

# Installation and Service Guide



# Installation and Service Guide

### Note

Before using this information and the product it supports, read the general information in Appendix D, "Getting help and technical assistance," on page 535, "Notices" on page 539, the Warranty Information document, and the Safety Information and Environmental Notices and User Guide documents on the IBM Documentation CD.

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## **Safety**

Before installing this product, read the Safety Information.

قبل تركيب هذا المنتج، يجب قراءة الملاحظات الأمنية

Antes de instalar este produto, leia as Informações de Segurança.

在安装本产品之前,请仔细阅读 Safety Information (安全信息)。

安裝本產品之前,請先閱讀「安全資訊」。

Prije instalacije ovog produkta obavezno pročitajte Sigurnosne Upute.

Před instalací tohoto produktu si přečtěte příručku bezpečnostních instrukcí.

Læs sikkerhedsforskrifterne, før du installerer dette produkt.

Lees voordat u dit product installeert eerst de veiligheidsvoorschriften.

Ennen kuin asennat tämän tuotteen, lue turvaohjeet kohdasta Safety Information.

Avant d'installer ce produit, lisez les consignes de sécurité.

Vor der Installation dieses Produkts die Sicherheitshinweise lesen.

Πριν εγκαταστήσετε το προϊόν αυτό, διαβάστε τις πληροφορίες ασφάλειας (safety information).

לפני שתתקינו מוצר זה, קראו את הוראות הבטיחות.

A termék telepítése előtt olvassa el a Biztonsági előírásokat!

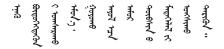
Prima di installare questo prodotto, leggere le Informazioni sulla Sicurezza.

製品の設置の前に、安全情報をお読みください。

본 제품을 설치하기 전에 안전 정보를 읽으십시오.

Пред да се инсталира овој продукт, прочитајте информацијата за безбедност.

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Les sikkerhetsinformasjonen (Safety Information) før du installerer dette produktet.

Przed zainstalowaniem tego produktu, należy zapoznać się z książką "Informacje dotyczące bezpieczeństwa" (Safety Information).

Antes de instalar este produto, leia as Informações sobre Segurança.

Перед установкой продукта прочтите инструкции по технике безопасности.

Pred inštaláciou tohto zariadenia si pečítaje Bezpečnostné predpisy.

Pred namestitvijo tega proizvoda preberite Varnostne informacije.

Antes de instalar este producto, lea la información de seguridad.

Läs säkerhetsinformationen innan du installerar den här produkten.

Bu ürünü kurmadan önce güvenlik bilgilerini okuyun.

Youq mwngz yungh canjbinj neix gaxgonq, itdingh aeu doeg aen canjbinj soengq cungj vahgangj ancien siusik.

## Safety statements

These statements provide the caution and danger information that is used in this documentation.

## Important:

Each caution and danger statement in this documentation is labeled with a number. This number is used to cross reference an English-language caution or danger statement with translated versions of the caution or danger statement in the *Safety Information* document.

For example, if a caution statement is labeled Statement 1, translations for that caution statement are in the *Safety Information* document under Statement 1.

Be sure to read all caution and danger statements in this documentation before you perform the procedures. Read any additional safety information that comes with your system or optional device before you install the device.

## Statement 1





## **DANGER**

Electrical current from power, telephone, and communication cables is hazardous.

### To avoid a shock hazard:

- Do not connect or disconnect any cables or perform installation, maintenance, or reconfiguration of this product during an electrical storm.
- Connect all power cords to a properly wired and grounded electrical outlet.
- Connect to properly wired outlets any equipment that will be attached to this product.
- When possible, use one hand only to connect or disconnect signal cables.
- Never turn on any equipment when there is evidence of fire, water, or structural damage.
- Disconnect the attached power cords, telecommunications systems, networks, and modems before you open the device covers, unless instructed otherwise in the installation and configuration procedures.
- Connect and disconnect cables as described in the following table when installing, moving, or opening covers on this product or attached devices.

## To Connect:

- 1. Turn everything OFF.
- 2. First, attach all cables to devices.
- 3. Attach signal cables to connectors.
- 4. Attach power cords to outlet.
- 5. Turn device ON.

## To Disconnect:

- 1. Turn everything OFF.
- 2. First, remove power cords from outlet.
- 3. Remove signal cables from connectors.
- 4. Remove all cables from devices.



When replacing the lithium battery, use only IBM® Part Number 33F8354 or an equivalent type battery recommended by the manufacturer. If your system has a module containing a lithium battery, replace it only with the same module type made by the same manufacturer. The battery contains lithium and can explode if not properly used, handled, or disposed of.

### Do not:

- Throw or immerse into water
- Heat to more than 100°C (212°F)
- · Repair or disassemble

Dispose of the battery as required by local ordinances or regulations.

## Statement 3



### **CAUTION:**

When laser products (such as CD-ROMs, DVD drives, fiber optic devices, or transmitters) are installed, note the following:

- Do not remove the covers. Removing the covers of the laser product could result in exposure to hazardous laser radiation. There are no serviceable parts inside the device.
- Use of controls or adjustments or performance of procedures other than those specified herein might result in hazardous radiation exposure.



## **DANGER**

Some laser products contain an embedded Class 3A or Class 3B laser diode. Note the following.

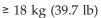
Laser radiation when open. Do not stare into the beam, do not view directly with optical instruments, and avoid direct exposure to the beam.

Class 1 Laser Product Laser Klasse 1 Laser Klass 1 Luokan 1 Laserlaite Appareil À Laser de Classe 1



Use safe practices when lifting.







≥ 32 kg (70.5 lb)



≥ 55 kg (121.2 lb)

## Statement 5





## **CAUTION:**

The power control button on the device and the power switch on the power supply do not turn off the electrical current supplied to the device. The device also might have more than one power cord. To remove all electrical current from the device, ensure that all power cords are disconnected from the power source.



## Statement 6



If you install a strain-relief bracket option over the end of the power cord that is connected to the device, you must connect the other end of the power cord to an easily accessible power source.





Never remove the cover on a power supply or any part that has the following label attached.



Hazardous voltage, current, and energy levels are present inside any component that has this label attached. There are no serviceable parts inside these components. If you suspect a problem with one of these parts, contact a service technician.

## Statement 11



## **CAUTION:**

The following label indicates sharp edges, corners, or joints nearby.



## Statement 12



## **CAUTION:**

The following label indicates a hot surface nearby.







## **DANGER**

Overloading a branch circuit is potentially a fire hazard and a shock hazard under certain conditions. To avoid these hazards, ensure that your system electrical requirements do not exceed branch circuit protection requirements. Refer to the information that is provided with your device for electrical specifications.

## Statement 15



## **CAUTION:**

Make sure that the rack is secured properly to avoid tipping when the server unit is extended.

## Statement 17



## **CAUTION:**

The following label indicates moving parts nearby.



## Statement 26



Do not place any object on top of rack-mounted devices.





Hazardous moving parts are nearby.



## Chapter 1. The Lenovo System x3650 M4 BD Type 5466 server

This *Installation and Service Guide* contains information and instructions for setting up yourLenovo System x3650 M4 BD Type 5466 server, instructions for installing some optional devices, cabling and configuring the server, removing and replacing devices, and diagnostics and troubleshooting information.

In addition to the instructions in Chapter 2, "Installing optional devices," on page 23 for installing optional hardware devices, updating firmware and device drivers, and completing the installation, Business Partners must also complete the steps in "Instructions for Business Partners" on page 23.

The Lenovo System x3650 M4 BD Type 5466 is a 2-U-high rack model, two-socket server for virtualization, database, and computational intensive computing. This high-performance, multi-core server is ideally suited for enterprise environments that require superior input/output (I/O) flexibility, scalability, and high manageability.

Performance, ease of use, reliability, and expansion capabilities were key considerations in the design of the server. These design features make it possible for you to customize the system hardware to meet your needs today and provide flexible expansion capabilities for the future.

The server comes with a limited warranty. For information about the terms of the warranty and getting service and assistance, see the *Warranty Information* document that comes with the server.

The server contains Lenovo next generation technologies, which help increase performance and reliability. For more information, see "What your server offers" on page 10 and "Reliability, availability, and serviceability" on page 13.

You can obtain up-to-date information about the server and other server products at http://www.ibm.com/systems/x/. At http://support.lenovo.com/, you can create a personalized support page by identifying Lenovo products that are of interest to you. From this personalized page, you can subscribe to weekly e-mail notifications about new technical documents, search for information and downloads, and access various administrative services.

If you participate in the client reference program, you can share information about your use of technology, best practices, and innovative solutions; build a professional network; and gain visibility for your business. For more information about the client reference program, see http://www.ibm.com/ibm/clientreference/.

The server supports up to fourteen 3.5-inch hot-swap drives (two of the 3.5-inch hot-swap hard disk drives are located at the rear of the server) using the supported drive backplane configurations. It supports 3.5-inch hot-swap Serial Attached SCSI (SAS) or SATA hard disk drives. The illustrations in this document might differ slightly from your hardware.

**Note:** Hard disk drive status reporting can be managed by ServeRAID software. See the RAID documentation on the ServeRAID Support CD for information about RAID controllers.

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The following illustrations show the controls, connectors, and hard disk drive bays on the front of the server.

## 12 hot-swap hard-disk drive configuration:

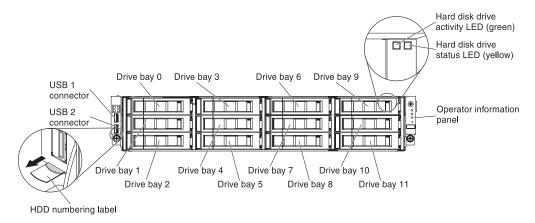


Figure 1. 12 hot-swap hard-disk drive configuration

If firmware and documentation updates are available, you can download them from the website. The server might have features that are not described in the documentation that comes with the server, and the documentation might be updated occasionally to include information about those features, or technical updates might be available to provide additional information that is not included in the server documentation. To check for updates, go to http://support.lenovo.com/.

Record information about the server in the following table.

Table 1. . Record of the system information

| Product name                 | Machine Type (s) | Model number | Serial number |
|------------------------------|------------------|--------------|---------------|
| Lenovo System x3650<br>M4 BD | Type 5466        |              |               |

The model number and serial number can be found on the front of the server. Depending on your server model, their respective locations can be found either in the following two illustrations.

**Note:** The illustrations in this document might differ slightly from your hardware.

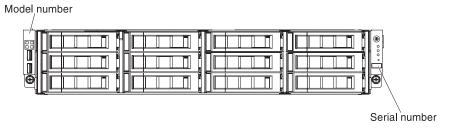


Figure 2. The model number and serial number

In addition, the system service label, which is on the cover of the server, provides a QR code for mobile access to service information. You can scan the QR code using

a QR code reader and scanner with a mobile device and get quick access to the Service Information website. The Service Information website provides additional information for parts installation and replacement videos, and error codes for server support.

The following illustration shows the QR code (http://ibm.co/18gSeXv):



Figure 3. QR code

You can download an ServerGuide Setup and Installation CD to help you configure the hardware, install device drivers, and install the operating system.

For a list of supported optional devices for the server, see http://www.ibm.com/ systems/info/x86servers/serverproven/compat/us/.

See the Rack Installation Instructions document on the Documentation CD for complete rack installation and removal instructions.

## The Documentation CD

The Documentation CD contains documentation for the server in Portable Document Format (PDF) and includes the IBM Documentation Browser to help you find information quickly.

## Hardware and software requirements

The Documentation CD requires the following minimum hardware and software:

- · Microsoft Windows XP, Windows 2000, or Red Hat Linux
- 100 MHz microprocessor
- 32 MB of RAM
- Adobe Acrobat Reader 3.0 (or later) or xpdf, which comes with Linux operating systems

## Using the Documentation Browser

Use the Documentation Browser to browse the contents of the CD, read brief descriptions of the documents, and view documents, using Adobe Acrobat Reader or xpdf. The Documentation Browser automatically detects the regional settings in use in your server and displays the documents in the language for that region (if available). If a document is not available in the language for that region, the English-language version is displayed.

Use one of the following procedures to start the Documentation Browser:

- If Autostart is enabled, insert the CD into the CD or DVD drive. The Documentation Browser starts automatically.
- · If Autostart is disabled or is not enabled for all users, use one of the following procedures:
  - If you are using a Windows operating system, insert the CD into the CD or DVD drive and click **Start -> Run**. In the **Open** field, type

where *e* is the drive letter of the CD or DVD drive, and click **OK**.

 If you are using Red Hat Linux, insert the CD into the CD or DVD drive; then, run the following command from the /mnt/cdrom directory: sh runlinux.sh

Select the server from the **Product** menu. The **Available Topics** list displays all the documents for the server. Some documents might be in folders. A plus sign (+) indicates each folder or document that has additional documents under it. Click the plus sign to display the additional documents.

When you select a document, a description of the document is displayed under **Topic Description**. To select more than one document, press and hold the Ctrl key while you select the documents. Click **View Book** to view the selected document or documents in Acrobat Reader or xpdf. If you selected more than one document, all the selected documents are opened in Acrobat Reader or xpdf.

To search all the documents, type a word or word string in the **Search** field and click **Search**. The documents in which the word or word string appears are listed in order of the most occurrences. Click a document to view it, and press Crtl+F to use the Acrobat search function, or press Alt+F to use the xpdf search function within the document.

Click **Help** for detailed information about using the Documentation Browser.

## **Related documentation**

This *Installation and Service Guide* contains general information about the server including how to set up and cabling the server, how to install supported optional devices, how to configure the server, and information to help you solve problems yourself and information for service technicians. The following documentation also comes with the server:

• Warranty Information:

This document is in printed format and comes with the server. It contains warranty terms and a pointer to the Statement of Limited Warranty on the website.

• Important Notices:

This document is in printed format and comes with the server. It contains information about the safety, environmental, and electronic emission notices for your Lenovo product.

• Environmental Notices and User Guide:

This document is in PDF format on the *Documentation CD*. It contains translated environmental notices.

• License Agreement for Machine Code:

This document is in PDF on the *Documentation CD*. It provides translated versions of the *License Agreement for Machine Code* for your product.

• Licenses and Attributions Document:

This document is in PDF on the *Documentation* CD. It provides the open source notices.

• Safety Information

This document is in PDF on the *Documentation CD*. It contains translated caution and danger statements. Each caution and danger statement that appears in the

documentation has a number that you can use to locate the corresponding statement in your language in the *Safety Information* document.

• *Rack Installation Instructions*This printed document contains instructions for installing the server in a rack.

Depending on the server model, additional documentation might be included on the *Documentation* CD.

The ToolsCenter for System x and BladeCenter is an online information center that contains information about tools for updating, managing, and deploying firmware, device drivers, and operating systems. The ToolsCenter for System x and BladeCenter is at http://publib.boulder.ibm.com/infocenter/toolsctr/v1r0/index.jsp.

The server might have features that are not described in the documentation that you received with the server. The documentation might be updated occasionally to include information about those features, or technical updates might be available to provide additional information that is not included in the server documentation. These updates are available from the website. To check for updates, go to <a href="http://www.ibm.com/supportportal/">http://www.ibm.com/supportportal/</a>.

## Notices and statements in this document

The caution and danger statements in this document are also in the multilingual *Safety Information* document, which is on the *Documentation* CD. Each statement is numbered for reference to the corresponding statement in your language in the *Safety Information* document.

The following notices and statements are used in this document:

- **Note:** These notices provide important tips, guidance, or advice.
- **Important:** These notices provide information or advice that might help you avoid inconvenient or problem situations.
- Attention: These notices indicate potential damage to programs, devices, or data.
   An attention notice is placed just before the instruction or situation in which damage might occur.
- Caution: These statements indicate situations that can be potentially hazardous to you. A caution statement is placed just before the description of a potentially hazardous procedure step or situation.
- Danger: These statements indicate situations that can be potentially lethal or extremely hazardous to you. A danger statement is placed just before the description of a potentially lethal or extremely hazardous procedure step or situation.

## Server features and specifications

The following information is a summary of the features and specifications of the server. Depending on the model, some features might not be available, or some specifications might not apply.

Racks are marked in vertical increments of 4.45 cm (1.75 inches). Each increment is referred to as a unit, or "U." A 1-U-high device is 1.75 inches tall.

## Microprocessor (depending on the model):

• Supports up to two multi-core microprocessors (one installed)

- Two QuickPath Interconnect (QPI) links speed up to 8.0 GT per second
- Designed for LGA 2011 socket
- · Scalable up to twelve cores
- 32 KB instruction cache, 32 KB data cache, and up to 30 MB L3 cache that is shared among the cores

### Note:

- Use the Setup utility to determine the type and speed of the microprocessors.
- For a list of supported microprocessors, see http://www.ibm.com/systems/info/x86servers/serverproven/compat/us/

## Memory (depending on the model):

- Minimum: 4 GB
- Maximum: 512 GB
- Type: 1600 MHz or 1866 MHz (Depending on the configuration)
  - UDIMM: 4 GB or 8GB
  - RDIMM: 4 GB, 8 GB, or 16 GB
  - LRDIMM: 32 GB
- Single-rank or dual-rank
- Slots: 16

## Drive expansion bays:

- Twelve front 3.5-inch SAS/SATA hot-swap hard disk drive bays
- Two rear 3.5-inch SAS/SATA hot-swap hard disk drive bays
- Twelve front 2.5-inch hot-swap solid state drive bays (through converter trays)
- Two rear 2.5-inch hot-swap solid state drive bays (through converter trays)

## **PCI** expansion slots:

Supports three different PCI adapters and up to 3 PCI expansion slots depending on server model.

- Riser 1
  - Type 1
    - Slot 1: PCI Express\* 3.0 x8 (full-height-half-length, full-height-half-length)
    - Slot 2: PCI Express\* 3.0 x8 (low-profile)
  - Type 2
    - Slot 1: PCI Express 3.0 x16 (full-height-half-length)
- Riser 2
  - Slot 3 (internal slot): PCI Express\* 3.0 x8 (low-profile)

## **Integrated functions:**

- Integrated Management Module II (IMM2), which provides service processor control and monitoring functions, video controller, and remote keyboard, video, mouse, and remote hard disk drive capabilities
- Onboard Intel Powerville 3-port Gigabit Ethernet controller with Wake on LAN support
- Seven Universal Serial Bus (USB) 2.0 ports (two on front and four on rear of the server, one for Hypervisor USB key)
- One serial port
- One video port on rear of server

### Note:

- 1. Maximum video resolution is 1600 x 1200 at 75 Hz.
- 2. In messages and documentation, the term service processor refers to the integrated management module II (IMM2).

## **Integrated Video controller:**

Matrox G200eR2

Note: The maximum video resolution is 1600 x 1200 at 75 Hz.

- SVGA compatible video controller
- DDR2-250MHz SDRAM video memory controller
- No DVI connector
- Avocent Digital Video Compression
- 16 MB of video memory (not expandable)

## ServeRAID controllers:

- ServeRAID M1115 SAS/SATA Controller for System x
- ServeRAID M5110 SAS/SATA Controller for System x
- ServeRAID M5120 SAS/SATA Controller for System x
- ServeRAID H1110 SAS/SATA Controller for System x
- ServeRAID M5100 Series Battery Kit for System X
- M5210 SAS/SATA Controller for System x
- N2115 SAS/SATA HBA for System x
- IBM 6Gb Performance Optimized HBA

## ServeRAID controller upgrade:

- ServeRAID M5100 Series 512MB Cache/RAID 5 Upgrade for System x
- ServeRAID M5100 Series 512MB Flash/RAID 5 Upgrade for System x
- ServeRAID M1100 Series Zero Cache/RAID 5 Upgrade for System x
- ServeRAID M5100 Series Zero Cache/RAID 5 Upgrade for System x
- ServeRAID M5100 Series RAID 6 Upgrade for System x
- ServeRAID M5100 Series 1GB Flash/RAID Upgrade for System x
- ServeRAID M5100 Series 2GB Cache/RAID 5 Upgrade for System x

For more information on Features on Demand (FoD), including instructions for automating the activation and installation of the activation key by using ToolsCenter or IBM Director, see the System x Features on Demand User's Guide at under the Help section.

## **Environment:**

- Air temperature:
  - Server on: 5°C to 40°C (41°F to 104°F); altitude: 0 to 915 m (3000 ft).
  - Server on: 5°C to 32°C (41°F to 89.6°F); altitude: 915 m (3000 ft) to 2134 m (7000 ft).
  - Server on: 5°C to 28°C (41°F to 82.4°F); altitude: 2134 m (7000 ft) to 3050 m (10000 ft).
  - Server off: 5°C to 45°C (41°F to 113°F)
  - Shipping:  $-40^{\circ}$ C to  $60^{\circ}$ C ( $-40^{\circ}$ F to  $140^{\circ}$ F)
- Humidity:
  - Server on: 8% to 80%; maximum dew point: 21°C; maximum rate of change: 5 °C/hr
  - Server off: 8% to 80%; maximum dew point: 27°C
- Design to ASHRAE Class A3, ambient of 35°C to 40°C, with relaxed support:
  - Support cloud like workload with no performance degradation acceptable (Turbo-Off)

- Under no circumstance, can any combination of worst case workload and configuration result in system shutdown or design exposure at 40°C
- Particulate contamination:

**Attention:** Airborne particulates and reactive gases acting alone or in combination with other environmental factors such as humidity or temperature might pose a risk to the server. For information about the limits for particulates and gases, see "Particulate contamination" on page 541.

## Electrical input with hot-swap ac power supplies:

- Input voltage low range:
  - Minimum: 100 V ac
  - Maximum: 127 V ac
- Input voltage high range:
  - Minimum: 200 V ac
  - Maximum: 240 V ac
- Sine-wave input (50 ~ 60 Hz) required
- · Input voltage range automatically selected
- Input kilovolt-amperes (kVA) approximately:
  - Minimum: 0.11 kVA
  - Maximum: 0.9 kVA

### Size:

- 2U
- Height: 86.5 mm (3.406 in.)
- Depth:
  - EIA flange to rear: 720.2 mm (28.35 in.)
  - Overall: 748.8 mm (29.5 in.)
- Width:
  - With top cover: 447 mm (17.6 in.)
- Weight: approximately 16.4 kg (Min.) and up to 29.8 kg (Max.) depending on your configuration

## System fans:

Front side: three Rear side: two

## Hot-swap power supplies (depending on the model):

- Up to two hot-swap power supplies for redundancy support
  - 750-watt ac
  - 900-watt ac

**Note:** You cannot mix high-efficiency and non-high-efficiency power supplies in the server.

## Acoustical noise emissions:

- Sound power, idle: 6.5 bel
- · Sound power, operating: 6.5 bel

### **Notes:**

 Power consumption and heat output vary depending on the number and type of optional features installed and the power-management optional features in use. 2. The noise emission level stated is the declared (upper limit) sound power level, in bels, for a random sample of machines. All measurements made in accordance with ISO 7779 and renorted in conformance with ISO 9296.

## EU Regulation 617/2013 Technical Documentation:

International Business Machines Corporation

New Orchard Road

Armonk, New York 10504

http://www.ibm.com/customersupport/

For more information on the energy efficiency program, go to http://www.ibm.com/systems/x/hardware/energy-star/index.html

## **Product Type:**

Computer Server

## Year first manufactured:

2014

## Internal/external power supply efficiency:

- http://www.plugloadsolutions.com/psu reports/ IBM\_FSA011\_550W\_SO-301\_Report.pdf
- http://www.plugloadsolutions.com/psu\_reports/IBM\_7001676-XXXX\_550W\_SO-458\_Report.pdf
- http://www.plugloadsolutions.com/psu\_reports/IBM\_7001605-XXXX 750W SO-258 Report.pdf
- http://www.plugloadsolutions.com/psu reports/SO-299 IBM DPS-750AB-1\_750W\_Report.pdf
- http://www.plugloadsolutions.com/psu reports/IBM 7001606-XXXX\_900W\_SO-273\_Report.pdf
- http://www.plugloadsolutions.com/psu\_reports/IBM\_DPS-900CB %20A\_900W\_SO-440\_Report.pdf

## Maximum power (watts):

See Power supply.

## Idle state power (watts):

## Sleep mode power (watts):

N/A for servers

## Off mode power (watts):

19

## Noise levels (the declared A-weighed sound power level of the computer): See Acoustical noise emissions.

## Test voltage and frequency:

230V / 50 Hz or 60 Hz

## Total harmonic distortion of the electricity supply system:

The maximum harmonic content of the input voltage waveform will be equal or less than 2%. The qualification is compliant with EN 61000-3-2.

## Information and documentation on the instrumentation set-up and circuits used for electrical testing:

ENERGY STAR Test Method for Computer Servers; ECOVA Generalized Test Protocol for Calculating the Energy Efficiency of Internal Ac-Dc and Dc-Dc Power Supplies.

## Measurement methodology used to determine information in this document:

ENERGY STAR Servers Version 2.0 Program Requirements; ECOVA Generalized Test Protocol for Calculating the Energy Efficiency of Internal Ac-Dc and Dc-Dc Power Supplies.

## What your server offers

The server uses the following features and technologies.

Features on Demand

If a Features on Demand feature is integrated in the server or in an optional device that is installed in the server, you can purchase an activation key to activate the feature. For information about Features on Demand, see /http://www.ibm.com/systems/x/fod/.

**Integrated Management Module II** The integrated management module II (IMM2) is the second generation of the IMM. The IMM2 is the common management controller for System x hardware. The IMM2 consolidates multiple management functions in a single chip on the server system board.

Some of the features that are unique to the IMM2 are enhanced performance, expanded compatibility with blade servers, higher-resolution remote video, expanded security options, and Feature on Demand enablement for hardware and firmware options.

For additional information, see "Using the integrated management module II" on page 99.

**UEFI-compliant server firmware** System x Server Firmware (server firmware) offers several features, including Unified Extensible Firmware Interface (UEFI) 2.1 compliance; Active Energy Manager technology; enhanced reliability, availability, and serviceability (RAS) capabilities; and basic input/output system (BIOS) compatibility support. UEFI replaces the BIOS and defines a standard interface between the operating system, platform firmware, and external devices. UEFI-compliant System x servers are capable of booting UEFI-compliant operating systems, BIOS-based operating systems, and BIOS-based adapters as well as UEFI-compliant adapters.

Note: The server does not support DOS (Disk Operating System).

- Dynamic System Analysis Preboot diagnostics programs The Dynamic System Analysis (DSA) Preboot diagnostics programs are stored on the integrated USB memory. It collects and analyzes system information to aid in diagnosing server problems. The diagnostic programs collect the following information about the server:
  - System configuration
  - Network interfaces and settings
  - Installed hardware
  - Light path diagnostics status
  - Service processor status and configuration
  - Vital product data, firmware, and UEFI (formerly BIOS) configuration
  - Hard disk drive health
  - RAID controller configuration

## - Event logs for ServeRAID controllers and service processors

The diagnostic programs create a merged log that includes events from all collected logs. The information is collected into a file that you can send to service and support. Additionally, you can view the information locally through a generated text report file. You can also copy the log to a removable media and view the log from a web browser.

For additional information about DSA Preboot diagnostics, see the *Problem Determination and Service Guide* on the *System x Documentation* CD

## · Multi-core processing

The server supports up to two Intel Xeon<sup>TM</sup> E5-2600v2 series multi-core microprocessors. The server comes with only one microprocessor installed.

### · Mobile access to Service Information website

The server provides a QR code on the system service label, which is on the cover of the server, that you can scan using a QR code reader and scanner with a mobile device to get quick access to the Service Information website. The Service Information website provides additional information for parts installation and replacement videos, and error codes for server support. For the QR code, see QR code information on page Chapter 1, "The Lenovo System x3650 M4 BD Type 5466 server," on page 1.

## • IBM Systems Director CD

IBM Systems Director is a workgroup-hardware-management tool that you can use to centrally manage System x and xSeries servers. For more information, see the IBM Systems Director documentation on the IBM Systems Director CD and "IBM Systems Director" on page 14

## X-Architecture technology

X-Architecture technology combines proven, innovative designs to make your Intel-processor-based server powerful, scalable, and reliable. For more information, see .

## Active<sup>™</sup> Memory active memorymemory

The Active Memory feature improves the reliability of memory through memory mirroring. Memory mirroring mode replicates and stores data on two pairs of DIMMs within two channels simultaneously. If a failure occurs, the memory controller switches from the primary pair of memory DIMMs to the backup pair of DIMMs. For more information about installing DIMMs for memory mirroring, see "Memory module installation" on page 58.

## - Large system-memory capacity

The server supports up to a maximum of 512 GB of system memory. The server supports only industry-standard double-data-rate 3 (DDR3) - 1600 MHz or 1866 MHz (depending on the configuration), synchronous dynamic random-access memory (SDRAM) registered dual inline memory modules (DIMMs) with error correcting code (ECC). For further details, see *Problem Determination and Service Guide* on the *System x Documentation* CD.

## ServerGuide Setup and Installation CD

The ServerGuide Setup and Installation CD, which you can download from the web, provides programs to help you set up the server and install a Windows operating system. The ServerGuide program detects installed optional hardware devices and provides the correct configuration programs and device drivers. For more information about the ServerGuide Setup and Installation CD, see "Using the ServerGuide Setup and Installation CD" on page 90.

## Integrated network support

The server comes with an integrated 3-port Gigabit Ethernet controller, which supports connection to a 10 Mbps, 100 Mbps, or 1000 Mbps network. For more information, see "Configuring the Gigabit Ethernet controller" on page 103.

## **Integrated Trusted Platform Module (TPM)**

This integrated security chip performs cryptographic functions and stores private and public secure keys. It provides the hardware support for the Trusted Computing Group (TCG) specification. You can download the software to support the TCG specification, when the software is available. See http://www.ibm.com/servers/eserver/xseries/scalable\_family.html for details about the TPM implementation. You can enable TPM support through the Setup utility under the **System Security** menu option.

## Large data-storage capacity and hot-swap capability

The hot-swap server models support a maximum of fourteen 3.5-inch hot-swap Serial Attached SCSI (SAS) hard disk drives or hot-swap Serial ATA (SATA) hard disk drives.

With the hot-swap feature, you can add, remove, or replace hard disk drives without turning off the server.

## · Light path diagnostics

Light path diagnostics provides LEDs to help you diagnose problems. For more information about the light path diagnostics, see "Light path diagnostics" on page 120

## PCI adapter capabilities

Based on the server configuration, the server may possibly support up to three PCI expansion slots. See "Installing an adapter on the PCI riser-card assembly" on page 45 for detailed information.

## **Active Energy Manager**

The Active Energy Manager solution is an IBM Systems Director extension that measures and reports server power consumption as it occurs. This enables you to monitor power consumption in correlation to specific software application programs and hardware configurations. You can obtain the measurement values through the systems-management interface and view them, using IBM Systems Director. For more information, including the required levels of IBM Systems Director and Active Energy Manager, see the IBM Systems Director Information Center at http://publib.boulder.ibm.com/infocenter/director/v6r1x/ index.jsp?topic=/director\_6.1/fqm0\_main.html, or see http://www-03.ibm.com/ systems/software/director/resources.html.

### Redundant connection

The IMM2 provides failover capability to a redundant Ethernet connection with the applicable application installed. If a problem occurs with the primary Ethernet connection, all Ethernet traffic that is associated with the primary connection is automatically switched to the optional redundant Ethernet connection. If the applicable device drivers are installed, this switching occurs without data loss and without user intervention.

## Redundant cooling and optional power capabilities

The server supports a maximum of two 750-watt or 900-watt hot-swap power supplies and three dual-motor non hot-swap fans, which provide redundancy for a typical configuration. The redundant cooling by the fans in the server enables continued operation if one of the fans fails. The server comes with one 750-watt or 900-watt hot-swap power supply and three non hot-swap fans.

**Note:** You cannot mix 750-watt and 900-watt power supplies in the server.

## ServeRAID support

The ServeRAID adapter provides hardware redundant array of independent disks (RAID) support to create configurations. The standard RAID adapter provides RAID levels 0 and 1. An optional RAID adapter is available for purchase.

## Systems-management capabilities

The server comes with an integrated management module II (IMM2). When the IMM2 is used with the systems-management software that comes with the server, you can manage the functions of the server locally and remotely. The IMM2 also provides system monitoring, event recording, and network alert capability. The system-management connector on the rear of the server is dedicated to the IMM2. The dedicated system-management connector provides additional security by separating the management network traffic from the production network. You can use the Setup utility to configure the server to use a dedicated systems-management network or a shared network.

## Reliability, availability, and serviceability

Three important computer design features are reliability, availability, and serviceability (RAS). The RAS features help to ensure the integrity of the data that is stored in the server, the availability of the server when you need it, and the ease with which you can diagnose and correct problems.

The server has the following RAS features:

- · Automatic error retry and recovery
- Automatic restart after a power failure
- Built-in monitoring for fan, power, temperature, voltage, and power-supply redundancy
- Cable-presence detection on most connectors
- Chipkill memory protection
- Dual redundant UEFI server firmware images
- Error codes and messages
- Error correcting code (ECC) L2 cache and system memory
- Cooling fans with speed-sensing capability
- Hot-swap hard disk drives (for servers that support such drives)
- Information and light path diagnostics LED panels
- Integrated management module (service processor)
- Memory mirroring
- Menu-driven setup, system configuration, and redundant array of independent disks (RAID) configuration programs
- Parity checking or CRC checking on the serially-attached SCSI (SAS) bus and PCI buses
- Power management: compliance with Advanced Configuration and Power Interface (ACPI)
- Power-on self-test (POST)
- Predictive Failure Analysis (PFA) alerts on memory, SAS/SATA hard disk drives and fans
- Redundant Ethernet capabilities with failover support
- Redundant hot-swap power supplies
- Remote system problem-determination support
- Standby voltage for systems-management features and monitoring
- Startup (boot) from LAN through Preboot Execution Environment (PXE) boot agent utility or Dynamic Host Configuration Protocol/Boot Protocol (DHCP/BOOTP)
- System auto-configuring from the configuration menu
- System error logging (POST and service processor)

- Systems-management monitoring through the Inter-Integrated Circuit (I<sup>2</sup>C) bus
- Upgradeable POST, UEFI, diagnostics, service processor microcode, and read-only memory (ROM) resident code, locally or over the LAN
- Vital product data (VPD) on microprocessors, system board, power supplies, and SAS (hot-swap-drive) backplane
- Wake on LAN capability for remote power up

## **IBM Systems Director**

IBM Systems Director is a platform-management foundation that streamlines the way you manage physical and virtual systems in a heterogeneous environment. By using industry standards, IBM Systems Director supports multiple operating systems and virtualization technologies in x86 platforms.

Through a single user interface, IBM Systems Director provides consistent views for viewing managed systems, determining how these systems relate to one other, and identifying their statuses, helping to correlate technical resources with business needs. A set of common tasks that are included with IBM Systems Director provides many of the core capabilities that are required for basic management, which means instant out-of-the-box business value. The common tasks are listed below:

- Discovery
- Inventory
- Configuration
- · System health
- Monitoring
- Updates
- Event notification
- Automation for managed systems

The IBM Systems Director Web and command-line interfaces provide a consistent interface that is focused on driving these common tasks and capabilities:

- Discovering, navigating, and visualizing systems on the network with the detailed inventory and relationships to the other network resources
- Notifying users of problems that occur on systems and the ability to isolate the sources of the problems
- Notifying users when systems need updates and distributing and installing updates on a schedule
- Analyzing real-time data for systems and setting critical thresholds that notify the administrator of emerging problems
- Configuring settings of a single system and creating a configuration plan that can apply those settings to multiple systems
- · Updating installed plug-ins to add new features and functions to the base capabilities
- · Managing the life cycles of virtual resources

For more information about IBM Systems Director, see the IBM Systems Director Information Center at http://publib.boulder.ibm.com/infocenter/director/v6r1x/ index.jsp?topic=/director\_6.1/fqm0\_main.html, and the Systems Management web page at http://www.ibm.com/systems/management/, which presents an overview of IBM Systems Management and IBM Systems Director.

## Server controls, LEDs, and power

This section describes the controls and light-emitting diodes (LEDs) and how to turn the server on and off.

For the locations of other LEDs on the system board, see "System-board LEDs" on page 28.

## Front view

The following illustration shows the controls, connectors, and hard disk drive bays on the front of the server.

12 hot-swap hard-disk drive configuration:

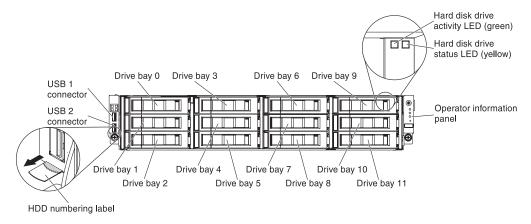


Figure 4. 12 hot-swap hard-disk drive configuration

- USB connectors: Connect a USB device, such as USB mouse or keyboard to either of these connectors.
- Hard disk drive activity LEDs (green):This green LED is used on hot-swap SAS or SATA hard disk drives. Each hot-swap hard disk drive has an activity LED, and when this LED is flashing, it indicates that the drive is in use.
- Hard disk drive status LEDs (yellow): This yellow LED is used on hot-swap SAS/SATA hard disk drives. Each hot-swap hard disk drive has a status LED. When this LED is lit, it indicates that the drive has failed. When this LED is flashing slowly (one flash per second), it indicates that the drive is being rebuilt as part of a RAID configuration. When the LED is flashing rapidly (three flashes per second), it indicates that the controller is identifying the drive.
- **Operator information panel:** This panel contains the power control button and light-emitting diodes (LEDs).

## Operator information panel

The section shows the controls and LEDs on the operator information panel.

The operator information panel is located on the side of the server.

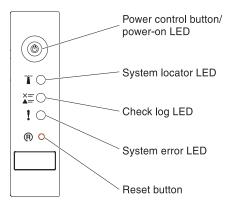


Figure 5. Operator information panel

- Power-control button and power-on LED: Press this button to turn the server on and off manually. The states of the power-on LED are as follows:
  - Off: Power is not present or the power supply, or the LED itself has failed.
  - Flashing rapidly (4 times per second): The server is turned off and is not ready to be turned on. The power-control button is disabled. This will last approximately 5 to 10 seconds.
  - Flashing slowly (once per second): The server is turned off and is ready to be turned on. You can press the power-control button to turn on the server.
  - **Lit:** The server is turned on.
- System-locator button/LED: Use this blue LED to visually locate the server among other servers. A system-locator LED is also on the rear of the server. This LED is used as a presence detection button as well. You can use IBM Systems Director or IMM2 web interface to light this LED remotely. This LED is controlled by the IMM2. The locator button is pressed to visually locate the server among the others servers.
- Check log LED: When this yellow LED is lit, it indicates that a system error has occurred. Check the error log for additional information. See the "Error messages" on page 128 for more information about event logs.
- System-error LED: When this yellow LED is lit, it indicates that a system error has occurred. A system-error LED is also on the rear of the server. An LED on the light path diagnostics panel on the operator information panel is also lit to help isolate the error. This LED is controlled by the IMM2.
- **Reset button:** Press this button to reset the server and run the power-on self-test (POST). You might have to use a pen or the end of a straightened paper clip to press the button.

Note: Depending on the type of operator information panel installed in your server, the Reset button is on the operator information panel or the light path diagnostics panel.

## Rear view

The following illustration shows the connectors on the rear of the server.

### **IMM Network Interface Port, Shared**

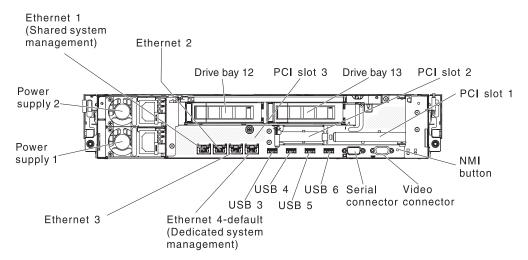


Figure 6. IMM network interface port

- Systems-management Ethernet connector:Use this connector to connect the server to a network for full systems-management information control. This connector is used only by the integrated management module (IMM2). A dedicated management network provides additional security by physically separating the management network traffic from the production network. You can use the Setup utility to configure the server to use a dedicated systems management network or a shared network.
- Ethernet connectors: Use either of these connectors to connect the server to a network. When you enable shared Ethernet for IMM2 in the Setup utility, you can access the IMM2 using either the Ethernet 1 or the system-management Ethernet (default Ethernet 4) connector. See Using the Setup utility for more information.
- PCI slot connectors:
  - PCI slot 1: Insert a full-height, half-length PCI Express\* adapter into this slot.
  - PCI slot 2: Insert a low-profile PCI Express\* adapter into this slot.
  - PCI slot 3: Insert a low-profile PCI Express\* adapter into this slot.

Connect the power cord to this connector.

- **Power-cord connector:** Connect the power cord to this connector.
- **USB connectors:** Each power supply has a dc power LED and an ac power LED. When the dc power LED is lit, it indicates that the power supply is supplying adequate dc power to the system. During normal operation, both the ac and dc power LEDs are lit. For any other combination of LEDs, see "Power-supply LEDs" on page 19.
- **NMI button:** Press this button to force a nonmaskable interrupt to the microprocessor. It allows you to blue screen the server and take a memory dump (use this button only when directed by the service support). You might have to use a pen or the end of a straightened paper clip to press the button.
- Serial connector: Connect a 9-pin serial device to this connector. The serial port is shared with the integrated management module II (IMM2). The IMM2 can take control of the shared serial port to perform text console redirection and to redirect serial traffic.
- Video connector: Connect a monitor to this connector.

**Note:** The maximum video resolution is 1600 x 1200 at 75 Hz. The following illustration shows the LEDs on the rear of the server.

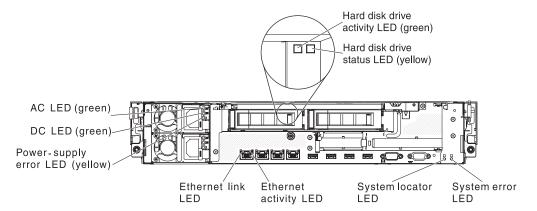


Figure 7. LEDs rear view

- Ethernet activity LEDs: When these LEDs are lit, they indicate that the server is transmitting to or receiving signals from the Ethernet LAN that is connected to the Ethernet port.
- Ethernet link LEDs: When these LEDs are lit, they indicate that there is an active link connection on the 10BASE-T, 100BASE-TX, or 1000BASE-TX interface for the Ethernet port.
- AC power LED: Each hot-swap power supply has an AC power LED and a DC power LED. When the AC power LED is lit, it indicates that sufficient power is coming into the power supply through the power cord. During typical operation, both the AC and DC power LEDs are lit. For any other combination of LEDs, see "Power-supply LEDs" on page 19.
- DC power LED: Each hot-swap power supply has a DC power LED and an AC power LED. When the DC power LED is lit, it indicates that the power supply is supplying adequate DC power to the system. During typical operation, both the AC and DC power LEDs are lit. For any other combination of LEDs, see "Power-supply LEDs" on page 19.
- **Power-supply error LED:** When the power-supply error LED is lit, it indicates that the power supply has failed.
- System-locator LED: Use this LED to visually locate the server among other servers. You can use IBM Systems Director or IMM2 web interface to light this LED remotely.
- System-error LED: When this LED is lit, it indicates that a system error has occurred. An LED on the light path diagnostics panel is also lit to help isolate the error.

## PCI riser-card adapter expansion slot locations

The section shows the PCI expansion slot connector locations on the server.

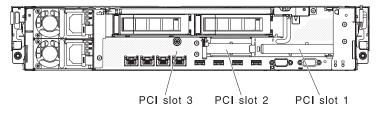


Figure 8. PCI expansion slot connector locations

## **Power-supply LEDs**

This section shows the power-supply LEDs on the server.

The following illustration shows the power-supply LEDs on the rear of the server.

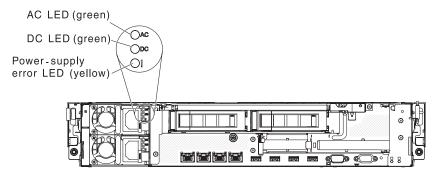


Figure 9. Power-supply LEDs

The following table describes the problems that are indicated by various combinations of the power-supply LEDs and suggested actions to correct the detected problems.

Table 2. Power-supply LEDs status and required action

| Power-supply LEDs |            |                   |  |  |   |
|-------------------|------------|-------------------|--|--|---|
| AC<br>(green)     | DC (green) | Error<br>(yellow) | Description  | Action   | Notes   |
| On                | On         | Off               | Normal operation   |  |   |
| Off               | Off        | Off               | No ac power to the<br>server or a problem<br>with the ac power<br>source | <ol> <li>Check the ac power to the server.</li> <li>Make sure that the power cord is connected to a functioning power source.</li> <li>Turn the server off and then turn the server back on.</li> <li>If the problem remains, replace the power supply.</li> </ol> | This is a normal condition when no ac power is present. |

Table 2. Power-supply LEDs status and required action (continued)

| Power-supply LEDs |                    |                   |   |  |  |
|-------------------|--------------------|-------------------|---|--|--|
| AC (green)        | DC (green)         | Error<br>(yellow) | Description   | Action   | Notes  |
| Off               | Off                | On                | No ac power to the server or a problem with the ac power source and the power supply had detected an internal problem | <ol> <li>Replace the power supply.</li> <li>Make sure that the power cord is connected to a functioning power source.</li> </ol>                     | This happens only when a second power supply is providing power to the server. |
| Off               | On                 | Off               | Faulty power-supply   | Replace the power supply.  |  |
| Off               | On                 | On                | Faulty power-supply   | Replace the power supply.  |  |
| On                | Off                | Off               | Power supply not<br>fully seated, faulty<br>system board,<br>faulty power<br>supply, or system<br>not power-on        | <ol> <li>Reseat the power supply.</li> <li>Replace the power supply.</li> <li>(Trained service technician only) Replace the system board.</li> </ol> | Typically indicates that a power supply is not fully seated.                   |
| On                | Off or<br>Flashing | On                | Faulty power supply   | Replace the power supply.  |  |
| On                | On                 | On                | Power supply is faulty but still operational  | Replace the power supply.  |  |

## Server power features

When the server is connected to a power source but is not turned on, the operating system does not run, and all core logic except for the integrated management module II (IMM2) is shut down.

However, the server can respond to requests from the IMM2, such as a remote request to turn on the server. The power-on LED flashes to indicate that the server is connected to power but is not turned on.

## Turning on the server

Use this information to turn on the server.

Approximately 40 seconds after the server is connected to power, the power-control button becomes active, and one or more fans might start running to provide cooling while the server is connected to power. You can turn on the server and start the operating system by pressing the power-control button.

The server can also be turned on in any of the following ways:

- If a power failure occurs while the server is turned on, the server will restart automatically when power is restored.
- If your operating system supports the Wake on LAN feature, the Wake on LAN feature can turn on the server.

For 32-bit operating systems only: Some memory is reserved for various system resources and is unavailable to the operating system. The amount of memory that is reserved for system resources depends on the operating system, the configuration of the server, and the configured PCI options.

## **Turning off the server**

Use this information to turn off the server.

When you turn off the server and leave it connected to power, the server can respond to requests from the IMM2, such as a remote request to turn on the server. While the server remains connected to power, one or more fans might continue to run. To remove all power from the server, you must disconnect it from the power source.

Some operating systems require an orderly shutdown before you turn off the server. See your operating-system documentation for information about shutting down the operating system.

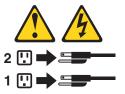
## Statement 5





### **CAUTION:**

The power control button on the device and the power switch on the power supply do not turn off the electrical current supplied to the device. The device also might have more than one power cord. To remove all electrical current from the device, ensure that all power cords are disconnected from the power source.



The server can be turned off in any of the following ways:

- You can turn off the server from the operating system, if your operating system supports this feature. After an orderly shutdown of the operating system, the server will be turned off automatically.
- You can press the power-control button to start an orderly shutdown of the operating system and turn off the server, if your operating system supports this feature.
- If the operating system stops functioning, you can press and hold the power-control button for more than 4 seconds to turn off the server.
- The IMM2 can turn off the server as an automatic response to a critical system failure.
- You can turn off the server through a request from the IMM2.

# Chapter 2. Installing optional devices

This chapter provides detailed instructions for installing optional hardware devices in the server.

In addition to the instructions in this chapter for installing optional hardware devices, updating the firmware and device drivers, and completing the installation, Business Partners must also complete the steps in "Instructions for Business Partners."

**Important:** To help ensure that the devices that you install work correctly and do not introduce problems, observe the following precautions:

- 1. Make sure that the server and the installed firmware levels support the devices that you are installing. If necessary, update the UEFI and IMM firmware and any other firmware that is stored on the system board. For information about where firmware is stored in the server, see "Updating the firmware" on page 87. For a list of supported optional devices for the server, go to http://www.ibm.com/systems/info/x86servers/serverproven/compat/us/.
- 2. Before you install optional hardware devices, make sure that the server is working correctly. Start the server and make sure that the operating system starts, if an operating system is installed, or that a 19990305 error code is displayed, indicating that an operating system was not found but the server is otherwise working correctly. If the server is not working correctly, see "Running the DSA Preboot diagnostic programs" on page 127 for information about how to run diagnostics.
- 3. Follow the installation procedures in this chapter and use the correct tools. Incorrectly installed device can cause system failure because of damaged pins in sockets or connectors, loose cabling, or loose components.
- 4. Use the best practices to apply current firmware and device-driver updates for the server and optional devices. To download the *Firmware Update Guides* document, go to www.ibm.com/support/entry/portal/ docdisplay?lndocid=MIGR-5082923&brandind=5000008. Additional hints and tips are available from the following sites:
  - Support website: http://support.lenovo.com/
  - System x configuration tools: http://www-03.ibm.com/systems/x/ hardware/configtools.html

# Installing optional hardware devices in the server

This following sections provide detailed instructions for installing optional hardware devices in the server.

# Instructions for Business Partners

Instructions for Business Partners on verifying the newly installed devices by running the Dynamic System Analysis (DSA) stress test.

In addition to the instructions in this chapter for installing optional hardware devices, updating firmware and device drivers, and completing the installation, Business Partners must also complete the following steps:

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- 1. After you have confirmed that the server starts correctly and recognizes the newly installed devices and that no error LEDs are lit, run the Dynamic System Analysis (DSA) stress test. For information about using DSA, see "Dynamic System Analysis" on page 125.
- 2. Shut down and restart the server multiple times to ensure that the server is correctly configured and functions correctly with the newly installed devices.
- 3. Save the DSA log as a file and send it to Lenovo. For information about transferring data and logs, see "How to send DSA data to IBM."
- 4. To ship the server, repackage it in the original undamaged packing material and observe procedures for shipping.

Support information for Business Partners is available at http://www.ibm.com/ partnerworld/pwhome.nsf/weblook/index\_us.html.

# How to send DSA data to IBM

Use the IBM Enhanced Customer Data Repository to send diagnostic data to IBM.

Before you send diagnostic data to IBM, read the terms of use at http://www-05.ibm.com/de/support/ecurep/terms.html.

You can use any of the following methods to send diagnostic data to IBM:

- Standard upload: http://www.ibm.com/de/support/ecurep/send\_http.html
- Standard upload with the system serial number: http://www.ecurep.ibm.com/ app/upload\_hw
- Secure upload: http://www.ibm.com/de/support/ecurep/ send http.html#secure
- Secure upload with the system serial number: https://www.ecurep.ibm.com/ app/upload\_hw

# Server components

The following illustration shows the major components in the server.

The illustrations in this document might differ slightly from your hardware.

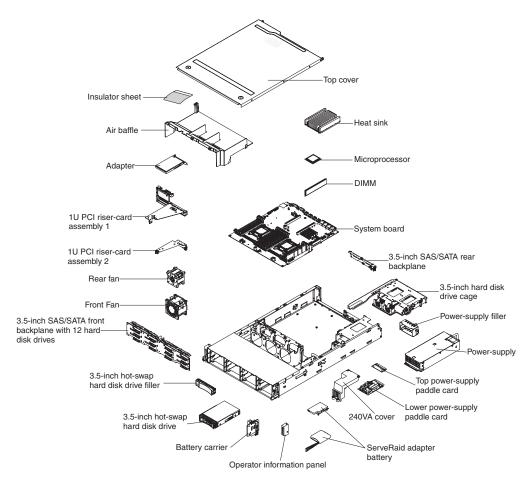


Figure 10. Server components

# Server internal LEDs, connectors, and jumpers

The illustrations in this section show the connectors, LEDs, and jumpers on the internal boards.

The illustrations might differ slightly from your hardware.

# **System-board internal connectors**

The following illustration shows the internal connectors on the system board.

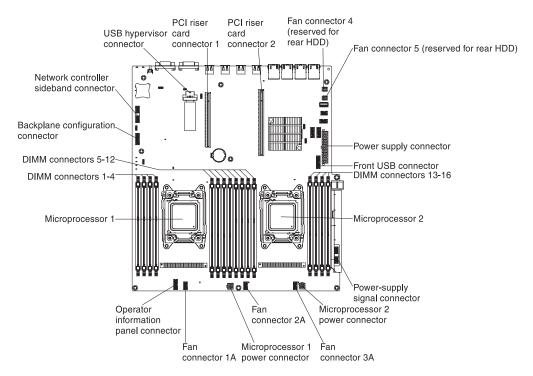


Figure 11. System board internal connectors

# **System-board DIMM connectors**

The following illustration shows the DIMM connectors on the system board.

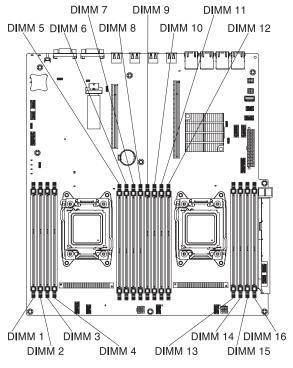


Figure 12. System board DIMM connectors

# **System-board external connectors**

The following illustration shows the external input/output connectors on the system board.

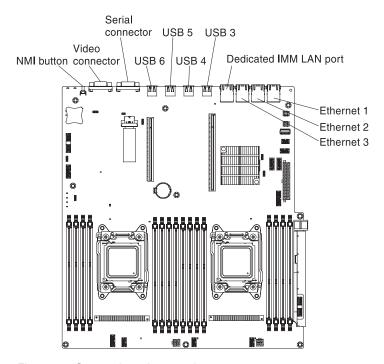


Figure 13. System board external connectors

# **System-board jumpers**

This section describes the jumpers on the system board.

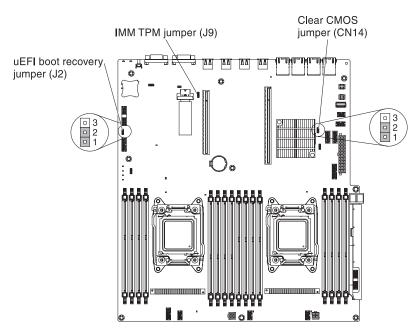


Figure 14. System board jumpers

Table 3. System board jumpers

| Jumper number | Jumper name               | Jumper setting   |
|---------------|---------------------------|--|
| CN14          | Clear CMOS jumper         | <ul> <li>Pins 1 and 2: Normal<br/>(default) - This keeps the<br/>CMOS data.</li> <li>Pins 2 and 3: This clears<br/>the CMOS data such as<br/>power-on password and<br/>loads the default UEFI<br/>settings.</li> </ul> |
|               |                           | Note 2   |
| J2            | UEFI boot recovery jumper | <ul> <li>Pins 1 and 2: Normal<br/>(default) Loads the<br/>primary firmware ROM<br/>page.</li> <li>Pins 2 and 3: Loads the<br/>secondary (backup)<br/>firmware ROM page.</li> </ul>                                     |
|               |                           | Notes 1 and 2  |
| ]9            | IMM TPM jumper            | <ul> <li>Pins 1 and 2: Normal<br/>(default) TPM not physical<br/>present.</li> <li>Pins 2 and 3: TPM<br/>physical present.</li> </ul>  |

### Note:

- 1. If no jumper is present, the server responds as if the pins are set to 1 and 2.
- 2. Changing the position of the UEFI recovery jumper from pins 1 and 2 to pins 2 and 3 before the server is turned on sets the UEFI recovery process. Do not change the jumper pin position after the server is turned on. This can cause an unpredictable problem.

# Important:

- 1. Before you change any switch settings or move any jumpers, turn off the server; then, disconnect all power cords and external cables. (Review the information on page "Safety" on page v, "Installation guidelines" on page 31, "Handling static-sensitive devices" on page 33, and "Turning off the server" on page 21.
- 2. Any system-board switch or jumper blocks that are not shown in the illustrations in this document are reserved.

## System-board LEDs

The following illustration shows the light-emitting diodes (LEDs) on the system board.

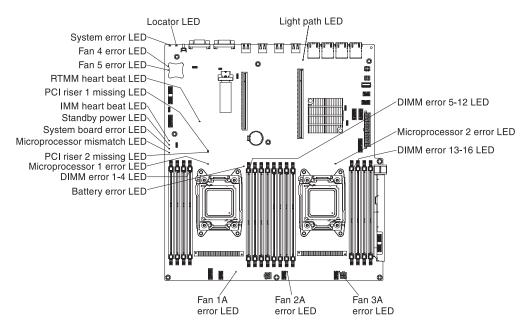


Figure 15. System board LEDs

Table 4. System board LEDs definition

| LED name                    | Description   |
|-----------------------------|---|
| Error LEDs                  | When an error LED is lit, it indicates that the associated component has failed.  |
| RTMM heartbeat LED          | Power-on and power-off sequencing.  |
| IMM 2 heartbeat LED         | Indicates the status of the boot process of the IMM2.   |
|                             | When the server is connected to power this LED flashes quickly to indicate that the IMM2 code is loading. When the loading is complete, the LED stops flashing briefly and then flashes slowly to indicate that the IMM2 if fully operational and you can press the power-control button to start the server. |
| Standby power LED           | When this LED is flashing, it indicates that the server is connected to an ac power source.   |
|                             | When this LED is lit, it indicates that the server is dc power on.  |
| System board error LED      | System-board has failed.  |
| Microprocessor mismatch LED | When this LED is lit, it indicates that microprocessor 1 is not installed, or the microprocessors do not have the same cache size and type, and clock speed.  |
| DIMM error LEDs             | A memory DIMM has failed or is incorrectly installed.   |
| Microprocessor error LED    | Microprocessor has failed, is missing, or has been incorrectly installed.   |

Table 4. System board LEDs definition (continued)

| LED name       | Description   |
|----------------|---|
| Light path LED | Indicates whether or not the lightpath button is functional. If the light path LED is lit after pressing the lightpath button, it indicates that the lightpath button is functioning properly. By contrast, if the lightpath LED is not lit when pressing the light path button, it means the lightpath |
|                | button is not functioning properly.   |

# PCI riser-card adapter expansion slot connectors

The following illustration shows the respective expansion slot connectors on the three different types of PCI riser card assemblies that the server is capable of supporting.

**Note:** The specifications of the following slot labeling is defined in the following format.

PCIe3 x aa (b, c, d, e)

#### where:

- aa = Physical connector link width
- b, c, d, e = Negotiable link width

PCI riser-card assembly 1

• Type 1

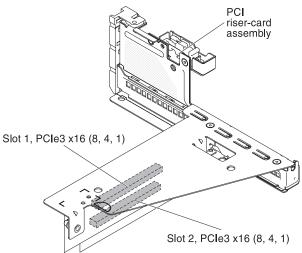


Figure 16. PCI riser-card assembly 1 (Type 1)

• Type 2

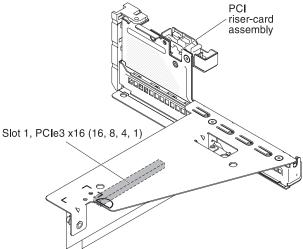
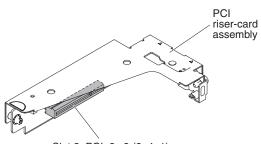


Figure 17. PCI riser-card assembly 1 (Type 2)

PCI riser-card assembly 2



Slot 3, PCle3 x8 (8, 4, 1)
Figure 18. PCl riser-card assembly 2

# Installation guidelines

Use the installation guidelines to install the System x3650 M4 BD Type 5466.

### Attention:

- Static electricity that is released to internal server components when the server is powered-on might cause the system to halt, which might result in the loss of data. To avoid this potential problem, always use an electrostatic-discharge wrist strap or other grounding system when removing or installing a hot-swap device.
- This product is not intended to be connected directly or indirectly by any means whatsoever to interfaces of public telecommunications networks, neither to be used in Public Services Network.

Before you install optional devices, read the following information:

- Read the safety information that begins on page "Safety" on page v and the guidelines in "Handling static-sensitive devices" on page 33. This information will help you work safely.
- Make sure that the devices that you are installing are supported. For a list of supported optional devices for the server, go to http://www.ibm.com/systems/ info/x86servers/serverproven/compat/us/.
- When you install your new server, take the opportunity to download and apply
  the most recent firmware updates. This step will help to ensure that any known
  issues are addressed and that your server is ready to function at maximum
  levels of performance. To download firmware updates for your server, go to
  http://www.ibm.com/support/fixcentral/.

Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.

For additional information about tools for updating, managing, and deploying firmware, see the ToolsCenter for System x and BladeCenter at http://www.ibm.com/support/entry/portal/docdisplay?lndocid=TOOL-CENTER.

- Before you install optional hardware, make sure that the server is working correctly. Start the server, and make sure that the operating system starts, if an operating system is installed, or that a 19990305 error code is displayed, indicating that an operating system was not found but the server is otherwise working correctly. If the server is not working correctly, see "Running the DSA Preboot diagnostic programs" on page 127 for information about how to run diagnostics.
- Observe good housekeeping in the area where you are working. Place removed covers and other parts in a safe place.
- Do not attempt to lift an object that you think is too heavy for you. If you have to lift a heavy object, observe the following precautions:
  - Make sure that you can stand safely without slipping.
  - Distribute the weight of the object equally between your feet.
  - Use a slow lifting force. Never move suddenly or twist when you lift a heavy object.
  - To avoid straining the muscles in your back, lift by standing or by pushing up with your leg muscles.
- Make sure that you have an adequate number of properly grounded electrical outlets for the server, monitor, and other devices.
- Back up all important data before you make changes to disk drives.
- Have a small flat-blade screwdriver available.
- To view the error LEDs on the system board and internal components, leave the server connected to power.
- You do not have to turn off the server to install or replace hot-swap power supplies, hot-swap fans, or hot-plug Universal Serial Bus (USB) devices. However, you must turn off the server before you perform any steps that involve removing or installing adapter cables and you must disconnect the power source from the server before you perform any steps that involve removing or installing a riser card.
- Blue on a component indicates touch points, where you can grip the component to remove it from or install it in the server, open or close a latch, and so on.
- Orange on a component or an orange label on or near a component indicates that the component can be hot-swapped, which means that if the server and operating system support hot-swap capability, you can remove or install the component while the server is running. (Orange can also indicate touch points on hot-swap components.) See the instructions for removing or installing a specific hot-swap component for any additional procedures that you might have to perform before you remove or install the component.
- When you are finished working on the server, reinstall all safety shields, guards, labels, and ground wires.

# System reliability guidelines

The system reliability guidelines to ensure proper system cooling.

To help ensure proper system cooling and system reliability, make sure that the following requirements are met:

- Each of the drive bays has a drive or a filler panel and electromagnetic compatibility (EMC) shield installed in it.
- If the server has redundant power, each of the power-supply bays has a power supply installed in it.
- There is adequate space around the server to allow the server cooling system to work properly. Leave approximately 50 mm (2.0 in.) of open space around the front and rear of the server. Do not place objects in front of the fans. For proper cooling and airflow, replace the server cover before you turn on the server.
- You have followed the cabling instructions that come with optional adapters.
- You have replaced a failed fan within 48 hours.
- You have replaced a hot-swap drive within 2 minutes of removal.
- You do not operate the server without the air baffles installed. Operating the server without the air baffles might cause the microprocessor to overheat.

# Working inside the server with the power on

Guidelines to work inside the server with the power on.

#### Attention:

- Lenovo System x3650 M4 BD Type 5466 does not support service on rack.
- Static electricity that is released to internal server components when the server is powered-on might cause the server to halt, which might result in the loss of data. To avoid this potential problem, always use an electrostatic-discharge wrist strap or other grounding system when you work inside the server with the power on.

You might have to have the server turned on while the cover is off, to look at light path diagnostics LEDs or replace hot swap components. Follow these guidelines when you work inside a server that is turned on:

- Avoid wearing loose-fitting clothing on your forearms. Button long-sleeved shirts before working inside the server; do not wear cuff links while you are working inside the server.
- Do not allow your necktie or scarf to hang inside the server.
- Remove jewelry, such as bracelets, necklaces, rings, and loose-fitting wrist watches.
- Remove items from your shirt pocket, such as pens and pencils, that could fall
  into the server as you lean over it.
- Avoid dropping any metallic objects, such as paper clips, hairpins, and screws, into the server.

# Handling static-sensitive devices

Use this information to handle static-sensitive devices.

**Attention:** Static electricity can damage the server and other electronic devices. To avoid damage, keep static-sensitive devices in their static-protective packages until you are ready to install them.

To reduce the possibility of damage from electrostatic discharge, observe the following precautions:

• Limit your movement. Movement can cause static electricity to build up around you.

- The use of a grounding system is highly recommended. For example, wear an electrostatic-discharge wrist strap, if one is available. Always use an electrostatic-discharge wrist strap or other grounding system when working inside the server with the power on
- Handle the device carefully, holding it by its edges or its frame.
- Do not touch solder joints, pins, or exposed circuitry.
- Do not leave the device where others can handle and damage it.
- While the device is still in its static-protective package, have the device be in contact to an unpainted metal surface on the outside of the server for at least 2 seconds. This drains static electricity from the package and from your body.
- Remove the device from its package and install it directly into the server without setting down the device. If it is necessary to set down the device, put it back into its static-protective package. Do not place the device on the server top cover or on a metal surface.
- Take additional care when handling devices during cold weather. Heating reduces indoor humidity and increases static electricity.

# Removing the server top cover

Use this information to remove the server top cover.

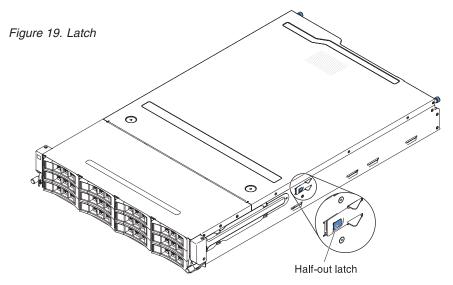
### About this task

To remove the server top cover, complete the following steps:

- 1. Read the safety information that begins on page "Safety" on page v and "Installation guidelines" on page 31.
- 2. Turn off the server (see "Turning off the server" on page 21) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
- 3. If the server has been installed in a rack, press the two release latches on the front of the server and remove the server out of the rack enclosure.

### Attention:

- Two or more people are required to remove the system from a rack cabinet.
- To completely remove the server from the rack, press the latches on the sides on the slide rails.



- 4. Loosen the two thumbscrews that secure the cover to the rear of the server.
- 5. Press on the two blue grip points and slide the cover toward the rear; then, lift the cover off the server and set it aside.

**Attention:** For proper cooling and airflow and to avoid damaging server components, replace the cover before you turn on the server.

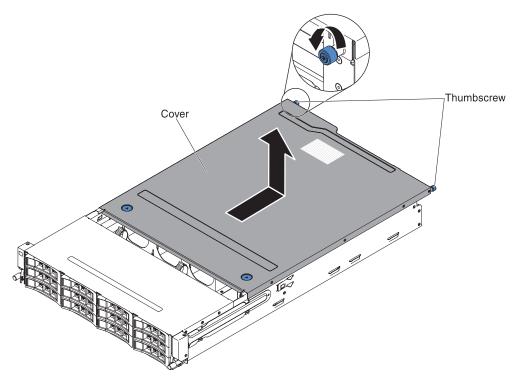


Figure 20. Cover removal

### Results

If you have other devices to install or remove, do so now. Otherwise, go to "Completing the installation" on page 77.

# Rotating the hot-swap rear hard disk drive cage up

Use this information to rotate the hot-swap rear hard disk drive cage up.

# About this task

To rotate the hot-swap hard disk drive cage up, complete the following steps.

# **Procedure**

- 1. Read the safety information that begins on page "Safety" on page v and "Installation guidelines" on page 31.
- 2. Turn off the server (see "Turning off the server" on page 21) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
- 3. Remove the server top cover (see "Removing the server top cover" on page 34.
- 4. Open the two respective blue latches on the chassis 1.
- 5. Slowly rotate the rear hard disk drive cage outwards until it stops 2.
- 6. Shift the switch on the rear hard disk drive cage to the lock position to keep the hard disk drive cage fixed 3.

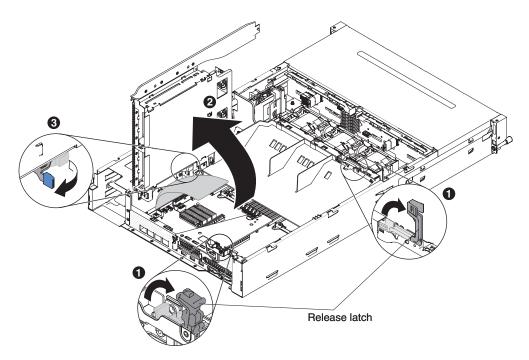


Figure 21. Hot-swap rear hard disk drive cage rotation

# Results

If you have other devices to install or remove, do so now. Otherwise, go to "Completing the installation" on page 77.

# Removing a PCI riser-card assembly

Use this information to remove a PCI riser-card assembly from the server.

### About this task

To remove the PCI riser-card assembly, complete the following steps:

- 1. Read the safety information that begins on page "Safety" on page v and "Installation guidelines" on page 31.
- 2. Turn off the server (see "Turning off the server" on page 21) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
- 3. Remove the server top cover (see "Removing the server top cover" on page 259).
- 4. Rotate the hot-swap rear hard disk drive cage up (see "Rotating the hot-swap rear hard disk drive cage up" on page 36
- 5. If an adapter is installed in the PCI riser-card assembly, disconnect any cables that are connected to the adapter.
- 6. Grasp the front and rear of the PCI riser-card assembly at the blue touch-points and lift it out of the PCI riser connector on the system board.

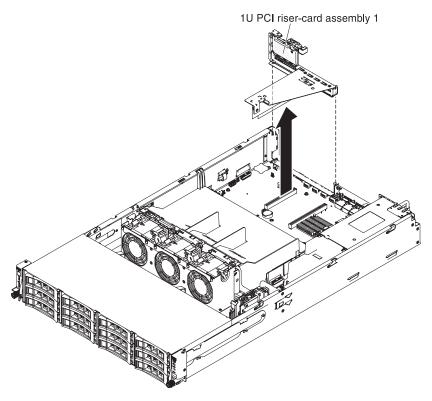


Figure 22. PCI riser-card assembly 1 removal

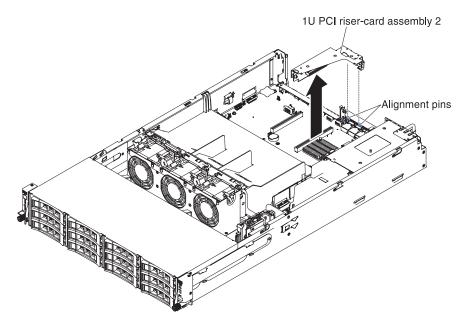


Figure 23. PCI riser-card assembly 2 removal

### Results

If you have other devices to install or remove, do so now. Otherwise, go to "Completing the installation" on page 77.

# Removing the air baffle

Use this information to remove the air baffle from the server.

# About this task

When you work with some optional devices, you must first remove the air baffle to access some components or connectors on the system board. The following illustration shows how to remove the air baffle.

To remove the air baffle, complete the following steps:

- 1. Read the safety information that begins on page "Safety" on page v and "Installation guidelines" on page 31.
- 2. Turn off the server (see "Turning off the server" on page 21) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
- 3. Remove the top cover (see "Removing the server top cover" on page 34).
- 4. Rotate the hot-swap rear hard disk drive cage up (see "Rotating the hot-swap rear hard disk drive cage up" on page 36.
- 5. Grasp the top of the air baffle and lift it out of the server.
  - **Attention:** For proper cooling and airflow, replace the air baffle before you turn on the server. Operating the server with the air baffle removed might damage server components.

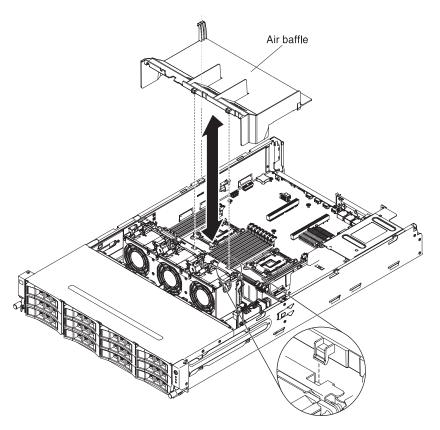


Figure 24. Air baffle removal

# **Results**

If you have other devices to install or remove, do so now. Otherwise, go to "Completing the installation" on page 77.

# Removing a hot-swap hard disk drive

Use this information to remove a hot-swap hard disk drive from the server.

# About this task

# Attention:

- To avoid damage to the drive connectors, make sure that the server cover is in place and fully closed whenever you install or remove a drive.
- To make sure that there is adequate system cooling, do not operate the server for more than 2 minutes without either a drive or a filler panel installed in each bay.

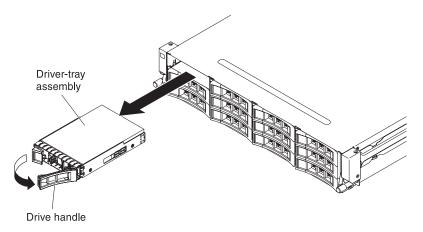


Figure 25. Hot-swap hard disk drive removal

To remove a hot-swap hard disk drive, complete the following steps:

### **Procedure**

- 1. Read the safety information that begins on page "Safety" on page v and "Installation guidelines" on page 31.
- 2. Press the release latch on the side of the drive front.
- 3. Grasp the handle and pull the hot-swap drive assembly out of the drive bay.

Note: You might have to reconfigure the disk arrays after you remove a hard disk drive. See the RAID documentation on the ServeRAID Support CD for information about RAID controllers.

# Results

If you have other devices to install or remove, do so now. Otherwise, go to "Completing the installation" on page 77.

# Removing an adapter from the PCI riser-card assembly

Use this information to remove an adapter from the PCI riser-card assembly.

## About this task

To remove an adapter from the PCI riser-card assembly, complete the following steps:

- 1. Read the safety information that begins on page "Safety" on page v and "Installation guidelines" on page 31.
- 2. Turn off the server (see "Turning off the server" on page 21) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
- 3. Remove the server cover (see "Removing the server top cover" on page 259).
- 4. Rotate the hot-swap rear hard disk drive cage up (see "Rotating the hot-swap rear hard disk drive cage up" on page 36.
- 5. Disconnect any cables from the adapter (make note of the cable routing, in case you reinstall the adapter later).

- 6. Remove the PCI riser-card assembly 1 or 2 (see "Removing a PCI riser-card assembly" on page 37).
- 7. The following illustrates the steps for removing an adapter from the PCI riser-card assemblies:
  - For PCI riser-card assembly 1:
    - a. Rotate the retention latch to the open position.
    - b. Carefully grasp the adapter by its top edge or upper corners, and pull the adapter from the PCI riser-card assembly.

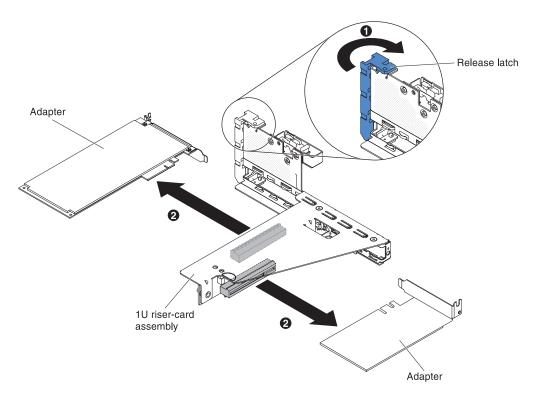


Figure 26. Adapter removal

- 8. Place the adapter on a flat, static-protective surface.
- 9. If you are instructed to return the adapter, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

# Results

If you have other devices to install or remove, do so now. Otherwise, go to "Completing the installation" on page 77.

# Removing a ServeRAID adapter from the PCI riser-card assembly

Use this information to remove a ServeRAID adapter from the PCI riser-card assembly.

# About this task

To remove a ServeRAID adapter from the PCI riser-card assembly, complete the following steps:

- 1. Read the safety information that begins on page "Safety" on page v and "Installation guidelines" on page 31.
- 2. Turn off the server (see "Turning off the server" on page 21) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
- 3. Remove the server cover (see "Removing the server top cover" on page 259).
- 4. Rotate the hot-swap rear hard disk drive cage up (see "Rotating the hot-swap rear hard disk drive cage up" on page 36.
- 5. Remove PCI riser-card assembly 1 or 2 (see "Removing a PCI riser-card assembly" on page 37).
- 6. The following illustrates the steps for removing an adapter from the PCI riser-card assemblies:
  - For PCI riser-card assembly 1:
    - a. Rotate the retention latch to the open position.
    - b. Carefully grasp the ServeRAID adapter by its top edge or upper corners, and pull the ServeRAID adapter from the PCI riser-card assembly.

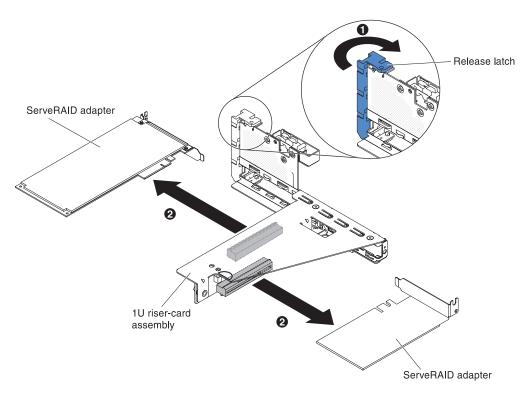


Figure 27. ServeRAID adapter removal

- For PCI riser-card assembly 2:
  - a. Pull the release pin to unlock the retention latch; then rotate the retention latch to the open position.
  - b. Carefully grasp the ServeRAID adapter by the edge and pull it out of PCI riser-card assembly 2.

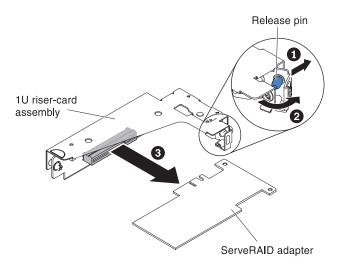


Figure 28. ServeRAID adapter removal

If you are instructed to return the ServeRAID adapter, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

**Note:** When the ServeRAID adapter is removed, software RAID will not be supported. This system does not support downgrade software RAID function from hardware RAID configuration.

#### Results

If you have other devices to install or remove, do so now. Otherwise, go to "Completing the installation" on page 77.

# Installing a hot-swap hard disk drive

Use this information to a hot-swap hard disk drive into the server.

# **About this task**

The following notes describe the type of hard disk drives that the server supports and other information that you must consider when you install a drive. For a list of supported drives, see http://www.ibm.com/systems/info/x86servers/serverproven/compat/us/

- Locate the documentation that comes with the hard disk drive and follow those instructions in addition to the instructions in this chapter.
- The system supports support up to fourteen 3.5-inch hot-swap SAS/SATA hard disk drives (two 3.5-inch hot-swap SAS/SATA hard disk drives are located at the rear of the server).
- All hot-swap drives in the server should have the same throughput speed rating. Using hard disk drives with different speed ratings will cause all drives to operate at the throughput speed of the slowest drive.

**Attention:** To maintain proper system cooling, do not operate the server for more than 10 minutes without either a drive or a filler panel installed in each bay.

To install a drive in a hot-swap bay, complete the following steps:

### **Procedure**

- 1. Read the safety information that begins on page "Safety" on page v and "Installation guidelines" on page 31.
- 2. Touch the static-protective package that contains the drive to any unpainted metal surface on the server; then, remove the drive from the package and place it on a static-protective surface.
- 3. Remove the drive filler panel from one of the empty hot-swap bays.
- 4. Install the hard disk drive in the hot-swap bay:
  - a. Orient the drive as shown in the illustration.
  - b. Make sure that the tray handle is open.
  - c. Align the drive assembly with the guide rails in the bay.

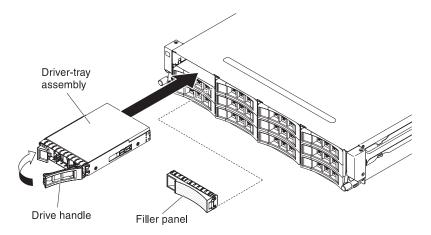


Figure 29. Hot-swap hard disk drive installation

- d. Gently push the drive assembly into the bay until the drive stops.
- e. Push the tray handle to the closed (locked) position.
- f. If the system is turned on, check the hard disk drive status LED to verify that the hard disk drive is operating correctly.
- 5. Check the drive status LED to verify that the drive is operating correctly. If the yellow drive status LED for a drive is lit continuously, that drive is faulty and must be replaced. If the green drive activity LED is flashing, the drive is being accessed.

**Note:** If the server is configured for RAID operation using a ServeRAID adapter, you might have to reconfigure your disk arrays after you install drives. See the ServeRAID adapter documentation for additional information about RAID operation and complete instructions for using the ServeRAID adapter.

- 6. If you are installing additional hot-swap drives, do so now.
- 7. Restart the server. Confirm that it starts correctly and recognizes the newly installed devices, and make sure that no error LEDs are lit.
- 8. Complete the additional steps in "Instructions for Business Partners" on page 23.

### Results

If you have other devices to install or remove, do so now. Otherwise, go to "Completing the installation" on page 77.

# Installing an adapter on the PCI riser-card assembly

Use this information to install an adapter on the PCI riser-card assembly.

### About this task

The following notes describe the types of adapters that the server supports and other information that you must consider when you install an adapter:

### **Notes:**

- To confirm that server supports the adapter that you are installing, see <a href="http://www.ibm.com/systems/info/x86servers/serverproven/compat/us/">http://www.ibm.com/systems/info/x86servers/serverproven/compat/us/</a>.
- Locate the documentation that comes with the adapter and follow those instructions in addition to the instructions in this section.
- Any high-definition video-out connector or stereo connector on any add-on video adapter is not supported.
- The server does not support legacy 5 V PCI adapters.

To install an adapter, complete the following steps:

- 1. Read the safety information that begins on page "Safety" on page v and "Installation guidelines" on page 31.
- 2. Turn off the server (see "Turning off the server" on page 21) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
- 3. Remove the server top cover (see "Removing the server top cover" on page 34).
- 4. Rotate the hot-swap rear hard disk drive cage up (see "Rotating the hot-swap rear hard disk drive cage up" on page 36.
- 5. Remove the PCI riser-card assembly (see "Removing a PCI riser-card assembly" on page 37.
- 6. Determine which expansion slot you will use for the adapter.
- 7. The following steps illustrate the procedure of installing an adapter on the PCI riser-card assemblies:
  - For PCI riser-card assembly 1:
    - a. Rotate the retention latch to the open position. Insert the adapter into the PCI riser-card assembly, aligning the edge connector on the adapter with the connector on the PCI riser-card assembly. Press the edge of the connector firmly into the PCI riser-card assembly. Make sure that the adapter snaps into the PCI riser-card assembly securely.
    - b. Rotate the retention latch to the close position. Make sure the retention latch engages the adapter securely.

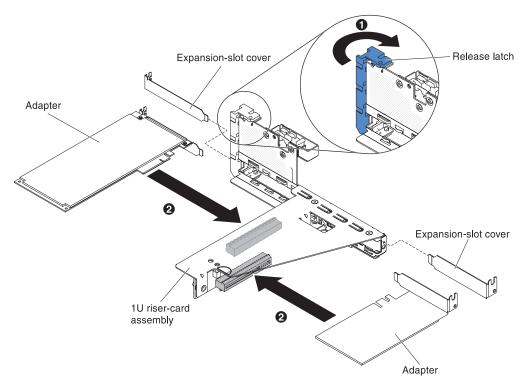


Figure 30. Adapter installation

8. Connect any required cables to the adapter.

### Attention:

- When you route cables, do not block any connectors or the ventilated space around any of the fans.
- Make sure that cables are not routed on top of components that are under the PCI riser-card assembly.
- Make sure that cables are not pinched by the server components.
- 9. Install the PCI riser-card assembly (see "Installing a PCI riser-card assembly" on page 79).
- 10. Perform any configuration tasks that are required for the adapter.

### Results

If you have other devices to install or remove, do so now. Otherwise, go to "Completing the installation" on page 77.

# Installing a single / dual port 10GbE SFP+ embedded adapter with interposer

Use this information to install a single / dual port 10GbE SFP+ embedded adapter with interposer.

### About this task

### Note:

• To confirm that server supports the adapter that you are installing, see http://www.ibm.com/systems/info/x86servers/serverproven/compat/us/.

• Locate the documentation that comes with the adapter and follow those instructions in addition to the instructions in this section.

To install an adapter, complete the following steps:

- 1. Read the safety information that begins on page "Safety" on page v and "Installation guidelines" on page 31.
- 2. Turn off the server (see "Turning off the server" on page 21) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
- 3. Remove the server top cover (see "Removing the server top cover" on page 34).
- 4. Rotate the hot-swap rear hard disk drive cage up (see "Rotating the hot-swap rear hard disk drive cage up" on page 36.
- 5. Remove the PCI riser-card assembly (see "Removing a PCI riser-card assembly" on page 37.
- 6. Rotate the retention latch to the open position. Insert the adapter into the PCI riser-card assembly, aligning the edge connector on the adapter with the connector on the PCI riser-card assembly. Press the edge of the connector firmly into the PCI riser-card assembly. Make sure that the adapter snaps into the PCI riser-card assembly securely.

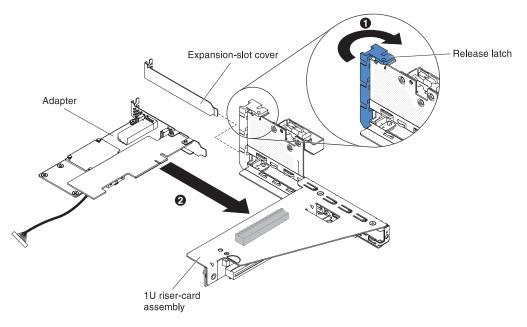


Figure 31. Single port 10GbE SFP+ embedded adapter installation

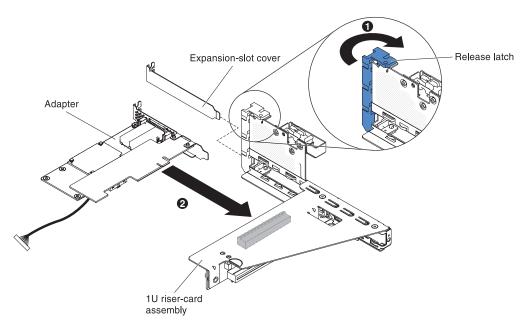


Figure 32. Dual port 10GbE SFP+ embedded adapter installation

- 7. Rotate the retention latch to the close position. Make sure the retention latch engages the adapter securely.
- 8. Connect the cable to the network controller sideband connector on the system board. (See "System-board internal connectors" on page 25).

### Attention:

- When you route cables, do not block any connectors or the ventilated space around any of the fans.
- Make sure that cables are not routed on top of components that are under the PCI riser-card assembly.
- Make sure that cables are not pinched by the server components.
- 9. Install the PCI riser-card assembly (see "Installing a PCI riser-card assembly" on page 79).
- 10. Perform any configuration tasks that are required for the adapter.

## Results

If you have other devices to install or remove, do so now. Otherwise, go to "Completing the installation" on page 77.

# Installing a ServeRAID adapter on the PCI riser-card assembly

Use this information to install a ServeRAID adapter on the PCI riser-card assembly.

## About this task

Important: When you install ServeRAID adapters on the PCI riser-card assemblies, please install them in the order listed:

- Slot 2 (For the rear backplane or external ServeRAID adapter only)
- Slot 1 (For external ServeRAID adapter only)

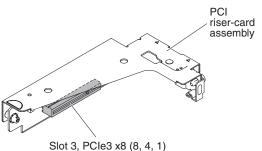
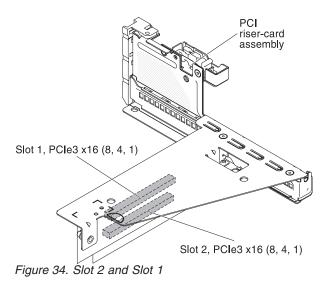


Figure 33. Slot 3

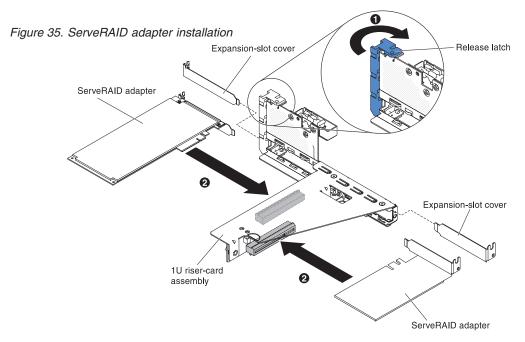


**Note:** The supported PCI slot for the RAID link function is slot 2 and 3. However, please note when installing RAID controller M5120, it can only be installed in slot 1 and 2.

To install a ServeRAID adapter on the PCI riser-card assembly, complete the following steps:

- 1. Read the safety information that begins on page "Safety" on page v and "Installation guidelines" on page 31.
- 2. Turn off the server (see "Turning off the server" on page 21) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
- 3. Remove the top cover (see "Removing the server top cover" on page 34).
- 4. If you are installing a new or replacement ServeRAID adapter, touch the static-protective package that contains the new ServeRAID adapter to any unpainted metal surface on the server. Then, remove the ServeRAID adapter from the package.
- 5. If you are installing a new or replacement ServeRAID adapter that uses a battery, complete the following steps:
  - a. Remove the battery from the ServeRAID adapter package or the battery package.
  - b. Install the battery and connect the battery to the ServeRAID controller as instructed in the documentation that comes with the ServeRAID controller

- or the battery, or see "Installing a ServeRAID adapter battery or flash power module in the remote battery tray" on page 52.
- 6. The following illustrates the steps for installing a ServeRAID adapter on the PCI riser-card assemblies:
  - For PCI riser-card assembly 1:
    - a. Rotate the retention latch to the open position. Insert the ServeRAID adapter into the PCI riser-card assembly, aligning the edge connector on the adapter with the connector on the PCI riser-card assembly. Press the edge of the connector firmly into the PCI riser-card assembly. Make sure that the adapter snaps into the PCI riser-card assembly securely.
    - b. Rotate the retention latch to the close position. Make sure the retention latch engages the adapter securely.



- For PCI riser-card assembly 2:
  - a. Pull the release pin to unlock the retention latch; then rotate the retention latch to the open position.
  - b. Align the ServeRAID adapter so that the keys align correctly with the connector on PCI riser-card assembly 2.
  - c. Insert the ServeRAID adapter into the connector on the riser-card until it is firmly seated.

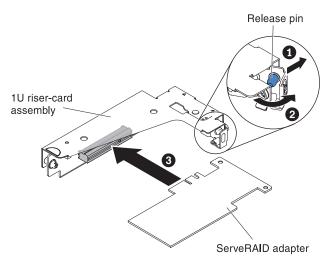


Figure 36. ServeRAID adapter installation

**Attention:** Incomplete insertion might cause damage to the server or the adapter.

7. Connect any required cables to the ServeRAID adapter.

### Attention:

- When you route cables, do not block any connectors or the ventilated space around any of the fans.
- Make sure that cables are not routed on top of components that are under the PCI riser-card assembly.
- Make sure that cables are not pinched by the server components.
- 8. Rotate the retention latch to the closed position, making sure the retention latch engages the ServeRAID adapter. Then, push the release pin to lock the retention latch in place.
- 9. Install PCI riser-card assembly 1 or 2 (see "Installing a PCI riser-card assembly" on page 79.

### Results

If you have other devices to install or remove, do so now. Otherwise, go to "Completing the installation" on page 77.

### Note:

- 1. When you restart the server for the first time after you install a ServeRAID adapter with a battery, the monitor screen remains blank while the controller initializes the battery. This might take a few minutes, after which the startup process continues. This is a one-time occurrence.
  - **Important:** You must allow the initialization process to be completed. If you do not, the battery pack will not work, and the server might not start.
  - The battery comes partially charged, at 30% or less of capacity. Run the server for 4 to 6 hours to fully charge the battery. The LED just above the battery on the controller remains lit until the battery is fully charged.
  - Until the battery is fully charged, the controller firmware sets the controller cache to write-through mode; after the battery is fully charged, the controller firmware re-enables write-back mode.
- 2. When you restart the server, you are given the opportunity to import the existing RAID configuration to the new ServeRAID adapter.

# Installing a ServeRAID adapter battery or flash power module in the remote battery tray

Use this information to install a ServeRAID adapter battery or flash power module in the remote battery tray.

## About this task

The Intelligent Battery Backup Unit (iBBU) is an optional battery for the ServeRAID adapter. It is referred to as the battery throughout this section. You must purchase the remote battery cable and install the battery at a distance from the ServeRAID adapter to avoid overheating.

You can install up to two batteries on the remote battery trays on the chassis.

To install a battery on the remote battery tray, complete the following steps:

- 1. Read the safety information that begins on page "Safety" on page v and "Installation guidelines" on page 31.
- 2. Turn off the server (see "Turning off the server" on page 21) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
- 3. Remove the server top cover (see "Removing the server top cover" on page 34).
- 4. Install the battery in the RAID battery tray:
  - a. Orient the battery as shown in the following illustration; then, lower the battery into the RAID battery tray. If the battery comes with a battery carrier, ensure that battery carrier posts align with the rings on the battery mounting slot so that the battery carrier is secure in the slot.
  - b. Push the battery retention clip back to its vertical position until it snaps into place, thereby securing the battery.

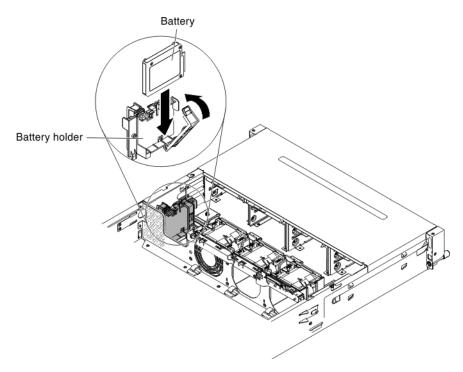


Figure 37. Battery installation

5. Connect the remote battery cable to the remote battery cable connector on the ServeRAID adapter. Route the remote battery cable in the server as shown in the following illustration.

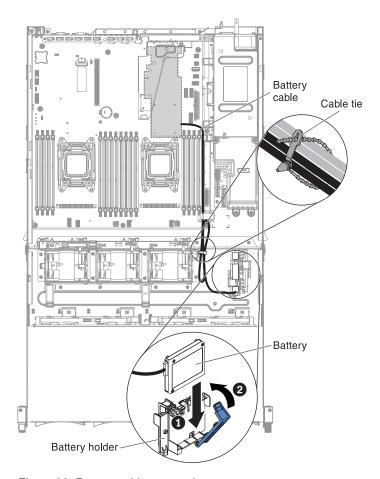


Figure 38. Battery cable connection

### Attention:

- Make sure the cable passes through the cable clips.
- Make sure that the cable is not pinched and does not cover any connectors or obstruct any components on the system board.

# Results

If you have other devices to install or remove, do so now. Otherwise, go to "Completing the installation" on page 77.

# Installing a hot-swap backplane on the rear hard disk drive cage

Use this information to install a hot-swap backplane on the rear hard disk drive cage.

## About this task

The following illustrations show two different types of hot-swap backplanes.

• Type 1 - SATA

**Attention:** This backplane has to be cascaded with the front backplane to make the master-slave connection.

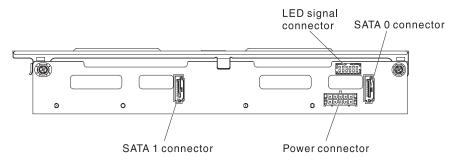


Figure 39. Type 1 - SATA

• Type - SAS

**Note:** This backplane can be an independent configuration (Cascading with the front backplane is unnecessary)

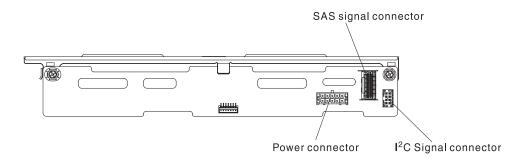


Figure 40. Type 2 - SAS

To install the hot-swap backplane for the rear hard disk drive cage, complete the following steps.

- 1. Read the safety information that begins on page "Safety" on page v and "Installation guidelines" on page 31.
- 2. Turn off the server (see "Turning off the server" on page 21) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
- 3. Remove the server top cover (see "Removing the server top cover" on page 34).
- 4. Connect cables to the backplane.
  - Type 1 SATA
    - Connect the LED signal, SATA signal and power cables to the backplane.

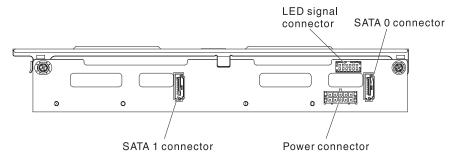


Figure 41. Type 1 - SATA

- Type 2 SAS
  - Connect the I<sup>2</sup>C signal, SAS signal and power cables to the backplane.

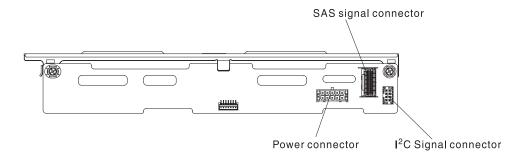


Figure 42. Type 2 - SAS

- 5. Align the backplane with the slot on the rear hard disk drive cage.
- 6. Lower the backplane into the rear hard disk drive cage. Make sure the three alignment pins securely engages the three holes on the hard disk drive cage.

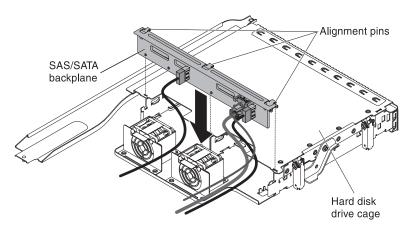


Figure 43. Hot-swap backplane installation

- 7. For information on how to connect the relevant cabling on the backplane to the server, please refer to "Replacing the hot-swap rear hard disk drive cage" on page 171.
- 8. Install the hot-swap hard disk drives in the rear hard disk drive cage (see "Installing a hot-swap hard disk drive" on page 43.

### Results

If you have other devices to install or remove, do so now. Otherwise, go to "Completing the installation" on page 77.

# Installing a front fan

Use this information to install a front fan into the server.

# **About this task**

For proper cooling, the server requires that all fans in the system be operating at all times.

**Attention:** To ensure proper server operation, if a fan fails, replace the fan immediately.

See "System-board internal connectors" on page 25 for the locations of the fan cable connectors.

To install a front fan, complete the following steps.

- 1. Touch the static-protective package that contains the new fan to any unpainted metal surface on the server. Then, remove the new fan from the package.
- 2. Read the safety information that begins on page "Safety" on page v and "Installation guidelines" on page 31.
- 3. Turn off the server (see "Turning off the server" on page 21) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
- 4. Remove the server top cover (see "Removing the server top cover" on page 34).
- 5. Rotate the hot-swap rear hard disk drive cage up (see "Rotating the hot-swap rear hard disk drive cage up" on page 36).
- 6. Remove the PCI riser-card assembly (see "Removing a PCI riser-card assembly" on page 37).
- 7. Remove the air baffle (see "Removing the air baffle" on page 38).
- 8. Installing Fan 1A:. (For installation of Fan 2A or Fan 3A, please go to step 10)

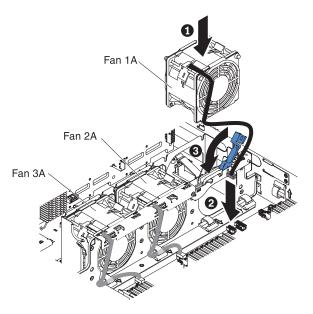


Figure 44. Fan installation

- a. Pull up the blue handle on the fan cage.
- b. Orient the fan so that the fan cable points to the system board.
- **c**. Lower the fan into the fan slot in the server and ensure that is it seated correctly.
- d. Connect the fan cable to the connector on the system board. (See "System-board internal connectors" on page 25).

Note: Make sure the cable passes through the cable clips.

- e. Insert the fan cable into the cable retainer clip.
- f. Return the blue handle back to its horizontal position.
- 9. If you have other devices to install or remove, do so now. Otherwise, go to "Completing the installation" on page 77.
- 10. Installing Fan 2A or 3A:
  - a. Orient the fan so that the fan cable points to the system board.
  - b. Lower the fan into the fan slot in the server and ensure that is it seated correctly.
  - **c.** Connect the fan cable to the connector on the system board. (See "System-board internal connectors" on page 25).
  - d. Insert the fan cable into the cable retainer clip.

**Note:** Make sure the cable passes through the cable clips.

11. If you have other devices to install or remove, do so now. Otherwise, go to "Completing the installation" on page 77.

# Memory module installation

The following notes describe the types of dual inline memory modules (DIMMs) that the server supports and other information that you must consider when you install DIMMs.

## About this task

- Confirm that the server supports the DIMM that you are installing, see http://www.ibm.com/systems/info/x86servers/serverproven/compat/us/.
- When you install or remove DIMMs, the server configuration information changes. When you restart the server, the system displays a message that indicates that the memory configuration has changed.
- The server supports only industry-standard double-data-rate 3 (DDR3) 1600 or 1866 MHz (depending on the configuration), synchronous dynamic random-access memory (SDRAM) registered dual inline memory modules (DIMMs) with error correcting code (ECC).
- The specifications of a DDR3 DIMM are on a label on the DIMM, in the following format.

ggg eRxff-PC3-wwwwm-aa-bb-cc-dd

#### where:

- *ggg* is the total capacity of the DIMM (for example, 1GB, 2GB, or 4GB)
- eis the number of ranks
  - 1 = single-rank
  - 2 = dual-rank
- x ff is the device organization or bit width (for example, x4, x8, or x16)
  - 4 = x4 organization (4 DQ lines per SDRAM)
  - 8 = x8 organization
  - 16 = x16 organization
- wwwww is the DIMM bandwidth, in MBps

12800 = 12.80 GBps PC3-1600 SDRAMs, 8-byte primary data bus)

14900 = 14.93 GBps PC3-1866 SDRAMS, 8-byte primary data bus)

- m is the DIMM type
  - E = Unbuffered DIMM (UDIMM) with ECC (x72-bit module data bus)
  - R = Registered DIMM (RDIMM)
  - U = Unbuffered DIMM with no ECC (x64-bit primary data bus)
  - L = Load Reduction DIMM (LR-DIMM)
- aa is the DDR3 SDRAM CAS latency, in clocks at maximum operating frequency
- bb is the JEDEC SPD Revision Encoding and Additions level
- cc is the reference design file for the design of the DIMM
- *d* is the revision number of the reference design of the DIMM

**Note:** To determine the type of a DIMM, see the label on the DIMM. The information on the label is in the format xxx nRxxx PC3-xxxxx-xx-xx-xx. The numeral in the fourth numerical position indicates whether the DIMM is single-rank (n=1) or dual-rank (n=2).

- Do not mix registered and unbuffered DIMMs in the server.
- Do not mix load reduced DIMMs with other types of DIMMs in the server.
- · DO not mix ECC and non-ECC DIMMs in the server.
- The server supports 1.35-volt (low-voltage) and 1.5-volt DIMMs.
- The server supports a maximum of 16 DIMMs (single-rank and dual-rank) on the base system board.
- The DIMM options that are available for the server are 4 GB, 8 GB, 16 GB, and 32 GB (when available).

- The server supports memory sparing. Memory sparing reserves memory capacity for failover in the event of a DIMM failure, and the reserved capacity is deducted from the total available memory. Memory sparing provides less redundancy than memory mirroring does. If a predetermined threshold of correctable errors is reached, the contents of the failing DIMM are copied to the spare memory, and the failing DIMM or rank is disabled. To enable memory sparing through the Setup utility, select System Settings > Memory.
- The server system board supports a minimum of 4 GB and a maximum of 512 GB of system memory.

**Note:** The amount of usable memory is reduced depending on the system configuration. A certain amount of memory must be reserved for system resources. To view the total amount of installed memory and the amount of configured memory, run the Setup utility. For additional information, see "Configuring the server" on page 88.

• The following table shows the DIMM connectors that are associated with each microprocessor:

Table 5. DIMM connectors associated with each microprocessor

|                  | DIMM connectors associated with the microprocessor |
|------------------|--|
| Microprocessor 1 | 1 through 8  |
| Microprocessor 2 | 9 through 16                                       |

- When you replace a DIMM, the server provides automatic DIMM enablement capability without you having to go to Setup to enable the new DIMM manually.
- The maximum operating speed of the server is determined by the slowest DIMM installed in the server.
- A minimum of one DIMM must be installed for each microprocessor. For example, you must install a minimum of two DIMMs if the server has two microprocessors installed.
- The server comes with a minimum of one DIMM installed in slot 8. When you install additional DIMMs, install them in the order shown in the information in the following tables to optimize system performance.
- The server supports independent mode, rank sparing mode, and mirroring mode.

### DIMM installation sequence

When you install additional DIMMs, install them in the order shown in the following table to optimize system performance.

# **About this task**

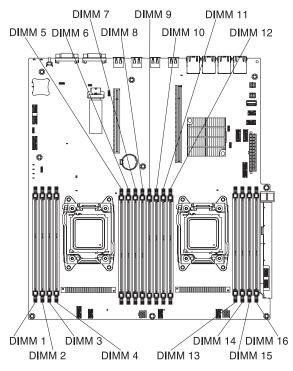


Figure 45. System board DIMM connectors

Table 6. Non-mirroring (normal) mode DIMM installation sequence

| Number of installed microprocessors | DIMM connector population sequence                    |
|-------------------------------------|---|
| 1                                   | 8, 6, 1, 3, 7, 5, 2, 4                                |
| 2                                   | 8, 16, 6, 14, 1, 9, 3, 11, 7, 15, 5, 13, 2, 10, 4, 12 |

The following tables lists the DIMM connectors on each memory channel.

Table 7. DIMM connectors on each memory channel

| Number of installed microprocessors | Memory channel | DIMM connectors |
|-------------------------------------|----------------|-----------------|
| Microprocessor 1                    | Channel 1      | 7, 8            |
|                                     | Channel 2      | 5, 6            |
|                                     | Channel 3      | 1, 2            |
|                                     | Channel 4      | 3, 4            |

The following table lists the DIMM connectors on each memory channel.

Table 8. DIMM connectors on each memory channel

| Number of installed microprocessors | Memory channel | DIMM connectors |
|-------------------------------------|----------------|-----------------|
| Microprocessor 2                    | Channel 1      | 15, 16          |
|                                     | Channel 2      | 13, 14          |
|                                     | Channel 3      | 9, 10           |
|                                     | Channel 4      | 11, 12          |

# Memory mirroring

Memory-mirroring mode replicates and stores data on two pairs of DIMMs within two channels simultaneously.

## About this task

Memory-mirroring mode replicates and stores data on two pairs of DIMMs within two channels simultaneously. If a failure occurs, the memory controller switches from the primary pair of memory DIMMs to the backup pair of DIMMs. You must enable memory mirroring through the Setup utility. For details about enabling memory mirroring, see "Using the Setup utility" on page 91. When you use the memory mirroring feature, consider the following information:

- · DIMMs must be installed in pairs. The DIMMs in each pair must be the same size and type.
- The maximum available memory is reduced to one third of the installed memory when memory mirroring is enabled. For example, if you install 96 GB of memory, only 32 GB of addressable memory is available when you use memory mirroring.
- Channel 1 DIMM connectors 1, 2, 7, and 8 are not used in memory-mirroring mode.

The following table lists the installation sequence for installing DIMMs in memory-mirroring mode.

Table 9. DIMM population sequence (memory-mirroring mode)

| Number of installed microprocessors | DIMM connector population sequence |
|-------------------------------------|------------------------------------|
| 1                                   | 8, 6                               |
|                                     | 1, 3                               |
|                                     | 7, 5                               |
|                                     | 2, 4                               |
| 2                                   | 8, 6, 16, 14                       |
|                                     | 1, 3, 9, 11                        |
|                                     | 7, 5, 15, 13                       |
|                                     | 2, 4, 10, 12                       |

When you install or remove DIMMs, the server configuration information changes. When you restart the server, the system displays a message that indicates that the memory configuration has changed.

# Rank sparing

Sparing enables a failing rank to be replaced by ranks installed in an unoccupied space. An unused spare rank on the channel can be used to copy the contents of a failing rank on that channel.

## About this task

When you use the memory mirroring feature, consider the following information:

- In rank sparing mode, one rank of a DIMM in each populated channel is reserved as spare memory. The spare rank is not available as active memory. When the active rank memory fails, its content is copied to the spare rank memory which becomes active. The spare rank must have identical or larger memory capacity than all the other ranks on the same channel.
- DIMMs must be installed in sets of three. The DIMMs in each set must be the same size and type.
- The following table lists the DIMM installation sequence for rank sparing mode when one or two microprocessors is installed in the server:

The following table shows the installation sequence for installing DIMMs for each microprocessor in memory online-spare mode:

Table 10. DIMM population sequence (rank sparing mode)

| Number of installed microprocessors | DIMM connector population sequence |
|-------------------------------------|------------------------------------|
| 1                                   | 8, 7                               |
|                                     | 1, 2                               |
|                                     | 6, 5                               |
|                                     | 3, 4                               |
| 2                                   | 8, 7, 16, 15                       |
|                                     | 6, 5                               |
|                                     | 14, 13                             |
|                                     | 1,2                                |
|                                     | 9, 10                              |
|                                     | 3, 4                               |
|                                     | 11, 12                             |

# Installing a DIMM

Use this information to install a DIMM.

#### About this task

**Note:** The first DIMM connectors in every channel are white-colored, while the second DIMM connectors in every channel are black-colored.

#### **Procedure**

- 1. Read the safety information that begins on page "Safety" on page v and "Installation guidelines" on page 31.
- 2. Turn off the server (see "Turning off the server" on page 21) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.

- 3. Remove the server top cover (see "Removing the server top cover" on page 34).
- 4. Rotate the hot-swap rear hard disk drive cage up (see "Rotating the hot-swap rear hard disk drive cage up" on page 36
- 5. Remove the PCI riser-card assembly (see "Removing a PCI riser-card assembly" on page 37.
- 6. Remove the air baffle (see "Removing the air baffle" on page 38.
- 7. Carefully flip open the retaining clip on each end of the DIMM connector. **Attention:** To avoid breaking the retaining clips or damaging the DIMM connectors, open and close the clips gently.

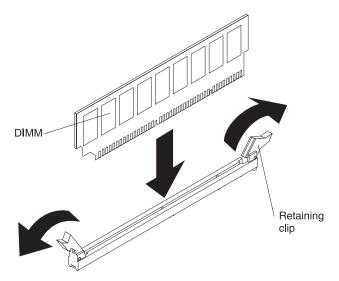


Figure 46. DIMM installation

- 8. Touch the static-protective package that contains the DIMM to any unpainted metal surface on the server. Then, remove the DIMM from the package.
- 9. Turn the DIMM so that the DIMM keys align correctly with the connector.
- 10. Insert the DIMM into the connector by aligning the edges of the DIMM with the slots at the end of the DIMM connector. Firmly press the DIMM straight down into the connector by applying pressure on both ends of the DIMM simultaneously. The retaining clips snap into the locked position when the DIMM is firmly seated in the connector.

**Important:** If there is a gap between the DIMM and the retaining clips, the DIMM has not been correctly inserted; open the retaining clips, remove the DIMM, and then reinsert it.

## Results

If you have other devices to install or remove, do so now. Otherwise, go to "Completing the installation" on page 77.

# Installing an additional microprocessor and heat sink

Use this information to install an additional microprocessor and heat sink.

#### About this task

The following notes describe the type of microprocessor that the server supports and other information that you must consider when you install a microprocessor:

- The server supports Intel scalable multi-core microprocessors which are designed for the LGA 2011 socket. Scalable up to ten cores with an integrated memory controller, quick-path interconnect and shared last cache. See <a href="http://www.ibm.com/systems/info/x86servers/serverproven/compat/us/">http://www.ibm.com/systems/info/x86servers/serverproven/compat/us/</a> for a list of supported microprocessors.
- Both microprocessors must have the same QuickPath Interconnect (QPI) link speed, integrated memory controller frequency, core frequency, power segment, cache size, and type.
- Read the documentation that comes with the microprocessor to determine whether you must update the server firmware for the server. To download the most current level of server firmware and many other code updates for your server, complete the following steps:
  - 1. Go to http://support.lenovo.com/.
  - 2. Under Product support, click System x.
  - 3. Under Popular links, click Software and device drivers.
  - Click System x3650 M4 BD to display the matrix of downloadable files for the server.
- (Optional) Obtain an SMP-capable operating system. For a list of supported operating systems and optional devices, see http://www.ibm.com/systems/info/x86servers/serverproven/compat/us/.
- To order additional microprocessor optional devices, contact your sales representative or reseller.
- The microprocessor speeds are automatically set for this server; therefore, you do not have to set any microprocessor frequency-selection jumpers or switches.
- If you have to replace a microprocessor, call for service.
- If the thermal-grease protective cover (for example, a plastic cap or tape liner) is removed from the heat sink, do not touch the thermal grease on the bottom of the heat sink or set down the heat sink.
- Do not remove the first microprocessor from the system board to install the second microprocessor.

#### Attention:

- A startup (boot) microprocessor must always be installed in microprocessor socket 1 on the system board.
- To ensure correct server operation when you install an additional microprocessor, use microprocessors that are compatible and install at least one DIMM in a DIMM connector for microprocessor 2.

There are two types of microprocessor installation tools. The tools are similar in function and design, however Tool A has one setting for installing one size of microprocessor, and supports the following families of microprocessors: E5-26xx, E5-46xx. Installation Tool B has two settings for installing two different sizes of microprocessors. The settings that are marked on Tool B are "L" for smaller low core microprocessors, and "H" for larger high core microprocessors. Installation Tool B supports the following families of microprocessors: E5-26xx, E5-46xx, E5-26xx v2, E5-46xx v2. Microprocessor Installation Tools A and B are shown in the following illustration.

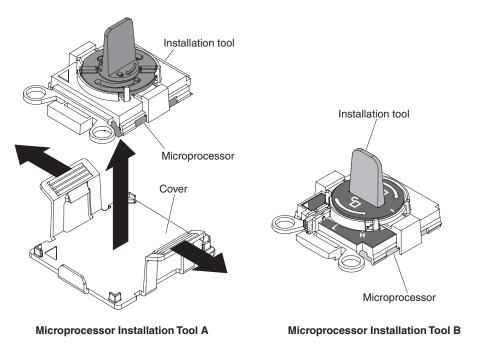


Figure 47. Microprocessor installation tools

To install an additional microprocessor, complete the following steps:

#### **Procedure**

- 1. Read the safety information that begins on page "Safety" on page v and "Installation guidelines" on page 31.
- 2. Turn off the server (see "Turning off the server" on page 21) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
- 3. Remove the server top cover (see "Removing the server top cover" on page
- 4. Rotate the hot-swap rear hard disk drive cage up (see "Rotating the hot-swap rear hard disk drive cage up" on page 36.
- 5. Remove the PCI riser-card assembly (see "Removing a PCI riser-card assembly" on page 37.
- 6. Remove the air baffle (see "Removing the air baffle" on page 38).
- 7. Locate the second microprocessor socket on the system board (see "System-board internal connectors" on page 25.
- 8. Open the microprocessor socket release levers and retainer:

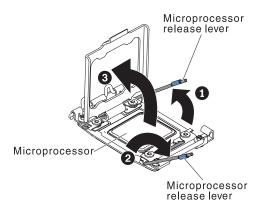


Figure 48. Microprocessor release lever and microprocessor bracket frame

- a. Identify which release lever is labeled as the first release lever. Then release the microprocessor release lever by pressing down on the end, moving it to the side, and releasing it to the open (up) position.
- b. Open the second release lever on the microprocessor socket.
- C. Open the microprocessor retainer.
   Attention: Do not touch the connectors on the microprocessor and the microprocessor socket.
- 9. Install the microprocessor on the microprocessor socket:
  - a. Touch the static-protective package that contains the new microprocessor to any *unpainted* on the chassis or any *unpainted* metal surface on any other grounded rack component; then, carefully remove the microprocessor from the package.
  - b. Release the sides of the cover and remove the cover from the installation tool. The microprocessor is preinstalled on the installation tool.

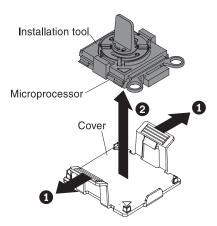


Figure 49. Installation tool cover removal

**Note:** Do not touch the microprocessor contacts. Contaminants on the microprocessor contacts, such as oil from your skin, can cause connection failures between the contacts and the socket.

**c.** Align the installation tool with the microprocessor socket. The installation tool rests flush on the socket only if properly aligned.

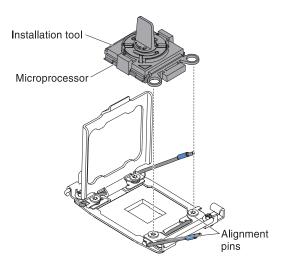


Figure 50. Installation tool alignment

- d. Install the microprocessor using the following instructions for your installation tool.
  - If using Installation Tool A, twist the handle on the microprocessor tool
    assembly counterclockwise to the open position to insert the
    microprocessor into the socket, and lift the installation tool out of the
    socket.
  - If using Installation Tool B, twist the handle of the installation tool
    assembly counterclockwise until the microprocessor is inserted into the
    socket, and lift the installation tool out of the socket. The following
    illustration shows the tool handle in the open position.

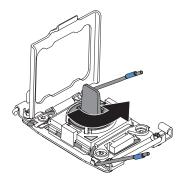


Figure 51. Installation tool handle adjustment

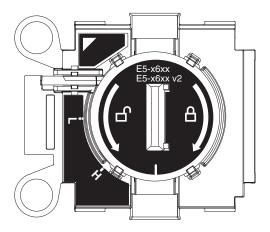


Figure 52. Installation Tool B

#### Attention:

- Do not press the microprocessor into the socket.
- Make sure that the microprocessor is oriented and aligned correctly in the socket before you try to close the microprocessor retainer.
- Do not touch the thermal material on the bottom of the heat sink or on top of the microprocessor. Touching the thermal material will contaminate it.
- 10. Remove the microprocessor socket cover, tape, or label from the surface of the microprocessor socket, if one is present. Store the socket cover in a safe place.

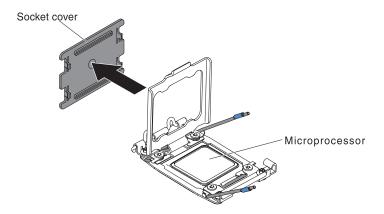


Figure 53. Socket cover removal

**Attention:** When you handle static-sensitive devices, take precautions to avoid damage from static electricity. For details about handling these devices, see "Handling static-sensitive devices" on page 33.

11. Close the microprocessor socket release levers and retainer:

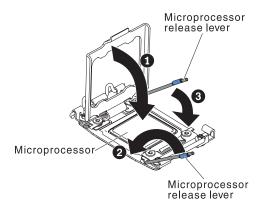


Figure 54. Microprocessor socket levers and retainer engagement

- a. Close the microprocessor retainer on the microprocessor socket.
- b. Identify which release lever is labeled as the first release lever to close and close it.
- c. Close the second release lever on the microprocessor socket.
- 12. Install a heat sink on the microprocessor:

### **Attention:**

- · Do not set down the heat sink after you remove the plastic cover
- Do not touch the thermal grease on the bottom of the heat sink or set down the heat sink after you remove the plastic cover. Touching the thermal grease will contaminate it. If the thermal grease is contaminated, call service and support to request a replacement thermal grease kit. For information about installing the replacement thermal grease, see "Thermal grease" on page 72.

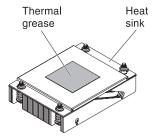


Figure 55. Heat-sink

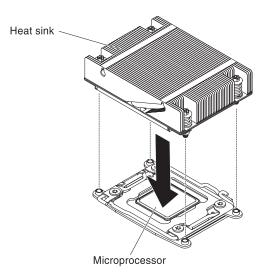


Figure 56. Heat-sink installation

- a. Remove the plastic protective cover from the bottom of the heat sink.
- b. Align the screw holes on the heat sink with the holes on the system board.
- c. Place the heat sink on the microprocessor with the thermal-grease side down.
- d. Press firmly on the captive screws and tighten them with a screwdriver. The follow illustration shows the sequence in tightening the screws, which is also shown on top of the heat sink. Begin with the screw labeled as "1", then "2", "3" and finally "4". If possible, each screw should be rotated two full rotations at a time. Repeat until the screws are tight. Do not overtighten the screws by using excessive force. If you are using a torque wrench, tighten the screws to 8.5 Newton-meters (Nm) to 13 Nm (6.3 foot-pounds to 9.6 foot-pounds).

Note: Please use Phillips screw driver No.0 to fasten screws.

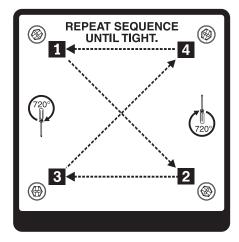


Figure 57. Screws sequence

## Results

If you have other devices to install or remove, do so now. Otherwise, go to "Completing the installation" on page 77.

# Thermal grease

The thermal grease must be replaced whenever the heat sink has been removed from the top of the microprocessor and is going to be reused or when debris is found in the grease. Use this information to replace damaged or contaminated thermal grease on the microprocessor and heat sink.

#### About this task

When you are installing the heat sink on the same microprocessor that is was removed from, make sure that the following requirements are met:

- The thermal grease on the heat sink and microprocessor is not contaminated.
- · Additional thermal grease is not added to the existing thermal grease on the heat sink and microprocessor.

#### Note:

- Read the Safety information on page "Safety" on page v.
- Read the "Installation guidelines" on page 31.
- Read "Handling static-sensitive devices" on page 33.

To replace damaged or contaminated thermal grease on the microprocessor and heat exchanger, complete the following steps:

#### **Procedure**

- 1. Place the heat sink on a clean work surface.
- 2. Remove the cleaning pad from its package and unfold it completely.
- 3. Use the cleaning pad to wipe the thermal grease from the bottom of the heat sink.

**Note:** Make sure that all of the thermal grease is removed.

4. Use a clean area of the cleaning pad to wipe the thermal grease from the microprocessor; then, dispose of the cleaning pad after all of the thermal grease is removed.

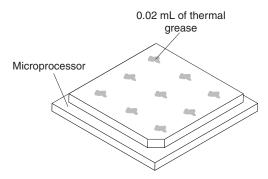


Figure 58. Thermal grease distribution

5. Use the thermal-grease syringe to place 9 uniformly spaced dots of 0.02 mL each on the top of the microprocessor. The outermost dots must be within approximately 5 mm of the edge of the microprocessor; this is to ensure uniform distribution of the grease.



Figure 59. Syringe

**Note:** If the grease is properly applied, approximately half of the grease will remain in the syringe.

6. Install the heat sink onto the microprocessor as described in "Replacing a microprocessor and heat sink" on page 244.

# Installing a hot-swap ac power supply

Use this information to install a hot-swap ac power supply.

#### About this task

The following items describe the type of power supply that the server supports and other information that you must consider when you install a power supply:

- To confirm that the server supports the power supply that you are installing, see http://www.ibm.com/systems/info/x86servers/serverproven/compat/us/.
- The server comes standard with one 750-watt or 900-watt hot-swap power supply. The input voltage is 110 V ac or 220 V ac auto-sensing.

**Note:** You cannot mix 110 V ac and 220 V ac, or 750-watt and 900-watt power supplies in the server, it is not supported.

- These power supplies are designed for parallel operation. In the event of a power-supply failure, the redundant power supply continues to power the system. The server supports a maximum of two power supplies.
- The server can run fully configured with one power supply. For redundancy support, you must install the second hot-swap power supply.

**Note:** You cannot mix high-efficiency and non-high-efficiency power supplies in the server.

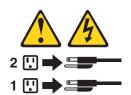
#### Statement 5





### **CAUTION:**

The power control button on the device and the power switch on the power supply do not turn off the electrical current supplied to the device. The device also might have more than one power cord. To remove all electrical current from the device, ensure that all power cords are disconnected from the power source.



#### Statement 8





#### **CAUTION:**

Never remove the cover on a power supply or any part that has the following label attached.



Hazardous voltage, current, and energy levels are present inside any component that has this label attached. There are no serviceable parts inside these components. If you suspect a problem with one of these parts, contact a service technician.

Attention: During normal operation, each power-supply bay must contain either a power supply or power-supply filler for proper cooling.

To replace a hot-swap ac power supply, complete the following steps.

## **Procedure**

- 1. Read the safety information that begins on page "Safety" on page v and "Installation guidelines" on page 31.
- 2. Touch the static-protective package that contains the hot-swap power supply to any unpainted metal surface on the server; then, remove the power supply from the package and place it on a static-protective surface.
- 3. If you are installing a hot-swap power supply into an empty bay, remove the power-supply filler panel from the power-supply bay. Meanwhile, if you are replacing a failed hot-swap power supply, remove it from the bay.

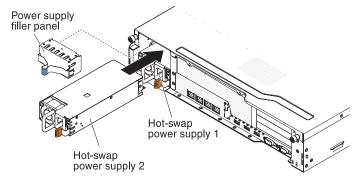


Figure 60. Power supply installation

4. Grasp the handle on the rear of the power supply and slide the power supply forward into the power-supply bay until it clicks. Make sure that the power supply connects firmly into the power-supply connector.

- 5. Connect the power cord for the new power supply to the power-cord connector on the power supply.
- 6. Route the power cord through the cable retainer clip so that it does not accidentally become disconnected.

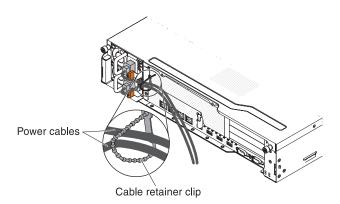


Figure 61. Power cord

- 7. Connect the power cord to a properly grounded electrical outlet.
- 8. Make sure that the ac power LED and the dc power LED on the power supply are lit, indicating that the power supply is operating correctly.
- 9. If you are adding a power supply to the server, attach the redundant power information label that comes with this option on the server top cover near the power supplies.

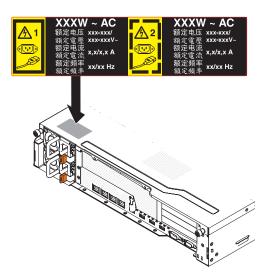


Figure 62. Power information label

# Installing a USB embedded hypervisor flash device

Use this information to install a USB embedded hypervisor flash device.

#### About this task

Hypervisor is a virtualization platform that enables multiple operating systems to run on a host computer at the same time. Support for hypervisor is available with the purchase and installation of an optional USB hypervisor memory key, with embedded hypervisor software.

To install the USB hypervisor memory key, complete the following steps:

# **Procedure**

- 1. Read the safety information that begins on page "Safety" on page v and "Installation guidelines" on page 31.
- 2. Turn off the server (see "Turning off the server" on page 21) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
- 3. Remove the top cover (see "Removing the server top cover" on page 34).
- 4. If you have the optional hot-swap rear hard disk drive cage installed, rotate it up (see "Rotating the hot-swap rear hard disk drive cage up" on page 36).
- 5. Remove PCIe riser-card assembly 1 (see "Removing a PCI riser-card assembly" on page 37).
- 6. Locate the embedded hypervisor USB flash device connector on the system board as shown in the following illustration:

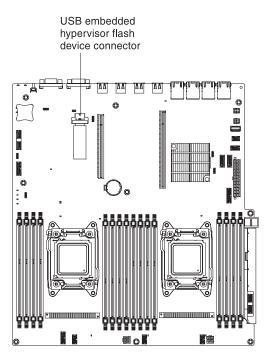


Figure 63. USB embedded hypervisor flash device connector

7. Slide the lockbar toward the riser-card assembly to the locked position until it is seated firmly.

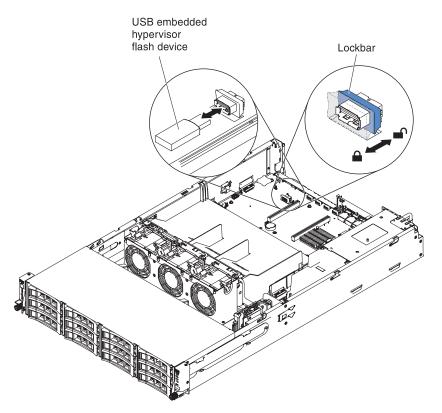


Figure 64. USB embedded hypervisor flash device installation

- 8. Align the USB flash device with the connector on the system board and push it into the connector until it is firmly seated.
- 9. Slide the lockbar toward the riser-card assembly to the locked position until it is seated firmly.

## Results

If you have other devices to install or remove, do so now. Otherwise, go to "Completing the installation."

**Note:** You must configure the server to boot from the hypervisor USB drive. See "Configuring the server" on page 88 for information about enabling the embedded hypervisor.

# Completing the installation

Use this information to complete the installation.

### About this task

To complete the installation, complete the following steps:

### **Procedure**

- 1. If you removed the air baffle, reinstall it (see "Installing the air baffle" on page 78).
- 2. If you removed a PCIe riser-card assembly, reinstall it (see "Installing a PCI riser-card assembly" on page 79).

- 3. If you have the optional hot-swap rear hard disk drive cage installed, rotate it down (see "Rotating the hot-swap rear hard disk drive cage down" on page
- 4. If you removed the server top cover, replace it (see "Installing the server top cover" on page 85).
- 5. Install the server in the rack cabinet (see the Rack Installation Instructions that come with the server for instructions).
- 6. To attach peripheral devices and connect the power cords, see "Front view" on page 15).
- 7. Update the server configuration (see "Updating the server configuration" on page 86).
- 8. Slide the server back into the rack, if necessary.
- 9. Start the server. Confirm that is starts correctly and recognizes the newly installed devices, and make sure that no error LEDs are lit.
- 10. (Business Partners only) Complete the additional steps in "Instructions for Business Partners" on page 23.

**Note:** Remember to route the power cord through the cable retainer clip so that it does not accidentally become disconnected.

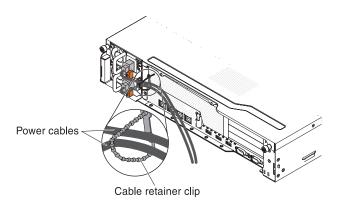


Figure 65. Power cord

# Installing the air baffle

Use this information to install the air baffle.

#### About this task

To install the air baffle, complete the following steps:

#### **Procedure**

- 1. Read the safety information that begins on page "Safety" on page v and "Installation guidelines" on page 31.
- 2. Lower the air baffle into the server. Make sure that the tabs on the air baffle are inserted into the holes on the chassis.

**Attention:** For proper cooling and airflow, replace the air baffle before you turn on the server. Operating the server with the air baffle removed might damage server components.

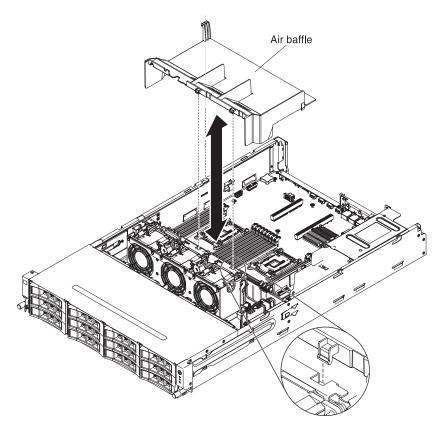


Figure 66.

## Results

If you have other devices to install or remove, do so now. Otherwise, go to "Completing the installation" on page 77.

# Installing a PCI riser-card assembly

Use this information to install a PCI riser-card assembly.

## **About this task**

To install the PCI riser-card assembly, complete the following steps:

#### **Procedure**

- 1. Read the safety information that begins on page "Safety" on page v and "Installation guidelines" on page 31.
- 2. Make sure that the server and all peripheral devices are turned off and that the power cords and all external cables are disconnected.
- 3. Reinstall any adapters and reconnect any internal cables that you removed in other procedures.
- 4. Align the PCI riser-card assembly with the alignment pin and the guide rails on the chassis.

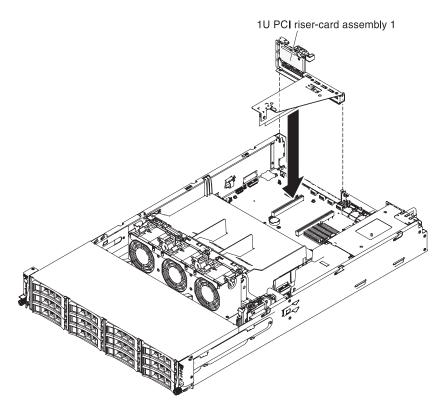


Figure 67. PCI riser-card assembly 1 installation

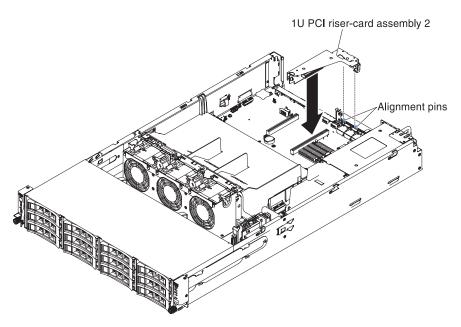


Figure 68. PCI riser-card assembly 2 installation

5. Press down on the blue touch points on the PCI riser-card assembly to install the assembly in the server. Make sure that the PCI riser-card assembly is fully seated in the PCI connectors on the system board.

**Attention:** Make sure that the cables are not pinched.

#### Results

If you have other devices to install or remove, do so now. Otherwise, go to "Completing the installation" on page 77.

# Rotating the hot-swap rear hard disk drive cage down

Use this information to rotate the optional hot-swap rear hard disk drive cage down.

## **About this task**

To rotate the optional hot-swap hard disk drive cage down, complete the following steps.

#### **Procedure**

1. Read the safety information that begins on page "Safety" on page v and "Installation guidelines" on page 31.

#### Attention:

a. Make sure you have routed the cables correctly as the following illustration before you rotate the hot-swap rear hard disk drive cage down. You have to route the cables underneath the bracket; then, route the cables through the cable retainer clip. Improper cable routing may damage the cables.

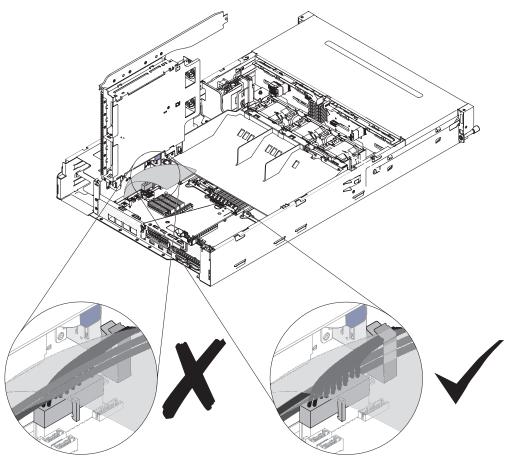


Figure 69. Cable routing

b. Make sure you have routed the cable properly and the cables are not squeezed as the following illustration before you rotate the hot-swap rear hard disk drive cage down. Improper cable routing may damage the cables.

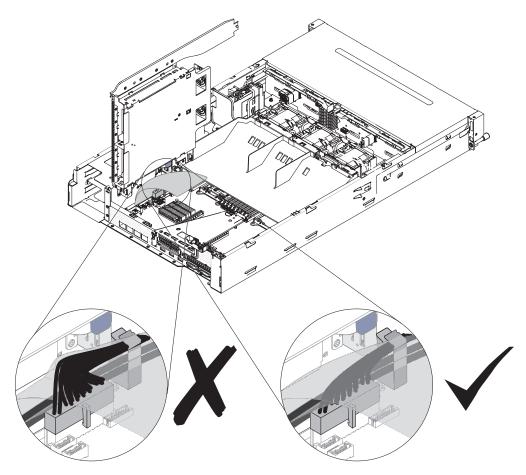


Figure 70. Cable routing

2. Shift the switch on the rear hard disk drive cage to the unlock position 1.

**Note:** Make sure you have fully shifted the switch to the unlock position as the following illustration. Otherwise, it may damage the cables.

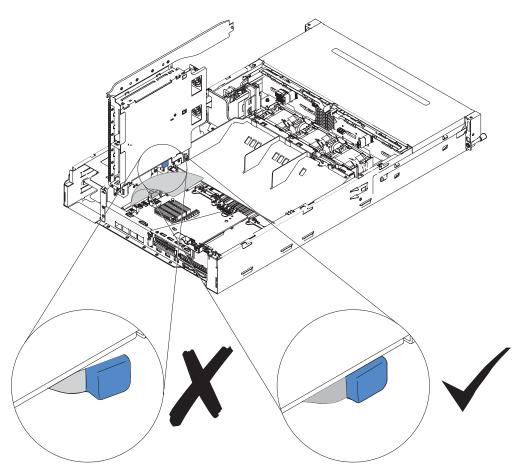


Figure 71. The switch

- 3. Slowly rotate the cage downwards until it sits into place 2.
- 4. Close the blue latches on the chassis 3.

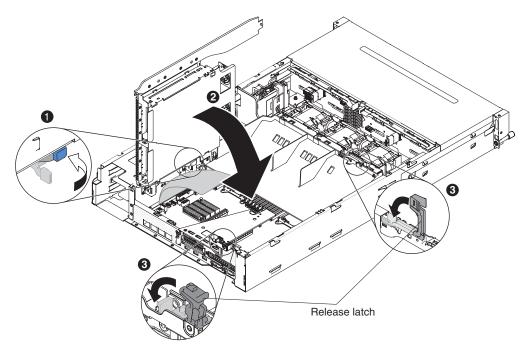


Figure 72. Hot-swap rear hard disk drive cage

#### Results

If you have other devices to install or remove, do so now. Otherwise, go to "Completing the installation" on page 77.

# Installing the server top cover

Use this information to install the server top cover.

## About this task

To install the server cover, complete the following steps:

## **Procedure**

- 1. Make sure that all cables, adapters, and other components are installed and seated correctly and that you have not left loose tools or parts inside the server. Also, make sure that all internal cables are correctly routed.
- 2. Align the cover over the server (toward the rear of the server) until the cover edges slip into position over the chassis.
  - **Attention:** Before sliding the cover forward, make sure that all the tabs on both the front, rear, and side of the cover engage the chassis correctly. If all the tabs do not engage the chassis correctly, it will be hard to remove the cover later.
- 3. Slide the cover forward toward the front of the server until the cover is completely closed.

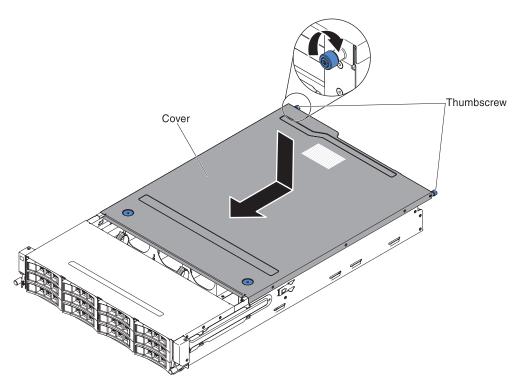


Figure 73. Cover installation

- 4. Tighten the thumbscrews on the rear of the cover to secure the cover to the chassis.
- 5. Install the server into the rack enclosure and tighten the two front thumbscrews to secure the server in the rack.

**Attention:** Two or more people are required to install the system in a rack cabinet.

# Updating the server configuration

Use this information to update the server configuration.

When you start the server for the first time after you add or remove a device, you might receive a message that the configuration has changed. The Setup utility starts automatically so that you can save the new configuration settings.

Some optional devices have device drivers that you must install. For information about installing device drivers, see the documentation that comes with each device.

If the server has an optional RAID adapter and you have installed or removed a hard disk drive, see the documentation that comes with the RAID adapter for information about reconfiguring the disk arrays.

For information about configuring the integrated Gigabit Ethernet controller, see "Configuring the Gigabit Ethernet controller" on page 103.

# Chapter 3. Configuration information and instructions

This chapter provides information about updating the firmware and using the configuration utilities.

# **Updating the firmware**

Use this information to update the system firmware.

**Important::** Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.

You can install code updates that are packaged as an UpdateXpress System Pack or UpdateXpress CD image. An UpdateXpress System Pack contains an integration-tested bundle of online firmware and device-driver updates for your server. Use UpdateXpress System Pack Installer to acquire and apply UpdateXpress System Packs and individual firmware and device-driver updates. For additional information and to download the UpdateXpress System Pack Installer, go to the ToolsCenter for System x and BladeCenter at http://www.ibm.com/support/entry/portal/docdisplay?lndocid=TOOL-CENTER and click UpdateXpress System Pack Installer.

When you click an update, an information page is displayed, including a list of the problems that the update fixes. Review this list for your specific problem; however, even if your problem is not listed, installing the update might solve the problem.

Be sure to separately install any listed critical updates that have release dates that are later than the release date of the UpdateXpress System Pack or UpdateXpress image.

The firmware for the server is periodically updated and is available for download on the website. To check for the latest level of firmware, such as the UEFI firmware, vital product data (VPD) code, device drivers, and integrated management module (IMM) firmware, go to http://www.ibm.com/support/fixcentral/.

**Attention:** Before you update the firmware, be sure to back up any data that is stored in the Trusted Platform Module (TPM), in case any of the TPM characteristics are changed by the new firmware. For instructions, see your encryption software documentation.

Download the latest firmware for the server; then, install the firmware, using the instructions that are included with the downloaded files.

When you replace a device in the server, you might have to either update the firmware that is stored in memory on the device or restore the pre-existing firmware from a diskette or CD image.

The following list indicates where the firmware is stored:

- UEFI firmware is stored in ROM on the system board.
- IMM2 firmware is stored in ROM on the IMM2 on the system board.

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- Ethernet firmware is stored in ROM on the Ethernet controller.
- ServeRAID firmware is stored in ROM on the ServeRAID adapter.
- SATA firmware is stored in ROM on the integrated SATA controller.
- SAS/SATA firmware is stored in ROM on the SAS/SATA controller on the system board.

# Configuring UEFI compatible devices

Use this information to configure UEFI compatible devices.

### About this task

UEFI compatible expansion cards can be configured through the Setup utility. To configure a UEFI compatible expansion card, complete the following steps:

Note: Before configuring a UEFI compatible device, it is recommended to update the firmware for your server. See "Updating the firmware" on page 87 for information on how to update the firmware for your server.

- 1. Run the Setup utility (see "Using the Setup utility" on page 91).
- 2. Select System Settings -> Network or Storage depending on the type of your adapters.

Note: Select System Settings → Adapters and UEFI drivers for UEFI 2.0 (and prior) compliant adapters and drivers installed in the server.

- 3. Select Please refresh this page first and press Enter.
- 4. Select the device driver that you want to configure and press Enter.
- 5. When you have finished changing settings, press Esc to exit from the program; select **Save** to save the settings that you have changed.

# Configuring the server

The following configuration programs come with the server:

### Setup utility

The UEFI Setup Utility program is part of the basic input/output system firmware. Use it to change interrupt request (IRQ) settings, change the startup-device sequence, set the date and time, and set passwords. For information about using this program, see "Using the Setup utility" on page 91.

#### **Boot Manager program**

The Boot Manager program is part of the server firmware. Use it to override the startup sequence that is set in the Setup utility and temporarily assign a device to be first in the startup sequence. For more information about using this program, see "Using the Boot Manager program" on page 98.

#### ServerGuide Setup and Installation CD

The ServerGuide program provides software-setup tools and installation tools that are designed for the server. Use this CD during the installation of the server to configure basic hardware features, such as an integrated SAS/SATA controller with RAID capabilities, and to simplify the installation of your operating system. For information about using this CD, see "Using the ServerGuide Setup and Installation CD" on page 90.

#### FastSetup

FastSetup is a no-cost software tool that helps simplify the maintenance and deployment of selected BladeCenter chassis, servers, and components. The

intuitive graphical interface initializes all phases of server setup, including discovery, update, and configuration. Features include templates that enable replication of settings to many servers and automation that reduces hands-on time and user errors. Wizards and other default settings enable customization capabilities. The low-touch, set-once and walk-away feature reduces the hands-on server setup time from days to minutes, particularly for larger deployments. For information about this tool, see http://www.ibm.com/support/entry/portal/docdisplay?brand=5000008&Indocid=TOOL-FASTSET.

## Integrated management module II

Use the integrated management module II (IMM2) for configuration, to update the firmware and sensor data record/field replaceable unit (SDR/FRU) data, and to remotely manage a network. For information about using IMM2, see "Using the integrated management module II" on page 99 and the *Integrated Management Module User's Guide* at http://www-947.ibm.com/support/entry/portal/docdisplay?lndocid=migr-5086346.

## VMware ESXi embedded hypervisor

An optional USB flash device with VMware ESXi embedded hypervisor software is available for purchase. Hypervisor is virtualization software that enables multiple operating systems to run on a host system at the same time. The USB embedded hypervisor flash device installs in the USB connector on the system board. For more information about using the embedded hypervisor, see "Using the embedded hypervisor" on page 100.

## Remote presence capability and blue-screen capture

The remote presence and blue-screen capture features are integrated functions of the Integrated Management Module II (IMM2). The remote presence feature provides the following functions:

- Remotely viewing video with graphics resolutions up to 1600 x 1200 at 75 Hz, regardless of the system state
- Remotely accessing the server, using the keyboard and mouse from a remote client
- Mapping the CD or DVD drive, diskette drive, and USB flash drive on a remote client, and mapping ISO and diskette image files as virtual drives that are available for use by the server
- Uploading a diskette image to the IMM memory and mapping it to the server as a virtual drive

The blue-screen capture feature captures the video display contents before the IMM restarts the server when the IMM detects an operating-system hang condition. A system administrator can use the blue-screen capture feature to assist in determining the cause of the hang condition.

#### Ethernet controller configuration

For information about configuring the Ethernet controller, see "Configuring the Gigabit Ethernet controller" on page 103.

## Configuring RAID arrays

For information about configuring RAID arrays, see "Configuring RAID arrays" on page 104.

#### Advanced Settings Utility (ASU) program

Use this program as an alternative to the Setup utility for modifying UEFI settings and IMM settings. Use the ASU program online or out of band to modify UEFI settings from the command line without the need to restart the server to access the Setup utility. For more information about using this program, see "Advanced Settings Utility program" on page 105.

# Using the ServerGuide Setup and Installation CD

Use this information as an overview for using the ServerGuide Setup and Installation CD.

The ServerGuide Setup and Installation CD provides software setup tools and installation tools that are designed for your server. The ServerGuide program detects the server model and optional hardware devices that are installed and uses that information during setup to configure the hardware. The ServerGuide simplifies the operating-system installations by providing updated device drivers and, in some cases, installing them automatically.

You can download a free image of the *ServerGuide Setup and Installation CD* from http://www.ibm.com/support/entry/portal/docdisplay?lndocid=SERV-GUIDE.

In addition to the *ServerGuide Setup and Installation* CD, you must have your operating-system CD to install the operating system.

#### ServerGuide features

This information provides an overview of the ServerGuide features.

Features and functions can vary slightly with different versions of the ServerGuide program. To learn more about the version that you have, start the ServerGuide Setup and Installation CD and view the online overview. Not all features are supported on all server models.

The ServerGuide program performs the following tasks:

- Sets system date and time
- Detects the RAID adapter or controller and runs the SAS/SATA RAID configuration program
- Checks the microcode (firmware) levels of a ServeRAID adapter and determines whether a later level is available from the CD
- Detects installed hardware options and provides updated device drivers for most adapters and devices
- Provides diskette-free installation for supported Windows operating systems
- Includes an online readme file with links to tips for your hardware and operating-system installation

# Setup and configuration overview

Use this information for the ServerGuide setup and configuration.

When you use the *ServerGuide Setup and Installation* CD, you do not need setup diskettes. You can use the CD to configure any supported server model. The setup program provides a list of tasks that are required to set up your server model. On a server with a ServeRAID adapter or SAS/SATA controller with RAID capabilities, you can run the SAS/SATA RAID configuration program to create logical drives.

**Note:** Features and functions can vary slightly with different versions of the ServerGuide program.

# Typical operating-system installation

This section details the ServerGuide typical operating-system installation.

The ServerGuide program can reduce the time it takes to install an operating system. It provides the device drivers that are required for your hardware and for

the operating system that you are installing. This section describes a typical ServerGuide operating-system installation.

**Note:** Features and functions can vary slightly with different versions of the ServerGuide program.

- 1. After you have completed the setup process, the operating-system installation program starts. (You will need your operating-system CD to complete the installation.)
- 2. The ServerGuide program stores information about the server model, service processor, hard disk drive controllers, and network adapters. Then, the program checks the CD for newer device drivers. This information is stored and then passed to the operating-system installation program.
- **3**. The ServerGuide program presents operating-system partition options that are based on your operating-system selection and the installed hard disk drives.
- 4. The ServerGuide program prompts you to insert your operating-system CD and restart the server. At this point, the installation program for the operating system takes control to complete the installation.

# Installing your operating system without using ServerGuide

Use this information to install the operating system on the server without using ServerGuide.

#### About this task

If you have already configured the server hardware and you are not using the ServerGuide program to install your operating system, you can download operating-system installation instructions for the server from http://support.lenovo.com/.

# Using the Setup utility

Use these instructions to start the Setup utility.

Use the Unified Extensible Firmware Interface (UEFI) Setup Utility program to perform the following tasks:

- View configuration information
- View and change assignments for devices and I/O ports
- Set the date and time
- Set and change passwords
- Set the startup characteristics of the server and the order of startup devices
- Set and change settings for advanced hardware features
- · View, set, and change settings for power-management features
- · View and clear error logs
- Change interrupt request (IRQ) settings
- Resolve configuration conflicts

#### Starting the Setup utility

Use this information to start up the Setup utility.

#### About this task

To start the Setup utility, complete the following steps:

#### **Procedure**

1. Turn on the server.

**Note:** Approximately 1 to 3 minutes after the server is connected to ac power, the power-control button becomes active.

- 2. When the prompt **<F1> Setup** is displayed, press F1. If you have set an administrator password, you must type the administrator password to access the full Setup utility menu. If you do not type the administrator password, a limited Setup utility menu is available.
- 3. Select settings to view or change.

# Setup utility menu choices

Use the Setup utility main menu to view and configure server configuration data and settings.

The following choices are on the Setup utility main menu for the UEFI. Depending on the version of the System x Server Firmware (server firmware), some menu choices might differ slightly from these descriptions.

## • System Information

Select this choice to view information about the server. When you make changes through other choices in the Setup utility, some of those changes are reflected in the system information; you cannot change settings directly in the system information. This choice is on the full Setup utility menu only.

## - System Summary

Select this choice to view configuration information, including the ID, speed, and cache size of the microprocessors, machine type and model of the server, the serial number, the system UUID, and the amount of installed memory. When you make configuration changes through other options in the Setup utility, the changes are reflected in the system summary; you cannot change settings directly in the system summary.

# **Product Data**

Select this choice to view the system-board identifier, the revision level or issue date of the firmware, the integrated management module and diagnostics code, and the version and date.

This choice is on the full Setup utility menu only.

#### System Settings

Select this choice to view or change the server component settings.

#### - Adapters and UEFI Drivers

Select this choice to view information about the adapters and device drivers installed in the server that are compliant with UEFI 1.10 and UEFI 2.0.

#### - Processors

Select this choice to view or change the processor settings.

#### Memory

Select this choice to view or change the memory settings. To configure memory mirroring, select System Settings > Memory > Memory Mode > Mirrored.

#### Devices and I/O Ports

Select this choice to view or change assignments for devices and input/output (I/O) ports. You can configure the serial ports; configure remote console redirection; enable or disable integrated Ethernet controllers, the SAS/SATA adapter, SATA optical drive channels, and PCI slots; and view the

system Ethernet MAC addresses. If you disable a device, it cannot be configured, and the operating system will not be able to detect it (this is equivalent to disconnecting the device).

#### - Power

Select this choice to view or change power capping to control consumption, processors, and performance states.

### - Active Energy Manager

Select this choice to enable or disable power capping. If you enable power capping, the Active Energy Manager program will limit the maximum power that is consumed by the server.

**Note:** It is available only when **System Settings → Processors → Processor Performance States** is enabled.

#### - Power/Performance Bias

Select this choice to determine how the power management of the microprocessor is controlled. You can choose either Platform Controlled (system) or OS Controlled (operating system) to control the setting. Not all operating systems support this feature.

## - Platform Controlled Type

Select this choice to determine how to balance between performance and power consumption. Choosing Maximum Performance will disable power management functions and allow the most aggressive use of turbo. Choosing Minimal Power will maximizes the use of power management features for least power consumption and disable turbo.

**Note:** It is available only when **System Settings** → **Power** → **Power/Performance Bias** → **Platform Controlled** is enabled.

## - Workload Configuration

Select this choice to determine how to balance between I/O bandwidth and balanced workload. Choosing I/O sensitive will get higher I/O bandwidth while expansion cards are used. Choosing Balanced will allow enough frequency for workload while the microprocessor cores are idle.

#### Operating Modes

Select this choice to view or change the operating profile (performance and power utilization). This choice specify a preset operating mode to configure the server for maximum power savings, maximum efficiency, and maximum performance.

# - Choose Operating Mode

Select the operating mode based on your preference. Power savings and performance are also highly dependent on hardware and software running on the system. When a present mode is selected, the low-level settings are not changeable and will be grayed out.

# - Memory Speed

Select the desired memory speed. Maximum performance mode maximizes performance. Balanced mode offers a balance between performance and power. Minimal power mode maximizes power savings.

#### - Memory Power Management

Select this choice to enable or disable power management on memory. If you choose Disabled, it will provide maximum performance but minimum power savings. If you choose Automatic, it is suitable for most applications.

#### - Proc Performance States

Select this choice to enable or disable processor performance states. Enabling processor performance states (Intel Speedstep Technology) saves power by reducing speed and voltage as the microprocessor utilized is reduced.

**Note:** Some operating systems must have the correct power profile selected to take advantage of this feature.

#### - C1 Enhance Mode

Select this choice to enable or disable C1E (C1 Enhanced) state. Enabling C1E (C1 Enhanced) state can save power by halting CPU cores that are idle.

**Note:** An operating system that supports C1E state must be installed to take advantage of this feature. Changing this setting will be effective after the next system reboot.

## - QPI Link Frequency

Select this choice to determine the desired microprocessor QPI link frequency. Maximum performance mode maximizes performance. Balanced mode offers a balance between performance and power. Minimal power maximizes power savings.

#### - Turbo Mode

Select this choice to enable or disable turbo mode. Enabling turbo mode can boost the overall microprocessor performance when all microprocessor cores are not fully utilized. A microprocessor core can run above its rated frequency for a short period of time when it is in turbo mode.

#### **CPU C-States**

Select this choice to enable or disable ACPI C2 Processor Power states. It will be effective after the next system reboot.

### Package ACPI CState Limit

Select this choice to determine the level of C-state. Selecting a higher C-state limit allows the microprocessors to consume less power when they are idle. If you experience problems with legacy operating systems, set the ACPI Cstate limit to C2.

# Power/Performance Bias

Select this choice to determine how the power management of the microprocessor is controlled. You can choose either Platform Controlled (system) or OS Controlled (operating system) to control the setting. Not all operating systems support this feature.

#### - Platform Controlled Type

Select this choice to determine how to balance between performance and power consumption. Choosing Maximum Performance will disable power management functions and allow the most aggressive use of turbo. Choosing Minimal Power will maximizes the use of power management features for least power consumption and disable turbo.

#### Legacy Support

Select this choice to view or set legacy support.

#### - Force Legacy Video on Boot

Select this choice to force INT video support, if the operating system does not support UEFI video output standards.

#### - Rehook INT 19h

Select this choice to enable or disable devices from taking control of the boot process. The default is **Disable**.

### - Legacy Thunk Support

Select this choice to enable or disable UEFI to interact with PCI mass storage devices that are non-UEFI compliant.

### - Infinite Boot Retry

Select this choice to enable or disable Infinitely retry the Legacy Boot order.

#### - BBS Boot

Select this choice to enable or disable legacy boot in BBS manner.

### - System Security

Select this choice to view or configure Trusted Platform Module (TPM) support.

## - Integrated Management Module

Select this choice to view or change the settings for the integrated management module.

#### - Power Restore Policy

Select this choice to view or enable the POST watchdog timer.

#### - Commands on USB Interface Preference

Select this choice to enable or disable the Ethernet over USB interface on IMM.

#### - Network Configuration

Select this choice to view the system management network interface port, the IMM MAC address, the current IMM IP address, and the host name; define the static IMM IP address, subnet mask, and gateway address; specify whether to use the static IP address or have DHCP assign the IMM IP address; save the network changes; and reset the IMM.

#### - Reset IMM to Defaults

Select this choice to view or reset IMM to the default settings.

#### - Reset IMM

Select this choice to reset the IMM settings.

#### Recovery

Select this option to configure recovery settings.

### Storage

Select this option to see all the storage device settings.

#### Network

Select this choice to view or configure the network device options, such as iSCSI, PXE, and network devices. There might be additional configuration choices for optional network devices that are compliant with UEFI 2.1 and later.

#### - Driver Health

Select this option to view the status of the controllers in the system as reported by their corresponding drivers.

### Date and Time

Select this choice to set the date and time in the server, in 24-hour format (*hour:minute:second*).

This choice is on the full Setup utility menu only.

## Start Options

Select this choice to view or change the start options, including the startup sequence, keyboard NumLock state, PXE boot option, and PCI device boot priority. Changes in the startup options take effect when you start the server.

The startup sequence specifies the order in which the server checks devices to find a boot record. The server starts from the first boot record that it finds. If the server has Wake on LAN hardware and software and the operating system supports Wake on LAN functions, you can specify a startup sequence for the Wake on LAN functions. For example, you can define a startup sequence that checks for a disc in the CD-RW/DVD drive, then checks the hard disk drive, and then checks a network adapter.

This choice is on the full Setup utility menu only.

#### · Boot Manager

Select this choice to view, add, delete, or change the device boot priority, boot from a file, select a one-time boot, or reset the boot order to the default setting.

### System Event Logs

Select this choice to enter the System Event Manager, where you can view the POST event log and the system-event log. You can use the arrow keys to move between pages in the error log.

The POST event log contains the three most recent error codes and messages that were generated during POST.

The system-event log contains POST and system management interrupt (SMI) events and all events that are generated by the baseboard management controller that is embedded in the integrated management module (IMM).

**Important:** If the system-error LED on the front of the server is lit but there are no other error indications, clear the system-event log. Also, after you complete a repair or correct an error, clear the system-event log to turn off the system-error LED on the front of the server.

#### POST Event Viewer

Select this choice to enter the POST event viewer to view the POST event log.

#### System Event Log

Select this choice to view the system event log.

#### - Clear System Event Log

Select this choice to clear the system event log.

#### User Security

Select this choice to set, change, or clear passwords. See "Passwords" on page 97 for more information.

This choice is on the full and limited Setup utility menu.

#### Power-on Password

Select this choice to set or change a power-on password. See "Power-on password" on page 97 for more information.

#### - Administrator Password

Select this choice to set or change an administrator password. An administrator password is intended to be used by a system administrator; it limits access to the full Setup utility menu. If an administrator password is set, the full Setup utility menu is available only if you type the administrator password at the password prompt. For more information, see "Administrator password" on page 98.

### Save Settings

Select this choice to save the changes that you have made in the settings.

## Restore Settings

Select this choice to cancel the changes that you have made in the settings and restore the previous settings.

#### · Load Default Settings

Select this choice to cancel the changes that you have made in the settings and restore the factory settings.

### Exit Setup

Select this choice to exit from the Setup utility. If you have not saved the changes that you have made in the settings, you are asked whether you want to save the changes or exit without saving them.

#### **Passwords**

From the **User Security** menu choice, you can set, change, and delete a power-on password and an administrator password.

The User Security choice is on the full Setup utility menu only.

If you set only a power-on password, you must type the power-on password to complete the system startup and to have access to the full Setup utility menu.

An administrator password is intended to be used by a system administrator; it limits access to the full Setup utility menu. If you set only an administrator password, you do not have to type a password to complete the system startup, but you must type the administrator password to access the Setup utility menu.

If you set a power-on password for a user and an administrator password for a system administrator, you can type either password to complete the system startup. A system administrator who types the administrator password has access to the full Setup utility menu; the system administrator can give the user authority to set, change, and delete the power-on password. A user who types the power-on password has access to only the limited Setup utility menu; the user can set, change, and delete the power-on password, if the system administrator has given the user that authority.

#### Power-on password:

If a power-on password is set, when you turn on the server, you must type the power-on password to complete the system startup. You can use any combination of 6 - 20 printable ASCII characters for the password.

When a power-on password is set, you can enable the Unattended Start mode, in which the keyboard and mouse remain locked but the operating system can start. You can unlock the keyboard and mouse by typing the power-on password.

If you forget the power-on password, you can regain access to the server in any of the following ways:

- If an administrator password is set, type the administrator password at the password prompt. Start the Setup utility and reset the power-on password.
- Remove the battery from the server and then reinstall it. See "Removing the system battery" on page 210 for instructions for removing the battery.
- Clear CMOS data by using the clear CMOS jumper (see "System-board jumpers" on page 27 for more information).

**Attention:** Before you change any switch settings or move any jumpers, turn off the server; then, disconnect all power cords and external cables. See the safety information that begins on page "Safety" on page v. Do not change settings or move jumpers on any system-board switch or jumper blocks that are not shown in this document.

Clearing CMOS data does not affect the administrator password.

#### Administrator password:

If an administrator password is set, you must type the administrator password for access to the full Setup utility menu. You can use any combination of 6 to 20 printable ASCII characters for the password.

Attention: If you set an administrator password and then forget it, there is no way to change, override, or remove it. You must replace the system board.

# Using the Boot Manager program

Use this information for the Boot Manager.

#### About this task

The Boot Manager program is a built-in, menu-driven configuration utility program that you can use to temporarily redefine the first startup device without changing settings in the Setup utility.

To use the Boot Manager program, complete the following steps:

#### **Procedure**

- 1. Turn off the server.
- 2. Restart the server.
- 3. When the prompt <F12> Select Boot Device is displayed, press F12. If a bootable USB mass storage device is installed, a submenu item (USB Key/Disk) is displayed.
- 4. Use the Up arrow and Down arrow keys to select an item from the Boot Selection Menu and press Enter.

#### Results

The next time the server starts, it returns to the startup sequence that is set in the Setup utility.

# Starting the backup server firmware

Use this information to start the backup server firmware.

### About this task

The system board contains a backup copy area for the server firmware. This is a secondary copy of the server firmware that you update only during the process of updating the server firmware. If the primary copy of the server firmware becomes damaged, use this backup copy.

To force the server to start from the backup copy, turn off the server; then, place the J2 jumper in the backup position (pins 2 and 3).

Use the backup copy of the server firmware until the primary copy is restored. After the primary copy is restored, turn off the server; then, move the J2 jumper back to the primary position (pins 1 and 2).

# The Update Xpress System Pack Installer

The Update *Xpress* System Pack Installer detects supported and installed device drivers and firmware in the server and installs available updates.

For additional information and to download the Update *Xpress* System Pack Installer, go to the Tools Center for System x and Blade Center at http://publib.boulder.ibm.com/infocenter/toolsctr/v1r0/ and click **Update Xpress** System Pack Installer.

# Using the integrated management module II

The integrated management module II (IMM2) is a second generation of the functions that were formerly provided by the baseboard management controller hardware. It combines service processor functions, video controller, and remote presence function in a single chip.

The IMM supports the following basic systems-management features:

- · Active Energy Manager.
- Alerts (in-band and out-of-band alerting, PET traps IPMI style, SNMP, e-mail).
- Auto Boot Failure Recovery (ABR).
- Automatic microprocessor disable on failure and restart in a two-microprocessor configuration when one microprocessor signals an internal error. When one of the microprocessors fail, the server will disable the failing microprocessor and restart with the other microprocessor.
- Automatic Server Restart (ASR) when POST is not complete or the operating
  system hangs and the operating system watchdog timer times-out. The IMM
  might be configured to watch for the operating system watchdog timer and
  reboot the system after a timeout, if the ASR feature is enabled. Otherwise, the
  IMM allows the administrator to generate a nonmaskable interrupt (NMI) by
  pressing an NMI button on the light path diagnostics panel for an
  operating-system memory dump. ASR is supported by IPMI.
- A virtual media key, which enables remote presence support (remote video, remote keyboard/mouse, and remote storage).
- · Boot sequence manipulation.
- · Command-line interface.
- Configuration save and restore.
- DIMM error assistance. The Unified Extensible Firmware Interface (UEFI)
  disables a failing DIMM that is detected during POST, and the IMM lights the
  associated system error LED and the failing DIMM error LED.
- Environmental monitor with fan speed control for temperature, voltages, fan failure, power supply failure, and power backplane failure.
- Intelligent Platform Management Interface (IPMI) Specification V2.0 and Intelligent Platform Management Bus (IPMB) support.
- Invalid system configuration (CNFG) LED support.
- Local firmware code flash update
- Nonmaskable interrupt (NMI) detection and reporting.
- Operating-system failure blue screen capture.
- PCI configuration data.

- PECI 3 support.
- Power/reset control (power-on, hard and soft shutdown, hard and soft reset, schedule power control).
- Query power-supply input power.
- ROM-based IMM firmware flash updates.
- Serial over LAN (SOL).
- Serial port redirection over telnet or ssh.
- · SMI handling
- System event log (SEL) user readable event log.

The IMM also provides the following remote server management capabilities through the ipmitool, a management utility program:

#### · Command-line interface (IPMI Shell)

The command-line interface provides direct access to server management functions through the IPMI 2.0 protocol. Use the command-line interface to issue commands to control the server power, view system information, and identify the server. You can also save one or more commands as a text file and run the file as a script.

#### Serial over LAN

Establish a Serial over LAN (SOL) connection to manage servers from a remote location. You can remotely view and change the UEFI settings, restart the server, identify the server, and perform other management functions. Any standard Telnet client application can access the SOL connection.

For more information about IMM, see the *Integrated Management Module User's Guide* at http://www-947.ibm.com/support/entry/portal/docdisplay?lndocid=migr-5086346.

# Using the embedded hypervisor

The VMware ESXi embedded hypervisor software is available on the optional USB flash device with embedded hypervisor.

### About this task

The USB flash device can be installed in the USB connector near PCI riser slot 1 on the system board. Hypervisor is virtualization software that enables multiple operating systems to run on a host system at the same time. The USB flash device is required to activate the hypervisor functions.

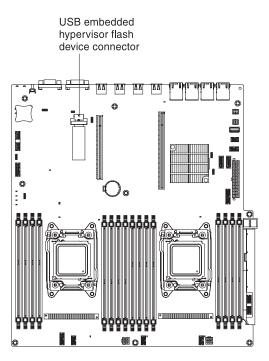


Figure 74. USB embedded hypervisor flash device connector

To start using the embedded hypervisor functions, you must add the USB flash device to the startup sequence in the Setup utility.

To add the USB flash device to the startup sequence, complete the following steps:

### **Procedure**

1. Turn on the server.

**Note:** Approximately 1 to 3 minutes after the server is connected to ac power, the power-control button becomes active.

- 2. When the prompt <F1> Setup is displayed, press F1.
- 3. From the Setup utility main menu, select Boot Manager.
- 4. Select **Add Boot Option**; then, select **USB Storage**. Press Enter, and then select Esc.
- 5. Select Change Boot Order and then select Commit Changes; then, press Enter.
- 6. Select Save Settings and then select Exit Setup.

### Results

If the embedded hypervisor flash device image becomes corrupt, you can use the *VMware Recovery* CD that comes with the system to recover the flash device image. To recover the flash device image, complete the following steps:

1. Turn on the server.

**Note:** Approximately 1 to 3 minutes after the server is connected to ac power, the power-control button becomes active.

- 2. Insert the VMware Recovery CD into the CD or DVD drive.
- 3. Follow the instructions on the screen.

For additional information and instructions, see the VMware ESXi Server 31 Embedded Setup Guide at http://pubs.vmware.com/vsphere-50/topic/ com.vmware.ICbase/PDF/vsphere-esxi-vcenter-server-50-installation-setupguide.pdf.

# Using the remote presence and blue-screen capture features

The remote presence and blue-screen capture features are integrated functions of the integrated management module II (IMM2).

### About this task

The remote presence feature provides the following functions:

- Remotely viewing video with graphics resolutions up to 1600 x 1200 at 75 Hz, regardless of the system state
- · Remotely accessing the server, using the keyboard and mouse from a remote client
- Mapping the CD or DVD drive, diskette drive, and USB flash drive on a remote client, and mapping ISO and diskette image files as virtual drives that are available for use by the server
- Uploading a diskette image to the IMM memory and mapping it to the server as a virtual drive

The blue-screen capture feature captures the video display contents before the IMM restarts the server when the IMM detects an operating-system hang condition. A system administrator can use the blue-screen capture to assist in determining the cause of the hang condition.

For more information on Features on Demand (FoD), including instructions for automating the activation and installation of the activation key by using ToolsCenter or IBM Director, see the System x Features on Demand User's Guide at /http://www.ibm.com/systems/x/fod/ under the Help section.

**Note:** The server may need to be restarted to activate the feature.

## Obtaining the IP address for the IMM

Use this information to obtain the IP address for the IMM.

### About this task

To access the Web interface to use the remote presence feature, you need the IP address of the IMM. You can obtain the IMM IP address through the Setup utility. The server comes with a default IP address for the IMM of 192.168.70.125. To locate the IP address, complete the following steps:

#### **Procedure**

1. Turn on the server.

**Note:** Approximately 1 to 3 minutes after the server is connected to ac power, the power-control button becomes active.

- 2. When the prompt <F1> Setup is displayed, pressF1. (This prompt is displayed on the screen for only a few seconds. You must press F1 quickly.) If you have set both a power-on password and an administrator password, you must type the administrator password to access the full Setup utility menu.
- 3. From the Setup utility main menu, select **System Settings**.

- 4. On the next screen, select **Integrated Management Module**.
- 5. On the next screen, select Network Configuration.
- 6. Find the IP address and write it down.
- 7. Exit from the Setup utility.

## Logging on to the Web interface

Use this information to log on to the web interface.

#### About this task

To log on to the IMM Web interface, complete the following steps:

#### **Procedure**

1. Open a Web browser on a computer that connects to the server and in the Address or URL field, type the IP address or host name of the IMM to which you want to connect.

**Note:** If you are logging on to the IMM for the first time after installation, the IMM defaults to DHCP. If a DHCP host is not available, the IMM assigns a static IP address of 192.168.70.125. The MAC address tag provides the default hostname of the IMM and does not require you to start the server.

2. On the Login page, type the user name and password. If you are using the IMM for the first time, you can obtain the user name and password from your system administrator. All login attempts are documented in the event log.

**Note:** The IMM is set initially with a user name of USERID and password of PASSW0RD (passw0rd with a zero, not a the letter O). You have read/write access. You must change the default password the first time you log on.

- 3. On the Welcome page, type a timeout value (in minutes) in the field that is provided. The IMM will log you off of the Web interface if your browser is inactive for the number of minutes that you entered for the timeout value.
- 4. Click **Continue** to start the session. The System Health page provides a quick view of the system status.

# **Enabling the Intel Gigabit Ethernet Utility program**

Use this information to enable the Intel Gigabit Ethernet Utility program.

The Intel Gigabit Ethernet Utility program is part of the server firmware. You can use it to configure the network as a startable device, and you can customize where the network startup option appears in the startup sequence. Enable and disable the Intel Gigabit Ethernet Utility program from the Setup utility.

# Configuring the Gigabit Ethernet controller

Use this information to configure the Ethernet controller.

The Ethernet controllers are integrated on the system board. They provide an interface for connecting to a 10 Mbps, 100 Mbps, or 1 Gbps network and provide full-duplex (FDX) capability, which enables simultaneous transmission and reception of data on the network. If the Ethernet ports in the server support auto-negotiation, the controllers detect the data-transfer rate (10BASE-T, 100BASE-TX, or 1000BASE-T) and duplex mode (full-duplex or half-duplex) of the network and automatically operate at that rate and mode.

You do not have to set any jumpers or configure the controllers. However, you must install a device driver to enable the operating system to address the controllers. For device drivers and information about configuring the Ethernet controllers or to find updated information about configuring the controllers, see http://support.lenovo.com/.

# Configuring RAID arrays

Use the Setup utility to configure RAID.

#### About this task

Use the configuration utility programs to configure and manage redundant array of independent disks (RAID) arrays. Be sure to use this program as described in this document.

The following table lists the different server configurations and the applications that are available for configuring and managing RAID.

Table 11. Server configuration and applications for configuring and managing RAID arrays

| Server configuration   | RAID array configuration (before operating system is installed)   | RAID array management<br>(after operating system is<br>installed)                               |
|--|---|---|
| ServeRAID-H1110 adapter  | LSI Utility (Setup utility,<br>press Ctrl+C), ServerGuide,<br>Human Interface<br>Infrastructure (HII)               | MegaRAID Storage Manager<br>(MSM), SAS2IRCU<br>(Command Line) Utility for<br>Storage Management |
| ServeRAID-M1115 adapter,<br>ServeRAID-M1100 adapter              | MegaRAID BIOS Configuration Utility (press Ctrl+H to start), pre-boot CLI (press Ctrl+P to start), ServerGuide, HII | MegaRAID Storage Manager<br>(MSM), MegaCLI (Command<br>Line Interface), and IBM<br>Director     |
| ServeRAID-M5100,<br>ServeRAID-M5110,<br>ServeRAID-M5120 adapters | MegaRAID BIOS Configuration Utility (press Ctrl+H to start), pre-boot CLI (press Ctrl+P to start), ServerGuide, HII | MegaRAID Storage Manager<br>(MSM), MegaCLI, and IBM<br>Director                                 |
| ServeRAID-M5200  | НІІ   | MegaRAID Storage Manager<br>(MSM), MegaCLI, and IBM<br>Director                                 |

#### Note:

- 1. For more information about Problem Determination and Service Guide for ServeRAID M controllers, see http://www-947.ibm.com/support/entry/ portal/docdisplay?lndocid=MIGR-5085607.
- 2. For more information about Configuration and Options Guide (COG), see http://www-947.ibm.com/support/entry/portal/docdisplay?lndocid=SCOD-3ZVQ5W&brandind=5000019.
- 3. For further details on creating a software RAID array of hard disk drives, please see the ServeRAID C105 documentation at http://www-947.ibm.com/ support/entry/portal/docdisplay?lndocid=MIGR-5089068.
- 4. When the ServeRAID adapter is removed, software RAID will not be supported. This system does not support downgrade software RAID function from hardware RAID configuration.

## Starting the LSI Configuration Utility program

Use these instructions to start the LSI Configuration Utility program.

To start the LSI Configuration Utility program, complete the following steps:

- 1. Turn on the server, and make sure that the server is the owner of the keyboard, video, and mouse.
- 2. When the prompt message is displayed, you may perform either of the following:
  - a. **ServeRAID-H1110**: press Ctrl+C.
  - b. ServeRAID-M5100, ServeRAID-M5110, ServeRAID-M5120, ServeRAID-M1100 or ServeRAID-M1115: press Ctrl+H.

When you have finished changing settings, press Esc to exit from the program; select **Save** to save the settings that you have changed.

## Starting the Human Interface Infrastructure (HII) Configuration Application

Use these instructions to start the Human Interface Infrastructure (HII) configuration utility program.

To start the Human Interface Infrastructure (HII) configuration utility program, complete the following steps:

- 1. Turn on the server.
  - Note: Approximately 1 to 3 minutes after the server is connected to ac power, the power-control button becomes active after the power-on LED flashes slowly.
- 2. When prompted, <F1 Setup> is displayed, press F1. If you have set an administrator password, you are prompted to type the password.
- 3. Under System Settings, select Storage.

When you have finished changing settings, press Esc to exit from the program; select **Save** to save the settings that you have changed.

# Advanced Settings Utility program

The Advanced Settings Utility (ASU) program is an alternative to the Setup utility for modifying UEFI settings.

Use the ASU program online or out of band to modify UEFI settings from the command line without the need to restart the system to access the Setup utility.

You can also use the ASU program to configure the optional remote presence features or other IMM settings. The remote presence features provide enhanced systems-management capabilities.

In addition, the ASU program provides limited settings for configuring the IPMI function in the IMM through the command-line interface.

Use the command-line interface to issue setup commands. You can save any of the settings as a file and run the file as a script. The ASU program supports scripting environments through a batch-processing mode.

For more information and to download the ASU program, go to http://www.ibm.com/support/entry/portal/docdisplay?lndocid=TOOL-ASU.

# **IBM Systems Director**

IBM Systems Director is a platform-management foundation that streamlines the way you manage physical and virtual systems in a heterogeneous environment. By using industry standards, IBM Systems Director supports multiple operating systems and virtualization technologies in x86 platforms.

Through a single user interface, IBM Systems Director provides consistent views for viewing managed systems, determining how these systems relate to one other, and identifying their statuses, helping to correlate technical resources with business needs. A set of common tasks that are included with IBM Systems Director provides many of the core capabilities that are required for basic management, which means instant out-of-the-box business value. The common tasks are listed below:

- Discovery
- Inventory
- Configuration
- System health
- · Monitoring
- Updates
- · Event notification
- Automation for managed systems

The IBM Systems Director Web and command-line interfaces provide a consistent interface that is focused on driving these common tasks and capabilities:

- Discovering, navigating, and visualizing systems on the network with the detailed inventory and relationships to the other network resources
- Notifying users of problems that occur on systems and the ability to isolate the sources of the problems
- Notifying users when systems need updates and distributing and installing updates on a schedule
- Analyzing real-time data for systems and setting critical thresholds that notify the administrator of emerging problems
- Configuring settings of a single system and creating a configuration plan that can apply those settings to multiple systems
- Updating installed plug-ins to add new features and functions to the base capabilities
- Managing the life cycles of virtual resources

For more information about IBM Systems Director, see the IBM Systems Director Information Center at http://publib.boulder.ibm.com/infocenter/director/v6r1x/index.jsp?topic=/director\_6.1/fqm0\_main.html, and the Systems Management web page at http://www.ibm.com/systems/management/, which presents an overview of IBM Systems Management and IBM Systems Director.

# Updating the Universal Unique Identifier (UUID)

The Universal Unique Identifier (UUID) must be updated when the system board is replaced. Use the Advanced Settings Utility to update the UUID in the UEFI-based server.

#### About this task

The ASU is an online tool that supports several operating systems. Make sure that you download the version for your operating system. You can download the ASU from the website. To download the ASU and update the UUID, complete the following steps.

Note: Changes are made periodically to the website. The actual procedure might vary slightly from what is described in this document.

#### **Procedure**

- 1. Download the Advanced Settings Utility (ASU):
  - a. Go to http://support.lenovo.com/.
  - b. Click the **Downloads** tab at the top of the panel.
  - c. Under ToolsCenter, select View ToolsCenter downloads.
  - d. Select Advanced Settings Utility (ASU).
  - e. Scroll down and click the link and download the ASU version for your operating system.
- 2. ASU sets the UUID in the Integrated Management Module (IMM). Select one of the following methods to access the Integrated Management Module (IMM) to
  - Online from the target system (LAN or keyboard console style (KCS) access)
  - Remote access to the target system (LAN based)
  - Bootable media containing ASU (LAN or KCS, depending upon the bootable media)
- 3. Copy and unpack the ASU package, which also includes other required files, to the server. Make sure that you unpack the ASU and the required files to the same directory. In addition to the application executable (asu or asu64), the following files are required:
  - For Windows based operating systems:
    - ibm\_rndis\_server\_os.inf
    - device.cat
  - For Linux based operating systems:
    - cdc\_interface.sh
- 4. After you install ASU, use the following command syntax to set the UUID: asu set SYSTEM\_PROD\_DATA.SysInfoUUID <uuid\_value> [access\_method]

Where:

<uuid\_value>

Up to 16-byte hexadecimal value assigned by you.

[access method]

The access method that you selected to use from the following methods:

• Online authenticated LAN access, type the command:

[host <imm internal ip>] [user <imm user id>][password <imm password>] Where:

imm internal ip

The IMM internal LAN/USB IP address. The default value is 169.254.95.118.

imm\_user\_id

The IMM account (1 of 12 accounts). The default value is USERID.

imm\_password

The IMM account password (1 of 12 accounts). The default value is PASSW0RD (with a zero 0 not an O).

Note: If you do not specify any of these parameters, ASU will use the default values. When the default values are used and ASU is unable to access the IMM using the online authenticated LAN access method, ASU will automatically use the unauthenticated KCS access method.

The following commands are examples of using the userid and password default values and not using the default values:

Example that does not use the userid and password default values: asu set SYSTEM\_PROD\_DATA.SYsInfoUUID <uuid\_value> --user <user id> --password <password>

Example that does use the userid and password default values: asu set SYSTEM PROD DATA.SysInfoUUID <uuid value>

Online KCS access (unauthenticated and user restricted):

You do not need to specify a value for access\_method when you use this access method.

#### Example:

asu set SYSTEM PROD DATA.SysInfoUUID <uuid value>

The KCS access method uses the IPMI/KCS interface. This method requires that the IPMI driver be installed. Some operating systems have the IPMI driver installed by default. ASU provides the corresponding mapping layer. See the Advanced Settings Utility Users Guide for more details. You can access the ASU Users Guide from the website.

**Note:** Changes are made periodically to the website. The actual procedure might vary slightly from what is described in this document.

- a. Go to http://support.lenovo.com/.
- b. Click the **Downloads** tab at the top of the panel.
- c. Under ToolsCenter, select View ToolsCenter downloads.
- d. Select Advanced Settings Utility (ASU).
- e. Scroll down and click the link and download the ASU version for your operating system. Scroll down and look under Online Help to download the Advanced Settings Utility Users Guide.
- Remote LAN access, type the command:

Note: When using the remote LAN access method to access IMM using the LAN from a client, the *host* and the *imm\_external\_ip* address are required parameters.

host <imm external ip> [user <imm user id>][password <imm password>] Where:

imm external ip

The external IMM LAN IP address. There is no default value. This parameter is required.

imm user id

The IMM account (1 of 12 accounts). The default value is USERID.

imm\_password

The IMM account password (1 of 12 accounts). The default value is PASSW0RD (with a zero 0 not an O).

The following commands are examples of using the userid and password default values and not using the default values:

Example that does not use the userid and password default values: asu set SYSTEM\_PROD\_DATA.SYsInfoUUID <uuid\_value> --host <imm\_ip> --user <user\_id> --password <password>

Example that does use the userid and password default values: asu set SYSTEM PROD DATA.SysInfoUUID <uuid value> --host <imm ip>

· Bootable media:

You can also build a bootable media using the applications available through the ToolsCenter website at http://www.ibm.com/support/entry/portal/docdisplay?Indocid=TOOL-CENTER. From the **ToolsCenter** page, scroll down for the available tools.

5. Restart the server.

# Updating the DMI/SMBIOS data

Use this information to update the DMI/SMBIOS data.

The Desktop Management Interface (DMI) must be updated when the system board is replaced. Use the Advanced Settings Utility (ASU) to update the DMI in the UEFI-based server. The ASU is an online tool that supports several operating systems. Make sure that you download the version for your operating system. You can download the ASU from the website. To download the ASU and update the DMI, complete the following steps.

**Note:** Changes are made periodically to the website. The actual procedure might vary slightly from what is described in this document.

- 1. Download the Advanced Settings Utility (ASU):
  - a. Go to http://support.lenovo.com/.
  - b. Click the **Downloads** tab at the top of the panel.
  - c. Under ToolsCenter, select View ToolsCenter downloads.
  - d. Select Advanced Settings Utility (ASU).
  - **e.** Scroll down and click the link and download the ASU version for your operating system.
- 2. ASU sets the DMI in the Integrated Management Module (IMM). Select one of the following methods to access the Integrated Management Module (IMM) to set the DMI:
  - Online from the target system (LAN or keyboard console style (KCS) access)
  - Remote access to the target system (LAN based)
  - Bootable media containing ASU (LAN or KCS, depending upon the bootable media)

**Note:** Lenovo provides a method for building a bootable media. You can create a bootable media using the Bootable Media Creator (BoMC) application from the Tools Center Web site. In addition, the Windows and Linux based tool kits are also available to build a bootable media. These tool

kits provide an alternate method to creating a Windows Professional Edition or Master Control Program (MCP) based bootable media, which will include the ASU application.

- 3. Copy and unpack the ASU package, which also includes other required files, to the server. Make sure that you unpack the ASU and the required files to the same directory. In addition to the application executable (asu or asu64), the following files are required:
  - For Windows based operating systems:
    - ibm\_rndis\_server\_os.inf
    - device.cat
  - For Linux based operating systems:
    - cdc\_interface.sh
- 4. After you install ASU, Type the following commands to set the DMI:

```
asu set SYSTEM PROD DATA.SysInfoProdName <m/t model> [access method]
asu set SYSTEM PROD DATA.SysInfoSerialNum <s/n> [access method]
asu set SYSTEM PROD DATA.SysEncloseAssetTag <asset tag> [access method]
Where:
```

<m/t model>

The server machine type and model number. Type mtm xxxxyyy, where xxxx is the machine type and yyy is the server model number.

The serial number on the server. Type sn zzzzzzz, where zzzzzzz is the serial number.

<asset method>

The server asset tag number. Type asset aaaaaaaaaaaaaaaaaaaaaaaaaaa, where aaaaaaaaaaaaaaaaaaaaaaaaaa is the asset tag number.

[access\_method]

The access method that you select to use from the following methods:

• Online authenticated LAN access, type the command:

[host <imm internal ip>] [user <imm user id>] [password <imm password>] Where:

imm\_internal\_ip

The IMM internal LAN/USB IP address. The default value is 169.254.95.118.

imm\_user\_id

The IMM account (1 of 12 accounts). The default value is USERID.

imm\_password

The IMM account password (1 of 12 accounts). The default value is PASSW0RD (with a zero 0 not an O).

Note: If you do not specify any of these parameters, ASU will use the default values. When the default values are used and ASU is unable to access the IMM using the online authenticated LAN access method, ASU will automatically use the following unauthenticated KCS access method.

The following commands are examples of using the userid and password default values and not using the default values:

```
Examples that do not use the userid and password default values:

asu set SYSTEM_PROD_DATA.SYsInfoProdName <m/t_model>
--user <imm_user_id> --password <imm_password>

asu set SYSTEM_PROD_DATA.SYsInfoSerialNum <s/n> --user <imm_user_id>
--password <imm_password>

asu set SYSTEM_PROD_DATA.SYsEncloseAssetTag <asset_tag>
--user <imm user id> --password <imm password>
```

Examples that do use the userid and password default values: asu set SYSTEM\_PROD\_DATA.SysInfoProdName <m/t\_model> asu set SYSTEM\_PROD\_DATA.SysInfoSerialNum <s/n> asu set SYSTEM\_PROD\_DATA.SysEncloseAssetTag <asset\_tag>

• Online KCS access (unauthenticated and user restricted):

You do not need to specify a value for *access\_method* when you use this access method.

The KCS access method uses the IPMI/KCS interface. This method requires that the IPMI driver be installed. Some operating systems have the IPMI driver installed by default. ASU provides the corresponding mapping layer. You can download the ASU from the website. To download the *Advanced Settings Utility Users Guide*, complete the following steps.

**Note:** Changes are made periodically to the website. The actual procedure might vary slightly from what is described in this document.

- a. Go to http://support.lenovo.com/.
- b. Click the **Downloads** tab at the top of the panel.
- c. Under ToolsCenter, select View ToolsCenter downloads.
- d. Select Advanced Settings Utility (ASU).
- e. Scroll down and click the link and download the ASU version for your operating system. Scroll down and look under **Online Help** to download the *Advanced Settings Utility Users Guide*.

The following commands are examples of using the userid and password default values and not using the default values:

```
Examples that do not use the userid and password default values: asu set SYSTEM_PROD_DATA.SYsInfoProdName <m/t_model> asu set SYSTEM_PROD_DATA.SYsInfoSerialNum <s/n> asu set SYSTEM_PROD_DATA.SYsEncloseAssetTag <asset_tag>
```

• Remote LAN access, type the command:

**Note:** When using the remote LAN access method to access IMM using the LAN from a client, the *host* and the *imm\_external\_ip* address are required parameters.

host <imm\_external\_ip> [user <imm\_user\_id>][password <imm\_password>]
Where:

imm\_external\_ip

The external IMM LAN IP address. There is no default value. This parameter is required.

imm\_user\_id

The IMM account (1 of 12 accounts). The default value is USERID.

imm\_password

The IMM account password (1 of 12 accounts). The default value is PASSW0RD (with a zero 0 not an O).

The following commands are examples of using the userid and password default values and not using the default values:

Examples that do not use the userid and password default values: asu set SYSTEM\_PROD\_DATA.SYsInfoProdName <m/t\_model> --host <imm\_ip> --user <imm user id> --password <imm password> asu set SYSTEM\_PROD\_DATA.SYsInfoSerialNum <s/n> --host <imm\_ip> --user <imm user id> --password <imm password> asu set SYSTEM PROD DATA.SYsEncloseAssetTag <asset tag> --host <imm\_ip> --user <imm\_user\_id> --password <imm\_password>

Examples that do use the userid and password default values: asu set SYSTEM\_PROD\_DATA.SysInfoProdName <m/t\_model> --host <imm\_ip> asu set SYSTEM\_PROD\_DATA.SysInfoSerialNum <s/n> --host <imm\_ip> asu set SYSTEM PROD DATA.SysEncloseAssetTag <asset tag> --host <imm ip>

#### · Bootable media:

You can also build a bootable media using the applications available through the Tools Center Web site at http://www.ibm.com/support/entry/portal/ docdisplay?Indocid=TOOL-CENTER. From the ToolsCenter, page, scroll down for the available tools.

#### 5. Restart the server.

# **Chapter 4. Troubleshooting**

This chapter describes the diagnostic tools and troubleshooting information that are available to help you solve problems that might occur in the server.

If you cannot diagnose and correct a problem by using the information in this chapter, see "Start here" and Appendix D, "Getting help and technical assistance," on page 535 for more information.

### Start here

You can solve many problems without outside assistance by following the troubleshooting procedures in this documentation and on the World Wide Web.

This document describes the diagnostic tests that you can perform, troubleshooting procedures, and explanations of error messages and error codes. The documentation that comes with your operating system and software also contains troubleshooting information.

# Diagnosing a problem

Before you contact IBM or an approved warranty service provider, follow these procedures in the order in which they are presented to diagnose a problem with your server.

#### **Procedure**

- Return the server to the condition it was in before the problem occurred. If any hardware, software, or firmware was changed before the problem occurred, if possible, reverse those changes. This might include any of the following items:
  - · Hardware components
  - Device drivers and firmware
  - System software
  - · UEFI firmware
  - System input power or network connections
- 2. View the light path diagnostics LEDs and event logs. The server is designed for ease of diagnosis of hardware and software problems.
  - Light path diagnostics LEDs: See "Server controls, LEDs, and power" on page 15 for information about using light path diagnostics LEDs.
  - Event logs: See "Event logs" on page 122 for information about notification events and diagnosis.
  - **Software or operating-system error codes:** See the documentation for the software or operating system for information about a specific error code. See the manufacturer's website for documentation.
- 3. Run IBM Dynamic System Analysis (DSA) and collect system data. Run Dynamic System Analysis (DSA) to collect information about the hardware, firmware, software, and operating system. Have this information available when you contact IBM or an approved warranty service provider. For instructions for running DSA, see the *Dynamic System Analysis Installation and User's Guide*.

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To download the latest version of DSA code and the Dynamic System Analysis Installation and User's Guide, go to http://www.ibm.com/support/entry/portal/ docdisplay?lndocid=SERV-DSA.

4. Check for and apply code updates. Fixes or workarounds for many problems might be available in updated UEFI firmware, device firmware, or device drivers. To display a list of available updates for the server, go to http://www.ibm.com/support/fixcentral/.

**Attention:** Installing the wrong firmware or device-driver update might cause the server to malfunction. Before you install a firmware or device-driver update, read any readme and change history files that are provided with the downloaded update. These files contain important information about the update and the procedure for installing the update, including any special procedure for updating from an early firmware or device-driver version to the latest version.

Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.

a. Install UpdateXpress system updates. You can install code updates that are packaged as an UpdateXpress System Pack or UpdateXpress CD image. An UpdateXpress System Pack contains an integration-tested bundle of online firmware and device-driver updates for your server. In addition, you can use IBM ToolsCenter Bootable Media Creator to create bootable media that is suitable for applying firmware updates and running preboot diagnostics. For more information about UpdateXpress System Packs, see http://www.ibm.com/support/entry/portal/docdisplay?lndocid=SERV-XPRESS and "Updating the firmware" on page 87. For more information about the Bootable Media Creator, see http://www.ibm.com/support/ entry/portal/docdisplay?lndocid=TOOL-BOMC.

Be sure to separately install any listed critical updates that have release dates that are later than the release date of the UpdateXpress System Pack or UpdateXpress image (see step 4b).

b. Install manual system updates.

the update might solve the problem.

- 1) Determine the existing code levels. In DSA, click Firmware/VPD to view system firmware levels, or click **Software** to view operating-system levels.
- 2) Download and install updates of code that is not at the latest level. To display a list of available updates for the server, go to http://www.ibm.com/support/fixcentral/. When you click an update, an information page is displayed, including a list of the problems that the update fixes. Review this list for your specific problem; however, even if your problem is not listed, installing
- 5. Check for and correct an incorrect configuration. If the server is incorrectly configured, a system function can fail to work when you enable it; if you make an incorrect change to the server configuration, a system function that has been enabled can stop working.
  - a. Make sure that all installed hardware and software are supported. See http://www.ibm.com/systems/info/x86servers/serverproven/compat/us/ to verify that the server supports the installed operating system, optional devices, and software levels. If any hardware or software component is not supported, uninstall it to determine whether it is causing the problem. You

- must remove nonsupported hardware before you contact IBM or an approved warranty service provider for support.
- b. Make sure that the server, operating system, and software are installed and configured correctly. Many configuration problems are caused by loose power or signal cables or incorrectly seated adapters. You might be able to solve the problem by turning off the server, reconnecting cables, reseating adapters, and turning the server back on. For information about performing the checkout procedure, see "About the checkout procedure" on page 116. For information about configuring the server, see "Configuring the server" on page 88.
- 6. See controller and management software documentation. If the problem is associated with a specific function (for example, if a RAID hard disk drive is marked offline in the RAID array), see the documentation for the associated controller and management or controlling software to verify that the controller is correctly configured.
  - Problem determination information is available for many devices such as RAID and network adapters.
  - For problems with operating systems or IBM software or devices, go to http://www.ibm.com/supportportal.
- 7. Check for troubleshooting procedures and RETAIN tips. Troubleshooting procedures and RETAIN tips document known problems and suggested solutions. To search for troubleshooting procedures and RETAIN tips, go to http://www.ibm.com/supportportal.
- 8. Use the troubleshooting tables. See "Troubleshooting by symptom" on page 128 to find a solution to a problem that has identifiable symptoms.
  - A single problem might cause multiple symptoms. Follow the troubleshooting procedure for the most obvious symptom. If that procedure does not diagnose the problem, use the procedure for another symptom, if possible.
  - If the problem remains, contact IBM or an approved warranty service provider for assistance with additional problem determination and possible hardware replacement. To open an online service request, go to http://www.ibm.com/ support/entry/portal/Open\_service\_request/. Be prepared to provide information about any error codes and collected data.

# Undocumented problems

If you have completed the diagnostic procedure and the problem remains, the problem might not have been previously identified by IBM. After you have verified that all code is at the latest level, all hardware and software configurations are valid, and no light path diagnostics LEDs or log entries indicate a hardware component failure, contact IBM or an approved warranty service provider for assistance.

To open an online service request, go to http://www.ibm.com/support/entry/ portal/Open\_service\_request/. Be prepared to provide information about any error codes and collected data and the problem determination procedures that you have used.

## Service bulletins

Lenovo continually updates the support website with the latest tips and techniques that you can use to solve problem that you might have with the Lenovo System x3650 M4 BD server.

To find service bulletins that are available for the Lenovo System x3650 M4 BD server, go to http://support.lenovo.com/ and search for Type 5466, and retain.

# Checkout procedure

The checkout procedure is the sequence of tasks that you should follow to diagnose a problem in the server.

# About the checkout procedure

Before you perform the checkout procedure for diagnosing hardware problems, review the following information.

- Read the safety information that begins on page "Safety" on page v.
- Dynamic System Analysis (DSA) provides the primary methods of testing the major components of the server, such as the system board, Ethernet controller, keyboard, mouse (pointing device), serial ports, and hard disk drives. You can also use them to test some external devices. If you are not sure whether a problem is caused by the hardware or by the software, you can use the diagnostic programs to confirm that the hardware is working correctly.
- When you run DSA, a single problem might cause more than one error message. When this happens, correct the cause of the first error message. The other error messages usually will not occur the next time you run DSA.

**Exception:** If multiple error codes or light path diagnostics LEDs indicate a microprocessor error, the error might be in the microprocessor or in the microprocessor socket. See "Microprocessor problems" on page 135 for information about diagnosing microprocessor problems.

- Before you run diagnostic programs, you must determine whether the failing server is part of a shared hard disk drive cluster (two or more servers sharing external storage devices). If it is part of a cluster, you can run all diagnostic programs except the ones that test the storage unit (that is, a hard disk drive in the storage unit) or the storage adapter that is attached to the storage unit. The failing server might be part of a cluster if any of the following conditions is true:
  - You have identified the failing server as part of a cluster (two or more servers sharing external storage devices).
  - One or more external storage units are attached to the failing server and at least one of the attached storage units is also attached to another server or unidentifiable device.
  - One or more servers are located near the failing server.

**Important:** If the server is part of a shared hard disk drive cluster, run one test at a time. Do not run any suite of tests, such as "quick" or "normal" tests, because this might enable the hard disk drive diagnostic tests.

- If the server is halted and a POST error code is displayed, see Appendix B, "UEFI/POST error codes," on page 455. If the server is halted and no error message is displayed, see "Troubleshooting by symptom" on page 128 and "Solving undetermined problems" on page 145.
- For information about power-supply problems, see "Solving power problems" on page 143 and "Power-supply LEDs" on page 19.
- · For intermittent problems, check the event log; see "Event logs" on page 122 and Appendix C, "DSA diagnostic test results," on page 469.

# Performing the checkout procedure

Use this information to perform the checkout procedure.

#### About this task

To perform the checkout procedure, complete the following steps:

#### **Procedure**

- 1. Is the server part of a cluster?
  - No: Go to step 2.
  - Yes: Shut down all failing servers that are related to the cluster. Go to step 2.
- 2. Complete the following steps:
  - a. Check the power supply LEDs (see "Power-supply LEDs" on page 19).
  - b. Turn off the server and all external devices.
  - c. Check all internal and external devices for compatibility at http://www.ibm.com/systems/info/x86servers/serverproven/compat/us/.
  - d. Check all cables and power cords.
  - e. Set all display controls to the middle positions.
  - f. Turn on all external devices.
  - g. Turn on the server. If the server does not start, see "Troubleshooting by symptom" on page 128.
  - h. Check the system-error LED on the operator information panel. If it is flashing, check the light path diagnostics LEDs (see "Light path diagnostics" on page 120).

**Note:** When you slide the light path diagnostics panel out of the server to check the LEDs or checkpoint codes, do not run the server continuously with light path diagnostics panel outside of the server. The panel should only be outside of the server a short time. The light path diagnostics panel must remain in the server when the server is running to ensure proper cooling.

- i. Check for the following results:
  - Successful completion of POST (see "UEFI/POST" on page 125 for more information)
  - Successful completion of startup, which is indicated by a readable display of the operating-system desktop
- 3. Is there a readable image on the monitor screen?
  - **No:** Find the failure symptom in "Troubleshooting by symptom" on page 128; if necessary, see "Solving undetermined problems" on page 145.
  - Yes: Run DSA (see "Running the DSA Preboot diagnostic programs" on page 127).
    - If DSA reports an error, follow the instructions in Appendix C, "DSA diagnostic test results," on page 469.
    - If DSA does not report an error but you still suspect a problem, see "Solving undetermined problems" on page 145.

# **Diagnostic tools**

The following tools are available to help you diagnose and solve hardware-related problems.

### · Light path diagnostics

Use light path diagnostics to diagnose system errors quickly. See "Light path diagnostics" on page 120 for more information.

### Event logs

The event logs list the error codes and messages that are generated when an error is detected for the subsystems IMM2, POST, DSA, and the server baseboard management controller. See "Event logs" on page 122 for more information.

#### **Integrated Management Module II**

The Integrated Management Module II (IMM2) combines service processor functions, video controller, and remote presence and blue-screen capture features in a single chip. The IMM provides advanced service-processor control, monitoring, and alerting function. If an environmental condition exceeds a threshold or if a system component fails, the IMM lights LEDs to help you diagnose the problem, records the error in the IMM event log, and alerts you to the problem. Optionally, the IMM also provides a virtual presence capability for remote server management capabilities. The IMM provides remote server management through the following industry-standard interfaces:

- Intelligent Platform Management Protocol (IPMI) version 2.0
- Simple Network Management Protocol (SNMP) version 3
- Common Information Model (CIM)
- Web browser

For more information about the Integrated Management Module (IMM), see "Using the integrated management module II" on page 99, Appendix A, "Integrated management module II (IMM2) error messages," on page 267, and the Integrated Management Module User's Guide at http://www-947.ibm.com/ support/entry/portal/docdisplay?lndocid=migr-5086346.

#### **Dynamic System Analysis**

Two editions of Dynamic System Analysis (DSA) are available for diagnosing problems, DSA Portable and DSA Preboot:

### DSA Portable

DSA Portable collect and analyze system information to aid in diagnosing server problems. DSA Portable runs on the server's operating system and collect the following information about the server:

- Drive health information
- Event logs for ServeRAID controllers and service processors
- IMM2 configuration information
- IMM2 environmental information
- Installed hardware, including PCI and USB information
- Installed applications and hot fixes
- Kernel modules
- Light path diagnostics status
- Microprocessor, input/out hub, and UEFI error logs
- Network interfaces and settings
- Option card driver and firmware information

- RAID controller configuration
- Service processor (integrated management module) status and configuration
- System configuration
- Vital product data, firmware, and UEFI configuration

DSA Portable create a DSA log, which is a chronologically ordered merge of the system-event log (as the IPMI event log), the integrated management module (IMM) chassis-event log (as the ASM event log), and the operating-system event logs. You can send the DSA log as a file to service (when requested by service) or view the information as a text file or HTML

Note: Use the latest available version of DSA to make sure you are using the most recent configuration data. For documentation and download information for DSA, see http://www.ibm.com/systems/management/.

For additional information, see "Dynamic System Analysis" on page 125 and Appendix C, "DSA diagnostic test results," on page 469.

#### - DSA Preboot

DSA Preboot diagnostic program is stored in the integrated USB memory on the server. DSA Preboot collects and analyzes system information to aid in diagnosing server problems, as well as offering a rich set of diagnostic tests of the major components of the server. DSA Preboot collects the following information about the server:

- Drive health information
- Event logs for ServeRAID controllers and service processors
- IMM2 configuration information
- IMM2 environmental information
- Installed hardware, including PCI and USB information
- Light path diagnostics status
- Microprocessor, input/out hub, and UEFI error logs
- Network interfaces and settings
- Option card driver and firmware information
- RAID controller configuration
- Service processor (integrated management module) status and configuration
- System configuration
- Vital product data, firmware, and UEFI configuration

DSA Preboot also provides diagnostics for the following system components (when they are installed):

- 1. Network adapter
- 2. IMM 12C bus
- 3. Lightpath diagnostics panel
- 4. Memory modules
- 5. Microprocessors
- 6. Optical devices (CD or DVD)
- 7. SAS or SATA drives
- 8. Tape drives (SCSI)
- 9. LSI controller

- 10. Broadcom network adapter
- 11. FusionIO storage
- 12. Intel GPU
- 13. Nvidia GPU

See "Running the DSA Preboot diagnostic programs" on page 127 for more information on running the DSA Preboot program on the server.

#### Troubleshooting by symptom

These tables list problem symptoms and actions to correct the problems. See "Troubleshooting by symptom" on page 128 for more information.

# Light path diagnostics

Light path diagnostics is a system of LEDs on various external and internal components of the server that leads you to the failed component.

When an error occurs, LEDs are lit throughout the server. By viewing the LEDs in a particular order, you can often identify the source of the error.

When LEDs are lit to indicate an error, they remain lit when the server is turned off, provided that the server is still connected to power and the power supply is operating correctly and the top cover is closed and latched correctly.

Before you work inside the server to view light path diagnostics LEDs, read the safety information that begins on page "Safety" on page v and "Handling static-sensitive devices" on page 33.

If an error occurs, view the light path diagnostics LEDs in the following order:

- 1. Look at the operator information panel on the front of the server.
  - If the Log LED is lit, it indicates that information about a suboptimal condition in the server is available in the IMM system-event log or in the system-event log.
  - If the system-error LED is lit, it indicates that an error has occurred; go to step 2.

**Note:** The initial server configuration will not include the light path diagnostics panel. Step 2 is for users who have upgraded the operator information panel to the advanced operator information panel. If the server only has the operator information panel, please go to step 3.

- 2. To view the advanced operator information panel, press the blue latch on the right of the operator panel. Lit LEDs on this panel indicate the type of error that has occurred.
  - Note any LEDs that are lit, and then reinstall the light path diagnostics panel in the server.
- 3. Remove the server top cover and look inside the server for lit LEDs. Certain components inside the server have LEDs that are lit to indicate the location of a problem.

The following illustration shows the LEDs on the system board.

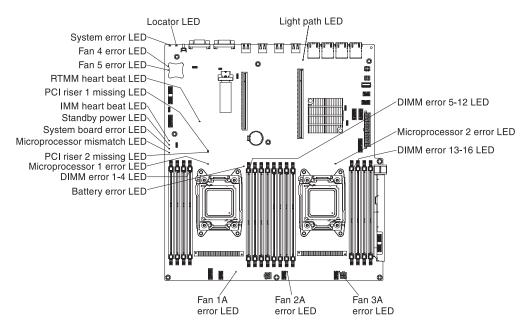


Figure 75. System board LEDs

| LED name                       | Description   |
|--------------------------------|---|
| Error LEDs                     | When an error LED is lit, it indicates that the associated component has failed.  |
| RTMM heartbeat LED             | Power-on and power-off sequencing.  |
| IMM 2 heartbeat LED            | Indicates the status of the boot process of the IMM2.   |
|                                | When the server is connected to power this LED flashes quickly to indicate that the IMM2 code is loading. When the loading is complete, the LED stops flashing briefly and then flashes slowly to indicate that the IMM2 if fully operational and you can press the power-control button to start the server.                               |
| Standby power LED              | When this LED is flashing, it indicates that the server is connected to an ac power source.   |
|                                | When this LED is lit, it indicates that the server is dc power on.  |
| System board error LED         | System-board has failed.  |
| Microprocessor<br>mismatch LED | When this LED is lit, it indicates that microprocessor 1 is not installed, or the microprocessors do not have the same cache size and type, and clock speed.  |
| DIMM error LEDs                | A memory DIMM has failed or is incorrectly installed.   |
| Microprocessor error<br>LED    | Microprocessor has failed, is missing, or has been incorrectly installed.   |
| Light path LED                 | Indicates whether or not the lightpath button is functional. If the light path LED is lit after pressing the lightpath button, it indicates that the lightpath button is functioning properly. By contrast, if the lightpath LED is not lit when pressing the light path button, it means the lightpath button is not functioning properly. |

# **Event logs**

Error codes and messages are displayed in POST event log, system-event log, integrated management module (IMM2) event log, and DSA event log.

- POST event log: This log contains the three most recent error codes and messages that were generated during POST. You can view the contents of the POST event log from the Setup utility (see "Starting the Setup utility" on page 91). For more information about POST error codes, see Appendix B, "UEFI/POST error codes," on page 455.
- System-event log: This log contains POST and system management interrupt (SMI) events and all events that are generated by the baseboard management controller that is embedded in the integrated management module (IMM). You can view the contents of the system-event log through the Setup utility and through the Dynamic System Analysis (DSA) program (as IPMI event log). The system-event log is limited in size. When it is full, new entries will not overwrite existing entries; therefore, you must periodically clear the system-event log through the Setup utility. When you are troubleshooting an error, you might have to save and then clear the system-event log to make the most recent events available for analysis. For more information about the system-event log, see Appendix A, "Integrated management module II (IMM2) error messages," on page 267.

Messages are listed on the left side of the screen, and details about the selected message are displayed on the right side of the screen. To move from one entry to the next, use the Up Arrow (↑) and Down Arrow (↓) keys.

Some IMM sensors cause assertion events to be logged when their setpoints are reached. When a setpoint condition no longer exists, a corresponding deassertion event is logged. However, not all events are assertion-type events.

- Integrated management module (IMM2) event log: This log contains a filtered subset of all IMM, POST, and system management interrupt (SMI) events. You can view the IMM event log through the IMM Web interface. For more information, see "Logging on to the Web interface" on page 103. You can also view the IMM event log through the Dynamic System Analysis (DSA) program (as the ASM event log). For more information about IMM error messages, see Appendix A, "Integrated management module II (IMM2) error messages," on page 267.
- **DSA event log:** This log is generated by the Dynamic System Analysis (DSA) program, and it is a chronologically ordered merge of the system-event log (as the IPMI event log), the IMM chassis-event log (as the ASM event log), and the operating-system event logs. You can view the DSA event log through the DSA program (see "Viewing event logs without restarting the server" on page 123). For more information about DSA and DSA messages, see Appendix C, "DSA diagnostic test results," on page 469 and "Dynamic System Analysis" on page 125.

For more information about viewing the logs or clearing the logs, see "Viewing event logs through the Setup utility," "Viewing event logs without restarting the server" on page 123, and "Clearing the error logs" on page 124.

#### Viewing event logs through the Setup utility

Use this information to view the event logs through the Setup utility.

#### About this task

To view the POST event log or system-event log, complete the following steps:

#### **Procedure**

- 1. Turn on the server.
- 2. When the prompt <F1> Setup is displayed, press F1. If you have set both a power-on password and an administrator password, you must type the administrator password to view the event logs.
- 3. Select **System Event Logs** and use one of the following procedures:
  - To view the POST event log, select **POST Event Viewer**.
  - To view the system-event log, select **System Event Log**.

## Viewing event logs without restarting the server

Use this information to view the event logs without restarting the server.

#### About this task

If the server is not hung and the IMM is connected to a network, methods are available for you to view one or more event logs without having to restart the server.

If you have installed Dynamic System Analysis (DSA) Portable, you can use it to view the system-event log (as the IPMI event log), or the IMM event log (as the ASM event log), the operating-system event logs, or the merged DSA log. You can also use DSA Preboot to view these logs, although you must restart the server to use DSA Preboot. The server comes with DSA Preboot stored in integrated USB memory. To install DSA Portable or check for and download a later version of DSA Preboot CD image, go to http://www.ibm.com/support/entry/portal/ docdisplay?lndocid=SERV-DSA.

#### Results

If IPMItool is installed in the server, you can use it to view the system-event log. Most recent versions of the Linux operating system come with a current version of IPMItool. For an overview of IPMI, go to http://www.ibm.com/developerworks/ linux/blueprints/ and click Using Intelligent Platform Management Interface (IPMI) on IBM Linux platforms.

You can view the IMM event log through the Event Log link in the integrated management module (IMM) Web interface. For more information, see "Logging on to the Web interface" on page 103.

The following table describes the methods that you can use to view the event logs, depending on the condition of the server. The first three conditions generally do not require that you restart the server.

Table 12. Methods for viewing event logs

| Condition  | Action   |
|--|--|
| The server is not hung and is connected to a network (using an operating system controlled network ports).   | Use any of the following methods:  • Run DSA Portable to view the diagnostic event log (requires IPMI driver) or create an output file that you can send to service and support (using ftp or local copy).  • Use IPMItool to view the system-event log (requires IPMI driver).  • Use the Web browser interface to the IMM to view the system-event log locally (requires RNDIS USB LAN driver).  |
| The server is not hung and is not connected to a network (using an operating system controlled network ports).                                       | <ul> <li>Use any of the following methods:</li> <li>Run Portable DSA to view the diagnostic event log (requires IPMI driver) or create an output file that you can send to service and support (using a local copy).</li> <li>Use IPMItool to view the system-event log (requires IPMI driver).</li> <li>Use the Web browser interface to the IMM to view the system-event log locally (requires RNDIS USB LAN driver). For more information, see "Obtaining the IP address for the IMM" on page 102 and "Logging on to the Web interface" on page 103.</li> </ul> |
| The integrated management module (IMM) is connected to a network and AC power is applied - the server state might be hung, not hung, or powered off. | <ul> <li>Use any of the following methods:</li> <li>Use IPMItool over the network to the IMM external IP address to view the system-event log.</li> <li>Use the Web browser interface to the IMM to view the system-event log. In the Web browser, type the IP address for the IMM and go to the Event Log page. For more information, see "Obtaining the IP address for the IMM" on page 102 and "Logging on to the Web interface" on page 103.</li> </ul>  |
| The server is hung and no communication can be made with the IMM.  | Restart the server and press F2 to start DSA Preboot and view the diagnostic event log (see "Running the DSA Preboot diagnostic programs" on page 127 for more information).  Alternatively, you can restart the server and press F1 to start the Setup utility and view the POST event log or system-event log. For more information, see "Viewing event logs through the Setup utility" on page 122.   |

# Clearing the error logs

Use this information to clear the error logs.

#### About this task

To clear the event logs, complete the following steps.

**Note:** The POST event log is automatically cleared each time the server is restarted.

#### **Procedure**

- 1. Turn on the server.
- 2. When the prompt <F1> Setup is displayed, press F1. If you have set both a power-on password and an administrator password, you must type the administrator password to view the event logs.
- 3. Use one of the following procedures:
  - To clear the IMM system-event log, select System Event Logs --> System Event Log. Select Clear System Event Log; then, press Enter twice.

## **UEFI/POST**

When you turn on the server, it performs a series of tests to check the operation of the server components and some optional devices in the server. This series of tests is called the power-on self-test, or POST.

**Note:** This server does not use beep codes for server status.

If a power-on password is set, you must type the password and press Enter (when you are prompted), for POST to run.

If POST detects a problem an error message is displayed. See Appendix B, "UEFI/POST error codes," on page 455 for more information.

If POST detects a problem, an error message is sent to the POST event log, see "Event logs" on page 122 for more information.

# **Dynamic System Analysis**

Dynamic System Analysis (DSA) collects and analyzes system information to aid in diagnosing server problems.

DSA collects the following information about the server:

- · Drive health information
- · Event logs for ServeRAID controllers and service processors
- Hardware inventory, including PCI and USB information
- Installed applications and hot fixes (available in DSA Portable only)
- Kernel modules (available in DSA Portable only)
- Light path diagnostics status
- Network interfaces and settings
- Performance data and details about processes that are running
- RAID and controller configuration
- Service processor (integrated management module) status and configuration
- System configuration
- Vital product data and firmware information

For system-specific information about the action that you should take as a result of a message that DSA generates, see "Diagnostic text messages" on page 127.

If you cannot find a problem by using DSA, see "Solving undetermined problems" on page 145 for information about testing the server.

#### Note:

- 1. In a multi-node environment, each server has a unique DSA interface. You can view server-specific information, such as event logs, from these unique DSA interfaces.
- 2. DSA Preboot might appear to be unresponsive when you start the program. This is normal operation while the program loads.

Make sure that the server has the latest version of the DSA code. To obtain DSA code and the *Dynamic System Analysis Installation and User's Guide*, go to http://www.ibm.com/support/entry/portal/docdisplay?lndocid=SERV-DSA.

#### **DSA** editions

Two editions of Dynamic System Analysis are available.

#### DSA Portable

DSA Portable Edition runs within the operating system; you do not have to restart the server to run it. It is packaged as a self-extracting file that you download from the Web. When you run the file, it self-extracts to a temporary folder and performs comprehensive collection of hardware and operating-system information. After it runs, it automatically deletes the temporary files and folder and leaves the results of the data collection and diagnostics on the server.

If you are unable to start the server, use DSA Portable.

#### · DSA Preboot

DSA Preboot runs outside of the operating system; you must restart the server to run it. It is provided in the flash memory on the server, or you can create a bootable media such as a CD, DVD, ISO, USB, or PXE using the ToolsCenter Bootable Media Creator (BoMC). For more details, see the BoMC *User Guide* at http://www.ibm.com/support/entry/portal/docdisplay?lndocid=TOOL-BOMC. In addition to the capabilities of the other editions of DSA, DSA Preboot includes diagnostic routines that would be disruptive to run within the operating-system environment (such as resetting devices and causing loss of network connectivity). It has a graphical user interface that you can use to specify which diagnostics to run and to view the diagnostic and data collection results.

DSA Preboot provides diagnostics for the following system components, if they are installed:

- Broadcom network adapter
- Optical devices (CD or DVD)
- Tape drives (SCSI, SAS, or SATA)
- Memory
- Microprocessor
- Checkpoint panel
- I2C bus
- SAS and SATA drives

If you are able to restart the server or if you need comprehensive diagnostics, use DSA Preboot.

The Lenovo System x3650 M4 BD server comes with DSA Preboot diagnostics code on the integrated USB flash memory. Utilities are available to reset and update the diagnostics code on the integrated USB flash device, if the diagnostic partition becomes damaged and does not start the DSA Preboot diagnostic programs. For more information and to download the utilities, go to http://www.ibm.com/support/entry/portal/docdisplay?lndocid=SERV-DSA.

### Running the DSA Preboot diagnostic programs

Use this information to run the DSA Preboot diagnostic programs.

#### About this task

Note: The DSA memory test might take up to 30 minutes to run. If the problem is not a memory problem, skip the memory test.

To run the DSA Preboot diagnostic programs that is stored in integrated flash memory on the server, complete the following steps:

#### **Procedure**

- 1. If the server is running, turn off the server and all attached devices.
- 2. Turn on all attached devices; then, turn on the server.
- 3. When the prompt <F2> Diagnostics is displayed, press F2.

**Note:** The DSA Preboot diagnostic program might appear to be unresponsive for an unusual length of time when you start the program. This is normal operation while the program loads.

4. Optionally, select Quit to DSA to exit from the stand-alone memory diagnostic program.

Note: After you exit from the stand-alone memory diagnostic environment, you must restart the server to access the stand-alone memory diagnostic environment again.

- 5. Select gui to display the graphical user interface, or select cmd to display the DSA interactive menu.
- 6. Follow the instructions on the screen to select the diagnostic test to run.

#### Results

If the server stops during testing and you cannot continue, restart the server and try running the DSA Preboot diagnostic programs again. If the problem remains, replace the component that was being tested when the server stopped.

## Diagnostic text messages

Diagnostic text messages are displayed while the tests are running.

A diagnostic text message contains one of the following results:

**Passed:** The test was completed without any errors.

**Failed:** The test detected an error.

**Aborted:** The test could not proceed because of the server configuration

Additional information concerning test failures is available in the extended diagnostic results for each test.

## Viewing the test log results

Use this information to view the test log results.

To view the test log for the results when the tests are completed, click the **Success** link in the Status column, if you are running the DSA graphical user interface, or type :x to exit the Execute Tests menu, if you are running the DSA interactive menu, or select **Diagnostic Event Log** in the graphical user interface. To transfer DSA Preboot collections to an external USB device, type the **copy** command in the DSA interactive menu.

- If you are running the DSA graphical user interface (GUI), click the **Success** link in the Status column.
- If you are running the DSA interactive menu (CLI), type :x to exit the Execute Tests menu; then, select the **completed tests** to view the results.

# Call home (automated service request)

Lenovo provides tools that can automatically collect and send data or call Support when an error is detected.

These tools can help service speed up the process of diagnosing problems. The following sections provide information about the call home tools.

### Service advisor

The server comes with the Service Advisor feature that can collect data about the system when the system detects a fault and sends that data to Service for problem determination.

It also includes the call home feature that automatically calls Service when a problem occurs. The Service Advisor feature is integrated into the Integrated Management Module (IMM). You will need to set up and configure the Service Advisor feature before you can use it. For more information about how to setup and configure the Service Advisor feature, see the *Integrated Management Module User's Guide* at http://www-947.ibm.com/support/entry/portal/docdisplay?lndocid=migr-5086346.

# **Electronic Service Agent**

Electronic Service Agent monitors, tracks, and captures system hardware errors and hardware and software inventory information, and reports serviceable problems directly to Support.

You can also choose to collect data manually. It uses minimal system resources, and can be downloaded from the website. For more information and to download Electronic Service Agent, go to http://www.ibm.com/support/electronic/portal/.

# **Error messages**

This section provides the list of error codes and messages for UEFI/POST, IMM2, and DSA that are generated when a problem is detected.

# Troubleshooting by symptom

Use the troubleshooting tables to find solutions to problems that have identifiable symptoms.

If you cannot find a solution to the problem in these tables, see Appendix C, "DSA diagnostic test results," on page 469 for information about testing the server and "Running the DSA Preboot diagnostic programs" on page 127 for additional information about running DSA Preboot program that is stored in integrated USB memory on the server. For additional information to help you solve problems, see "Start here" on page 113.

If you have just added new software or a new optional device and the server is not working, complete the following steps before you use the troubleshooting tables:

- 1. Check the system-error LED on the operator information panel; if it is lit, check the light path diagnostics LEDs (see "Light path diagnostics" on page 120).
- 2. Remove the software or device that you just added.
- 3. Run Dynamic System Analysis (DSA) to determine whether the server is running correctly (for information about using DSA, see Appendix C, "DSA diagnostic test results," on page 469.
- 4. Reinstall the new software or new device.

# Hypervisor problems

- Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.
- See Chapter 5, "Parts listing," on page 151 to check if a component is a consumable, structural, or FRU part.
- If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.

| Symptom   | Action  |
|---|---|
| hypervisor flash device is not<br>listed in the expected boot<br>order, does not appear in the<br>list of boot devices, or a similar<br>problem has occurred. | Make sure that the optional embedded hypervisor flash device is selected on the boot manager ( <f12> Select Boot Device) at startup.</f12>  |
|   | 2. Make sure that the embedded hypervisor flash device is seated in the connector correctly (see "Removing a USB embedded hypervisor flash device" on page 198 and "Replacing a USB embedded hypervisor flash device" on page 200). |
|   | 3. See the documentation that comes with the optional embedded hypervisor flash device for setup and configuration information.   |
|   | 4. Make sure that other software works on the server.   |

# **General problems**

- Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.
- See Chapter 5, "Parts listing," on page 151 to check whether a component is a consumable, structural, or FRU part.
- If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.

| Symptom                         | Action   |
|---------------------------------|--|
| A cover latch is broken, an LED | If the part is a CRU, replace it. If the part is a FRU, the part must be replaced by a |
| is not working, or a similar    | trained service technician (see Chapter 6, "Removing and replacing components,"        |
| problem has occurred.           | on page 161 to determine whether the part is a consumable, structural, or FRU          |
|                                 | component).  |

- Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.
- See Chapter 5, "Parts listing," on page 151 to check whether a component is a consumable, structural, or FRU
  part.
- If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.

| Symptom   | Action  |
|---|---|
| The server is hung while the screen is on. Cannot start the Setup utility by pressing F1. | <ol> <li>See "Nx-boot failure" on page 149 for more information.</li> <li>See "Recovering the server firmware" on page 146 for more information.</li> </ol> |
| The server cover was removed while running and the server shut off.                       | Replace the server cover and restart the server.  |

# Hard disk drive problems

- Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.
- See Chapter 5, "Parts listing," on page 151 to check if a component is a consumable, structural, or FRU part.
- If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.

| Symptom  | Action  |
|--|---|
| Not all drives are recognized by<br>the DSA hard disk drive<br>diagnostic test.                  | Remove the drive that is indicated by DSA (see "Removing a hot-swap hard disk drive" on page 39 ); then, run the hard disk drive diagnostic test again (see Appendix C, "DSA diagnostic test results," on page 469). If the remaining drives are recognized, replace the drive that you removed with a new one. |
| The server stops responding during the hard disk drive diagnostic test.                          | Remove the drive that is indicated by DSA (see "Removing a hot-swap hard disk drive" on page 39); then, run the hard disk drive diagnostic test again (see Appendix C, "DSA diagnostic test results," on page 469). If the remaining drives are recognized, replace the drive that you removed with a new one.  |
| A hard disk drive has failed,<br>and the associated yellow hard<br>disk drive status LED is lit. | Replace the failed hard disk drive.   |

- Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.
- See Chapter 5, "Parts listing," on page 151 to check if a component is a consumable, structural, or FRU part.
- If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.

| Symptom  | Action  |
|--|---|
| A newly installed hard disk drive is not recognized. | 1. Observe the associated yellow hard disk drive status LED. If the LED is lit, it indicates a drive fault.   |
|  | 2. If the LED is lit, remove the drive from the bay, wait 45 seconds, and reinsert the drive, making sure that the drive assembly connects to the hard disk drive backplane.  |
|  | 3. Observe the associated green hard disk drive activity LED and the yellow status LED:   |
|  | <ul> <li>If the green activity LED is flashing and the yellow status LED is not lit, the<br/>drive is recognized by the controller and is working correctly. Run the DSA<br/>hard disk drive test to determine whether the drive is detected.</li> </ul>  |
|  | • If the green activity LED is flashing and the yellow status LED is flashing slowly, the drive is recognized by the controller and is rebuilding.  |
|  | • If neither LED is lit or flashing, check the hard disk drive backplane (go to step "Hard disk drive problems" on page 130).   |
|  | • If the green activity LED is flashing and the yellow status LED is lit, replace the drive. If the activity of the LEDs remains the same, go to step "Hard disk drive problems" on page 130. If the activity of the LEDs changes, return to step 1.  |
|  | 4. Make sure that the hard disk drive backplane is correctly seated. When it is correctly seated, the drive assemblies correctly connect to the backplane without bowing or causing movement of the backplane.  |
|  | 5. Reseat the backplane power cable and repeat steps 1 through 3.   |
|  | 6. Reseat the backplane signal cable and repeat steps 1 through 3.  |
|  | 7. Suspect the backplane signal cable or the backplane:   |
|  | a. Replace the affected backplane signal cable.   |
|  | b. Replace the affected backplane.  |
|  | 8. Run the DSA tests for the SAS/SATA adapter and hard disk drives (see "Running the DSA Preboot diagnostic programs" on page 127).   |
|  | • If the adapter passes the test but the drives are not recognized, replace the backplane signal cable and run the tests again.   |
|  | Replace the backplane.  |
|  | • If the adapter fails the test, disconnect the backplane signal cable from the adapter and run the tests again.  |
|  | If the adapter fails the test, replace the adapter.   |
|  | 9. See "Problem determination tips" on page 145.  |
| Multiple hard disk drives fail.                      | Make sure that the hard disk drive, SAS/SATA RAID adapter, and server device drivers and firmware are at the latest level.  Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code. |
| Multiple hard disk drives are offline.               | Review the storage subsystem logs for indications of problems within the storage subsystem, such as backplane or cable problems.  |
|  | 2. See "Problem determination tips" on page 145.  |

- Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.
- See Chapter 5, "Parts listing," on page 151 to check if a component is a consumable, structural, or FRU part.
- If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.

| Symptom   | Action  |
|---|---|
| A replacement hard disk drive does not rebuild.   | 1. Make sure that the hard disk drive is recognized by the adapter (the green hard disk drive activity LED is flashing).  |
|   | 2. Review the SAS/SATA RAID adapter documentation to determine the correct configuration parameters and settings.   |
| A green hard disk drive activity<br>LED does not accurately<br>represent the actual state of the            | 1. If the green hard disk drive activity LED does not flash when the drive is in use, run the DSA disk drive test (see "Running the DSA Preboot diagnostic programs" on page 127. |
| associated drive.   | 2. Use one of the following procedures:   |
|   | <ul> <li>If the drive passes the test, replace the backplane.</li> </ul>  |
|   | <ul> <li>If the drive fails the test, replace the drive.</li> </ul>   |
| A yellow hard disk drive status LED does not accurately represent the actual state of the associated drive. | 1. If the yellow hard disk drive LED and the RAID adapter software do not indicate the same status for the drive, complete the following steps:                                   |
|   | a. Turn off the server.   |
|   | b. Reseat the SAS/SATA adapter.   |
|   | c. Reseat the backplane signal cable and backplane power cable.   |
|   | d. Reseat the hard disk drive.  |
|   | e. Turn on the server and observe the activity of the hard disk drive LEDs.   |
|   | 2. See "Problem determination tips" on page 145.  |

# Intermittent problems

- Follow the suggested actions in the order in which they are listed in the Action column until the problem is
- If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.

| Symptom  | Action   |
|--|--|
| A problem occurs only occasionally and is difficult to diagnose. | <ol> <li>Make sure that:         <ul> <li>All cables and cords are connected securely to the rear of the server and attached devices.</li> <li>When the server is turned on, air is flowing from the fan grille. If there is no airflow, the fan is not working. This can cause the server to overheat and shut down.</li> </ul> </li> <li>Check the event logs (see "Event logs" on page 122).</li> <li>See "Solving undetermined problems" on page 145.</li> </ol> |

- Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.
- If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.

| Symptom                                    | Action  |
|--|---|
| The server resets (restarts) occasionally. | 1. If the reset occurs during POST and the POST watchdog timer is enabled (click System Settings> Integrated Management Module> POST Watchdog Timer in the Setup utility to see the POST watchdog setting), make sure that sufficient time is allowed in the watchdog timeout value (POST Watchdog Timer). If the server continues to reset during POST, see Appendix B, "UEFI/POST error codes," on page 455 and Appendix C, "DSA diagnostic test results," on page 469.             |
|  | 2. If the reset occurs after the operating system starts, disable any automatic server restart (ASR) utilities, such as the Automatic Server Restart IPMI Application for Windows, or any ASR devices that are be installed.  Note: ASR utilities operate as operating-system utilities and are related to the IPMI device driver. If the reset continues to occur after the operating system starts, the operating system might have a problem; see "Software problems" on page 142. |
|  | 3. If neither condition applies, check the event logs (see "Event logs" on page 122).   |

### Keyboard, mouse, or pointing-device problems

- Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.
- See Chapter 5, "Parts listing," on page 151 to check if a component is a consumable, structural, or FRU part.
- If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.

| Symptom                                       | Action   |
|---|--|
| All or some keys on the keyboard do not work. | <ul><li>1. Make sure that:</li><li>• The keyboard cable is securely connected.</li><li>• The server and the monitor are turned on.</li></ul>                           |
|   | 2. If you are using a USB keyboard, run the Setup utility and enable keyboardless operation.   |
|   | 3. If you are using a USB keyboard and it is connected to a USB hub, disconnect the keyboard from the hub and connect it directly to the server.                       |
|   | 4. Replace the keyboard.   |
| The mouse or USB-device does                  | 1. Make sure that:   |
| not work.                                     | <ul> <li>The mouse or USB device cable is securely connected to the server.</li> </ul>   |
|   | <ul> <li>The mouse or USB device drivers are installed correctly.</li> </ul>   |
|   | <ul> <li>The server and the monitor are turned on.</li> </ul>  |
|   | The mouse option is enabled in the Setup utility.  |
|   | 2. If you are using a USB mouse or USB device and it is connected to a USB hub, disconnect the mouse or USB device from the hub and connect it directly to the server. |
|   | 3. Replace the mouse or USB-device.  |

## **Memory problems**

- Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.
- See Chapter 5, "Parts listing," on page 151 to check if a component is a consumable, structural, or FRU part.
- If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.

| Symptom   | Action   |
|---|--|
| The amount of system memory that is displayed is less than the amount of installed physical | <b>Note:</b> If you change memory, you must update the memory configuration in the Setup utility.  |
|   | 1. Make sure that:   |
| memory.   | <ul> <li>No error LEDs are lit on the operator information panel, on the memory<br/>tray, or on the MAX5 memory expansion module.</li> </ul>   |
|   | Memory mirroring does not account for the discrepancy.   |
|   | The memory modules are seated correctly (see "Removing a memory module" on page 187 and "Replacing a memory module" on page 188).  |
|   | You have installed the correct type of memory.   |
|   | <ul> <li>If you changed the memory, you updated the memory configuration in the<br/>Setup utility.</li> </ul>  |
|   | <ul> <li>All banks of memory are enabled. The server might have automatically<br/>disabled a memory bank when it detected a problem, or a memory bank<br/>might have been manually disabled.</li> </ul>  |
|   | 2. Check the POST event log:   |
|   | <ul> <li>If a DIMM was disabled by a systems-management interrupt (SMI), replace<br/>the DIMM.</li> </ul>  |
|   | <ul> <li>If a DIMM was disabled by the user or by POST, run the Setup utility and<br/>enable the DIMM.</li> </ul>  |
|   | 3. Run memory diagnostics (see "Running the DSA Preboot diagnostic programs" on page 127).   |
|   | 4. Make sure that there is no memory mismatch when the server is at the minimum memory configuration ( see "Memory module installation" on page 58 for information about DIMM rules and population sequence).  |
|   | 5. Reseat the DIMM.  |
|   | 6. Restart the server.   |
| Multiple rows of DIMMs in a   | 1. Reseat the DIMMs; then, restart the server.   |
| branch are identified as failing.   | 1. Remove the lowest-numbered DIMM pair of those that are identified and replace it with an identical pair of known good DIMMs; then, restart the server. Repeat as necessary. If the failures continue after all identified pairs are replaced, go to step 4.   |
|   | 2. Return the removed DIMMs, one pair at a time, to their original connectors, restarting the server after each pair, until a pair fails. Replace each DIMM in the failed pair with an identical known good DIMM, restarting the server after each DIMM. Replace the failed DIMM. Repeat step 3 until you have tested all removed DIMMs. |
|   | 3. Replace the lowest-numbered DIMM pair of those identified; then, restart the server. Repeat as necessary.   |
|   | 4. (Trained technician only) Replace the system board.   |

### Microprocessor problems

- Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.
- · See Chapter 5, "Parts listing," on page 151 to check if a component is a consumable, structural, or FRU part.
- If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.

| Symptom   | Action   |
|---|--|
| The server goes directly to the POST Event Viewer when it is turned on. | 1. Correct any errors that are indicated by the light path diagnostics LEDs (see "Light path diagnostics" on page 120).  |
|   | 2. Make sure that the server supports all the microprocessors and that the microprocessors match in speed, type, and cache size. To view the microprocessor information, run the Setup utility and select System Information → System Summary → Processor. |
|   | 3. (Trained technician only) Make sure that microprocessor 1 is seated correctly.  |
|   | 4. (Trained technician only) Remove microprocessor 2 and restart the server.   |
|   | 5. Replace the following components one at a time, in the order shown, restarting the server each time:  |
|   | a. (Trained technician only) Microprocessor  |
|   | b. (Trained technician only) System board  |

## Monitor and video problems

Some monitors have their own self-tests. If you suspect a problem with your monitor, see the documentation that comes with the monitor for instructions for testing and adjusting the monitor. If you cannot diagnose the problem, call for service.

- Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.
- · See Chapter 5, "Parts listing," on page 151 to check if a component is a consumable, structural, or FRU part.
- If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.

| Symptom              | Action   |
|----------------------|--|
| Testing the monitor. | 1. Make sure that the monitor cables are firmly connected.   |
|                      | 2. Try using a different monitor on the server, or try using the monitor that is being tested on a different server.       |
|                      | 3. Run the diagnostic programs. If the monitor passes the diagnostic programs, the problem might be a video device driver. |
|                      | 4. (Trained technician only) Replace the system board.   |

- Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.
- See Chapter 5, "Parts listing," on page 151 to check if a component is a consumable, structural, or FRU part.
- If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.

| Symptom   | Action   |
|---|--|
| The screen is blank.  | 1. If the server is attached to a KVM switch, bypass the KVM switch to eliminate it as a possible cause of the problem: connect the monitor cable directly to the correct connector on the rear of the server.   |
|   | <ul> <li>2. Make sure that:</li> <li>The server is turned on. If there is no power to the server, see "Power problems" on page 140.</li> <li>The monitor cables are connected correctly.</li> <li>The monitor is turned on and the brightness and contrast controls are adjusted correctly.</li> </ul> |
|   | 3. Make sure that the correct server is controlling the monitor, if applicable.  |
|   | 4. Make sure that damaged server firmware is not affecting the video; see "Updating the firmware" on page 87.  |
|   | 5. Observe the checkpoint LEDs on the system board; if the codes are changing, go to step 6.   |
|   | 6. Replace the following components one at a time, in the order shown, restarting the server each time:  |
|   | a. Monitor   |
|   | b. Video adapter (if one is installed)   |
|   | c. (Trained technician only) System board.   |
|   | 7. See "Solving undetermined problems" on page 145.  |
| The monitor works when you  | 1. Make sure that:   |
| turn on the server, but the screen goes blank when you start some application programs. | • The application program is not setting a display mode that is higher than the capability of the monitor.   |
|   | <ul> <li>You installed the necessary device drivers for the application.</li> </ul>  |
|   | 2. Run video diagnostics (see "Running the DSA Preboot diagnostic programs" on page 127).  |
|   | <ul> <li>If the server passes the video diagnostics, the video is good; see "Solving<br/>undetermined problems" on page 145.</li> </ul>  |
|   | <ul> <li>(Trained technician only) If the server fails the video diagnostics, replace the<br/>system board.</li> </ul>   |

- Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.
- See Chapter 5, "Parts listing," on page 151 to check if a component is a consumable, structural, or FRU part.
- If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.

| Symptom   | Action  |
|---|---|
| The monitor has screen jitter, or<br>the screen image is wavy,<br>unreadable, rolling, or<br>distorted. | 1. If the monitor self-tests show that the monitor is working correctly, consider the location of the monitor. Magnetic fields around other devices (such as transformers, appliances, fluorescents, and other monitors) can cause screen jitter or wavy, unreadable, rolling, or distorted screen images. If this happens, turn off the monitor. |
|   | <b>Attention:</b> Moving a color monitor while it is turned on might cause screen discoloration.  |
|   | Move the device and the monitor at least 305 mm (12 in.) apart, and turn on the monitor.  Notes:  |
|   | a. To prevent diskette drive read/write errors, make sure that the distance between the monitor and any external diskette drive is at least 76 mm (3 in.).  |
|   | b. Non-IBM monitor cables might cause unpredictable problems.   |
|   | 2. Reseat the monitor cable.  |
|   | 3. Replace the components listed in step 2 one at a time, in the order shown, restarting the server each time:  |
|   | a. Monitor cable  |
|   | b. Video adapter (if one is installed)  |
|   | c. Monitor  |
|   | d. (Trained technician only) System board.  |
| Wrong characters appear on the screen.  | 1. If the wrong language is displayed, update the server firmware to the latest level (see "Updating the firmware" on page 87) with the correct language.   |
|   | 2. Reseat the monitor cable.  |
|   | 3. Replace the components listed in step 2 one at a time, in the order shown, restarting the server each time:  |
|   | a. Monitor cable  |
|   | b. Video adapter (if one is installed)  |
|   | c. Monitor  |
|   | d. (Trained technician only) System board.  |

## **Network connection problems**

- Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.
- See Chapter 5, "Parts listing," on page 151 to check if a component is a consumable, structural, or FRU part.
- If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.

| Symptom  | Action   |
|--|--|
| Unable to wake the server using the Wake on LAN feature. | 1. If you are using the dual-port network adapter and the server is connected to the network using Ethernet 5 connector, check the system-error log or IMM2 system event log (see "Event logs" on page 122), make sure:  |
|  | a. The room temperature is not too high (see "Server features and specifications" on page 5).  |
|  | b. The air vents are not blocked.  |
|  | c. The air baffle is installed securely.   |
|  | 2. Reseat the dual-port network adapter (see "Removing an adapter from the PCI riser-card assembly" on page 178 and "Replacing an adapter on the PCI riser-card assembly" on page 181).  |
|  | 3. Turn off the server and disconnect it from the power source; then, wait 10 seconds before restarting the server.  |
|  | 4. If the problem still remains, replace the dual-port network adapter.  |
| Wake on Lan feature is in disable mode                   | <ol> <li>Turn on the server.         Note: Approximately 1 to 3 minutes after the server is connected to ac power, the power-control button becomes active after the power-on LED flashes slowly.     </li> <li>When prompted, <f1 setup=""> is displayed, press F1. If you have set an administrator password, you are prompted to type the password.</f1></li> </ol> |
|  | 3. Under System Configuration and Boot Management, select System Settings.   |
|  | 4. Under System Settings, select Network.  |
|  | 5. Under <b>Network</b> , select the port number.  |
|  | 6. Under the chosen port number, select <b>Intel (R) I350 Gigabit Network Connection</b> .   |
|  | 7. Under Main Configuration Page, select NIC configuration.  |
|  | 8. Under <b>NIC configuration</b> , change the <b>Wake on Lan</b> function from <b>Disabled</b> to <b>Enabled</b> .  |
|  | <ol> <li>Press ESC several times until the System Configuration and Boot<br/>Management window is displayed.</li> </ol>  |
|  | 10. Select Save Setting.   |
|  | 11. Turn off the server and disconnect it from the power source. You must disconnect the system from ac power to enable the Wake on Lan function.  |
| Log in failed by using LDAP account with SSL enabled.    | 1. Make sure the license key is valid.   |
| account with ool chapted.                                | 2. Generate a new license key and log in again.  |

## **Optional-device problems**

- Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.
- See Chapter 5, "Parts listing," on page 151 to check if a component is a consumable, structural, or FRU part.
- If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.

| Symptom  | Action  |
|--|---|
| An optional device that was just installed does not work.    | <ol> <li>Make sure that:         <ul> <li>The device is designed for the server (see http://www.ibm.com/systems/info/x86servers/serverproven/compat/us/).</li> <li>You followed the installation instructions that came with the device and the device is installed correctly.</li> <li>You have not loosened any other installed devices or cables.</li> <li>You updated the configuration information in the Setup utility. Whenever memory or any other device is changed, you must update the configuration.</li> </ul> </li> </ol> |
|  | 2. Reseat the device that you just installed.   |
|  | 3. Replace the device that you just installed.  |
| An optional device that worked previously does not work now. | <ol> <li>Make sure that all of the cable connections for the device are secure.</li> <li>If the device comes with test instructions, use those instructions to test the device.</li> <li>If the failing device is a SCSI device make ourse that:</li> </ol>   |
|  | <ul> <li>3. If the failing device is a SCSI device, make sure that:</li> <li>The cables for all external SCSI devices are connected correctly.</li> <li>The last device in each SCSI chain, or the end of the SCSI cable, is terminated correctly.</li> <li>Any external SCSI device is turned on. You must turn on an external SCSI device before you turn on the server.</li> </ul>   |
|  | 4. Reseat the failing device.   |
|  | 5. Replace the failing device.  |

## **Power problems**

- Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.
- See Chapter 5, "Parts listing," on page 151 to check if a component is a consumable, structural, or FRU part.
- If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.

| Symptom   | Action   |
|---|--|
| The power-control button does not work, and the reset button does work (the server does not start).  Note: The power-control button will not function until approximately 1 to 3 minutes after the server has been connected to ac power. | <ol> <li>Make sure that the top cover is closed and latched correctly.</li> <li>Make sure that the top cover/power cut-off switch cable is seated correctly.</li> <li>Make sure that the power-control button on the server is working correctly:         <ol> <li>Disconnect the server power cords.</li> <li>Reconnect the power cords.</li> <li>Reseat the operator information panel cables, and then repeat steps 3a and 3b.</li> <li>If the server starts, reseat the operator information panel. If the problem remains, replace the operator information panel.</li> </ol> </li> <li>Make sure that the reset button is working correctly:         <ol> <li>Disconnect the server power cords.</li> <li>Reconnect the power cords.</li> </ol> </li> <li>Reseat the operator information panel cable, and then repeat steps 3a and 3b.</li> </ol> |
|   | <ul> <li>If the server starts, replace the operator information panel.</li> <li>If the server does not start, go to step 5.</li> </ul> 5. Make sure that: <ul> <li>The power cords are correctly connected to the server and to a working electrical outlet.</li> <li>The type of memory that is installed is correct.</li> <li>The DIMMs are fully seated.</li> <li>The LEDs on the power supply do not indicate a problem.</li> <li>The microprocessors are installed in the correct sequence.</li> </ul> 6. Reseat the following components:  |
|   | <ul> <li>a. DIMMs</li> <li>b. Power supplies</li> <li>7. Replace the components listed in step 6 one at a time, in the order shown, restarting the server each time.</li> <li>8. If you just installed an optional device, remove it, and restart the server. If the server now starts, you might have installed more devices than the power supply supports.</li> <li>9. See "Power-supply LEDs" on page 19.</li> </ul>   |
| The server does not start.  | <ol> <li>See "Solving undetermined problems" on page 145.</li> <li>Check the power LED on the system board. See "System-board LEDs" on page 28 for the LED location.</li> <li>Reseat the power supply.</li> <li>Replace the power supply.</li> </ol>   |
| The server does not start. (Continued)  |  |

- Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.
- · See Chapter 5, "Parts listing," on page 151 to check if a component is a consumable, structural, or FRU part.
- If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.

| Symptom   | Action   |
|---|--|
| The server does not turn off.   | <ol> <li>Determine whether you are using an Advanced Configuration and Power Interface (ACPI) or a non-ACPI operating system. If you are using a non-ACPI operating system, complete the following steps:         <ol> <li>Press Ctrl+Alt+Delete.</li> <li>Turn off the server by pressing the power-control button and hold it down for 5 seconds.</li> </ol> </li> </ol> |
|   | <ul><li>c. Restart the server.</li><li>d. If the server fails POST and the power-control button does not work,</li></ul>   |
|   | disconnect the ac power cord for 20 seconds; then, reconnect the ac power cord and restart the server.   |
|   | 2. If the problem remains or if you are using an ACPI-aware operating system, suspect the system board.  |
| The server unexpectedly shuts down, and the LEDs on the operator information panel are not lit. | See "Solving undetermined problems" on page 145.   |

## Serial-device problems

- Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.
- See Chapter 5, "Parts listing," on page 151 to check if a component is a consumable, structural, or FRU part.
- · If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.

| Symptom   | Action   |
|---|--|
| The number of serial ports that are identified by the operating system is less than the number of installed serial ports. | <ol> <li>Make sure that:</li> <li>Each port is assigned a unique address in the Setup utility and none of the serial ports is disabled.</li> <li>The serial-port adapter (if one is present) is seated correctly.</li> </ol>                         |
|   | 2. Reseat the serial port adapter.   |
|   | 3. Replace the serial port adapter.  |
| A serial device does not work.  | <ol> <li>Make sure that:</li> <li>The device is compatible with the server.</li> <li>The serial port is enabled and is assigned a unique address.</li> <li>The device is connected to the correct connector (see "Rear view" on page 16).</li> </ol> |
|   | 2. Reseat the following components:  |
|   | a. Failing serial device   |
|   | b. Serial cable  |
|   | 3. Replace the components listed in step 2 one at a time, in the order shown, restarting the server each time.   |
|   | 4. (Trained technician only) Replace the system board.   |

## ServerGuide problems

- Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.
- · See Chapter 5, "Parts listing," on page 151 to check if a component is a consumable, structural, or FRU part.
- If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.

| Symptom   | Action   |  |
|---|--|--|
| The ServerGuide Setup and Installation CD will not start.   | Make sure that the server supports the ServerGuide program and has a startable (bootable) DVD drive.   |  |
|   | 2. If the startup (boot) sequence settings have been changed, make sure that the DVD drive is first in the startup sequence.   |  |
|   | 3. If more than one DVD drive is installed, make sure that only one drive is set as the primary drive. Start the CD from the primary drive.  |  |
| The MegaRAID Storage<br>Manager program cannot view<br>all installed drives, or the<br>operating system cannot be<br>installed. | <ol> <li>Make sure that the hard disk drive is connected correctly.</li> <li>Make sure that the SAS/SATA hard disk drive cables are securely connected.</li> </ol>   |  |
| The operating-system installation program continuously loops.   | Make more space available on the hard disk.  |  |
| The ServerGuide program will not start the operating-system CD.   | Make sure that the operating-system CD is supported by the ServerGuide program. For a list of supported operating-system versions, go to http://www.ibm.com/support/entry/portal/docdisplay?lndocid=SERV-GUIDE, click Service and Support Site, click the link for your ServerGuide version, and scroll down to the list of supported Microsoft Windows operating systems. |  |
| The operating system cannot be installed; the option is not available.  |  |  |

# Software problems

- Follow the suggested actions in the order in which they are listed in the Action column until the problem is
- See Chapter 5, "Parts listing," on page 151 to check if a component is a consumable, structural, or FRU part.
- If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.

| Symptom                         | Action  |
|---------------------------------|---|
| You suspect a software problem. | <ol> <li>To determine whether the problem is caused by the software, make sure that:</li> <li>The server has the minimum memory that is needed to use the software. For memory requirements, see the information that comes with the software. If you have just installed an adapter or memory, the server might have a memory-address conflict.</li> <li>The software is designed to operate on the server.</li> <li>Other software works on the server.</li> <li>The software works on another server.</li> </ol> |
|                                 | 2. If you received any error messages when using the software, see the information that comes with the software for a description of the messages and suggested solutions to the problem.   |
|                                 | 3. Contact the software vendor.   |

### Universal Serial Bus (USB) port problems

- Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.
- · See Chapter 5, "Parts listing," on page 151 to check if a component is a consumable, structural, or FRU part.
- If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.

| Symptom                     | Action  |
|-----------------------------|---|
| A USB device does not work. | <ol> <li>Make sure that:         <ul> <li>The correct USB device driver is installed.</li> <li>The operating system supports USB devices.</li> </ul> </li> <li>Make sure that the USB configuration options are set correctly in the Setup</li> </ol> |
|                             | utility (see "Using the Setup utility" on page 91 for more information).  3. If you are using a USB hub, disconnect the USB device from the hub and connect it directly to the server.  |

### Video problems

See "Monitor and video problems" on page 135.

### Solving power problems

Use this information to solve power problems.

### About this task

Power problems can be difficult to solve. For example, a short circuit can exist anywhere on any of the power distribution buses. Usually, a short circuit will cause the power subsystem to shut down because of an overcurrent condition. To diagnose a power problem, use the following general procedure:

- 1. Turn off the server and disconnect all power cords.
- 2. Check for loose cables in the power subsystem. Also check for short circuits, for example, if a loose screw is causing a short circuit on a circuit board.
- 3. If the system-error LED on the system board is lit, complete the following steps:
  - a. Check the IMM2 event log. To access the web interface, see "Logging on to the Web interface" on page 103.
  - b. If a log indicates that there is a power rail failure, find the location of the failed power rail on the system board.
  - c. Disconnect the cables and power cords to all internal and external devices (see "Internal cable routing" on page 161). Leave the power-supply cords connected.
  - d. Remove each component that is associated with the failed power component, one at a time, restarting the server each time, until the cause of the failure is identified.
  - e. Replace the identified component.

4. Reconnect all power cords and turn on the server. If the server starts successfully, replace the adapters and devices one at a time until the problem is isolated.

#### Results

If the server does not start from the minimum configuration, replace the components in the minimum configuration one at a time until the problem is isolated.

### Solving Ethernet controller problems

Use this information to solve the Ethernet controller problems.

### About this task

The method that you use to test the Ethernet controller depends on which operating system you are using. See the operating-system documentation for information about Ethernet controllers, and see the Ethernet controller device-driver readme file.

Try the following procedures:

- · Make sure that the correct device drivers, which come with the server are installed and that they are at the latest level.
- Make sure that the Ethernet cable is installed correctly.
  - The cable must be securely attached at all connections. If the cable is attached but the problem remains, try a different cable.
  - If you set the Ethernet controller to operate at 100 Mbps, you must use Category 5 cabling.
  - If you directly connect two servers (without a hub), or if you are not using a hub with X ports, use a crossover cable. To determine whether a hub has an X port, check the port label. If the label contains an X, the hub has an X port.
- Determine whether the hub supports auto-negotiation. If it does not, try configuring the integrated Ethernet controller manually to match the speed and duplex mode of the hub.
- Check the Ethernet controller LEDs on the rear panel of the server. These LEDs indicate whether there is a problem with the connector, cable, or hub.
  - The Ethernet link status LED is lit when the Ethernet controller receives a link pulse from the hub. If the LED is off, there might be a defective connector or cable or a problem with the hub.
  - The Ethernet transmit/receive activity LED is lit when the Ethernet controller sends or receives data over the Ethernet network. If the Ethernet transmit/receive activity is off, make sure that the hub and network are operating and that the correct device drivers are installed.
- Check for operating-system-specific causes of the problem.
- Make sure that the device drivers on the client and server are using the same protocol.

If the Ethernet controller still cannot connect to the network but the hardware appears to be working, the network administrator must investigate other possible causes of the error.

### Solving undetermined problems

If Dynamic System Analysis (DSA) cannot diagnose the failure or if the server is inoperative, use the information in this section to solve the undetermined problems.

#### About this task

If you suspect that a software problem is causing failures (continuous or intermittent), see "Power problems" on page 140.

Corrupted data in CMOS memory or corrupted UEFI firmware can cause undetermined problems. To reset the CMOS data, use the CMOS jumper to clear the CMOS memory and override the power-on password; see "System-board jumpers" on page 27. If you suspect that the UEFI firmware is corrupted, see "Recovering the server firmware" on page 146.

If the power supplies are working correctly, complete the following steps:

#### **Procedure**

- 1. Turn off the server.
- 2. Make sure that the server cover is closed and latched correctly.
- 3. Make sure that the server top cover/power cut-off switch cable is connected correctly.
- 4. Make sure that the server is cabled correctly.
- 5. Remove or disconnect the following devices, one at a time, until you find the failure. Turn on the server and reconfigure it each time.
  - · Any external devices.
  - Surge-suppressor device (on the server).
  - Printer, mouse, and non-IBM devices.
  - · Each adapter.
  - · Hard disk drives.
  - Memory modules. The minimum configuration requirement is 2 GB DIMM in slot 1 when one microprocessor is installed in the server.
- 6. Turn on the server.

#### Results

If the problem is solved when you remove an adapter from the server but the problem recurs when you reinstall the same adapter, suspect the adapter; if the problem recurs when you replace the adapter with a different one, suspect the riser card.

If you suspect a networking problem and the server passes all the system tests, suspect a network cabling problem that is external to the server.

# **Problem determination tips**

Because of the variety of hardware and software combinations that can encounter, use the following information to assist you in problem determination. If possible, have this information available when requesting assistance from Lenovo.

The model number and serial number are shown in the following illustration.

Note: The illustrations in this document might differ slightly from your hardware.

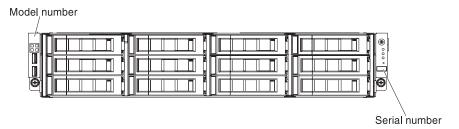


Figure 76. Model number and serial number

- Machine type and model
- · Microprocessor or hard disk drive upgrades
- Failure symptom
  - Does the server fail the Dynamic System Analysis diagnostic tests?
  - What occurs? When? Where?
  - Does the failure occur on a single server or on multiple servers?
  - Is the failure repeatable?
  - Has this configuration ever worked?
  - What changes, if any, were made before the configuration failed?
  - Is this the original reported failure?
- · Diagnostic program type and version level
- · Hardware configuration (print screen of the system summary)
- UEFI firmware level
- IMM firmware level
- Operating-system software

You can solve some problems by comparing the configuration and software setups between working and nonworking servers. When you compare servers to each other for diagnostic purposes, consider them identical only if all the following factors are exactly the same in all the servers:

- · Machine type and model
- · UEFI firmware level
- · IMM firmware level
- · Adapters and attachments, in the same locations
- Address jumpers, terminators, and cabling
- Software versions and levels
- Diagnostic program type and version level
- Setup utility settings
- Operating-system control-file setup

See Appendix D, "Getting help and technical assistance," on page 535 for information about calling Lenovo for service.

# Recovering the server firmware

Use this information to recover the server firmware.

#### About this task

Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.

If the server firmware has become corrupted, such as from a power failure during an update, you can recover the server firmware in either of two ways:

- **In-band method:** Recover server firmware, using either the boot block jumper (Automated Boot Recovery) and a server Firmware Update Package Service Pack.
- Out-of-band method: Use the IMM Web interface to update the firmware, using the latest server firmware update package.

**Note:** You can obtain a server update package from one of the following sources:

- Download the server firmware update from the World Wide Web.
- Contact your service representative.

To download the server firmware update package from the World Wide Web, go to http://support.lenovo.com/.

The flash memory of the server consists of a primary bank and a backup bank. You must maintain a bootable System x Server Firmware (server firmware) image in the backup bank. If the server firmware in the primary bank becomes corrupted, you can either manually boot the backup bank with the boot block jumper, or in the case of image corruption, this will occur automatically with the Automated Boot Recovery function.

#### In-band manual recovery method

To recover the server firmware and restore the server operation to the primary bank, complete the following steps:

- 1. Turn off the server, and disconnect all power cords and external cables.
- 2. Remove the server cover. See "Removing the server top cover" on page 259 for more information.
- 3. Locate the UEFI boot recovery jumper (J2) on the system board.

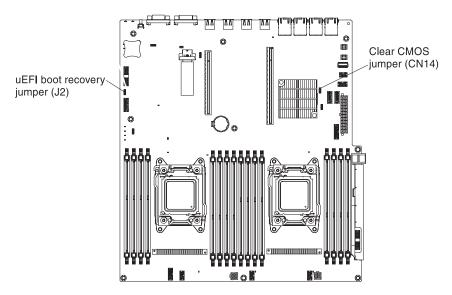


Figure 77. Jumper location

- 4. Move the jumper from pins 1 and 2 to pins 2 and 3 to enable the UEFI recovery mode.
- 5. Reinstall the server cover; then, reconnect all power cords.
- 6. Restart the server. The power-on self-test (POST) starts.
- 7. Boot the server to an operating system that is supported by the Flash UEFI Update package that you downloaded.
- 8. Perform the firmware update by following the instructions that are in the firmware update package readme file.
- 9. Copy the downloaded firmware update package into a directory.
- 10. From a command line, type *filename*-s, where *filename* is the name of the executable file that you downloaded with the firmware update package.
- 11. Turn off the server and disconnect all power cords and external cables, and then remove the server cover.
- 12. Move the UEFI boot recovery jumper back to the primary position (pins 1 and 2).
- 13. Reinstall the server cover, and then reconnect all the power cables.
- 14. Restart the server.

#### Results

#### In-band automated boot recovery method

**Note:** Use this method if the BOARD LED on the light path diagnostics panel is lit and there is a log entry or Booting Backup Image is displayed on the firmware splash screen; otherwise, use the in-band manual recovery method.

- 1. Boot the server to an operating system that is supported by the firmware update package that you downloaded.
- 2. Perform the firmware update by following the instructions that are in the firmware update package readme file.
- 3. Restart the server.
- 4. At the firmware splash screen, press F3 when prompted to restore to the primary bank. The server boots from the primary bank.

**Out-of-band method:** See the IMM2 documentation.

For more information about UEFI-compliant firmware, go to http:// support.lenovo.com/.

## Automated boot recovery (ABR)

Use this information for Automated boot recovery (ABR).

#### About this task

While the server is starting, if the integrated management module II detects problems with the server firmware in the primary bank, the server automatically switches to the backup firmware bank and gives you the opportunity to recover the firmware in the primary bank. For instructions for recovering the UEFI firmware, see "Recovering the server firmware" on page 146. After you have recovered the firmware in the primary bank, complete the following steps:

#### **Procedure**

- 1. Restart the server.
- 2. When the prompt press F3 to restore to primary is displayed, press F3 to recover the primary bank. Pressing F3 will restart the server.

### **Nx-boot failure**

Use this information for Nx-boot failure.

Configuration changes, such as added devices or adapter firmware updates, and firmware or application code problems can cause the server to fail POST (the power-on self-test). If this occurs, the server responds in either of the following ways:

- The server restarts automatically and attempts POST again.
- · The server hangs, and you must manually restart the server for the server to attempt POST again.

After a specified number of consecutive attempts (automatic or manual), the Nx-boot failure feature causes the server to revert to the default UEFI configuration and start the Setup utility so that you can make the necessary corrections to the configuration and restart the server. If the server is unable to successfully complete POST with the default configuration, there might be a problem with the system board.

To specify the number of consecutive restart attempts that will trigger the Nx-boot failure feature, in the Setup utility, click System Settings > Recovery > POST Attempts > POST Attempts Limit. The available options are 3, 6, 9, and 255 (disable Nx-boot failure).

# **Chapter 5. Parts listing**

The parts listing of System x3650 M4 BD Type 5466.

The following replaceable components are available for the Lenovo System x3650 M4 BD Type 5466 server, except as specified otherwise in "Replaceable server components." For an updated parts listing, go to http://support.lenovo.com/.

### Replaceable server components

The replaceable server components for System x3650 M4 BD Type 5466.

Replaceable components consist of consumable parts, structural parts, and field replaceable units (FRUs):

- Consumables: Purchase and replacement of consumables (components, such as batteries and printer cartridges, that have depleting life) is your responsibility. If Lenovo acquires or installs a consumable component at your request, you will be charged for the service.
- **Structural parts:** Purchase and replacement of structural parts (components, such as chassis assembly, top cover, and bezel) is your responsibility. If Lenovo acquires or installs a structural component at your request, you will be charged for the service.
- **Field replaceable unit (FRU):** FRUs must be installed only by trained technicians, unless they are classified as customer replaceable units (CRUs):
  - Tier 1 customer replaceable unit (CRU): Replacement of Tier 1 CRUs is your responsibility. If Lenovo installs a Tier 1 CRU at your request, you will be charged for the installation.
  - Tier 2 customer replaceable unit (CRU): You may install a Tier 2 CRU yourself or request Lenovo to install it, at no additional charge, under the type of warranty service that is designated for your server.

For information about the terms of the warranty and getting service and assistance, see the *Warranty Information* document that comes with the server. For more information about getting service and assistance, see Appendix D, "Getting help and technical assistance," on page 535.

Visit http://www.ibm.com/systems/info/x86servers/serverproven/compat/us/for the latest options supporting plan.

The following illustration shows the major components in the server. The illustrations in this document might differ slightly from your hardware.

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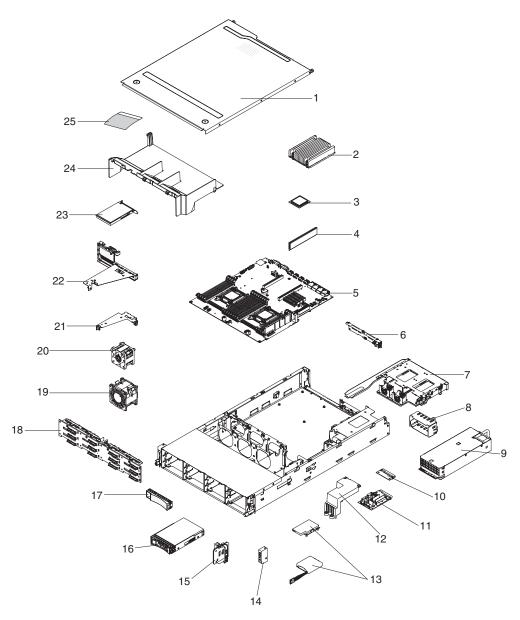


Figure 78. Server components

The following table lists the part numbers for the server components.

Table 13. Parts listing, Type 5466

| Index | Description  | CRU part<br>number (Tier 1) | CRU part<br>number (Tier 2) |
|-------|--|-----------------------------|-----------------------------|
| 2     | Heat sink assembly, 95 W   |                             | 90Y4967                     |
| 2     | Heat sink assembly, 115 W  |                             | 46W2702                     |
| 3     | Microprocessor, Intel Xeon E5-2603 v2, 1.8GHz, 10MB, 1333MHz, 80W (4-core) |                             | 00Y2778                     |
| 3     | Microprocessor, Intel Xeon E5-2609 v2, 2.5GHz, 10MB, 1333MHz, 80W (4-core) |                             | 00Y2779                     |
| 3     | Microprocessor, Intel Xeon E5-2620 v2, 2.1GHz, 15MB, 1600MHz, 80W (6-core) |                             | 00Y2780                     |

Table 13. Parts listing, Type 5466 (continued)

| ndex | Description  | CRU part<br>number (Tier 1) | CRU part<br>number (Tier 2 |
|------|--|-----------------------------|----------------------------|
| 3    | Microprocessor, Intel Xeon E5-2628 v2, 1.9GHz, 20MB, 1600MHz, 70W (8-core)   |                             | 00AE525                    |
| 3    | Microprocessor, Intel Xeon E5-2630 v2, 2.6GHz, 15MB, 80W (6-core)            |                             | 00Y2781                    |
| 3    | Microprocessor, Intel Xeon E5-2630L v2, 2.4GHz, 15MB, 1600MHz, 60W (6-core)  |                             | 00Y2792                    |
| 3    | Microprocessor, Intel Xeon E5-2640 v2, 2.0GHz, 20MB, 95W (8-core)            |                             | 00Y2782                    |
| 3    | Microprocessor, Intel Xeon E5-2648 v2, 1.9GHz, 25MB, 1866MHz,70W (10-core)   |                             | 00AE523                    |
| 3    | Microprocessor, Intel Xeon E5-2650 v2, 2.6GHz, 20MB, 95W (8-core)            |                             | 00Y2783                    |
| 3    | Microprocessor, Intel Xeon E5-2650L v2, 1.7GHz, 25MB, 70W (10-core)          |                             | 00Y2793                    |
| 3    | Microprocessor, Intel Xeon E5-2660 v2, 2.2GHz, 25MB, 1866MHz, 95W (10-core)  |                             | 00Y2784                    |
| 3    | Microprocessor, Intel Xeon E5-2670 v2, 2.5GHz, 25MB, 1866MHz, 115W (10-core) |                             | 00Y2785                    |
| 3    | Microprocessor, Intel Xeon E5-2680 v2, 2.8GHz, 25MB, 115W (10-core)          |                             | 00Y2786                    |
| 3    | Microprocessor, Intel Xeon E5-2695 v2 2.4GHz 30MB, 1866MHz, 115W (12-core)   |                             | 00Y2776                    |
| 4    | Memory, 4GB single-rank 1.35V, DDR3, 1600MHz, RDIMM                          | 00D5026                     |                            |
| 4    | Memory, 4GB single-rank 1.5V, DDR3, 1866MHz, RDIMM                           | 00D5022                     |                            |
| 4    | Memory, 8GB single rank 1.35V, DDR3, 1600MHz, RDIMM                          | 00D5038                     |                            |
| 4    | Memory, 8GB single-rank 1.5V, DDR3, 1866MHz, RDIMM                           | 00D5034                     |                            |
| 4    | Memory, 8GB dual-rank 1.35V, DDR3, 1600MHz, UDIMM                            | 00D5018                     |                            |
| 4    | Memory, 8GB dual-rank 1.35V, DDR3, 1600MHz, RDIMM                            | 00D5046                     |                            |
| 4    | Memory,16GB dual-rank 1.35V, DDR3, 1600MHz, RDIMM                            | 46W0674                     |                            |
| 4    | Memory,16GB dual-rank 1.5V, DDR3, 1866MHz, RDIMM                             | 46W0670                     |                            |
| 5    | System board   |                             | 00KF428                    |
| 6    | Backplane, 2x3.5" HDD separate array   | 00AL197                     |                            |
| 6    | Backplane, 2x3.5" HDD extension to front array (14HDD array)                 | 90Y5145                     |                            |
| 9    | Power supply, 750 W, ac  | 69Y5872                     |                            |
| 9    | Power supply, 750 W, ac  | 94Y8114                     |                            |
| 9    | Power supply, 900 W, ac  | 94Y8118                     |                            |
| 10   | Top power-supply paddle card   | 69Y5790                     |                            |
| 11   | Lower power-supply paddle card   | 94Y8263                     |                            |
| 14   | Operator information panel assembly, side                                    | 00D8623                     |                            |
| 16   | Hard disk drive, 3.5-inch hot-swap, SAS, 300 GB, 15 K                        | 49Y6093                     |                            |
| 16   | Hard disk drive, 3.5-inch hot-swap, SAS, 450 GB, 15 K                        | 49Y6098                     |                            |
| 16   | Hard disk drive, 3.5-inch hot-swap, SATA, 500 GB 7.2K                        | 81Y9787                     |                            |
| 16   | Hard disk drive, 3.5-inch hot-swap, SAS, 600 GB, 15 K                        | 49Y6103                     |                            |
| 16   | Hard disk drive, 3.5-inch hot-swap, SAS, 1 TB, 7.2K                          | 90Y8568                     |                            |
| 16   | Hard disk drive, 3.5-inch hot-swap, SATA, 1 TB, 7.2K                         | 81Y9791                     |                            |

Table 13. Parts listing, Type 5466 (continued)

| Index | Description  | CRU part<br>number (Tier 1) | CRU part<br>number (Tier 2) |
|-------|--|-----------------------------|-----------------------------|
| 16    | Hard disk drive, 3.5-inch hot-swap, SAS, 2 TB, 7.2K      | 00FN189                     |                             |
| 16    | Hard disk drive, 3.5-inch hot-swap, SAS, 2 TB, 7.2K      | 90Y8573                     |                             |
| 16    | Hard disk drive, 3.5-inch hot-swap, SATA, 2 TB, 7.2K     | 00FN114                     |                             |
| 16    | Hard disk drive, 3.5-inch hot-swap, SATA, 2 TB, 7.2K     | 81Y9795                     |                             |
| 16    | Hard disk drive, 3.5-inch hot-swap, SAS, 3 TB, 7.2K      | 90Y8578                     |                             |
| 16    | Hard disk drive, 3.5-inch hot-swap, SATA, 3 TB, 7.2K     | 00FN129                     |                             |
| 16    | Hard disk drive, 3.5-inch hot-swap, SATA, 3 TB, 7.2K     | 81Y9799                     |                             |
| 16    | Hard disk drive, 3.5-inch hot-swap, SAS, 4 TB, 7.2 K     | 00FN209                     |                             |
| 16    | Hard disk drive, 3.5-inch hot-swap, SAS, 4 TB, 7.2 K     | 49Y6211                     |                             |
| 16    | Hard disk drive, 3.5-inch hot-swap, SATA, 4 TB, 7.2 K    | 00FN144                     |                             |
| 16    | Hard disk drive, 3.5-inch hot-swap, SATA, 4 TB, 7.2 K    | 49Y6003                     |                             |
| 16    | Hard disk drive, 3.5-inch hot-swap, SATA, 5 TB, 7.2 K    | 00FN159                     |                             |
| 16    | Hard disk drive, 3.5-inch hot-swap, SAS, 6TB, 7.2 K      | 00FN229                     |                             |
| 16    | Hard disk drive, 3.5-inch hot-swap, SATA, 6TB, 7.2 K     | 00FN174                     |                             |
| 16    | Solid state drive, hot-swap, 64 GB                       | 00W1287                     |                             |
| 16    | Solid state drive, hot-swap, 120 GB                      | 00AJ436                     |                             |
| 16    | Solid state drive, hot-swap, 128 GB                      | 00W1292                     |                             |
| 16    | Solid state drive, hot-swap, 200 GB                      | 00AJ441                     |                             |
| 16    | Solid state drive, hot-swap, 240 GB                      | 00FN353                     |                             |
| 16    | Solid state drive, hot-swap, 256 GB                      | 00W1297                     |                             |
| 16    | Solid state drive, hot-swap, 480 GB                      | 00AJ446                     |                             |
| 16    | Solid state drive, hot-swap, 480 GB                      | 00FN358                     |                             |
| 16    | Solid state drive, hot-swap, 512 GB                      | 00W1302                     |                             |
| 16    | Solid state drive, hot-swap, 800 GB                      | 00AJ451                     |                             |
| 16    | Solid state drive, hot-swap, 960 GB                      | 00FN363                     |                             |
| 18    | 12x3.5" hot-swap backplane assembly                      | 69Y4741                     |                             |
| 19    | Front fan, 80x56 mm                                      | 00D2566                     |                             |
| 20    | Rear fan, 40x28 mm                                       | 00AL760                     |                             |
| 21    | 1U riser card, one PCIe x8 slot (For slotless RAID only) | 00Y7542                     |                             |
| 22    | 1U riser card, two PCIe x8 slots (butterfly)             | 00Y7539                     |                             |
| 22    | 1U riser card, one PCIe x16 slot                         | 00Y7540                     |                             |
| 23    | 365GB High IOPS MLC Mono adapter                         | 00AE814                     |                             |
| 23    | 365GB High IOPS MLC Mono adapter                         | 46C9079                     |                             |
| 23    | 785GB High IOPS MLC Mono adapter                         | 00AE815                     |                             |
| 23    | 1.2TB high IOPS MLC Mono adapter                         | 00AE812                     |                             |
| 23    | Mellanox ConnectX-3 VPI IB/E adapter                     | 00D9552                     |                             |
| 23    | Mellanox ConnectX-3 10 GbE adapter                       | 00D9692                     |                             |
| 23    | Solarflare SFN5162F MR dual-port 10GbE SFP+ adapter      | 47C9955                     |                             |
| 23    | Solarflare SFN6122F LL dual Port 10GbE SFP+ adapter      | 47C9963                     |                             |

Table 13. Parts listing, Type 5466 (continued)

| Index | Description   | CRU part number (Tier 1) | CRU part<br>number (Tier 2 |
|-------|---|--------------------------|----------------------------|
| 23    | Broadcom NetXtreme II dual port 10GBaseT adapter              | 49Y7912                  |                            |
| 23    | NetXtreme I quad port GbE adapter                             | 90Y9355                  |                            |
| 23    | NetXtreme I dual port GbE adapter                             | 90Y9373                  |                            |
| 23    | Intel X520-DA2 dual port 10GbE SFP+ adapter                   | 49Y7962                  |                            |
| 23    | Intel X540-T2 dual port 10GBaseT adapter                      | 49Y7972                  |                            |
| 23    | ServeRAID H1110 SAS/SATA adapter                              | 81Y4494                  |                            |
|       | ServeRAID M5110 SAS/SATA controller                           | 00AE807                  |                            |
|       | ServeRAID M5210 SAS/SATA controller                           | 46C9111                  |                            |
|       | ServeRAID F5115 200GB SAS/SATA controller                     | 00AE885                  |                            |
|       | ServeRAID F5115 800GB SAS/SATA controller                     | 00AE889                  |                            |
|       | N2115 SAS/SATA controller                                     | 46C8989                  |                            |
|       | ServeRAID M5100 series 512MB cache/RAID 5 upgrade             | 81Y4485                  |                            |
|       | ServeRAID M5100 series 512MB flash/RAID 5 upgrade             | 46C9027                  |                            |
|       | ServeRAID M5100 series 1GB flash/RAID 5 upgrade               | 46C9029                  |                            |
|       | ServeRAID M5200 series 1GB cache/RAID 5 upgrade               | 47C8657                  |                            |
|       | ServeRAID M5200 series 1GB flash/RAID 5 upgrade               | 47C8661                  |                            |
|       | ServeRAID M5200 Series 2GB Flash/RAID 5 Upgrade               | 47C8665                  |                            |
|       | Flash adapter F825 Enterprise Value for System x              | 00AE863                  |                            |
|       | Flash adapter F1650 Enterprise Value for System x             | 00AE866                  |                            |
|       | Flash adapter F3200 Enterprise Value for System x             | 00AE869                  |                            |
|       | Endeavor basic 10Gb BE3-R adapter                             | 00D8543                  |                            |
|       | Video adapter, NVIDIA Quadro K600                             | 90Y2383                  |                            |
| 25    | Insulator sheet for the power cable                           | 00YD751                  |                            |
|       | Label, Chassis GBM  | 00AL765                  |                            |
|       | Label, GBM  | 00AL757                  |                            |
|       | Cable, I2C planar to rear backplane, 2x 3.5" HDD - SAS signal | 00AL764                  |                            |
|       | Cable, EIA USB  | 00AL766                  |                            |
|       | Cable, HDD power (Y cable)                                    | 00D8668                  |                            |
|       | Cable, rear HDD SATA signal                                   | 00D9030                  |                            |
|       | Cable, 12G V to mini SAS V 820mm                              | 00Y8433                  |                            |
|       | Cord, 4 - 4.3m line   | 39M5076                  |                            |
|       | Cord, 4.3m line   | 39M5378                  |                            |
|       | Cord, 1.5m line   | 39M5375                  |                            |
|       | Cable, 2.8m, 10A/100-250V, C13 to IEC 320-C14 rack power      | 39M5377                  |                            |
|       | Cable, power distribution unit jumper                         | 39M5392                  |                            |
|       | Cable, CRU 1M   | 39R6530                  |                            |
|       | Cable, CRU 3M   | 39R6532                  |                            |
|       | Cable, SAS signal, 760 mm                                     | 81Y7300                  |                            |
|       | Cable, operator information panel, side                       | 81Y7342                  |                            |

Table 13. Parts listing, Type 5466 (continued)

| Index | Description  | CRU part<br>number (Tier 1) | CRU part<br>number (Tier 2) |
|-------|--|-----------------------------|-----------------------------|
|       | Cable, rear HDD configuration                                    | 81Y7344                     |                             |
|       | Cable, HS 12 HDD power, 590 mm                                   | 81Y7346                     |                             |
|       | Cable, HS 12 HDD configuration                                   | 81Y7350                     |                             |
|       | 6Gb performance optimized HBA                                    | 46C8937                     |                             |
|       | N2125 SAS/SATA HBA   | 46C9011                     |                             |
|       | N2215 SAS/SATA HBA   | 47C8676                     |                             |
|       | Brocade 8Gb FC single-port HBA                                   | 46M6061                     |                             |
|       | Brocade 8Gb FC dual-port HBA                                     | 46M6062                     |                             |
|       | Brocade 16Gb FC single-port HBA                                  | 81Y1671                     |                             |
|       | Brocade 16Gb FC dual-port HBA                                    | 81Y1678                     |                             |
|       | Emulex 16Gb FC single-port HBA                                   | 81Y1658                     |                             |
|       | Emulex 16Gb FC dual-port HBA                                     | 81Y1665                     |                             |
|       | Qlogic 16Gb FC single-port HBA                                   | 00Y3440                     |                             |
|       | Qlogic 16Gb FC dual-port HBA                                     | 00Y3344                     |                             |
|       | Cable, ServeRAID power module                                    | 90Y7310                     |                             |
|       | US E 103P-RoHS keyboard  | 94Y6050                     |                             |
|       | UltraNav keyboard USB  | 94Y6108                     |                             |
|       | Intel X520 dual port 10GbE SFP+ Embedded adapter with interposer | 00FK895                     |                             |
|       | Broadcom single port 10GbE SFP+ Embedded adapter with interposer | 00FK896                     |                             |
|       | Broadcom dual port 10GbE SFP+ Embedded adapter with interposer   | 00AL195                     |                             |
|       | USB memory key for VMware  | 42D0545                     |                             |

## Consumable and structural parts

Consumable and structural parts are not covered by the Statement of Limited Warranty. You can place an order on the structural parts from the retail store.

The following structural parts are available for purchase from the retail store.

Table 14. Consumable and structural parts, Type 5466

| Index | Description                            | Part number |
|-------|--|-------------|
| 1     | Top cover                              | 00D8660     |
| 7     | HDD cage, 3.5" HS HDD, rear            | 00D8667     |
| 8     | Power supply filler                    | 94Y7610     |
| 12    | 240VA cover (Paddle card safety cover) | 00D8657     |
| 13    | ServeRAID M5110 series battery kit     | 81Y4491     |
| 15    | Battery carrier                        | 00D8655     |
| 17    | Filler, 3.5-inch hot-swap HDD          | 69Y5364     |
| 18    | 3.5-inch 12 HDD bracket kit            | 69Y4524     |
| 24    | Air baffle                             | 00AL761     |
|       | EIA LED cover kit                      | 00AL762     |

Table 14. Consumable and structural parts, Type 5466 (continued)

| Index | Description                   | Part number |
|-------|-------------------------------|-------------|
|       | Front EIA USB cover kit       | 00AL763     |
|       | Mechanical shell assembly     | 00AL759     |
|       | USB panel assembly, side      | 00D8624     |
|       | 3.5" HDD bracket              | 00D8652     |
|       | Shipping bracket assembly kit | 00D8659     |
|       | BP stopper bracket            | 00D8665     |
|       | Miscellaneous parts kit       | 00Y7347     |
|       | Tape drive                    | 40K6449     |
|       | Rail kit                      | 00Y8216     |
|       | Chassis support kit           | 94Y6974     |

To order a consumable or structural part, go to http://www.ibm.com.

If you need help with your order, call the toll-free number that is listed on the retail parts page, or contact your local representative for assistance.

### Power cords

For your safety, a power cord with a grounded attachment plug is provided to use with this product. To avoid electrical shock, always use the power cord and plug with a properly grounded outlet.

Power cords for this product that are used in the United States and Canada are listed by Underwriter's Laboratories (UL) and certified by the Canadian Standards Association (CSA).

For units intended to be operated at 115 volts: Use a UL-listed and CSA-certified cord set consisting of a minimum 18 AWG, Type SVT or SJT, three-conductor cord, a maximum of 15 feet in length and a parallel blade, grounding-type attachment plug rated 15 amperes, 125 volts.

For units intended to be operated at 230 volts (U.S. use): Use a UL-listed and CSA-certified cord set consisting of a minimum 18 AWG, Type SVT or SJT, three-conductor cord, a maximum of 15 feet in length and a tandem blade, grounding-type attachment plug rated 15 amperes, 250 volts.

For units intended to be operated at 230 volts (outside the U.S.): Use a cord set with a grounding-type attachment plug. The cord set should have the appropriate safety approvals for the country in which the equipment will be installed.

Power cords for a specific country or region are usually available only in that country or region.

| Power cord part number | Used in these countries and regions                             |
|------------------------|---|
| 39M5206                | China   |
| 39M5102                | Australia, Fiji, Kiribati, Nauru, New Zealand, Papua New Guinea |

| Power cord part number | Used in these countries and regions   |  |
|------------------------|---|--|
| 39M5123                | Afghanistan, Albania, Algeria, Andorra, Angola, Armenia, Austria, Azerbaijan, Belarus, Belgium, Benin, Bosnia and Herzegovina, Bulgaria, Burkina Faso, Burundi, Cambodia, Cameroon, Cape Verde, Central African Republic, Chad, Comoros, Congo (Democratic Republic of), Congo (Republic of), Cote D'Ivoire (Ivory Coast), Croatia (Republic of), Czech Republic, Dahomey, Djibouti, Egypt, Equatorial Guinea, Eritrea, Estonia, Ethiopia, Finland, France, French Guyana, French Polynesia, Germany, Greece, Guadeloupe, Guinea, Guinea Bissau, Hungary, Iceland, Indonesia, Iran, Kazakhstan, Kyrgyzstan, Laos (People's Democratic Republic of), Latvia, Lebanon, Lithuania, Luxembourg, Macedonia (former Yugoslav Republic of), Madagascar, Mali, Martinique, Mauritania, Mauritius, Mayotte, Moldova (Republic of), Monaco, Mongolia, Morocco, Mozambique, Netherlands, New Caledonia, Niger, Norway, Poland, Portugal, Reunion, Romania, Russian Federation, Rwanda, Sao Tome and Principe, Saudi Arabia, Senegal, Serbia, Slovakia, Slovenia (Republic of), Somalia, Spain, Suriname, Sweden, Syrian Arab Republic, Tajikistan, Tahiti, Togo, Tunisia, Turkey, Turkmenistan, Ukraine, Upper Volta, Uzbekistan, Vanuatu, Vietnam, Wallis and Futuna, Yugoslavia (Federal Republic of), Zaire |  |
| 39M5130                | Denmark   |  |
| 39M5144                | Bangladesh, Lesotho, Macao, Maldives, Namibia, Nepal, Pakistan, Samoa, South Africa, Sri Lanka, Swaziland, Uganda   |  |
| 39M5151                | Abu Dhabi, Bahrain, Botswana, Brunei Darussalam, Channel Islands, China (Hong Kong S.A.R.), Cyprus, Dominica, Gambia, Ghana, Grenada, Iraq, Ireland, Jordan, Kenya, Kuwait, Liberia, Malawi, Malaysia, Malta, Myanmar (Burma), Nigeria, Oman, Polynesia, Qatar, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Seychelles, Sierra Leone, Singapore, Sudan, Tanzania (United Republic of), Trinidad and Tobago, United Arab Emirates (Dubai), United Kingdom, Yemen, Zambia, Zimbabwe   |  |
| 39M5158                | Liechtenstein, Switzerland  |  |
| 39M5165                | Chile, Italy, Libyan Arab Jamahiriya  |  |
| 39M5172                | Israel  |  |
| 39M5095                | 220 - 240 V  Antigua and Barbuda, Aruba, Bahamas, Barbados, Belize, Bermuda, Bolivia, Caicos Islands, Canada, Cayman Islands, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Guam, Guatemala, Haiti, Honduras, Jamaica, Mexico, Micronesia (Federal States of), Netherlands Antilles, Nicaragua, Panama, Peru, Philippines, Saudi Arabia, Thailand, Taiwan, United States of America, Venezuela  |  |

| Power cord part number | Used in these countries and regions   |
|------------------------|---|
| 39M5076                | Antigua and Barbuda, Aruba, Bahamas, Barbados, Belize, Bermuda, Bolivia, Caicos Islands, Canada, Cayman Islands, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Guam, Guatemala, Haiti, Honduras, Jamaica, Mexico, Micronesia (Federal States of), Netherlands Antilles, Nicaragua, Panama, Peru, Philippines, Saudi Arabia, Thailand, Taiwan, United States of America, Venezuela |
| 39M5219                | Korea (Democratic People's Republic of), Korea (Republic of)  |
| 39M5199                | Japan   |
| 39M5226                | India   |
| 39M5240                | Brazil  |

# Chapter 6. Removing and replacing components

Use this information to remove and replace the server components.

Replaceable components consist of consumable parts, structural parts, and field replaceable units (FRUs):

- Consumables: Purchase and replacement of consumables (components, such as batteries and printer cartridges, that have depleting life) is your responsibility. If Lenovo acquires or installs a consumable component at your request, you will be charged for the service.
- **Structural parts:** Purchase and replacement of structural parts (components, such as chassis assembly, top cover, and bezel) is your responsibility. If Lenovo acquires or installs a structural component at your request, you will be charged for the service.
- **Field replaceable unit (FRU):** FRUs must be installed only by trained technicians, unless they are classified as customer replaceable units (CRUs):
  - Tier 1 customer replaceable unit (CRU): Replacement of Tier 1 CRUs is your responsibility. If Lenovo installs a Tier 1 CRU at your request, you will be charged for the installation.
  - Tier 2 customer replaceable unit: You may install a Tier 2 CRU yourself or request Lenovo to install it, at no additional charge, under the type of warranty service that is designated for your server.

See Chapter 5, "Parts listing," on page 151 to determine whether a component is a consumable, structural part, Tier 1 CRU, Tier 2 CRU or FRU.

For information about the terms of the warranty, see the *Warranty Information* document that comes with the server. Reminder that for customers in the USA with 9x5 Next Business Day warranty the customer is required to remove the unit (two people) from the rack and Lenovo service personnel cannot assist the customer.

For more information about getting service and assistance, see Appendix D, "Getting help and technical assistance," on page 535.

# Returning a device or component

If you are instructed to return a device or component, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

# Internal cable routing

**Attention:** Failing to install or remove the cable with care may damage the connectors on the system board. Any damage to the connectors may require replacing the system board.

# Hot-swap hard disk drive backplane cable connections

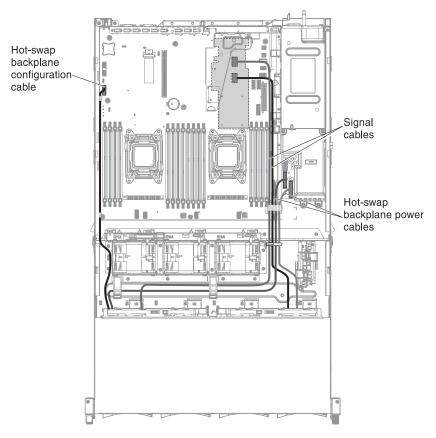
This section provides information about routing the cables when you install some components in the server.

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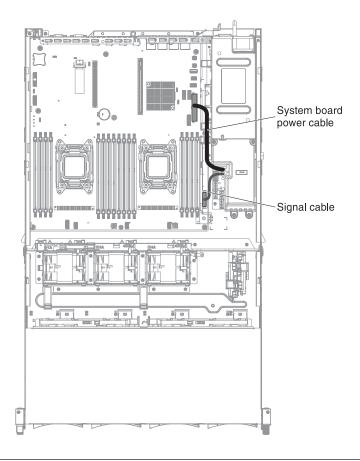
For more information about the requirements for cables and connecting devices, see the documentation that comes with these devices.

**Note:** When the hot-swap backplane is in use, make sure that Port 1 on the hardware ServeRAID or system board is connected to Port 1 on the backplane. Likewise, Port 0 on the hardware ServeRAID or system board should be connected to Port 0 on the backplane.

The following illustration shows the hardware ServeRAID cabling information for twelve 3.5-inch hot-swap drive backplane assemblies:



The following illustrations show the cabling information for the power paddle card:



## Removing and replacing components

Use this information to remove and replace the server components.

Replaceable components consist of consumable parts, structural parts, and field replaceable units (FRUs):

- Consumables: Purchase and replacement of consumables (components, such as batteries and printer cartridges, that have depleting life) is your responsibility. If Lenovo acquires or installs a consumable component at your request, you will be charged for the service.
- **Structural parts:** Purchase and replacement of structural parts (components, such as chassis assembly, top cover, and bezel) is your responsibility. If Lenovo acquires or installs a structural component at your request, you will be charged for the service.
- **Field replaceable unit (FRU):** FRUs must be installed only by trained technicians, unless they are classified as customer replaceable units (CRUs):
  - Tier 1 customer replaceable unit (CRU): Replacement of Tier 1 CRUs is your responsibility. If Lenovo installs a Tier 1 CRU at your request, you will be charged for the installation.
  - Tier 2 customer replaceable unit: You may install a Tier 2 CRU yourself or request Lenovo to install it, at no additional charge, under the type of warranty service that is designated for your server.

See Chapter 5, "Parts listing," on page 151 to determine whether a component is a consumable, structural part, Tier 1 CRU, Tier 2 CRU or FRU.

For information about the terms of the warranty, see the Warranty Information document that comes with the server. Reminder that for customers in the USA with 9x5 Next Business Day warranty the customer is required to remove the unit (two people) from the rack and Lenovo service personnel cannot assist the customer.

For more information about getting service and assistance, see Appendix D, "Getting help and technical assistance," on page 535.

# Removing and replacing Tier 1 CRUs

Replacement of Tier 1 CRUs is your responsibility. If Lenovo installs a Tier 1 CRU at your request, you will be charged for the installation.

The illustrations in this document might differ slightly from your hardware.

### Removing a hot-swap hard disk drive

Use this information to remove a hot-swap hard disk drive.

#### About this task

#### Attention:

- To avoid damage to the drive connectors, make sure that the server cover is in place and fully closed whenever you install or remove a drive.
- To make sure that there is adequate system cooling, do not operate the server for more than 2 minutes without either a drive or a filler panel installed in each bay.

To remove a hot-swap hard disk drive, complete the following steps:

- 1. Read the safety information that begins on page "Safety" on page v, "Handling static-sensitive devices" on page 33 and "Installation guidelines" on page 31.
- 2. Press the release latch on the side of the drive front.

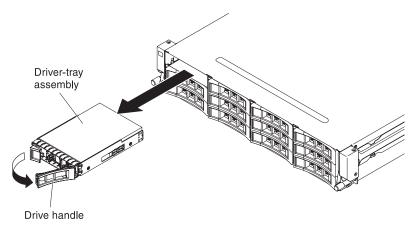


Figure 79. Hot-swap drive removal

- 3. Grasp the handle and pull the hot-swap drive assembly out of the drive bay.
- 4. If you are instructed to return the hot-swap drive, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

### Replacing a hot-swap hard disk drive

Use this information to replace a hot-swap hard disk drive.

#### About this task

The following notes describe the type of hard disk drives that the server supports and other information that you must consider when you install a drive.

- Locate the documentation that comes with the hard disk drive and follow those instructions in addition to the instructions in this chapter.
- The server supports up to fourteen 3.5-inch hot-swap SAS/SATA hard disk drives (two 3.5-inch hot-swap SAS/SATA hard disk drives are located at the rear of the server). For a list of the supported hard disk drives, see <a href="http://www.ibm.com/systems/info/x86servers/serverproven/compat/us/">http://www.ibm.com/systems/info/x86servers/serverproven/compat/us/</a>.
- All hot-swap drives in the server should have the same throughput speed rating. Using hard disk drives with different speed ratings will cause all drives to operate at the throughput speed of the slowest drive.

To install a hot-swap SAS or SATA drive, complete the following steps:

**Important:** Do not install a SCSI hard disk drive in this server.

- 1. Read the safety information that begins on page "Safety" on page v, "Handling static-sensitive devices" on page 33 and "Installation guidelines" on page 31.
- 2. Touch the static-protective package that contains the drive to any unpainted metal surface on the server; then, remove the drive from the package and place it on a static-protective surface.
- 3. Remove the filler panel from the front of the server.
- 4. Orient the drive as shown in the illustration.

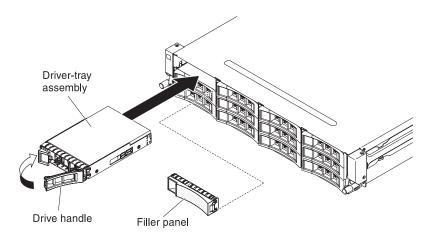


Figure 80.

- 5. Make sure that the tray handle is open.
- 6. Align the drive assembly with the guide rails in the bay.
- 7. Gently push the drive assembly into the bay until the drive stops.
- 8. Push the tray handle to the closed (locked) position.
- 9. If the system is turned on, check the hard disk drive status LED to verify that the hard disk drive is operating correctly.

#### Results

After you replace a failed hard disk drive, the green activity LED flashes as the disk spins up. The yellow LED turns off after approximately 1 minute. If the new drive starts to rebuild, the yellow LED flashes slowly, and the green activity LED remains lit during the rebuild process. If the yellow LED remains lit, see "Hard disk drive problems" on page 130.

**Note:** You might have to reconfigure the disk arrays after you install hard disk drives. See the RAID documentation on the *ServeRAID Support* CD for information about RAID controllers.

### Rotating the hot-swap rear hard disk drive cage up

Use this information to rotate the hot-swap rear hard disk drive cage up.

#### **About this task**

To rotate the hot-swap hard disk drive cage up, complete the following steps.

- 1. Read the safety information that begins on page "Safety" on page v and "Installation guidelines" on page 31.
- 2. Turn off the server (see "Turning off the server" on page 21) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
- 3. Remove the server top cover (see "Removing the server top cover" on page 259
- 4. Open the two respective blue latches on the chassis 1.
- 5. Slowly rotate the rear hard disk drive cage outwards until it stops 2.
- 6. Shift the switch on the rear hard disk drive cage to the lock position to keep the hard disk drive cage fixed 3.

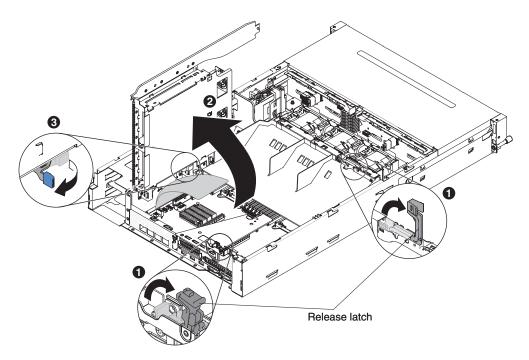


Figure 81. Hot-swap rear hard disk drive cage

## Rotating the hot-swap rear hard disk drive cage down

Use this information to rotate the hot-swap rear hard disk drive cage down.

## **About this task**

To rotate the hot-swap hard disk drive cage down, complete the following steps.

## **Procedure**

1. Read the safety information that begins on page "Safety" on page v and "Installation guidelines" on page 31.

## Attention:

a. Make sure you have routed the cables correctly as the following illustration before you rotate the hot-swap rear hard disk drive cage down. You have to route the cables underneath the bracket; then, route the cables through the cable retainer clip. Improper cable routing may damage the cables.

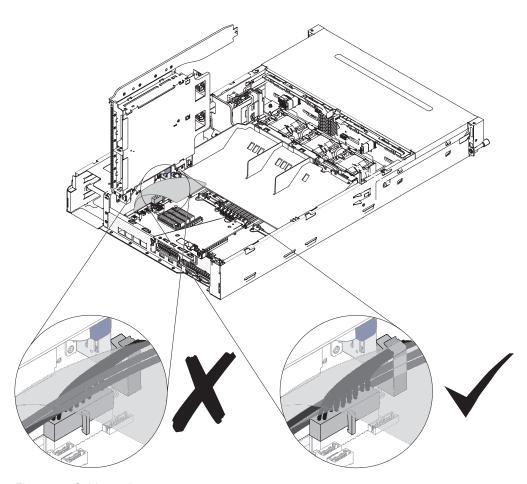


Figure 82. Cable routing

b. Make sure you have routed the cable properly and the cables are not squeezed as the following illustration before you rotate the hot-swap rear hard disk drive cage down. Improper cable routing may damage the cables.

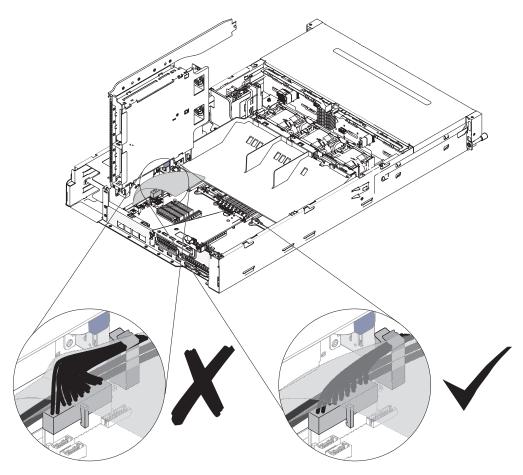


Figure 83. Cable routing

2. Shift the switch on the rear hard disk drive cage to the unlock position 1.

**Note:** Make sure you have fully shifted the switch to the unlock position as the following illustration. Otherwise, it may damage the cables.

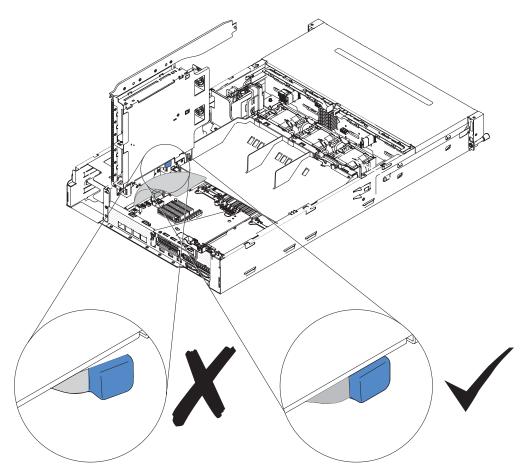


Figure 84. The switch

- 3. Slowly rotate the cage downwards until it sits into place 2.
- 4. Close the blue latches on the chassis 3.

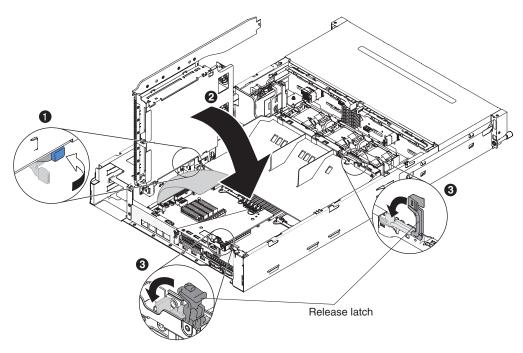


Figure 85. Hot-swap rear hard disk drive cage

## Removing the hot-swap rear hard disk drive cage

Use this information to remove the hot-swap rear hard disk drive cage.

## About this task

To remove the rear hot-swap hard disk drive cage, complete the following steps:

- 1. Read the safety information that begins on page "Safety" on page vand "Installation guidelines" on page 31.
- 2. Turn off the server (see "Turning off the server" on page 21) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
- 3. Remove the server top cover (see "Removing the server top cover" on page 259
- 4. Open the blue latches **1** on the chassis.

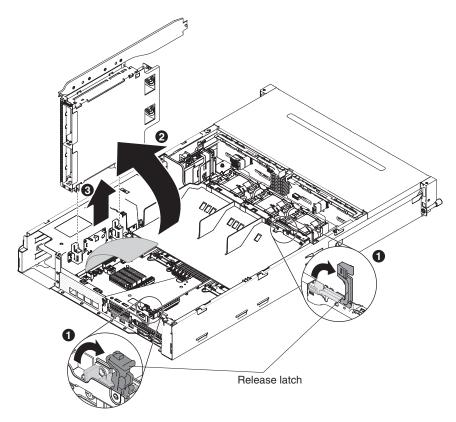


Figure 86. Hot-swap rear hard disk drive cage removal

- 5. Rotate the rear hard disk drive cage outwards 2.
- 6. Make sure the switch on the rear hard disk drive cage is in the unlock position.
- 7. Carefully pull the rear hard disk drive cage 3 out of the chassis.
- 8. If you are instructed to return the rear hard disk drive cage, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

## Replacing the hot-swap rear hard disk drive cage

Use this information to replace the hot-swap rear hard disk drive cage.

## About this task

To install the rear hot-swap hard disk drive cage, complete the following steps:

- 1. Read the safety information that begins on page "Safety" on page vand "Installation guidelines" on page 31.
- 2. Turn off the server (see "Turning off the server" on page 21) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
- 3. Remove the server top cover (see "Removing the server top cover" on page 259.
- 4. Open the two respective blue latches on the chassis 1.
- 5. Align the two moveable levers of the rear hard disk drive cage with the two chassis support brackets. Slide the cage into the chassis support brackets until it firmly sits into place **2**.

- 6. Make sure the switch on the rear hard disk drive cage is in the unlock
- 7. Rotate the cage inward until it firmly sits into place 3.

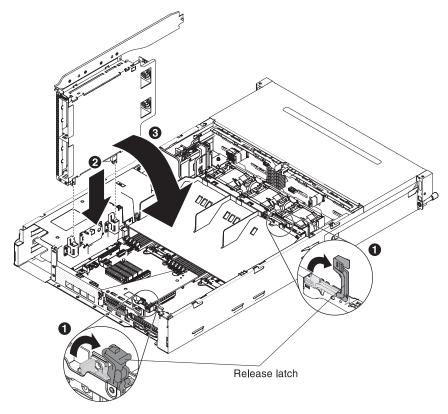


Figure 87. Rear hard disk drive cage installation

- 8. Close the latches on the chassis.
- 9. Remove the power cable that currently connects the hot-swap hard disk drive backplane in the server to the power-paddle card.
  - Type 1 SATA

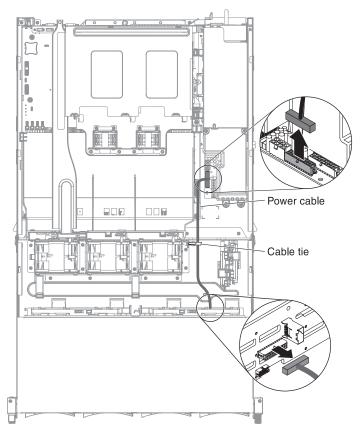


Figure 88. Cable routing

• Type 2 - SAS

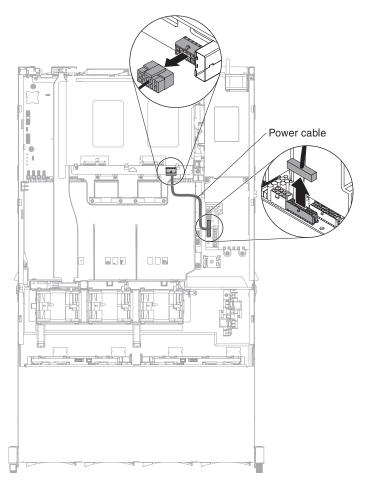


Figure 89. Cable routing

- 10. Connect cables to the backplane.
  - Type 1 SATA
    - a. Connect the LED signal, SATA signal and power cables to the backplane.

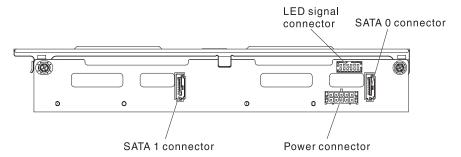


Figure 90. Type 1

- b. Insert the hot-swap backplane onto the rear hard disk drive cage (see "Replacing the hot-swap backplane on the rear hard disk drive cage" on page 237
- **c**. Connect the other end of the LED signal cable to the hot-swap hard disk drive backplane in the server.

d. Find the rear hard disk drive detect pin of the hot-swap backplane signal (I<sup>2</sup>C) cable located near the system fan cage; then, connect with the rear hard disk drive detect pin of the LED signal cable from the option package.

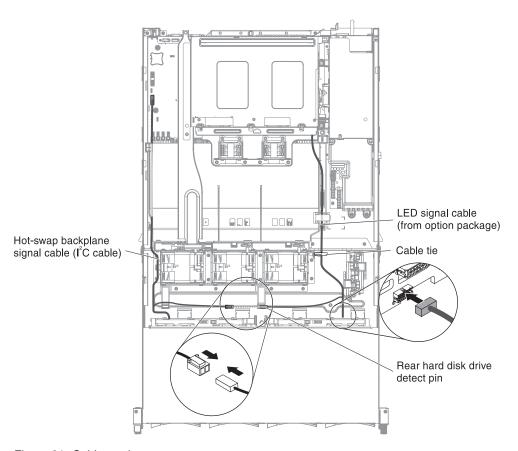


Figure 91. Cable routing

**e**. Connect the other end of the SATA signal and power cables to the power paddle card and hot-swap hard disk drive backplane in the server. Make sure the labels of both connectors are matched.

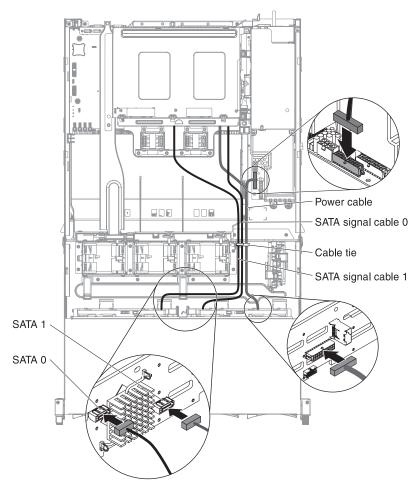


Figure 92. Cable routing

**Note:** Make sure that Port 1 is connected to Port 1 for both backplanes. Likewise, Port 0 is connected to Port 0 for both backplanes.

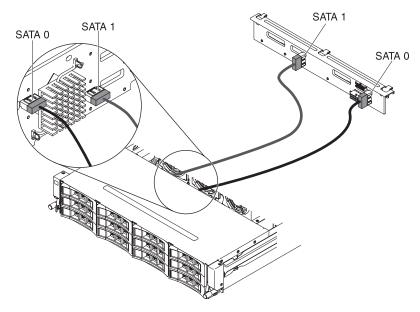


Figure 93. Cable connection

**Note:** Make sure the cables are routed in the proper locations without blocking the airflow. It is recommended to press all the cables downwards to make the cable routing easier. Secure the cables with any cable retention clips.

- Type 2 SAS
  - a. Connect the I<sup>2</sup>C signal, SAS signal and power cables to the backplane.

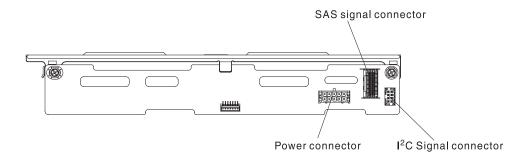


Figure 94. Type 2

- b. Insert the hot-swap backplane onto the rear hard disk drive cage (see "Replacing the hot-swap backplane on the rear hard disk drive cage" on page 237.
- **c**. Connect the other ends of the I<sup>2</sup>C signal, SAS signal and power cables.

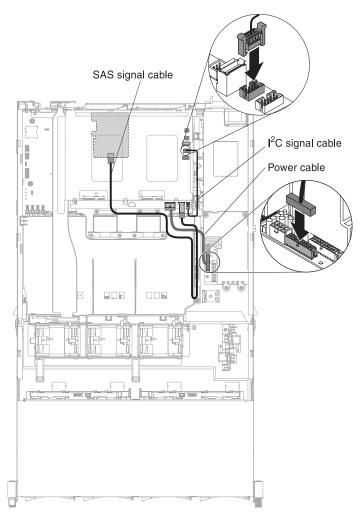


Figure 95. Cable routing

**Note:** Make sure the cables are routed in the proper locations without blocking the airflow. It is recommended to press all the cables downwards to make the cable routing easier. Secure the cables with any cable retention clips.

- 11. Install the server top cover (see "Replacing the server top cover" on page 260.
- 12. Reconnect the external cables; then, reconnect the power cords and turn on the peripheral devices and the server.

# Removing an adapter from the PCI riser-card assembly

Use this information to remove an adapter from the PCI riser-card assembly.

## About this task

To remove an adapter from a PCI expansion slot, complete the following steps:

- 1. Read the safety information that begins on page "Safety" on page v and "Installation guidelines" on page 31.
- 2. Turn off the server (see "Turning off the server" on page 21) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.

- 3. Remove the server top cover (see "Removing the server top cover" on page 259).
- 4. Rotate the hot-swap rear hard disk drive up (see "Rotating the hot-swap rear hard disk drive cage up" on page 166).
- 5. Disconnect any cables from the adapter (make note of the cable routing, in case you reinstall the adapter later).
- 6. Remove the PCI riser-card assembly 1 or 2 (see "Removing a PCI riser-card assembly" on page 207).
- 7. The following illustrates the steps for removing an adapter from the PCI riser-card assemblies:
  - For PCI riser-card assembly 1:
    - a. Rotate the retention latch to the open position.
    - b. Carefully grasp the adapter by its top edge or upper corners, and pull the adapter from the PCI riser-card assembly.

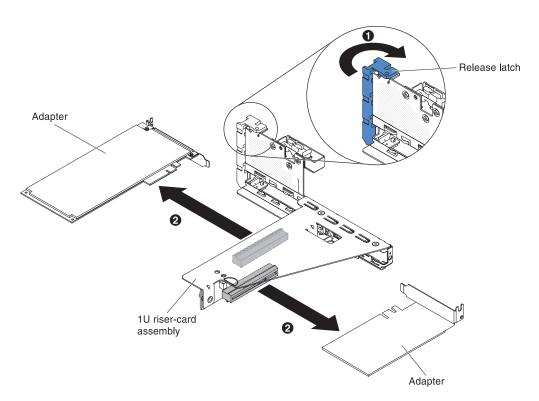


Figure 96. Adapter removal

- 8. Place the adapter on a flat, static-protective surface.
- 9. If you are instructed to return the adapter, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

## Replacing the insulator sheet for the power cable

Use this information to replace the insulator sheet for the power cable

## About this task

To replace the insulator sheet for the power cable, complete the following steps.

#### **Procedure**

- 1. Read the safety information that begins on page "Safety" on page v and "Installation guidelines" on page 31.
- 2. Turn off the server (see "Turning off the server" on page 21) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
- 3. Remove the server top cover (see "Removing the server top cover" on page 259).
- 4. Rotate the hot-swap rear hard disk drive cage up (See"Rotating the hot-swap rear hard disk drive cage up" on page 166).
- 5. Remove the liner from the insulator sheet.

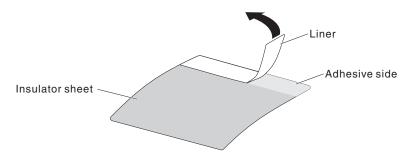


Figure 97. Liner removal

6. Align the insulator sheet with the bracket on the right side and insert it to the slot straight.

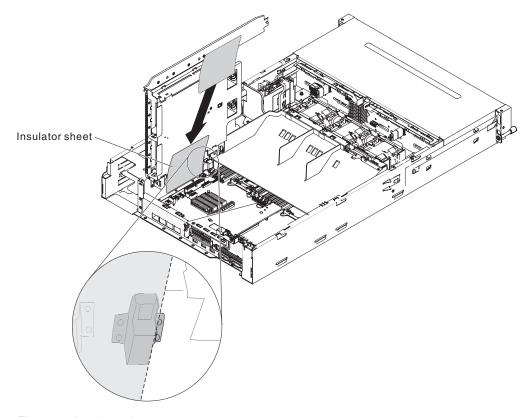


Figure 98. Insulator sheet

7. Use you fingers to press the bottom of the insulator sheet back and forth and make sure it is fixed correctly.

# Removing the insulator sheet for the power cable

Use this information to remove the insulator sheet for the power cable

#### About this task

To remove the insulator sheet for the power cable, complete the following steps.

#### **Procedure**

- 1. Read the safety information that begins on page "Safety" on page v and "Installation guidelines" on page 31.
- 2. Turn off the server (see "Turning off the server" on page 21) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
- 3. Remove the server top cover (see "Removing the server top cover" on page 259).
- 4. Rotate the hot-swap rear hard disk drive cage up (See "Rotating the hot-swap rear hard disk drive cage up" on page 166).
- 5. Remove the insulator sheet from the server.

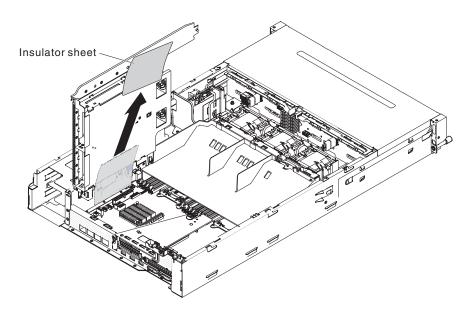


Figure 99. Insulator sheet removal

# Replacing an adapter on the PCI riser-card assembly

Use this information to replace an adapter on the PCI riser-card assembly.

#### About this task

#### **Notes:**

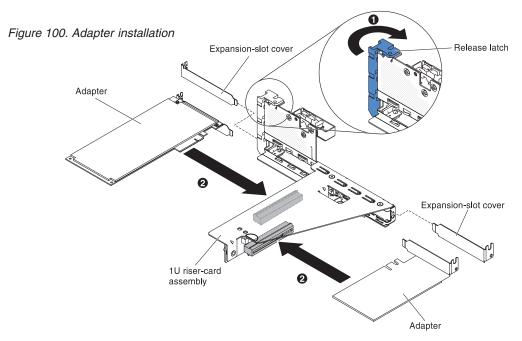
- The instructions in this section apply to any supported adapter (for example, video graphics adapters or network adapters).
- See "Installing an adapter on the PCI riser-card assembly" on page 45 for additional notes and information that you must consider when you install an adapter in the server.

- Do not set the maximum digital video adapter resolution above 1600 x 1200 at 75 Hz for an LCD monitor. This is the highest resolution that is supported for any add-on video adapter that you install in the server.
- Any high-definition video-out connector or stereo connector on any add-on video adapter is not supported

To replace an adapter, complete the following steps:

**Attention:** When you install an adapter, make sure that the adapter is correctly seated in the PCI riser-card assembly and that the PCI riser-card assembly is securely seated in the riser-card connector on the system board before you turn on the server. An incorrectly seated adapter might cause damage to the system board, the PCI riser-card assembly, or the adapter.

- 1. Read the safety information that begins on page "Safety" on page v and "Installation guidelines" on page 31.
- 2. Follow the cabling instructions, if any come with the adapter. Route the adapter cables before you install the adapter.
- 3. The following illustrates the steps for installing an adapter on the PCI riser-card assemblies:
  - For PCI riser-card assembly 1:
    - a. Rotate the retention latch to the open position. Insert the adapter into the PCI riser-card assembly, aligning the edge connector on the adapter with the connector on the PCI riser-card assembly. Press the edge of the connector firmly into the PCI riser-card assembly. Make sure that the adapter snaps into the PCI riser-card assembly securely.
    - b. Rotate the retention latch to the close position. Make sure the retention latch engages the adapter securely.



- 4. Install the PCI riser-card assembly in the server (see "Replacing a PCI riser-card assembly" on page 209).
- 5. Perform any configuration tasks that are required for the adapter.

- 6. Install the cover (see "Replacing the server top cover" on page 260).
- 7. Install the server in the rack cabinet (see the *Rack Installation Instructions* that come with the server for instructions).
- 8. Reconnect the power cord and any cables that you removed.
- 9. Turn on the peripheral devices and the server.

# Removing a front fan

Use this information to remove a front fan.

#### About this task

**Attention:** To ensure proper server operation, if a fan fails, you need to turn off the server first, then replace the fan immediately.

To remove a front fan, first complete the following steps:

- 1. Read the safety information that begins on page "Safety" on page v and "Installation guidelines" on page 31.
- 2. Turn off the server (see "Turning off the server" on page 21) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
- 3. Remove the server top cover (see "Removing the server top cover" on page 259).
- 4. Rotate the hot-swap rear hard disk drive cage up (see "Rotating the hot-swap rear hard disk drive cage up" on page 166).
- 5. Remove the air baffle (see "Removing the air baffle" on page 261).
- 6. Removing Fan 1A:

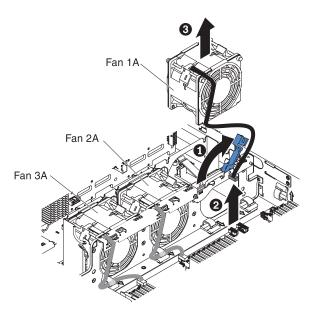


Figure 101. Fan removal

- a. Pull up the blue handle on the fan cage.
- b. Disconnect the fan cable from the connector on the system board. (See "System-board internal connectors" on page 25).

- c. Pull the fan cable out of the cable retainer clip.
- d. Grasp the top of the fan with your index finger and thumb and slowly lift the fan out of the server.
- 7. Removing Fan 2A or Fan 3A
  - a. Disconnect the fan cable from the connector on the fan board. (See "System-board internal connectors" on page 25).
  - b. Pull the fan cable out of the cable retainer clip.
  - c. Grasp the top of the fan with your index finger and thumb and lift the fan out of the server.
- 8. If you are instructed to return the fan, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

# Replacing a front fan

Use this information to replace a front fan.

## **About this task**

For proper cooling, the server requires that all fans in the system be operating at all times.

**Attention:** To ensure proper server operation, if a fan fails, replace the fan immediately.

See "System-board internal connectors" on page 25 for the locations of the fan cable connectors.

Read the safety information that begins on page "Safety" on page v and "Installation guidelines" on page 31

Steps for installing Fan 1A:

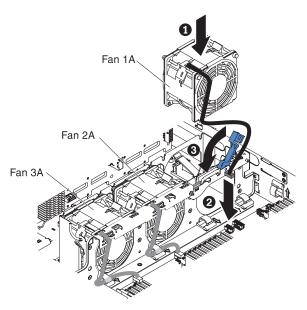


Figure 102. Fan installation

To install or replace a front fan, complete the following steps

- 1. Touch the static-protective package that contains the new fan to any unpainted metal surface on the server. Then, remove the new fan from the package.
- 2. Pull up the blue handle on the fan cage.
- 3. Orient the fan so that the fan cable points to the system board.
- 4. Lower the fan into the fan slot in the server and ensure that is it seated correctly.
- 5. Connect the fan cable to the connector on the system board. (See "System-board internal connectors" on page 25).
- 6. Insert the fan cable into the cable retainer clip.
- 7. Return the blue handle back to its horizontal position.
- 8. Install the air baffle (see "Replacing the air baffle" on page 262).
- 9. Rotate the hot-swap rear hard disk drive downward (see "Rotating the hot-swap rear hard disk drive cage down" on page 167).
- 10. Install the server top cover (see "Replacing the server top cover" on page 260).
- 11. Reconnect the external cables; then, reconnect the power cords and turn on the peripheral devices and the server.

Steps for installing Fan 2A or 3A:

- 1. Touch the static-protective package that contains the new fan to any unpainted metal surface on the server. Then, remove the new fan from the package.
- 2. Orient the fan so that the fan cable points to the system board.
- 3. Lower the fan into the fan slot in the server and ensure that is it seated correctly.
- 4. Connect the fan cable to the connector on the system board. (See "System-board internal connectors" on page 25).
- 5. Insert the fan cable into the cable retainer clip.
- 6. Install the air baffle (see "Replacing the air baffle" on page 262).
- 7. Rotate the hot-swap rear hard disk drive downward (see "Rotating the hot-swap rear hard disk drive cage down" on page 167).
- 8. Install the server top cover (see "Replacing the server top cover" on page 260).
- 9. Reconnect the external cables; then, reconnect the power cords and turn on the peripheral devices and the server.

## Removing a rear fan

Use this information to remove a rear fan.

## About this task

**Attention:** To ensure proper server operation, if a fan fails, you need to turn off the server first, then replace the fan immediately.

To remove a rear fan, complete the following steps:

- 1. Read the safety information that begins on page "Safety" on page v and "Installation guidelines" on page 31.
- 2. Turn off the server (see "Turning off the server" on page 21) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.

- 3. Remove the server top cover (see "Removing the server top cover" on page 259).
- 4. Rotate the hot-swap rear hard disk drive cage up (see "Rotating the hot-swap rear hard disk drive cage up" on page 166).
- 5. Disconnect the fan cable from the connector on the system board. (See "System-board internal connectors" on page 25
- 6. Grasp the top of the fan with your index finger and thumb and lift the fan out of the fan cage.

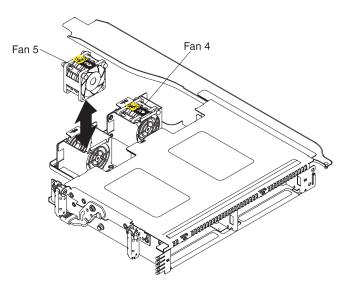


Figure 103. Rear fan removal

7. If you are instructed to return the fan, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

## Replacing a rear fan

Use this information to replace a rear fan.

## About this task

For proper cooling, the server requires that all fans in the system be operating at all times.

**Attention:** To ensure proper server operation, if a fan fails, replace the fan immediately.

See "System-board internal connectors" on page 25 for the locations of the fan cable connectors.

Read the safety information that begins on page "Safety" on page v and "Installation guidelines" on page 31

To install or replace a rear fan, complete the following steps

- 1. Touch the static-protective package that contains the new fan to any unpainted metal surface on the server. Then, remove the new fan from the package.
- 2. Orient the fan as the following illustration.

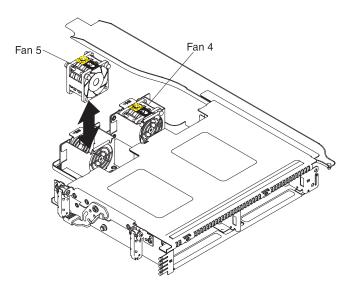


Figure 104. Rear fan installation

- 3. Lower the fan into the fan slot in the server and ensure that is it seated correctly.
- 4. Connect the system fan cable to the connector on the system board. (see "System-board internal connectors" on page 25)
- 5. Install the server top cover (see "Replacing the server top cover" on page 260).
- 6. Reconnect the external cables; then, reconnect the power cords and turn on the peripheral devices and the server.

# Removing a memory module

Use this information to remove a memory module.

## About this task

To remove a dual inline memory module (DIMM), complete the following steps:

- 1. Read the safety information that begins on page "Safety" on page v and "Installation guidelines" on page 31.
- 2. Turn off the server (see "Turning off the server" on page 21) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
- 3. Remove the server top cover (see "Removing the server top cover" on page 259).
- 4. Rotate the hot-swap rear hard disk drive cage up (see "Rotating the hot-swap rear hard disk drive cage up" on page 166).
- 5. Remove the PCI riser-card assembly (see "Removing a PCI riser-card assembly" on page 207).
- 6. Remove the air baffle (see "Removing the air baffle" on page 261).
- 7. Carefully flip open the retaining clip on each end of the DIMM connector and lift the DIMM from the connector.
  - **Attention:** To avoid breaking the retaining clips or damaging the DIMM connectors, open and close the clips gently.

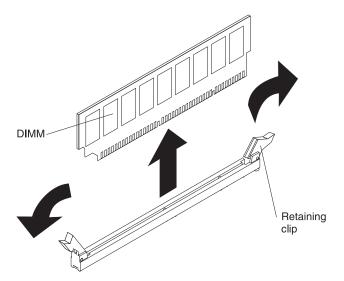


Figure 105. DIMM removal

8. If you are instructed to return the DIMM, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

# Replacing a memory module

Use this information to replace a memory module.

## About this task

#### **Notes:**

- See "Memory module installation" on page 58 for notes and information that you must consider when you install DIMMs.
- Confirm that the server supports the DIMM that you are installing, see http://www.ibm.com/systems/info/x86servers/serverproven/compat/us/.

The following illustration shows the location of the DIMM connectors on the system board.

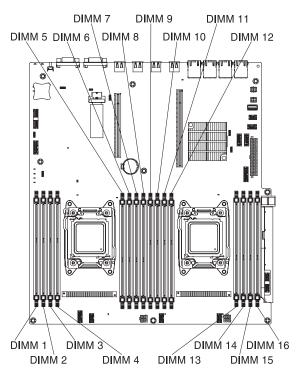


Figure 106. DIMM connectors

To install a DIMM, complete the following steps:

**Note:** The odd-numbered DIMM connectors are white-colored, while the even-numbered DIMM connectors are black-colored.

- 1. Read the safety information that begins on page "Safety" on page v and "Installation guidelines" on page 31.
- 2. Turn off the server (see "Turning off the server" on page 21) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
- 3. Remove the server top cover (see "Removing the server top cover" on page 259).
- 4. Carefully flip open the retaining clip on each end of the DIMM connector. **Attention:** To avoid breaking the retaining clips or damaging the DIMM connectors, open and close the clips gently.

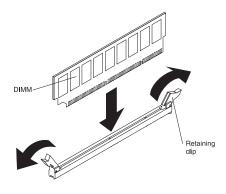


Figure 107. DIMM installation

- 5. Touch the static-protective package that contains the DIMM to any unpainted metal surface on the outside of the server. Then, remove the DIMM from the package.
- 6. Turn the DIMM so that the DIMM keys align correctly with the connector.
- 7. Insert the DIMM into the connector by aligning the edges of the DIMM with the slots at the end of the DIMM connector. Firmly press the DIMM straight down into the connector by applying pressure on both ends of the DIMM simultaneously. The retaining clips snap into the locked position when the DIMM is firmly seated in the connector.
  - **Attention:** If there is a gap between the DIMM and the retaining clips, the DIMM has not been correctly inserted; open the retaining clips, remove the DIMM, and then reinsert it.
- 8. Repeat steps 5 through 7 until all the new or replacement DIMMs are installed.
- 9. Install the air baffle (see "Replacing the air baffle" on page 262).
- 10. Install the PCI riser-card assembly (see "Replacing a PCI riser-card assembly" on page 209).
- 11. Rotate the hot-swap rear hard disk drive downward (see "Rotating the hot-swap rear hard disk drive cage down" on page 167).
- 12. Replace the server top cover (see "Replacing the server top cover" on page 260).
- 13. Reconnect the external cables; then, reconnect the power cords and turn on the peripheral devices and the server.
- 14. Go to the Setup utility and make sure all the installed DIMMs are present and enabled.

# Removing a ServeRAID adapter from the PCI riser-card assembly

Use this information to remove a ServeRAID adapter from the PCI riser-card assembly.

## About this task

To remove a ServeRAID adapter from the PCI riser-card assembly, complete the following steps:

## **Procedure**

1. Read the safety information that begins on page "Safety" on page v and "Installation guidelines" on page 31.

- 2. Turn off the server (see "Turning off the server" on page 21) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
- 3. Remove the server cover (see "Removing the server top cover" on page 259).
- 4. Rotate the hot-swap rear hard disk drive cage up (see "Rotating the hot-swap rear hard disk drive cage up" on page 166).
- 5. Remove PCI riser-card assembly 1 or 2 (see "Removing a PCI riser-card assembly" on page 207).
- 6. The following illustrates the steps for removing an adapter from the PCI riser-card assemblies:
  - For PCI riser-card assembly 1:
    - a. Rotate the retention latch to the open position.
    - b. Carefully grasp the ServeRAID adapter by its top edge or upper corners, and pull the ServeRAID adapter from the PCI riser-card assembly.

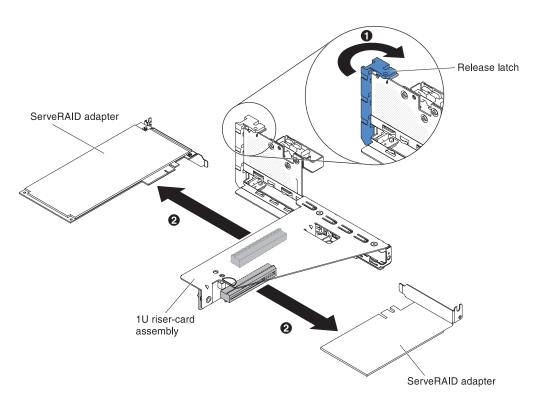


Figure 108. ServeRAID adapter removal

- For PCI riser-card assembly 2:
  - a. Pull the release pin to unlock the retention latch; then rotate the retention latch to the open position.
  - b. Carefully grasp the ServeRAID adapter by the edge and pull it out of PCI riser-card assembly 2.

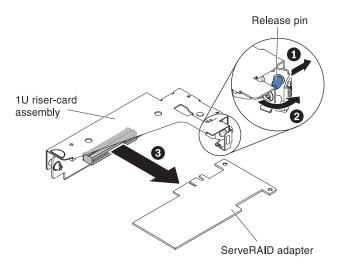


Figure 109. ServeRAID adapter removal

7. If you are instructed to return the ServeRAID adapter, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Note: When the ServeRAID adapter is removed, software RAID will not be supported. This system does not support downgrade software RAID function from hardware RAID configuration.

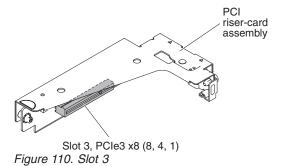
# Replacing a ServeRAID adapter on the PCI riser-card assembly

Use this information to replace a ServeRAID adapter on the PCI riser-card assembly.

## About this task

Important: When you install ServeRAID adapters on the PCI riser-card assemblies, please install them in the order listed:

- Slot 3
- Slot 2 (For the rear backplane or external ServeRAID adapter only)
- Slot 1 (For external ServeRAID adapter only)



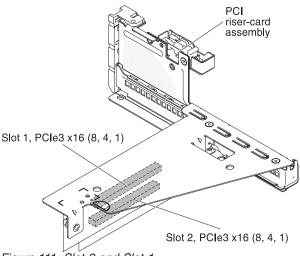


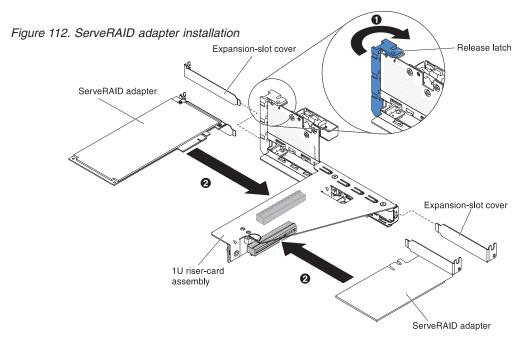
Figure 111. Slot 2 and Slot 1

**Note:** The supported PCI slot for the RAID link function is slot 2 and 3. However, please note when installing RAID controller M5120, it can only be installed in slot 1 and 2.

To install a ServeRAID adapter on the PCI riser-card assembly, complete the following steps:

- 1. Read the safety information that begins on page "Safety" on page v and "Installation guidelines" on page 31.
- 2. Turn off the server (see "Turning off the server" on page 21) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
- 3. Remove the server top cover (see "Removing the server top cover" on page 259).
- 4. If you are installing a new or replacement ServeRAID adapter, touch the static-protective package that contains the new ServeRAID adapter to any unpainted metal surface on the server. Then, remove the ServeRAID adapter from the package.
- 5. If you are installing a new or replacement ServeRAID adapter that uses a battery, complete the following steps:
  - a. Remove the battery from the ServeRAID adapter package or the battery package.
  - b. Install the battery and connect the battery to the ServeRAID controller as instructed in the documentation that comes with the ServeRAID controller or the battery, or see "Installing a ServeRAID adapter battery or flash power module in the remote battery tray" on page 52.
- 6. The following illustrates the steps for installing a ServeRAID adapter on the PCI riser-card assemblies:
  - For PCI riser-card assembly 1:
    - a. Rotate the retention latch to the open position. Insert the ServeRAID adapter into the PCI riser-card assembly, aligning the edge connector on the adapter with the connector on the PCI riser-card assembly. Press the edge of the connector firmly into the PCI riser-card assembly. Make sure that the adapter snaps into the PCI riser-card assembly securely.

b. Rotate the retention latch to the close position. Make sure the retention latch engages the adapter securely.



- For PCI riser-card assembly 2:
  - a. Pull the release pin to unlock the retention latch; then rotate the retention latch to the open position.
  - b. Align the adapter so that the keys align correctly with the connector on PCI riser-card assembly 2.
  - **c**. Insert the adapter into the connector on the riser-card until it is firmly seated.

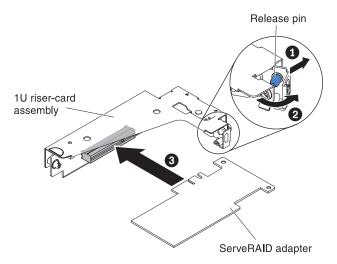


Figure 113. ServeRAID adapter installation

**Attention:** Incomplete insertion might cause damage to the server or the adapter.

7. Connect any required cables to the ServeRAID adapter.

#### Attention:

- When you route cables, do not block any connectors or the ventilated space around any of the fans.
- Make sure that cables are not routed on top of components that are under the PCI riser-card assembly.
- Make sure that cables are not pinched by the server components.
- 8. Rotate the retention latch to the closed position, making sure the retention latch engages the ServeRAID adapter. Then, push in the release pin to lock the retention latch in place.
- 9. Install PCI riser-card assembly 2 (see "Installing a PCI riser-card assembly" on page 79).

#### Results

#### Note:

- 1. When you restart the server for the first time after you install a ServeRAID adapter with a battery, the monitor screen remains blank while the controller initializes the battery. This might take a few minutes, after which the startup process continues. This is a one-time occurrence.
  - **Important:** You must allow the initialization process to be completed. If you do not, the battery pack will not work, and the server might not start.
  - The battery comes partially charged, at 30% or less of capacity. Run the server for 4 to 6 hours to fully charge the battery. The LED just above the battery on the controller remains lit until the battery is fully charged.
  - Until the battery is fully charged, the controller firmware sets the controller cache to write-through mode; after the battery is fully charged, the controller firmware re-enables write-back mode.
- 2. When you restart the server, you are given the opportunity to import the existing RAID configuration to the new ServeRAID adapter.

# Removing the RAID adapter battery or flash power module from the RAID battery tray

Use this information to remove the RAID adapter battery or flash power module from the RAID battery tray.

## About this task

To remove the RAID adapter battery from the RAID battery tray, complete the following steps:

- 1. Read the safety information that begins on page "Safety" on page v and "Installation guidelines" on page 31.
- 2. Turn off the server (see "Turning off the server" on page 21) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
- 3. Remove the server top cover (see "Removing the server top cover" on page 259).
- 4. Slightly use your finger or thumb to unlock the battery retention clip from the battery holder. During the unlocking process you will hear a "click" sound.

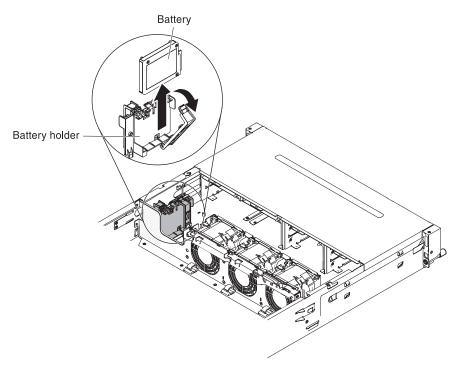


Figure 114. RAID adapter battery removal

- 5. If there is a battery cable, carefully disconnect the battery cable from the battery cable connector on the battery.
- 6. Lift the battery up to remove the battery from the battery holder.
- 7. If you are instructed to return the RAID adapter battery, follow all packaging instructions, and use any packaging materials for shipping that are supplied to

# Replacing a RAID adapter battery or flash power module in the RAID battery tray

Use this information to replace a RAID adapter battery or flash power module in the RAID battery tray.

## About this task

When you install any ServeRAID adapter in the server that come with a RAID adapter battery, the battery must be installed remotely to prevent the battery from overheating.

To install a RAID adapter battery in the RAID battery tray, complete the following steps:

- 1. Read the safety information that begins on page "Safety" on page v and "Installation guidelines" on page 31.
- 2. Slightly use your finger or thumb to unlock the battery retention clip from the battery holder. During the unlocking process you will hear a "click" sound.
- 3. Install the battery in the RAID battery tray:
  - a. Orient the battery as shown in the following illustration; then, lower the battery into the RAID battery tray. If the battery comes with a battery

- carrier, ensure that battery carrier posts align with the rings on the battery mounting slot so that the battery carrier is secure in the slot.
- b. Push the battery retention clip back to its vertical position until it snaps into place, thereby securing the battery.

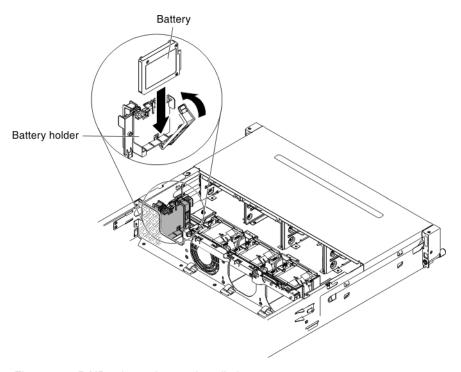


Figure 115. RAID adapter battery installation

4. Connect the remote battery cable to the remote battery cable connector to the ServeRAID adapter. Route the remote battery cable in the server as shown in the following illustration.

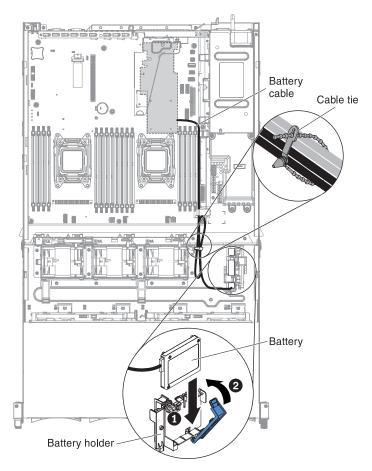


Figure 116. Cable routing

## Attention:

- Make sure the relevant cables pass through the cable clips.
- Make sure that the cable is not pinched and does not cover any connectors or obstruct any components on the system board.
- 5. Install the server top cover (see "Replacing the server top cover" on page 260).
- 6. Reconnect the external cables; then, reconnect the power cords and turn on the peripheral devices and the server.

## Removing a USB embedded hypervisor flash device

Use this information to remove a USB embedded hypervisor flash device.

## **About this task**

To remove a USB hypervisor key from the server, complete the following steps:

- 1. Read the safety information that begins on page "Safety" on page v and "Installation guidelines" on page 31.
- 2. Turn off the server (see "Turning off the server" on page 21) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
- 3. Remove the server top cover (see "Removing the server top cover" on page 259).

- 4. Rotate the hot-swap rear hard disk drive cage up (see "Rotating the hot-swap rear hard disk drive cage up" on page 166.
- 5. Remove PCI riser-card assembly 1 (see "Removing a PCI riser-card assembly" on page 207).
- 6. Locate the USB embedded hypervisor flash device connector on the system board.

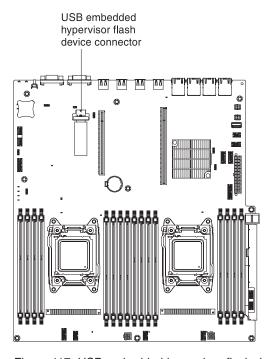


Figure 117. USB embedded hypervisor flash device connector

7. Slide the lockbar on the flash device connector to the unlocked position and pull the USB flash device out of the connector.

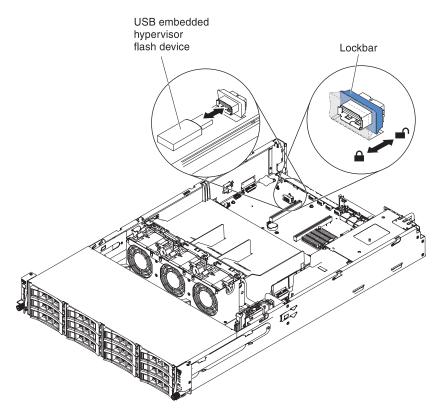


Figure 118. USB embedded hypervisor flash device removal

8. If you are instructed to return the hypervisor memory key, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

**Note:** You must configure the server not to look for the hypervisor USB drive. See "Configuring the server" on page 88 for information about disabling hypervisor support.

## Replacing a USB embedded hypervisor flash device

Use this information to replace a USB embedded hypervisor flash device.

## About this task

To install a USB hypervisor memory key in the server, complete the following steps:

- 1. Read the safety information that begins on page "Safety" on page v and "Installation guidelines" on page 31.
- 2. Turn off the server (see "Turning off the server" on page 21) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
- 3. Remove the server top cover (see "Removing the server top cover" on page 259).
- 4. Rotate the hot-swap rear hard disk drive cage up (see "Rotating the hot-swap rear hard disk drive cage up" on page 166.
- 5. Remove PCI riser-card assembly 1 (see "Removing a PCI riser-card assembly" on page 207).

6. Locate the USB embedded hypervisor flash device connector on the system board.

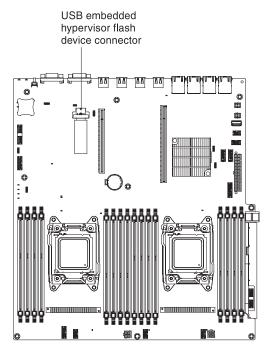


Figure 119. USB embedded hypervisor flash device connector

- 7. Align the USB flash device with the connector on the system board and push it into the connector until it is firmly seated.
- 8. Slide the lockbar toward the riser-card assembly to the locked position until it is seated firmly.

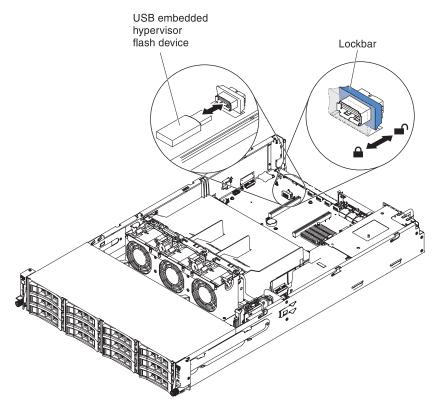


Figure 120. USB embedded hypervisor flash device installation

- 9. Install PCI riser-card assembly 1 (see "Replacing a PCI riser-card assembly" on page 209).
- 10. Rotate the hot-swap rear hard disk drive cage down (see "Rotating the hot-swap rear hard disk drive cage down" on page 167).
- 11. Install the server top cover (see "Replacing the server top cover" on page 260).
- 12. Reconnect the power cord and any cables that you removed.
- 13. Turn on the peripheral devices and the server.

Note: You will have to configure the server to boot from the hypervisor USB drive. See "Configuring the server" on page 88 for information about enabling the hypervisor memory key.

## Removing a hot-swap ac power supply

Use this information to remove a hot-swap ac power supply.

## About this task

Important: If the server has two power supplies, and if you remove either of them, the server will not have redundant power; if the server power load then exceeds 750W or 900W (depends on server model), the server might not start or might not function correctly.

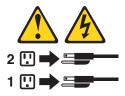
#### Statement 5





#### **CAUTION:**

The power control button on the device and the power switch on the power supply do not turn off the electrical current supplied to the device. The device also might have more than one power cord. To remove all electrical current from the device, ensure that all power cords are disconnected from the power source.



## Statement 8





#### **CAUTION:**

Never remove the cover on a power supply or any part that has the following label attached.



Hazardous voltage, current, and energy levels are present inside any component that has this label attached. There are no serviceable parts inside these components. If you suspect a problem with one of these parts, contact a service technician.

To remove a hot-swap ac power supply, complete the following steps.

- 1. Read the safety information that begins on page "Safety" on page v and "Installation guidelines" on page 31.
- 2. If only one power supply is installed, turn off the server and peripheral devices and disconnect all power cords. Meanwhile, if two power supplies are installed, it is not necessary to turn off the server and peripheral devices and disconnect all power cords.
- 3. Hold the power-supply handle and press the orange release latch to the left simultaneously.
- 4. Press and hold the orange release tab to the left. Grasp the handle and pull the power supply out of the server.

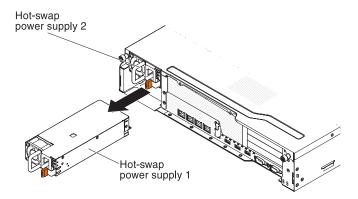


Figure 121. Power supply removal

- 5. Release the latch and use other hand to provide support to the power supply as you pull remaining portion out of the bay.
- 6. If you are instructed to return the power supply, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

## Replacing a hot-swap ac power supply

Use this information to replace a hot-swap ac power supply.

## About this task

The following items describe the type of power supply that the server supports and other information that you must consider when you install a power supply:

- To confirm that the server supports the power supply that you are installing, see http://www.ibm.com/systems/info/x86servers/serverproven/compat/us/.
- The server comes standard with one 750-watt or 900-watt hot-swap power supply. The input voltage is 110 V ac or 220 V ac auto-sensing.

Note: You cannot mix 110 V ac and 220 V ac, or 750-watt and 900-watt power supplies in the server, it is not supported.

- These power supplies are designed for parallel operation. In the event of a power-supply failure, the redundant power supply continues to power the system. The server supports a maximum of two power supplies.
- The server can run fully configured with one power supply. For redundancy support, you must install the second hot-swap power supply.

Note: You cannot mix high-efficiency and non-high-efficiency power supplies in the server.

#### Statement 5





#### **CAUTION:**

The power control button on the device and the power switch on the power supply do not turn off the electrical current supplied to the device. The device also might have more than one power cord. To remove all electrical current from the device, ensure that all power cords are disconnected from the power source.



## Statement 8





## **CAUTION:**

Never remove the cover on a power supply or any part that has the following label attached.



Hazardous voltage, current, and energy levels are present inside any component that has this label attached. There are no serviceable parts inside these components. If you suspect a problem with one of these parts, contact a service technician.

**Attention:** During normal operation, each power-supply bay must contain either a power supply or power-supply filler for proper cooling.

To replace a hot-swap ac power supply, complete the following steps.

- 1. Read the safety information that begins on page "Safety" on page v and "Installation guidelines" on page 31.
- 2. Touch the static-protective package that contains the hot-swap power supply to any unpainted metal surface on the server; then, remove the power supply from the package and place it on a static-protective surface.
- 3. If you are installing a hot-swap power supply into an empty bay, remove the power-supply filler panel from the power-supply bay. Meanwhile, if you are replacing a failed hot-swap power supply, remove it from the bay.

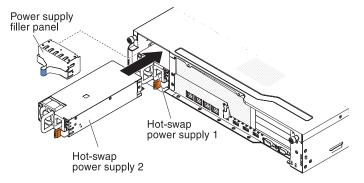


Figure 122. Power supply installation

- 4. Grasp the handle on the rear of the power supply and slide the power supply forward into the power-supply bay until it clicks. Make sure that the power supply connects firmly into the power-supply connector.
- 5. Connect the power cord for the new power supply to the power-cord connector on the power supply.
- 6. Route the power cord through the cable retainer clip so that it does not accidentally become disconnected.

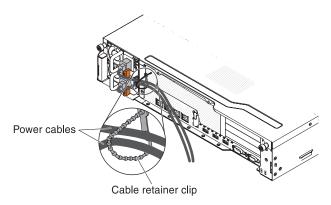


Figure 123. Power cord

- 7. Connect the power cord to a properly grounded electrical outlet.
- 8. Make sure that the ac power LED and the dc power LED on the power supply are lit, indicating that the power supply is operating correctly.
- 9. If you are adding a power supply to the server, attach the redundant power information label that comes with this option on the server top cover near the power supplies.

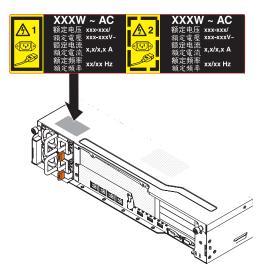


Figure 124. Redundant power information label

## Removing a PCI riser-card assembly

Use this information to remove a PCI riser-card assembly.

## About this task

To remove the PCI riser-card assembly, complete the following steps:

- 1. Read the safety information that begins on page "Safety" on page v and "Installation guidelines" on page 31.
- 2. Turn off the server (see "Turning off the server" on page 21) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
- 3. Remove the server cover (see "Removing the server top cover" on page 259).
- 4. Rotate the hot-swap rear hard disk drive cage up (see "Rotating the hot-swap rear hard disk drive cage up" on page 166.
- 5. If an adapter is installed in the PCI riser-card assembly, disconnect any cables that are connected to the adapter.
- 6. Grasp the front and rear of the PCI riser-card assembly at the blue touch-points and lift it out of the PCI riser connector on the system board.

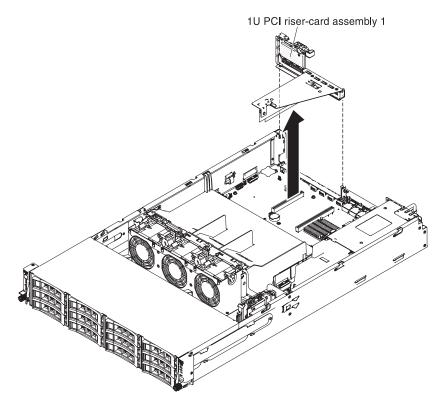


Figure 125. PCI riser-card assembly 1 removal

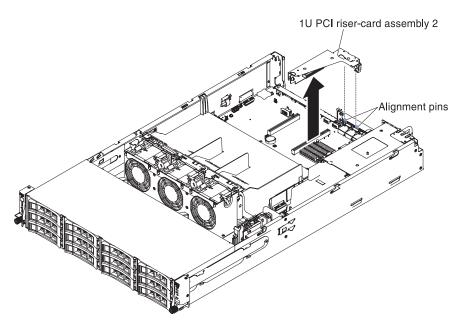


Figure 126. PCI riser-card assembly 2 removal

- 7. Remove the adapter, if necessary, from the PCI riser-card assembly.
- 8. If you are instructed to return the PCI riser-card assembly, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

# Replacing a PCI riser-card assembly

Use this information to replace a PCI riser-card assembly.

## **About this task**

To replace the PCI riser-card assembly, complete the following steps:

- 1. Read the safety information that begins on page "Safety" on page v and "Installation guidelines" on page 31.
- 2. Make sure that the server and all peripheral devices are turned off and that the power cords and all external cables are disconnected.
- 3. Reinstall any adapters and reconnect any internal cables that you removed in other procedures.
- 4. Align the PCI riser-card assembly with the PCI riser connector on the system board and guide pins on the server; then, press down on blue touch points on the PCI riser-card assembly to install the assembly in the server. Make sure that the PCI riser-card assembly is fully seated in the PCI connectors on the system board.

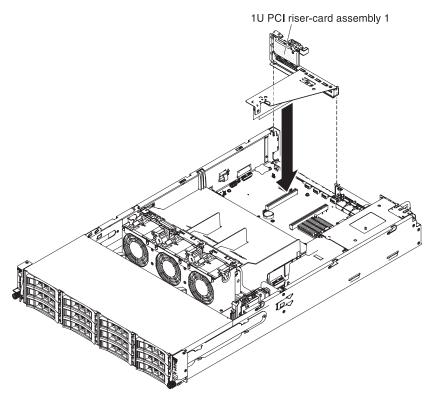


Figure 127. PCI riser-card assembly 1 installation

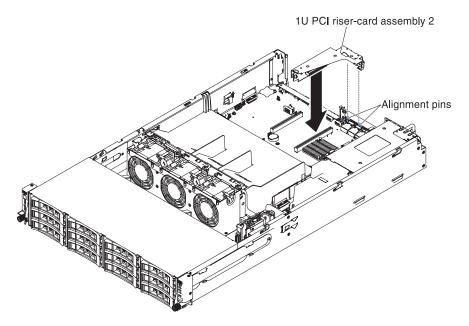


Figure 128. PCI riser-card assembly 2 installation

- 5. Rotate the hot-swap rear hard disk drive cage down (see "Rotating the hot-swap rear hard disk drive cage down" on page 167.
- 6. Install the server top cover (see "Replacing the server top cover" on page 260.
- 7. Reconnect the external cables; then, reconnect the power cords and turn on the peripheral devices and the server.

# Removing the system battery

Use this information to remove the system battery.

## About this task

The following notes describe information that you must consider when replacing the battery:

• Lenovo has designed this product with your safety in mind. The lithium battery must be handled correctly to avoid possible danger. If you replace the battery, you must adhere to the following instructions.

**Note:** In the U. S., call 1-800-IBM-4333 for information about battery disposal.

- If you replace the original lithium battery with a heavy-metal battery or a battery with heavy-metal components, be aware of the following environmental consideration. Batteries and accumulators that contain heavy metals must not be disposed of with normal domestic waste. They will be taken back free of charge by the manufacturer, distributor, or representative, to be recycled or disposed of in a proper manner.
- To order replacement batteries, call 1-800-IBM-SERV within the United States, and 1-800-465-7999 or 1-800-465-6666 within Canada. Outside the U.S. and Canada, call your support center or business partner.

**Note:** After you replace the battery, you must reconfigure the server and reset the system date and time.

Statement 2



#### **CAUTION:**

When replacing the lithium battery, use only Part Number 33F8354 or an equivalent type battery recommended by the manufacturer. If your system has a module containing a lithium battery, replace it only with the same module type made by the same manufacturer. The battery contains lithium and can explode if not properly used, handled, or disposed of.

#### Do not:

- Throw or immerse into water
- Heat to more than 100°C (212°F)
- Repair or disassemble

Dispose of the battery as required by local ordinances or regulations.

To remove the system-board battery, complete the following steps:

- 1. Read the safety information that begins on page "Safety" on page v and "Installation guidelines" on page 31.
- **2.** Follow any special handling and installation instructions that come with the battery.
- 3. Turn off the server (see "Turning off the server" on page 21) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
- 4. Remove the server top cover (see "Removing the server top cover" on page 259).
- 5. Remove the PCI riser-card assembly (see "Removing a PCI riser-card assembly" on page 207).
- 6. Locate the battery on the system board.

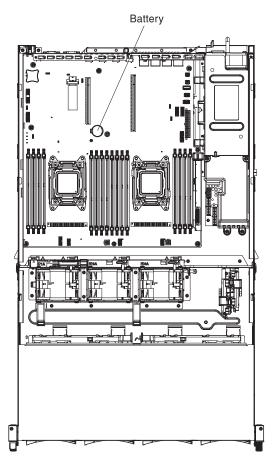
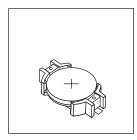


Figure 129. Battery location

- 7. Remove the system-board battery:
  - a. Use one finger to push the battery horizontally out of its housing.





- b. Use your thumb and index finger to lift the battery from the socket.
- 8. Dispose of the battery as required by local ordinances or regulations. See the Environmental Notices and User's Guide on the Documentation CD for more information.

## Replacing the system battery

Use this information to replace the system battery.

# About this task

The following notes describe information that you must consider when replacing the system-board battery in the server.

- When replacing the system-board battery, you must replace it with a lithium battery of the same type from the same manufacturer.
- To order replacement batteries, call 1-800-426-7378 within the United States, and 1-800-465-7999 or 1-800-465-6666 within Canada. Outside the U.S. and Canada, call your sales representative or reseller.
- After you replace the system-board battery, you must reconfigure the server and reset the system date and time.
- To avoid possible danger, read and follow the following safety statement.

## Statement 2



#### **CAUTION:**

When replacing the lithium battery, use only Part Number 33F8354 or an equivalent type battery recommended by the manufacturer. If your system has a module containing a lithium battery, replace it only with the same module type made by the same manufacturer. The battery contains lithium and can explode if not properly used, handled, or disposed of.

#### Do not:

- Throw or immerse into water
- Heat to more than 100°C (212°F)
- Repair or disassemble

Dispose of the battery as required by local ordinances or regulations.

To install the replacement system-board battery, complete the following steps:

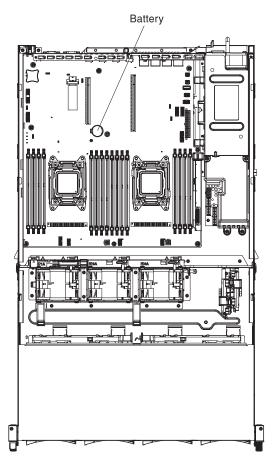
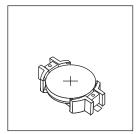
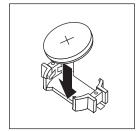


Figure 130. Battery location

- 1. Follow any special handling and installation instructions that come with the replacement battery.
- 2. Insert the new battery:
  - a. Position the battery so that the positive (+) symbol is facing you.





- b. Place the battery into its socket, and press the battery press the battery toward the housing until it clicks into place. Make sure that the battery clip holds the battery securely.
- 3. Install the PCI riser-card assembly (see "Replacing a PCI riser-card assembly" on page 209).
- 4. Install the cover (see "Replacing the server top cover" on page 260).
- 5. Reconnect the external cables; then, reconnect the power cords and turn on the peripheral devices and the server.

**Note:** You must wait approximately 1 to 3 minutes after you connect the server to a power source before the power-control button becomes active.

- 6. Start the Setup utility and reset the configuration.
  - Set the system date and time.
  - Set the power-on password.
  - Reconfigure the server.

See "Using the Setup utility" on page 91 for details.

# Removing the front USB connector assembly cable About this task

To remove the front USB connector assembly cable that is on the side of the server, complete the following steps:

- 1. Read the safety information that begins on page "Safety" on page v and "Installation guidelines" on page 31.
- 2. Turn off the server (see "Turning off the server" on page 21) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
- 3. Remove the server top cover (see "Removing the server top cover" on page 259).
- 4. Rotate the hot-swap rear hard disk drive cage up (see "Rotating the hot-swap rear hard disk drive cage up" on page 166.
- 5. Remove the PCI riser-card assembly (see "Replacing a PCI riser-card assembly" on page 209).
- 6. Remove the air baffle (see "Removing the air baffle" on page 261).
- 7. Make note of where the front USB connector assembly cable is attached to the system board; then, disconnect it.

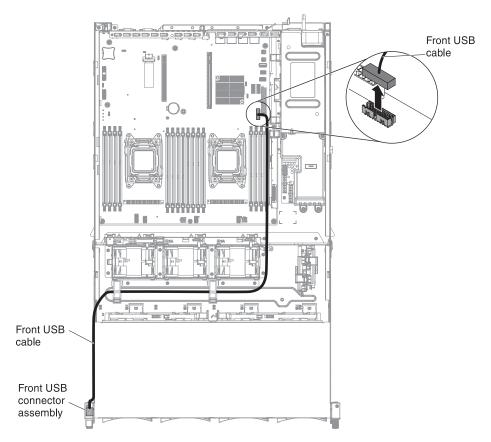


Figure 131. Disconnecting front USB cable

8. Remove the screws from the cable arm cover; then, slide the cable arm cover towards the rear of the server and set it aside.

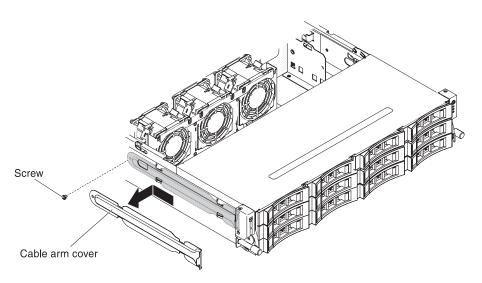


Figure 132. Screws removal

9. Remove the screws from the front USB connector assembly.

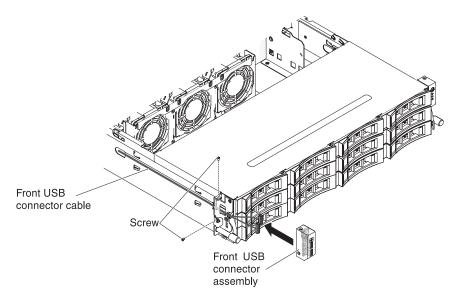


Figure 133. Front USB connector assembly removal

- 10. Disconnect the cable to the front USB connector assembly.
- 11. If you are instructed to return the front USB connector assembly cable, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

# Replacing the front USB connector assembly cable

Use this information to replace the front USB connector assembly cable.

## About this task

To install the front USB connector assembly cable that is on this side of the server, complete the following steps:

- 1. Read the safety information that begins on page "Safety" on page v and "Installation guidelines" on page 31
- 2. Connect the front USB connector assembly cable to the system board and route the internal cabling as shown in the following illustration.

**Attention:** Make sure the relevant cables pass through the cable clips.

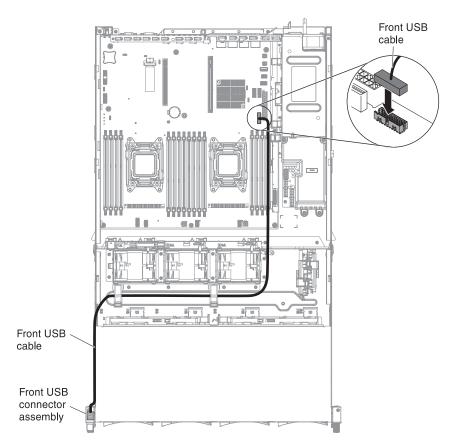
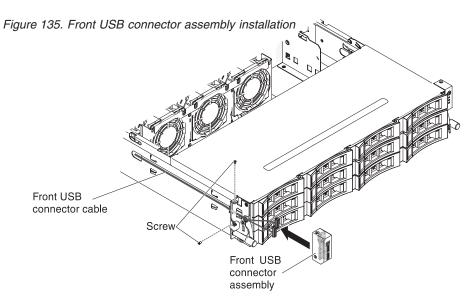


Figure 134. Connecting front USB cable

3. Reconnect the cable to the front USB connector assembly.



- 4. Install the screws to secure the front USB connector assembly to the side of the server.
- 5. Slide the cable arm cover into the retention slots and install the screws to secure it on the side of the chassis.

**Note:** The cable is routed on the outside of the chassis and connected to the system board. The cable must be protected by the cable cover on the side of the chassis.

- 6. Install PCI riser-card assembly 2 (see "Replacing a PCI riser-card assembly" on page 209).
- 7. Install the air baffle (see "Replacing the air baffle" on page 262).
- 8. Rotate the hot-swap rear hard disk drive cage down (see "Rotating the hot-swap rear hard disk drive cage down" on page 167.
- 9. Install the server top cover (see "Replacing the server top cover" on page 260).
- 10. Reconnect the external cables; then, reconnect the power cords and turn on the peripheral devices and the server.

## Removing the front USB connector assembly

Use this information to remove the front USB connector assembly.

#### About this task

To remove the front USB connector assembly that is on the side of the server, complete the following steps:

- 1. Read the safety information that begins on page "Safety" on page v and "Installation guidelines" on page 31.
- 2. Turn off the server (see "Turning off the server" on page 21) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
- 3. Remove the screws from the cable arm cover; then, slide the cable arm cover towards the rear of the server and set it aside.

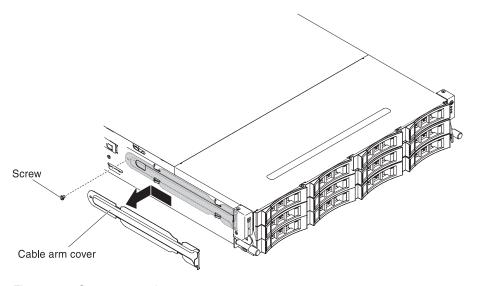


Figure 136. Screw removal

- 4. Remove the screws that secure the front USB connector assembly to the side of the server.
- 5. Disconnect the cable to the front USB connector assembly.

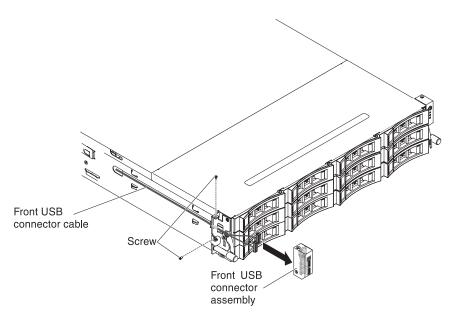


Figure 137. Front USB connector assembly removal

6. If you are instructed to return the front USB connector assembly, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

# Replacing the front USB connector assembly

Use this information to replace the front USB connector assembly.

## **About this task**

To install the front USB connector assembly that is on this side of the server, complete the following steps:

- 1. Read the safety information that begins on page "Safety" on page v and "Installation guidelines" on page 31
- 2. Touch the static-protective package that contains the front USB connector assembly to any *unpainted* metal surface on the outside of the chassis; then, remove the front USB connector assembly from the package.
- 3. Reconnect the cable to the front USB connector assembly.

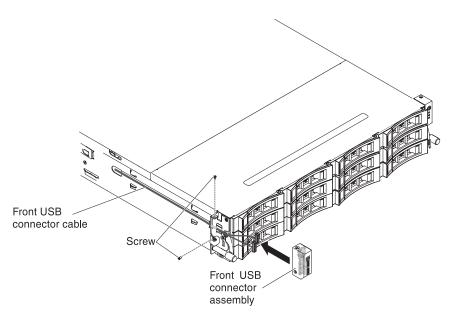


Figure 138. Front USB connector assembly installation

- 4. Install the screws to secure the front USB connector assembly to the side of the server.
- 5. Install the screws to secure the cable arm cover to the server.

**Note:** The cable is routed on the outside of the chassis and connected to the USB connector board. The cable must be protected by the cable cover on the side of the chassis.

- 6. Install the server top cover (see "Replacing the server top cover" on page 260).
- 7. Reconnect the external cables; then, reconnect the power cords and turn on the peripheral devices and the server.

# Removing the upper power supply card from the power-supply paddle card assembly

Use this information to remove the upper power supply card from the power-supply paddle card assembly.

## About this task

**Note:** The power-supply paddle card assembly includes the upper and lower power supply paddle cards.

To remove the upper power supply card, complete the following steps:

- 1. Read the safety information that begins on page "Safety" on page v and "Installation guidelines" on page 31.
- 2. Turn off the server (see "Turning off the server" on page 21) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
- 3. Remove the server cover (see "Removing the server top cover" on page 259).
- 4. Remove the power supply out of the server to disconnect it from the power-supply paddle card assembly.

5. Remove the screws that secure the safety cover (240VA cover) to the chassis and remove the safety cover.

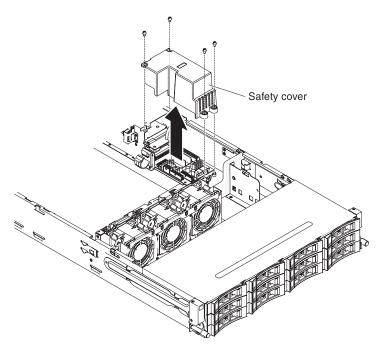


Figure 139. Screws removal

6. After removing the safety cover, you can see the upper power supply card and lower power-supply paddle card.

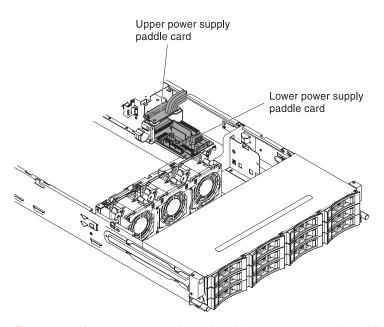


Figure 140. Upper power supply card and lower power-supply paddle card

- 7. Make note of where the cables between the upper power supply card and lower power-supply card are connected; then, disconnect them.
- 8. Remove the screws that secure the upper power supply card to the chassis.
- 9. Lift the upper power supply card out of the server.

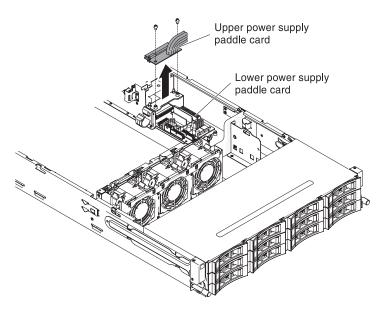


Figure 141. Upper power supply card removal

10. If you are instructed to return the upper power supply card, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

# Replacing the upper power supply card in the power-supply paddle card assembly

Use this information to replace the upper power supply card in the power-supply paddle card assembly.

## About this task

To install the upper power supply card, complete the following steps:

- 1. Touch the static-protective package that contains the upper power supply card to any *unpainted* metal surface on the outside of the chassis; then, remove the upper power supply card from the package.
- 2. Turn off the server (see "Turning off the server" on page 21) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
- 3. Align the upper power supply card with the two pointed tips and two screw holes on the holder; then install the screws.

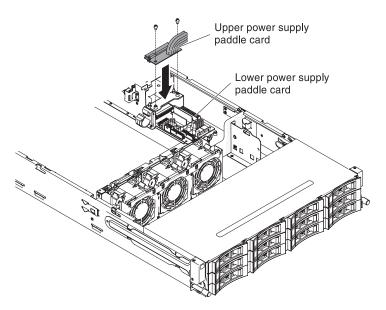


Figure 142. Upper power supply card installation

- 4. Reconnect the cables between the upper power supply card and lower power-supply paddle card.
- 5. Align the screw holes on the safety cover (240VA cover) with the screw holes on the chassis; then install the screws.
- 6. Install the screws to secure the safety cover.

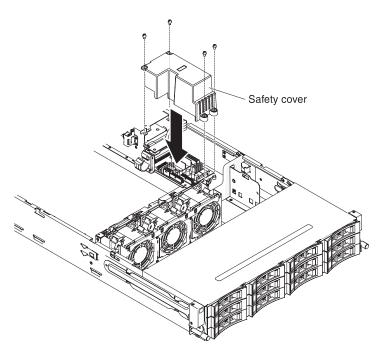


Figure 143. safety cover installation

- 7. Install the server top cover (see "Replacing the server top cover" on page 260).
- 8. Install the power supplies.
- 9. Reconnect the external cables; then, reconnect the power cords and turn on the peripheral devices and the server.

# Removing the lower power supply card from the power-supply paddle card assembly

Use this information to remove the lower power supply card from the power-supply paddle card assembly.

## About this task

**Note:** The power-supply paddle card assembly includes the upper and lower power supply paddle cards.

To remove the lower power supply card, complete the following steps:

- 1. Read the safety information that begins on page "Safety" on page v and "Installation guidelines" on page 31.
- 2. Turn off the server (see "Turning off the server" on page 21) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
- 3. Remove the server top cover (see "Removing the server top cover" on page 259).
- 4. Rotate the hot-swap rear hard disk drive cage up (see "Rotating the hot-swap rear hard disk drive cage up" on page 36.
- 5. Remove the PCI riser-card assembly (see "Removing a PCI riser-card assembly" on page 207).
- 6. Remove the air baffle (see "Removing the air baffle" on page 261).
- 7. Remove the power supply out of the server to disconnect it from the power-supply paddle card assembly.
- 8. Remove the screws that secure the safety cover (240VA cover) to the chassis and remove the safety cover.

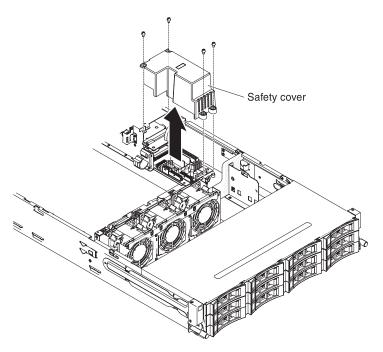


Figure 144. Screws removal

9. After removing the safety cover, you can see the upper power supply card and lower power-supply paddle card.

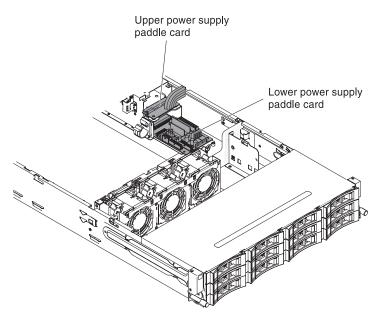
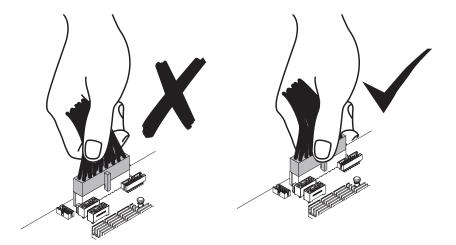


Figure 145. Upper power supply card and lower power-supply paddle card

- 10. Make note of where the cables between the upper power supply card and lower power-supply card are connected; then, disconnect them.
- 11. Make note of which cables are attached to the lower power-supply paddle card then, disconnect them.
- 12. Make note of where the cables between the lower power supply card and system board are connected; then, disconnect them from the system board.
  Attention: When disconnecting the power cable connector from the system board, do not grab the wires. Please grab the middle connector to vertically remove the power cable connector from the system board.



- 13. Remove the screws that secure the lower power-supply card to the chassis.
- 14. Lift the lower power-supply card out of the server.

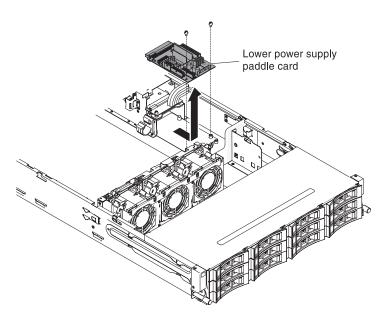


Figure 146. Lower power-supply card removal

15. If you are instructed to return the power-supply paddle card, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

# Replacing the lower power supply card in the power-supply paddle card assembly

Use this information to replace the lower power supply card in the power-supply paddle card assembly.

### About this task

To install the lower power supply card, complete the following steps:

- 1. Touch the static-protective package that contains the power-supply paddle card to any *unpainted* metal surface on the outside of the chassis; then, remove the power-supply paddle card assembly from the package.
- 2. Turn off the server (see "Turning off the server" on page 21) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
- 3. Place the lower power supply card on the mounting studs on the chassis and align the two holes on the back of the lower power supply card with the two screw holes on the chassis; then install the screws. You might need to tilt the lower power-supply paddle card a little bit to make the installation easier.

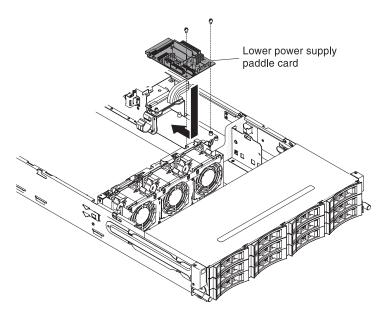


Figure 147. Lower power supply card installation

- 4. Reconnect the cables between the upper power supply card and lower power-supply paddle card.
- 5. Align the screw holes on the safety cover (240VA cover) with the screw holes on the chassis; then install the screws to secure the safety cover.

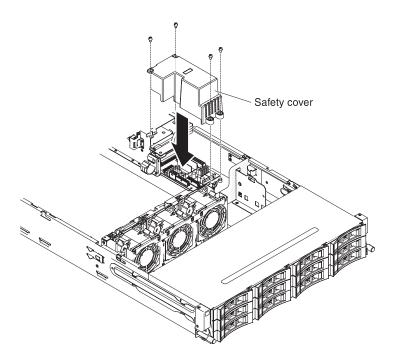
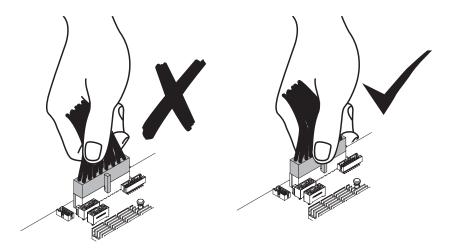


Figure 148. Screws installation

- 6. Reconnect any cables that were removed from the lower power-supply paddle card.
- 7. Reconnect the lower power-supply paddle card cables to the system board. You can refer to the internal cable routing section "Internal cable routing" on page 161 for further details.

## Attention:

a. When reconnecting the power cable connector to the system board, do not grab the wires. Please grab the middle connector to vertically insert the power cable connector to the system board.



b. When reconnecting the power cable connector to the system board, make sure to route the cable underneath the bracket; then, route the cable through the cable retainer clip. The following illustration shows how to route the power cable correctly.

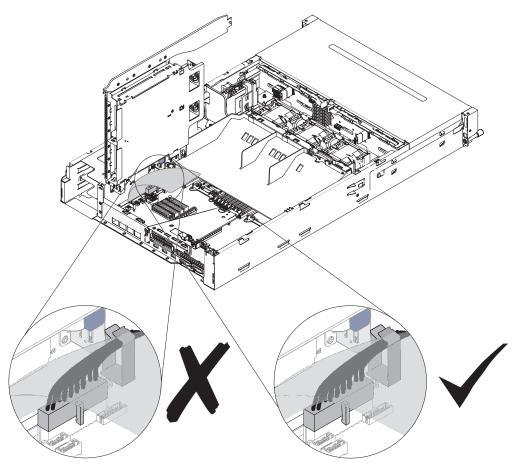


Figure 149. Cable routing

- 8. Install the air baffle (see "Replacing the air baffle" on page 262).
- 9. Install the PCI riser-card assembly (see "Replacing a PCI riser-card assembly" on page 209.
- 10. Rotate the hot-swap rear hard disk drive cage down (see "Rotating the hot-swap rear hard disk drive cage down" on page 167.
- 11. Install the server top cover (see "Replacing the server top cover" on page 260).
- 12. Install the power supplies.
- 13. Reconnect the external cables; then, reconnect the power cords and turn on the peripheral devices and the server.

## Removing the hot-swap hard disk drive backplane

Use this information to remove the hot-swap hard disk drive backplane.

## **About this task**

To remove the hot-swap hard disk drive backplane, complete the following steps:

- 1. Read the safety information that begins on page "Safety" on page v and "Installation guidelines" on page 31.
- 2. Turn off the server (see "Turning off the server" on page 21) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.

- 3. Pull the drives or filler panels out of the server slightly to disengage them from the backplane assembly.
- 4. Remove the server top cover (see "Removing the server top cover" on page 259).
- 5. Open the two cable retainer clips behind the fan cage to release the cabling.

**Note:** You can refer to the internal cable routing section "Internal cable routing" on page 161 for further details.

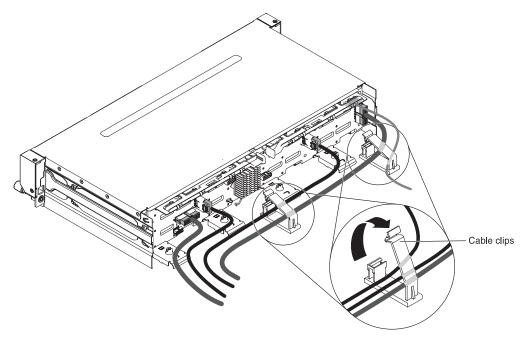


Figure 150. Cable clips

6. Press the release latches and rotate out the top of the backplane; then, slightly lift the backplane out of the server by pulling outwards and lifting it up.

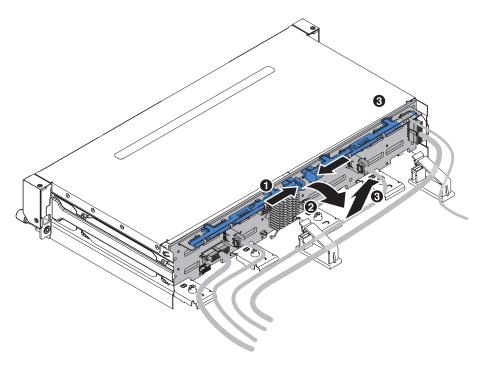


Figure 151. Hot-swap hard disk drive backplane removal

7. Make note of where the power cable and signal cables are attached to the backplane; then, disconnect them.

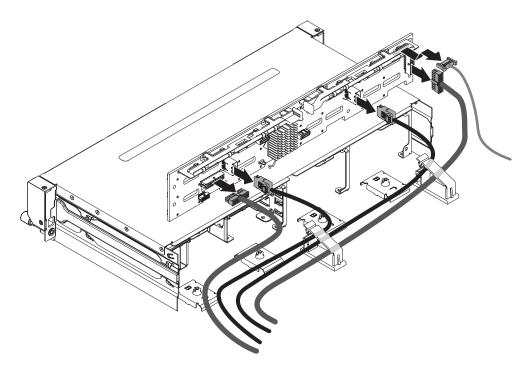


Figure 152. Power cable and signal cables

- 8. Remove the backplane out of the server.
- 9. If you are instructed to return the backplane, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

## Replacing the hot-swap hard disk drive backplane

Use this information replace the hot-swap hard disk drive backplane.

## About this task

To remove the hot-swap hard disk drive backplane, complete the following steps:

## **Procedure**

- 1. Read the safety information that begins on page "Safety" on page v and "Installation guidelines" on page 31.
- 2. Reconnect the power cable and signal cables that you removed from the backplane.

#### Note:

- a. Make sure that Port 1 on the hardware ServeRAID or system board is connected to Port 1 on the backplane. Likewise, Port 0 on the hardware ServeRAID or system board should be connected to Port 0 on the backplane.
- b. You can refer to the internal cable routing section "Internal cable routing" on page 161 for further details.

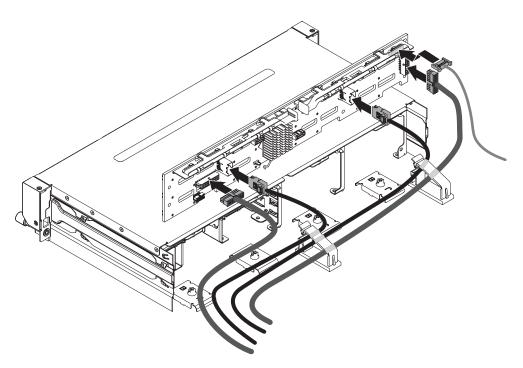


Figure 153. Power cable and signal cables

- 3. Align the backplane with the slot on the chassis
- 4. Lower the backplane into the server. Leave the backplane an angle of elevation so the backplane connectors will not get damaged. Make sure the locating plates securely engages the bottom of the backplane.
- 5. Press the release latches; then, rotate the top of the backplane toward the front of the server until it locks into place.

**Note:** Make sure the backplane is engaged into place by the locating plates and that it is securely installed in the server.

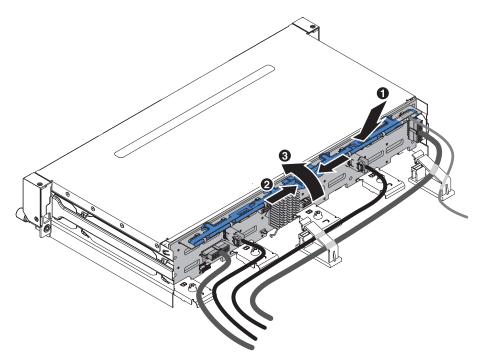


Figure 154. Hot-swap hard disk drive backplane installation

- 6. Close the two cable retainer clips behind the fan cage to secure the cabling.
- 7. Install the server top cover (see "Replacing the server top cover" on page 260.
- 8. Insert the cabling into the two cable clips and fasten the cable clips.
- 9. Reinstall the drives or filler panels.
- 10. Reconnect the external cables; then, reconnect the power cords and turn on the peripheral devices and the server.

# Removing the hot-swap backplane on the rear hard disk drive cage

Use this information to remove the hot-swap backplane on the rear hard disk drive cage.

# About this task

The following illustrations show two different types of hot-swap backplanes.

• Type 1 - SATA

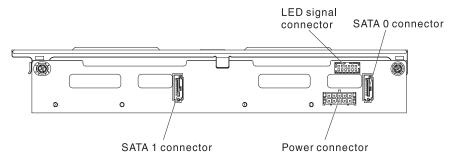


Figure 155. Type 1 - SATA

• Type - SAS

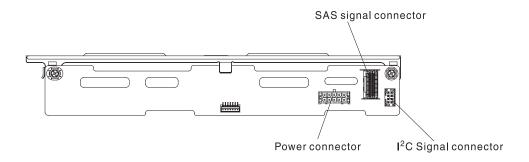


Figure 156. Type 2 - SAS

To remove the hot-swap backplane on the rear hard disk drive cage, complete the following steps.

- 1. Read the safety information that begins on page "Safety" on page v and "Installation guidelines" on page 31.
- 2. Turn off the server (see "Turning off the server" on page 21) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
- 3. Remove the server top cover (see "Removing the server top cover" on page 34).
- 4. Remove all hot-swap hard disk drives in the rear hard disk drive cage (see "Removing a hot-swap hard disk drive" on page 164.
- 5. Lift the backplane out of the rear hard disk drive cage.

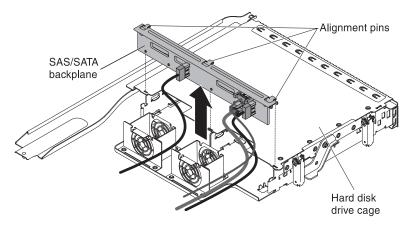


Figure 157. Hot-swap backplane removal

- 6. Disconnect the cables.
  - Type 1 SATA
    - Disconnect the LED signal, SATA signal and power cables from the backplane. Make note of which cable is connected to which connector.

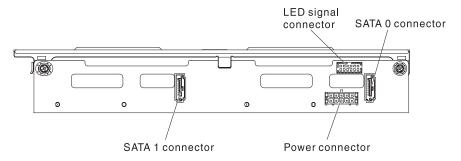


Figure 158. Type 1 - SATA

- Type 2 SAS
  - Disconnect the I<sup>2</sup>C signal, SAS signal and power cables from the backplane. Make note of which cable is connected to which connector.

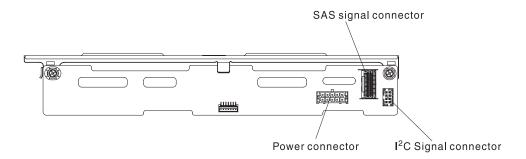


Figure 159. Type 2 - SAS

7. If you are instructed to return the backplane, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

# Replacing the hot-swap backplane on the rear hard disk drive cage

Use this information to replace the hot-swap backplane on the rear hard disk drive cage.

## About this task

The following illustrations show two different types of hot-swap backplanes.

• Type 1 - SATA

**Attention:** This backplane has to be cascaded with the front backplane to make the master-slave connection.

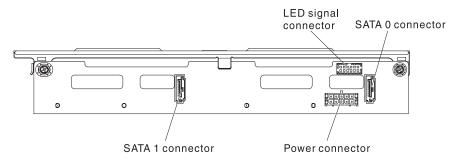


Figure 160. Type 1 - SATA

• Type - SAS

**Note:** This backplane can be an independent configuration (Cascading with the front backplane is unnecessary)

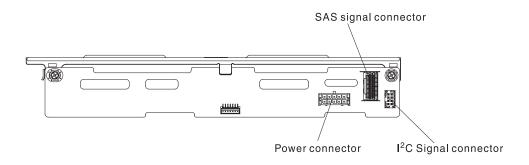


Figure 161. Type 2 - SAS

To install the replacement hot-swap backplane on the rear hard disk drive cage, complete the following steps.

- 1. Read the safety information that begins on page "Safety" on page v and "Installation guidelines" on page 31.
- 2. Reconnect the cables.
  - Type 1 SATA
    - Reconnect the LED signal, SATA signal and power cables.

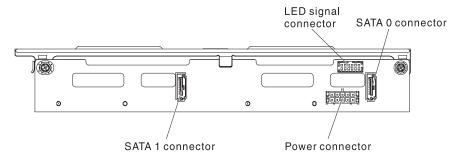


Figure 162. Type 1 - SATA

- Type 2 SAS
  - Reconnect the I<sup>2</sup>C signal, SAS signal and power cables.

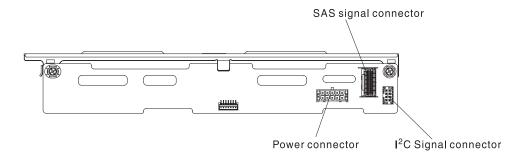


Figure 163. Type 2 - SAS

- 3. Align the backplane with the slot on the rear hard disk drive cage.
- 4. Lower the backplane into the rear hard disk drive cage. Make sure the three alignment pins securely engages the three holes on the hard disk drive cage.

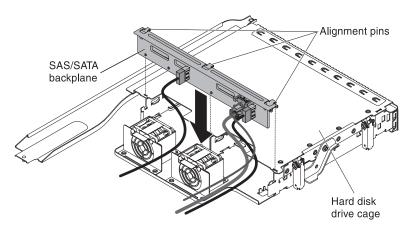


Figure 164. Backplane installation

- 5. For information on how to connect the relevant cabling on the backplane to the server, please refer to "Replacing the hot-swap rear hard disk drive cage" on page 171.
- 6. Install the hot-swap hard disk drives in the rear hard disk drive cage (see "Replacing a hot-swap hard disk drive" on page 165.

- 7. Install the server top cover (see "Replacing the server top cover" on page 260.
- 8. Reconnect the external cables; then, reconnect the power cords and turn on the peripheral devices and the server.

# Removing and replacing Tier 2 CRUs

You may install a Tier 2 CRU yourself or request Lenovo to install it, at no additional charge, under the type of warranty service that is designated for your server.

The illustrations in this document might differ slightly from your hardware.

## Removing a microprocessor and heat sink

Use this information to remove a microprocessor and heat sink.

#### About this task

#### Attention:

- Microprocessors are to be removed only by trained technicians.
- Be extremely careful, the pins on the socket are fragile. Any damage to the pins may require replacing the system board.
- Do not allow the thermal grease on the microprocessor and heat sink to come in contact with anything.
- Removing the heat sink from the microprocessor destroys the even distribution of the thermal grease and requires replacing the thermal grease.
- Do not touch the microprocessor contacts; handle the microprocessor by the edges only. Contaminants on the microprocessor contacts, such as oil from your skin, can cause connection failures between the contacts and the socket.
- Use the microprocessor installation tool that came with the new microprocessor
  to remove and install the microprocessor. Failure to use the microprocessor tool
  may cause damage to the pins on the socket. Any damage to the pins may
  require replacing the system board.

**Note:** Be sure to use the installation tool that comes with your microprocessor installation tool assembly. The tools are similar in function and design, however Tool A has one setting for installing one size of microprocessor, and supports the following families of microprocessors: E5-26xx, E5-46xx. Installation Tool B has two settings for installing two different sizes of microprocessors. The settings that are marked on Tool B are "L" for smaller low core microprocessors, and "H" for larger high core microprocessors. Installation Tool B supports the following families of microprocessors: E5-26xx, E5-46xx, E5-26xx v2, E5-46xx v2.

Microprocessor Installation Tools A and B are shown in the following illustration.

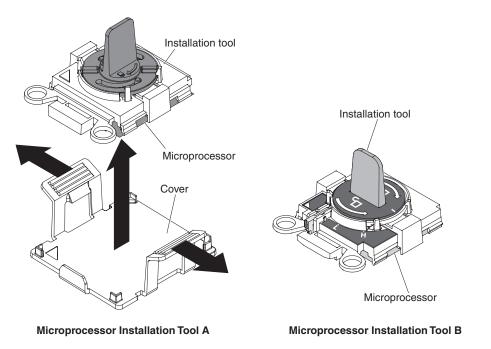


Figure 165. Microprocessor installation tools

To remove a microprocessor and heat sink, complete the following steps:

#### **Procedure**

- 1. Read the safety information that begins on page "Safety" on page v and "Installation guidelines" on page 31.
- 2. Turn off the server (see "Turning off the server" on page 21) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
- 3. Remove the server top cover (see "Removing the server top cover" on page 259).
- 4. Rotate the hot-swap rear hard disk drive cage up (see "Rotating the hot-swap rear hard disk drive cage up" on page 166.
- 5. Remove the PCI riser-card assembly (see "Removing a PCI riser-card assembly" on page 207).
- 6. Remove the air baffle (see "Removing the air baffle" on page 261).
- 7. Disconnect any cables that impede access to the heat sink and microprocessor.
- 8. If you are removing microprocessor 1, remove the memory modules from DIMM connectors 4 and 5. If you are removing microprocessor 2, remove the memory modules from DIMM connectors 12 and 13. See "Removing a memory module" on page 187 for instructions.
- 9. Remove the heat sink:

**Attention:** Do not touch the thermal material on the bottom of the heat sink. Touching the thermal material will contaminate it. If the thermal material on the microprocessor or heat sink becomes contaminated, you must wipe off the contaminated thermal material on the microprocessor or heat sink with the alcohol wipes and reapply clean thermal grease to the heat sink.

a. Loosen the four screws on the corners of the microprocessor retainer.

**Note:** Please use Phillips screw driver No.0 to loosen screws.

b. Lift the heat sink out of the server. If the heat sink sticks to the microprocessor, slightly twist the heat sink back and forth to break the seal. After removal, place the heat sink (with the thermal grease side up) on a clean, flat surface.

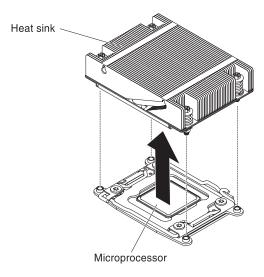


Figure 166. Heat sink removal

10. Open the microprocessor socket release levers and retainer:

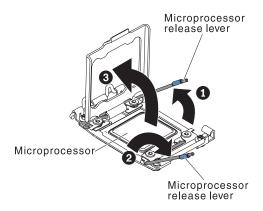


Figure 167. Microprocessor release lever and microprocessor bracket frame

- a. Identify which release lever is labeled as the first release lever. Then release the microprocessor release lever by pressing down on the end, moving it to the side, and releasing it to the open (up) position.
- b. Open the second release lever on the microprocessor socket.
- **c**. Open the microprocessor bracket frame by lifting up the tab on the top edge. Keep the bracket frame in the open position.

**Note:** Do not touch the microprocessor contacts. Contaminants on the microprocessor contacts, such as oil from your skin, can cause connection failures between the contacts and the socket.

- 11. Remove the microprocessor from the socket.
  - a. Select the empty installation tool and ensure that the handle is in the open position. If the installation tool handle is not in the open position, use the following instructions for your installation tool:

• If using Installation Tool A, twist the microprocessor installation tool handle counterclockwise to the open position.

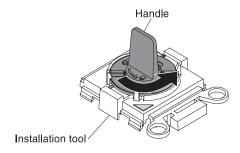


Figure 168. Installation tool handle adjustment

• If using Installation Tool B, 1 lift the interlock latch and hold it up while you 2 twist the microprocessor installation tool handle counterclockwise to the open position, and then release the interlock latch. The following illustration of the installation tool shows the location of the interlock latch and counterclockwise rotation of the handle before loading the microprocessor.

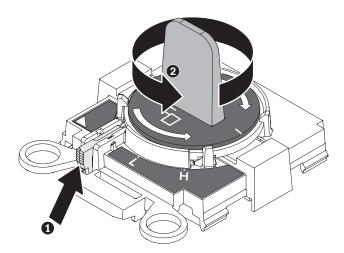


Figure 169. Installation tool handle adjustment

b. Align the installation tool with the screws, as shown in the following graphic, and lower the installation tool on the microprocessor. The installation tool rests flush on the socket only when it is aligned correctly.

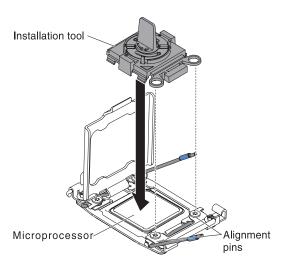


Figure 170. Installation tool alignment

- **c**. Using the following instructions for your installation tool to remove the microprocessor.
  - If using Installation Tool A, gently twist the handle clockwise to the closed position and lift the microprocessor out of the socket.
  - If using Installation Tool B, gently twist the handle of the installation tool clockwise until it locks in the "H" or "L" position, depending on the size of microprocessor, and then lift the microprocessor out of the socket.

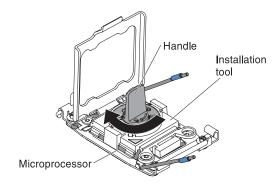


Figure 171. Installation tool handle adjustment

d. Lift the microprocessor out of the socket.

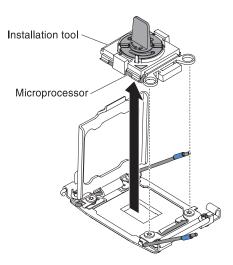


Figure 172. Installation tool removal

12. If you are instructed to return the microprocessor, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you. Do not return the microprocessor installation tool.

## Replacing a microprocessor and heat sink

Use this information to replace a microprocessor and heat sink

#### About this task

**Attention:** When you handle static-sensitive devices, take precautions to avoid damage from static electricity. For details about handling these devices, see "Handling static-sensitive devices" on page 33.

## **Important:**

- A startup (boot) microprocessor must always be installed in microprocessor connector 1 on the system board.
- To ensure correct server operation, make sure that you use microprocessors that are compatible and you have installed an additional DIMM for microprocessor 2. Compatible microprocessors must have the same QuickPath Interconnect (QPI) link speed, integrated memory controller frequency, core frequency, power segment, cache size, and type.
- Microprocessors with different stepping levels are supported in this server. If you install microprocessors with different stepping levels, it does not matter which microprocessor is installed in microprocessor connector 1 or connector 2.
- · If you are installing a microprocessor that has been removed, make sure that it is paired with its original heat sink or a new replacement heat sink. Do not reuse a heat sink from another microprocessor; the thermal grease distribution might be different and might affect conductivity.
- If you are installing a new heat sink, remove the protective backing from the thermal material that is on the underside of the new heat sink.
- If you are installing a new heat-sink assembly that did not come with thermal grease, see "Thermal grease" on page 72 for instructions for applying thermal
- · If you are installing a heat sink that has contaminated thermal grease, see "Thermal grease" on page 72 for instructions for replacing the thermal grease.

There are two types of microprocessor installation tools. The tools are similar in function and design, however Tool A has one setting for installing one size of microprocessor, and supports the following families of microprocessors: E5-26xx, E5-46xx. Installation Tool B has two settings for installing two different sizes of microprocessors. The settings that are marked on Tool B are "L" for smaller low core microprocessors, and "H" for larger high core microprocessors. Installation Tool B supports the following families of microprocessors: E5-26xx, E5-46xx, E5-26xx v2, E5-46xx v2.

Microprocessor Installation Tools A and B are shown in the following illustration.

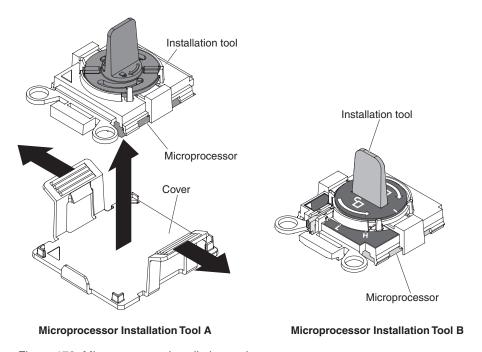


Figure 173. Microprocessor installation tools

To install a microprocessor and heat sink, complete the following steps:

#### **Procedure**

- 1. Read the safety information that begins on page "Safety" on page v and "Installation guidelines" on page 31.
- 2. Open the microprocessor socket release levers and retainer:

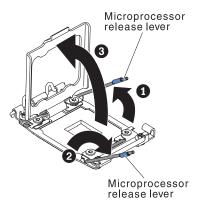


Figure 174. Microprocessor socket levers and retainer disengagement

- a. Identify which release lever is labeled as the first release lever. Then release the microprocessor release lever by pressing down on the end, moving it to the side, and releasing it to the open (up) position.
- b. Open the second release lever on the microprocessor socket.
- C. Open the microprocessor retainer.
   Attention: Do not touch the connectors on the microprocessor and the microprocessor socket.
- 3. Install the microprocessor on the microprocessor socket:
  - a. Touch the static-protective package that contains the new microprocessor to any *unpainted* on the chassis or any *unpainted* metal surface on any other grounded rack component; then, carefully remove the microprocessor from the package.
  - b. Release the sides of the cover and remove the cover from the installation tool. The microprocessor is preinstalled on the installation tool.

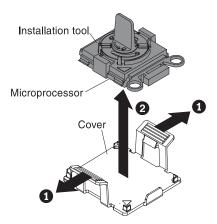


Figure 175. Installation tool cover removal

**Note:** Do not touch the microprocessor contacts. Contaminants on the microprocessor contacts, such as oil from your skin, can cause connection failures between the contacts and the socket.

c. Align the installation tool with the microprocessor socket. The installation tool rests flush on the socket only if properly aligned.

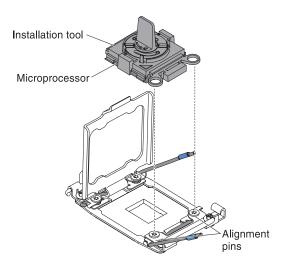


Figure 176. Installation tool alignment

- d. Install the microprocessor using the following instructions for your installation tool.
  - If using Installation Tool A, twist the handle on the microprocessor tool assembly counterclockwise to the open position to insert the microprocessor into the socket, and lift the installation tool out of the socket.
  - If using Installation Tool B, twist the handle of the installation tool assembly counterclockwise until the microprocessor is inserted into the socket, and lift the installation tool out of the socket. The following illustration shows the tool handle in the open position.

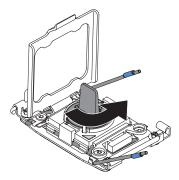


Figure 177. Installation tool handle adjustment

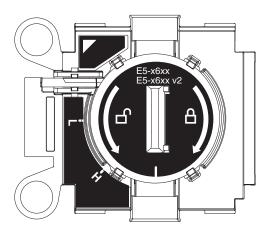


Figure 178. Installation Tool B

#### Attention:

- Do not press the microprocessor into the socket.
- Make sure that the microprocessor is oriented and aligned correctly in the socket before you try to close the microprocessor retainer.
- Do not touch the thermal material on the bottom of the heat sink or on top of the microprocessor. Touching the thermal material will contaminate it.
- 4. Remove the microprocessor socket cover, tape, or label from the surface of the microprocessor socket, if one is present. Store the socket cover in a safe place.

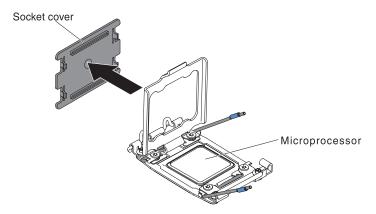


Figure 179. Socket cover removal

**Attention:** When you handle static-sensitive devices, take precautions to avoid damage from static electricity. For details about handling these devices, see "Handling static-sensitive devices" on page 33.

5. Close the microprocessor socket release levers and retainer:

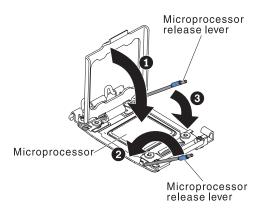


Figure 180. Microprocessor socket levers and retainer engagement

- a. Close the microprocessor retainer on the microprocessor socket.
- b. Identify which release lever is labeled as the first release lever to close and close it.
- c. Close the second release lever on the microprocessor socket.
- 6. Install a heat sink on the microprocessor:

## Attention:

- Do not set down the heat sink after you remove the plastic cover
- Do not touch the thermal grease on the bottom of the heat sink or set down the heat sink after you remove the plastic cover. Touching the thermal grease will contaminate it. If the thermal grease is contaminated, call service and support to request a replacement thermal grease kit. For information about installing the replacement thermal grease, see "Thermal grease" on page 72.

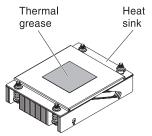


Figure 181. Heat-sink

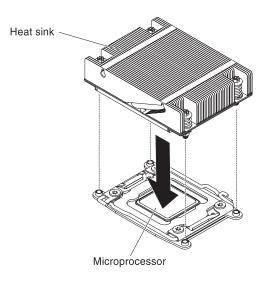


Figure 182. Heat-sink installation

- a. Remove the plastic protective cover from the bottom of the heat sink.
- b. Align the screw holes on the heat sink with the holes on the system board.
- **c**. Place the heat sink on the microprocessor with the thermal-grease side down.
- d. Press firmly on the captive screws and tighten them with a screwdriver. The follow illustration shows the sequence in tightening the screws, which is also shown on top of the heat sink. Begin with the screw labeled as "1", then "2", "3" and finally "4". If possible, each screw should be rotated two full rotations at a time. Repeat until the screws are tight. Do not overtighten the screws by using excessive force. If you are using a torque wrench, tighten the screws to 8.5 Newton-meters (Nm) to 13 Nm (6.3 foot-pounds to 9.6 foot-pounds).

Note: Please use Phillips screw driver No.0 to fasten screws.

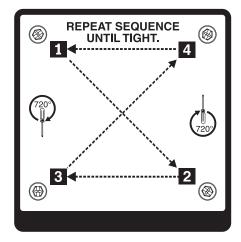


Figure 183. Screws sequence

7. If you are replacing microprocessor 1, install the previously removed memory module into DIMM connector 6. If you are replacing microprocessor 2, install the previously removed memory module from DIMM connector 12. See "Replacing a memory module" on page 188 for instructions.

- 8. Install the air baffle (see "Replacing the air baffle" on page 262).
- 9. Install the PCI riser-card assembly (see "Replacing a PCI riser-card assembly" on page 209.
- 10. Rotate the hot-swap rear hard disk drive cage down (see "Rotating the hot-swap rear hard disk drive cage down" on page 167.
- 11. Install the server top cover (see "Replacing the server top cover" on page 260).
- 12. Reconnect the external cables; then, reconnect the power cords and turn on the peripheral devices and the server.

## Thermal grease:

The thermal grease must be replaced whenever the heat sink has been removed from the top of the microprocessor and is going to be reused or when debris is found in the grease. Use this information to replace damaged or contaminated thermal grease on the microprocessor and heat sink.

#### About this task

When you are installing the heat sink on the same microprocessor that is was removed from, make sure that the following requirements are met:

- The thermal grease on the heat sink and microprocessor is not contaminated.
- Additional thermal grease is not added to the existing thermal grease on the heat sink and microprocessor.

#### Note:

- Read the Safety information on page "Safety" on page v.
- Read the "Installation guidelines" on page 31.
- Read "Handling static-sensitive devices" on page 33.

To replace damaged or contaminated thermal grease on the microprocessor and heat exchanger, complete the following steps:

#### Procedure

- 1. Place the heat sink on a clean work surface.
- 2. Remove the cleaning pad from its package and unfold it completely.
- 3. Use the cleaning pad to wipe the thermal grease from the bottom of the heat sink.

**Note:** Make sure that all of the thermal grease is removed.

4. Use a clean area of the cleaning pad to wipe the thermal grease from the microprocessor; then, dispose of the cleaning pad after all of the thermal grease is removed.

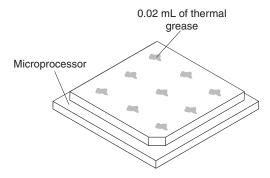


Figure 184. Thermal grease distribution

5. Use the thermal-grease syringe to place 9 uniformly spaced dots of 0.02 mL each on the top of the microprocessor. The outermost dots must be within approximately 5 mm of the edge of the microprocessor; this is to ensure uniform distribution of the grease.



Figure 185. Syringe

**Note:** If the grease is properly applied, approximately half of the grease will remain in the syringe.

6. Install the heat sink onto the microprocessor as described in "Replacing a microprocessor and heat sink" on page 244.

## Removing the system board

Use this information to remove the system board.

## About this task

#### Note:

- 1. Before you replace the system board, make sure that you backup any features on demand (FoD) keys that were enabled. Remember to re-enable the features on demand (FoD) keys after installing the new system board. For more information on Features on Demand (FoD), including instructions for automating the activation and installation of the activation key by using ToolsCenter or IBM Systems Director, see the Features on Demand User's Guide at /http://www.ibm.com/systems/x/fod/ under the Help section.
- 2. When you replace the system board, you must either update the server with the latest firmware or restore the pre-existing firmware from a diskette or CD image. Make sure that you have the latest firmware or a copy of the pre-existing firmware before you proceed.

Before you remove the system board from the server, take the following steps to save data, firmware, and configuration data:

Record all system configuration information, such as IMM IP addresses, vital product data, and the machine type, model number, serial number, Universally Unique Identifier, and asset tag of the server.

- Using the Advanced Settings Utility (ASU), save the system configuration to external media.
- · Save the system-event log to external media.

**Note:** When you replace the system board, you must either update the server with the latest firmware or restore the pre-existing firmware that the customer provides on a diskette or CD image. Make sure that you have the latest firmware or a copy of the pre-existing firmware before you proceed.

To remove the system board, complete the following steps:

#### **Procedure**

- 1. Read the safety information that begins on page "Safety" on page v and "Installation guidelines" on page 31.
- 2. Turn off the server (see "Turning off the server" on page 21) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
- 3. Pull the power supplies out of the rear of the server, just enough to disengage them from the server.
- 4. Remove the server top cover (see "Removing the server top cover" on page 259).
- 5. Remove the hot-swap rear hard disk drive cage (see "Removing the hot-swap rear hard disk drive cage" on page 170.
- 6. Remove all PCI riser-card assemblies and adapters (see "Removing a PCI riser-card assembly" on page 207, "Removing an adapter from the PCI riser-card assembly" on page 178 and "Removing a ServeRAID adapter from the PCI riser-card assembly" on page 190.
- 7. Remove the air baffle (see "Removing the air baffle" on page 261).
- 8. Remove all heat sinks and microprocessors, and set them aside on a static-protective surface for reinstallation (see "Removing a microprocessor and heat sink" on page 239.

#### Note:

- a. Be sure to keep the heat sink and microprocessor from each microprocessor socket of the old system board together so that you can install them on the new system board together. For example, when you remove the heat sink and microprocessor from microprocessor socket 1 of the old system board , install them both on the same socket on the new system board.
- b. Use an alcohol wipe to remove any thermal grease from the tabs on the microprocessor bracket frame on the old system board.
- 9. Remove all DIMMs, and place them on a static-protective surface for reinstallation (see "Removing a memory module" on page 187).
  - **Important:** Make a note of the location of each DIMM as you remove it, so that you can later reinstall it in the same connector.
- 10. Remove the system battery (see "Removing the system battery" on page 210).
- 11. Remove the USB embedded hypervisor flash device (see "Removing a USB embedded hypervisor flash device" on page 198.
- 12. Disconnect all cables from the system board. Make a list of each cable as you disconnect it; you can then use this as a checklist when you install the new system board (see "Internal cable routing" on page 161 and "System-board internal connectors" on page 25 for more information).

13. Loosen the nine screws that secure the system board to the chassis.

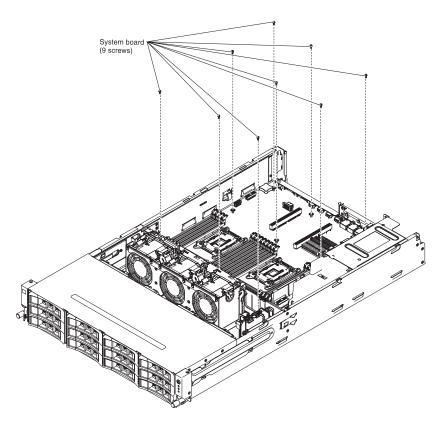


Figure 186. 9 screws

14. Grasp two holders and slightly lift the system board.

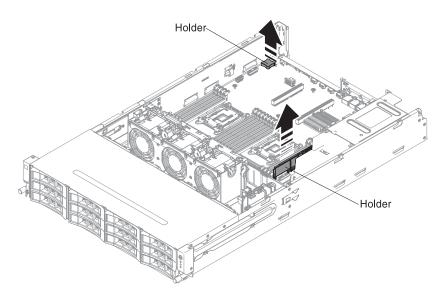


Figure 187. System board removal

15. Gently push the external input/output connectors out of their respective holes in the chassis.

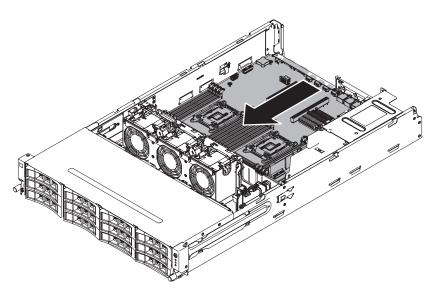


Figure 188. System board removal

16. Grasp the system board by the holders; then, carefully lift up the system board and remove it from the chassis, being careful not to damage any surrounding components.

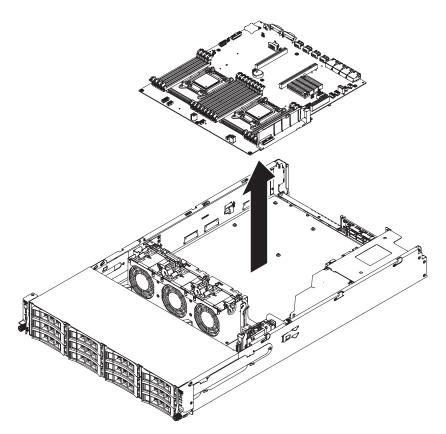


Figure 189. System board removal

17. Remove the socket dust covers from the microprocessor sockets on the new system board and place them on the microprocessor sockets of the old system board that you are removing.

18. If you are instructed to return the system board, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

**Attention:** Make sure to place the socket covers for the microprocessor sockets on the system board before returning the system board.

## Replacing the system board

Use this information to replace the system board.

#### About this task

#### Note:

- 1. Before you replace the system board, make sure that you backup any features on demand (FoD) keys that were enabled. Remember to re-enable the features on demand (FoD) keys after installing the new system board. For more information on Features on Demand (FoD), including instructions for automating the activation and installation of the activation key by using ToolsCenter or IBM Systems Director, see the Features on Demand User's Guide at /http://www.ibm.com/systems/x/fod/ under the Help section.
- 2. When you reassemble the components in the server, be sure to route all cables carefully so that they are not exposed to excessive pressure and that they do not get pinched when you reinstall the system board (see "Internal cable routing" on page 161 and "System-board internal connectors" on page 25 for more information). In addition, make sure the cables are inserted into the relevant cable clips.
- 3. When you replace the system board, you must either update the server with the latest firmware or restore the pre-existing firmware that the customer provides on a diskette or CD image. Make sure that you have the latest firmware or a copy of the pre-existing firmware before you proceed. See "Updating the firmware" on page 87, "Updating the Universal Unique Identifier (UUID)" on page 106, and "Updating the DMI/SMBIOS data" on page 109 for more information.

Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code

To install the system board, complete the following steps:

#### Procedure

- 1. Read the safety information that begins on page "Safety" on page v and "Installation guidelines" on page 31.
- 2. Grasp two holders and lower the system board into the chassis.

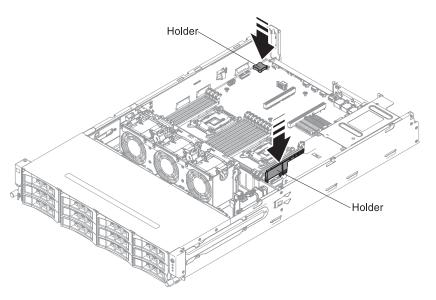


Figure 190. System board installation

3. Gently push the system board by holders to insert the external input/output connectors into their respective holes in the chassis.

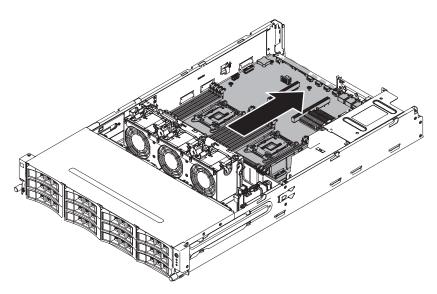


Figure 191. System board installation

4. Install the screws to secure the system board to the chassis.

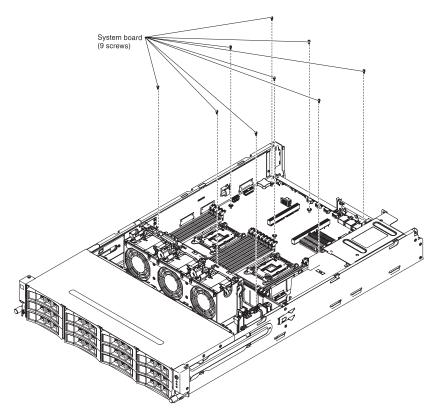


Figure 192. 9 screws

- 5. Install the USB embedded hypervisor flash device (see "Replacing a USB embedded hypervisor flash device" on page 200).
- 6. Install the system battery (see "Replacing the system battery" on page 212).
- 7. Install the DIMMs (see "Replacing a memory module" on page 188).
- 8. Install each microprocessor with its matching heat sink (see "Replacing a microprocessor and heat sink" on page 244).
- 9. Install the socket covers that you removed from the microprocessor sockets on the new system board and place them on the microprocessor sockets of the old system board, if you have not done so.
- 10. Reconnect to the system board the cables that you disconnected in step 12 of "Removing the system board" on page 252 (see "Internal cable routing" on page 161 and "System-board internal connectors" on page 25 for more information).
- 11. Install the air baffle (see "Replacing the air baffle" on page 262), making sure that all cables are out of the way.
- 12. Install any removed adapters into the particular PCI riser-card assemblies (see "Replacing an adapter on the PCI riser-card assembly" on page 181 and "Replacing a ServeRAID adapter on the PCI riser-card assembly" on page 192).
- 13. Install the PCI riser-card assemblies (see "Replacing a PCI riser-card assembly" on page 209).
- 14. Install the hot-swap rear hard disk drive cage (see "Replacing the hot-swap rear hard disk drive cage" on page 171).
- 15. Install the server top cover (see "Replacing the server top cover" on page 260).
- **16**. Push the power supplies back into the server.

- 17. Reconnect the external cables; then, reconnect the power cords and turn on the peripheral devices and the server.
- 18. Start the Setup utility and reset the configuration.
  - Set the system date and time.
  - Set the power-on password.
  - Reconfigure the server.

See "Using the Setup utility" on page 91.

- 19. Either update the server with the latest RAID firmware or restore the pre-existing firmware from a diskette or CD image (see "Updating the firmware" on page 87).
- 20. Update the UUID (see "Updating the Universal Unique Identifier (UUID)" on page 106).
- 21. Update the DMI/SMBIOS (see "Updating the DMI/SMBIOS data" on page 109).

# Removing and replacing consumable and structural parts

This section provides information for removing and replacing consumable and structural parts in the server.

Replacement of consumable parts and structural parts is your responsibility. If Lenovo installs a consumable part or structural part at your request, you will be charged for the installation.

The illustrations in this document might differ slightly from the hardware.

# Removing the server top cover

Use this information to remove the server top cover.

#### About this task

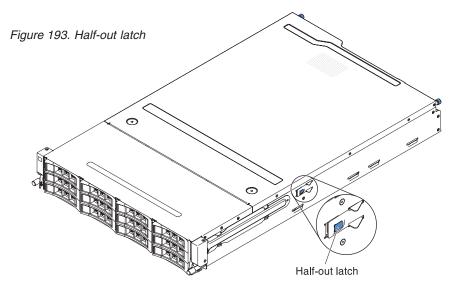
To remove the server top cover, complete the following steps:

#### **Procedure**

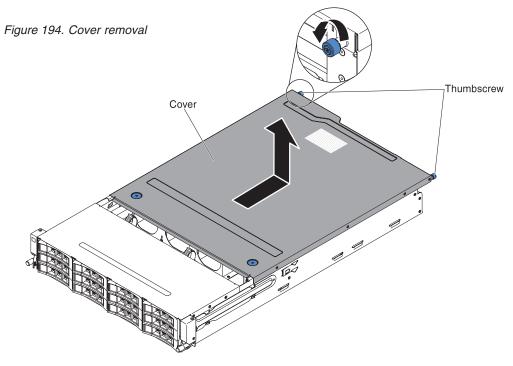
- 1. Read the safety information that begins on page "Safety" on page v and "Installation guidelines" on page 31.
- 2. Turn off the server (see "Turning off the server" on page 21) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
- 3. If the server has been installed in a rack, press the two release latches on the front of the server and remove the server out of the rack enclosure.

#### Attention:

- Two or more people are required to remove the system from a rack cabinet.
- To completely remove the server from the rack, press the latches on the sides on the slide rails.



- 4. Loosen the two thumbscrews that secure the cover to the chassis.
- 5. Press on the two blue grip points and slide the cover toward the rear; then, lift the cover off the server. Set the cover aside.



6. If you are instructed to return the server top cover, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

# Replacing the server top cover

Use this information to replace the server top cover.

To install the server top cover, complete the following steps:

#### **Procedure**

- 1. Make sure that all cables, adapters, and other components are installed and seated correctly and that you have not left loose tools or parts inside the server. Also, make sure that all internal cables are correctly routed.
- 2. Align the cover over the server (toward the rear of the server) until the cover edges slip into position over the chassis.
  - **Attention:** Before sliding the cover forward, make sure that all the tabs on both the front, rear, and side of the cover engage the chassis correctly. If all the tabs do not engage the chassis correctly, it will be hard to remove the server top cover in the future.
- 3. Slide the cover forward toward the front of the server until the cover is completely closed.
- 4. Tighten the thumbscrews on the rear of the cover to secure the cover to the chassis.

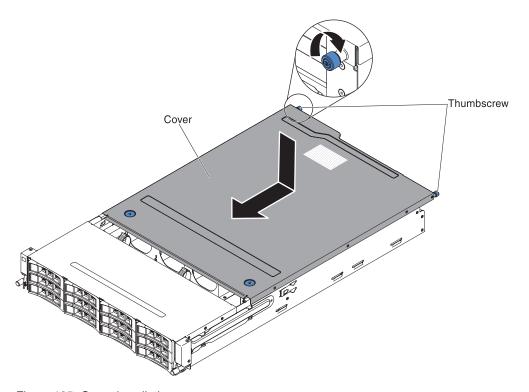


Figure 195. Cover installation

- 5. Install the server into the rack enclosure and tighten the two front thumbscrews to secure the server in the rack.
  - **Attention:** Two or more people are required to install the system in a rack cabinet.
- 6. Reconnect the external cables; then, reconnect the power cords and turn on the peripheral devices and the server.

# Removing the air baffle

Use this information to remove the air baffle from the server.

To remove the air baffle, complete the following steps.

#### **Procedure**

- 1. Read the safety information that begins on page "Safety" on page v and "Installation guidelines" on page 31.
- 2. Turn off the server (see "Turning off the server" on page 21) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
- 3. Remove the server top cover (see "Removing the server top cover" on page
- 4. Rotate the hot-swap rear hard disk drive cage up (see "Rotating the hot-swap rear hard disk drive cage up" on page 166.
- 5. If necessary, remove the PCI riser-card assembly (see "Removing a PCI riser-card assembly" on page 207.
- 6. Grasp the top of the air baffle and lift the air baffle out of the server. Attention: For proper cooling and airflow, reinstall the air baffle, making sure all cables are out of the way, before you turn on the server. Operating the server with the air baffle removed might damage server components.

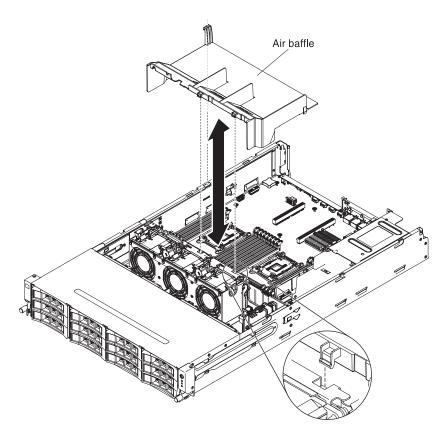


Figure 196. Air baffle removal

7. If you are instructed to return the air baffle, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

## Replacing the air baffle

Use this information to replace the air baffle.

To install the air baffle, complete the following steps.

#### **Procedure**

- 1. Read the safety information that begins on page "Safety" on page v and "Installation guidelines" on page 31.
- 2. Align the tabs on the air baffle with the slots on the chassis.
- 3. Lower the air baffle into the server. Make sure that the tabs on the air baffle are inserted into the holes on the chassis (see the illustration).

**Attention:** For proper cooling and airflow, reinstall the air baffle before you turn on the server. Operating the server with the air baffle removed might damage server components.

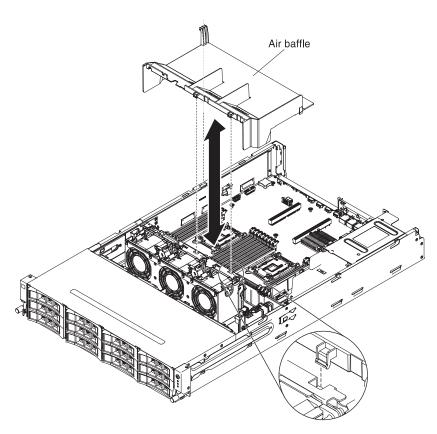


Figure 197. Air baffle installation

- 4. If necessary, install the PCI riser-card assembly (see "Replacing a PCI riser-card assembly" on page 209.
- 5. Rotate the hot-swap rear hard disk drive cage down (see "Rotating the hot-swap rear hard disk drive cage down" on page 167.
- 6. Install the server top cover (see "Replacing the server top cover" on page 260.
- 7. Reconnect the external cables; then, reconnect the power cords and turn on the peripheral devices and the server.

## Removing the paddle card safety cover (240VA cover)

Use this information to remove the paddle card safety cover (240VA cover) from the server.

To remove the paddle card safety cover, complete the following steps.

#### **Procedure**

- 1. Read the safety information that begins on page "Safety" on page v and "Installation guidelines" on page 31.
- 2. Turn off the server (see "Turning off the server" on page 21) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
- 3. Remove the server top cover (see "Removing the server top cover" on page 259).
- 4. Remove the screws that secure the safety cover to the chassis and remove the safety cover.

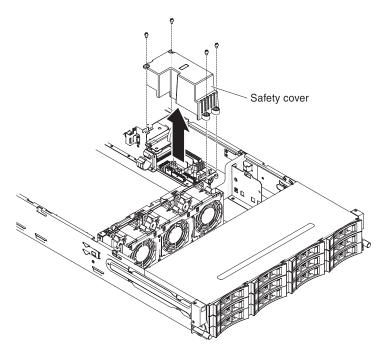


Figure 198. Screws removal

5. If you are instructed to return the air baffle, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

# Replacing the paddle card safety cover (240VA cover)

Use this information to replace the paddle card safety cover (240VA cover)

#### About this task

To install the paddle card safety cover, complete the following steps.

## **Procedure**

- 1. Read the safety information that begins on page "Safety" on page v and "Installation guidelines" on page 31.
- 2. Install the screws to secure the safety cover on the power-supply paddle card assembly.

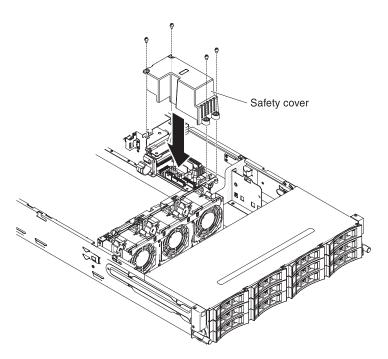


Figure 199. Screws installation

- 3. Install the server top cover (see "Replacing the server top cover" on page 260.
- 4. Reconnect the external cables; then, reconnect the power cords and turn on the peripheral devices and the server.

# Appendix A. Integrated management module II (IMM2) error messages

When a hardware event is detected by the IMM on the server, the IMM logs that event in the system-event log in the server.

For each event code, the following fields are displayed:

#### **Event identifier**

A hexadecimal identifier that uniquely identifies an event or class of events. In this documentation, the event identifiers are prefixed with 0x and followed by eight characters.

## **Event description**

The logged message string that appears for an event. When the event string is displayed in the system-event log, information such as a specific component is displayed. In this documentation, that additional information appears as variables, such as [arg1] or [arg2].

## Explanation

Additional information to explain why the event occurred.

## Severity

An indication of the level of concern for the condition. In the system-event log, severity is abbreviated to the first character. The following severities can be displayed.

**Info:** The event was recorded for audit purposes, usually a user action or a change of states that is normal behavior.

## Warning:

The event is not as severe as an error, but if possible, the condition should be corrected before it becomes an error. It might also be a condition that requires additional monitoring or maintenance.

**Error:** The event is a failure or critical condition that impairs service or an expected function.

## **Alert Category**

Similar events are grouped together in categories. The alert category is in the following format:

severity - device

severity is one of the following severity levels:

- Critical: A key component in the server is no longer functioning.
- Warning: The event might progress to a critical level.
- **System:** The event is the result of a system error or a configuration change.

*device* is the specific device in the server that caused the event to be generated.

## Serviceable

Whether user action is required to correct the problem.

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#### **CIM Information**

The prefix of the message ID and the sequence number that is used by the CIM message registry.

## **SNMP Trap ID**

The SNMP trap ID that is found in the SNMP alert management information base (MIB).

## Automatically contact Service

If this field is set to **Yes**, and you have enabled Electronic Service Agent<sup>T</sup> (ESA), Lenovo Support will be notified automatically if the event is generated.

While you wait for Lenovo Support to call, you can perform the recommended actions for the event.

#### User response

The actions that you should perform to solve the event.

Perform the steps listed in this section in the order shown until the problem is solved. After you perform all of the actions that are described in this field, if you cannot solve the problem, contact Lenovo Support.

**Note:** This list includes error codes and messages that might not apply to this machine type and model.

The following is the list of IMM2 error messages and suggested actions to correct the detected server problems. For more information about IMM2, see the *Integrated Management Module II User's Guide* at http://www.ibm.com/support/entry/portal/docdisplay?lndocid=MIGR-5086346.

# IMM Events that automatically notify Support

You can configure the Integrated Management Module II (IMM2) to automatically notify Support (also known as *call home*) if certain types of errors are encountered. If you have configured this function, see the table for a list of events that automatically notify Support.

Table 15. Events that automatically notify Support

|                   |   | Automatically<br>Notify |
|-------------------|---|-------------------------|
| Event ID          | Message String  | Support                 |
| 40000086-00000000 | Test Call Home Generated by user [arg1].  | Yes                     |
| 40000087-00000000 | Manual Call Home by user [arg1]: [arg2].  | Yes                     |
| 80010202-0701ffff | Numeric sensor<br>[NumericSensorElementName] going low<br>(lower critical) has asserted. (CMOS<br>Battery)  | Yes                     |
| 80010902-0701ffff | Numeric sensor<br>[NumericSensorElementName] going high<br>(upper critical) has asserted.                   | Yes                     |
| 806f0021-2201ffff | Fault in slot [PhysicalConnectorSystemElementName] on system [ComputerSystemElementName]. (No Op ROM Space) | Yes                     |

Table 15. Events that automatically notify Support (continued)

| Event ID          | Message String  | Automatically<br>Notify<br>Support |
|-------------------|---|------------------------------------|
| 806f0021-2582ffff | Fault in slot [PhysicalConnectorSystemElementName] on system [ComputerSystemElementName]. (All PCI Error) | Yes                                |
| 806f0021-3001ffff | Fault in slot [PhysicalConnectorSystemElementName] on system [ComputerSystemElementName]. (PCI 1)         | Yes                                |
| 806f0108-0a01ffff | [PowerSupplyElementName] has Failed.<br>(Power Supply 1)  | Yes                                |
| 806f0108-0a02ffff | [PowerSupplyElementName] has Failed.<br>(Power Supply 2)  | Yes                                |
| 806f010c-2001ffff | Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 1)   | Yes                                |
| 806f010c-2002ffff | Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 2)   | Yes                                |
| 806f010c-2003ffff | Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 3)   | Yes                                |
| 806f010c-2004ffff | Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 4)   | Yes                                |
| 806f010c-2005ffff | Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 5)   | Yes                                |
| 806f010c-2006ffff | Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 6)   | Yes                                |
| 806f010c-2007ffff | Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 7)   | Yes                                |
| 806f010c-2008ffff | Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 8)   | Yes                                |
| 806f010c-2009ffff | Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 9)   | Yes                                |

Table 15. Events that automatically notify Support (continued)

|                   |  | Automatically<br>Notify |
|-------------------|--|-------------------------|
| Event ID          | Message String   | Support                 |
| 806f010c-200affff | Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 10)   | Yes                     |
| 806f010c-200bffff | Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 11)   | Yes                     |
| 806f010c-200cffff | Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 12)   | Yes                     |
| 806f010c-200dffff | Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 13)   | Yes                     |
| 806f010c-200effff | Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 14)   | Yes                     |
| 806f010c-200fffff | Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 15)   | Yes                     |
| 806f010c-2010ffff | Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 16)   | Yes                     |
| 806f010c-2581ffff | Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (All DIMMS) | Yes                     |
| 806f010d-0400ffff | The Drive [StorageVolumeElementName] has been disabled due to a detected fault. (Drive 0)                  | Yes                     |
| 806f010d-0401ffff | The Drive [StorageVolumeElementName] has been disabled due to a detected fault. (Drive 1)                  | Yes                     |
| 806f010d-0402ffff | The Drive [StorageVolumeElementName] has been disabled due to a detected fault. (Drive 2)                  | Yes                     |
| 806f010d-0403ffff | The Drive [StorageVolumeElementName] has been disabled due to a detected fault. (Drive 3)                  | Yes                     |
| 806f010d-0404ffff | The Drive [StorageVolumeElementName] has been disabled due to a detected fault. (Drive 4)                  | Yes                     |
| 806f010d-0405ffff | The Drive [StorageVolumeElementName] has been disabled due to a detected fault. (Drive 5)                  | Yes                     |

Table 15. Events that automatically notify Support (continued)

|                   |  | Automatically<br>Notify |
|-------------------|--|-------------------------|
| Event ID          | Message String   | Support                 |
| 806f010d-0406ffff | The Drive [StorageVolumeElementName] has been disabled due to a detected fault. (Drive 6)                    | Yes                     |
| 806f010d-0407ffff | The Drive [StorageVolumeElementName] has been disabled due to a detected fault. (Drive 7)                    | Yes                     |
| 806f010d-0408ffff | The Drive [StorageVolumeElementName] has been disabled due to a detected fault. (Drive 8)                    | Yes                     |
| 806f010d-0409ffff | The Drive [StorageVolumeElementName] has been disabled due to a detected fault. (Drive 9)                    | Yes                     |
| 806f010d-040affff | The Drive [StorageVolumeElementName] has been disabled due to a detected fault. (Drive 10)                   | Yes                     |
| 806f010d-040bffff | The Drive [StorageVolumeElementName] has been disabled due to a detected fault. (Drive 11)                   | Yes                     |
| 806f010d-040cffff | The Drive [StorageVolumeElementName] has been disabled due to a detected fault. (Drive 12)                   | Yes                     |
| 806f010d-040dffff | The Drive [StorageVolumeElementName] has been disabled due to a detected fault. (Drive 13)                   | Yes                     |
| 806f011b-0701ffff | The connector [PhysicalConnectorElementName] has encountered a configuration error. (Front USB)              | Yes                     |
| 806f0207-0301ffff | [ProcessorElementName] has Failed with FRB1/BIST condition. (CPU 1)  | Yes                     |
| 806f0207-0302ffff | [ProcessorElementName] has Failed with FRB1/BIST condition. (CPU 2)  | Yes                     |
| 806f0207-2584ffff | [ProcessorElementName] has Failed with FRB1/BIST condition. (All CPUs)                                       | Yes                     |
| 806f020d-0400ffff | Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 0)       | Yes                     |
| 806f020d-0401ffff | Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 1)       | Yes                     |
| 806f020d-0402ffff | Failure Predicted on drive<br>[StorageVolumeElementName] for array<br>[ComputerSystemElementName]. (Drive 2) | Yes                     |
| 806f020d-0403ffff | Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 3)       | Yes                     |

Table 15. Events that automatically notify Support (continued)

|                   |   | Automatically<br>Notify |
|-------------------|---|-------------------------|
| Event ID          | Message String  | Support                 |
| 806f020d-0404ffff | Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 4)  | Yes                     |
| 806f020d-0405ffff | Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 5)  | Yes                     |
| 806f020d-0406ffff | Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 6)  | Yes                     |
| 806f020d-0407ffff | Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 7)  | Yes                     |
| 806f020d-0408ffff | Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 8)  | Yes                     |
| 806f020d-0409ffff | Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 9)  | Yes                     |
| 806f020d-040affff | Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 10) | Yes                     |
| 806f020d-040bffff | Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 11) | Yes                     |
| 806f020d-040cffff | Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 12) | Yes                     |
| 806f020d-040dffff | Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 13) | Yes                     |
| 806f050c-2001ffff | Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 1) | Yes                     |
| 806f050c-2002ffff | Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 2) | Yes                     |
| 806f050c-2003ffff | Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 3) | Yes                     |
| 806f050c-2004ffff | Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 4) | Yes                     |

Table 15. Events that automatically notify Support (continued)

| Event ID          | Message String   | Automatically<br>Notify<br>Support |
|-------------------|--|------------------------------------|
| 806f050c-2005ffff | Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 5)  | Yes                                |
| 806f050c-2006ffff | Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 6)  | Yes                                |
| 806f050c-2007ffff | Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 7)  | Yes                                |
| 806f050c-2008ffff | Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 8)  | Yes                                |
| 806f050c-2009ffff | Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 9)  | Yes                                |
| 806f050c-200affff | Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 10) | Yes                                |
| 806f050c-200bffff | Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 11) | Yes                                |
| 806f050c-200cffff | Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 12) | Yes                                |
| 806f050c-200dffff | Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 13) | Yes                                |
| 806f050c-200effff | Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 14) | Yes                                |
| 806f050c-200fffff | Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 15) | Yes                                |
| 806f050c-2010ffff | Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 16) | Yes                                |

Table 15. Events that automatically notify Support (continued)

| Event ID          | Message String   | Automatically<br>Notify<br>Support |
|-------------------|--|------------------------------------|
| 806f050c-2581ffff | Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (All DIMMS) | Yes                                |
| 806f060d-0400ffff | Array [ComputerSystemElementName] has failed. (Drive 0)  | Yes                                |
| 806f060d-0401ffff | Array [ComputerSystemElementName] has failed. (Drive 1)  | Yes                                |
| 806f060d-0402ffff | Array [ComputerSystemElementName] has failed. (Drive 2)  | Yes                                |
| 806f060d-0403ffff | Array [ComputerSystemElementName] has failed. (Drive 3)  | Yes                                |
| 806f060d-0404ffff | Array [ComputerSystemElementName] has failed. (Drive 4)  | Yes                                |
| 806f060d-0405ffff | Array [ComputerSystemElementName] has failed. (Drive 5)  | Yes                                |
| 806f060d-0406ffff | Array [ComputerSystemElementName] has failed. (Drive 6)  | Yes                                |
| 806f060d-0407ffff | Array [ComputerSystemElementName] has failed. (Drive 7)  | Yes                                |
| 806f060d-0408ffff | Array [ComputerSystemElementName] has failed. (Drive 8)  | Yes                                |
| 806f060d-0409ffff | Array [ComputerSystemElementName] has failed. (Drive 9)  | Yes                                |
| 806f060d-040affff | Array [ComputerSystemElementName] has failed. (Drive 10)   | Yes                                |
| 806f060d-040bffff | Array [ComputerSystemElementName] has failed. (Drive 11)   | Yes                                |
| 806f060d-040cffff | Array [ComputerSystemElementName] has failed. (Drive 12)   | Yes                                |
| 806f060d-040dffff | Array [ComputerSystemElementName] has failed. (Drive 13)   | Yes                                |
| 806f0813-2581ffff | A Uncorrectable Bus Error has occurred on system [ComputerSystemElementName]. (DIMMs)                      | Yes                                |
| 806f0813-2582ffff | A Uncorrectable Bus Error has occurred on system [ComputerSystemElementName]. (PCIs)                       | Yes                                |
| 806f0813-2584ffff | A Uncorrectable Bus Error has occurred on system [ComputerSystemElementName]. (CPUs)                       | Yes                                |

40000001-00000000 Management Controller [arg1] Network Initialization Complete.

Explanation: This message is for the use case where a

Management Controller network has completed initialization.

May also be shown as 4000000100000000 or 0x4000000100000000

## 4000002-00000000 • 40000006-00000000

Severity: Info

Alert Category: System - IMM Network event

Serviceable: No

CIM Information: Prefix: IMM and ID: 0001

SNMP Trap ID: 37

Automatically notify Support: No

User response: Information only; no action is

required.

# 40000002-00000000 Certificate Authority [arg1] has detected a [arg2] Certificate Error.

**Explanation:** This message is for the use case when there is an error with an SSL Server, SSL Client, or SSL Trusted CA Certificate.

May also be shown as 4000000200000000 or 0x4000000200000000

Severity: Error

Alert Category: System - SSL certification

Serviceable: No

CIM Information: Prefix: IMM and ID: 0002

SNMP Trap ID: 22

Automatically notify Support: No

**User response:** Make sure that the certificate that you are importing is correct and properly generated.

# 40000003-0000000 Ethernet Data Rate modified from [arg1] to [arg2] by user [arg3].

**Explanation:** This message is for the use case where a user modifies the Ethernet Port data rate.

May also be shown as 4000000300000000 or 0x4000000300000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0003

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** Information only; no action is

required.

# 40000004-0000000 Ethernet Duplex setting modified from [arg1] to [arg2] by user [arg3].

**Explanation:** This message is for the use case where A user modifies the Ethernet Port duplex setting.

May also be shown as 400000040000000 or 0x400000400000000

Severity: Info

**Alert Category:** none **Serviceable:** No

CIM Information: Prefix: IMM and ID: 0004

**SNMP Trap ID:** 

Automatically notify Support: No

User response: Information only; no action is

required.

# 40000005-00000000 Ethernet MTU setting modified from [arg1] to [arg2] by user [arg3].

**Explanation:** This message is for the use case where a

user modifies the Ethernet Port MTU setting.

May also be shown as 4000000500000000 or 0x4000005000000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0005

**SNMP Trap ID:** 

**Automatically notify Support:** No

User response: Information only; no action is

required.

# 40000006-0000000 Ethernet locally administered MAC address modified from [arg1] to [arg2] by user [arg3].

**Explanation:** This message is for the use case where a user modifies the Ethernet Port MAC address setting.

May also be shown as 4000000600000000 or 0x40000006000000000

**Severity:** Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0006

**SNMP Trap ID:** 

Automatically notify Support: No

User response: Information only; no action is

## 40000007-00000000 • 4000000c-00000000

40000007-00000000 Ethernet interface [arg1] by user [arg2].

**Explanation:** This message is for the use case where a user enables or disabled the ethernet interface.

May also be shown as 4000000700000000 or 0x4000007000000000

Severity: Info

**Alert Category:** none **Serviceable:** No

CIM Information: Prefix: IMM and ID: 0007

**SNMP Trap ID:** 

Automatically notify Support: No

User response: Information only; no action is

required.

40000008-00000000 Hostname set to [arg1] by user [arg2].

**Explanation:** This message is for the use case where user modifies the Hostname of a Management

Controller.

May also be shown as 4000000800000000 or 0x4000000800000000

Severity: Info

Alert Category: System - IMM Network event

Serviceable: No

CIM Information: Prefix: IMM and ID: 0008

SNMP Trap ID: 37

Automatically notify Support: No

User response: Information only; no action is

required.

40000009-00000000 IP address of network interface modified from [arg1] to [arg2] by user [arg3].

**Explanation:** This message is for the use case where user modifies the IP address of a Management

Controller.

May also be shown as 4000000900000000 or

0x4000000900000000

**Severity:** Info

Alert Category: System - IMM Network event

Serviceable: No

CIM Information: Prefix: IMM and ID: 0009

SNMP Trap ID: 37

Automatically notify Support: No

**User response:** Information only; no action is

required.

4000000a-00000000 IP subnet mask of network interface modified from [arg1] to [arg2] by user [arg3].

**Explanation:** This message is for the use case where a user modifies the IP subnet mask of a Management

Controller.

May also be shown as 4000000a00000000 or

0x4000000a00000000

Severity: Info

**Alert Category:** none **Serviceable:** No

CIM Information: Prefix: IMM and ID: 0010

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** Information only; no action is

required.

4000000b-00000000 IP address of default gateway modified from [arg1] to [arg2] by user [arg3].

**Explanation:** This message is for the use case where a user modifies the default gateway IP address of a

Management Controller.

May also be shown as 4000000b00000000 or

0x4000000b00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0011

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** Information only; no action is

required.

4000000c-00000000 OS Watchdog response [arg1] by [arg2] .

**Explanation:** This message is for the use case where an OS Watchdog has been enabled or disabled by a user.

May also be shown as 4000000c00000000 or 0x4000000c000000000

**Severity:** Warning **Alert Category:** none

Serviceable: No

## 400000d-00000000 • 40000011-00000000

CIM Information: Prefix: IMM and ID: 0012

**SNMP Trap ID:** 

Automatically notify Support: No

User response: Information only; no action is

required.

# 4000000d-00000000 DHCP[[arg1]] failure, no IP address assigned.

**Explanation:** This message is for the use case where a DHCP server fails to assign an IP address to a

Management Controller.

May also be shown as 400000d000000000 or

0x400000d000000000 **Severity:** Warning

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0013

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** Complete the following steps until the problem is solved:

- Make sure that the IMM network cable is connected.
- 2. Make sure that there is a DHCP server on the network that can assign an IP address to the IMM.

# 4000000e-00000000 Remote Login Successful. Login ID: [arg1] from [arg2] at IP address [arg3].

**Explanation:** This message is for the use case where a user successfully logs in to a Management Controller.

May also be shown as 4000000e00000000 or 0x4000000e000000000

Severity: Info

Alert Category: System - Remote Login

Serviceable: No

CIM Information: Prefix: IMM and ID: 0014

SNMP Trap ID: 30

Automatically notify Support: No

**User response:** Information only; no action is

required.

# 4000000f-00000000 Attempting to [arg1] server [arg2] by user [arg3].

**Explanation:** This message is for the use case where a user is using the Management Controller to perform a power function on the system.

May also be shown as 4000000f00000000 or 0x4000000f00000000

Severity: Info

**Alert Category:** none **Serviceable:** No

CIM Information: Prefix: IMM and ID: 0015

**SNMP Trap ID:** 

Automatically notify Support: No

User response: Information only; no action is

required.

# 40000010-00000000 Security: Userid: [arg1] had [arg2] login failures from WEB client at IP address [arg3].

**Explanation:** This message is for the use case where a user has failed to log in to a Management Controller

from a web browser.

May also be shown as 4000001000000000 or 0x4000001000000000

Severity: Warning

Alert Category: System - Remote Login

Serviceable: No

CIM Information: Prefix: IMM and ID: 0016

SNMP Trap ID: 30

Automatically notify Support: No

**User response:** Complete the following steps until the

problem is solved:

1. Make sure that the correct login ID and password are being used.

Have the system administrator reset the login ID or password.

# 40000011-00000000 Security: Login ID: [arg1] had [arg2] login failures from CLI at [arg3].

**Explanation:** This message is for the use case where a user has failed to log in to a Management Controller from the Legacy CLI.

May also be shown as 4000001100000000 or 0x4000001100000000

Severity: Warning

Alert Category: System - Remote Login

Serviceable: No

CIM Information: Prefix: IMM and ID: 0017

SNMP Trap ID: 30

Automatically notify Support: No

## 40000012-00000000 • 40000016-00000000

**User response:** Complete the following steps until the problem is solved:

- 1. Make sure that the correct login ID and password are being used.
- Have the system administrator reset the login ID or password.

40000012-00000000 Remote access attempt failed.
Invalid userid or password received.
Userid is [arg1] from WEB browser at IP

address [arg2].

**Explanation:** This message is for the use case where a remote user has failed to establish a remote control session from a Web browser session.

May also be shown as 4000001200000000 or 0x4000001200000000

**Severity:** Info

Alert Category: System - Remote Login

Serviceable: No

CIM Information: Prefix: IMM and ID: 0018

SNMP Trap ID: 30

Automatically notify Support: No

User response: Make sure that the correct login ID

and password are being used.

40000013-00000000 Remote access attempt failed.
Invalid userid or password received.
Userid is [arg1] from TELNET client at
IP address [arg2].

**Explanation:** This message is for the use case where a user has failed to log in to a Management Controller from a telnet session.

May also be shown as 4000001300000000 or 0x4000001300000000

**Severity:** Info

Alert Category: System - Remote Login

Serviceable: No

CIM Information: Prefix: IMM and ID: 0019

SNMP Trap ID: 30

Automatically notify Support: No

User response: Make sure that the correct login ID

and password are being used.

40000014-00000000 The [arg1] on system [arg2] cleared by user [arg3].

**Explanation:** This message is for the use case where a Management Controller Event Log on a system is cleared by a user.

May also be shown as 4000001400000000 or 0x4000001400000000

Severity: Info

**Alert Category:** none **Serviceable:** No

CIM Information: Prefix: IMM and ID: 0020

**SNMP Trap ID:** 

Automatically notify Support: No

User response: Information only; no action is

required.

40000015-00000000 Management Controller [arg1] reset was initiated by user [arg2].

**Explanation:** This message is for the use case where a Management Controller reset is initiated by a user.

May also be shown as 40000015000000000 or

0x4000001500000000

Severity: Info

**Alert Category:** none **Serviceable:** No

CIM Information: Prefix: IMM and ID: 0021

**SNMP Trap ID:** 

Automatically notify Support: No

User response: Information only; no action is

required.

40000016-00000000 ENET[[arg1]] DHCP-HSTN=[arg2], DN=[arg3], IP@=[arg4],

SN=[arg5], GW@=[arg6], DNS1@=[arg7].

**Explanation:** This message is for the use case where a Management Controller IP address and configuration has been assigned by the DHCP server.

May also be shown as 4000001600000000 or 0x4000001600000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0022

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** Information only; no action is

40000017-00000000 ENET[[arg1]] IP-

Cfg:HstName=[arg2], IP@=[arg3], NetMsk=[arg4], GW@=[arg5].

**Explanation:** This message is for the use case where a Management Controller IP address and configuration has been assigned statically using user data.

May also be shown as 4000001700000000 or 0x4000001700000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0023

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** Information only; no action is

required.

# 40000018-00000000 LAN: Ethernet[[arg1]] interface is no longer active.

**Explanation:** This message is for the use case where a Management Controller ethernet interface is no longer active.

May also be shown as 4000001800000000 or 0x4000001800000000

Severity: Info

**Alert Category:** none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0024

**SNMP Trap ID:** 

Automatically notify Support: No

User response: Information only; no action is

required.

# 40000019-00000000 LAN: Ethernet[[arg1]] interface is now active.

**Explanation:** This message is for the use case where a Management Controller ethernet interface is now active.

May also be shown as 4000001900000000 or 0x4000001900000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0025

**SNMP Trap ID:** 

Automatically notify Support: No

User response: Information only; no action is

required.

# 4000001a-00000000 DHCP setting changed to [arg1] by user [arg2].

**Explanation:** This message is for the use case where a

user changes the DHCP setting.

May also be shown as 4000001a00000000 or

0x4000001a00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0026

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** Information only; no action is

required.

# 4000001b-0000000 Management Controller [arg1]: Configuration restored from a file by user [arg2].

**Explanation:** This message is for the use case where a user restores a Management Controller configuration from a file.

May also be shown as 4000001b00000000 or

0x4000001b00000000

**Severity:** Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0027

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** Information only; no action is

required.

# 4000001c-00000000 Watchdog [arg1] Screen Capture Occurred .

**Explanation:** This message is for the use case where an operating system error has occurred and the screen was captured.

May also be shown as 4000001c00000000 or 0x4000001c00000000

Severity: Info

Alert Category: System - other

Serviceable: No

# 4000001d-00000000 • 40000020-00000000

CIM Information: Prefix: IMM and ID: 0028

SNMP Trap ID: 22

Automatically notify Support: No

**User response:** If there was no operating-system error, complete the following steps until the problem is solved:

- 1. Reconfigure the watchdog timer to a higher value.
- Make sure that the IMM Ethernet-over-USB interface is enabled.
- 3. Reinstall the RNDIS or cdc\_ether device driver for the operating system.
- 4. Disable the watchdog.

If there was an operating-system error, check the integrity of the installed operating system.

# 4000001d-00000000 Watchdog [arg1] Failed to Capture Screen.

**Explanation:** This message is for the use case where an operating system error has occurred and the screen capture failed.

May also be shown as 4000001d00000000 or 0x4000001d00000000

Severity: Error

Alert Category: System - other

Serviceable: No

CIM Information: Prefix: IMM and ID: 0029

SNMP Trap ID: 22

Automatically notify Support: No

**User response:** Complete the following steps until the problem is solved:

- 1. Reconfigure the watchdog timer to a higher value.
- 2. Make sure that the IMM Ethernet over USB interface is enabled.
- 3. Reinstall the RNDIS or cdc\_ether device driver for the operating system.
- 4. Disable the watchdog. Check the integrity of the installed operating system.
- 5. Update the IMM firmware. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.

# 4000001e-00000000 Running the backup Management Controller [arg1] main application.

**Explanation:** This message is for the use case where a

Management Controller has resorted to running the backup main application.

May also be shown as 4000001e00000000 or 0x4000001e00000000

Severity: Warning

Alert Category: System - other

Serviceable: No

CIM Information: Prefix: IMM and ID: 0030

SNMP Trap ID: 22

Automatically notify Support: No

**User response:** Update the IMM firmware. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.

# $4000001f\hbox{-}00000000 \quad Please \ ensure \ that \ the$

Management Controller [arg1] is flashed with the correct firmware. The Management Controller is unable to match its firmware to the server.

**Explanation:** This message is for the use case where a Management Controller firmware version does not match the server.

May also be shown as 4000001f00000000 or 0x4000001f00000000

Severity: Error

**Alert Category:** System - other

Serviceable: No

CIM Information: Prefix: IMM and ID: 0031

SNMP Trap ID: 22

Automatically notify Support: No

**User response:** Update the IMM firmware to a version that the server supports. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.

# 40000020-00000000 Management Controller [arg1] Reset was caused by restoring default values.

**Explanation:** This message is for the use case where a Management Controller has been reset due to a user restoring the configuration to default values.

May also be shown as 4000002000000000 or 0x4000002000000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0032

**SNMP Trap ID:** 

Automatically notify Support: No

User response: Information only; no action is

required.

40000021-00000000 Management Controller [arg1] clock has been set from NTP server

[arg2].

Explanation: This message is for the use case where a Management Controller clock has been set from the

Network Time Protocol server.

May also be shown as 40000021000000000 or

0x4000002100000000

**Severity:** Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0033

**SNMP Trap ID:** 

Automatically notify Support: No

User response: Information only; no action is

required.

40000022-00000000 SSL data in the Management Controller [arg1] configuruation data is invalid. Clearing configuration data

region and disabling SSL.

Explanation: This message is for the use case where a Management Controller has detected invalid SSL data in the configuration data and is clearing the configuration data region and disabling the SSL.

May also be shown as 4000002200000000 or

0x4000002200000000

**Severity:** Error

Alert Category: System - other

Serviceable: No

CIM Information: Prefix: IMM and ID: 0034

SNMP Trap ID: 22

Automatically notify Support: No

User response: Complete the following steps until the problem is solved:

1. Make sure that the certificate that you are importing is correct.

2. Try to import the certificate again.

# 40000023-00000000 Flash of [arg1] from [arg2] succeeded for user [arg3].

**Explanation:** This message is for the use case where a user has successfully flashed the firmware component (MC Main Application, MC Boot ROM, BIOS, Diagnostics, System Power Backplane, Remote Expansion Enclosure Power Backplane, Integrated System Management Processor, or Remote Expansion Enclosure Processor) from the interface and IP address ( %d.

May also be shown as 4000002300000000 or

0x4000002300000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0035

**SNMP Trap ID:** 

Automatically notify Support: No

User response: Information only; no action is

required.

# 40000024-00000000 Flash of [arg1] from [arg2] failed for user [arg3].

**Explanation:** This message is for the use case where a user has not flashed the firmware component from the interface and IP address due to a failure.

May also be shown as 4000002400000000 or

0x4000002400000000

Severity: Info

**Alert Category:** System - other

Serviceable: No

CIM Information: Prefix: IMM and ID: 0036

SNMP Trap ID: 22

Automatically notify Support: No

User response: Information only; no action is

required.

# 40000025-00000000 The [arg1] on system [arg2] is 75% full.

**Explanation:** This message is for the use case where a Management Controller Event Log on a system is 75% full.

May also be shown as 40000025000000000 or 0x40000025000000000

Severity: Info

**Alert Category:** System - Event Log 75% full

Serviceable: No

## 40000026-00000000 • 4000002a-00000000

CIM Information: Prefix: IMM and ID: 0037

SNMP Trap ID: 35

Automatically notify Support: No

User response: Information only; no action is

required.

40000026-00000000 The [arg1] on system [arg2] is 100% full.

**Explanation:** This message is for the use case where a Management Controller Event Log on a system is 100%

full.

May also be shown as 4000002600000000 or

0x4000002600000000

Severity: Info

Alert Category: System - Event Log 75% full

Serviceable: No

CIM Information: Prefix: IMM and ID: 0038

SNMP Trap ID: 35

Automatically notify Support: No

**User response:** To avoid losing older log entries, save

the log as a text file and clear the log.

40000027-00000000 Platform Watchdog Timer expired for [arg1].

**Explanation:** This message is for the use case when an implementation has detected a Platform Watchdog

Timer Expired

May also be shown as 4000002700000000 or 0x4000002700000000

**Severity:** Error

Alert Category: System - OS Timeout

Serviceable: No

CIM Information: Prefix: IMM and ID: 0039

SNMP Trap ID: 21

Automatically notify Support: No

**User response:** Complete the following steps until the problem is solved:

- 1. Reconfigure the watchdog timer to a higher value.
- Make sure that the IMM Ethernet-over-USB interface is enabled.
- 3. Reinstall the RNDIS or cdc\_ether device driver for the operating system.
- 4. Disable the watchdog.
- Check the integrity of the installed operating system.

# 40000028-00000000 Management Controller Test Alert Generated by [arg1].

Explanation: This message is for the use case where a

user has generated a Test Alert.

May also be shown as 4000002800000000 or

0x4000002800000000

Severity: Info

Alert Category: System - other

Serviceable: No

CIM Information: Prefix: IMM and ID: 0040

SNMP Trap ID: 22

Automatically notify Support: No

**User response:** Information only; no action is

required.

40000029-00000000 Security: Userid: [arg1] had [arg2] login failures from an SSH client at IP address [arg3].

**Explanation:** This message is for the use case where a user has failed to log in to a Management Controller

from SSH.

May also be shown as 4000002900000000 or 0x4000002900000000

Severity: Info

Alert Category: System - Remote Login

Serviceable: No

CIM Information: Prefix: IMM and ID: 0041

SNMP Trap ID: 30

Automatically notify Support: No

**User response:** Complete the following steps until the

problem is solved:

 Make sure that the correct login ID and password are being used.

2. Have the system administrator reset the login ID or password.

4000002a-00000000 [arg1] firmware mismatch internal to system [arg2]. Please attempt to flash the [arg3] firmware.

**Explanation:** This message is for the use case where a specific type of firmware mismatch has been detected.

May also be shown as 4000002a00000000 or 0x4000002a00000000

Severity: Error

**Alert Category:** System - Other

Serviceable: No

## 4000002b-00000000 • 40000030-00000000

CIM Information: Prefix: IMM and ID: 0042

SNMP Trap ID: 22

Automatically notify Support: No

**User response:** Reflash the IMM firmware to the latest

version.

4000002b-00000000 Domain name set to [arg1].

**Explanation:** Domain name set by user

May also be shown as 4000002b00000000 or

0x4000002b00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0043

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** Information only; no action is

required.

4000002c-00000000 Domain Source changed to [arg1] by user [arg2].

Explanation: Domain source changed by user

May also be shown as 4000002c00000000 or

0x4000002c000000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0044

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** Information only; no action is

required.

4000002d-00000000 DDNS setting changed to [arg1]

by user [arg2].

**Explanation:** DDNS setting changed by user

May also be shown as 4000002d00000000 or

0x4000002d00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0045

**SNMP Trap ID:** 

Automatically notify Support: No

User response: Information only; no action is

required.

4000002e-00000000 DDNS registration successful.

The domain name is [arg1].

**Explanation:** DDNS registation and values

May also be shown as 4000002e000000000 or

0x4000002e000000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0046

**SNMP Trap ID:** 

Automatically notify Support: No

User response: Information only; no action is

required.

4000002f-00000000 IPv6 enabled by user [arg1].

Explanation: IPv6 protocol is enabled by user

May also be shown as 4000002f00000000 or

0x4000002f00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0047

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** Information only; no action is

required.

40000030-00000000 IPv6 disabled by user [arg1].

**Explanation:** IPv6 protocol is disabled by user

May also be shown as 4000003000000000 or

0x4000003000000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0048

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** Information only; no action is

## 40000031-00000000 • 40000036-00000000

40000031-00000000 IPv6 static IP configuration enabled by user [arg1].

**Explanation:** IPv6 static address assignment method is

enabled by user

May also be shown as 4000003100000000 or

0x4000003100000000

Severity: Info

Alert Category: none

CIM Information: Prefix: IMM and ID: 0049

**SNMP Trap ID:** 

Serviceable: No

Automatically notify Support: No

User response: Information only; no action is

required.

40000032-00000000 IPv6 DHCP enabled by user [arg1].

**Explanation:** IPv6 DHCP assignment method is

enabled by user

May also be shown as 4000003200000000 or

0x4000003200000000

**Severity:** Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0050

**SNMP Trap ID:** 

Automatically notify Support: No

User response: Information only; no action is

required.

40000033-00000000 IPv6 stateless auto-configuration enabled by user [arg1].

**Explanation:** IPv6 statless auto-assignment method is

enabled by user

May also be shown as 4000003300000000 or

0x4000003300000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0051

**SNMP Trap ID:** 

Automatically notify Support: No

User response: Information only; no action is

required.

40000034-00000000 IPv6 static IP configuration disabled by user [arg1].

**Explanation:** IPv6 static assignment method is

disabled by user

May also be shown as 4000003400000000 or

0x4000003400000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0052

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** Information only; no action is

required.

40000035-00000000 IPv6 DHCP disabled by user [arg1].

**Explanation:** IPv6 DHCP assignment method is

disabled by user

May also be shown as 4000003500000000 or

0x4000003500000000

**Severity:** Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0053

**SNMP Trap ID:** 

Automatically notify Support: No

User response: Information only; no action is

required.

40000036-00000000 IPv6 stateless auto-configuration disabled by user [arg1].

**Explanation:** IPv6 statless auto-assignment method is

disabled by user

May also be shown as 4000003600000000 or

0x4000003600000000

**Severity:** Info

**Alert Category:** none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0054

**SNMP Trap ID:** 

Automatically notify Support: No

User response: Information only; no action is

40000037-00000000 ENET[[arg1]] IPv6-

LinkLocal:HstName=[arg2], IP@=[arg3]

,Pref=[arg4].

**Explanation:** IPv6 Link Local address is active

May also be shown as 4000003700000000 or

0x4000003700000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0055

**SNMP Trap ID:** 

Automatically notify Support: No

User response: Information only; no action is

required.

40000038-00000000 ENET[[arg1]] IPv6-

Static:HstName=[arg2], IP@=[arg3] ,Pref=[arg4], GW@=[arg5] .

**Explanation:** IPv6 Static address is active

May also be shown as 4000003800000000 or

0x4000003800000000

**Severity:** Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0056

**SNMP Trap ID:** 

Automatically notify Support: No

User response: Information only; no action is

required.

40000039-00000000 ENET[[arg1]] DHCPv6-

HSTN=[arg2], DN=[arg3], IP@=[arg4],

Pref=[arg5].

**Explanation:** IPv6 DHCP-assigned address is active

May also be shown as 4000003900000000 or

0x4000003900000000

**Severity:** Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0057

**SNMP Trap ID:** 

Automatically notify Support: No

User response: Information only; no action is

required.

4000003a-00000000 IPv6 static address of network interface modified from [arg1] to [arg2]

by user [arg3].

**Explanation:** A user modifies the IPv6 static address

of a Management Controller

May also be shown as 4000003a00000000 or

0x4000003a000000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0058

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** Information only; no action is

required.

4000003b-00000000 DHCPv6 failure, no IP address assigned.

**Explanation:** S DHCP6 server fails to assign an IP

address to a Management Controller.

May also be shown as 4000003b00000000 or

0x4000003b00000000 Severity: Warning Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0059

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** Complete the following steps until the

problem is solved:

1. Make sure that the IMM network cable is

connected.

Make sure that there is a DHCPv6 server on the network that can assign an IP address to the IMM.

4000003c-00000000 Platform Watchdog Timer expired for [arg1].

**Explanation:** An implementation has detected an OS

Loader Watchdog Timer Expired

May also be shown as 4000003c00000000 or

0x4000003c000000000

Severity: Error

Alert Category: System - Loader timeout

Serviceable: No

CIM Information: Prefix: IMM and ID: 0060

## 4000003d-00000000 • 40000041-00000000

SNMP Trap ID: 26

Automatically notify Support: No

User response:

1. Reconfigure the watchdog timer to a higher value.

- Make sure that the IMM Ethernet over USB interface is enabled.
- 3. Reinstall the RNDIS or cdc\_ether device driver for the operating system.
- 4. Disable the watchdog.

Check the integrity of the installed operating system.

# 4000003d-00000000 Telnet port number changed from [arg1] to [arg2] by user [arg3].

Explanation: A user has modified the telnet port

number

May also be shown as 4000003d00000000 or

0x4000003d00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0061

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** Information only; no action is

required.

# 4000003e-00000000 SSH port number changed from [arg1] to [arg2] by user [arg3].

**Explanation:** A user has modified the SSH port

number

May also be shown as 4000003e00000000 or

0x4000003e000000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0062

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** Information only; no action is

required.

# 4000003f-0000000 Web-HTTP port number changed from [arg1] to [arg2] by user [arg3].

Explanation: A user has modified the Web HTTP port

number

May also be shown as 4000003f00000000 or 0x4000003f00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0063

**SNMP Trap ID:** 

Automatically notify Support: No

User response: Information only; no action is

required.

# 40000040-00000000 Web-HTTPS port number changed from [arg1] to [arg2] by user [arg3].

Explanation: A user has modified the Web HTTPS

port number

May also be shown as 4000004000000000 or

0x4000004000000000

**Severity:** Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0064

**SNMP Trap ID:** 

Automatically notify Support: No

User response: Information only; no action is

required.

# 40000041-00000000 CIM/XML HTTP port number changed from [arg1] to [arg2] by user [arg3].

Explanation: A user has modified the CIM HTTP port

number

May also be shown as 4000004100000000 or

0x4000004100000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0065

**SNMP Trap ID:** 

Automatically notify Support: No

User response: Information only; no action is

## 40000042-00000000 • 40000047-00000000

40000042-0000000 CIM/XML HTTPS port number changed from [arg1] to [arg2] by user

[arg3].

**Explanation:** A user has modified the CIM HTTPS

port number

May also be shown as 4000004200000000 or

0x4000004200000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0066

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** Information only; no action is

required.

40000043-00000000 SNMP Agent port number changed from [arg1] to [arg2] by user

[arg3].

Explanation: A user has modified the SNMP Agent

port number

May also be shown as 4000004300000000 or

0x4000004300000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0067

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** Information only; no action is

required.

40000044-00000000 SNMP Traps port number changed from [arg1] to [arg2] by user

[arg3].

**Explanation:** A user has modified the SNMP Traps

port number

May also be shown as 4000004400000000 or

0x4000004400000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0068

**SNMP Trap ID:** 

Automatically notify Support: No

User response: Information only; no action is

required.

40000045-00000000 Syslog port number changed from [arg1] to [arg2] by user [arg3].

Explanation: A user has modified the Syslog receiver

port number

May also be shown as 4000004500000000 or

0x4000004500000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0069

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** Information only; no action is

required.

40000046-00000000 Remote Presence port number changed from [arg1] to [arg2] by user

[arg3].

**Explanation:** A user has modified the Remote

Presence port number

May also be shown as 4000004600000000 or

0x4000004600000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0070

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** Information only; no action is

required.

40000047-00000000 LED [arg1] state changed to [arg2] by [arg3].

**Explanation:** A user has modified the state of an LED

May also be shown as 4000004700000000 or

0x4000004700000000

**Severity:** Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0071

**SNMP Trap ID:** 

Automatically notify Support: No

## 40000048-00000000 • 4000004d-00000000

**User response:** Information only; no action is

required.

40000048-00000000 Inventory data changed for

device [arg1], new device data hash=[arg2], new master data

hash=[arg3].

**Explanation:** Something has caused the physical

inventory to change

May also be shown as 4000004800000000 or

0x4000004800000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0072

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** Information only; no action is

required.

40000049-00000000 SNMP [arg1] enabled by user [arg2] .

Explanation: A user enabled SNMPv1 or SNMPv3 or

Traps

May also be shown as 4000004900000000 or

0x4000004900000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0073

**SNMP Trap ID:** 

Automatically notify Support: No

User response: Information only; no action is

required.

4000004a-00000000 SNMP [arg1] disabled by user

[arg2].

**Explanation:** A user disabled SNMPv1 or SNMPv3 or

Traps

May also be shown as 4000004a00000000 or

0x4000004a00000000

**Severity:** Info

**Alert Category:** none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0074

**SNMP Trap ID:** 

Automatically notify Support: No

User response: Information only; no action is

required.

4000004b-00000000 SNMPv1 [arg1] set by user [arg2]:

Name=[arg3], AccessType=[arg4],

Address=[arg5], .

Explanation: A user changed the SNMP community

string

May also be shown as 4000004b00000000 or

0x4000004b00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0075

**SNMP Trap ID:** 

Automatically notify Support: No

User response: Information only; no action is

required.

4000004c-00000000 LDAP Server configuration set by user [arg1]: SelectionMethod=[arg2],

DomainName=[arg3], Server1=[arg4],

Server2=[arg5], Server3=[arg6], Server4=[arg7].

Server4=[arg/]

**Explanation:** A user changed the LDAP server

configuration

May also be shown as 4000004c00000000 or

0x4000004c00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0076

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** Information only; no action is

required.

4000004d-00000000 LDAP set by user [arg1]:

RootDN=[arg2],

UIDSearchAttribute=[arg3], BindingMethod=[arg4], EnhancedRBS=[arg5],

TargetName=[arg6], GroupFilter=[arg7],

GroupAttribute=[arg8], LoginAttribute=[arg9].

**Explanation:** A user configured an LDAP

Miscellaneous setting

May also be shown as 4000004d00000000 or 0x4000004d00000000

Severity: Info

**Alert Category:** none **Serviceable:** No

CIM Information: Prefix: IMM and ID: 0077

**SNMP Trap ID:** 

Automatically notify Support: No

User response: Information only; no action is

required.

4000004e-00000000 Serial Redirection set by user

[arg1]: Mode=[arg2], BaudRate=[arg3], StopBits=[arg4], Parity=[arg5], SessionTerminateSequence=[arg6].

**Explanation:** A user configured the Serial Port mode

May also be shown as 4000004e000000000 or

0x4000004e00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0078

**SNMP Trap ID:** 

Automatically notify Support: No

User response: Information only; no action is

required.

4000004f-00000000 Date and Time set by user [arg1]:

Date=[arg2], Time-[arg3], DST Auto-adjust=[arg4], Timezone=[arg5].

**Explanation:** A user configured the Date and Time

settings

May also be shown as 4000004f00000000 or

0x4000004f00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0079

**SNMP Trap ID:** 

Automatically notify Support: No

User response: Information only; no action is

required.

40000050-00000000 Server General Settings set by

user [arg1]: Name=[arg2], Contact=[arg3],

Location=[arg4], Room=[arg5],

RackID=[arg6], Rack U-position=[arg7].

**Explanation:** A user configured the Location setting

May also be shown as 4000005000000000 or

0x4000005000000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0080

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** Information only; no action is

required.

40000051-00000000 Server Power Off Delay set to [arg1] by user [arg2].

**Explanation:** A user configured the Server Power Off

Delay

May also be shown as 4000005100000000 or

0x4000005100000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0081

**SNMP Trap ID:** 

Automatically notify Support: No

User response: Information only; no action is

required.

40000052-00000000 Server [arg1] scheduled for [arg2] at [arg3] by user [arg4].

**Explanation:** A user configured a Server Power action

at a specific time

May also be shown as 4000005200000000 or

0x40000052000000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0082

**SNMP Trap ID:** 

Automatically notify Support: No

User response: Information only; no action is

40000053-00000000 Server [arg1] scheduled for every [arg2] at [arg3] by user [arg4].

**Explanation:** A user configured a recurring Server

Power Action

May also be shown as 4000005300000000 or

0x4000005300000000

Severity: Info

Alert Category: none Serviceable: No

CIM Information: Prefix: IMM and ID: 0083

**SNMP Trap ID:** 

Automatically notify Support: No

User response: Information only; no action is

required.

40000054-00000000 Server [arg1] [arg2] cleared by user [arg3].

**Explanation:** A user cleared a Server Power Action.

May also be shown as 4000005400000000 or

0x4000005400000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0084

**SNMP Trap ID:** 

Automatically notify Support: No

User response: Information only; no action is

required.

40000055-00000000 Synchronize time setting by user

[arg1]: Mode=[arg2],

NTPServerHost=[arg3]:[arg4],NTPUpdateFrequency=[arg5]. IPv4Server3=[arg6], IPv6Server1=[arg7],

**Explanation:** A user configured the Date and Time

synchronize settings

May also be shown as 4000005500000000 or

0x40000055000000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0085

**SNMP Trap ID:** 

Automatically notify Support: No

User response: Information only; no action is

required.

40000056-00000000 SMTP Server set by user [arg1] to [arg2]:[arg3].

**Explanation:** A user configured the SMTP server

May also be shown as 4000005600000000 or

0x40000056000000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0086

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** Information only; no action is

required.

40000057-00000000 Telnet [arg1] by user [arg2].

**Explanation:** A user enables or disables Telnet services

May also be shown as 4000005700000000 or

0x4000005700000000

Severity: Info

**Alert Category:** none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0087

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** Information only; no action is

required.

40000058-00000000 DNS servers set by user [arg1]:

UseAdditionalServers=[arg2], PreferredDNStype=[arg3],

IPv4Server1=[arg4], IPv4Server2=[arg5],

IPv6Server2=[arg8], IPv6Server3=[arg9].

**Explanation:** A user configures the DNS servers

May also be shown as 4000005800000000 or

0x4000005800000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0088

**SNMP Trap ID:** 

Automatically notify Support: No

User response: Information only; no action is

40000059-00000000 LAN over USB [arg1] by user [arg2].

**Explanation:** A user configured USB-LAN May also be shown as 4000005900000000 or

0x40000059000000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0089

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** Information only; no action is

required.

4000005a-00000000 LAN over USB Port Forwarding

set by user [arg1]: ExternalPort=[arg2], USB-LAN port=[arg3].

USB-LAN port=[arg3]

Explanation: A user configured USB-LAN port

forwarding

May also be shown as 4000005a000000000 or

0x4000005a00000000

**Severity:** Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0090

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** Information only; no action is

required.

4000005b-00000000 Secure Web services (HTTPS) [arg1] by user [arg2].

**Explanation:** A user enables or disables Secure web

services

May also be shown as 4000005b00000000 or

0x4000005b00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0091

**SNMP Trap ID:** 

Automatically notify Support: No

User response: Information only; no action is

required.

4000005c-00000000 Secure CIM/XML(HTTPS) [arg1] by user [arg2].

Explanation: A user enables or disables Secure

CIM/XML services

May also be shown as 4000005c00000000 or

0x4000005c000000000

Severity: Info

Alert Category: none

Serviceable: No

**CIM Information: Prefix:** IMM and **ID:** 0092

**SNMP Trap ID:** 

Automatically notify Support: No

User response: Information only; no action is

required.

4000005d-00000000 Secure LDAP [arg1] by user [arg2].

**Explanation:** A user enables or disables Secure LDAP

services

May also be shown as 4000005d00000000 or

0x4000005d000000000

Severity: Info

Alert Category: none

**Serviceable:** No

CIM Information: Prefix: IMM and ID: 0093

**SNMP Trap ID:** 

Automatically notify Support: No

User response: Information only; no action is

required.

4000005e-00000000 SSH [arg1] by user [arg2].

Explanation: A user enables or disables SSH services

May also be shown as 4000005e00000000 or

0x4000005e00000000

**Severity:** Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0094

**SNMP Trap ID:** 

**Automatically notify Support:** No

**User response:** Information only; no action is

4000005f-00000000 Server timeouts set by user [arg1]:

EnableOSWatchdog=[arg2], OSWatchdogTimout=[arg3], EnableLoaderWatchdog=[arg4], LoaderTimeout=[arg5].

**Explanation:** A user configures Server Timeouts

May also be shown as 4000005f00000000 or

0x4000005f00000000

Severity: Info

Alert Category: none Serviceable: No

CIM Information: Prefix: IMM and ID: 0095

**SNMP Trap ID:** 

Automatically notify Support: No

User response: Information only; no action is

required.

40000060-00000000 License key for [arg1] added by user [arg2].

**Explanation:** A user installs License Key

May also be shown as 4000006000000000 or

0x40000060000000000

Alert Category: none

Serviceable: No

Severity: Info

CIM Information: Prefix: IMM and ID: 0096

**SNMP Trap ID:** 

Automatically notify Support: No

User response: Information only; no action is

required.

40000061-00000000 License key for [arg1] removed

by user [arg2].

**Explanation:** A user removes a License Key May also be shown as 4000006100000000 or

0x4000006100000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0097

**SNMP Trap ID:** 

Automatically notify Support: No

User response: Information only; no action is

required.

40000062-00000000 Global Login General Settings set

by user [arg1]:

AuthenticationMethod=[arg2],

LockoutPeriod=[arg3], SessionTimeout=[arg4].

**Explanation:** A user changes the Global Login General

Settings

May also be shown as 4000006200000000 or

0x4000006200000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0098

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** Information only; no action is

required.

40000063-00000000 Global Login Account Security

set by user [arg1]:

PasswordRequired=[arg2],

PasswordExpirationPeriod=[arg3], MinimumPasswordReuseCycle=[arg4], MinimumPasswordLength=[arg5],

MinimumPasswordChangeInterval=[arg6],

MaxmumLoginFailures=[arg7], LockoutAfterMaxFailures=[arg8], MinimumDifferentCharacters=[arg9],

DefaultIDExpired=[arg10],

ChangePasswordFirstAccess=[arg11].

**Explanation:** A user changes the Global Login

Account Security Settings to Legacy

May also be shown as 4000006300000000 or

0x40000063000000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0099

**SNMP Trap ID:** 

Automatically notify Support: No

User response: Information only; no action is

required.

40000064-00000000 User [arg1] created.

Explanation: A user account was created

May also be shown as 4000006400000000 or

0x4000006400000000

Severity: Info

## 40000065-00000000 • 4000006a-00000000

Alert Category: none

Serviceable: No

**CIM Information: Prefix: IMM and ID: 0100** 

**SNMP Trap ID:** 

Automatically notify Support: No

User response: Information only; no action is

required.

40000065-00000000 User [arg1] removed..

**Explanation:** A user account was deleted May also be shown as 4000006500000000 or

0x40000065000000000

**Severity:** Info

Alert Category: none

CIM Information: Prefix: IMM and ID: 0101

**SNMP Trap ID:** 

Serviceable: No.

Automatically notify Support: No

User response: Information only; no action is

required.

40000066-00000000 User [arg1] password modified.

Explanation: A user account was changed

May also be shown as 4000006600000000 or

0x4000006600000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0102

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** Information only; no action is

required.

40000067-00000000 User [arg1] role set to [arg2].

Explanation: A user account role assigned May also be shown as 4000006700000000 or

0x4000006700000000

Severity: Info

Alert Category: none Serviceable: No

CIM Information: Prefix: IMM and ID: 0103

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** Information only; no action is

required.

40000068-00000000 User [arg1] custom privileges set:

[arg2].

Explanation: User account priveleges assigned

May also be shown as 4000006800000000 or

0x40000068000000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0104

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** Information only; no action is

required.

40000069-00000000 User [arg1] for SNMPv3 set:

AuthenticationProtocol=[arg2],

PrivacyProtocol=[arg3],

AccessType=[arg4], HostforTraps=[arg5].

Explanation: User account SNMPv3 settings changed

May also be shown as 4000006900000000 or

0x4000006900000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0105

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** Information only; no action is

required.

4000006a-00000000 SSH Client key added for user

[arg1].

**Explanation:** User locally defined an SSH Client key

May also be shown as 4000006a00000000 or

0x4000006a000000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0106

**SNMP Trap ID:** 

Automatically notify Support: No

# 4000006b-00000000 • 40000070-00000000

**User response:** Information only; no action is

required.

4000006b-00000000 SSH Client key imported for user [arg1] from [arg2].

[aig1] Holli [aig2].

**Explanation:** User imported an SSH Client key

May also be shown as 4000006b00000000 or

0x4000006b00000000

Severity: Info

**Alert Category:** none **Serviceable:** No

CIM Information: Prefix: IMM and ID: 0107

**SNMP Trap ID:** 

Automatically notify Support: No

User response: Information only; no action is

required.

4000006c-00000000 SSH Client key removed from user [arg1].

Explanation: User removed an SSH Client key

May also be shown as 4000006c00000000 or

0x4000006c00000000

Alert Category: none

Serviceable: No

Severity: Info

CIM Information: Prefix: IMM and ID: 0108

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is

required.

4000006d-00000000 Management Controller [arg1]:

Configuration saved to a file by user

[arg2].

Explanation: A user saves a Management Controller

configuration to a file.

May also be shown as 4000006d00000000 or

0x4000006d000000000

**Severity:** Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0109

**SNMP Trap ID:** 

Automatically notify Support: No

User response: Information only; no action is

required.

4000006e-00000000 Alert Configuration Global Event

Notification set by user [arg1]:

 $RetryLimit=[arg2],\ RetryInterval=[arg3],$ 

EntryInterval=[arg4].

**Explanation:** A user changes the Global Event

Notification settings.

May also be shown as 4000006e00000000 or

0x4000006e000000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0110

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** Information only; no action is

required.

4000006f-00000000 Alert Recipient Number [arg1]

updated: Name=[arg2],

AllowedFilters=[arg8].

DeliveryMethod=[arg3], Address=[arg4], IncludeLog=[arg5], Enabled=[arg6],

EnabledAlerts=[arg7],

Explanation: A user adds or updates an Alert

Recipient

May also be shown as 4000006f00000000 or

0x4000006f00000000

**Severity:** Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0111

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** Information only; no action is

required.

40000070-00000000 SNMP Traps enabled by user

[arg1]: EnabledAlerts=[arg2], AllowedFilters=[arg3] .

**Explanation:** A user enabled the SNMP Traps

configuration

May also be shown as 4000007000000000 or

0x40000070000000000

Severity: Info

## 40000071-00000000 • 40000076-00000000

**Alert Category:** none

**Serviceable:** No

CIM Information: Prefix: IMM and ID: 0112

**SNMP Trap ID:** 

Automatically notify Support: No

User response: Information only; no action is

required.

40000071-00000000 The power cap value changed from [arg1] watts to [arg2] watts by user

[arg3].

Explanation: Power Cap values changed by user

May also be shown as 4000007100000000 or

0x4000007100000000

**Severity:** Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0113

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is

required.

40000072-00000000 The minimum power cap value

changed from [arg1] watts to [arg2]

watts.

Explanation: Minimum Power Cap value changed

May also be shown as 4000007200000000 or

0x4000007200000000

**Severity:** Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0114

**SNMP Trap ID:** 

Automatically notify Support: No

User response: Information only; no action is

required.

40000073-00000000 The maximum power cap value

changed from [arg1] watts to [arg2]

watts.

Explanation: Maximum Power Cap value changed

May also be shown as 4000007300000000 or

0x4000007300000000

Severity: Info

Alert Category: none

**Serviceable:** No

**CIM Information: Prefix:** IMM and **ID:** 0115

**SNMP Trap ID:** 

Automatically notify Support: No

User response: Information only; no action is

required.

40000074-00000000 The soft minimum power cap value changed from [arg1] watts to

[arg2] watts.

Explanation: Soft Minimum Power Cap value changed

May also be shown as 4000007400000000 or

0x4000007400000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0116

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** Information only; no action is

required.

40000075-00000000 The measured power value exceeded the power cap value.

Explanation: Power exceeded cap

May also be shown as 4000007500000000 or

0x4000007500000000 **Severity:** Warning

Alert Category: Warning - Power

Serviceable: No

**CIM Information: Prefix:** IMM and **ID:** 0117

SNMP Trap ID: 164

**Automatically notify Support:** No

**User response:** Information only; no action is

required.

40000076-00000000 The new minimum power cap value exceeded the power cap value.

**Explanation:** Minimum Power Cap exceeds Power

Cap

May also be shown as 4000007600000000 or 0x4000007600000000

Severity: Warning

Alert Category: Warning - Power

## 40000077-00000000 • 4000007c-00000000

Serviceable: No

CIM Information: Prefix: IMM and ID: 0118

SNMP Trap ID: 164

Automatically notify Support: No

**User response:** Information only; no action is

required.

40000077-00000000 Power capping was activated by

user [arg1].

Explanation: Power capping activated by user

May also be shown as 4000007700000000 or

0x4000007700000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0119

**SNMP Trap ID:** 

**Automatically notify Support:** No

**User response:** Information only; no action is

required.

40000078-00000000 Power capping was deactivated

by user [arg1].

Explanation: Power capping deactivated by user

May also be shown as 4000007800000000 or

0x4000007800000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0120

**SNMP Trap ID:** 

Automatically notify Support: No

User response: Information only; no action is

required.

40000079-00000000 Static Power Savings mode has been turned on by user [arg1].

**Explanation:** Static Power Savings mode turned on by

user

May also be shown as 4000007900000000 or

0x4000007900000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0121

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** Information only; no action is

required.

4000007a-00000000 Static Power Savings mode has been turned off by user [arg1].

**Explanation:** Static Power Savings mode turned off by

use

May also be shown as 4000007a00000000 or

0x4000007a00000000

Severity: Info

Alert Category: none

**Serviceable:** No

CIM Information: Prefix: IMM and ID: 0122

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** Information only; no action is

required.

4000007b-00000000 Dynamic Power Savings mode has been turned on by user [arg1].

**Explanation:** Dynamic Power Savings mode turned on

by user

May also be shown as 4000007b00000000 or

0x4000007b00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0123

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** Information only; no action is

required.

4000007c-00000000 Dynamic Power Savings mode has been turned off by user [arg1].

Explanation: Dynamic Power Savings mode turned off

by user

May also be shown as 4000007c000000000 or

0x4000007c00000000

**Severity:** Info

Alert Category: none

Serviceable: No

# 4000007d-00000000 • 40000082-00000000

CIM Information: Prefix: IMM and ID: 0124

**SNMP Trap ID:** 

Automatically notify Support: No

User response: Information only; no action is

required.

4000007d-00000000 Power cap and external throttling occurred.

**Explanation:** Power cap and external throttling

occurred

May also be shown as 4000007d00000000 or

0x4000007d00000000

Severity: Info

Alert Category: none

CIM Information: Prefix: IMM and ID: 0125

**SNMP Trap ID:** 

Serviceable: No

Automatically notify Support: No

**User response:** Information only; no action is

required.

4000007e-00000000 External throttling occurred.

Explanation: External throttling occurred May also be shown as 4000007e00000000 or

0x4000007e00000000

**Severity:** Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0126

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** Information only; no action is

required.

4000007f-00000000 Power cap throttling occurred.

**Explanation:** Power cap throttling occurrred May also be shown as 4000007f00000000 or

0x4000007f00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0127

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** Information only; no action is

required.

40000080-00000000 Remote Control session started by user [arg1] in [arg2] mode.

**Explanation:** Remote Control session started May also be shown as 4000008000000000 or

0x4000008000000000

Severity: Info

Alert Category: none Serviceable: No

CIM Information: Prefix: IMM and ID: 0128

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** Information only; no action is

required.

40000081-00000000 PXE boot requested by user [arg1].

**Explanation:** PXE boot requested

May also be shown as 4000008100000000 or

0x4000008100000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0129

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** Information only; no action is

required.

40000082-00000000 The measured power value has returned below the power cap value.

Explanation: Power exceeded cap recovered May also be shown as 4000008200000000 or

0x4000008200000000

Severity: Info

Alert Category: Warning - Power

Serviceable: No

CIM Information: Prefix: IMM and ID: 0130

SNMP Trap ID: 164

Automatically notify Support: No

**User response:** Information only; no action is

## 40000083-00000000 • 40000088-00000000

40000083-00000000 The new minimum power cap

value has returned below the power cap

value

Explanation: Minimum Power Cap exceeds Power

Cap recovered

May also be shown as 4000008300000000 or

0x4000008300000000

Severity: Info

Alert Category: Warning - Power

Serviceable: No

CIM Information: Prefix: IMM and ID: 0131

SNMP Trap ID: 164

Automatically notify Support: No

**User response:** Information only; no action is

required.

40000084-00000000 IMM firmware mismatch

between nodes [arg1] and [arg2]. Please attempt to flash the IMM firmware to

the same level on all nodes.

**Explanation:** A mismatch of IMM firmware has been

detected between nodes

May also be shown as 4000008400000000 or

0x4000008400000000

Severity: Error

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: IMM and ID: 0132

SNMP Trap ID: 22

Automatically notify Support: No

User response: Attempt to flash the IMM firmware to

the same level on all nodes.

40000085-00000000 FPGA firmware mismatch between nodes [arg1] and [arg2]. Please attempt to flash the FPGA firmware to

the same level on all nodes.

**Explanation:** A mismatch of FPGA firmware has been

detected between nodes

May also be shown as 4000008500000000 or

0x4000008500000000

**Severity:** Error

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: IMM and ID: 0133

SNMP Trap ID: 22

Automatically notify Support: No

User response: Attempt to flash the FPGA firmware to

the same level on all nodes.

40000086-00000000 Test Call Home Generated by

user [arg1].

**Explanation:** Test Call Home generated by user.

May also be shown as 4000008600000000 or

0x4000008600000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0134

**SNMP Trap ID:** 

Automatically notify Support: Yes

**User response:** Information only; no action is

required.

40000087-00000000 Manual Call Home by user

[arg1]: [arg2].

**Explanation:** Manual Call Home by user.

May also be shown as 4000008700000000 or

0x4000008700000000

**Severity:** Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0135

**SNMP Trap ID:** 

**Automatically notify Support:** Yes

**User response:** IBM Support will address the problem.

40000088-0000000 Management Controller [arg1]: Configuration restoration from a file by

user [arg2] completed.

**Explanation:** This message is for the use case where a user restores a Management Controller configuration

from a file and it completes.

May also be shown as 4000008800000000 or

0x4000008800000000

**Severity:** Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0136

SNMP Trap ID:

Automatically notify Support: No

**User response:** Information only; no action is

required.

40000089-00000000 Management Controller [arg1]: Configuration restoration from a file by user [arg2] failed to complete.

Explanation: This message is for the use case where a user restores a Management Controller configuration from a file and the restoration fails to complete.

May also be shown as 4000008900000000 or 0x4000008900000000

Severity: Error

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: IMM and ID: 0137

SNMP Trap ID: 22

Automatically notify Support: No

#### User response:

- 1. Turn off the server and disconnect it from the power source. You must disconnect the server from ac power to reset the IMM.
- 2. After 45 seconds, reconnect the server to the power source and turn on the server.
- 3. Retry the operation.

# 4000008a-00000000 Management Controller [arg1]: Configuration restoration from a file by user [arg2] failed to start.

Explanation: This message is for the use case where a user restores a Management Controller configuration from a file and the restoration fails to start.

May also be shown as 4000008a00000000 or 0x4000008a00000000

**Severity:** Error

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: IMM and ID: 0138

SNMP Trap ID: 22

Automatically notify Support: No

# User response:

- 1. Turn off the server and disconnect it from the power source. You must disconnect the server from ac power to reset the IMM.
- 2. After 45 seconds, reconnect the server to the power source and turn on the server.
- 3. Retry the operation.

# 4000008b-00000000 One or more of the Storage Management IP addresses has changed.

**Explanation:** This message is for the use case where an IP address for the Storage Management has changed

May also be shown as 4000008b00000000 or 0x4000008b00000000

Severity: Info

Alert Category: System - IMM Network event

Serviceable: No

CIM Information: Prefix: IMM and ID: 0139

SNMP Trap ID: 37

Automatically notify Support: No

User response: Information only; no action is

required.

#### 80010002-0701ffff Numeric sensor

[NumericSensorElementName] going low (lower non-critical) has asserted. (CMOS Battery)

**Explanation:** This message is for the use case when an implementation has detected a Lower Non-critical sensor going low has asserted.

May also be shown as 800100020701ffff or 0x800100020701ffff

Severity: Warning

Alert Category: Warning - Voltage

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0476

SNMP Trap ID: 13

Automatically notify Support: No

**User response:** Replace the system battery.

#### 80010202-0701ffff Numeric sensor

[NumericSensorElementName] going low (lower critical) has asserted. (CMOS Battery)

**Explanation:** This message is for the use case when an implementation has detected a Lower Critical sensor going low has asserted.

May also be shown as 800102020701ffff or 0x800102020701ffff

Severity: Error

Alert Category: Critical - Voltage

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0480

SNMP Trap ID: 1

## 80010204-1d01ffff • 80010204-1d04ffff

Automatically notify Support: Yes

**User response:** If the specified sensor is CMOS battery, replace the system battery. If the specified sensor is Planar 3.3V or Planar 5V, (trained technician only) replace the system board. If the specified sensor is Planar 12V, complete the following steps until the problem is solved:

- 1. Check power supply n LED.
- 2. Remove the failing power supply.
- 3. Follow actions in "Power Problems and Solving Power Problems".
- 4. (Trained technician only) Replace the system board. (n = power supply number)

#### 80010204-1d01ffff Numeric sensor

[NumericSensorElementName] going low (lower critical) has asserted. (Fan 1Aa Tach)

**Explanation:** This message is for the use case when an implementation has detected a Lower Critical sensor going low has asserted.

May also be shown as 800102041d01ffff or 0x800102041d01ffff

Severity: Error

Alert Category: Critical - Fan Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0480

SNMP Trap ID: 11

**Automatically notify Support:** No

#### User response:

- 1. Reseat the failing fan n, which is indicated by a lit LED near the fan connector on the system board.
- 2. Replace the failing fan. (n = fan number)

## 80010204-1d02ffff Numeric sensor

[NumericSensorElementName] going low (lower critical) has asserted. (Fan 1Ab Tach)

**Explanation:** This message is for the use case when an implementation has detected a Lower Critical sensor going low has asserted.

May also be shown as 800102041d02ffff or 0x800102041d02ffff

Severity: Error

Alert Category: Critical - Fan Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0480

SNMP Trap ID: 11

Automatically notify Support: No

User response:

- Reseat the failing fan n, which is indicated by a lit LED near the fan connector on the system board.
- 2. Replace the failing fan. (n = fan number)

#### 80010204-1d03ffff Numeric sensor

[NumericSensorElementName] going low (lower critical) has asserted. (Fan 2Aa Tach)

**Explanation:** This message is for the use case when an implementation has detected a Lower Critical sensor going low has asserted.

May also be shown as 800102041d03ffff or 0x800102041d03ffff

Severity: Error

Alert Category: Critical - Fan Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0480

SNMP Trap ID: 11

Automatically notify Support: No

User response:

1. Reseat the failing fan n, which is indicated by a lit LED near the fan connector on the system board.

2. Replace the failing fan. (n = fan number)

#### 80010204-1d04ffff Numeric sensor

[NumericSensorElementName] going low (lower critical) has asserted. (Fan 2Ab Tach)

**Explanation:** This message is for the use case when an implementation has detected a Lower Critical sensor going low has asserted.

May also be shown as 800102041d04ffff or 0x800102041d04ffff

Severity: Error

Alert Category: Critical - Fan Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0480

SNMP Trap ID: 11

Automatically notify Support: No

User response:

 Reseat the failing fan n, which is indicated by a lit LED near the fan connector on the system board.

2. Replace the failing fan. (n = fan number)

#### 80010204-1d05ffff • 80010701-0702ffff

80010204-1d05ffff Numeric sensor

[NumericSensorElementName] going low (lower critical) has asserted. (Fan 3Aa Tach)

**Explanation:** This message is for the use case when an implementation has detected a Lower Critical sensor going low has asserted.

May also be shown as 800102041d05ffff or 0x800102041d05ffff

Severity: Error

Alert Category: Critical - Fan Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0480

SNMP Trap ID: 11

Automatically notify Support: No

#### User response:

- 1. Reseat the failing fan n, which is indicated by a lit LED near the fan connector on the system board.
- 2. Replace the failing fan. (n = fan number)

#### 80010204-1d06ffff Numeric sensor

[NumericSensorElementName] going low (lower critical) has asserted. (Fan 3Ab Tach)

**Explanation:** This message is for the use case when an implementation has detected a Lower Critical sensor going low has asserted.

May also be shown as 800102041d06ffff or 0x800102041d06ffff

**Severity:** Error

**Alert Category:** Critical - Fan Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0480

SNMP Trap ID: 11

Automatically notify Support: No

## User response:

- Reseat the failing fan n, which is indicated by a lit LED near the fan connector on the system board.
- Replace the failing fan. (n = fan number)

# 80010204-1d07ffff Numeric sensor

[NumericSensorElementName] going low (lower critical) has asserted. (Fan 4 Tach)

**Explanation:** This message is for the use case when an implementation has detected a Lower Critical sensor going low has asserted.

May also be shown as 800102041d07ffff or 0x800102041d07ffff

Severity: Error

Alert Category: Critical - Fan Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0480

SNMP Trap ID: 11

Automatically notify Support: No

#### User response:

- 1. Reseat the failing fan n, which is indicated by a lit LED near the fan connector on the system board.
- 2. Replace the failing fan. (n = fan number)

#### 80010204-1d08ffff Numeric sensor

[NumericSensorElementName] going low (lower critical) has asserted. (Fan 5 Tach)

**Explanation:** This message is for the use case when an implementation has detected a Lower Critical sensor going low has asserted.

May also be shown as 800102041d08ffff or 0x800102041d08ffff

**Severity:** Error

Alert Category: Critical - Fan Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0480

SNMP Trap ID: 11

Automatically notify Support: No

## User response:

- 1. Reseat the failing fan n, which is indicated by a lit LED near the fan connector on the system board.
- 2. Replace the failing fan. (n = fan number)

#### 80010701-0702ffff Numeric sensor

[NumericSensorElementName] going high (upper non-critical) has asserted. (FHHL Amb Temp)

**Explanation:** This message is for the use case when an implementation has detected an Upper Non-critical sensor going high has asserted.

May also be shown as 800107010702ffff or 0x800107010702ffff

**Severity:** Warning

Alert Category: Warning - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0490

## 80010701-0703ffff • 80010701-0c01ffff

SNMP Trap ID: 12

Automatically notify Support: No

#### User response:

- Make sure that the fans are operating, that there are no obstructions to the airflow (front and rear of the server), that the air baffle is in place and correctly installed, and that the server cover is installed and completely closed.
- 2. Check the ambient temperature. You must be operating within the specifications (see Server Features and specifications for more information).
- 3. Make sure that the heat sink for microprocessor n.
- 4. (Trained technician only) Replace system board.

#### 80010701-0703ffff Numeric sensor

[NumericSensorElementName] going high (upper non-critical) has asserted. (LowProfile Amb)

**Explanation:** This message is for the use case when an implementation has detected an Upper Non-critical sensor going high has asserted.

May also be shown as 800107010703ffff or 0x800107010703ffff

Severity: Warning

Alert Category: Warning - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0490

SNMP Trap ID: 12

Automatically notify Support: No

#### User response:

- Make sure that the fans are operating, that there are no obstructions to the airflow (front and rear of the server), that the air baffle is in place and correctly installed, and that the server cover is installed and completely closed.
- Check the ambient temperature. You must be operating within the specifications (see Server Features and specifications for more information).
- 3. Make sure that the heat sink for microprocessor n.
- 4. (Trained technician only) Replace system board.

#### 80010701-0704ffff Numeric sensor

[NumericSensorElementName] going high (upper non-critical) has asserted. (RAID Amb Temp)

**Explanation:** This message is for the use case when an implementation has detected an Upper Non-critical sensor going high has asserted.

May also be shown as 800107010704ffff or 0x800107010704ffff

Severity: Warning

Alert Category: Warning - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0490

SNMP Trap ID: 12

Automatically notify Support: No

#### User response:

- Make sure that the fans are operating, that there are no obstructions to the airflow (front and rear of the server), that the air baffle is in place and correctly installed, and that the server cover is installed and completely closed.
- Check the ambient temperature. You must be operating within the specifications (see Server Features and specifications for more information).
- 3. Make sure that the heat sink for microprocessor n.
- 4. (Trained technician only) Replace system board.

#### 80010701-0c01ffff Numeric sensor

[NumericSensorElementName] going high (upper non-critical) has asserted. (Ambient Temp)

**Explanation:** This message is for the use case when an implementation has detected an Upper Non-critical sensor going high has asserted.

May also be shown as 800107010c01ffff or 0x800107010c01ffff

Severity: Warning

Alert Category: Warning - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0490

SNMP Trap ID: 12

**Automatically notify Support:** No

#### User response:

- Make sure that the fans are operating, that there are no obstructions to the airflow (front and rear of the server), that the air baffle is in place and correctly installed, and that the server cover is installed and completely closed.
- 2. Check the ambient temperature. You must be operating within the specifications (see Server Features and specifications for more information).
- 3. Make sure that the heat sink for microprocessor n.
- 4. (Trained technician only) Replace system board.

## 80010701-1401ffff • 80010701-1404ffff

#### 80010701-1401ffff Numeric sensor

[NumericSensorElementName] going high (upper non-critical) has asserted. (CPU1 VR Temp)

**Explanation:** This message is for the use case when an implementation has detected an Upper Non-critical sensor going high has asserted.

May also be shown as 800107011401ffff or 0x800107011401ffff

Severity: Warning

Alert Category: Warning - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0490

SNMP Trap ID: 12

Automatically notify Support: No

#### User response:

- Make sure that the fans are operating, that there are no obstructions to the airflow (front and rear of the server), that the air baffle is in place and correctly installed, and that the server cover is installed and completely closed.
- 2. Check the ambient temperature. You must be operating within the specifications (see Server Features and specifications for more information).
- 3. Make sure that the heat sink for microprocessor n.
- 4. (Trained technician only) Replace system board.

#### 80010701-1402ffff Numeric sensor

[NumericSensorElementName] going high (upper non-critical) has asserted. (CPU2 VR Temp)

**Explanation:** This message is for the use case when an implementation has detected an Upper Non-critical sensor going high has asserted.

May also be shown as 800107011402ffff or 0x800107011402ffff

Severity: Warning

Alert Category: Warning - Temperature

Serviceable: Yes

**CIM Information: Prefix:** PLAT and **ID:** 0490

SNMP Trap ID: 12

Automatically notify Support: No

# User response:

 Make sure that the fans are operating, that there are no obstructions to the airflow (front and rear of the server), that the air baffle is in place and correctly installed, and that the server cover is installed and completely closed.

- 2. Check the ambient temperature. You must be operating within the specifications (see Server Features and specifications for more information).
- 3. Make sure that the heat sink for microprocessor n.
- 4. (Trained technician only) Replace system board.

#### 80010701-1403ffff Numeric sensor

[NumericSensorElementName] going high (upper non-critical) has asserted. (DIMM AB VR Temp)

**Explanation:** This message is for the use case when an implementation has detected an Upper Non-critical sensor going high has asserted.

May also be shown as 800107011403ffff or

0x800107011403ffff

Severity: Warning

Alert Category: Warning - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0490

SNMP Trap ID: 12

Automatically notify Support: No

#### User response:

- Make sure that the fans are operating, that there are no obstructions to the airflow (front and rear of the server), that the air baffle is in place and correctly installed, and that the server cover is installed and completely closed.
- Check the ambient temperature. You must be operating within the specifications (see Server Features and specifications for more information).
- 3. Make sure that the heat sink for microprocessor n.
- 4. (Trained technician only) Replace system board.

#### 80010701-1404ffff Numeric sensor

[NumericSensorElementName] going high (upper non-critical) has asserted. (DIMM CD VR Temp)

**Explanation:** This message is for the use case when an implementation has detected an Upper Non-critical sensor going high has asserted.

May also be shown as 800107011404ffff or 0x800107011404ffff

Severity: Warning

**Alert Category:** Warning - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0490

SNMP Trap ID: 12

Automatically notify Support: No

User response:

# 80010701-1405ffff • 80010701-2d01ffff

- 1. Make sure that the fans are operating, that there are no obstructions to the airflow (front and rear of the server), that the air baffle is in place and correctly installed, and that the server cover is installed and completely closed.
- 2. Check the ambient temperature. You must be operating within the specifications (see Server Features and specifications for more information).
- 3. Make sure that the heat sink for microprocessor n.
- (Trained technician only) Replace system board.

# 80010701-1405ffff Numeric sensor

[NumericSensorElementName] going high (upper non-critical) has asserted. (DIMM EF VR Temp)

Explanation: This message is for the use case when an implementation has detected an Upper Non-critical sensor going high has asserted.

May also be shown as 800107011405ffff or 0x800107011405ffff

**Severity:** Warning

Alert Category: Warning - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0490

SNMP Trap ID: 12

Automatically notify Support: No

# User response:

- 1. Make sure that the fans are operating, that there are no obstructions to the airflow (front and rear of the server), that the air baffle is in place and correctly installed, and that the server cover is installed and completely closed.
- 2. Check the ambient temperature. You must be operating within the specifications (see Server Features and specifications for more information).
- 3. Make sure that the heat sink for microprocessor n.
- 4. (Trained technician only) Replace system board.

#### 80010701-1406ffff Numeric sensor

[NumericSensorElementName] going high (upper non-critical) has asserted. (DIMM GH VR Temp)

**Explanation:** This message is for the use case when an implementation has detected an Upper Non-critical sensor going high has asserted.

May also be shown as 800107011406ffff or 0x800107011406ffff

Severity: Warning

**Alert Category:** Warning - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0490

SNMP Trap ID: 12

Automatically notify Support: No

# User response:

- 1. Make sure that the fans are operating, that there are no obstructions to the airflow (front and rear of the server), that the air baffle is in place and correctly installed, and that the server cover is installed and completely closed.
- 2. Check the ambient temperature. You must be operating within the specifications (see Server Features and specifications for more information).
- 3. Make sure that the heat sink for microprocessor n.
- 4. (Trained technician only) Replace system board.

#### 80010701-2c01ffff Numeric sensor

[NumericSensorElementName] going high (upper non-critical) has asserted. (Mezz Card Temp)

**Explanation:** This message is for the use case when an implementation has detected an Upper Non-critical sensor going high has asserted.

May also be shown as 800107012c01ffff or

0x800107012c01ffff

Severity: Warning

**Alert Category:** Warning - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0490

SNMP Trap ID: 12

Automatically notify Support: No

# User response:

- 1. Make sure that the fans are operating, that there are no obstructions to the airflow (front and rear of the server), that the air baffle is in place and correctly installed, and that the server cover is installed and completely closed.
- 2. Check the ambient temperature. You must be operating within the specifications (see Server Features and specifications for more information).
- 3. Make sure that the heat sink for microprocessor n.
- (Trained technician only) Replace system board.

#### 80010701-2d01ffff Numeric sensor

[NumericSensorElementName] going high (upper non-critical) has asserted. (PCH Temp)

**Explanation:** This message is for the use case when an implementation has detected an Upper Non-critical sensor going high has asserted.

May also be shown as 800107012d01ffff or 0x800107012d01ffff

Severity: Warning

Alert Category: Warning - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0490

SNMP Trap ID: 12

Automatically notify Support: No

# User response:

- 1. Make sure that the fans are operating, that there are no obstructions to the airflow (front and rear of the server), that the air baffle is in place and correctly installed, and that the server cover is installed and completely closed.
- Check the ambient temperature. You must be operating within the specifications (see Server Features and specifications for more information).
- 3. Make sure that the heat sink for microprocessor n.
- 4. (Trained technician only) Replace system board.

#### 80010901-0702ffff Numeric sensor

[NumericSensorElementName] going high (upper critical) has asserted. (FHHL Amb Temp)

**Explanation:** This message is for the use case when an implementation has detected an Upper Critical sensor going high has asserted.

May also be shown as 800109010702ffff or 0x800109010702ffff

Severity: Error

**Alert Category:** Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0494

SNMP Trap ID: 0

Automatically notify Support: No

#### User response:

- Make sure that the fans are operating, that there are no obstructions to the airflow (front and rear of the server), that the air baffle is in place and correctly installed, and that the server cover is installed and completely closed.
- Check the ambient temperature. You must be operating within the specifications (see Server Features and specifications for more information).
- 3. Make sure that the heat sink for microprocessor n.
- 4. (Trained technician only) Replace system board.

80010901-0703ffff Numeric sensor

[NumericSensorElementName] going high (upper critical) has asserted. (LowProfile Amb)

**Explanation:** This message is for the use case when an implementation has detected an Upper Critical sensor going high has asserted.

May also be shown as 800109010703ffff or 0x800109010703ffff

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0494

**SNMP Trap ID:** 0

Automatically notify Support: No

#### User response:

- Make sure that the fans are operating, that there are no obstructions to the airflow (front and rear of the server), that the air baffle is in place and correctly installed, and that the server cover is installed and completely closed.
- Check the ambient temperature. You must be operating within the specifications (see Server Features and specifications for more information).
- 3. Make sure that the heat sink for microprocessor n.
- 4. (Trained technician only) Replace system board.

#### 80010901-0704ffff Numeric sensor

[NumericSensorElementName] going high (upper critical) has asserted. (RAID Amb Temp)

**Explanation:** This message is for the use case when an implementation has detected an Upper Critical sensor going high has asserted.

May also be shown as 800109010704ffff or 0x800109010704ffff

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0494

**SNMP Trap ID:** 0

Automatically notify Support: No

# User response:

 Make sure that the fans are operating, that there are no obstructions to the airflow (front and rear of the server), that the air baffle is in place and correctly installed, and that the server cover is installed and completely closed.

## 80010901-0c01ffff • 80010901-1403ffff

- Check the ambient temperature. You must be operating within the specifications (see Server Features and specifications for more information).
- 3. Make sure that the heat sink for microprocessor n.
- 4. (Trained technician only) Replace system board.

#### 80010901-0c01ffff Numeric sensor

[NumericSensorElementName] going high (upper critical) has asserted. (Ambient Temp)

**Explanation:** This message is for the use case when an implementation has detected an Upper Critical sensor going high has asserted.

May also be shown as 800109010c01ffff or 0x800109010c01ffff

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0494

SNMP Trap ID: 0

Automatically notify Support: No

#### User response:

- Make sure that the fans are operating, that there are no obstructions to the airflow (front and rear of the server), that the air baffle is in place and correctly installed, and that the server cover is installed and completely closed.
- Check the ambient temperature. You must be operating within the specifications (see Server Features and specifications for more information).
- 3. Make sure that the heat sink for microprocessor n.
- 4. (Trained technician only) Replace system board.

#### 80010901-1401ffff Numeric sensor

[NumericSensorElementName] going high (upper critical) has asserted. (CPU1 VR Temp)

**Explanation:** This message is for the use case when an implementation has detected an Upper Critical sensor going high has asserted.

May also be shown as 800109011401ffff or 0x800109011401ffff

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0494

SNMP Trap ID: 0

**Automatically notify Support:** No

User response:

- Make sure that the fans are operating, that there are no obstructions to the airflow (front and rear of the server), that the air baffle is in place and correctly installed, and that the server cover is installed and completely closed.
- 2. Check the ambient temperature. You must be operating within the specifications (see Server Features and specifications for more information).
- 3. Make sure that the heat sink for microprocessor n.
- 4. (Trained technician only) Replace system board.

#### 80010901-1402ffff Numeric sensor

[NumericSensorElementName] going high (upper critical) has asserted. (CPU2 VR Temp)

**Explanation:** This message is for the use case when an implementation has detected an Upper Critical sensor going high has asserted.

May also be shown as 800109011402ffff or

0x800109011402ffff

**Severity:** Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0494

**SNMP Trap ID:** 0

Automatically notify Support: No

#### User response:

- Make sure that the fans are operating, that there are no obstructions to the airflow (front and rear of the server), that the air baffle is in place and correctly installed, and that the server cover is installed and completely closed.
- 2. Check the ambient temperature. You must be operating within the specifications (see Server Features and specifications for more information).
- 3. Make sure that the heat sink for microprocessor n.
- 4. (Trained technician only) Replace system board.

#### 80010901-1403ffff Numeric sensor

[NumericSensorElementName] going high (upper critical) has asserted. (DIMM AB VR Temp)

**Explanation:** This message is for the use case when an implementation has detected an Upper Critical sensor going high has asserted.

May also be shown as 800109011403ffff or 0x800109011403ffff

**Severity:** Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0494

**SNMP Trap ID:** 0

Automatically notify Support: No

#### User response:

- Make sure that the fans are operating, that there are no obstructions to the airflow (front and rear of the server), that the air baffle is in place and correctly installed, and that the server cover is installed and completely closed.
- 2. Check the ambient temperature. You must be operating within the specifications (see Server Features and specifications for more information).
- 3. Make sure that the heat sink for microprocessor n.
- 4. (Trained technician only) Replace system board.

#### 80010901-1404ffff Numeric sensor

[NumericSensorElementName] going high (upper critical) has asserted. (DIMM CD VR Temp)

**Explanation:** This message is for the use case when an implementation has detected an Upper Critical sensor going high has asserted.

May also be shown as 800109011404ffff or 0x800109011404ffff

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0494

**SNMP Trap ID:** 0

Automatically notify Support: No

# User response:

- 1. Make sure that the fans are operating, that there are no obstructions to the airflow (front and rear of the server), that the air baffle is in place and correctly installed, and that the server cover is installed and completely closed.
- 2. Check the ambient temperature. You must be operating within the specifications (see Server Features and specifications for more information).
- 3. Make sure that the heat sink for microprocessor n.
- 4. (Trained technician only) Replace system board.

#### 80010901-1405ffff Numeric sensor

[NumericSensorElementName] going high (upper critical) has asserted. (DIMM EF VR Temp)

**Explanation:** This message is for the use case when an implementation has detected an Upper Critical sensor going high has asserted.

May also be shown as 800109011405ffff or

0x800109011405ffff

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0494

SNMP Trap ID: 0

Automatically notify Support: No

#### User response:

- Make sure that the fans are operating, that there are no obstructions to the airflow (front and rear of the server), that the air baffle is in place and correctly installed, and that the server cover is installed and completely closed.
- 2. Check the ambient temperature. You must be operating within the specifications (see Server Features and specifications for more information).
- 3. Make sure that the heat sink for microprocessor n.
- 4. (Trained technician only) Replace system board.

#### 80010901-1406ffff Numeric sensor

[NumericSensorElementName] going high (upper critical) has asserted. (DIMM GH VR Temp)

**Explanation:** This message is for the use case when an implementation has detected an Upper Critical sensor going high has asserted.

May also be shown as 800109011406ffff or

0x800109011406ffff

**Severity:** Error

**Alert Category:** Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0494

SNMP Trap ID: 0

Automatically notify Support: No

#### User response:

- Make sure that the fans are operating, that there are no obstructions to the airflow (front and rear of the server), that the air baffle is in place and correctly installed, and that the server cover is installed and completely closed.
- 2. Check the ambient temperature. You must be operating within the specifications (see Server Features and specifications for more information).
- 3. Make sure that the heat sink for microprocessor n.
- 4. (Trained technician only) Replace system board.

#### 80010901-2c01ffff • 80010b01-0702ffff

80010901-2c01ffff Numeric sensor

[NumericSensorElementName] going high (upper critical) has asserted. (Mezz Card Temp)

**Explanation:** This message is for the use case when an implementation has detected an Upper Critical sensor going high has asserted.

May also be shown as 800109012c01ffff or 0x800109012c01ffff

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0494

SNMP Trap ID: 0

Automatically notify Support: No

#### User response:

- Make sure that the fans are operating, that there are no obstructions to the airflow (front and rear of the server), that the air baffle is in place and correctly installed, and that the server cover is installed and completely closed.
- Check the ambient temperature. You must be operating within the specifications (see Server Features and specifications for more information).
- 3. Make sure that the heat sink for microprocessor n.
- 4. (Trained technician only) Replace system board.

#### 80010901-2d01ffff Numeric sensor

[NumericSensorElementName] going high (upper critical) has asserted. (PCH Temp)

**Explanation:** This message is for the use case when an implementation has detected an Upper Critical sensor going high has asserted.

May also be shown as 800109012d01ffff or 0x800109012d01ffff

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0494

**SNMP Trap ID:** 0

Automatically notify Support: No

## User response:

 Make sure that the fans are operating, that there are no obstructions to the airflow (front and rear of the server), that the air baffle is in place and correctly installed, and that the server cover is installed and completely closed.

- 2. Check the ambient temperature. You must be operating within the specifications (see Server Features and specifications for more information).
- 3. Make sure that the heat sink for microprocessor n.
- 4. (Trained technician only) Replace system board.

#### 80010902-0701ffff Numeric sensor

[NumericSensorElementName] going high (upper critical) has asserted.

**Explanation:** This message is for the use case when an implementation has detected an Upper Critical sensor going high has asserted.

May also be shown as 800109020701ffff or

0x800109020701ffff

**Severity:** Error

Alert Category: Critical - Voltage

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0494

SNMP Trap ID: 1

Automatically notify Support: Yes

**User response:** If the specified sensor is Planar 3.3V or Planar 5V, (Trained technician only) replace the system board. If the specified sensor is Planar 12V, complete the following steps until the problem is solved:

1. Check power supply n LED.

2. Remove the failing power supply.

3. (Trained technician only) Replace the system board. (n = power supply number)

#### 80010b01-0702ffff Numeric sensor

[NumericSensorElementName] going high (upper non-recoverable) has asserted. (FHHL Amb Temp)

**Explanation:** This message is for the use case when an implementation has detected an Upper Non-recoverable sensor going high has asserted.

May also be shown as 80010b010702ffff or 0x80010b010702ffff

**Severity:** Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0498

**SNMP Trap ID:** 0

**Automatically notify Support:** No

#### User response:

 Make sure that the fans are operating, that there are no obstructions to the airflow (front and rear of the server), that the air baffle is in place and

- correctly installed, and that the server cover is installed and completely closed.
- 2. Check the ambient temperature. You must be operating within the specifications (see Server Features and specifications for more information).
- 3. Make sure that the heat sink for microprocessor n.
- 4. (Trained technician only) Replace system board.

#### 80010b01-0703ffff Numeric sensor

[NumericSensorElementName] going high (upper non-recoverable) has asserted. (LowProfile Amb)

**Explanation:** This message is for the use case when an implementation has detected an Upper Non-recoverable sensor going high has asserted.

May also be shown as 80010b010703ffff or 0x80010b010703ffff

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0498

SNMP Trap ID: 0

Automatically notify Support: No

#### User response:

- Make sure that the fans are operating, that there are no obstructions to the airflow (front and rear of the server), that the air baffle is in place and correctly installed, and that the server cover is installed and completely closed.
- Check the ambient temperature. You must be operating within the specifications (see Server Features and specifications for more information).
- 3. Make sure that the heat sink for microprocessor n.
- 4. (Trained technician only) Replace system board.

# 80010b01-0704ffff Numeric sensor

[NumericSensorElementName] going high (upper non-recoverable) has asserted. (RAID Amb Temp)

**Explanation:** This message is for the use case when an implementation has detected an Upper Non-recoverable sensor going high has asserted.

May also be shown as 80010b010704ffff or 0x80010b010704ffff

Severity: Error

**Alert Category:** Critical - Temperature

Serviceable: Yes

**CIM Information: Prefix:** PLAT and **ID:** 0498

**SNMP Trap ID:** 0

# Automatically notify Support: No

#### User response:

- Make sure that the fans are operating, that there are no obstructions to the airflow (front and rear of the server), that the air baffle is in place and correctly installed, and that the server cover is installed and completely closed.
- 2. Check the ambient temperature. You must be operating within the specifications (see Server Features and specifications for more information).
- 3. Make sure that the heat sink for microprocessor n.
- 4. (Trained technician only) Replace system board.

#### 80010b01-0c01ffff Numeric sensor

[NumericSensorElementName] going high (upper non-recoverable) has asserted. (Ambient Temp)

**Explanation:** This message is for the use case when an implementation has detected an Upper Non-recoverable sensor going high has asserted.

May also be shown as 80010b010c01ffff or

0x80010b010c01ffff

**Severity:** Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0498

**SNMP Trap ID:** 0

Automatically notify Support: No

#### User response:

- Make sure that the fans are operating, that there are no obstructions to the airflow (front and rear of the server), that the air baffle is in place and correctly installed, and that the server cover is installed and completely closed.
- Check the ambient temperature. You must be operating within the specifications (see Server Features and specifications for more information).
- 3. Make sure that the heat sink for microprocessor n.
- 4. (Trained technician only) Replace system board.

#### 80010b01-1401ffff Numeric sensor

[NumericSensorElementName] going high (upper non-recoverable) has asserted. (CPU1 VR Temp)

**Explanation:** This message is for the use case when an implementation has detected an Upper Non-recoverable sensor going high has asserted.

May also be shown as 80010b011401ffff or

0x80010b011401ffff

Severity: Error

#### 80010b01-1402ffff • 80010b01-1404ffff

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0498

SNMP Trap ID: 0

Automatically notify Support: No

# User response:

- Make sure that the fans are operating, that there are no obstructions to the airflow (front and rear of the server), that the air baffle is in place and correctly installed, and that the server cover is installed and completely closed.
- Check the ambient temperature. You must be operating within the specifications (see Server Features and specifications for more information).
- 3. Make sure that the heat sink for microprocessor n.
- 4. (Trained technician only) Replace system board.

#### 80010b01-1402ffff Numeric sensor

[NumericSensorElementName] going high (upper non-recoverable) has asserted. (CPU2 VR Temp)

**Explanation:** This message is for the use case when an implementation has detected an Upper Non-recoverable sensor going high has asserted.

May also be shown as 80010b011402ffff or 0x80010b011402ffff

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0498

**SNMP Trap ID:** 0

Automatically notify Support: No

#### User response:

- Make sure that the fans are operating, that there are no obstructions to the airflow (front and rear of the server), that the air baffle is in place and correctly installed, and that the server cover is installed and completely closed.
- 2. Check the ambient temperature. You must be operating within the specifications (see Server Features and specifications for more information).
- 3. Make sure that the heat sink for microprocessor n.
- 4. (Trained technician only) Replace system board.

#### 80010b01-1403ffff Numeric sensor

[NumericSensorElementName] going high (upper non-recoverable) has asserted. (DIMM AB VR Temp)

**Explanation:** This message is for the use case when an implementation has detected an Upper Non-recoverable

sensor going high has asserted.

May also be shown as 80010b011403ffff or

0x80010b011403ffff

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0498

**SNMP Trap ID:** 0

Automatically notify Support: No

#### User response:

- Make sure that the fans are operating, that there are no obstructions to the airflow (front and rear of the server), that the air baffle is in place and correctly installed, and that the server cover is installed and completely closed.
- 2. Check the ambient temperature. You must be operating within the specifications (see Server Features and specifications for more information).
- 3. Make sure that the heat sink for microprocessor n.
- 4. (Trained technician only) Replace system board.

#### 80010b01-1404ffff Numeric sensor

[NumericSensorElementName] going high (upper non-recoverable) has asserted. (DIMM CD VR Temp)

**Explanation:** This message is for the use case when an implementation has detected an Upper Non-recoverable sensor going high has asserted.

May also be shown as 80010b011404ffff or

0x80010b011404ffff

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0498

**SNMP Trap ID:** 0

Automatically notify Support: No

# User response:

- 1. Make sure that the fans are operating, that there are no obstructions to the airflow (front and rear of the server), that the air baffle is in place and correctly installed, and that the server cover is installed and completely closed.
- 2. Check the ambient temperature. You must be operating within the specifications (see Server Features and specifications for more information).
- 3. Make sure that the heat sink for microprocessor n.
- 4. (Trained technician only) Replace system board.

#### 80010b01-1405ffff • 80010b01-2d01ffff

80010b01-1405ffff Numeric sensor

[NumericSensorElementName] going high (upper non-recoverable) has asserted. (DIMM EF VR Temp)

**Explanation:** This message is for the use case when an implementation has detected an Upper Non-recoverable sensor going high has asserted.

May also be shown as 80010b011405ffff or 0x80010b011405ffff

Severity: Error

**Alert Category:** Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0498

**SNMP Trap ID:** 0

Automatically notify Support: No

#### User response:

- Make sure that the fans are operating, that there are no obstructions to the airflow (front and rear of the server), that the air baffle is in place and correctly installed, and that the server cover is installed and completely closed.
- 2. Check the ambient temperature. You must be operating within the specifications (see Server Features and specifications for more information).
- 3. Make sure that the heat sink for microprocessor n.
- 4. (Trained technician only) Replace system board.

#### 80010b01-1406ffff Numeric sensor

[NumericSensorElementName] going high (upper non-recoverable) has asserted. (DIMM GH VR Temp)

**Explanation:** This message is for the use case when an implementation has detected an Upper Non-recoverable sensor going high has asserted.

May also be shown as 80010b011406ffff or 0x80010b011406ffff

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0498

**SNMP Trap ID:** 0

Automatically notify Support: No

#### User response:

 Make sure that the fans are operating, that there are no obstructions to the airflow (front and rear of the server), that the air baffle is in place and correctly installed, and that the server cover is installed and completely closed.

- 2. Check the ambient temperature. You must be operating within the specifications (see Server Features and specifications for more information).
- 3. Make sure that the heat sink for microprocessor n.
- 4. (Trained technician only) Replace system board.

#### 80010b01-2c01ffff Numeric sensor

[NumericSensorElementName] going high (upper non-recoverable) has asserted. (Mezz Card Temp)

**Explanation:** This message is for the use case when an implementation has detected an Upper Non-recoverable sensor going high has asserted.

May also be shown as 80010b012c01ffff or

0x80010b012c01ffff

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0498

**SNMP Trap ID:** 0

Automatically notify Support: No

#### User response:

- Make sure that the fans are operating, that there are no obstructions to the airflow (front and rear of the server), that the air baffle is in place and correctly installed, and that the server cover is installed and completely closed.
- Check the ambient temperature. You must be operating within the specifications (see Server Features and specifications for more information).
- 3. Make sure that the heat sink for microprocessor n.
- 4. (Trained technician only) Replace system board.

#### 80010b01-2d01ffff Numeric sensor

[NumericSensorElementName] going high (upper non-recoverable) has asserted. (PCH Temp)

**Explanation:** This message is for the use case when an implementation has detected an Upper Non-recoverable sensor going high has asserted.

May also be shown as 80010b012d01ffff or

0x80010b012d01ffff

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0498

SNMP Trap ID: 0

Automatically notify Support: No

#### 80030006-2101ffff • 8007010f-2582ffff

- Make sure that the fans are operating, that there are no obstructions to the airflow (front and rear of the server), that the air baffle is in place and correctly installed, and that the server cover is installed and completely closed.
- 2. Check the ambient temperature. You must be operating within the specifications (see Server Features and specifications for more information).
- 3. Make sure that the heat sink for microprocessor n.
- 4. (Trained technician only) Replace system board.

### 80030006-2101ffff Sensor [SensorElementName] has deasserted. (Sig Verify Fail)

**Explanation:** This message is for the use case when an implementation has detected a Sensor has deasserted.

May also be shown as 800300062101ffff or 0x800300062101ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0509

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

### 80030012-2301ffff Sensor [SensorElementName] has deasserted. (OS RealTime Mod)

**Explanation:** This message is for the use case when an implementation has detected a Sensor has deasserted.

May also be shown as 800300122301ffff or 0x800300122301ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0509

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

### 80030108-0a01ffff Sensor [SensorElementName] has asserted. (PS Heavy Load)

**Explanation:** This message is for the use case when an implementation has detected a Sensor has asserted.

May also be shown as 800301080a01ffff or 0x800301080a01ffff

0.00000010000011111

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0508

**SNMP Trap ID:** 

Automatically notify Support: No

#### User response:

1. Replace the power supply with higher rated power.

2. Reduce the total power consumption by removing newly added or unused option like drives or adapters.

## 8007010f-2201ffff Sensor [SensorElementName] has transitioned from normal to non-critical state. (GPT Status)

**Explanation:** This message is for the use case when an implementation has detected a Sensor transitioned to non-critical from normal.

May also be shown as 8007010f2201ffff or 0x8007010f2201ffff

Severity: Warning

Alert Category: Warning - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0520

SNMP Trap ID: 60

Automatically notify Support: No

#### User response:

1. Check the IBM support site for service bulletins or firmware updates that apply to this GPT error.

2. Set the UEFI setting DISK GPT Recovery to Automatic.

3. Replace the corrupt disk.

### 8007010f-2582ffff Sensor [SensorElementName] has transitioned from normal to non-critical state. (No PCI I/O Space)

**Explanation:** This message is for the use case when an implementation has detected a Sensor transitioned to non-critical from normal.

May also be shown as 8007010f2582ffff or 0x8007010f2582ffff

Severity: Warning

Alert Category: Warning - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0520

SNMP Trap ID: 60

Automatically notify Support: No

**User response:** Complete the following step to solve

PCI I/O resource errors:

#### 80070114-2201ffff • 80070202-0701ffff

- 1. Go to F1 Setup
- 2. System Settings
- 3. Device and I/O ports
- 4. PCI 64 bit Resource and choose enable.

### 80070114-2201ffff Sensor [SensorElementName] has transitioned from normal to non-critical state. (TPM Phy Pres Set)

**Explanation:** This message is for the use case when an implementation has detected a Sensor transitioned to non-critical from normal.

May also be shown as 800701142201ffff or 0x800701142201ffff

Severity: Warning

Alert Category: Warning - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0520

SNMP Trap ID: 60

Automatically notify Support: No

#### User response:

- Complete the administrative tasks that require the TPM physical presence switch to be in the ON position.
- 2. Restore the physical presence switch to the OFF position.
- 3. Reboot the system.
- 4. (Trained technician only) If the error continues, replace the planar.

## 80070201-0301ffff Sensor [SensorElementName] has transitioned to critical from a less severe state. (CPU 1 OverTemp)

**Explanation:** This message is for the use case when an implementation has detected a Sensor transitioned to critical from less severe.

May also be shown as 800702010301ffff or 0x800702010301ffff

**Severity:** Error

**Alert Category:** Critical - Temperature

Serviceable: Yes

**CIM Information: Prefix:** PLAT and **ID:** 0522

**SNMP Trap ID:** 0

Automatically notify Support: No

#### User response:

 Make sure that the fans are operating, that there are no obstructions to the airflow (front and rear of the server), that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.

- Check the ambient temperature. You must be operating within the specifications (see Features and specifications for more information).
- 3. Make sure that the heat sink for microprocessor n is installed correctly.
- 4. (Trained technician only) Replace microprocessor n. (n = microprocessor number)

#### 80070201-0302ffff Sensor [SensorElementName] has transitioned to critical from a less severe state. (CPU 2 OverTemp)

**Explanation:** This message is for the use case when an implementation has detected a Sensor transitioned to critical from less severe.

May also be shown as 800702010302ffff or 0x800702010302ffff

Severity: Error

**Alert Category:** Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0522

SNMP Trap ID: 0

Automatically notify Support: No

#### User response:

- Make sure that the fans are operating, that there are no obstructions to the airflow (front and rear of the server), that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.
- 2. Check the ambient temperature. You must be operating within the specifications (see Features and specifications for more information).
- 3. Make sure that the heat sink for microprocessor n is installed correctly.
- 4. (Trained technician only) Replace microprocessor n. (n = microprocessor number)

## 80070202-0701ffff Sensor [SensorElementName] has transitioned to critical from a less severe state. (SysBrd Vol Fault)

**Explanation:** This message is for the use case when an implementation has detected a Sensor transitioned to critical from less severe.

May also be shown as 800702020701ffff or 0x800702020701ffff

Severity: Error

**Alert Category:** Critical - Voltage

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0522

#### 80070208-0a01ffff • 8007020f-2582ffff

SNMP Trap ID: 1

**Automatically notify Support:** No

#### User response:

- 1. Check the system-event log.
- 2. Check for an error LED on the system board.
- 3. Replace any failing device.
- 4. Check for a server firmware update. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
- 5. (Trained technician only) Replace the system board.

#### 80070208-0a01ffff Sensor [SensorElementName] has transitioned to critical from a less severe state. (PS 1 Fan Fault)

Explanation: This message is for the use case when an implementation has detected a Sensor transitioned to critical from less severe.

May also be shown as 800702080a01ffff or 0x800702080a01ffff

Severity: Error

Alert Category: Critical - Power

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0522

SNMP Trap ID: 4

Automatically notify Support: No

#### User response:

- 1. Make sure that there are no obstructions, such as bundled cables, to the airflow from the power-supply fan.
- 2. Use the IBM Power Configurator utility to ensure current system power consumption is under limitation. For more information and to download the utility, go to http://www-03.ibm.com/systems/ bladecenter/resources/powerconfig.html.
- 3. Replace power supply n. (n = power supplynumber)

PS 1 Therm Fault:

#### 80070208-0a02ffff Sensor [SensorElementName] has transitioned to critical from a less severe state. (PS 2 Fan Fault)

**Explanation:** This message is for the use case when an implementation has detected a Sensor transitioned to critical from less severe.

May also be shown as 800702080a02ffff or 0x800702080a02ffff

Severity: Error

**Alert Category:** Critical - Power

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0522

SNMP Trap ID: 4

Automatically notify Support: No

#### User response:

- 1. Make sure that there are no obstructions, such as bundled cables, to the airflow from the power-supply fan.
- 2. Use the IBM Power Configurator utility to ensure current system power consumption is under limitation. For more information and to download the utility, go to http://www-03.ibm.com/systems/ bladecenter/resources/powerconfig.html.
- 3. Replace power supply n. (n = power supplynumber)

PS 2 Therm Fault:

#### 8007020f-2201ffff Sensor [SensorElementName] has transitioned to critical from a less severe state. (TXT ACM Module)

**Explanation:** This message is for the use case when an implementation has detected a Sensor transitioned to critical from less severe.

May also be shown as 8007020f2201ffff or 0x8007020f2201ffff

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0522

SNMP Trap ID: 50

Automatically notify Support: No

#### User response:

- 1. If enabling TXT is not required, disable TXT from the Setup Utility.
- 2. If enabling TXT is required, verify that the TPM is enabled and activated from the Setup Utility.
- If the problem remains, contact your service representative.

#### 8007020f-2582ffff Sensor [SensorElementName] has transitioned to critical from a less severe state. (No PCI I/O Space)

Explanation: This message is for the use case when an implementation has detected a Sensor transitioned to critical from less severe.

#### 80070214-2201ffff • 8007021b-0302ffff

May also be shown as 8007020f2582ffff or 0x8007020f2582ffff

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0522

SNMP Trap ID: 50

Automatically notify Support: No

**User response:** Complete the following step to solve PCI I/O resource errors:

1. Go to F1 Setup

2. System Settings

3. Device and I/O ports

4. PCI 64 bit Resource and choose enable.

#### 80070214-2201ffff Sensor [SensorElementName] has transitioned to critical from a less severe state. (TPM Lock)

**Explanation:** This message is for the use case when an implementation has detected a Sensor transitioned to critical from less severe.

May also be shown as 800702142201ffff or 0x800702142201ffff

Severity: Error

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0522

**SNMP Trap ID:** 

Automatically notify Support: No

#### User response:

- 1. Update the server firmware (see Recovering the server firmware).
- If the problem persists, (trained technician only) replace the system board (see Removing the system board and Installing the system board).

#### 80070219-0701ffff Sensor [SensorElementName] has transitioned to critical from a less severe state. (SysBrd Fault)

**Explanation:** This message is for the use case when an implementation has detected a Sensor transitioned to critical from less severe.

May also be shown as 800702190701ffff or 0x800702190701ffff

**Severity:** Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0522

SNMP Trap ID: 50

Automatically notify Support: No

#### User response:

1. Check for an error LED on the system board.

- 2. Check the system-event log.
- 3. Check for the system firmware version and update to the latest version. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
- 4. Replace any failing device which indicated from system event log.
- 5. If problems still occurred, (trained technician only) replace the system board.

#### 8007021b-0301ffff Sensor [SensorElementName] has transitioned to critical from a less severe state. (CPU 1 OPILinkErr)

**Explanation:** This message is for the use case when an implementation has detected a Sensor transitioned to critical from less severe.

May also be shown as 8007021b0301ffff or 0x8007021b0301ffff

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0522

SNMP Trap ID: 50

Automatically notify Support: No

#### User response:

- 1. Check for a server firmware update.
- 2. Make sure that the installed microprocessors are compatible.
- 3. (Trained technician only) Replace the microprocessor if the problems still exist
- 4. (Trained technician only) Replace the system board if the problems still exist.

#### 8007021b-0302ffff Sensor [SensorElementName] has transitioned to critical from a less severe state. (CPU 2 QPILinkErr)

**Explanation:** This message is for the use case when an implementation has detected a Sensor transitioned to critical from less severe.

May also be shown as 8007021b0302ffff or 0x8007021b0302ffff

#### 80070301-0301ffff • 80070608-0a01ffff

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0522

SNMP Trap ID: 50

Automatically notify Support: No

#### User response:

- 1. Check for a server firmware update.
- 2. Make sure that the installed microprocessors are compatible.
- (Trained technician only) Replace the microprocessor if the problems still exist
- 4. (Trained technician only) Replace the system board if the problems still exist.

#### 80070301-0301ffff Sensor [SensorElementName] has transitioned to non-recoverable from a less severe state. (CPU 1 OverTemp)

**Explanation:** This message is for the use case when an implementation has detected a Sensor transitioned to non-recoverable from less severe.

May also be shown as 800703010301ffff or 0x800703010301ffff

Severity: Error

**Alert Category:** Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0524

SNMP Trap ID: 0

Automatically notify Support: No

#### User response:

- Make sure that the fans are operating, that there are no obstructions to the airflow (front and rear of the server), that the air baffle is in place and correctly installed, and that the server cover is installed and completely closed.
- Check the ambient temperature. You must be operating within the specifications (see Server Features and specifications for more information).
- 3. Make sure that the heat sink for microprocessor n.
- (Trained technician only) Replace microprocessor n. (n = microprocessor number)

#### 80070301-0302ffff Sensor [SensorElementName] has transitioned to non-recoverable from a less severe state. (CPU 2 OverTemp)

**Explanation:** This message is for the use case when an implementation has detected a Sensor transitioned to non-recoverable from less severe.

May also be shown as 800703010302ffff or 0x800703010302ffff

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0524

SNMP Trap ID: 0

Automatically notify Support: No

#### User response:

- Make sure that the fans are operating, that there are no obstructions to the airflow (front and rear of the server), that the air baffle is in place and correctly installed, and that the server cover is installed and completely closed.
- Check the ambient temperature. You must be operating within the specifications (see Server Features and specifications for more information).
- 3. Make sure that the heat sink for microprocessor n.
- 4. (Trained technician only) Replace microprocessor n. (n = microprocessor number)

### 80070608-0a01ffff Sensor [SensorElementName] has transitioned to non-recoverable.

**Explanation:** This message is for the use case when an implementation has detected a Sensor transitioned to non-recoverable.

May also be shown as 800706080a01ffff or

0x800706080a01ffff

Severity: Error

**Alert Category:** Critical - Power

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0530

SNMP Trap ID: 4

Automatically notify Support: No

**User response:** If the specified sensor is PS n 12V OC Fault, complete the following steps until the problem is solved:

- 1. Use the IBM Power Configurator utility to determine current system power consumption. For more information and to download the utility, go to http://www-03.ibm.com/systems/bladecenter/resources/powerconfig.html.
- 2. Follow actions in "Power Problems and Solving Power Problems".

If the specified sensor is PS n 12V OV Fault, complete the following steps until the problem is solved:

- 1. Check power supply n LED.
- 2. Remove the failing power supply.

3. (Trained technician only) Replace the system board. (n = power supply number)

If the specified sensor is PS n 12V UV Fault, complete the following steps until the problem is solved:

- 1. Check power supply n LED.
- 2. Remove the failing power supply.
- 3. Follow actions in "Power Problems and Solving Power Problems".
- 4. (Trained technician only) Replace the system board. (n = power supply number)

If the specified sensor is PS n 12Vaux Fault, complete the following steps until the problem is solved:

- 1. Check power supply n LED.
- Replace power supply n. (n = power supply number)

### 80070608-0a02ffff Sensor [SensorElementName] has transitioned to non-recoverable.

**Explanation:** This message is for the use case when an implementation has detected a Sensor transitioned to non-recoverable.

May also be shown as 800706080a02ffff or 0x800706080a02ffff

Severity: Error

Alert Category: Critical - Power

Serviceable: Yes

**CIM Information: Prefix:** PLAT and **ID:** 0530

SNMP Trap ID: 4

Automatically notify Support: No

**User response:** If the specified sensor is PS n 12V OC Fault, complete the following steps until the problem is solved:

- Use the IBM Power Configurator utility to determine current system power consumption. For more information and to download the utility, go to http://www-03.ibm.com/systems/bladecenter/ resources/powerconfig.html.
- 2. Follow actions in "Power Problems and Solving Power Problems".

If the specified sensor is PS n 12V OV Fault, complete the following steps until the problem is solved:

- 1. Check power supply n LED.
- 2. Remove the failing power supply.
- 3. (Trained technician only) Replace the system board. (n = power supply number)

If the specified sensor is PS n 12V UV Fault, complete the following steps until the problem is solved:

1. Check power supply n LED.

- 2. Remove the failing power supply.
- 3. Follow actions in "Power Problems and Solving Power Problems".
- (Trained technician only) Replace the system board.
   (n = power supply number)

If the specified sensor is PS n 12Vaux Fault, complete the following steps until the problem is solved:

- 1. Check power supply n LED.
- Replace power supply n. (n = power supply number)

#### 80070614-2201ffff Sensor [SensorElementName] has transitioned to non-recoverable. (TPM Phy Pres Set)

**Explanation:** This message is for the use case when an implementation has detected a Sensor transitioned to non-recoverable.

May also be shown as 800706142201ffff or 0x800706142201ffff

Severity: Error

**Alert Category:** Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0530

SNMP Trap ID: 50

Automatically notify Support: No

#### User response:

- 1. Update the server firmware (see Recovering the server firmware).
- 2. If the problem persists, (trained technician only) replace the system board (see Removing the system board and Installing the system board).

### 8008010f-2101ffff Device [LogicalDeviceElementName] has been added. (Phy Presence Jmp)

**Explanation:** This message is for the use case when an implementation has detected a Device was inserted.

May also be shown as 8008010f2101ffff or 0x8008010f2101ffff

**Severity:** Info

**Alert Category:** System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0536

**SNMP Trap ID:** 

**Automatically notify Support:** No

**User response:** No action; information only.

#### 80080128-2101ffff • 800b010a-1e82ffff

80080128-2101ffff Device

[LogicalDeviceElementName] has been added. (Low Security Jmp)

**Explanation:** This message is for the use case when an implementation has detected a Device was inserted.

May also be shown as 800801282101ffff or 0x800801282101ffff

**Severity:** Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0536

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

800b0008-1301ffff Redundancy

[RedundancySetElementName] has been restored. (Power Unit)

**Explanation:** This message is for the use case when an

implementation has detected Redundancy was

Restored.

May also be shown as 800b00081301ffff or 0x800b00081301ffff

**Severity:** Info

**Alert Category:** Warning - Redundant Power Supply

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0561

SNMP Trap ID: 10

Automatically notify Support: No

**User response:** No action; information only.

800b0108-1301ffff Redundancy Lost for [RedundancySetElementName] has

asserted. (Power Unit)

Explanation: This message is for the use case when

Redundancy Lost has asserted.

May also be shown as 800b01081301ffff or

0x800b01081301ffff

Severity: Error

Alert Category: Critical - Redundant Power Supply

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0802

SNMP Trap ID: 9

Automatically notify Support: No

User response:

1. Check the LEDs for both power supplies.

Follow the actions in Power-supply LEDs. 2.

800b010a-1e81ffff Redundancy Lost for [RedundancySetElementName] has

asserted. (Cooling Zone 1)

**Explanation:** This message is for the use case when

Redundancy Lost has asserted.

May also be shown as 800b010a1e81ffff or

0x800b010a1e81ffff **Severity:** Error

Alert Category: Critical - Fan Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0802

SNMP Trap ID: 11

Automatically notify Support: No

User response:

1. Make sure that the connectors on fan n are not damaged.

2. Make sure that the fan n connectors on the system board are not damaged.

3. Make sure that the fans are correctly installed.

4. Reseat the fans.

Replace the fans. (n = fan number)

800b010a-1e82ffff Redundancy Lost for [RedundancySetElementName] has asserted. (Cooling Zone 2)

Explanation: This message is for the use case when

Redundancy Lost has asserted.

May also be shown as 800b010a1e82ffff or

0x800b010a1e82ffff

**Severity:** Error

Alert Category: Critical - Fan Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0802

SNMP Trap ID: 11

Automatically notify Support: No

User response:

1. Make sure that the connectors on fan n are not damaged.

2. Make sure that the fan n connectors on the system board are not damaged.

3. Make sure that the fans are correctly installed.

4. Reseat the fans.

Replace the fans. (n = fan number)

### 800b010a-1e83ffff Redundancy Lost for [RedundancySetElementName] has asserted. (Cooling Zone 3)

**Explanation:** This message is for the use case when

Redundancy Lost has asserted.

May also be shown as 800b010a1e83ffff or 0x800b010a1e83ffff

Severity: Error

Alert Category: Critical - Fan Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0802

SNMP Trap ID: 11

Automatically notify Support: No

#### User response:

- Make sure that the connectors on fan n are not damaged.
- 2. Make sure that the fan n connectors on the system board are not damaged.
- 3. Make sure that the fans are correctly installed.
- 4. Reseat the fans.
- 5. Replace the fans. (n = fan number)

## 800b010a-1e84ffff Redundancy Lost for [RedundancySetElementName] has asserted. (Cooling Zone 4)

**Explanation:** This message is for the use case when Redundancy Lost has asserted.

May also be shown as 800b010a1e84ffff or 0x800b010a1e84ffff

**Severity:** Error

Alert Category: Critical - Fan Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0802

SNMP Trap ID: 11

Automatically notify Support: No

#### User response:

- Make sure that the connectors on fan n are not damaged.
- 2. Make sure that the fan n connectors on the system board are not damaged.
- 3. Make sure that the fans are correctly installed.
- 4. Reseat the fans.
- 5. Replace the fans. (n = fan number)

## 800b010a-1e85ffff Redundancy Lost for [RedundancySetElementName] has asserted. (Cooling Zone 5)

**Explanation:** This message is for the use case when

Redundancy Lost has asserted.

May also be shown as 800b010a1e85ffff or

0x800b010a1e85ffff

**Severity:** Error

Alert Category: Critical - Fan Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0802

SNMP Trap ID: 11

Automatically notify Support: No

#### User response:

- Make sure that the connectors on fan n are not damaged.
- 2. Make sure that the fan n connectors on the system board are not damaged.
- 3. Make sure that the fans are correctly installed.
- 4. Reseat the fans.
- 5. Replace the fans. (n = fan number)

#### 800b010c-2581ffff Redundancy Lost for [RedundancySetElementName] has asserted. (Backup Memory)

**Explanation:** This message is for the use case when Redundancy Lost has asserted.

May also be shown as 800b010c2581ffff or 0x800b010c2581ffff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0802

SNMP Trap ID: 41

Automatically notify Support: No

#### User response:

- Check the system-event log for DIMM failure events (uncorrectable or PFA) and correct the failures
- 2. Re-enable mirroring in the Setup utility.

#### 800b0309-1301ffff Non-redundant:Sufficient

Resources from Redundancy Degraded or Fully Redundant for [RedundancySetElementName] has asserted. (Power Resource)

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**Explanation:** This message is for the use case when a

#### 800b030c-2581ffff • 800b050a-1e82ffff

Redundancy Set has transitioned from Redundancy Degraded or Fully Redundant to Non-redundant:Sufficient.

May also be shown as 800b03091301ffff or 0x800b03091301ffff

Severity: Warning

Alert Category: Warning - Redundant Power Supply

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0806

SNMP Trap ID: 10

Automatically notify Support: No

#### User response:

- Non-redundant sufficient: Power load will be handled by remaining power supply, though the system may throttle to avoid a power supply over-current condition.
- 2. Replace the power supply with higher rated power.

800b030c-2581ffff Non-redundant:Sufficient
Resources from Redundancy Degraded
or Fully Redundant for
[RedundancySetElementName] has
asserted. (Backup Memory)

**Explanation:** This message is for the use case when a Redundancy Set has transitioned from Redundancy Degraded or Fully Redundant to Non-redundant:Sufficient.

May also be shown as 800b030c2581ffff or 0x800b030c2581ffff

Severity: Warning

**Alert Category:** Warning - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0806

SNMP Trap ID: 43

Automatically notify Support: No

#### User response:

- Check the system-event log for DIMM failure events (uncorrectable or PFA) and correct the failures.
- 2. Re-enable mirroring in the Setup utility.

800b0509-1301ffff Non-redundant:Insufficient Resources for [RedundancySetElementName] has asserted. (Power Resource)

**Explanation:** This message is for the use case when a Redundancy Set has transitioned to Non-redundant:Insufficient Resources.

May also be shown as 800b05091301ffff or 0x800b05091301ffff

Severity: Error

Alert Category: Critical - Redundant Power Supply

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0810

**SNMP Trap ID:** 9

Automatically notify Support: No

#### User response:

- Non-redundant sufficient: Power load will be handled by remaining power supply, though the system may throttle to avoid a power supply over-current condition.
- 2. Replace the power supply with higher rated power.

#### 800b050a-1e81ffff Non-redundant:Insufficient Resources for [RedundancySetElementName] has asserted. (Cooling Zone 1)

**Explanation:** This message is for the use case when a Redundancy Set has transitioned to

Non-redundant:Insufficient Resources.

May also be shown as 800b050a1e81ffff or 0x800b050a1e81ffff

**Severity:** Error

Alert Category: Critical - Fan Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0810

SNMP Trap ID: 11

Automatically notify Support: No

#### User response:

- 1. Make sure that the connectors on fan n are not damaged.
- 2. Make sure that the fan n connectors on the system board are not damaged.
- 3. Make sure that the fans are correctly installed.
- 4. Reseat the fans.
- 5. Replace the fans. (n = fan number)

#### 800b050a-1e82ffff Non-redundant:Insufficient Resources for [RedundancySetElementName] has asserted. (Cooling Zone 2)

**Explanation:** This message is for the use case when a Redundancy Set has transitioned to Non-redundant:Insufficient Resources.

May also be shown as 800b050a1e82ffff or 0x800b050a1e82ffff

#### 800b050a-1e83ffff • 800b050c-2581ffff

Severity: Error

Alert Category: Critical - Fan Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0810

SNMP Trap ID: 11

Automatically notify Support: No

#### User response:

- Make sure that the connectors on fan n are not damaged.
- 2. Make sure that the fan n connectors on the system board are not damaged.
- 3. Make sure that the fans are correctly installed.
- 4. Reseat the fans.
- 5. Replace the fans. (n = fan number)

#### 800b050a-1e83ffff Non-redundant:Insufficient Resources for [RedundancySetElementName] has

asserted. (Cooling Zone 3)

**Explanation:** This message is for the use case when a Redundancy Set has transitioned to Non-redundant:Insufficient Resources.

May also be shown as 800b050a1e83ffff or 0x800b050a1e83ffff

Severity: Error

Alert Category: Critical - Fan Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0810

SNMP Trap ID: 11

Automatically notify Support: No

#### User response:

- Make sure that the connectors on fan n are not damaged.
- 2. Make sure that the fan n connectors on the system board are not damaged.
- 3. Make sure that the fans are correctly installed.
- 4. Reseat the fans.
- 5. Replace the fans. (n = fan number)

#### 800b050a-1e84ffff Non-redundant:Insufficient Resources for [RedundancySetElementName] has asserted. (Cooling Zone 4)

**Explanation:** This message is for the use case when a Redundancy Set has transitioned to Non-redundant:Insufficient Resources.

May also be shown as 800b050a1e84ffff or 0x800b050a1e84ffff

Severity: Error

Alert Category: Critical - Fan Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0810

SNMP Trap ID: 11

Automatically notify Support: No

#### User response:

- Make sure that the connectors on fan n are not damaged.
- 2. Make sure that the fan n connectors on the system board are not damaged.
- 3. Make sure that the fans are correctly installed.
- 4. Reseat the fans.
- 5. Replace the fans. (n = fan number)

#### 800b050a-1e85ffff Non-redundant:Insufficient Resources for [RedundancySetElementName] has asserted. (Cooling Zone 5)

**Explanation:** This message is for the use case when a Redundancy Set has transitioned to Non-redundant:Insufficient Resources.

May also be shown as 800b050a1e85ffff or 0x800b050a1e85ffff

Severity: Error

Alert Category: Critical - Fan Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0810

SNMP Trap ID: 11

Automatically notify Support: No

#### User response:

- 1. Make sure that the connectors on fan n are not damaged.
- Make sure that the fan n connectors on the system board are not damaged.
- 3. Make sure that the fans are correctly installed.
- 4. Reseat the fans.
- 5. Replace the fans. (n = fan number)

#### 800b050c-2581ffff Non-redundant:Insufficient Resources for [RedundancySetElementName] has asserted. (Backup Memory)

**Explanation:** This message is for the use case when a Redundancy Set has transitioned to Non-redundant:Insufficient Resources.

May also be shown as 800b050c2581ffff or 0x800b050c2581ffff

#### 806f0007-0301ffff • 806f0008-0a02ffff

Severity: Error

**Alert Category:** Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0810

SNMP Trap ID: 41

Automatically notify Support: No

#### User response:

 Check the system-event log for DIMM failure events (uncorrectable or PFA) and correct the failures

2. Re-enable mirroring in the Setup utility.

### 806f0007-0301ffff [ProcessorElementName] has Failed with IERR. (CPU 1)

**Explanation:** This message is for the use case when an implementation has detected a Processor Failed - IERR Condition.

May also be shown as 806f00070301ffff or 0x806f00070301ffff

Severity: Error

Alert Category: Critical - CPU

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0042

SNMP Trap ID: 40

Automatically notify Support: No

#### User response:

- Update the latest level of system firmware and device drivers are installed for all adapters and standard devices, such as UEFI, IMM Ethernet, and SAS. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
- 2. Run the DSA program.
- 3. Reseat the adapter.
- 4. Replace the adapter.
- 5. (Trained technician only) Replace microprocessor n. (n = microprocessor number)
- 6. (Trained technician only) Replace the system board.

### 806f0007-0302ffff [ProcessorElementName] has Failed with IERR. (CPU 2)

**Explanation:** This message is for the use case when an implementation has detected a Processor Failed - IERR Condition.

May also be shown as 806f00070302ffff or 0x806f00070302ffff

Severity: Error

Alert Category: Critical - CPU

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0042

SNMP Trap ID: 40

Automatically notify Support: No

#### User response:

- Update the latest level of system firmware and device drivers are installed for all adapters and standard devices, such as UEFI, IMM Ethernet, and SAS. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
- 2. Run the DSA program.
- 3. Reseat the adapter.
- 4. Replace the adapter.
- (Trained technician only) Replace microprocessor n. (n = microprocessor number)
- 6. (Trained technician only) Replace the system board.

# 806f0008-0a01ffff [PowerSupplyElementName] has been added to container [PhysicalPackageElementName]. (Power Supply 1)

**Explanation:** This message is for the use case when an implementation has detected a Power Supply has been added.

May also be shown as 806f00080a01ffff or 0x806f00080a01ffff

Severity: Info

**Alert Category:** System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0084

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

# 806f0008-0a02ffff [PowerSupplyElementName] has been added to container [PhysicalPackageElementName]. (Power Supply 2)

**Explanation:** This message is for the use case when an implementation has detected a Power Supply has been added.

May also be shown as 806f00080a02ffff or 0x806f00080a02ffff

Severity: Info

#### 806f0009-1301ffff • 806f000d-0404ffff

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0084

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

806f0009-1301ffff [PowerSupplyElementName] has been turned off. (Host Power)

**Explanation:** This message is for the use case when an implementation has detected a Power Unit that has been Disabled.

May also be shown as 806f00091301ffff or 0x806f00091301ffff

Severity: Info

Alert Category: System - Power Off

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0106

SNMP Trap ID: 23

Automatically notify Support: No

User response: No action; information only.

806f000d-0400ffff The Drive

[StorageVolumeElementName] has been added. (Drive 0)

**Explanation:** This message is for the use case when an implementation has detected a Drive has been Added.

May also be shown as 806f000d0400ffff or 0x806f000d0400ffff

**Severity:** Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0162

SNMP Trap ID: 5

Automatically notify Support: No

**User response:** No action; information only.

806f000d-0401ffff The Drive

[StorageVolumeElementName] has been added. (Drive 1)

**Explanation:** This message is for the use case when an implementation has detected a Drive has been Added.

May also be shown as 806f000d0401ffff or 0x806f000d0401ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0162

**SNMP Trap ID:** 5

Automatically notify Support: No

User response: No action; information only.

806f000d-0402ffff The Drive

[StorageVolumeElementName] has been added. (Drive 2)

**Explanation:** This message is for the use case when an implementation has detected a Drive has been Added.

May also be shown as 806f000d0402ffff or 0x806f000d0402ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0162

**SNMP Trap ID:** 5

Automatically notify Support: No

User response: No action; information only.

806f000d-0403ffff The Drive

[StorageVolumeElementName] has been added. (Drive 3)

**Explanation:** This message is for the use case when an implementation has detected a Drive has been Added.

May also be shown as 806f000d0403ffff or 0x806f000d0403ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0162

SNMP Trap ID: 5

Automatically notify Support: No

**User response:** No action; information only.

806f000d-0404ffff The Drive

[StorageVolumeElementName] has been added. (Drive 4)

**Explanation:** This message is for the use case when an implementation has detected a Drive has been Added.

May also be shown as 806f000d0404ffff or

0x806f000d0404ffff

Severity: Info

#### 806f000d-0405ffff • 806f000d-040affff

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0162

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

806f000d-0405ffff The Drive

[StorageVolumeElementName] has been added. (Drive 5)

**Explanation:** This message is for the use case when an implementation has detected a Drive has been Added.

May also be shown as 806f000d0405ffff or

0x806f000d0405ffff

**Severity:** Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0162

**SNMP Trap ID:** 5

Automatically notify Support: No

User response: No action; information only.

806f000d-0406ffff The Drive

[StorageVolumeElementName] has been

added. (Drive 6)

**Explanation:** This message is for the use case when an implementation has detected a Drive has been Added.

May also be shown as 806f000d0406ffff or

0x806f000d0406ffff

**Severity:** Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0162

SNMP Trap ID: 5

Automatically notify Support: No

**User response:** No action; information only.

806f000d-0407ffff The Drive

[StorageVolumeElementName] has been

added. (Drive 7)

**Explanation:** This message is for the use case when an implementation has detected a Drive has been Added.

May also be shown as 806f000d0407ffff or

0x806f000d0407ffff

**Severity:** Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0162

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

806f000d-0408ffff The Drive

[StorageVolumeElementName] has been

added. (Drive 8)

**Explanation:** This message is for the use case when an implementation has detected a Drive has been Added.

May also be shown as 806f000d0408ffff or

0x806f000d0408ffff

**Severity:** Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0162

**SNMP Trap ID:** 5

Automatically notify Support: No

User response: No action; information only.

806f000d-0409ffff The Drive

[StorageVolumeElementName] has been

added. (Drive 9)

**Explanation:** This message is for the use case when an implementation has detected a Drive has been Added.

May also be shown as 806f000d0409ffff or

0x806f000d0409ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0162

SNMP Trap ID: 5

Automatically notify Support: No

**User response:** No action; information only.

806f000d-040affff The Drive

[StorageVolumeElementName] has been

added. (Drive 10)

**Explanation:** This message is for the use case when an implementation has detected a Drive has been Added.

May also be shown as 806f000d040affff or

0x806f000d040affff

Severity: Info

#### 806f000d-040bffff • 806f000f-220102ff

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0162

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

806f000d-040bffff The Drive

[StorageVolumeElementName] has been added. (Drive 11)

**Explanation:** This message is for the use case when an implementation has detected a Drive has been Added.

May also be shown as 806f000d040bffff or 0x806f000d040bffff

**Severity:** Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0162

**SNMP Trap ID:** 5

Automatically notify Support: No

User response: No action; information only.

806f000d-040cffff The Drive

[StorageVolumeElementName] has been added. (Drive 12)

**Explanation:** This message is for the use case when an implementation has detected a Drive has been Added.

May also be shown as 806f000d040cffff or 0x806f000d040cffff

**Severity:** Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0162

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

806f000d-040dffff The Drive

[StorageVolumeElementName] has been added. (Drive 13)

**Explanation:** This message is for the use case when an implementation has detected a Drive has been Added.

May also be shown as 806f000d040dffff or

0x806f000d040dffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0162

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

806f000f-220101ff The System

[ComputerSystemElementName] has detected no memory in the system.

(ABR Status)

**Explanation:** This message is for the use case when an implementation has detected that memory was detected

in the system.

May also be shown as 806f000f220101ff or

0x806f000f220101ff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0794

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** This is a UEFI detected event. The UEFI(POST) error code for this event can be found in the logged IMM message text. Please refer to the UEFI(POST) error code in the "UEFI(POST) error code" section of the Information Center for the appropriate user response. Firmware Error: Sys Boot Status:

806f000f-220102ff Subsystem

[MemoryElementName] has insufficient memory for operation. (ABR Status)

**Explanation:** This message is for the use case when an implementation has detected that the usable Memory is insufficient for operation.

May also be shown as 806f000f220102ff or 0x806f000f220102ff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0132

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** This is a UEFI detected event. The UEFI(POST) error code for this event can be found in the logged IMM message text. Please refer to the UEFI(POST) error code in the "UEFI(POST) error code"

#### 806f000f-220103ff • 806f000f-22010aff

section of the Information Center for the appropriate user response. Firmware Error : Sys Boot Status :

#### 806f000f-220103ff The System

[ComputerSystemElementName] encountered firmware error unrecoverable boot device failure. (ABR Status)

**Explanation:** This message is for the use case when an implementation has detected that System Firmware Error Unrecoverable boot device failure has occurred.

May also be shown as 806f000f220103ff or 0x806f000f220103ff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0770

SNMP Trap ID: 5

Automatically notify Support: No

**User response:** This is a UEFI detected event. The UEFI(POST) error code for this event can be found in the logged IMM message text. Please refer to the UEFI(POST) error code in the "UEFI(POST) error code" section of the Information Center for the appropriate user response. Firmware Error: Sys Boot Status:

#### 806f000f-220104ff The System

[ComputerSystemElementName]has encountered a motherboard failure. (ABR Status)

**Explanation:** This message is for the use case when an implementation has detected that a fatal motherboard failure in the system.

May also be shown as 806f000f220104ff or 0x806f000f220104ff

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0795

SNMP Trap ID: 50

Automatically notify Support: No

**User response:** This is a UEFI detected event. The UEFI(POST) error code for this event can be found in the logged IMM message text. Please refer to the UEFI(POST) error code in the "UEFI(POST) error code" section of the Information Center for the appropriate user response. Firmware Error: Sys Boot Status:

#### 806f000f-220107ff The System

[ComputerSystemElementName] encountered firmware error - unrecoverable keyboard failure. (ABR Status)

**Explanation:** This message is for the use case when an implementation has detected that System Firmware Error Unrecoverable Keyboard failure has occurred.

May also be shown as 806f000f220107ff or 0x806f000f220107ff

0.000010001220107

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0764

SNMP Trap ID: 50

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI(POST) error code for this event can be found in the logged IMM message text. Please refer to the UEFI(POST) error code in the "UEFI(POST) error code" section of the Information Center for the appropriate user response. Firmware Error: Sys Boot Status:

#### 806f000f-22010aff The System

[ComputerSystemElementName] encountered firmware error - no video device detected. (ABR Status)

**Explanation:** This message is for the use case when an implementation has detected that System Firmware Error No video device detected has occurred.

May also be shown as 806f000f22010aff or 0x806f000f22010aff

Severity: Error

**Alert Category:** Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0766

**SNMP Trap ID:** 50

Automatically notify Support: No

**User response:** This is a UEFI detected event. The UEFI(POST) error code for this event can be found in the logged IMM message text. Please refer to the UEFI(POST) error code in the "UEFI(POST) error code" section of the Information Center for the appropriate user response. Firmware Error: Sys Boot Status:

806f000f-22010bff Firmware BIOS (ROM) corruption

was detected on system

[ComputerSystemElementName] during POST. (ABR Status)

**Explanation:** Firmware BIOS (ROM) corruption was detected on the system during POST.

May also be shown as 806f000f22010bff or 0x806f000f22010bff

Severity: Info

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0850

SNMP Trap ID: 40

Automatically notify Support: No

#### User response:

- Make sure the server meets the minimum configuration to start (see Power-supply LEDs).
- 2. Recover the server firmware from the backup page: a.Restart the server. b.At the prompt, press F3 to recover the firmware.
- 3. Update the server firmware to the latest level (see Updating the firmware). Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
- 4. Remove components one at a time, restarting the server each time, to see if the problem goes away.
- 5. If the problem remains, (trained service technician) replace the system board.

Firmware Error : Sys Boot Status :

### 806f000f-22010cff CPU voltage mismatch detected on [ProcessorElementName]. (ABR Status)

**Explanation:** This message is for the use case when an implementation has detected a CPU voltage mismatch with the socket voltage.

May also be shown as 806f000f22010cff or 0x806f000f22010cff

Severity: Error

Alert Category: Critical - CPU

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0050

SNMP Trap ID: 40

Automatically notify Support: No

**User response:** This is a UEFI detected event. The UEFI(POST) error code for this event can be found in

the logged IMM message text. Please refer to the UEFI(POST) error code in the "UEFI(POST) error code" section of the Information Center for the appropriate user response. Firmware Error : Sys Boot Status :

#### $806f000f\hbox{-}2201ffff\quad The\ System$

[ComputerSystemElementName] encountered a POST Error. (ABR Status)

**Explanation:** This message is for the use case when an implementation has detected a Post Error.

May also be shown as 806f000f2201ffff or 0x806f000f2201ffff

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0184

SNMP Trap ID: 50

Automatically notify Support: No

**User response:** This is a UEFI detected event. The UEFI(POST) error code for this event can be found in the logged IMM message text. Please refer to the UEFI(POST) error code in the "UEFI(POST) error code" section of the Information Center for the appropriate user response. Firmware Error: Sys Boot Status:

### 806f0013-1701ffff A diagnostic interrupt has occurred on system

[ComputerSystemElementName]. (NMI State)

**Explanation:** This message is for the use case when an implementation has detected a Front Panel NMI / Diagnostic Interrupt.

May also be shown as 806f00131701ffff or 0x806f00131701ffff

**Severity:** Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0222

SNMP Trap ID: 50

Automatically notify Support: No

**User response:** If the NMI button has not been pressed, complete the following steps:

- 1. Make sure that the NMI button is not pressed.
- 2. Replace the operator information panel cable.
- 3. Replace the operator information panel.

806f001e-2201ffff No bootable media available for system [ComputerSystemElementName]. (No Boot Device)

**Explanation:** This message is for the use case when an implementation has detected a System with No

Bootable Media.

May also be shown as 806f001e2201ffff or 0x806f001e2201ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0286

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

806f0021-2201ffff Fault in slot

[PhysicalConnectorSystemElementName] on system

[ComputerSystemElementName]. (No Op ROM Space)

**Explanation:** This message is for the use case when an implementation has detected a Fault in a slot.

May also be shown as 806f00212201ffff or 0x806f00212201ffff

Severity: Error

**Alert Category:** Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0330

SNMP Trap ID: 50

Automatically notify Support: Yes

#### User response:

- 1. Check the PCI LED.
- 2. Reseat the affected adapters and riser card.
- 3. Update the server firmware (UEFI and IMM) and adapter firmware. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
- 4. Replace the affected adapters.
- 5. Replace the riser card.
- 6. (Trained service technicians only) Replace the system board.

806f0021-2582ffff Fault in slot

[PhysicalConnectorSystemElementName]

on system

[ComputerSystemElementName]. (All PCI Error)

**Explanation:** This message is for the use case when an implementation has detected a Fault in a slot.

May also be shown as 806f00212582ffff or 0x806f00212582ffff

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0330

SNMP Trap ID: 50

Automatically notify Support: Yes

#### User response:

1. Check the PCI LED.

- 2. Reseat the affected adapters and riser card.
- 3. Update the server firmware (UEFI and IMM) and adapter firmware. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
- 4. Replace the affected adapters.
- 5. Replace the riser card.
- 6. (Trained service technicians only) Replace the system board.

One of PCI Error:

806f0021-3001ffff Fault in slot

[PhysicalConnectorSystemElementName] on system

[ComputerSystemElementName]. (PCI 1)

Explanation: This message is for the use case when an implementation has detected a Fault in a slot.

May also be shown as 806f00213001ffff or 0x806f00213001ffff

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0330

SNMP Trap ID: 50

Automatically notify Support: Yes

- 1. Check the PCI LED.
- 2. Reseat the affected adapters and riser card.

- 3. Update the server firmware (UEFI and IMM) and adapter firmware. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
- 4. Replace the affected adapters.
- 5. Replace the riser card.
- 6. (Trained service technicians only) Replace the system board.

PCI 2: PCI 3:

### 806f0023-2101ffff Watchdog Timer expired for [WatchdogElementName]. (IPMI Watchdog)

**Explanation:** This message is for the use case when an implementation has detected a Watchdog Timer Expired.

May also be shown as 806f00232101ffff or 0x806f00232101ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0368

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

806f0028-2101ffff Sensor [SensorElementName] is unavailable or degraded on management system [ComputerSystemElementName]. (TPM Cmd Failures)

**Explanation:** This message is for the use case when an implementation has detected a Sensor is Unavailable or degraded.

May also be shown as 806f00282101ffff or 0x806f00282101ffff

Severity: Warning

Alert Category: Warning - Other

Serviceable: Yes

**CIM Information: Prefix:** PLAT and **ID:** 0398

SNMP Trap ID: 60

Automatically notify Support: No

#### User response:

- 1. Turn off the server and disconnect the power cords. Reconnect the power cords and restart the server.
- 2. If the problem remains, (trained technician only) replace the system board.

#### 806f0107-0301ffff An Over-Temperature Condition has been detected on [ProcessorElementName]. (CPU 1)

**Explanation:** This message is for the use case when an implementation has detected an Over-Temperature Condition Detected for Processor.

May also be shown as 806f01070301ffff or 0x806f01070301ffff

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0036

**SNMP Trap ID:** 0

Automatically notify Support: No

#### User response:

- Make sure that the fans are operating. There are no obstructions to the airflow (front and rear of the server), the air baffles are in place and correctly installed, and the server cover is installed and completely closed.
- 2. Make sure that the heat sink for microprocessor n is installed correctly.
- 3. (Trained technician only) Replace microprocessor n. (n = microprocessor number)

#### 806f0107-0302ffff An Over-Temperature Condition has been detected on [ProcessorElementName]. (CPU 2)

**Explanation:** This message is for the use case when an implementation has detected an Over-Temperature Condition Detected for Processor.

May also be shown as 806f01070302ffff or 0x806f01070302ffff

**Severity:** Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0036

**SNMP Trap ID:** 0

Automatically notify Support: No

- Make sure that the fans are operating. There are no obstructions to the airflow (front and rear of the server), the air baffles are in place and correctly installed, and the server cover is installed and completely closed.
- Make sure that the heat sink for microprocessor n is installed correctly.
- 3. (Trained technician only) Replace microprocessor n. (n = microprocessor number)

### 806f0108-0a01ffff [PowerSupplyElementName] has Failed. (Power Supply 1)

**Explanation:** This message is for the use case when an implementation has detected a Power Supply has failed.

May also be shown as 806f01080a01ffff or

0x806f01080a01ffff **Severity:** Error

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Alert Category: Critical - Power

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0086

SNMP Trap ID: 4

Automatically notify Support: Yes

#### User response:

1. Reseat power supply n.

- If the power-on LED is not lit and the power-supply error LED is lit, replace power supply n.
- 3. If both the power-on LED and the power-supply error LED are not lit, see Power problems for more information. (n = power supply number)

### 806f0108-0a02ffff [PowerSupplyElementName] has Failed. (Power Supply 2)

**Explanation:** This message is for the use case when an implementation has detected a Power Supply has failed.

May also be shown as 806f01080a02ffff or 0x806f01080a02ffff

Severity: Error

Alert Category: Critical - Power

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0086

SNMP Trap ID: 4

Automatically notify Support: Yes

#### User response:

1. Reseat power supply n.

- If the power-on LED is not lit and the power-supply error LED is lit, replace power supply n.
- 3. If both the power-on LED and the power-supply error LED are not lit, see Power problems for more information. (n = power supply number)

### 806f0109-1301ffff [PowerSupplyElementName] has been Power Cycled. (Host Power)

**Explanation:** This message is for the use case when an implementation has detected a Power Unit that has been power cycled.

May also be shown as 806f01091301ffff or 0x806f01091301ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0108

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

# 806f010c-2001ffff Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 1)

**Explanation:** This message is for the use case when an implementation has detected a Memory uncorrectable error.

May also be shown as 806f010c2001ffff or 0x806f010c2001ffff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0138

SNMP Trap ID: 41

**Automatically notify Support:** Yes

- Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
- 2. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
- 3. If the problem follows the DIMM, replace the failing DIMM.
- (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
- 5. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
- (Trained technician only) Replace the affected microprocessor.

#### 806f010c-2002ffff • 806f010c-2004ffff

- Manually re-enable all affected DIMMs, and save the setting before restarting the server.
- 8. (Trained Service technician only) Replace the affected microprocessor.

806f010c-2002ffff Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 2)

**Explanation:** This message is for the use case when an implementation has detected a Memory uncorrectable error

May also be shown as 806f010c2002ffff or 0x806f010c2002ffff

**Severity:** Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0138

SNMP Trap ID: 41

Automatically notify Support: Yes

#### User response:

- Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
- 2. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
- 3. If the problem follows the DIMM, replace the failing DIMM.
- (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
- (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
- 6. (Trained technician only) Replace the affected microprocessor.
- 7. Manually re-enable all affected DIMMs, and save the setting before restarting the server.
- 8. (Trained Service technician only) Replace the affected microprocessor.

806f010c-2003ffff Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 3)

**Explanation:** This message is for the use case when an implementation has detected a Memory uncorrectable error.

May also be shown as 806f010c2003ffff or 0x806f010c2003ffff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0138

SNMP Trap ID: 41

Automatically notify Support: Yes

#### User response:

- Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
- Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
- 3. If the problem follows the DIMM, replace the failing DIMM.
- (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
- 5. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
- (Trained technician only) Replace the affected microprocessor.
- Manually re-enable all affected DIMMs, and save the setting before restarting the server.
- 8. (Trained Service technician only) Replace the affected microprocessor.

806f010c-2004ffff Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 4)

**Explanation:** This message is for the use case when an implementation has detected a Memory uncorrectable error.

May also be shown as 806f010c2004ffff or 0x806f010c2004ffff

**Severity:** Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0138

SNMP Trap ID: 41

Automatically notify Support: Yes

#### 806f010c-2005ffff • 806f010c-2006ffff

- Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
- Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
- 3. If the problem follows the DIMM, replace the failing DIMM.
- (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
- (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
- (Trained technician only) Replace the affected microprocessor.
- 7. Manually re-enable all affected DIMMs, and save the setting before restarting the server.
- 8. (Trained Service technician only) Replace the affected microprocessor.

## 806f010c-2005ffff Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 5)

**Explanation:** This message is for the use case when an implementation has detected a Memory uncorrectable error.

May also be shown as 806f010c2005ffff or 0x806f010c2005ffff

Severity: Error

**Alert Category:** Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0138

SNMP Trap ID: 41

Automatically notify Support: Yes

#### User response:

- 1. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
- Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
- If the problem follows the DIMM, replace the failing DIMM.
- (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.

- 5. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
- 6. (Trained technician only) Replace the affected microprocessor.
- 7. Manually re-enable all affected DIMMs, and save the setting before restarting the server.
- 8. (Trained Service technician only) Replace the affected microprocessor.

# 806f010c-2006ffff Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 6)

**Explanation:** This message is for the use case when an implementation has detected a Memory uncorrectable error.

May also be shown as 806f010c2006ffff or 0x806f010c2006ffff

**Severity:** Error

**Alert Category:** Critical - Memory

Serviceable: Yes

**CIM Information: Prefix:** PLAT and **ID:** 0138

SNMP Trap ID: 41

Automatically notify Support: Yes

- 1. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
- 2. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
- 3. If the problem follows the DIMM, replace the failing DIMM.
- 4. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
- (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
- 6. (Trained technician only) Replace the affected microprocessor.
- 7. Manually re-enable all affected DIMMs, and save the setting before restarting the server.
- 8. (Trained Service technician only) Replace the affected microprocessor.

# 806f010c-2007ffff Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 7)

**Explanation:** This message is for the use case when an implementation has detected a Memory uncorrectable error.

May also be shown as 806f010c2007ffff or 0x806f010c2007ffff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0138

SNMP Trap ID: 41

Automatically notify Support: Yes

#### User response:

- Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
- Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
- 3. If the problem follows the DIMM, replace the failing DIMM.
- (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
- (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
- 6. (Trained technician only) Replace the affected microprocessor.
- 7. Manually re-enable all affected DIMMs, and save the setting before restarting the server.
- 8. (Trained Service technician only) Replace the affected microprocessor.

# 806f010c-2008ffff Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 8)

**Explanation:** This message is for the use case when an implementation has detected a Memory uncorrectable error.

May also be shown as 806f010c2008ffff or 0x806f010c2008ffff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0138

SNMP Trap ID: 41

Automatically notify Support: Yes

#### User response:

- Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
- 2. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
- 3. If the problem follows the DIMM, replace the failing DIMM.
- (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
- (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
- 6. (Trained technician only) Replace the affected microprocessor.
- 7. Manually re-enable all affected DIMMs, and save the setting before restarting the server.
- (Trained Service technician only) Replace the affected microprocessor.

# 806f010c-2009ffff Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 9)

**Explanation:** This message is for the use case when an implementation has detected a Memory uncorrectable error.

May also be shown as 806f010c2009ffff or 0x806f010c2009ffff

**Severity:** Error

**Alert Category:** Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0138

SNMP Trap ID: 41

Automatically notify Support: Yes

- Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
- 2. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.

#### 806f010c-200affff • 806f010c-200cffff

- 3. If the problem follows the DIMM, replace the failing DIMM.
- (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
- (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
- 6. (Trained technician only) Replace the affected microprocessor.
- Manually re-enable all affected DIMMs, and save the setting before restarting the server.
- 8. (Trained Service technician only) Replace the affected microprocessor.

# 806f010c-200affff Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 10)

**Explanation:** This message is for the use case when an implementation has detected a Memory uncorrectable error.

May also be shown as 806f010c200affff or 0x806f010c200affff

Severity: Error

**Alert Category:** Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0138

SNMP Trap ID: 41

Automatically notify Support: Yes

#### User response:

- 1. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
- Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
- 3. If the problem follows the DIMM, replace the failing DIMM.
- (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
- (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
- 6. (Trained technician only) Replace the affected microprocessor.

- 7. Manually re-enable all affected DIMMs, and save the setting before restarting the server.
- 8. (Trained Service technician only) Replace the affected microprocessor.

# 806f010c-200bffff Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 11)

**Explanation:** This message is for the use case when an implementation has detected a Memory uncorrectable error.

May also be shown as 806f010c200bffff or 0x806f010c200bffff

Severity: Error

**Alert Category:** Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0138

SNMP Trap ID: 41

Automatically notify Support: Yes

#### User response:

- Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
- 2. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
- 3. If the problem follows the DIMM, replace the failing DIMM.
- (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
- (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
- **6**. (Trained technician only) Replace the affected microprocessor.
- 7. Manually re-enable all affected DIMMs, and save the setting before restarting the server.
- 8. (Trained Service technician only) Replace the affected microprocessor.

# 806f010c-200cffff Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 12)

**Explanation:** This message is for the use case when an implementation has detected a Memory uncorrectable error.

May also be shown as 806f010c200cffff or 0x806f010c200cffff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0138

SNMP Trap ID: 41

Automatically notify Support: Yes

#### User response:

- Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
- Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
- 3. If the problem follows the DIMM, replace the failing DIMM.
- 4. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
- (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
- (Trained technician only) Replace the affected microprocessor.
- 7. Manually re-enable all affected DIMMs, and save the setting before restarting the server.
- 8. (Trained Service technician only) Replace the affected microprocessor.

# 806f010c-200dffff Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 13)

**Explanation:** This message is for the use case when an implementation has detected a Memory uncorrectable error

May also be shown as 806f010c200dffff or 0x806f010c200dffff

**Severity:** Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0138

SNMP Trap ID: 41

Automatically notify Support: Yes

User response:

- 1. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
- Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
- 3. If the problem follows the DIMM, replace the failing DIMM.
- (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
- (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
- 6. (Trained technician only) Replace the affected microprocessor.
- 7. Manually re-enable all affected DIMMs, and save the setting before restarting the server.
- 8. (Trained Service technician only) Replace the affected microprocessor.

## 806f010c-200effff Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 14)

**Explanation:** This message is for the use case when an implementation has detected a Memory uncorrectable error.

May also be shown as 806f010c200effff or 0x806f010c200effff

Severity: Error

**Alert Category:** Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0138

SNMP Trap ID: 41

**Automatically notify Support:** Yes

- Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
- 2. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
- 3. If the problem follows the DIMM, replace the failing DIMM.
- (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.

#### 806f010c-200fffff • 806f010c-2581ffff

- (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
- 6. (Trained technician only) Replace the affected microprocessor.
- 7. Manually re-enable all affected DIMMs, and save the setting before restarting the server.
- (Trained Service technician only) Replace the affected microprocessor.

# 806f010c-200fffff Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 15)

**Explanation:** This message is for the use case when an implementation has detected a Memory uncorrectable error.

May also be shown as 806f010c200fffff or 0x806f010c200fffff

Severity: Error

**Alert Category:** Critical - Memory

Serviceable: Yes

**CIM Information: Prefix:** PLAT and **ID:** 0138

SNMP Trap ID: 41

Automatically notify Support: Yes

#### User response:

- Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
- 2. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
- 3. If the problem follows the DIMM, replace the failing DIMM.
- (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
- (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
- 6. (Trained technician only) Replace the affected microprocessor.
- 7. Manually re-enable all affected DIMMs, and save the setting before restarting the server.
- 8. (Trained Service technician only) Replace the affected microprocessor.

# 806f010c-2010ffff Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 16)

**Explanation:** This message is for the use case when an implementation has detected a Memory uncorrectable error.

May also be shown as 806f010c2010ffff or 0x806f010c2010ffff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0138

SNMP Trap ID: 41

**Automatically notify Support:** Yes

#### User response:

- Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
- Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
- 3. If the problem follows the DIMM, replace the failing DIMM.
- (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
- (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
- 6. (Trained technician only) Replace the affected microprocessor.
- 7. Manually re-enable all affected DIMMs, and save the setting before restarting the server.
- 8. (Trained Service technician only) Replace the affected microprocessor.

# 806f010c-2581ffff Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (All DIMMS)

**Explanation:** This message is for the use case when an implementation has detected a Memory uncorrectable error.

May also be shown as 806f010c2581ffff or 0x806f010c2581ffff

Severity: Error

**Alert Category:** Critical - Memory

#### 806f010d-0400ffff • 806f010d-0402ffff

Serviceable: Yes

**CIM Information: Prefix:** PLAT and **ID:** 0138

SNMP Trap ID: 41

Automatically notify Support: Yes

**User response:** If the specified sensor is All DIMMs or One of the DIMMs, please the complete the following steps until the problem is solved:

- 1. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
- 2. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
- 3. If the problem follows the DIMM, replace the failing DIMM.
- (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
- (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
- 6. (Trained technician only) Replace the affected microprocessor.
- 7. Manually re-enable all affected DIMMs, and save the setting before restarting the server.
- 8. (Trained Service technician only) Replace the affected microprocessor.

#### 806f010d-0400ffff The Drive

[StorageVolumeElementName] has been disabled due to a detected fault. (Drive 0)

**Explanation:** This message is for the use case when an implementation has detected a Drive was Disabled due to fault.

May also be shown as 806f010d0400ffff or 0x806f010d0400ffff

**Severity:** Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0164

SNMP Trap ID: 5

Automatically notify Support: Yes

#### User response:

- 1. Run the hard disk drive diagnostic test on drive n.
- 2. Reseat the following components: a. Hard disk drive (wait 1 minute or more before reinstalling the drive) b. Cable from the system board to the backplane

3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive b. Cable from the system board to the backplane c. Hard disk drive backplane (n = hard disk drive number)

#### 806f010d-0401ffff The Drive

[StorageVolumeElementName] has been disabled due to a detected fault. (Drive 1)

**Explanation:** This message is for the use case when an implementation has detected a Drive was Disabled due to fault.

May also be shown as 806f010d0401ffff or 0x806f010d0401ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0164

**SNMP Trap ID:** 5

Automatically notify Support: Yes

#### User response:

- 1. Run the hard disk drive diagnostic test on drive n.
- 2. Reseat the following components: a. Hard disk drive (wait 1 minute or more before reinstalling the drive) b. Cable from the system board to the backplane
- 3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive b. Cable from the system board to the backplane c. Hard disk drive backplane (n = hard disk drive number)

#### 806f010d-0402ffff The Drive

[StorageVolumeElementName] has been disabled due to a detected fault. (Drive 2)

**Explanation:** This message is for the use case when an implementation has detected a Drive was Disabled due to fault.

May also be shown as 806f010d0402ffff or 0x806f010d0402ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0164

SNMP Trap ID: 5

**Automatically notify Support:** Yes

#### 806f010d-0403ffff • 806f010d-0406ffff

- 1. Run the hard disk drive diagnostic test on drive n.
- Reseat the following components: a. Hard disk drive (wait 1 minute or more before reinstalling the drive) b. Cable from the system board to the backplane
- 3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive b. Cable from the system board to the backplane c. Hard disk drive backplane (n = hard disk drive number)

#### 806f010d-0403ffff The Drive

[StorageVolumeElementName] has been disabled due to a detected fault. (Drive 3)

**Explanation:** This message is for the use case when an implementation has detected a Drive was Disabled due to fault.

May also be shown as 806f010d0403ffff or 0x806f010d0403ffff

**Severity:** Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0164

**SNMP Trap ID:** 5

Automatically notify Support: Yes

#### User response:

- 1. Run the hard disk drive diagnostic test on drive n.
- Reseat the following components: a. Hard disk drive (wait 1 minute or more before reinstalling the drive) b. Cable from the system board to the backplane
- 3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive b. Cable from the system board to the backplane c. Hard disk drive backplane (n = hard disk drive number)

#### 806f010d-0404ffff The Drive

[StorageVolumeElementName] has been disabled due to a detected fault. (Drive 4)

**Explanation:** This message is for the use case when an implementation has detected a Drive was Disabled due to fault.

May also be shown as 806f010d0404ffff or 0x806f010d0404ffff

**Severity:** Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0164

**SNMP Trap ID:** 5

Automatically notify Support: Yes

#### User response:

- 1. Run the hard disk drive diagnostic test on drive n.
- 2. Reseat the following components: a. Hard disk drive (wait 1 minute or more before reinstalling the drive) b. Cable from the system board to the backplane
- 3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive b. Cable from the system board to the backplane c. Hard disk drive backplane (n = hard disk drive number)

#### 806f010d-0405ffff The Drive

[StorageVolumeElementName] has been disabled due to a detected fault. (Drive 5)

**Explanation:** This message is for the use case when an implementation has detected a Drive was Disabled due to fault.

May also be shown as 806f010d0405ffff or 0x806f010d0405ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0164

**SNMP Trap ID:** 5

Automatically notify Support: Yes

#### User response:

- 1. Run the hard disk drive diagnostic test on drive n.
- 2. Reseat the following components: a. Hard disk drive (wait 1 minute or more before reinstalling the drive) b. Cable from the system board to the backplane
- 3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive b. Cable from the system board to the backplane c. Hard disk drive backplane (n = hard disk drive number)

#### 806f010d-0406ffff The Drive

[StorageVolumeElementName] has been disabled due to a detected fault. (Drive 6)

**Explanation:** This message is for the use case when an implementation has detected a Drive was Disabled due to fault.

May also be shown as 806f010d0406ffff or 0x806f010d0406ffff

#### 806f010d-0407ffff • 806f010d-0409ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0164

SNMP Trap ID: 5

Automatically notify Support: Yes

#### User response:

- 1. Run the hard disk drive diagnostic test on drive n.
- 2. Reseat the following components: a. Hard disk drive (wait 1 minute or more before reinstalling the drive) b. Cable from the system board to the backplane
- 3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive b. Cable from the system board to the backplane c. Hard disk drive backplane (n = hard disk drive number)

#### 806f010d-0407ffff The Drive

[StorageVolumeElementName] has been disabled due to a detected fault. (Drive 7)

**Explanation:** This message is for the use case when an implementation has detected a Drive was Disabled due to fault.

May also be shown as 806f010d0407ffff or 0x806f010d0407ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0164

SNMP Trap ID: 5

**Automatically notify Support:** Yes

#### User response:

- 1. Run the hard disk drive diagnostic test on drive n.
- Reseat the following components: a. Hard disk drive (wait 1 minute or more before reinstalling the drive) b. Cable from the system board to the backplane
- 3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive b. Cable from the system board to the backplane c. Hard disk drive backplane (n = hard disk drive number)

#### 806f010d-0408ffff The Drive

[StorageVolumeElementName] has been disabled due to a detected fault. (Drive 8)

**Explanation:** This message is for the use case when an

implementation has detected a Drive was Disabled due to fault.

May also be shown as 806f010d0408ffff or

0x806f010d0408ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0164

SNMP Trap ID: 5

Automatically notify Support: Yes

#### User response:

- 1. Run the hard disk drive diagnostic test on drive n.
- 2. Reseat the following components: a. Hard disk drive (wait 1 minute or more before reinstalling the drive) b. Cable from the system board to the backplane
- 3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive b. Cable from the system board to the backplane c. Hard disk drive backplane (n = hard disk drive number)

#### 806f010d-0409ffff The Drive

[StorageVolumeElementName] has been disabled due to a detected fault. (Drive 9)

**Explanation:** This message is for the use case when an implementation has detected a Drive was Disabled due to fault.

May also be shown as 806f010d0409ffff or 0x806f010d0409ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0164

**SNMP Trap ID:** 5

Automatically notify Support: Yes

- 1. Run the hard disk drive diagnostic test on drive n.
- 2. Reseat the following components: a. Hard disk drive (wait 1 minute or more before reinstalling the drive) b. Cable from the system board to the backplane
- 3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive b. Cable from the system board to the backplane c. Hard disk drive backplane (n = hard disk drive number)

#### 806f010d-040affff • 806f010d-040dffff

806f010d-040affff The Drive

[StorageVolumeElementName] has been disabled due to a detected fault. (Drive 10)

10)

**Explanation:** This message is for the use case when an implementation has detected a Drive was Disabled due to fault.

.. ........

May also be shown as 806f010d040affff or 0x806f010d040affff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0164

SNMP Trap ID: 5

Automatically notify Support: Yes

#### User response:

- 1. Run the hard disk drive diagnostic test on drive n.
- 2. Reseat the following components: a. Hard disk drive (wait 1 minute or more before reinstalling the drive) b. Cable from the system board to the backplane
- 3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive b. Cable from the system board to the backplane c. Hard disk drive backplane (n = hard disk drive number)

#### 806f010d-040bffff The Drive

[StorageVolumeElementName] has been disabled due to a detected fault. (Drive 11)

**Explanation:** This message is for the use case when an implementation has detected a Drive was Disabled due to fault.

May also be shown as 806f010d040bffff or 0x806f010d040bffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0164

**SNMP Trap ID:** 5

**Automatically notify Support:** Yes

#### User response:

- 1. Run the hard disk drive diagnostic test on drive n.
- Reseat the following components: a. Hard disk drive (wait 1 minute or more before reinstalling the drive) b. Cable from the system board to the backplane

3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive b. Cable from the system board to the backplane c. Hard disk drive backplane (n = hard disk drive number)

#### 806f010d-040cffff The Drive

[StorageVolumeElementName] has been disabled due to a detected fault. (Drive 12)

**Explanation:** This message is for the use case when an implementation has detected a Drive was Disabled due to fault.

May also be shown as 806f010d040cffff or

0x806f010d040cffff

**Severity:** Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0164

**SNMP Trap ID:** 5

Automatically notify Support: Yes

#### User response:

- 1. Run the hard disk drive diagnostic test on drive n.
- 2. Reseat the following components: a. Hard disk drive (wait 1 minute or more before reinstalling the drive) b. Cable from the system board to the backplane
- 3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive b. Cable from the system board to the backplane c. Hard disk drive backplane (n = hard disk drive number)

#### 806f010d-040dffff The Drive

[StorageVolumeElementName] has been disabled due to a detected fault. (Drive 13)

**Explanation:** This message is for the use case when an implementation has detected a Drive was Disabled due to fault.

May also be shown as 806f010d040dffff or

0x806f010d040dffff

**Severity:** Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0164

SNMP Trap ID: 5

**Automatically notify Support:** Yes

- 1. Run the hard disk drive diagnostic test on drive n.
- Reseat the following components: a. Hard disk drive (wait 1 minute or more before reinstalling the drive) b. Cable from the system board to the backplane
- 3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive b. Cable from the system board to the backplane c. Hard disk drive backplane (n = hard disk drive number)

#### 806f010f-2201ffff The System

[ComputerSystemElementName] encountered a firmware hang. (Firmware Error)

**Explanation:** This message is for the use case when an implementation has detected a System Firmware Hang.

May also be shown as 806f010f2201ffff or 0x806f010f2201ffff

Severity: Error

Alert Category: System - Boot failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0186

SNMP Trap ID: 25

Automatically notify Support: No

#### User response:

- Make sure the server meets the minimum configuration to start (see Power-supply LEDs).
- 2. Update the server firmware on the primary page. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
- 3. (Trained technician only) Replace the system board.

### 806f0113-0301ffff A bus timeout has occurred on system [ComputerSystemElementName]. (CPU 1 PECI)

**Explanation:** This message is for the use case when an implementation has detected a Bus Timeout.

May also be shown as 806f01130301ffff or 0x806f01130301ffff

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0224

**SNMP Trap ID:** 50

Automatically notify Support: No

#### User response:

- (Trained technician only)Reseat the microprocessor, and then restart the server.
- (Trained technician only)Replace microprocessor n. (n = microprocessor number)

### 806f0113-0302ffff A bus timeout has occurred on system [ComputerSystemElementName]. (CPU 2 PECI)

**Explanation:** This message is for the use case when an implementation has detected a Bus Timeout.

May also be shown as 806f01130302ffff or 0x806f01130302ffff

**Severity:** Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0224

SNMP Trap ID: 50

Automatically notify Support: No

#### User response:

- (Trained technician only)Reseat the microprocessor, and then restart the server.
- (Trained technician only)Replace microprocessor n. (n = microprocessor number)

#### 806f011b-0701ffff The connector

[PhysicalConnectorElementName] has encountered a configuration error. (Front USB)

**Explanation:** This message is for the use case when an implementation has detected an Interconnect Configuration Error.

May also be shown as 806f011b0701ffff or 0x806f011b0701ffff

**Severity:** Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0266

SNMP Trap ID: 50

Automatically notify Support: Yes

**User response:** If the specified sensor is front USB connector, reset the front USB cable on the system board. If the specified sensor is PwrPaddle cable, complete the following steps until problem is solved:

- Reseat the power paddle cable on the system board.
- 2. Replace the power paddle cable.

#### 806f0123-2101ffff • 806f0207-0301ffff

3. (Trained technician only) Replace the supercap n. (n = supercap number)

4. (Trained technician only) Replace the system board.

806f0123-2101ffff Reboot of system

[ComputerSystemElementName] initiated by [WatchdogElementName]. (IPMI Watchdog)

**Explanation:** This message is for the use case when an implementation has detected a Reboot by a Watchdog

occurred.

May also be shown as 806f01232101ffff or 0x806f01232101ffff

0.0001012.5210111

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0370

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

806f0125-0b01ffff [ManagedElementName] detected as absent. (PCI Riser 1)

**Explanation:** This message is for the use case when an implementation has detected a Managed Element is

Absent.

May also be shown as 806f01250b01ffff or

0x806f01250b01ffff

**Severity:** Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0392

SNMP Trap ID:

Automatically notify Support: No

**User response:** Please ensure the PCI riser 1 has been

installed correctly.

806f0125-0b02ffff [ManagedElementName] detected as absent. (PCI Riser 2)

**Explanation:** This message is for the use case when an implementation has detected a Managed Element is

Absent.

May also be shown as 806f01250b02ffff or

0x806f01250b02ffff

**Severity:** Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0392

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** Please ensure the PCI riser 1 has been

installed correctly.

806f0125-0c01ffff [ManagedElementName] detected as absent. (Front Panel)

**Explanation:** This message is for the use case when an implementation has detected a Managed Element is

Absent.

May also be shown as 806f01250c01ffff or

0x806f01250c01ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0392

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** Please ensure the PCI riser 1 has been

installed correctly.

806f0125-2c01ffff [ManagedElementName] detected as absent. (Mezz Card)

**Explanation:** This message is for the use case when an implementation has detected a Managed Element is

Absent.

May also be shown as 806f01252c01ffff or

0x806f01252c01ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0392

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** Please ensure the PCI riser 1 has been

installed correctly.

806f0207-0301ffff [ProcessorElementName] has Failed with FRB1/BIST condition. (CPU

**Explanation:** This message is for the use case when an implementation has detected a Processor Failed -

FRB1/BIST condition.

May also be shown as 806f02070301ffff or

0x806f02070301ffff

Severity: Error

Alert Category: Critical - CPU

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0044

SNMP Trap ID: 40

Automatically notify Support: Yes

#### User response:

- 1. Update the latest level of system firmware and device drivers are installed for all adapters and standard devices, such as UEFI, IMM Ethernet, and SAS. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
- 2. Run the DSA program.
- 3. (Trained technician only) Replace microprocessor n. (n = microprocessor number)
- 4. (Trained technician only) Replace the system board.

### 806f0207-0302ffff [ProcessorElementName] has Failed with FRB1/BIST condition. (CPU 2)

**Explanation:** This message is for the use case when an implementation has detected a Processor Failed - FRB1/BIST condition.

May also be shown as 806f02070302ffff or 0x806f02070302ffff

**Severity:** Error

Alert Category: Critical - CPU

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0044

SNMP Trap ID: 40

Automatically notify Support: Yes

#### User response:

- 1. Update the latest level of system firmware and device drivers are installed for all adapters and standard devices, such as UEFI, IMM Ethernet, and SAS. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
- 2. Run the DSA program.
- 3. (Trained technician only) Replace microprocessor n. (n = microprocessor number)
- 4. (Trained technician only) Replace the system board.

806f0207-2584ffff [ProcessorElementName] has Failed with FRB1/BIST condition. (All CPUs)

**Explanation:** This message is for the use case when an implementation has detected a Processor Failed - FRB1/BIST condition.

May also be shown as 806f02072584ffff or 0x806f02072584ffff

Severity: Error

Alert Category: Critical - CPU

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0044

SNMP Trap ID: 40

Automatically notify Support: Yes

#### User response:

- 1. Update the latest level of system firmware and device drivers are installed for all adapters and standard devices, such as UEFI, IMM Ethernet, and SAS. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
- 2. Run the DSA program.
- 3. (Trained technician only) Replace microprocessor n. (n = microprocessor number)
- 4. (Trained technician only) Replace the system board.

One of the CPUs:

806f020d-0400ffff Failure Predicted on drive
[StorageVolumeElementName] for array
[ComputerSystemElementName]. (Drive
0)

**Explanation:** This message is for the use case when an implementation has detected an Array Failure is Predicted.

May also be shown as 806f020d0400ffff or 0x806f020d0400ffff

Severity: Warning

Alert Category: System - Predicted Failure

Serviceable: Yes

**CIM Information: Prefix:** PLAT and **ID:** 0168

SNMP Trap ID: 27

Automatically notify Support: Yes

#### User response:

1. Run the hard disk drive diagnostic test on drive n.

#### 806f020d-0401ffff • 806f020d-0404ffff

- 2. Reseat the following components: a. Hard disk drive (wait 1 minute or more before reinstalling the drive) b. Cable from the system board to the backplane
- 3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive b. Cable from the system board to the backplane c. Hard disk drive backplane (n = hard disk drive number)

#### 806f020d-0401ffff Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive

**Explanation:** This message is for the use case when an implementation has detected an Array Failure is Predicted.

May also be shown as 806f020d0401ffff or 0x806f020d0401ffff

Severity: Warning

**Alert Category:** System - Predicted Failure

Serviceable: Yes

**CIM Information: Prefix:** PLAT and **ID:** 0168

SNMP Trap ID: 27

Automatically notify Support: Yes

#### User response:

- 1. Run the hard disk drive diagnostic test on drive n.
- 2. Reseat the following components: a. Hard disk drive (wait 1 minute or more before reinstalling the drive) b. Cable from the system board to the backplane
- 3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive b. Cable from the system board to the backplane c. Hard disk drive backplane (n = hard disk drive number)

#### 806f020d-0402ffff Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive

Explanation: This message is for the use case when an implementation has detected an Array Failure is Predicted.

May also be shown as 806f020d0402ffff or 0x806f020d0402ffff

Severity: Warning

Alert Category: System - Predicted Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0168

SNMP Trap ID: 27

**Automatically notify Support:** Yes

#### User response:

- 1. Run the hard disk drive diagnostic test on drive n.
- 2. Reseat the following components: a. Hard disk drive (wait 1 minute or more before reinstalling the drive) b. Cable from the system board to the backplane
- 3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive b. Cable from the system board to the backplane c. Hard disk drive backplane (n = hard disk drive number)

#### 806f020d-0403ffff Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive

**Explanation:** This message is for the use case when an implementation has detected an Array Failure is Predicted.

May also be shown as 806f020d0403ffff or 0x806f020d0403ffff

**Severity:** Warning

Alert Category: System - Predicted Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0168

SNMP Trap ID: 27

Automatically notify Support: Yes

#### User response:

- 1. Run the hard disk drive diagnostic test on drive n.
- 2. Reseat the following components: a. Hard disk drive (wait 1 minute or more before reinstalling the drive) b. Cable from the system board to the backplane
- 3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive b. Cable from the system board to the backplane c. Hard disk drive backplane (n = hard disk drive number)

#### 806f020d-0404ffff Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive

Explanation: This message is for the use case when an implementation has detected an Array Failure is Predicted.

May also be shown as 806f020d0404ffff or 0x806f020d0404ffff

Severity: Warning

#### 806f020d-0405ffff • 806f020d-0407ffff

Alert Category: System - Predicted Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0168

SNMP Trap ID: 27

Automatically notify Support: Yes

#### User response:

- 1. Run the hard disk drive diagnostic test on drive n.
- 2. Reseat the following components: a. Hard disk drive (wait 1 minute or more before reinstalling the drive) b. Cable from the system board to the backplane
- 3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive b. Cable from the system board to the backplane c. Hard disk drive backplane (n = hard disk drive number)

## 806f020d-0405ffff Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive

**Explanation:** This message is for the use case when an implementation has detected an Array Failure is Predicted.

May also be shown as 806f020d0405ffff or 0x806f020d0405ffff

Severity: Warning

Alert Category: System - Predicted Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0168

SNMP Trap ID: 27

Automatically notify Support: Yes

#### User response:

- 1. Run the hard disk drive diagnostic test on drive n.
- 2. Reseat the following components: a. Hard disk drive (wait 1 minute or more before reinstalling the drive) b. Cable from the system board to the backplane
- 3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive b. Cable from the system board to the backplane c. Hard disk drive backplane (n = hard disk drive number)

## 806f020d-0406ffff Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive

Explanation: This message is for the use case when an

implementation has detected an Array Failure is Predicted.

May also be shown as 806f020d0406ffff or

0x806f020d0406ffff

Severity: Warning

Alert Category: System - Predicted Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0168

SNMP Trap ID: 27

Automatically notify Support: Yes

#### User response:

- 1. Run the hard disk drive diagnostic test on drive n.
- 2. Reseat the following components: a. Hard disk drive (wait 1 minute or more before reinstalling the drive) b. Cable from the system board to the backplane
- 3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive b. Cable from the system board to the backplane c. Hard disk drive backplane (n = hard disk drive number)

# 806f020d-0407ffff Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive

**Explanation:** This message is for the use case when an implementation has detected an Array Failure is Predicted.

May also be shown as 806f020d0407ffff or 0x806f020d0407ffff

. . . . . . . .

Severity: Warning

Alert Category: System - Predicted Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0168

SNMP Trap ID: 27

**Automatically notify Support:** Yes

- 1. Run the hard disk drive diagnostic test on drive n.
- 2. Reseat the following components: a. Hard disk drive (wait 1 minute or more before reinstalling the drive) b. Cable from the system board to the backplane
- 3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive b. Cable from the system board to the backplane c. Hard disk drive backplane (n = hard disk drive number)

#### 806f020d-0408ffff • 806f020d-040bffff

806f020d-0408ffff Failure Predicted on drive
[StorageVolumeElementName] for array
[ComputerSystemElementName]. (Drive

8)

**Explanation:** This message is for the use case when an implementation has detected an Array Failure is

Predicted.

May also be shown as 806f020d0408ffff or 0x806f020d0408ffff

Severity: Warning

Alert Category: System - Predicted Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0168

SNMP Trap ID: 27

Automatically notify Support: Yes

#### User response:

1. Run the hard disk drive diagnostic test on drive n.

- 2. Reseat the following components: a. Hard disk drive (wait 1 minute or more before reinstalling the drive) b. Cable from the system board to the backplane
- 3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive b. Cable from the system board to the backplane c. Hard disk drive backplane (n = hard disk drive number)

## 806f020d-0409ffff Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 9)

**Explanation:** This message is for the use case when an implementation has detected an Array Failure is Predicted.

May also be shown as 806f020d0409ffff or 0x806f020d0409ffff

Severity: Warning

Alert Category: System - Predicted Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0168

SNMP Trap ID: 27

**Automatically notify Support:** Yes

#### User response:

- 1. Run the hard disk drive diagnostic test on drive n.
- Reseat the following components: a. Hard disk drive (wait 1 minute or more before reinstalling the drive) b. Cable from the system board to the backplane

3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive b. Cable from the system board to the backplane c. Hard disk drive backplane (n = hard disk drive number)

## 806f020d-040affff Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive

**Explanation:** This message is for the use case when an implementation has detected an Array Failure is Predicted.

May also be shown as 806f020d040affff or 0x806f020d040affff

Severity: Warning

Alert Category: System - Predicted Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0168

SNMP Trap ID: 27

Automatically notify Support: Yes

#### User response:

- 1. Run the hard disk drive diagnostic test on drive n.
- 2. Reseat the following components: a. Hard disk drive (wait 1 minute or more before reinstalling the drive) b. Cable from the system board to the backplane
- 3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive b. Cable from the system board to the backplane c. Hard disk drive backplane (n = hard disk drive number)

# 806f020d-040bffff Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive

**Explanation:** This message is for the use case when an implementation has detected an Array Failure is Predicted.

May also be shown as 806f020d040bffff or 0x806f020d040bffff

Severity: Warning

Alert Category: System - Predicted Failure

Serviceable: Yes

**CIM Information: Prefix:** PLAT and **ID:** 0168

SNMP Trap ID: 27

**Automatically notify Support:** Yes

- 1. Run the hard disk drive diagnostic test on drive n.
- 2. Reseat the following components: a. Hard disk drive (wait 1 minute or more before reinstalling the drive) b. Cable from the system board to the backplane
- 3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive b. Cable from the system board to the backplane c. Hard disk drive backplane (n = hard disk drive number)

# 806f020d-040cffff Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive

**Explanation:** This message is for the use case when an implementation has detected an Array Failure is Predicted.

May also be shown as 806f020d040cffff or 0x806f020d040cffff

Severity: Warning

Alert Category: System - Predicted Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0168

SNMP Trap ID: 27

Automatically notify Support: Yes

#### User response:

- 1. Run the hard disk drive diagnostic test on drive n.
- Reseat the following components: a. Hard disk drive (wait 1 minute or more before reinstalling the drive) b. Cable from the system board to the backplane
- 3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive b. Cable from the system board to the backplane c. Hard disk drive backplane (n = hard disk drive number)

# 806f020d-040dffff Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive

**Explanation:** This message is for the use case when an implementation has detected an Array Failure is Predicted.

May also be shown as 806f020d040dffff or 0x806f020d040dffff

Severity: Warning

Alert Category: System - Predicted Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0168

SNMP Trap ID: 27

Automatically notify Support: Yes

#### User response:

- 1. Run the hard disk drive diagnostic test on drive n.
- 2. Reseat the following components: a. Hard disk drive (wait 1 minute or more before reinstalling the drive) b. Cable from the system board to the backplane
- 3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive b. Cable from the system board to the backplane c. Hard disk drive backplane (n = hard disk drive number)

# 806f0223-2101ffff Powering off system [ComputerSystemElementName] initiated by [WatchdogElementName]. (IPMI Watchdog)

**Explanation:** This message is for the use case when an implementation has detected a Poweroff by Watchdog has occurred.

May also be shown as 806f02232101ffff or 0x806f02232101ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0372

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

### 806f0308-0a01ffff [PowerSupplyElementName] has lost input. (Power Supply 1)

**Explanation:** This message is for the use case when an implementation has detected a Power Supply that has input that has been lost.

May also be shown as 806f03080a01ffff or 0x806f03080a01ffff

Severity: Info

**Alert Category:** System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0100

**SNMP Trap ID:** 

Automatically notify Support: No

#### User response:

1. Reconnect the power cords.

#### 806f0308-0a02ffff • 806f030c-2002ffff

- 2. Check power supply n LED.
- 3. See Power-supply LEDs for more information. (n = power supply number)

### 806f0308-0a02ffff [PowerSupplyElementName] has lost input. (Power Supply 2)

**Explanation:** This message is for the use case when an implementation has detected a Power Supply that has input that has been lost.

May also be shown as 806f03080a02ffff or 0x806f03080a02ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0100

**SNMP Trap ID:** 

Automatically notify Support: No

User response:

1. Reconnect the power cords.

2. Check power supply n LED.

3. See Power-supply LEDs for more information. (n = power supply number)

#### 806f030c-2001ffff Scrub Failure for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 1)

**Explanation:** This message is for the use case when an implementation has detected a Memory Scrub failure.

May also be shown as 806f030c2001ffff or 0x806f030c2001ffff

Severity: Error

**Alert Category:** Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0136

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** Note: Each time you install or remove a DIMM, you must disconnect the server from the power source; then, wait 10 seconds before restarting the server.

- Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
- 2. Manually re-enable all affected DIMMs.
- 3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.

- 4. If the problem follows the DIMM, replace the failing DIMM.
- (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
- (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
- 7. (Trained technician only) Replace the affected microprocessor.

#### 806f030c-2002ffff Scrub Failure for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 2)

**Explanation:** This message is for the use case when an implementation has detected a Memory Scrub failure.

May also be shown as 806f030c2002ffff or 0x806f030c2002ffff

Severity: Error

**Alert Category:** Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0136

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** Note: Each time you install or remove a DIMM, you must disconnect the server from the power source; then, wait 10 seconds before restarting the server.

- Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
- 2. Manually re-enable all affected DIMMs.
- 3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
- 4. If the problem follows the DIMM, replace the failing DIMM.
- (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
- (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
- 7. (Trained technician only) Replace the affected microprocessor.

806f030c-2003ffff Scrub Failure for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 3)

**Explanation:** This message is for the use case when an implementation has detected a Memory Scrub failure.

May also be shown as 806f030c2003ffff or 0x806f030c2003ffff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0136

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** Note: Each time you install or remove a DIMM, you must disconnect the server from the power source; then, wait 10 seconds before restarting the server.

- Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
- 2. Manually re-enable all affected DIMMs.
- 3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
- 4. If the problem follows the DIMM, replace the failing DIMM.
- (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
- 6. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
- (Trained technician only) Replace the affected microprocessor.

806f030c-2004ffff Scrub Failure for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 4)

**Explanation:** This message is for the use case when an implementation has detected a Memory Scrub failure.

May also be shown as 806f030c2004ffff or 0x806f030c2004ffff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0136

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** Note: Each time you install or remove a DIMM, you must disconnect the server from the power source; then, wait 10 seconds before restarting the server.

- Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
- 2. Manually re-enable all affected DIMMs.
- 3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
- 4. If the problem follows the DIMM, replace the failing DIMM.
- (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
- 6. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
- (Trained technician only) Replace the affected microprocessor.

806f030c-2005ffff Scrub Failure for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 5)

**Explanation:** This message is for the use case when an implementation has detected a Memory Scrub failure.

May also be shown as 806f030c2005ffff or 0x806f030c2005ffff

Severity: Error

**Alert Category:** Critical - Memory

Serviceable: Yes

**CIM Information: Prefix:** PLAT and **ID:** 0136

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** Note: Each time you install or remove a DIMM, you must disconnect the server from the power source; then, wait 10 seconds before restarting the server.

- 1. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
- 2. Manually re-enable all affected DIMMs.
- 3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.

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- 4. If the problem follows the DIMM, replace the failing DIMM.
- (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
- (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
- (Trained technician only) Replace the affected microprocessor.

## 806f030c-2006ffff Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

(DIMM 6)

**Explanation:** This message is for the use case when an implementation has detected a Memory Scrub failure.

May also be shown as 806f030c2006ffff or 0x806f030c2006ffff

Severity: Error

**Alert Category:** Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0136

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** Note: Each time you install or remove a DIMM, you must disconnect the server from the power source; then, wait 10 seconds before restarting the server.

- Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
- 2. Manually re-enable all affected DIMMs.
- 3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
- 4. If the problem follows the DIMM, replace the failing DIMM.
- (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
- (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
- 7. (Trained technician only) Replace the affected microprocessor.

### 806f030c-2007ffff Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

(DIMM 7)

**Explanation:** This message is for the use case when an implementation has detected a Memory Scrub failure.

May also be shown as 806f030c2007ffff or 0x806f030c2007ffff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0136

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** Note: Each time you install or remove a DIMM, you must disconnect the server from the power source; then, wait 10 seconds before restarting the server.

- Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
- 2. Manually re-enable all affected DIMMs.
- 3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
- If the problem follows the DIMM, replace the failing DIMM.
- 5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
- 6. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
- 7. (Trained technician only) Replace the affected microprocessor.

#### 806f030c-2008ffff Scrub Failure for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 8)

**Explanation:** This message is for the use case when an implementation has detected a Memory Scrub failure.

May also be shown as 806f030c2008ffff or 0x806f030c2008ffff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** Note: Each time you install or remove a DIMM, you must disconnect the server from the power source; then, wait 10 seconds before restarting the server.

- Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
- 2. Manually re-enable all affected DIMMs.
- 3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
- 4. If the problem follows the DIMM, replace the failing DIMM.
- (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
- (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
- (Trained technician only) Replace the affected microprocessor.

806f030c-2009ffff Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

(DIMM 9)

**Explanation:** This message is for the use case when an implementation has detected a Memory Scrub failure.

May also be shown as 806f030c2009ffff or 0x806f030c2009ffff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0136

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** Note: Each time you install or remove a DIMM, you must disconnect the server from the power source; then, wait 10 seconds before restarting the server.

- Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
- 2. Manually re-enable all affected DIMMs.
- 3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.

- 4. If the problem follows the DIMM, replace the failing DIMM.
- (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
- (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
- (Trained technician only) Replace the affected microprocessor.

806f030c-200affff Scrub Failure for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 10)

**Explanation:** This message is for the use case when an implementation has detected a Memory Scrub failure.

May also be shown as 806f030c200affff or 0x806f030c200affff

**Severity:** Error

**Alert Category:** Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0136

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** Note: Each time you install or remove a DIMM, you must disconnect the server from the power source; then, wait 10 seconds before restarting the server.

- Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
- Manually re-enable all affected DIMMs.
- Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
- 4. If the problem follows the DIMM, replace the failing DIMM.
- (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
- (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
- 7. (Trained technician only) Replace the affected microprocessor.

806f030c-200bffff Scrub Failure for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 11)

**Explanation:** This message is for the use case when an implementation has detected a Memory Scrub failure.

May also be shown as 806f030c200bffff or 0x806f030c200bffff

Severity: Error

**Alert Category:** Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0136

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** Note: Each time you install or remove a DIMM, you must disconnect the server from the power source; then, wait 10 seconds before restarting the server.

- 1. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
- 2. Manually re-enable all affected DIMMs.
- 3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
- 4. If the problem follows the DIMM, replace the failing DIMM.
- 5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
- 6. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
- 7. (Trained technician only) Replace the affected microprocessor.

806f030c-200cffff Scrub Failure for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 12)

**Explanation:** This message is for the use case when an implementation has detected a Memory Scrub failure.

May also be shown as 806f030c200cffff or 0x806f030c200cffff

**Severity:** Error

**Alert Category:** Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0136

SNMP Trap ID: 41

**Automatically notify Support:** No

**User response:** Note: Each time you install or remove a DIMM, you must disconnect the server from the power source; then, wait 10 seconds before restarting the server.

- 1. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
- 2. Manually re-enable all affected DIMMs.
- 3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
- 4. If the problem follows the DIMM, replace the failing DIMM.
- 5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
- 6. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
- 7. (Trained technician only) Replace the affected microprocessor.

806f030c-200dffff Scrub Failure for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 13)

**Explanation:** This message is for the use case when an implementation has detected a Memory Scrub failure.

May also be shown as 806f030c200dffff or 0x806f030c200dffff

Severity: Error

**Alert Category:** Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0136

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** Note: Each time you install or remove a DIMM, you must disconnect the server from the power source; then, wait 10 seconds before restarting the server.

- 1. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
- 2. Manually re-enable all affected DIMMs.
- 3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.

- 4. If the problem follows the DIMM, replace the failing DIMM.
- (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
- (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
- (Trained technician only) Replace the affected microprocessor.

# 806f030c-200effff Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 14)

**Explanation:** This message is for the use case when an implementation has detected a Memory Scrub failure.

May also be shown as 806f030c200effff or 0x806f030c200effff

Severity: Error

**Alert Category:** Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0136

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** Note: Each time you install or remove a DIMM, you must disconnect the server from the power source; then, wait 10 seconds before restarting the server.

- Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
- 2. Manually re-enable all affected DIMMs.
- 3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
- 4. If the problem follows the DIMM, replace the failing DIMM.
- (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
- (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
- (Trained technician only) Replace the affected microprocessor.

806f030c-200fffff Scrub Failure for [PhysicalMemoryElementName] on

[PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 15)

**Explanation:** This message is for the use case when an implementation has detected a Memory Scrub failure.

May also be shown as 806f030c200fffff or 0x806f030c200fffff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0136

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** Note: Each time you install or remove a DIMM, you must disconnect the server from the power source; then, wait 10 seconds before restarting the server.

- Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
- 2. Manually re-enable all affected DIMMs.
- 3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
- 4. If the problem follows the DIMM, replace the failing DIMM.
- (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
- 6. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
- (Trained technician only) Replace the affected microprocessor.

### 806f030c-2010ffff Scrub Failure for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 16)

**Explanation:** This message is for the use case when an implementation has detected a Memory Scrub failure.

May also be shown as 806f030c2010ffff or 0x806f030c2010ffff

**Severity:** Error

Alert Category: Critical - Memory

Serviceable: Yes

#### 806f030c-2581ffff • 806f0323-2101ffff

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** Note: Each time you install or remove a DIMM, you must disconnect the server from the power source; then, wait 10 seconds before restarting the server.

- Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
- 2. Manually re-enable all affected DIMMs.
- 3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
- 4. If the problem follows the DIMM, replace the failing DIMM.
- (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
- (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
- (Trained technician only) Replace the affected microprocessor.

#### 806f030c-2581ffff Scrub Failure for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (All DIMMS)

**Explanation:** This message is for the use case when an implementation has detected a Memory Scrub failure.

May also be shown as 806f030c2581ffff or 0x806f030c2581ffff

Severity: Error

**Alert Category:** Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0136

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** If the specified sensor is All DIMMs or One of the DIMMs, please complete the following steps until the problem is solved: Note: Each time you install or remove a DIMM, you must disconnect the server from the power source; then, wait 10 seconds before restarting the server.

- Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
- 2. Manually re-enable all affected DIMMs.

- 3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
- 4. If the problem follows the DIMM, replace the failing DIMM.
- 5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
- (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
- (Trained technician only) Replace the affected microprocessor.

### 806f0313-1701ffff A software NMI has occurred on system [ComputerSystemElementName]. (NMI State)

**Explanation:** This message is for the use case when an implementation has detected a Software NMI.

May also be shown as 806f03131701ffff or 0x806f03131701ffff

**Severity:** Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0228

SNMP Trap ID: 50

**Automatically notify Support:** No

#### User response:

- 1. Check the device driver.
- 2. Reinstall the device driver.
- 3. Update all device drivers to the latest level.
- 4. Update the firmware (UEFI and IMM).

# 806f0323-2101ffff Power cycle of system [ComputerSystemElementName] initiated by watchdog [WatchdogElementName]. (IPMI Watchdog)

**Explanation:** This message is for the use case when an implementation has detected a Power Cycle by Watchdog occurred.

May also be shown as 806f03232101ffff or 0x806f03232101ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

#### 806f040c-2001ffff [PhysicalMemoryElementName] Disabled on Subsystem [MemoryElementName]. (DIMM 1)

**Explanation:** This message is for the use case when an implementation has detected that Memory has been Disabled.

May also be shown as 806f040c2001ffff or 0x806f040c2001ffff

**Severity:** Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0131

**SNMP Trap ID:** 

Automatically notify Support: No

#### User response:

- 1. Make sure the DIMM is installed correctly.
- 2. If the DIMM was disabled because of a memory fault (memory uncorrectable error or memory logging limit reached), follow the suggested actions for that error event and restart the server.
- 3. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory event. If no memory fault is recorded in the logs and no DIMM connector error LED is lit, you can re-enable the DIMM through the Setup utility or the Advanced Settings Utility (ASU).

#### 806f040c-2002ffff [PhysicalMemoryElementName] Disabled on Subsystem [MemoryElementName]. (DIMM 2)

**Explanation:** This message is for the use case when an implementation has detected that Memory has been Disabled.

May also be shown as 806f040c2002ffff or 0x806f040c2002ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0131

**SNMP Trap ID:** 

Automatically notify Support: No

#### User response:

1. Make sure the DIMM is installed correctly.

- 2. If the DIMM was disabled because of a memory fault (memory uncorrectable error or memory logging limit reached), follow the suggested actions for that error event and restart the server.
- Check the IBM support website for an applicable retain tip or firmware update that applies to this memory event. If no memory fault is recorded in the logs and no DIMM connector error LED is lit, you can re-enable the DIMM through the Setup utility or the Advanced Settings Utility (ASU).

#### 806f040c-2003ffff [PhysicalMemoryElementName] Disabled on Subsystem [MemoryElementName]. (DIMM 3)

**Explanation:** This message is for the use case when an implementation has detected that Memory has been

Disabled.

May also be shown as 806f040c2003ffff or

0x806f040c2003ffff

Severity: Info

**Alert Category:** System - Other

Serviceable: No

**CIM Information: Prefix: PLAT and ID: 0131** 

**SNMP Trap ID:** 

Automatically notify Support: No

#### User response:

- 1. Make sure the DIMM is installed correctly.
- 2. If the DIMM was disabled because of a memory fault (memory uncorrectable error or memory logging limit reached), follow the suggested actions for that error event and restart the server.
- 3. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory event. If no memory fault is recorded in the logs and no DIMM connector error LED is lit, you can re-enable the DIMM through the Setup utility or the Advanced Settings Utility (ASU).

#### 806f040c-2004ffff [PhysicalMemoryElementName] Disabled on Subsystem [MemoryElementName]. (DIMM 4)

Explanation: This message is for the use case when an implementation has detected that Memory has been Disabled.

May also be shown as 806f040c2004ffff or

0x806f040c2004ffff

**Severity:** Info

Alert Category: System - Other

Serviceable: No

#### 806f040c-2005ffff • 806f040c-2008ffff

**SNMP Trap ID:** 

**Automatically notify Support:** No

#### User response:

- 1. Make sure the DIMM is installed correctly.
- 2. If the DIMM was disabled because of a memory fault (memory uncorrectable error or memory logging limit reached), follow the suggested actions for that error event and restart the server.
- 3. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory event. If no memory fault is recorded in the logs and no DIMM connector error LED is lit, you can re-enable the DIMM through the Setup utility or the Advanced Settings Utility (ASU).

#### 806f040c-2005ffff [PhysicalMemoryElementName] Disabled on Subsystem [MemoryElementName]. (DIMM 5)

**Explanation:** This message is for the use case when an implementation has detected that Memory has been Disabled.

May also be shown as 806f040c2005ffff or 0x806f040c2005ffff

**Severity:** Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0131

**SNMP Trap ID:** 

Automatically notify Support: No

#### User response:

- 1. Make sure the DIMM is installed correctly.
- 2. If the DIMM was disabled because of a memory fault (memory uncorrectable error or memory logging limit reached), follow the suggested actions for that error event and restart the server.
- 3. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory event. If no memory fault is recorded in the logs and no DIMM connector error LED is lit, you can re-enable the DIMM through the Setup utility or the Advanced Settings Utility (ASU).

#### 806f040c-2006ffff [PhysicalMemoryElementName] Disabled on Subsystem [MemoryElementName]. (DIMM 6)

Explanation: This message is for the use case when an implementation has detected that Memory has been Disabled.

May also be shown as 806f040c2006ffff or 0x806f040c2006ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0131

**SNMP Trap ID:** 

Automatically notify Support: No

#### User response:

- 1. Make sure the DIMM is installed correctly.
- 2. If the DIMM was disabled because of a memory fault (memory uncorrectable error or memory logging limit reached), follow the suggested actions for that error event and restart the server.
- 3. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory event. If no memory fault is recorded in the logs and no DIMM connector error LED is lit, you can re-enable the DIMM through the Setup utility or the Advanced Settings Utility (ASU).

#### 806f040c-2007ffff [PhysicalMemoryElementName] Disabled on Subsystem [MemoryElementName]. (DIMM 7)

**Explanation:** This message is for the use case when an implementation has detected that Memory has been Disabled.

May also be shown as 806f040c2007ffff or

0x806f040c2007ffff

Severity: Info

**Alert Category:** System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0131

**SNMP Trap ID:** 

Automatically notify Support: No

#### User response:

- 1. Make sure the DIMM is installed correctly.
- 2. If the DIMM was disabled because of a memory fault (memory uncorrectable error or memory logging limit reached), follow the suggested actions for that error event and restart the server.
- 3. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory event. If no memory fault is recorded in the logs and no DIMM connector error LED is lit, you can re-enable the DIMM through the Setup utility or the Advanced Settings Utility (ASU).

#### 806f040c-2008ffff [PhysicalMemoryElementName] Disabled on Subsystem [MemoryElementName]. (DIMM 8)

**Explanation:** This message is for the use case when an

implementation has detected that Memory has been Disabled.

May also be shown as 806f040c2008ffff or 0x806f040c2008ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0131

**SNMP Trap ID:** 

Automatically notify Support: No

#### User response:

- 1. Make sure the DIMM is installed correctly.
- If the DIMM was disabled because of a memory fault (memory uncorrectable error or memory logging limit reached), follow the suggested actions for that error event and restart the server.
- 3. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory event. If no memory fault is recorded in the logs and no DIMM connector error LED is lit, you can re-enable the DIMM through the Setup utility or the Advanced Settings Utility (ASU).

## 806f040c-2009ffff [PhysicalMemoryElementName] Disabled on Subsystem [MemoryElementName]. (DIMM 9)

**Explanation:** This message is for the use case when an implementation has detected that Memory has been Disabled.

May also be shown as 806f040c2009ffff or 0x806f040c2009ffff

**Severity:** Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0131

**SNMP Trap ID:** 

**Automatically notify Support:** No

#### User response:

- 1. Make sure the DIMM is installed correctly.
- If the DIMM was disabled because of a memory fault (memory uncorrectable error or memory logging limit reached), follow the suggested actions for that error event and restart the server.
- 3. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory event. If no memory fault is recorded in the logs and no DIMM connector error LED is lit, you can re-enable the DIMM through the Setup utility or the Advanced Settings Utility (ASU).

## 806f040c-200affff [PhysicalMemoryElementName] Disabled on Subsystem [MemoryElementName]. (DIMM 10)

**Explanation:** This message is for the use case when an implementation has detected that Memory has been Disabled.

May also be shown as 806f040c200affff or

0x806f040c200affff **Severity:** Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0131

**SNMP Trap ID:** 

Automatically notify Support: No

#### User response:

- 1. Make sure the DIMM is installed correctly.
- 2. If the DIMM was disabled because of a memory fault (memory uncorrectable error or memory logging limit reached), follow the suggested actions for that error event and restart the server.
- 3. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory event. If no memory fault is recorded in the logs and no DIMM connector error LED is lit, you can re-enable the DIMM through the Setup utility or the Advanced Settings Utility (ASU).

## 806f040c-200bffff [PhysicalMemoryElementName] Disabled on Subsystem [MemoryElementName]. (DIMM 11)

**Explanation:** This message is for the use case when an implementation has detected that Memory has been Disabled.

May also be shown as 806f040c200bffff or

0x806f040c200bffff

**Severity:** Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0131

**SNMP Trap ID:** 

Automatically notify Support: No

- 1. Make sure the DIMM is installed correctly.
- If the DIMM was disabled because of a memory fault (memory uncorrectable error or memory logging limit reached), follow the suggested actions for that error event and restart the server.
- 3. Check the IBM support website for an applicable retain tip or firmware update that applies to this

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memory event. If no memory fault is recorded in the logs and no DIMM connector error LED is lit, you can re-enable the DIMM through the Setup utility or the Advanced Settings Utility (ASU).

## 806f040c-200cffff [PhysicalMemoryElementName] Disabled on Subsystem [MemoryElementName]. (DIMM 12)

**Explanation:** This message is for the use case when an implementation has detected that Memory has been Disabled.

May also be shown as 806f040c200cffff or 0x806f040c200cffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0131

**SNMP Trap ID:** 

Automatically notify Support: No

#### User response:

- 1. Make sure the DIMM is installed correctly.
- 2. If the DIMM was disabled because of a memory fault (memory uncorrectable error or memory logging limit reached), follow the suggested actions for that error event and restart the server.
- 3. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory event. If no memory fault is recorded in the logs and no DIMM connector error LED is lit, you can re-enable the DIMM through the Setup utility or the Advanced Settings Utility (ASU).

## 806f040c-200dffff [PhysicalMemoryElementName] Disabled on Subsystem [MemoryElementName]. (DIMM 13)

**Explanation:** This message is for the use case when an implementation has detected that Memory has been Disabled.

May also be shown as 806f040c200dffff or 0x806f040c200dffff

**Severity:** Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0131

**SNMP Trap ID:** 

Automatically notify Support: No

#### User response:

1. Make sure the DIMM is installed correctly.

- 2. If the DIMM was disabled because of a memory fault (memory uncorrectable error or memory logging limit reached), follow the suggested actions for that error event and restart the server.
- 3. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory event. If no memory fault is recorded in the logs and no DIMM connector error LED is lit, you can re-enable the DIMM through the Setup utility or the Advanced Settings Utility (ASU).

## 806f040c-200effff [PhysicalMemoryElementName] Disabled on Subsystem [MemoryElementName]. (DIMM 14)

**Explanation:** This message is for the use case when an implementation has detected that Memory has been Disabled.

May also be shown as 806f040c200effff or 0x806f040c200effff

**Severity:** Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0131

**SNMP Trap ID:** 

Automatically notify Support: No

#### User response:

- 1. Make sure the DIMM is installed correctly.
- 2. If the DIMM was disabled because of a memory fault (memory uncorrectable error or memory logging limit reached), follow the suggested actions for that error event and restart the server.
- 3. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory event. If no memory fault is recorded in the logs and no DIMM connector error LED is lit, you can re-enable the DIMM through the Setup utility or the Advanced Settings Utility (ASU).

## 806f040c-200fffff [PhysicalMemoryElementName] Disabled on Subsystem [MemoryElementName]. (DIMM 15)

**Explanation:** This message is for the use case when an implementation has detected that Memory has been Disabled.

May also be shown as 806f040c200fffff or 0x806f040c200fffff

Severity: Info

Alert Category: System - Other

Serviceable: No

**SNMP Trap ID:** 

Automatically notify Support: No

#### User response:

- 1. Make sure the DIMM is installed correctly.
- If the DIMM was disabled because of a memory fault (memory uncorrectable error or memory logging limit reached), follow the suggested actions for that error event and restart the server.
- 3. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory event. If no memory fault is recorded in the logs and no DIMM connector error LED is lit, you can re-enable the DIMM through the Setup utility or the Advanced Settings Utility (ASU).

## 806f040c-2010ffff [PhysicalMemoryElementName] Disabled on Subsystem [MemoryElementName]. (DIMM 16)

**Explanation:** This message is for the use case when an implementation has detected that Memory has been Disabled.

May also be shown as 806f040c2010ffff or 0x806f040c2010ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0131

**SNMP Trap ID:** 

Automatically notify Support: No

#### User response:

- 1. Make sure the DIMM is installed correctly.
- 2. If the DIMM was disabled because of a memory fault (memory uncorrectable error or memory logging limit reached), follow the suggested actions for that error event and restart the server.
- 3. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory event. If no memory fault is recorded in the logs and no DIMM connector error LED is lit, you can re-enable the DIMM through the Setup utility or the Advanced Settings Utility (ASU).

## 806f040c-2581ffff [PhysicalMemoryElementName] Disabled on Subsystem [MemoryElementName]. (All DIMMS)

**Explanation:** This message is for the use case when an implementation has detected that Memory has been Disabled.

May also be shown as 806f040c2581ffff or 0x806f040c2581ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0131

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** If the specified sensor is All DIMMs or One of the DIMMs, please complete the following steps until the problem is solved:

- 1. Make sure the DIMM is installed correctly.
- 2. If the DIMM was disabled because of a memory fault (memory uncorrectable error or memory logging limit reached), follow the suggested actions for that error event and restart the server.
- 3. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory event. If no memory fault is recorded in the logs and no DIMM connector error LED is lit, you can re-enable the DIMM through the Setup utility or the Advanced Settings Utility (ASU).

### 806f0413-2582ffff A PCI PERR has occurred on system [ComputerSystemElementName]. (PCIs)

**Explanation:** This message is for the use case when an implementation has detected a PCI PERR.

May also be shown as 806f04132582ffff or 0x806f04132582ffff

Severity: Error

**Alert Category:** Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0232

SNMP Trap ID: 50

Automatically notify Support: No

- 1. Check the PCI LED.
- 2. Reseat the affected adapters and riser cards.
- 3. Update the server firmware (UEFI and IMM) and adapter firmware. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
- 4. Remove both adapters.
- 5. Replace the PCIe adapters.
- 6. Replace the riser card.

#### 806f0507-0301ffff • 806f050c-2001ffff

806f0507-0301ffff [ProcessorElementName] has a Configuration Mismatch. (CPU 1)

**Explanation:** This message is for the use case when an implementation has detected a Processor Configuration

Mismatch has occurred.

May also be shown as 806f05070301ffff or 0x806f05070301ffff

Severity: Error

Alert Category: Critical - CPU

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0062

SNMP Trap ID: 40

Automatically notify Support: No

User response:

1. Make sure that the installed microprocessors are compatible with each other.

2. (Trained technician only) Reseat microprocessor n.

3. (Trained technician only) Replace microprocessor n. (n = microprocessor number)

### 806f0507-0302ffff [ProcessorElementName] has a Configuration Mismatch. (CPU 2)

**Explanation:** This message is for the use case when an implementation has detected a Processor Configuration Mismatch has occurred.

May also be shown as 806f05070302ffff or 0x806f05070302ffff

Severity: Error

Alert Category: Critical - CPU

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0062

SNMP Trap ID: 40

Automatically notify Support: No

User response:

 Make sure that the installed microprocessors are compatible with each other.

2. (Trained technician only) Reseat microprocessor n.

3. (Trained technician only) Replace microprocessor n. (n = microprocessor number)

### 806f0507-2584ffff [ProcessorElementName] has a Configuration Mismatch. (All CPUs)

**Explanation:** This message is for the use case when an implementation has detected a Processor Configuration Mismatch has occurred.

May also be shown as 806f05072584ffff or 0x806f05072584ffff

Severity: Error

Alert Category: Critical - CPU

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0062

SNMP Trap ID: 40

Automatically notify Support: No

User response:

 Make sure that the installed microprocessors are compatible with each other.

2. (Trained technician only) Reseat microprocessor n.

3. (Trained technician only) Replace microprocessor n. (n = microprocessor number)

One of the CPUs:

806f050c-2001ffff Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 1)

**Explanation:** This message is for the use case when an implementation has detected that the Memory Logging Limit has been Reached.

May also be shown as 806f050c2001ffff or 0x806f050c2001ffff

Severity: Warning

Alert Category: Warning - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0144

SNMP Trap ID: 43

Automatically notify Support: Yes

User response:

 Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.

2. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.

3. If the problem follows the DIMM, replace the failing DIMM.

 (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.

 (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.

6. (Trained technician only) Replace the affected microprocessor.

- 7. Manually re-enable all affected DIMMs, and save the setting before restarting the server.
- 8. (Trained Service technician only) Replace the affected microprocessor.

806f050c-2002ffff Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 2)

**Explanation:** This message is for the use case when an implementation has detected that the Memory Logging Limit has been Reached.

May also be shown as 806f050c2002ffff or 0x806f050c2002ffff

Severity: Warning

Alert Category: Warning - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0144

SNMP Trap ID: 43

Automatically notify Support: Yes

#### User response:

- Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
- 2. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
- 3. If the problem follows the DIMM, replace the failing DIMM.
- (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
- (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
- 6. (Trained technician only) Replace the affected microprocessor.
- 7. Manually re-enable all affected DIMMs, and save the setting before restarting the server.
- 8. (Trained Service technician only) Replace the affected microprocessor.

806f050c-2003ffff Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 3)

**Explanation:** This message is for the use case when an implementation has detected that the Memory Logging Limit has been Reached.

May also be shown as 806f050c2003ffff or 0x806f050c2003ffff

Severity: Warning

Alert Category: Warning - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0144

SNMP Trap ID: 43

Automatically notify Support: Yes

#### User response:

- Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
- Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
- 3. If the problem follows the DIMM, replace the failing DIMM.
- (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
- (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
- (Trained technician only) Replace the affected microprocessor.
- 7. Manually re-enable all affected DIMMs, and save the setting before restarting the server.
- 8. (Trained Service technician only) Replace the affected microprocessor.

806f050c-2004ffff Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 4)

**Explanation:** This message is for the use case when an implementation has detected that the Memory Logging Limit has been Reached.

May also be shown as 806f050c2004ffff or 0x806f050c2004ffff

Severity: Warning

Alert Category: Warning - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0144

SNMP Trap ID: 43

Automatically notify Support: Yes

#### 806f050c-2005ffff • 806f050c-2006ffff

- Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
- Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
- 3. If the problem follows the DIMM, replace the failing DIMM.
- (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
- (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
- (Trained technician only) Replace the affected microprocessor.
- 7. Manually re-enable all affected DIMMs, and save the setting before restarting the server.
- 8. (Trained Service technician only) Replace the affected microprocessor.

#### 806f050c-2005ffff Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 5)

**Explanation:** This message is for the use case when an implementation has detected that the Memory Logging Limit has been Reached.

May also be shown as 806f050c2005ffff or 0x806f050c2005ffff

Severity: Warning

Alert Category: Warning - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0144

SNMP Trap ID: 43

Automatically notify Support: Yes

#### User response:

- 1. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
- Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
- If the problem follows the DIMM, replace the failing DIMM.
- 4. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.

- (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
- 6. (Trained technician only) Replace the affected microprocessor.
- 7. Manually re-enable all affected DIMMs, and save the setting before restarting the server.
- 8. (Trained Service technician only) Replace the affected microprocessor.

#### 806f050c-2006ffff Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 6)

**Explanation:** This message is for the use case when an implementation has detected that the Memory Logging Limit has been Reached.

May also be shown as 806f050c2006ffff or 0x806f050c2006ffff

Severity: Warning

Alert Category: Warning - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0144

SNMP Trap ID: 43

Automatically notify Support: Yes

- 1. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
- 2. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
- 3. If the problem follows the DIMM, replace the failing DIMM.
- 4. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
- (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
- 6. (Trained technician only) Replace the affected microprocessor.
- 7. Manually re-enable all affected DIMMs, and save the setting before restarting the server.
- 8. (Trained Service technician only) Replace the affected microprocessor.

#### 806f050c-2007ffff Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 7)

**Explanation:** This message is for the use case when an implementation has detected that the Memory Logging Limit has been Reached.

May also be shown as 806f050c2007ffff or 0x806f050c2007ffff

Severity: Warning

Alert Category: Warning - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0144

SNMP Trap ID: 43

Automatically notify Support: Yes

#### User response:

- Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
- 2. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
- 3. If the problem follows the DIMM, replace the failing DIMM.
- (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
- (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
- 6. (Trained technician only) Replace the affected microprocessor.
- 7. Manually re-enable all affected DIMMs, and save the setting before restarting the server.
- 8. (Trained Service technician only) Replace the affected microprocessor.

#### 806f050c-2008ffff Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 8)

**Explanation:** This message is for the use case when an implementation has detected that the Memory Logging Limit has been Reached.

May also be shown as 806f050c2008ffff or 0x806f050c2008ffff

Severity: Warning

Alert Category: Warning - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0144

SNMP Trap ID: 43

Automatically notify Support: Yes

#### User response:

- Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
- Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
- 3. If the problem follows the DIMM, replace the failing DIMM.
- (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
- (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
- 6. (Trained technician only) Replace the affected microprocessor.
- 7. Manually re-enable all affected DIMMs, and save the setting before restarting the server.
- 8. (Trained Service technician only) Replace the affected microprocessor.

#### 806f050c-2009ffff Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 9)

**Explanation:** This message is for the use case when an implementation has detected that the Memory Logging Limit has been Reached.

May also be shown as 806f050c2009ffff or 0x806f050c2009ffff

Severity: Warning

Alert Category: Warning - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0144

SNMP Trap ID: 43

Automatically notify Support: Yes

- Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
- 2. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.

#### 806f050c-200affff • 806f050c-200cffff

- 3. If the problem follows the DIMM, replace the failing DIMM.
- 4. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
- (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
- 6. (Trained technician only) Replace the affected microprocessor.
- Manually re-enable all affected DIMMs, and save the setting before restarting the server.
- 8. (Trained Service technician only) Replace the affected microprocessor.

#### 806f050c-200affff Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 10)

**Explanation:** This message is for the use case when an implementation has detected that the Memory Logging Limit has been Reached.

May also be shown as 806f050c200affff or 0x806f050c200affff

Severity: Warning

Alert Category: Warning - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0144

SNMP Trap ID: 43

Automatically notify Support: Yes

#### User response:

- Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
- 2. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
- 3. If the problem follows the DIMM, replace the failing DIMM.
- (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
- (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
- 6. (Trained technician only) Replace the affected microprocessor.

- 7. Manually re-enable all affected DIMMs, and save the setting before restarting the server.
- 8. (Trained Service technician only) Replace the affected microprocessor.

#### 806f050c-200bffff Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 11)

**Explanation:** This message is for the use case when an implementation has detected that the Memory Logging Limit has been Reached.

May also be shown as 806f050c200bffff or 0x806f050c200bffff

Severity: Warning

Alert Category: Warning - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0144

SNMP Trap ID: 43

Automatically notify Support: Yes

#### User response:

- Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
- 2. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
- 3. If the problem follows the DIMM, replace the failing DIMM.
- (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
- (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
- **6**. (Trained technician only) Replace the affected microprocessor.
- 7. Manually re-enable all affected DIMMs, and save the setting before restarting the server.
- 8. (Trained Service technician only) Replace the affected microprocessor.

#### 806f050c-200cffff Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 12)

**Explanation:** This message is for the use case when an implementation has detected that the Memory Logging Limit has been Reached.

May also be shown as 806f050c200cffff or 0x806f050c200cffff

Severity: Warning

Alert Category: Warning - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0144

SNMP Trap ID: 43

Automatically notify Support: Yes

#### User response:

- Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
- Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
- 3. If the problem follows the DIMM, replace the failing DIMM.
- (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
- (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
- 6. (Trained technician only) Replace the affected microprocessor.
- 7. Manually re-enable all affected DIMMs, and save the setting before restarting the server.
- 8. (Trained Service technician only) Replace the affected microprocessor.

#### 806f050c-200dffff Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 13)

**Explanation:** This message is for the use case when an implementation has detected that the Memory Logging Limit has been Reached.

May also be shown as 806f050c200dffff or 0x806f050c200dffff

Severity: Warning

Alert Category: Warning - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0144

SNMP Trap ID: 43

Automatically notify Support: Yes

User response:

- Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
- 2. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
- 3. If the problem follows the DIMM, replace the failing DIMM.
- (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
- (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
- 6. (Trained technician only) Replace the affected microprocessor.
- Manually re-enable all affected DIMMs, and save the setting before restarting the server.
- 8. (Trained Service technician only) Replace the affected microprocessor.

#### 806f050c-200effff Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 14)

**Explanation:** This message is for the use case when an implementation has detected that the Memory Logging Limit has been Reached.

May also be shown as 806f050c200effff or 0x806f050c200effff

Severity: Warning

**Alert Category:** Warning - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0144

SNMP Trap ID: 43

Automatically notify Support: Yes

- Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
- 2. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
- 3. If the problem follows the DIMM, replace the failing DIMM.
- 4. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.

#### 806f050c-200fffff • 806f050c-2581ffff

- (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
- 6. (Trained technician only) Replace the affected microprocessor.
- 7. Manually re-enable all affected DIMMs, and save the setting before restarting the server.
- (Trained Service technician only) Replace the affected microprocessor.

806f050c-200fffff Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 15)

**Explanation:** This message is for the use case when an implementation has detected that the Memory Logging Limit has been Reached.

May also be shown as 806f050c200fffff or 0x806f050c200fffff

Severity: Warning

Alert Category: Warning - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0144

SNMP Trap ID: 43

Automatically notify Support: Yes

#### User response:

- Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
- 2. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
- 3. If the problem follows the DIMM, replace the failing DIMM.
- (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
- (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
- 6. (Trained technician only) Replace the affected microprocessor.
- 7. Manually re-enable all affected DIMMs, and save the setting before restarting the server.
- 8. (Trained Service technician only) Replace the affected microprocessor.

806f050c-2010ffff Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 16)

**Explanation:** This message is for the use case when an implementation has detected that the Memory Logging Limit has been Reached.

May also be shown as 806f050c2010ffff or 0x806f050c2010ffff

Severity: Warning

Alert Category: Warning - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0144

SNMP Trap ID: 43

**Automatically notify Support:** Yes

#### User response:

- Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
- Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
- 3. If the problem follows the DIMM, replace the failing DIMM.
- (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
- 5. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
- 6. (Trained technician only) Replace the affected microprocessor.
- 7. Manually re-enable all affected DIMMs, and save the setting before restarting the server.
- 8. (Trained Service technician only) Replace the affected microprocessor.

806f050c-2581ffff Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (All DIMMS)

**Explanation:** This message is for the use case when an implementation has detected that the Memory Logging Limit has been Reached.

May also be shown as 806f050c2581ffff or 0x806f050c2581ffff

Severity: Warning

**Alert Category:** Warning - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0144

SNMP Trap ID: 43

Automatically notify Support: Yes

**User response:** If the specified sensor is All DIMMs or One of the DIMMs, please complete the following steps until the problem is solved:

- 1. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
- 2. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
- 3. If the problem follows the DIMM, replace the failing DIMM.
- 4. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
- (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
- 6. (Trained technician only) Replace the affected microprocessor.
- 7. Manually re-enable all affected DIMMs, and save the setting before restarting the server.
- 8. (Trained Service technician only) Replace the affected microprocessor.

#### 806f050d-0400ffff Array

[ComputerSystemElementName] is in critical condition. (Drive 0)

**Explanation:** This message is for the use case when an implementation has detected that an Array is Critical.

May also be shown as 806f050d0400ffff or 0x806f050d0400ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0174

**SNMP Trap ID:** 5

Automatically notify Support: No

#### User response:

- Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
- 2. Make sure that the SAS cable is connected correctly.
- 3. Replace the SAS cable.
- 4. Check backplane cable connection.

- 5. Replace the RAID adapter.
- Replace the hard disk drive that is indicated by a lit status LED.

#### 806f050d-0401ffff Array

[ComputerSystemElementName] is in critical condition. (Drive 1)

**Explanation:** This message is for the use case when an implementation has detected that an Array is Critical.

May also be shown as 806f050d0401ffff or 0x806f050d0401ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0174

**SNMP Trap ID:** 5

Automatically notify Support: No

#### User response:

- Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
- 2. Make sure that the SAS cable is connected correctly.
- 3. Replace the SAS cable.
- 4. Check backplane cable connection.
- 5. Replace the RAID adapter.
- 6. Replace the hard disk drive that is indicated by a lit status LED.

#### 806f050d-0402ffff Array

[ComputerSystemElementName] is in critical condition. (Drive 2)

**Explanation:** This message is for the use case when an implementation has detected that an Array is Critical.

May also be shown as 806f050d0402ffff or 0x806f050d0402ffff

Severity: Error

**Alert Category:** Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0174

SNMP Trap ID: 5

Automatically notify Support: No

- 1. Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
- 2. Make sure that the SAS cable is connected correctly.
- 3. Replace the SAS cable.

#### 806f050d-0403ffff • 806f050d-0406ffff

- 4. Check backplane cable connection.
- 5. Replace the RAID adapter.
- Replace the hard disk drive that is indicated by a lit status LED.

#### 806f050d-0403ffff Array

[ComputerSystemElementName] is in critical condition. (Drive 3)

**Explanation:** This message is for the use case when an implementation has detected that an Array is Critical.

May also be shown as 806f050d0403ffff or 0x806f050d0403ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0174

SNMP Trap ID: 5

Automatically notify Support: No

#### User response:

- Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
- Make sure that the SAS cable is connected correctly.
- 3. Replace the SAS cable.
- 4. Check backplane cable connection.
- 5. Replace the RAID adapter.
- Replace the hard disk drive that is indicated by a lit status LED.

#### 806f050d-0404ffff Array

[ComputerSystemElementName] is in critical condition. (Drive 4)

**Explanation:** This message is for the use case when an implementation has detected that an Array is Critical.

May also be shown as 806f050d0404ffff or 0x806f050d0404ffff

**Severity:** Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0174

**SNMP Trap ID:** 5

Automatically notify Support: No

#### User response:

- Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
- Make sure that the SAS cable is connected correctly.

- 3. Replace the SAS cable.
- 4. Check backplane cable connection.
- 5. Replace the RAID adapter.
- 6. Replace the hard disk drive that is indicated by a lit status LED.

#### 806f050d-0405ffff Array

[ComputerSystemElementName] is in critical condition. (Drive 5)

**Explanation:** This message is for the use case when an implementation has detected that an Array is Critical.

May also be shown as 806f050d0405ffff or

0x806f050d0405ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0174

SNMP Trap ID: 5

Automatically notify Support: No

#### User response:

- Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
- 2. Make sure that the SAS cable is connected correctly.
- 3. Replace the SAS cable.
- 4. Check backplane cable connection.
- 5. Replace the RAID adapter.
- 6. Replace the hard disk drive that is indicated by a lit status LED.

#### 806f050d-0406ffff Array

[ComputerSystemElementName] is in critical condition. (Drive 6)

**Explanation:** This message is for the use case when an implementation has detected that an Array is Critical.

May also be shown as 806f050d0406ffff or 0x806f050d0406ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0174

SNMP Trap ID: 5

Automatically notify Support: No

#### User response:

1. Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.

#### 806f050d-0407ffff • 806f050d-040affff

- 2. Make sure that the SAS cable is connected correctly.
- 3. Replace the SAS cable.
- 4. Check backplane cable connection.
- 5. Replace the RAID adapter.
- Replace the hard disk drive that is indicated by a lit status LED.

#### 806f050d-0407ffff Array

[ComputerSystemElementName] is in critical condition. (Drive 7)

**Explanation:** This message is for the use case when an implementation has detected that an Array is Critical.

May also be shown as 806f050d0407ffff or 0x806f050d0407ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0174

**SNMP Trap ID:** 5

Automatically notify Support: No

User response:

- Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
- 2. Make sure that the SAS cable is connected correctly.
- 3. Replace the SAS cable.
- 4. Check backplane cable connection.
- 5. Replace the RAID adapter.
- 6. Replace the hard disk drive that is indicated by a lit status LED.

#### 806f050d-0408ffff Array

[ComputerSystemElementName] is in critical condition. (Drive 8)

**Explanation:** This message is for the use case when an implementation has detected that an Array is Critical.

May also be shown as 806f050d0408ffff or 0x806f050d0408ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0174

**SNMP Trap ID:** 5

Automatically notify Support: No

User response:

- Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
- 2. Make sure that the SAS cable is connected correctly.
- 3. Replace the SAS cable.
- 4. Check backplane cable connection.
- 5. Replace the RAID adapter.
- 6. Replace the hard disk drive that is indicated by a lit status LED.

#### 806f050d-0409ffff Array

[ComputerSystemElementName] is in critical condition. (Drive 9)

**Explanation:** This message is for the use case when an implementation has detected that an Array is Critical.

May also be shown as 806f050d0409ffff or 0x806f050d0409ffff

Severity: Error

**Alert Category:** Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0174

**SNMP Trap ID:** 5

Automatically notify Support: No

User response:

- Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
- 2. Make sure that the SAS cable is connected correctly.
- 3. Replace the SAS cable.
- 4. Check backplane cable connection.
- 5. Replace the RAID adapter.
- Replace the hard disk drive that is indicated by a lit status LED.

#### 806f050d-040affff Array

[ComputerSystemElementName] is in critical condition. (Drive 10)

**Explanation:** This message is for the use case when an implementation has detected that an Array is Critical.

May also be shown as 806f050d040affff or 0x806f050d040affff

**Severity:** Error

**Alert Category:** Critical - Hard Disk drive

Serviceable: Yes

**CIM Information: Prefix:** PLAT and **ID:** 0174

**SNMP Trap ID:** 5

Automatically notify Support: No

#### 806f050d-040bffff • 806f0513-2582ffff

#### User response:

- Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
- Make sure that the SAS cable is connected correctly.
- 3. Replace the SAS cable.
- 4. Check backplane cable connection.
- 5. Replace the RAID adapter.
- Replace the hard disk drive that is indicated by a lit status LED.

#### 806f050d-040bffff Array

### [ComputerSystemElementName] is in critical condition. (Drive 11)

**Explanation:** This message is for the use case when an implementation has detected that an Array is Critical.

May also be shown as 806f050d040bffff or 0x806f050d040bffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0174

SNMP Trap ID: 5

Automatically notify Support: No

#### User response:

- Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
- Make sure that the SAS cable is connected correctly.
- 3. Replace the SAS cable.
- 4. Check backplane cable connection.
- 5. Replace the RAID adapter.
- Replace the hard disk drive that is indicated by a lit status LED.

#### 806f050d-040cffff Array

### [ComputerSystemElementName] is in critical condition. (Drive 12)

**Explanation:** This message is for the use case when an implementation has detected that an Array is Critical.

May also be shown as 806f050d040cffff or 0x806f050d040cffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0174

**SNMP Trap ID:** 5

#### Automatically notify Support: No

#### User response:

- Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
- Make sure that the SAS cable is connected correctly.
- 3. Replace the SAS cable.
- 4. Check backplane cable connection.
- 5. Replace the RAID adapter.
- Replace the hard disk drive that is indicated by a lit status LED.

#### 806f050d-040dffff Array

### [ComputerSystemElementName] is in critical condition. (Drive 13)

**Explanation:** This message is for the use case when an implementation has detected that an Array is Critical.

May also be shown as 806f050d040dffff or 0x806f050d040dffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

**CIM Information: Prefix:** PLAT and **ID:** 0174

**SNMP Trap ID:** 5

Automatically notify Support: No

#### User response:

- Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
- Make sure that the SAS cable is connected correctly.
- 3. Replace the SAS cable.
- 4. Check backplane cable connection.
- 5. Replace the RAID adapter.
- 6. Replace the hard disk drive that is indicated by a lit status LED.

### 806f0513-2582ffff A PCI SERR has occurred on system [ComputerSystemElementName]. (PCIs)

**Explanation:** This message is for the use case when an implementation has detected a PCI SERR.

May also be shown as 806f05132582ffff or 0x806f05132582ffff

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

SNMP Trap ID: 50

Automatically notify Support: No

#### User response:

- 1. Check the PCI LED.
- 2. Reseat the affected adapters and riser card.
- 3. Update the server firmware (UEFI and IMM) and adapter firmware. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
- 4. Make sure that the adapter is supported. For a list of supported optional devices, see http://www.ibm.com/systems/info/x86servers/serverproven/compat/us/.
- 5. Remove both adapters.
- 6. Replace the PCIe adapters.
- 7. Replace the riser card.

# 806f052b-2101ffff Invalid or Unsupported firmware or software was detected on system [ComputerSystemElementName]. (IMM2 FW Failover)

**Explanation:** This message is for the use case when an implementation has detected an Invalid/Unsupported Firmware/Software Version.

May also be shown as 806f052b2101ffff or 0x806f052b2101ffff

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0446

SNMP Trap ID: 50

**Automatically notify Support:** No

#### User response:

- Make sure the server meets the minimum configuration to start (see Power-supply LEDs).
- 2. Recover the server firmware from the backup page by restarting the server.
- 3. Update the server firmware to the latest level (see Updating the firmware). Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
- 4. Remove components one at a time, restarting the server each time, to see if the problem goes away.
- 5. If the problem remains, (trained service technician) replace the system board.

806f0607-0301ffff An SM BIOS Uncorrectable CPU complex error for [ProcessorElementName] has asserted. (CPU 1)

**Explanation:** This message is for the use case when an SM BIOS Uncorrectable CPU complex error has asserted

May also be shown as 806f06070301ffff or 0x806f06070301ffff

Severity: Error

Alert Category: Critical - CPU

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0816

SNMP Trap ID: 40

Automatically notify Support: No

#### User response:

- Update the latest level of system firmware and device drivers are installed for all adapters and standard devices, such as UEFI, IMM Ethernet, and SAS. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
- 2. Run the DSA program.
- 3. (Trained technician only) Replace microprocessor n. (n = microprocessor number)
- 4. (Trained technician only) Replace the system board.

# 806f0607-0302ffff An SM BIOS Uncorrectable CPU complex error for [ProcessorElementName] has asserted. (CPU 2)

**Explanation:** This message is for the use case when an SM BIOS Uncorrectable CPU complex error has asserted.

May also be shown as 806f06070302ffff or 0x806f06070302ffff

**Severity:** Error

Alert Category: Critical - CPU

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0816

SNMP Trap ID: 40

Automatically notify Support: No

#### User response:

 Update the latest level of system firmware and device drivers are installed for all adapters and standard devices, such as UEFI, IMM Ethernet, and SAS. Important: Some cluster solutions require

#### 806f0607-2584ffff • 806f060d-0401ffff

specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.

- 2. Run the DSA program.
- 3. (Trained technician only) Replace microprocessor n. (n = microprocessor number)
- 4. (Trained technician only) Replace the system board.

#### 806f0607-2584ffff An SM BIOS Uncorrectable CPU complex error for [ProcessorElementName] has asserted. (All CPUs)

**Explanation:** This message is for the use case when an SM BIOS Uncorrectable CPU complex error has asserted.

May also be shown as 806f06072584ffff or 0x806f06072584ffff

Severity: Error

Alert Category: Critical - CPU

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0816

SNMP Trap ID: 40

Automatically notify Support: No

#### User response:

- 1. Update the latest level of system firmware and device drivers are installed for all adapters and standard devices, such as UEFI, IMM Ethernet, and SAS. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
- 2. Run the DSA program.
- 3. (Trained technician only) Replace microprocessor n. (n = microprocessor number)
- 4. (Trained technician only) Replace the system board.

One of the CPUs:

#### 806f0608-1301ffff [PowerSupplyElementName] has a Configuration Mismatch. (PS Configuration)

**Explanation:** This message is for the use case when an implementation has detected a Power Supply with a Configuration Error.

May also be shown as 806f06081301ffff or 0x806f06081301ffff

**Severity:** Error

**Alert Category:** Critical - Power

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0104

SNMP Trap ID: 4

Automatically notify Support: No

#### User response:

- 1. Make sure that the power supplies installed are with the same rating or wattage.
- 2. Reinstall the power supplies with the same rating or wattage.

#### 806f060d-0400ffff Array

[ComputerSystemElementName] has failed. (Drive 0)

Explanation: This message is for the use case when an implementation has detected that an Array Failed.

May also be shown as 806f060d0400ffff or 0x806f060d0400ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0176

**SNMP Trap ID:** 5

Automatically notify Support: Yes

#### User response:

- 1. Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
- 2. Make sure that the SAS cable is connected correctly.
- 3. Replace the SAS cable.
- 4. Replace the RAID adapter.
- 5. Replace the hard disk drive that is indicated by a lit status LED.

#### 806f060d-0401ffff Array

[ComputerSystemElementName] has failed. (Drive 1)

**Explanation:** This message is for the use case when an implementation has detected that an Array Failed.

May also be shown as 806f060d0401ffff or 0x806f060d0401ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0176

SNMP Trap ID: 5

Automatically notify Support: Yes

#### User response:

- Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
- Make sure that the SAS cable is connected correctly.
- 3. Replace the SAS cable.
- 4. Replace the RAID adapter.
- Replace the hard disk drive that is indicated by a lit status LED.

#### 806f060d-0402ffff Array

[ComputerSystemElementName] has failed. (Drive 2)

**Explanation:** This message is for the use case when an implementation has detected that an Array Failed.

May also be shown as 806f060d0402ffff or 0x806f060d0402ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0176

SNMP Trap ID: 5

Automatically notify Support: Yes

#### User response:

- Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
- 2. Make sure that the SAS cable is connected correctly.
- 3. Replace the SAS cable.
- 4. Replace the RAID adapter.
- Replace the hard disk drive that is indicated by a lit status LED.

#### 806f060d-0403ffff Array

[ComputerSystemElementName] has failed. (Drive 3)

**Explanation:** This message is for the use case when an implementation has detected that an Array Failed.

May also be shown as 806f060d0403ffff or 0x806f060d0403ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0176

**SNMP Trap ID:** 5

**Automatically notify Support:** Yes

User response:

- Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
- 2. Make sure that the SAS cable is connected correctly.
- 3. Replace the SAS cable.
- 4. Replace the RAID adapter.
- 5. Replace the hard disk drive that is indicated by a lit status LED.

#### 806f060d-0404ffff Array

[ComputerSystemElementName] has failed. (Drive 4)

**Explanation:** This message is for the use case when an implementation has detected that an Array Failed.

May also be shown as 806f060d0404ffff or 0x806f060d0404ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0176

**SNMP Trap ID:** 5

Automatically notify Support: Yes

#### User response:

- 1. Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
- Make sure that the SAS cable is connected correctly.
- 3. Replace the SAS cable.
- 4. Replace the RAID adapter.
- 5. Replace the hard disk drive that is indicated by a lit status LED.

#### 806f060d-0405ffff Array

[ComputerSystemElementName] has failed. (Drive 5)

**Explanation:** This message is for the use case when an implementation has detected that an Array Failed.

May also be shown as 806f060d0405ffff or 0x806f060d0405ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0176

SNMP Trap ID: 5

Automatically notify Support: Yes

#### 806f060d-0406ffff • 806f060d-0409ffff

- Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
- Make sure that the SAS cable is connected correctly.
- 3. Replace the SAS cable.
- 4. Replace the RAID adapter.
- Replace the hard disk drive that is indicated by a lit status LED.

#### 806f060d-0406ffff Array

[ComputerSystemElementName] has failed. (Drive 6)

**Explanation:** This message is for the use case when an implementation has detected that an Array Failed.

May also be shown as 806f060d0406ffff or 0x806f060d0406ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0176

**SNMP Trap ID:** 5

Automatically notify Support: Yes

#### User response:

- Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
- Make sure that the SAS cable is connected correctly.
- 3. Replace the SAS cable.
- 4. Replace the RAID adapter.
- Replace the hard disk drive that is indicated by a lit status LED.

#### 806f060d-0407ffff Array

[ComputerSystemElementName] has failed. (Drive 7)

**Explanation:** This message is for the use case when an implementation has detected that an Array Failed.

May also be shown as 806f060d0407ffff or 0x806f060d0407ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0176

**SNMP Trap ID:** 5

Automatically notify Support: Yes

User response:

- Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
- 2. Make sure that the SAS cable is connected correctly.
- 3. Replace the SAS cable.
- 4. Replace the RAID adapter.
- 5. Replace the hard disk drive that is indicated by a lit status LED.

#### 806f060d-0408ffff Array

[ComputerSystemElementName] has failed. (Drive 8)

**Explanation:** This message is for the use case when an implementation has detected that an Array Failed.

May also be shown as 806f060d0408ffff or 0x806f060d0408ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0176

**SNMP Trap ID:** 5

Automatically notify Support: Yes

#### User response:

- Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
- Make sure that the SAS cable is connected correctly.
- 3. Replace the SAS cable.
- 4. Replace the RAID adapter.
- 5. Replace the hard disk drive that is indicated by a lit status LED.

#### 806f060d-0409ffff Array

[ComputerSystemElementName] has failed. (Drive 9)

**Explanation:** This message is for the use case when an implementation has detected that an Array Failed.

May also be shown as 806f060d0409ffff or 0x806f060d0409ffff

**Severity:** Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0176

**SNMP Trap ID:** 5

**Automatically notify Support:** Yes

#### 806f060d-040affff • 806f060d-040dffff

- Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
- Make sure that the SAS cable is connected correctly.
- 3. Replace the SAS cable.
- 4. Replace the RAID adapter.
- Replace the hard disk drive that is indicated by a lit status LED.

#### 806f060d-040affff Array

[ComputerSystemElementName] has failed. (Drive 10)

**Explanation:** This message is for the use case when an implementation has detected that an Array Failed.

May also be shown as 806f060d040affff or 0x806f060d040affff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0176

SNMP Trap ID: 5

Automatically notify Support: Yes

#### User response:

- Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
- Make sure that the SAS cable is connected correctly.
- 3. Replace the SAS cable.
- 4. Replace the RAID adapter.
- Replace the hard disk drive that is indicated by a lit status LED.

#### 806f060d-040bffff Array

[ComputerSystemElementName] has failed. (Drive 11)

**Explanation:** This message is for the use case when an implementation has detected that an Array Failed.

May also be shown as 806f060d040bffff or 0x806f060d040bffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0176

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

- Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
- 2. Make sure that the SAS cable is connected correctly.
- 3. Replace the SAS cable.
- 4. Replace the RAID adapter.
- 5. Replace the hard disk drive that is indicated by a lit status LED.

#### 806f060d-040cffff Array

[ComputerSystemElementName] has failed. (Drive 12)

**Explanation:** This message is for the use case when an implementation has detected that an Array Failed.

May also be shown as 806f060d040cffff or 0x806f060d040cffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0176

**SNMP Trap ID:** 5

Automatically notify Support: Yes

#### User response:

- Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
- Make sure that the SAS cable is connected correctly.
- 3. Replace the SAS cable.
- 4. Replace the RAID adapter.
- Replace the hard disk drive that is indicated by a lit status LED.

#### 806f060d-040dffff Array

[ComputerSystemElementName] has failed. (Drive 13)

**Explanation:** This message is for the use case when an implementation has detected that an Array Failed.

May also be shown as 806f060d040dffff or 0x806f060d040dffff

Severity: Error

**Alert Category:** Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0176

**SNMP Trap ID:** 5

**Automatically notify Support:** Yes

#### 806f070c-2001ffff • 806f070c-2005ffff

- Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
- 2. Make sure that the SAS cable is connected correctly.
- 3. Replace the SAS cable.
- 4. Replace the RAID adapter.
- Replace the hard disk drive that is indicated by a lit status LED.

806f070c-2001ffff Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 1)

**Explanation:** This message is for the use case when an implementation has detected a Memory DIMM configuration error has been corrected.

May also be shown as 806f070c2001ffff or 0x806f070c2001ffff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** Make sure that DIMMs are installed and following the memory population chart in the system publication.

806f070c-2002ffff Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 2)

**Explanation:** This message is for the use case when an implementation has detected a Memory DIMM configuration error has been corrected.

May also be shown as 806f070c2002ffff or 0x806f070c2002ffff

Severity: Error

**Alert Category:** Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** Make sure that DIMMs are installed and following the memory population chart in the system publication.

806f070c-2003ffff Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 3)

**Explanation:** This message is for the use case when an implementation has detected a Memory DIMM configuration error has been corrected.

May also be shown as 806f070c2003ffff or 0x806f070c2003ffff

Severity: Error

**Alert Category:** Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** Make sure that DIMMs are installed and following the memory population chart in the system publication.

806f070c-2004ffff Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 4)

**Explanation:** This message is for the use case when an implementation has detected a Memory DIMM configuration error has been corrected.

May also be shown as 806f070c2004ffff or 0x806f070c2004ffff

Severity: Error

**Alert Category:** Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** Make sure that DIMMs are installed and following the memory population chart in the system publication.

806f070c-2005ffff Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 5)

**Explanation:** This message is for the use case when an implementation has detected a Memory DIMM configuration error has been corrected.

May also be shown as 806f070c2005ffff or 0x806f070c2005ffff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** Make sure that DIMMs are installed and following the memory population chart in the system publication.

806f070c-2006ffff Configuration Error for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName].

(DIMM 6)

**Explanation:** This message is for the use case when an implementation has detected a Memory DIMM configuration error has been corrected.

May also be shown as 806f070c2006ffff or 0x806f070c2006ffff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** Make sure that DIMMs are installed and following the memory population chart in the

system publication.

806f070c-2007ffff Configuration Error for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 7)

**Explanation:** This message is for the use case when an implementation has detected a Memory DIMM configuration error has been corrected.

May also be shown as 806f070c2007ffff or 0x806f070c2007ffff

Severity: Error

**Alert Category:** Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** Make sure that DIMMs are installed and following the memory population chart in the

system publication.

806f070c-2008ffff Configuration Error for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName].

(DIMM 8)

**Explanation:** This message is for the use case when an

implementation has detected a Memory DIMM configuration error has been corrected.

May also be shown as 806f070c2008ffff or

0x806f070c2008ffff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** Make sure that DIMMs are installed and following the memory population chart in the

system publication.

806f070c-2009ffff Configuration Error for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName].

(DIMM 9)

**Explanation:** This message is for the use case when an

implementation has detected a Memory DIMM

configuration error has been corrected.

May also be shown as 806f070c2009ffff or

0x806f070c2009ffff

**Severity:** Error

**Alert Category:** Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** Make sure that DIMMs are installed and following the memory population chart in the

system publication.

806f070c-200affff Configuration Error for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName].

(DIMM 10)

**Explanation:** This message is for the use case when an implementation has detected a Memory DIMM

configuration error has been corrected.

May also be shown as 806f070c200affff or

0x806f070c200affff

**Severity:** Error

#### 806f070c-200bffff • 806f070c-200fffff

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** Make sure that DIMMs are installed and following the memory population chart in the

system publication.

806f070c-200bffff Configuration Error for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName].

(DIMM 11)

**Explanation:** This message is for the use case when an implementation has detected a Memory DIMM

configuration error has been corrected.

May also be shown as 806f070c200bffff or 0x806f070c200bffff

Severity: Error

**Alert Category:** Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** Make sure that DIMMs are installed and following the memory population chart in the

system publication.

806f070c-200cffff Configuration Error for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName].

(DIMM 12)

**Explanation:** This message is for the use case when an implementation has detected a Memory DIMM

configuration error has been corrected.

May also be shown as 806f070c200cffff or

0x806f070c200cffff **Severity:** Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** Make sure that DIMMs are installed and following the memory population chart in the

system publication.

806f070c-200dffff Configuration Error for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName].

(DIMM 13)

**Explanation:** This message is for the use case when an

implementation has detected a Memory DIMM

configuration error has been corrected.

May also be shown as 806f070c200dffff or

0x806f070c200dffff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** Make sure that DIMMs are installed and following the memory population chart in the

system publication.

806f070c-200effff Configuration Error for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName].

(DIMM 14)

**Explanation:** This message is for the use case when an

implementation has detected a Memory DIMM

configuration error has been corrected.

May also be shown as 806f070c200effff or

0x806f070c200effff

Severity: Error

**Alert Category:** Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** Make sure that DIMMs are installed and following the memory population chart in the

system publication.

806f070c-200fffff Configuration Error for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName].

(DIMM 15)

**Explanation:** This message is for the use case when an implementation has detected a Memory DIMM

configuration error has been corrected.

May also be shown as 806f070c200fffff or

0x806f070c200fffff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** Make sure that DIMMs are installed and following the memory population chart in the system publication.

806f070c-2010ffff Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 16)

**Explanation:** This message is for the use case when an implementation has detected a Memory DIMM configuration error has been corrected.

May also be shown as 806f070c2010ffff or 0x806f070c2010ffff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** Make sure that DIMMs are installed and following the memory population chart in the system publication.

806f070c-2581ffff Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

**Explanation:** This message is for the use case when an implementation has detected a Memory DIMM configuration error has been corrected.

May also be shown as 806f070c2581ffff or 0x806f070c2581ffff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** If the specified sensor is All DIMMs or One of the DIMMs, please make sure that DIMMs are installed and following the memory population chart in the system publication.

806f070d-0400ffff Rebuild in progress for Array in system [ComputerSystemElementName]. (Drive 0)

**Explanation:** This message is for the use case when an implementation has detected that an Array Rebuild is in Progress.

May also be shown as 806f070d0400ffff or 0x806f070d0400ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0178

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

806f070d-0401ffff Rebuild in progress for Array in system [ComputerSystemElementName]. (Drive 1)

**Explanation:** This message is for the use case when an implementation has detected that an Array Rebuild is in Progress.

May also be shown as 806f070d0401ffff or

0x806f070d0401ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0178

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

806f070d-0402ffff Rebuild in progress for Array in system [ComputerSystemElementName]. (Drive 2)

**Explanation:** This message is for the use case when an implementation has detected that an Array Rebuild is in Progress.

May also be shown as 806f070d0402ffff or 0x806f070d0402ffff

Severity: Info

**Alert Category:** System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0178

**SNMP Trap ID:** 

#### 806f070d-0403ffff • 806f070d-0408ffff

Automatically notify Support: No

**User response:** No action; information only.

806f070d-0403ffff Rebuild in progress for Array in system [ComputerSystemElementName].

(Drive 3)

**Explanation:** This message is for the use case when an implementation has detected that an Array Rebuild is in Progress.

May also be shown as 806f070d0403ffff or 0x806f070d0403ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0178

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

806f070d-0404ffff Rebuild in progress for Array in system [ComputerSystemElementName]. (Drive 4)

**Explanation:** This message is for the use case when an implementation has detected that an Array Rebuild is in Progress.

May also be shown as 806f070d0404ffff or 0x806f070d0404ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0178

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

806f070d-0405ffff Rebuild in progress for Array in system [ComputerSystemElementName]. (Drive 5)

**Explanation:** This message is for the use case when an implementation has detected that an Array Rebuild is in Progress.

May also be shown as 806f070d0405ffff or 0x806f070d0405ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0178

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

806f070d-0406ffff Rebuild in progress for Array in system [ComputerSystemElementName].

(Drive 6)

**Explanation:** This message is for the use case when an implementation has detected that an Array Rebuild is in Progress.

May also be shown as 806f070d0406ffff or

0x806f070d0406ffff **Severity:** Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0178

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

806f070d-0407ffff Rebuild in progress for Array in system [ComputerSystemElementName].
(Drive 7)

**Explanation:** This message is for the use case when an implementation has detected that an Array Rebuild is in Progress.

May also be shown as 806f070d0407ffff or

0x806f070d0407ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0178

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

806f070d-0408ffff Rebuild in progress for Array in system [ComputerSystemElementName]. (Drive 8)

**Explanation:** This message is for the use case when an implementation has detected that an Array Rebuild is in Progress.

May also be shown as 806f070d0408ffff or

0x806f070d0408ffff

Severity: Info

#### 806f070d-0409ffff • 806f070d-040dffff

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0178

**SNMP Trap ID:** 

Automatically notify Support: No

User response: No action; information only.

806f070d-0409ffff Rebuild in progress for Array in system [ComputerSystemElementName].
(Drive 9)

**Explanation:** This message is for the use case when an implementation has detected that an Array Rebuild is in Progress.

May also be shown as 806f070d0409ffff or 0x806f070d0409ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0178

**SNMP Trap ID:** 

Automatically notify Support: No

User response: No action; information only.

806f070d-040affff Rebuild in progress for Array in system [ComputerSystemElementName].
(Drive 10)

**Explanation:** This message is for the use case when an implementation has detected that an Array Rebuild is in Progress.

May also be shown as 806f070d040affff or 0x806f070d040affff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0178

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

806f070d-040bffff Rebuild in progress for Array in system [ComputerSystemElementName].

(Drive 11)

**Explanation:** This message is for the use case when an implementation has detected that an Array Rebuild is in Progress.

May also be shown as 806f070d040bffff or

0x806f070d040bfffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0178

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

806f070d-040cffff Rebuild in progress for Array in system [ComputerSystemElementName].
(Drive 12)

**Explanation:** This message is for the use case when an implementation has detected that an Array Rebuild is

in Progress.

May also be shown as 806f070d040cffff or

0x806f070d040cfffff

**Severity:** Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0178

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

806f070d-040dffff Rebuild in progress for Array in system [ComputerSystemElementName]. (Drive 13)

**Explanation:** This message is for the use case when an implementation has detected that an Array Rebuild is in Progress.

May also be shown as 806f070d040dffff or 0x806f070d040dffff

Severity: Info

**Alert Category:** System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0178

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

#### 806f072b-2101ffff • 806f0813-2581ffff

806f072b-2101ffff A successful software or firmware

change was detected on system [ComputerSystemElementName]. (IMM

Promotion)

**Explanation:** This message is for the use case when an implementation has detected a Successful Software or

Firmware Change.

May also be shown as 806f072b2101ffff or

0x806f072b2101ffff

**Severity:** Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0450

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only. IMM

Recovery:

806f072b-2201ffff A successful software or firmware

change was detected on system [ComputerSystemElementName]. (Bkup Auto Update)

**Explanation:** This message is for the use case when an implementation has detected a Successful Software or Firmware Change.

May also be shown as 806f072b2201ffff or 0x806f072b2201ffff

**Severity:** Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0450

**SNMP Trap ID:** 

Automatically notify Support: No

User response: No action; information only. ROM

Recovery:

806f0807-0301ffff [ProcessorElementName] has been Disabled. (CPU 1)

**Explanation:** This message is for the use case when an implementation has detected a Processor has been

Disabled.

May also be shown as 806f08070301ffff or

0x806f08070301ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0061

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

806f0807-0302ffff [ProcessorElementName] has been Disabled. (CPU 2)

**Explanation:** This message is for the use case when an implementation has detected a Processor has been

Disabled.

May also be shown as 806f08070302ffff or

0x806f08070302ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0061

SNMP Trap ID:

Automatically notify Support: No

**User response:** No action; information only.

806f0807-2584ffff [ProcessorElementName] has been Disabled. (All CPUs)

**Explanation:** This message is for the use case when an implementation has detected a Processor has been

Disabled.

May also be shown as 806f08072584ffff or

0x806f08072584ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0061

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only. One of

the CPUs:

806f0813-2581ffff A Uncorrectable Bus Error has occurred on system

[ComputerSystemElementName].

(DIMMs)

**Explanation:** This message is for the use case when an implementation has detected a Bus Uncorrectable Error.

May also be shown as 806f08132581ffff or

0x806f08132581ffff

Severity: Error

**Alert Category:** Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0240

SNMP Trap ID: 50

Automatically notify Support: Yes

#### User response:

- 1. Check the system-event log.
- 2. Check the DIMM error LEDs.
- 3. Remove the failing DIMM from the system board.
- 4. Check for a server firmware update. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
- 5. Make sure that the installed DIMMs are supported and configured correctly.
- 6. (Trained technician only) Replace the system board.

## 806f0813-2582ffff A Uncorrectable Bus Error has occurred on system [ComputerSystemElementName]. (PCIs)

**Explanation:** This message is for the use case when an implementation has detected a Bus Uncorrectable Error.

May also be shown as 806f08132582ffff or 0x806f08132582ffff

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0240

SNMP Trap ID: 50

Automatically notify Support: Yes

#### User response:

- 1. Check the system-event log.
- 2. Check the PCI LED.
- 3. Remove the adapter from the indicated PCI slot.
- 4. Check for a server firmware update. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
- 5. (Trained technician only) Replace the system board.

## 806f0813-2584ffff A Uncorrectable Bus Error has occurred on system [ComputerSystemElementName]. (CPUs)

**Explanation:** This message is for the use case when an implementation has detected a Bus Uncorrectable Error.

May also be shown as 806f08132584ffff or 0x806f08132584ffff

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0240

SNMP Trap ID: 50

**Automatically notify Support:** Yes

#### User response:

- 1. Check the system-event log.
- 2. (Trained technician only) Remove the failing microprocessor from the system board (see Removing a microprocessor and heat sink).
- 3. Check for a server firmware update. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
- Make sure that the two microprocessors are matching.
- 5. (Trained technician only) Replace the system board.

### 806f0823-2101ffff Watchdog Timer interrupt occurred for [WatchdogElementName]. (IPMI Watchdog)

**Explanation:** This message is for the use case when an implementation has detected a Watchdog Timer interrupt occurred.

May also be shown as 806f08232101ffff or

0x806f08232101ffff

**Severity:** Info

**Alert Category:** System - Other

Serviceable: No

**CIM Information: Prefix:** PLAT and **ID:** 0376

**SNMP Trap ID:** 

**Automatically notify Support:** No

User response: No action; information only.

#### 806f090c-2001ffff [PhysicalMemoryElementName] on Subsystem [MemoryElementName] Throttled. (DIMM 1)

**Explanation:** This message is for the use case when an implementation has detected Memory has been Throttled.

May also be shown as 806f090c2001ffff or 0x806f090c2001ffff

Severity: Warning

#### 806f090c-2002ffff • 806f090c-2006ffff

Alert Category: System - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0142

SNMP Trap ID: 22

Automatically notify Support: No

User response:

1. Reseat the DIMM, and then restart the server.

2. Replace DIMM n. (n = DIMM number)

806f090c-2002ffff [PhysicalMemoryElementName] on Subsystem [MemoryElementName] Throttled. (DIMM 2)

**Explanation:** This message is for the use case when an implementation has detected Memory has been

Throttled.

May also be shown as 806f090c2002ffff or

0x806f090c2002ffff

Severity: Warning

Alert Category: System - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0142

SNMP Trap ID: 22

Automatically notify Support: No

User response:

1. Reseat the DIMM, and then restart the server.

2. Replace DIMM n. (n = DIMM number)

806f090c-2003ffff [PhysicalMemoryElementName] on Subsystem [MemoryElementName] Throttled. (DIMM 3)

**Explanation:** This message is for the use case when an implementation has detected Memory has been

Throttled.

May also be shown as 806f090c2003ffff or

0x806f090c2003ffff

Severity: Warning

Alert Category: System - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0142

SNMP Trap ID: 22

Automatically notify Support: No

User response:

1. Reseat the DIMM, and then restart the server.

2. Replace DIMM n. (n = DIMM number)

806f090c-2004ffff [PhysicalMemoryElementName] on Subsystem [MemoryElementName] Throttled. (DIMM 4)

**Explanation:** This message is for the use case when an

implementation has detected Memory has been

Throttled.

May also be shown as 806f090c2004ffff or

0x806f090c2004ffff

Severity: Warning

Alert Category: System - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0142

SNMP Trap ID: 22

Automatically notify Support: No

User response:

1. Reseat the DIMM, and then restart the server.

2. Replace DIMM n. (n = DIMM number)

806f090c-2005ffff [PhysicalMemoryElementName] on Subsystem [MemoryElementName] Throttled. (DIMM 5)

**Explanation:** This message is for the use case when an

implementation has detected Memory has been

Throttled.

May also be shown as 806f090c2005ffff or

0x806f090c2005ffff

Severity: Warning

**Alert Category:** System - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0142

SNMP Trap ID: 22

Automatically notify Support: No

User response:

1. Reseat the DIMM, and then restart the server.

2. Replace DIMM n. (n = DIMM number)

806f090c-2006ffff [PhysicalMemoryElementName] on Subsystem [MemoryElementName] Throttled. (DIMM 6)

**Explanation:** This message is for the use case when an implementation has detected Memory has been

Throttled.

May also be shown as 806f090c2006ffff or

0x806f090c2006ffff

Severity: Warning

Alert Category: System - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0142

SNMP Trap ID: 22

Automatically notify Support: No

#### User response:

1. Reseat the DIMM, and then restart the server.

2. Replace DIMM n. (n = DIMM number)

#### 806f090c-2007ffff [PhysicalMemoryElementName] on Subsystem [MemoryElementName] Throttled. (DIMM 7)

**Explanation:** This message is for the use case when an implementation has detected Memory has been Throttled.

May also be shown as 806f090c2007ffff or 0x806f090c2007ffff

Severity: Warning

Alert Category: System - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0142

SNMP Trap ID: 22

Automatically notify Support: No

#### User response:

1. Reseat the DIMM, and then restart the server.

2. Replace DIMM n. (n = DIMM number)

#### 806f090c-2008ffff [PhysicalMemoryElementName] on Subsystem [MemoryElementName] Throttled. (DIMM 8)

**Explanation:** This message is for the use case when an implementation has detected Memory has been Throttled.

May also be shown as 806f090c2008ffff or 0x806f090c2008ffff

Severity: Warning

Alert Category: System - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0142

SNMP Trap ID: 22

Automatically notify Support: No

#### User response:

1. Reseat the DIMM, and then restart the server.

2. Replace DIMM n. (n = DIMM number)

806f090c-2009ffff [PhysicalMemoryElementName] on Subsystem [MemoryElementName] Throttled. (DIMM 9)

**Explanation:** This message is for the use case when an implementation has detected Memory has been

Throttled.

May also be shown as 806f090c2009ffff or

0x806f090c2009ffff

Severity: Warning

Alert Category: System - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0142

SNMP Trap ID: 22

Automatically notify Support: No

#### User response:

1. Reseat the DIMM, and then restart the server.

2. Replace DIMM n. (n = DIMM number)

#### 806f090c-200affff [PhysicalMemoryElementName] on Subsystem [MemoryElementName] Throttled. (DIMM 10)

**Explanation:** This message is for the use case when an implementation has detected Memory has been Throttled.

May also be shown as 806f090c200affff or 0x806f090c200affff

Severity: Warning

Alert Category: System - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0142

SNMP Trap ID: 22

Automatically notify Support: No

#### User response:

1. Reseat the DIMM, and then restart the server.

2. Replace DIMM n. (n = DIMM number)

#### 806f090c-200bffff [PhysicalMemoryElementName] on Subsystem [MemoryElementName] Throttled. (DIMM 11)

**Explanation:** This message is for the use case when an implementation has detected Memory has been Throttled.

May also be shown as 806f090c200bffff or 0x806f090c200bffff

Severity: Warning

Alert Category: System - Other

#### 806f090c-200cffff • 806f090c-2010ffff

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0142

SNMP Trap ID: 22

Automatically notify Support: No

User response:

1. Reseat the DIMM, and then restart the server.

2. Replace DIMM n. (n = DIMM number)

806f090c-200cffff [PhysicalMemoryElementName] on Subsystem [MemoryElementName] Throttled. (DIMM 12)

Explanation: This message is for the use case when an implementation has detected Memory has been Throttled.

May also be shown as 806f090c200cffff or 0x806f090c200cffff

Severity: Warning

Alert Category: System - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0142

SNMP Trap ID: 22

Automatically notify Support: No

User response:

1. Reseat the DIMM, and then restart the server.

2. Replace DIMM n. (n = DIMM number)

806f090c-200dffff [PhysicalMemoryElementName] on Subsystem [MemoryElementName] Throttled. (DIMM 13)

**Explanation:** This message is for the use case when an implementation has detected Memory has been Throttled.

May also be shown as 806f090c200dffff or 0x806f090c200dffff

Severity: Warning

Alert Category: System - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0142

SNMP Trap ID: 22

Automatically notify Support: No

User response:

1. Reseat the DIMM, and then restart the server.

2. Replace DIMM n. (n = DIMM number)

806f090c-200effff [PhysicalMemoryElementName] on Subsystem [MemoryElementName] Throttled. (DIMM 14)

**Explanation:** This message is for the use case when an implementation has detected Memory has been

Throttled.

May also be shown as 806f090c200effff or

0x806f090c200effff

Severity: Warning

Alert Category: System - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0142

SNMP Trap ID: 22

Automatically notify Support: No

User response:

1. Reseat the DIMM, and then restart the server.

2. Replace DIMM n. (n = DIMM number)

806f090c-200fffff [PhysicalMemoryElementName] on Subsystem [MemoryElementName] Throttled. (DIMM 15)

**Explanation:** This message is for the use case when an implementation has detected Memory has been

Throttled.

May also be shown as 806f090c200fffff or 0x806f090c200fffff

**Severity:** Warning

Alert Category: System - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0142

SNMP Trap ID: 22

Automatically notify Support: No

User response:

1. Reseat the DIMM, and then restart the server.

Replace DIMM n. (n = DIMM number)

806f090c-2010ffff [PhysicalMemoryElementName] on Subsystem [MemoryElementName] Throttled. (DIMM 16)

**Explanation:** This message is for the use case when an implementation has detected Memory has been Throttled.

May also be shown as 806f090c2010ffff or 0x806f090c2010ffff

Severity: Warning

Alert Category: System - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0142

SNMP Trap ID: 22

Automatically notify Support: No

#### User response:

1. Reseat the DIMM, and then restart the server.

2. Replace DIMM n. (n = DIMM number)

### 806f0a07-0301ffff [ProcessorElementName] is operating in a Degraded State. (CPU 1)

**Explanation:** This message is for the use case when an implementation has detected a Processor is running in the Degraded state.

May also be shown as 806f0a070301ffff or 0x806f0a070301ffff

Severity: Warning

Alert Category: Warning - CPU

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0038

SNMP Trap ID: 42

Automatically notify Support: No

#### User response:

- 1. Make sure that the fans are operating, that there are no obstructions to the airflow (front and rear of the server), that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.
- 2. Check the ambient temperature. You must be operating within the specifications.
- Make sure that the heat sink for microprocessor n is installed correctly.
- 4. (Trained technician only) Replace microprocessor n. (n = microprocessor number)

### 806f0a07-0302ffff [ProcessorElementName] is operating in a Degraded State. (CPU 2)

**Explanation:** This message is for the use case when an implementation has detected a Processor is running in the Degraded state.

May also be shown as 806f0a070302ffff or 0x806f0a070302ffff

Severity: Warning

**Alert Category:** Warning - CPU

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0038

SNMP Trap ID: 42

**Automatically notify Support:** No

#### User response:

- Make sure that the fans are operating, that there are no obstructions to the airflow (front and rear of the server), that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.
- 2. Check the ambient temperature. You must be operating within the specifications.
- Make sure that the heat sink for microprocessor n is installed correctly.
- 4. (Trained technician only) Replace microprocessor n. (n = microprocessor number)

# 806f0a0c-2001ffff An Over-Temperature Condition has been detected on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 1)

**Explanation:** This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Detected.

May also be shown as 806f0a0c2001ffff or 0x806f0a0c2001ffff

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0146

SNMP Trap ID: 0

**Automatically notify Support:** No

#### User response:

- 1. Make sure that the fans are operating, that there are no obstructions to the airflow, that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.
- 2. Make sure that ambient temperature is within the specifications.
- If a fan has failed, complete the action for a fan failure.
- 4. Replace DIMM n. (n = DIMM number)

## 806f0a0c-2002ffff An Over-Temperature Condition has been detected on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 2)

**Explanation:** This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Detected.

May also be shown as 806f0a0c2002ffff or

0x806f0a0c2002ffff

Severity: Error

#### 806f0a0c-2003ffff • 806f0a0c-2005ffff

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0146

SNMP Trap ID: 0

Automatically notify Support: No

#### User response:

- 1. Make sure that the fans are operating, that there are no obstructions to the airflow, that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.
- 2. Make sure that ambient temperature is within the specifications.
- 3. If a fan has failed, complete the action for a fan
- 4. Replace DIMM n. (n = DIMM number)

806f0a0c-2003ffff An Over-Temperature Condition has been detected on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 3)

**Explanation:** This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Detected.

May also be shown as 806f0a0c2003ffff or 0x806f0a0c2003ffff

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0146

SNMP Trap ID: 0

Automatically notify Support: No

#### User response:

- 1. Make sure that the fans are operating, that there are no obstructions to the airflow, that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.
- 2. Make sure that ambient temperature is within the specifications.
- 3. If a fan has failed, complete the action for a fan failure.
- 4. Replace DIMM n. (n = DIMM number)

806f0a0c-2004ffff An Over-Temperature Condition has been detected on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 4)

Explanation: This message is for the use case when an implementation has detected an Over Temperature

Condition for Memory that has been Detected.

May also be shown as 806f0a0c2004ffff or

0x806f0a0c2004ffff

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0146

**SNMP Trap ID:** 0

Automatically notify Support: No

#### User response:

- 1. Make sure that the fans are operating, that there are no obstructions to the airflow, that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.
- 2. Make sure that ambient temperature is within the specifications.
- 3. If a fan has failed, complete the action for a fan failure.
- 4. Replace DIMM n. (n = DIMM number)

806f0a0c-2005ffff An Over-Temperature Condition has been detected on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 5)

Explanation: This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Detected.

May also be shown as 806f0a0c2005ffff or 0x806f0a0c2005ffff

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0146

**SNMP Trap ID:** 0

Automatically notify Support: No

#### User response:

- 1. Make sure that the fans are operating, that there are no obstructions to the airflow, that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.
- 2. Make sure that ambient temperature is within the specifications.
- 3. If a fan has failed, complete the action for a fan
- 4. Replace DIMM n. (n = DIMM number)

806f0a0c-2006ffff An Over-Temperature Condition has been detected on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 6)

**Explanation:** This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Detected.

May also be shown as 806f0a0c2006ffff or 0x806f0a0c2006ffff

Severity: Error

**Alert Category:** Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0146

SNMP Trap ID: 0

Automatically notify Support: No

#### User response:

- Make sure that the fans are operating, that there are no obstructions to the airflow, that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.
- 2. Make sure that ambient temperature is within the specifications.
- 3. If a fan has failed, complete the action for a fan failure.
- 4. Replace DIMM n. (n = DIMM number)

806f0a0c-2007ffff An Over-Temperature Condition has been detected on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 7)

**Explanation:** This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Detected.

May also be shown as 806f0a0c2007ffff or 0x806f0a0c2007ffff

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0146

SNMP Trap ID: 0

Automatically notify Support: No

#### User response:

 Make sure that the fans are operating, that there are no obstructions to the airflow, that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.

- 2. Make sure that ambient temperature is within the specifications.
- 3. If a fan has failed, complete the action for a fan failure.
- 4. Replace DIMM n. (n = DIMM number)

806f0a0c-2008ffff An Over-Temperature Condition has been detected on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 8)

**Explanation:** This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Detected.

May also be shown as 806f0a0c2008ffff or 0x806f0a0c2008ffff

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0146

**SNMP Trap ID:** 0

Automatically notify Support: No

#### User response:

- 1. Make sure that the fans are operating, that there are no obstructions to the airflow, that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.
- 2. Make sure that ambient temperature is within the specifications.
- 3. If a fan has failed, complete the action for a fan failure.
- 4. Replace DIMM n. (n = DIMM number)

806f0a0c-2009ffff An Over-Temperature Condition has been detected on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 9)

**Explanation:** This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Detected.

May also be shown as 806f0a0c2009ffff or

0x806f0a0c2009ffff

**Severity:** Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0146

**SNMP Trap ID:** 0

Automatically notify Support: No

#### 806f0a0c-200affff • 806f0a0c-200dffff

#### User response:

- Make sure that the fans are operating, that there are no obstructions to the airflow, that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.
- 2. Make sure that ambient temperature is within the specifications.
- 3. If a fan has failed, complete the action for a fan failure.
- 4. Replace DIMM n. (n = DIMM number)

806f0a0c-200affff An Over-Temperature Condition has been detected on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 10)

**Explanation:** This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Detected.

May also be shown as 806f0a0c200affff or 0x806f0a0c200affff

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0146

SNMP Trap ID: 0

Automatically notify Support: No

#### User response:

- Make sure that the fans are operating, that there are no obstructions to the airflow, that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.
- 2. Make sure that ambient temperature is within the specifications.
- 3. If a fan has failed, complete the action for a fan failure.
- 4. Replace DIMM n. (n = DIMM number)

806f0a0c-200bffff An Over-Temperature Condition has been detected on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 11)

**Explanation:** This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Detected.

May also be shown as 806f0a0c200bffff or 0x806f0a0c200bffff

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0146

**SNMP Trap ID:** 0

Automatically notify Support: No

#### User response:

- Make sure that the fans are operating, that there are no obstructions to the airflow, that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.
- 2. Make sure that ambient temperature is within the specifications.
- If a fan has failed, complete the action for a fan failure.
- 4. Replace DIMM n. (n = DIMM number)

806f0a0c-200cffff An Over-Temperature Condition has been detected on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 12)

**Explanation:** This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Detected.

May also be shown as 806f0a0c200cffff or

0x806f0a0c200cffff **Severity:** Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0146

**SNMP Trap ID:** 0

Automatically notify Support: No

#### User response:

- Make sure that the fans are operating, that there are no obstructions to the airflow, that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.
- 2. Make sure that ambient temperature is within the specifications.
- 3. If a fan has failed, complete the action for a fan failure
- 4. Replace DIMM n. (n = DIMM number)

806f0a0c-200dffff An Over-Temperature Condition has been detected on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 13)

**Explanation:** This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Detected.

May also be shown as 806f0a0c200dffff or 0x806f0a0c200dffff

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0146

SNMP Trap ID: 0

Automatically notify Support: No

#### User response:

- Make sure that the fans are operating, that there are no obstructions to the airflow, that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.
- 2. Make sure that ambient temperature is within the specifications.
- If a fan has failed, complete the action for a fan failure.
- 4. Replace DIMM n. (n = DIMM number)

# 806f0a0c-200effff An Over-Temperature Condition has been detected on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 14)

**Explanation:** This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Detected.

May also be shown as 806f0a0c200effff or 0x806f0a0c200effff

Severity: Error

**Alert Category:** Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0146

SNMP Trap ID: 0

Automatically notify Support: No

#### User response:

- Make sure that the fans are operating, that there are no obstructions to the airflow, that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.
- 2. Make sure that ambient temperature is within the specifications.
- 3. If a fan has failed, complete the action for a fan failure
- 4. Replace DIMM n. (n = DIMM number)

806f0a0c-200fffff An Over-Temperature Condition has been detected on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 15)

**Explanation:** This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Detected.

May also be shown as 806f0a0c200fffff or 0x806f0a0c200fffff

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0146

SNMP Trap ID: 0

Automatically notify Support: No

#### User response:

- Make sure that the fans are operating, that there are no obstructions to the airflow, that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.
- 2. Make sure that ambient temperature is within the specifications.
- 3. If a fan has failed, complete the action for a fan failure.
- 4. Replace DIMM n. (n = DIMM number)

806f0a0c-2010ffff An Over-Temperature Condition has been detected on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 16)

**Explanation:** This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Detected.

May also be shown as 806f0a0c2010ffff or 0x806f0a0c2010ffff

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0146

**SNMP Trap ID:** 0

Automatically notify Support: No

#### User response:

 Make sure that the fans are operating, that there are no obstructions to the airflow, that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.

#### 806f0a13-0301ffff • 81010204-1d01ffff

- 2. Make sure that ambient temperature is within the specifications.
- If a fan has failed, complete the action for a fan failure.
- 4. Replace DIMM n. (n = DIMM number)

806f0a13-0301ffff A Fatal Bus Error has occurred on system [ComputerSystemElementName]. (CPU 1 PECI)

**Explanation:** This message is for the use case when an implementation has detected a Bus Fatal Error.

May also be shown as 806f0a130301ffff or 0x806f0a130301ffff

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0244

SNMP Trap ID: 50

Automatically notify Support: No

User response:

1. (Trained technician only)Reseat the microprocessor, and then restart the server.

(Trained technician only)Replace microprocessor n. (n = microprocessor number)

806f0a13-0302ffff A Fatal Bus Error has occurred on system [ComputerSystemElementName]. (CPU 2 PECI)

Explanation: This message is for the use case when an implementation has detected a Bus Fatal Error.

May also be shown as 806f0a130302ffff or 0x806f0a130302ffff

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0244

SNMP Trap ID: 50

Automatically notify Support: No

User response:

1. (Trained technician only)Reseat the microprocessor, and then restart the server.

2. (Trained technician only)Replace microprocessor n. (n = microprocessor number)

81010002-0701ffff Numeric sensor

[NumericSensorElementName] going low (lower non-critical) has deasserted. (CMOS Battery)

**Explanation:** This message is for the use case when an implementation has detected a Lower Non-critical sensor going low has deasserted.

May also be shown as 810100020701ffff or 0x810100020701ffff

Severity: Info

Alert Category: Warning - Voltage

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0477

SNMP Trap ID: 13

Automatically notify Support: No

**User response:** No action; information only.

81010202-0701ffff Numeric sensor

[NumericSensorElementName] going low (lower critical) has deasserted. (CMOS Battery)

**Explanation:** This message is for the use case when an implementation has detected a Lower Critical sensor going low has deasserted.

May also be shown as 810102020701ffff or 0x810102020701ffff

**Severity:** Info

**Alert Category:** Critical - Voltage

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0481

SNMP Trap ID: 1

Automatically notify Support: No

**User response:** No action; information only.

81010204-1d01ffff Numeric sensor

[NumericSensorElementName] going low (lower critical) has deasserted. (Fan 1Aa Tach)

**Explanation:** This message is for the use case when an implementation has detected a Lower Critical sensor

going low has deasserted.

May also be shown as 810102041d01ffff or 0x810102041d01ffff

Severity: Info

Alert Category: Critical - Fan Failure

Serviceable: No

#### 81010204-1d02ffff • 81010204-1d06ffff

CIM Information: Prefix: PLAT and ID: 0481

SNMP Trap ID: 11

Automatically notify Support: No

**User response:** No action; information only.

81010204-1d02ffff Numeric sensor

[NumericSensorElementName] going low (lower critical) has deasserted. (Fan 1Ab Tach)

**Explanation:** This message is for the use case when an implementation has detected a Lower Critical sensor going low has deasserted.

May also be shown as 810102041d02ffff or 0x810102041d02ffff

Severity: Info

Alert Category: Critical - Fan Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0481

SNMP Trap ID: 11

Automatically notify Support: No

**User response:** No action; information only.

81010204-1d03ffff Numeric sensor

[NumericSensorElementName] going low (lower critical) has deasserted. (Fan 2Aa Tach)

**Explanation:** This message is for the use case when an implementation has detected a Lower Critical sensor going low has deasserted.

May also be shown as 810102041d03ffff or 0x810102041d03ffff

**Severity:** Info

Alert Category: Critical - Fan Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0481

SNMP Trap ID: 11

Automatically notify Support: No

**User response:** No action; information only.

81010204-1d04ffff Numeric sensor

[NumericSensorElementName] going low (lower critical) has deasserted. (Fan 2Ab Tach)

**Explanation:** This message is for the use case when an implementation has detected a Lower Critical sensor going low has deasserted.

May also be shown as 810102041d04ffff or

0x810102041d04ffff

Severity: Info

Alert Category: Critical - Fan Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0481

SNMP Trap ID: 11

Automatically notify Support: No

**User response:** No action; information only.

81010204-1d05ffff Numeric sensor

[NumericSensorElementName] going low (lower critical) has deasserted. (Fan

3Aa Tach)

**Explanation:** This message is for the use case when an implementation has detected a Lower Critical sensor

going low has deasserted.

May also be shown as 810102041d05ffff or

0x810102041d05ffff

Severity: Info

Alert Category: Critical - Fan Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0481

SNMP Trap ID: 11

Automatically notify Support: No

**User response:** No action; information only.

81010204-1d06ffff Numeric sensor

[NumericSensorElementName] going low (lower critical) has deasserted. (Fan

3Ab Tach)

**Explanation:** This message is for the use case when an implementation has detected a Lower Critical sensor

going low has deasserted.

May also be shown as 810102041d06ffff or

0x810102041d06ffff

**Severity:** Info

**Alert Category:** Critical - Fan Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0481

SNMP Trap ID: 11

Automatically notify Support: No

#### 81010204-1d07ffff • 81010701-0c01ffff

81010204-1d07ffff Numeric sensor

[NumericSensorElementName] going low (lower critical) has deasserted. (Fan

4 Tach)

**Explanation:** This message is for the use case when an implementation has detected a Lower Critical sensor going low has deasserted.

May also be shown as 810102041d07ffff or 0x810102041d07ffff

**Severity:** Info

Alert Category: Critical - Fan Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0481

SNMP Trap ID: 11

Automatically notify Support: No

**User response:** No action; information only.

81010204-1d08ffff Numeric sensor

[NumericSensorElementName] going low (lower critical) has deasserted. (Fan

5 Tach)

**Explanation:** This message is for the use case when an implementation has detected a Lower Critical sensor going low has deasserted.

May also be shown as 810102041d08ffff or 0x810102041d08ffff

**Severity:** Info

**Alert Category:** Critical - Fan Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0481

SNMP Trap ID: 11

Automatically notify Support: No

**User response:** No action; information only.

81010701-0702ffff Numeric sensor

[NumericSensorElementName] going high (upper non-critical) has deasserted. (FHHL Amb Temp)

**Explanation:** This message is for the use case when an implementation has detected an Upper Non-critical

sensor going high has deasserted.

May also be shown as 810107010702ffff or 0x810107010702ffff

Severity: Info

Alert Category: Warning - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0491

SNMP Trap ID: 12

Automatically notify Support: No

User response: No action; information only.

81010701-0703ffff Numeric sensor

[NumericSensorElementName] going high (upper non-critical) has deasserted.

(LowProfile Amb)

**Explanation:** This message is for the use case when an implementation has detected an Upper Non-critical

sensor going high has deasserted.

May also be shown as 810107010703ffff or

0x810107010703ffff

Severity: Info

**Alert Category:** Warning - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0491

SNMP Trap ID: 12

Automatically notify Support: No

**User response:** No action; information only.

81010701-0704ffff Numeric sensor

[NumericSensorElementName] going high (upper non-critical) has deasserted.

(RAID Amb Temp)

**Explanation:** This message is for the use case when an implementation has detected an Upper Non-critical

sensor going high has deasserted.

May also be shown as 810107010704ffff or

0x810107010704ffff

Severity: Info

Alert Category: Warning - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0491

SNMP Trap ID: 12

Automatically notify Support: No

**User response:** No action; information only.

81010701-0c01ffff Numeric sensor

[NumericSensorElementName] going high (upper non-critical) has deasserted.

(Ambient Temp)

**Explanation:** This message is for the use case when an implementation has detected an Upper Non-critical

sensor going high has deasserted.

May also be shown as 810107010c01ffff or 0x810107010c01ffff

Severity: Info

Alert Category: Warning - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0491

SNMP Trap ID: 12

Automatically notify Support: No

**User response:** No action; information only.

81010701-1401ffff Numeric sensor

[NumericSensorElementName] going high (upper non-critical) has deasserted. (CPU1 VR Temp)

**Explanation:** This message is for the use case when an implementation has detected an Upper Non-critical sensor going high has deasserted.

May also be shown as 810107011401ffff or 0x810107011401ffff

**Severity:** Info

**Alert Category:** Warning - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0491

SNMP Trap ID: 12

Automatically notify Support: No

**User response:** No action; information only.

81010701-1402ffff Numeric sensor

[NumericSensorElementName] going high (upper non-critical) has deasserted. (CPU2 VR Temp)

Explanation: This message is for the use case when an implementation has detected an Upper Non-critical

sensor going high has deasserted.

May also be shown as 810107011402ffff or 0x810107011402ffff

**Severity:** Info

Alert Category: Warning - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0491

SNMP Trap ID: 12

Automatically notify Support: No

**User response:** No action; information only.

81010701-1403ffff Numeric sensor

[NumericSensorElementName] going high (upper non-critical) has deasserted. (DIMM AB VR Temp)

**Explanation:** This message is for the use case when an implementation has detected an Upper Non-critical

sensor going high has deasserted.

May also be shown as 810107011403ffff or

0x810107011403ffff

Severity: Info

Alert Category: Warning - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0491

SNMP Trap ID: 12

Automatically notify Support: No

**User response:** No action; information only.

81010701-1404ffff Numeric sensor

[NumericSensorElementName] going high (upper non-critical) has deasserted. (DIMM CD VR Temp)

**Explanation:** This message is for the use case when an implementation has detected an Upper Non-critical sensor going high has deasserted.

May also be shown as 810107011404ffff or

0x810107011404ffff

**Severity:** Info

Alert Category: Warning - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0491

SNMP Trap ID: 12

Automatically notify Support: No

**User response:** No action; information only.

81010701-1405ffff Numeric sensor

[NumericSensorElementName] going high (upper non-critical) has deasserted. (DIMM EF VR Temp)

**Explanation:** This message is for the use case when an implementation has detected an Upper Non-critical sensor going high has deasserted.

May also be shown as 810107011405ffff or

0x810107011405ffff

Severity: Info

**Alert Category:** Warning - Temperature

Serviceable: No

#### 81010701-1406ffff • 81010901-0703ffff

CIM Information: Prefix: PLAT and ID: 0491

SNMP Trap ID: 12

Automatically notify Support: No

**User response:** No action; information only.

81010701-1406ffff Numeric sensor

[NumericSensorElementName] going high (upper non-critical) has deasserted. (DIMM GH VR Temp)

**Explanation:** This message is for the use case when an implementation has detected an Upper Non-critical sensor going high has deasserted.

May also be shown as 810107011406ffff or 0x810107011406ffff

Severity: Info

Alert Category: Warning - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0491

SNMP Trap ID: 12

Automatically notify Support: No

**User response:** No action; information only.

81010701-2c01ffff Numeric sensor

[NumericSensorElementName] going high (upper non-critical) has deasserted. (Mezz Card Temp)

**Explanation:** This message is for the use case when an implementation has detected an Upper Non-critical sensor going high has deasserted.

May also be shown as 810107012c01ffff or 0x810107012c01ffff

Severity: Info

Alert Category: Warning - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0491

SNMP Trap ID: 12

Automatically notify Support: No

**User response:** No action; information only.

81010701-2d01ffff Numeric sensor

[NumericSensorElementName] going high (upper non-critical) has deasserted. (PCH Temp)

**Explanation:** This message is for the use case when an implementation has detected an Upper Non-critical sensor going high has deasserted.

May also be shown as 810107012d01ffff or

0x810107012d01ffff

Severity: Info

Alert Category: Warning - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0491

SNMP Trap ID: 12

Automatically notify Support: No

User response: No action; information only.

81010901-0702ffff Numeric sensor

[NumericSensorElementName] going high (upper critical) has deasserted. (FHHL Amb Temp)

(TITIE TIME TEMP)

**Explanation:** This message is for the use case when an implementation has detected an Upper Critical sensor

going high has deasserted.

May also be shown as 810109010702ffff or

0x810109010702ffff

Severity: Info

**Alert Category:** Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0495

**SNMP Trap ID:** 0

Automatically notify Support: No

User response: No action; information only.

81010901-0703ffff Numeric sensor

[NumericSensorElementName] going high (upper critical) has deasserted. (LowProfile Amb)

**Explanation:** This message is for the use case when an implementation has detected an Upper Critical sensor

going high has deasserted.

May also be shown as 810109010703ffff or 0x810109010703ffff

**Severity:** Info

**Alert Category:** Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0495

SNMP Trap ID: 0

Automatically notify Support: No

81010901-0704ffff Numeric sensor

[NumericSensorElementName] going high (upper critical) has deasserted. (RAID Amb Temp)

**Explanation:** This message is for the use case when an implementation has detected an Upper Critical sensor going high has deasserted.

May also be shown as 810109010704ffff or 0x810109010704ffff

**Severity:** Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0495

SNMP Trap ID: 0

Automatically notify Support: No

**User response:** No action; information only.

81010901-0c01ffff Numeric sensor

[NumericSensorElementName] going high (upper critical) has deasserted. (Ambient Temp)

**Explanation:** This message is for the use case when an implementation has detected an Upper Critical sensor going high has deasserted.

May also be shown as 810109010c01ffff or 0x810109010c01ffff

**Severity:** Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0495

SNMP Trap ID: 0

Automatically notify Support: No

**User response:** No action; information only.

81010901-1401ffff Numeric sensor

[NumericSensorElementName] going high (upper critical) has deasserted. (CPU1 VR Temp)

**Explanation:** This message is for the use case when an implementation has detected an Upper Critical sensor going high has deasserted.

May also be shown as 810109011401ffff or 0x810109011401ffff

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0495

SNMP Trap ID: 0

Automatically notify Support: No

**User response:** No action; information only.

81010901-1402ffff Numeric sensor

[NumericSensorElementName] going high (upper critical) has deasserted.

(CPU2 VR Temp)

**Explanation:** This message is for the use case when an implementation has detected an Upper Critical sensor

going high has deasserted.

May also be shown as 810109011402ffff or

0x810109011402ffff

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0495

**SNMP Trap ID:** 0

Automatically notify Support: No

**User response:** No action; information only.

81010901-1403ffff Numeric sensor

[NumericSensorElementName] going high (upper critical) has deasserted.

(DIMM AB VR Temp)

**Explanation:** This message is for the use case when an implementation has detected an Upper Critical sensor

going high has deasserted.

May also be shown as 810109011403ffff or

0x810109011403ffff

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0495

SNMP Trap ID: 0

Automatically notify Support: No

**User response:** No action; information only.

81010901-1404ffff Numeric sensor

[NumericSensorElementName] going high (upper critical) has deasserted. (DIMM CD VR Temp)

**Explanation:** This message is for the use case when an implementation has detected an Upper Critical sensor

going high has deasserted.

#### 81010901-1405ffff • 81010902-0701ffff

May also be shown as 810109011404ffff or 0x810109011404ffff

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0495

**SNMP Trap ID:** 0

Automatically notify Support: No

**User response:** No action; information only.

81010901-1405ffff Numeric sensor

[NumericSensorElementName] going high (upper critical) has deasserted. (DIMM EF VR Temp)

**Explanation:** This message is for the use case when an implementation has detected an Upper Critical sensor going high has deasserted.

May also be shown as 810109011405ffff or 0x810109011405ffff

**Severity:** Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0495

SNMP Trap ID: 0

Automatically notify Support: No

**User response:** No action; information only.

81010901-1406ffff Numeric sensor

[NumericSensorElementName] going high (upper critical) has deasserted. (DIMM GH VR Temp)

**Explanation:** This message is for the use case when an implementation has detected an Upper Critical sensor going high has deasserted.

May also be shown as 810109011406ffff or 0x810109011406ffff

**Severity:** Info

**Alert Category:** Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0495

SNMP Trap ID: 0

Automatically notify Support: No

**User response:** No action; information only.

81010901-2c01ffff Numeric sensor

[NumericSensorElementName] going high (upper critical) has deasserted. (Mezz Card Temp)

**Explanation:** This message is for the use case when an implementation has detected an Upper Critical sensor going high has deasserted.

May also be shown as 810109012c01ffff or

0x810109012c01ffff

Severity: Info

**Alert Category:** Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0495

SNMP Trap ID: 0

Automatically notify Support: No

**User response:** No action; information only.

81010901-2d01ffff Numeric sensor

[NumericSensorElementName] going high (upper critical) has deasserted. (PCH Temp)

**Explanation:** This message is for the use case when an implementation has detected an Upper Critical sensor going high has deasserted.

May also be shown as 810109012d01ffff or

0x810109012d01ffff

**Severity:** Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0495

**SNMP Trap ID:** 0

Automatically notify Support: No

**User response:** No action; information only.

81010902-0701ffff Numeric sensor

[NumericSensorElementName] going high (upper critical) has deasserted. (SysBrd 12V)

This message is f

**Explanation:** This message is for the use case when an implementation has detected an Upper Critical sensor going high has deasserted.

going mgm has deasserted

May also be shown as 810109020701ffff or

0x810109020701ffff

Severity: Info

Alert Category: Critical - Voltage

Serviceable: No

#### 81010b01-0702ffff • 81010b01-1401ffff

CIM Information: Prefix: PLAT and ID: 0495

SNMP Trap ID: 1

Automatically notify Support: No

User response: No action; information only. SysBrd

3.3V : SysBrd 5V :

81010b01-0702ffff Numeric sensor

[NumericSensorElementName] going high (upper non-recoverable) has deasserted. (FHHL Amb Temp)

**Explanation:** This message is for the use case when an implementation has detected an Upper Non-recoverable sensor going high has deasserted.

May also be shown as 81010b010702ffff or 0x81010b010702ffff

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0499

**SNMP Trap ID:** 0

Automatically notify Support: No

**User response:** No action; information only.

81010b01-0703ffff Numeric sensor

[NumericSensorElementName] going high (upper non-recoverable) has deasserted. (LowProfile Amb)

**Explanation:** This message is for the use case when an implementation has detected an Upper Non-recoverable sensor going high has deasserted.

May also be shown as 81010b010703ffff or 0x81010b010703ffff

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0499

**SNMP Trap ID:** 0

Automatically notify Support: No

**User response:** No action; information only.

81010b01-0704ffff Numeric sensor

[NumericSensorElementName] going high (upper non-recoverable) has deasserted. (RAID Amb Temp)

**Explanation:** This message is for the use case when an implementation has detected an Upper Non-recoverable sensor going high has deasserted.

May also be shown as 81010b010704ffff or

0x81010b010704ffff

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0499

SNMP Trap ID: 0

Automatically notify Support: No

**User response:** No action; information only.

81010b01-0c01ffff Numeric sensor

[NumericSensorElementName] going high (upper non-recoverable) has deasserted. (Ambient Temp)

**Explanation:** This message is for the use case when an implementation has detected an Upper Non-recoverable

sensor going high has deasserted.

May also be shown as 81010b010c01ffff or

0x81010b010c01ffff

**Severity:** Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0499

**SNMP Trap ID:** 0

Automatically notify Support: No

**User response:** No action; information only.

81010b01-1401ffff Numeric sensor

[NumericSensorElementName] going high (upper non-recoverable) has deasserted. (CPU1 VR Temp)

**Explanation:** This message is for the use case when an implementation has detected an Upper Non-recoverable sensor going high has deasserted.

May also be shown as 81010b011401ffff or

0x81010b011401ffff

**Severity:** Info

**Alert Category:** Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0499

SNMP Trap ID: 0

Automatically notify Support: No

#### 81010b01-1402ffff • 81010b01-2c01ffff

81010b01-1402ffff Numeric sensor

[NumericSensorElementName] going high (upper non-recoverable) has deasserted. (CPU2 VR Temp)

**Explanation:** This message is for the use case when an implementation has detected an Upper Non-recoverable sensor going high has deasserted.

May also be shown as 81010b011402ffff or 0x81010b011402ffff

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0499

**SNMP Trap ID:** 0

Automatically notify Support: No

**User response:** No action; information only.

81010b01-1403ffff Numeric sensor

[NumericSensorElementName] going high (upper non-recoverable) has deasserted. (DIMM AB VR Temp)

**Explanation:** This message is for the use case when an implementation has detected an Upper Non-recoverable

sensor going high has deasserted.

May also be shown as 81010b011403ffff or 0x81010b011403ffff

Severity: Info

**Alert Category:** Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0499

SNMP Trap ID: 0

Automatically notify Support: No

**User response:** No action; information only.

81010b01-1404ffff Numeric sensor

[NumericSensorElementName] going high (upper non-recoverable) has deasserted. (DIMM CD VR Temp)

**Explanation:** This message is for the use case when an implementation has detected an Upper Non-recoverable sensor going high has deasserted.

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May also be shown as 81010b011404ffff or 0x81010b011404ffff

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0499

**SNMP Trap ID:** 0

Automatically notify Support: No

**User response:** No action; information only.

81010b01-1405ffff Numeric sensor

[NumericSensorElementName] going high (upper non-recoverable) has deasserted. (DIMM EF VR Temp)

**Explanation:** This message is for the use case when an implementation has detected an Upper Non-recoverable sensor going high has deasserted.

May also be shown as 81010b011405ffff or

0x81010b011405ffff

**Severity:** Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0499

**SNMP Trap ID:** 0

Automatically notify Support: No

User response: No action; information only.

81010b01-1406ffff Numeric sensor

[NumericSensorElementName] going high (upper non-recoverable) has deasserted. (DIMM GH VR Temp)

**Explanation:** This message is for the use case when an implementation has detected an Upper Non-recoverable

sensor going high has deasserted.

May also be shown as 81010b011406ffff or

0x81010b011406ffff

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0499

SNMP Trap ID: 0

Automatically notify Support: No

**User response:** No action; information only.

81010b01-2c01ffff Numeric sensor

[NumericSensorElementName] going high (upper non-recoverable) has deasserted. (Mezz Card Temp)

**Explanation:** This message is for the use case when an implementation has detected an Upper Non-recoverable

sensor going high has deasserted.

#### 81010b01-2d01ffff • 8107010f-2201ffff

May also be shown as 81010b012c01ffff or 0x81010b012c01ffff

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0499

SNMP Trap ID: 0

Automatically notify Support: No

**User response:** No action; information only.

81010b01-2d01ffff Numeric sensor

[NumericSensorElementName] going high (upper non-recoverable) has deasserted. (PCH Temp)

**Explanation:** This message is for the use case when an implementation has detected an Upper Non-recoverable sensor going high has deasserted.

May also be shown as 81010b012d01ffff or 0x81010b012d01ffff

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0499

**SNMP Trap ID:** 0

Automatically notify Support: No

**User response:** No action; information only.

81030006-2101ffff Sensor [SensorElementName] has asserted. (Sig Verify Fail)

**Explanation:** This message is for the use case when an implementation has detected a Sensor has asserted.

May also be shown as 810300062101ffff or 0x810300062101ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0508

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

81030012-2301ffff Sensor [SensorElementName] has asserted. (OS RealTime Mod)

**Explanation:** This message is for the use case when an implementation has detected a Sensor has asserted.

May also be shown as 810300122301ffff or

0x810300122301ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0508

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

81030108-0a01ffff Sensor [SensorElementName] has deasserted. (PS Heavy Load)

**Explanation:** This message is for the use case when an implementation has detected a Sensor has deasserted.

May also be shown as 810301080a01ffff or

0x810301080a01ffff

**Severity:** Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0509

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

8107010f-2201ffff Sensor [SensorElementName] has deasserted the transition from normal to non-critical state. (GPT Status)

**Explanation:** This message is for the use case when an implementation has detected that a Sensor has deasserted a transition to non-critical from normal.

May also be shown as 8107010f2201ffff or

0x8107010f2201ffff

Severity: Info

Alert Category: Warning - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0521

SNMP Trap ID: 60

Automatically notify Support: No

#### 8107010f-2582ffff • 81070208-0a02ffff

8107010f-2582ffff Sensor [SensorElementName] has deasserted the transition from normal to non-critical state. (No PCI I/O Space)

**Explanation:** This message is for the use case when an implementation has detected that a Sensor has deasserted a transition to non-critical from normal.

May also be shown as 8107010f2582ffff or 0x8107010f2582ffff

Severity: Info

Alert Category: Warning - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0521

SNMP Trap ID: 60

Automatically notify Support: No

**User response:** No action; information only.

81070201-0301ffff Sensor [SensorElementName] has transitioned to a less severe state from critical. (CPU 1 OverTemp)

**Explanation:** This message is for the use case when an implementation has detected a Sensor transition to less severe from critical.

May also be shown as 810702010301ffff or 0x810702010301ffff

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0523

SNMP Trap ID: 0

Automatically notify Support: No

**User response:** No action; information only.

81070201-0302ffff Sensor [SensorElementName] has transitioned to a less severe state from critical. (CPU 2 OverTemp)

**Explanation:** This message is for the use case when an implementation has detected a Sensor transition to less severe from critical.

May also be shown as 810702010302ffff or 0x810702010302ffff

Severity: Info

**Alert Category:** Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0523

SNMP Trap ID: 0

Automatically notify Support: No

User response: No action; information only.

81070202-0701ffff Sensor [SensorElementName] has transitioned to a less severe state from critical. (SysBrd Vol Fault)

**Explanation:** This message is for the use case when an implementation has detected a Sensor transition to less severe from critical.

severe from critical.

May also be shown as 810702020701ffff or

0x810702020701ffff

Severity: Info

Alert Category: Critical - Voltage

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0523

SNMP Trap ID: 1

Automatically notify Support: No

**User response:** No action; information only.

81070208-0a01ffff Sensor [SensorElementName] has transitioned to a less severe state from critical. (PS 1 Fan Fault)

**Explanation:** This message is for the use case when an implementation has detected a Sensor transition to less severe from critical.

May also be shown as 810702080a01ffff or

0x810702080a01ffff **Severity:** Info

Alert Category: Critical - Power

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0523

SNMP Trap ID: 4

Automatically notify Support: No

**User response:** No action; information only. PS 1

Therm Fault:

81070208-0a02ffff Sensor [SensorElementName] has transitioned to a less severe state from critical. (PS 2 Fan Fault)

**Explanation:** This message is for the use case when an implementation has detected a Sensor transition to less severe from critical.

May also be shown as 810702080a02ffff or

0x810702080a02ffff

**Severity:** Info

Alert Category: Critical - Power

#### 8107020f-2201ffff • 8107021b-0301ffff

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0523

SNMP Trap ID: 4

Automatically notify Support: No

User response: No action; information only. PS 2

Therm Fault:

8107020f-2201ffff Sensor [SensorElementName] has transitioned to a less severe state from critical. (TXT ACM Module)

**Explanation:** This message is for the use case when an implementation has detected a Sensor transition to less severe from critical.

May also be shown as 8107020f2201ffff or 0x8107020f2201ffff

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0523

SNMP Trap ID: 50

Automatically notify Support: No

**User response:** No action; information only.

8107020f-2582ffff Sensor [SensorElementName] has transitioned to a less severe state from critical. (No PCI I/O Space)

**Explanation:** This message is for the use case when an implementation has detected a Sensor transition to less severe from critical.

May also be shown as 8107020f2582ffff or 0x8107020f2582ffff

**Severity:** Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0523

SNMP Trap ID: 50

**Automatically notify Support:** No

User response: No action; information only.

81070214-2201ffff Sensor [SensorElementName] has transitioned to a less severe state from critical. (TPM Lock)

**Explanation:** This message is for the use case when an implementation has detected a Sensor transition to less severe from critical.

May also be shown as 810702142201ffff or

0x810702142201ffff

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0523

SNMP Trap ID: 50

Automatically notify Support: No

**User response:** No action; information only.

81070219-0701ffff Sensor [SensorElementName] has transitioned to a less severe state from critical. (SysBrd Fault)

**Explanation:** This message is for the use case when an implementation has detected a Sensor transition to less

severe from critical.

May also be shown as 810702190701ffff or

0x810702190701ffff

**Severity:** Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0523

**SNMP Trap ID:** 50

Automatically notify Support: No

**User response:** No action; information only.

8107021b-0301ffff Sensor [SensorElementName] has transitioned to a less severe state from critical. (CPU 1 QPILinkErr)

**Explanation:** This message is for the use case when an implementation has detected a Sensor transition to less severe from critical.

May also be shown as 8107021b0301ffff or

0x8107021b0301ffff

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0523

**SNMP Trap ID:** 50

Automatically notify Support: No

#### 8107021b-0302ffff • 810b010a-1e81ffff

8107021b-0302ffff Sensor [SensorElementName] has transitioned to a less severe state from critical. (CPU 2 OPILinkErr)

**Explanation:** This message is for the use case when an implementation has detected a Sensor transition to less severe from critical.

May also be shown as 8107021b0302ffff or 0x8107021b0302ffff

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0523

SNMP Trap ID: 50

Automatically notify Support: No

**User response:** No action; information only.

81070301-0301ffff Sensor [SensorElementName] has deasserted the transition to non-recoverable from a less severe state. (CPU 1 OverTemp)

**Explanation:** This message is for the use case when an implementation has detected that the Sensor transition to non-recoverable from less severe has deasserted.

May also be shown as 810703010301ffff or 0x810703010301ffff

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0525

SNMP Trap ID: 0

Automatically notify Support: No

**User response:** No action; information only.

81070301-0302ffff Sensor [SensorElementName] has deasserted the transition to non-recoverable from a less severe state. (CPU 2 OverTemp)

**Explanation:** This message is for the use case when an implementation has detected that the Sensor transition to non-recoverable from less severe has deasserted.

May also be shown as 810703010302ffff or 0x810703010302ffff

**Severity:** Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0525

SNMP Trap ID: 0

Automatically notify Support: No

**User response:** No action; information only.

81070608-0a01ffff Sensor [SensorElementName] has deasserted the transition to non-recoverable. (PS1 12V OC Fault)

**Explanation:** This message is for the use case when an implementation has detected that the Sensor transition

to non-recoverable has deasserted.

May also be shown as 810706080a01ffff or

0x810706080a01ffff

Severity: Info

Alert Category: Critical - Power

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0531

SNMP Trap ID: 4

Automatically notify Support: No

User response: No action; information only. PS1 12V OV Fault: PS1 12V UV Fault: PS1 12Vaux Fault:

81070608-0a02ffff Sensor [SensorElementName] has deasserted the transition to non-recoverable. (PS2 12V OC Fault)

**Explanation:** This message is for the use case when an implementation has detected that the Sensor transition to non-recoverable has deasserted.

May also be shown as 810706080a02ffff or

0x810706080a02ffff

Severity: Info

Alert Category: Critical - Power

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0531

SNMP Trap ID: 4

Automatically notify Support: No

**User response:** No action; information only. PS2 12V OV Fault: PS2 12V UV Fault: PS2 12Vaux Fault:

810b010a-1e81ffff Redundancy Lost for [RedundancySetElementName] has deasserted. (Cooling Zone 1)

**Explanation:** This message is for the use case when

Redundacy Lost has deasserted.

May also be shown as 810b010a1e81ffff or

0x810b010a1e81ffff

Severity: Info

#### 810b010a-1e82ffff • 810b0309-1301ffff

**Alert Category:** Critical - Fan Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0803

SNMP Trap ID: 11

Automatically notify Support: No

User response: No action; information only.

810b010a-1e82ffff Redundancy Lost for [RedundancySetElementName] has deasserted. (Cooling Zone 2)

**Explanation:** This message is for the use case when

Redundacy Lost has deasserted.

May also be shown as 810b010a1e82ffff or

0x810b010a1e82ffff

**Severity:** Info

Alert Category: Critical - Fan Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0803

SNMP Trap ID: 11

Automatically notify Support: No

User response: No action; information only.

810b010a-1e83ffff Redundancy Lost for [RedundancySetElementName] has deasserted. (Cooling Zone 3)

Explanation: This message is for the use case when

Redundacy Lost has deasserted.

May also be shown as 810b010a1e83ffff or

0x810b010a1e83ffff

Severity: Info

Alert Category: Critical - Fan Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0803

SNMP Trap ID: 11

Automatically notify Support: No

**User response:** No action; information only.

810b010a-1e84ffff Redundancy Lost for [RedundancySetElementName] has deasserted. (Cooling Zone 4)

**Explanation:** This message is for the use case when

Redundacy Lost has deasserted.

May also be shown as 810b010a1e84ffff or

0x810b010a1e84ffff

Severity: Info

Alert Category: Critical - Fan Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0803

SNMP Trap ID: 11

Automatically notify Support: No

User response: No action; information only.

810b010a-1e85ffff Redundancy Lost for [RedundancySetElementName] has deasserted. (Cooling Zone 5)

**Explanation:** This message is for the use case when

Redundacy Lost has deasserted.

May also be shown as 810b010a1e85ffff or

0x810b010a1e85ffff

**Severity:** Info

Alert Category: Critical - Fan Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0803

SNMP Trap ID: 11

Automatically notify Support: No

**User response:** No action; information only.

810b010c-2581ffff Redundancy Lost for [RedundancySetElementName] has deasserted. (Backup Memory)

**Explanation:** This message is for the use case when

Redundacy Lost has deasserted.

May also be shown as 810b010c2581ffff or

0x810b010c2581ffff

Severity: Info

**Alert Category:** Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0803

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** No action; information only.

810b0309-1301ffff Non-redundant:Sufficient
Resources from Redundancy Degraded
or Fully Redundant for
[RedundancySetElementName] has

deasserted. (Power Resource)

**Explanation:** This message is for the use case when a

Redundancy Set has transitioned from Non-redundant:Sufficient Resources.

#### 810b030c-2581ffff • 810b050a-1e83ffff

May also be shown as 810b03091301ffff or 0x810b03091301ffff

Severity: Info

Alert Category: Warning - Redundant Power Supply

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0807

SNMP Trap ID: 10

Automatically notify Support: No

User response: No action; information only.

810b030c-2581ffff Non-redundant:Sufficient

Resources from Redundancy Degraded

or Fully Redundant for

[RedundancySetElementName] has deasserted. (Backup Memory)

Explanation: This message is for the use case when a

Redundancy Set has transitioned from Non-redundant:Sufficient Resources.

May also be shown as 810b030c2581ffff or

0x810b030c2581ffff

**Severity:** Info

**Alert Category:** Warning - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0807

SNMP Trap ID: 43

Automatically notify Support: No

**User response:** No action; information only.

 $810b0509\hbox{-}1301ffff \quad Non-redundant\hbox{:} Insufficient$ 

Resources for

[RedundancySetElementName] has deasserted. (Power Resource)

Explanation: This message is for the use case when a

Redundancy Set has transitioned from Non-redundant:Insufficient Resources.

May also be shown as 810b05091301ffff or

0x810b05091301ffff

**Severity:** Info

Alert Category: Critical - Redundant Power Supply

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0811

**SNMP Trap ID:** 9

Automatically notify Support: No

**User response:** No action; information only.

810b050a-1e81ffff Non-redundant:Insufficient

Resources for

[RedundancySetElementName] has deasserted. (Cooling Zone 1)

**Explanation:** This message is for the use case when a

Redundancy Set has transitioned from Non-redundant:Insufficient Resources.

May also be shown as 810b050a1e81ffff or

0x810b050a1e81ffff

Severity: Info

Alert Category: Critical - Fan Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0811

SNMP Trap ID: 11

Automatically notify Support: No

**User response:** No action; information only.

 $810b050a\hbox{-}1e82ffff \quad Non-redundant: Insufficient$ 

Resources for

[RedundancySetElementName] has deasserted. (Cooling Zone 2)

Explanation: This message is for the use case when a

Redundancy Set has transitioned from Non-redundant:Insufficient Resources.

May also be shown as 810b050a1e82ffff or

0x810b050a1e82ffff

Severity: Info

**Alert Category:** Critical - Fan Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0811

SNMP Trap ID: 11

Automatically notify Support: No

**User response:** No action; information only.

810b050a-1e83ffff Non-redundant:Insufficient

Resources for

[RedundancySetElementName] has deasserted. (Cooling Zone 3)

Explanation: This message is for the use case when a

Redundancy Set has transitioned from Non-redundant:Insufficient Resources.

May also be shown as 810b050a1e83ffff or

0x810b050a1e83ffff

Severity: Info

Alert Category: Critical - Fan Failure

Serviceable: No

#### 810b050a-1e84ffff • 816f0008-0a01ffff

CIM Information: Prefix: PLAT and ID: 0811

SNMP Trap ID: 11

Automatically notify Support: No

**User response:** No action; information only.

810b050a-1e84ffff Non-redundant:Insufficient

Resources for [RedundancySetElementName] has deasserted. (Cooling Zone 4)

**Explanation:** This message is for the use case when a

Redundancy Set has transitioned from Non-redundant:Insufficient Resources.

May also be shown as 810b050a1e84ffff or

0x810b050a1e84ffff

Severity: Info

Alert Category: Critical - Fan Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0811

SNMP Trap ID: 11

Automatically notify Support: No

**User response:** No action; information only.

810b050a-1e85ffff Non-redundant:Insufficient

Resources for

[RedundancySetElementName] has deasserted. (Cooling Zone 5)

Explanation: This message is for the use case when a

Redundancy Set has transitioned from Non-redundant:Insufficient Resources.

May also be shown as 810b050a1e85ffff or

0x810b050a1e85ffff

Severity: Info

Alert Category: Critical - Fan Failure

Serviceable: No

**CIM Information: Prefix:** PLAT and **ID:** 0811

SNMP Trap ID: 11

Automatically notify Support: No

**User response:** No action; information only.

810b050c-2581ffff Non-redundant:Insufficient

Resources for

[RedundancySetElementName] has deasserted. (Backup Memory)

**Explanation:** This message is for the use case when a

Redundancy Set has transitioned from Non-redundant:Insufficient Resources.

May also be shown as 810b050c2581ffff or

0x810b050c2581ffff

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0811

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** No action; information only.

816f0007-0301ffff [ProcessorElementName] has Recovered from IERR. (CPU 1)

**Explanation:** This message is for the use case when an implementation has detected a Processor Recovered -

IERR Condition.

May also be shown as 816f00070301ffff or

0x816f00070301fffff

**Severity:** Info

Alert Category: Critical - CPU

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0043

SNMP Trap ID: 40

Automatically notify Support: No

**User response:** No action; information only.

816f0007-0302ffff [ProcessorElementName] has Recovered from IERR. (CPU 2)

**Explanation:** This message is for the use case when an implementation has detected a Processor Recovered -

IERR Condition.

May also be shown as 816f00070302ffff or

0x816f00070302ffff

Severity: Info

Alert Category: Critical - CPU

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0043

**SNMP Trap ID:** 40

Automatically notify Support: No

**User response:** No action; information only.

 $816f0008\hbox{-}0a01ffff \quad [PowerSupplyElementName] has$ 

been removed from container [PhysicalPackageElementName]. (Power

Supply 1)

**Explanation:** This message is for the use case when an

#### 816f0008-0a02ffff • 816f000d-0401ffff

implementation has detected a Power Supply has been removed.

May also be shown as 816f00080a01ffff or 0x816f00080a01ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0085

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

816f0008-0a02ffff [PowerSupplyElementName] has

been removed from container [PhysicalPackageElementName]. (Power

Supply 2)

**Explanation:** This message is for the use case when an implementation has detected a Power Supply has been removed.

May also be shown as 816f00080a02ffff or 0x816f00080a02ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0085

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

816f0009-1301ffff [PowerSupplyElementName] has been turned on. (Host Power)

**Explanation:** This message is for the use case when an implementation has detected a Power Unit that has

been Enabled.

May also be shown as 816f00091301ffff or

0x816f00091301ffff

Severity: Info

Alert Category: System - Power On

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0107

SNMP Trap ID: 24

Automatically notify Support: No

**User response:** No action; information only.

816f000d-0400ffff The Drive

[StorageVolumeElementName] has been removed from unit

[PhysicalPackageElementName]. (Drive 0)

**Explanation:** This message is for the use case when an

implementation has detected a Drive has been

Removed.

May also be shown as 816f000d0400ffff or

0x816f000d0400ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0163

**SNMP Trap ID:** 5

Automatically notify Support: No

User response:

 Reseat hard disk drive n.(n = hard disk drive number). Wait 1 minute or more before reinstalling the drive.

2. Make sure that the disk firmware and RAID controller and backplane firmware are at the latest level.

3. Check the SAS cable.

4. Replace the hard disk drive.

816f000d-0401ffff The Drive

[StorageVolumeElementName] has been removed from unit

[PhysicalPackageElementName]. (Drive

**Explanation:** This message is for the use case when an implementation has detected a Drive has been Removed.

May also be shown as 816f000d0401ffff or

0x816f000d0401ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0163

**SNMP Trap ID:** 5

Automatically notify Support: No

User response:

 Reseat hard disk drive n.(n = hard disk drive number). Wait 1 minute or more before reinstalling the drive.

Make sure that the disk firmware and RAID controller and backplane firmware are at the latest level.

#### 816f000d-0402ffff • 816f000d-0405ffff

- 3. Check the SAS cable.
- 4. Replace the hard disk drive.

#### 816f000d-0402ffff The Drive

[StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName]. (Drive

2)

**Explanation:** This message is for the use case when an implementation has detected a Drive has been Removed.

May also be shown as 816f000d0402ffff or 0x816f000d0402ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0163

SNMP Trap ID: 5

Automatically notify Support: No

#### User response:

- Reseat hard disk drive n.(n = hard disk drive number). Wait 1 minute or more before reinstalling the drive.
- 2. Make sure that the disk firmware and RAID controller and backplane firmware are at the latest level
- 3. Check the SAS cable.
- 4. Replace the hard disk drive.

#### 816f000d-0403ffff The Drive

[StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName]. (Drive 3)

**Explanation:** This message is for the use case when an implementation has detected a Drive has been Removed.

May also be shown as 816f000d0403ffff or 0x816f000d0403ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0163

**SNMP Trap ID:** 5

Automatically notify Support: No

#### User response:

 Reseat hard disk drive n.(n = hard disk drive number). Wait 1 minute or more before reinstalling the drive.

- 2. Make sure that the disk firmware and RAID controller and backplane firmware are at the latest level.
- 3. Check the SAS cable.
- 4. Replace the hard disk drive.

#### 816f000d-0404ffff The Drive

[StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName]. (Drive 4)

**Explanation:** This message is for the use case when an implementation has detected a Drive has been

Removed.

May also be shown as 816f000d0404ffff or 0x816f000d0404ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0163

**SNMP Trap ID:** 5

Automatically notify Support: No

#### User response:

- 1. Reseat hard disk drive n.(n = hard disk drive number). Wait 1 minute or more before reinstalling the drive.
- Make sure that the disk firmware and RAID controller and backplane firmware are at the latest level.
- 3. Check the SAS cable.
- 4. Replace the hard disk drive.

#### 816f000d-0405ffff The Drive

[StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName]. (Drive 5)

**Explanation:** This message is for the use case when an implementation has detected a Drive has been Removed.

May also be shown as 816f000d0405ffff or 0x816f000d0405ffff

**Severity:** Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0163

**SNMP Trap ID:** 5

Automatically notify Support: No

User response:

#### 816f000d-0406ffff • 816f000d-0409ffff

- Reseat hard disk drive n.(n = hard disk drive number). Wait 1 minute or more before reinstalling the drive.
- Make sure that the disk firmware and RAID controller and backplane firmware are at the latest level.
- 3. Check the SAS cable.
- 4. Replace the hard disk drive.

#### 816f000d-0406ffff The Drive

[StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName]. (Drive 6)

**Explanation:** This message is for the use case when an implementation has detected a Drive has been Removed.

May also be shown as 816f000d0406ffff or 0x816f000d0406ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0163

SNMP Trap ID: 5

Automatically notify Support: No

#### User response:

- Reseat hard disk drive n.(n = hard disk drive number). Wait 1 minute or more before reinstalling the drive.
- Make sure that the disk firmware and RAID controller and backplane firmware are at the latest level.
- 3. Check the SAS cable.
- 4. Replace the hard disk drive.

#### 816f000d-0407ffff The Drive

[StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName]. (Drive 7)

**Explanation:** This message is for the use case when an implementation has detected a Drive has been Removed.

May also be shown as 816f000d0407ffff or 0x816f000d0407ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0163

**SNMP Trap ID:** 5

Automatically notify Support: No

#### User response:

- Reseat hard disk drive n.(n = hard disk drive number). Wait 1 minute or more before reinstalling the drive.
- Make sure that the disk firmware and RAID controller and backplane firmware are at the latest level.
- 3. Check the SAS cable.
- 4. Replace the hard disk drive.

#### 816f000d-0408ffff The Drive

[StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName]. (Drive 8)

**Explanation:** This message is for the use case when an implementation has detected a Drive has been Removed.

May also be shown as 816f000d0408ffff or 0x816f000d0408ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0163

SNMP Trap ID: 5

Automatically notify Support: No

#### User response:

- 1. Reseat hard disk drive n.(n = hard disk drive number). Wait 1 minute or more before reinstalling the drive.
- Make sure that the disk firmware and RAID controller and backplane firmware are at the latest level.
- 3. Check the SAS cable.
- 4. Replace the hard disk drive.

#### 816f000d-0409ffff The Drive

[StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName]. (Drive 9)

**Explanation:** This message is for the use case when an implementation has detected a Drive has been Removed.

May also be shown as 816f000d0409ffff or 0x816f000d0409ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0163

**SNMP Trap ID:** 5

Automatically notify Support: No

#### User response:

- Reseat hard disk drive n.(n = hard disk drive number). Wait 1 minute or more before reinstalling the drive.
- Make sure that the disk firmware and RAID controller and backplane firmware are at the latest level.
- 3. Check the SAS cable.
- 4. Replace the hard disk drive.

#### 816f000d-040affff The Drive

[StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName]. (Drive

Explanation: This message is for the use case when an

implementation has detected a Drive has been Removed.

May also be shown as 816f000d040affff or 0x816f000d040affff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0163

**SNMP Trap ID:** 5

Automatically notify Support: No

#### User response:

- Reseat hard disk drive n.(n = hard disk drive number). Wait 1 minute or more before reinstalling the drive.
- 2. Make sure that the disk firmware and RAID controller and backplane firmware are at the latest level
- 3. Check the SAS cable.
- 4. Replace the hard disk drive.

#### 816f000d-040bffff The Drive

[StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName]. (Drive 11)

**Explanation:** This message is for the use case when an implementation has detected a Drive has been Removed.

May also be shown as 816f000d040bffff or 0x816f000d040bffff

**Severity:** Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0163

SNMP Trap ID: 5

Automatically notify Support: No

#### User response:

- Reseat hard disk drive n.(n = hard disk drive number). Wait 1 minute or more before reinstalling the drive.
- Make sure that the disk firmware and RAID controller and backplane firmware are at the latest level.
- 3. Check the SAS cable.
- 4. Replace the hard disk drive.

#### 816f000d-040cffff The Drive

[StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName]. (Drive 12)

**Explanation:** This message is for the use case when an implementation has detected a Drive has been Removed.

May also be shown as 816f000d040cffff or 0x816f000d040cffff

**Severity:** Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0163

**SNMP Trap ID:** 5

Automatically notify Support: No

#### User response:

- Reseat hard disk drive n.(n = hard disk drive number). Wait 1 minute or more before reinstalling the drive.
- 2. Make sure that the disk firmware and RAID controller and backplane firmware are at the latest level.
- 3. Check the SAS cable.
- 4. Replace the hard disk drive.

#### 816f000d-040dffff The Drive

[StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName]. (Drive 12)

Explanation: This message is for the use case when an

#### 816f000f-2201ffff • 816f0021-2582ffff

implementation has detected a Drive has been Removed.

May also be shown as 816f000d040dffff or 0x816f000d040dffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0163

SNMP Trap ID: 5

Automatically notify Support: No

User response:

1. Reseat hard disk drive n.(n = hard disk drive number). Wait 1 minute or more before reinstalling the drive.

2. Make sure that the disk firmware and RAID controller and backplane firmware are at the latest level.

3. Check the SAS cable.

4. Replace the hard disk drive.

816f000f-2201ffff The System

[ComputerSystemElementName] has detected a POST Error deassertion. (ABR Status)

**Explanation:** This message is for the use case when an implementation has detected that Post Error has deasserted.

May also be shown as 816f000f2201ffff or 0x816f000f2201ffff

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0185

SNMP Trap ID: 50

Automatically notify Support: No

User response: No action; information only. Firmware

Error: Sys Boot Status:

816f0013-1701ffff System

[ComputerSystemElementName] has recovered from a diagnostic interrupt. (NMI State)

**Explanation:** This message is for the use case when an implementation has detected a recovery from a Front

Panel NMI / Diagnostic Interrupt

May also be shown as 816f00131701ffff or 0x816f00131701ffff

Severity: Info

**Alert Category:** Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0223

SNMP Trap ID: 50

Automatically notify Support: No

User response: No action; information only.

816f0021-2201ffff Fault condition removed on slot

[PhysicalConnectorElementName] on system [ComputerSystemElementName].

(No Op ROM Space)

Explanation: This message is for the use case when an implementation has detected a Fault condition in a slot

has been removed.

May also be shown as 816f00212201ffff or

0x816f00212201ffff

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0331

SNMP Trap ID: 50

Automatically notify Support: No

User response: No action; information only.

816f0021-2582ffff Fault condition removed on slot

[PhysicalConnectorElementName] on system [ComputerSystemElementName].

(All PCI Error)

Explanation: This message is for the use case when an implementation has detected a Fault condition in a slot

has been removed.

May also be shown as 816f00212582ffff or

0x816f00212582ffff

Severity: Info

**Alert Category:** Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0331

SNMP Trap ID: 50

Automatically notify Support: No

**User response:** No action; information only. One of

PCI Error:

816f0021-3001ffff Fault condition removed on slot [PhysicalConnectorElementName] on system [ComputerSystemElementName]. (PCI 1)

**Explanation:** This message is for the use case when an implementation has detected a Fault condition in a slot has been removed.

May also be shown as 816f00213001ffff or 0x816f00213001ffff

**Severity:** Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0331

SNMP Trap ID: 50

Automatically notify Support: No

**User response:** No action; information only. PCI 2:

PCI 3:

816f0028-2101ffff Sensor [SensorElementName] has returned to normal on management system [ComputerSystemElementName]. (TPM Cmd Failures)

**Explanation:** This message is for the use case when an implementation has detected a Sensor returned from degraded/unavailable/failure.

May also be shown as 816f00282101ffff or 0x816f00282101ffff

**Severity:** Info

**Alert Category:** Warning - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0399

SNMP Trap ID: 60

Automatically notify Support: No

User response: No action; information only.

816f0107-0301ffff An Over-Temperature Condition has been removed on [ProcessorElementName]. (CPU 1)

**Explanation:** This message is for the use case when an implementation has detected a Over-Temperature Condition has been Removed for Processor.

May also be shown as 816f01070301ffff or 0x816f01070301ffff

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0037

SNMP Trap ID: 0

Automatically notify Support: No

**User response:** No action; information only.

816f0107-0302ffff An Over-Temperature Condition has been removed on [ProcessorElementName]. (CPU 2)

**Explanation:** This message is for the use case when an implementation has detected a Over-Temperature Condition has been Removed for Processor.

May also be shown as 816f01070302ffff or

0x816f01070302fffff

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0037

SNMP Trap ID: 0

Automatically notify Support: No

**User response:** No action; information only.

816f0108-0a01ffff [PowerSupplyElementName] has returned to OK status. (Power Supply 1)

**Explanation:** This message is for the use case when an implementation has detected a Power Supply return to normal operational status.

May also be shown as 816f01080a01ffff or

0x816f01080a01ffff

Severity: Info

Alert Category: Critical - Power

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0087

SNMP Trap ID: 4

Automatically notify Support: No

**User response:** No action; information only.

816f0108-0a02ffff [PowerSupplyElementName] has returned to OK status. (Power Supply 2)

**Explanation:** This message is for the use case when an implementation has detected a Power Supply return to normal operational status.

May also be shown as 816f01080a02ffff or 0x816f01080a02ffff

Severity: Info

Alert Category: Critical - Power

#### 816f010c-2001ffff • 816f010c-2005ffff

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0087

SNMP Trap ID: 4

Automatically notify Support: No

**User response:** No action; information only.

816f010c-2001ffff Uncorrectable error recovery

detected for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName].

(DIMM 1)

Explanation: This message is for the use case when an implementation has detected a Memory uncorrectable

error recovery.

May also be shown as 816f010c2001ffff or 0x816f010c2001ffff

**Severity:** Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0139

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** No action; information only.

816f010c-2002ffff Uncorrectable error recovery

detected for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName].

(DIMM 2)

Explanation: This message is for the use case when an implementation has detected a Memory uncorrectable

error recovery.

May also be shown as 816f010c2002ffff or

0x816f010c2002ffff

**Severity:** Info

**Alert Category:** Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0139

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** No action; information only.

816f010c-2003ffff Uncorrectable error recovery

detected for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName].

(DIMM 3)

**Explanation:** This message is for the use case when an implementation has detected a Memory uncorrectable

error recovery.

May also be shown as 816f010c2003ffff or

0x816f010c2003ffff

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0139

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** No action; information only.

816f010c-2004ffff Uncorrectable error recovery

detected for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName].

(DIMM 4)

**Explanation:** This message is for the use case when an implementation has detected a Memory uncorrectable

error recovery.

May also be shown as 816f010c2004ffff or

0x816f010c2004ffff

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0139

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** No action; information only.

816f010c-2005ffff Uncorrectable error recovery

detected for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName].

(DIMM 5)

**Explanation:** This message is for the use case when an implementation has detected a Memory uncorrectable

error recovery.

May also be shown as 816f010c2005ffff or

0x816f010c2005ffff

**Severity:** Info

Alert Category: Critical - Memory

Serviceable: No.

CIM Information: Prefix: PLAT and ID: 0139

SNMP Trap ID: 41

#### 816f010c-2006ffff • 816f010c-200affff

Automatically notify Support: No

**User response:** No action; information only.

816f010c-2006ffff Uncorrectable error recovery

detected for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName].

(DIMM 6)

**Explanation:** This message is for the use case when an implementation has detected a Memory uncorrectable

error recovery.

May also be shown as 816f010c2006ffff or 0x816f010c2006ffff

UX816IU1UC2UU6III

**Severity:** Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0139

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** No action; information only.

816f010c-2007ffff Uncorrectable error recovery

detected for

 $[Physical Memory Element Name] \ on \\ Subsystem \ [Memory Element Name].$ 

(DIMM 7)

**Explanation:** This message is for the use case when an implementation has detected a Memory uncorrectable error recovery.

May also be shown as 816f010c2007ffff or 0x816f010c2007ffff

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0139

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** No action; information only.

816f010c-2008ffff Uncorrectable error recovery

detected for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName].

(DIMM 8)

**Explanation:** This message is for the use case when an implementation has detected a Memory uncorrectable

error recovery.

May also be shown as 816f010c2008ffff or

0x816f010c2008ffff

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0139

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** No action; information only.

816f010c-2009ffff Uncorrectable error recovery

detected for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName].

(DIMM 9)

**Explanation:** This message is for the use case when an implementation has detected a Memory uncorrectable

error recovery.

May also be shown as 816f010c2009ffff or

0x816f010c2009ffff

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0139

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** No action; information only.

816f010c-200affff Uncorrectable error recovery

detected for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName].

(DIMM 10)

**Explanation:** This message is for the use case when an implementation has detected a Memory uncorrectable

error recovery.

May also be shown as 816f010c200affff or

0x816f010c200affff

**Severity:** Info

**Alert Category:** Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0139

SNMP Trap ID: 41

Automatically notify Support: No

#### 816f010c-200bffff • 816f010c-2010ffff

816f010c-200bffff Uncorrectable error recovery

detected for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName].

(DIMM 11)

**Explanation:** This message is for the use case when an implementation has detected a Memory uncorrectable

error recovery.

May also be shown as 816f010c200bffff or 0x816f010c200bffff

5X0101010**C2**00D1

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0139

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** No action; information only.

816f010c-200cffff Uncorrectable error recovery

detected for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName].

(DIMM 12)

**Explanation:** This message is for the use case when an implementation has detected a Memory uncorrectable

error recovery.

May also be shown as 816f010c200cffff or 0x816f010c200cffff

0.001010100200011

Severity: Info

**Alert Category:** Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0139

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** No action; information only.

816f010c-200dffff Uncorrectable error recovery

detected for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName].

(DIMM 13)

**Explanation:** This message is for the use case when an implementation has detected a Memory uncorrectable

error recovery.

May also be shown as 816f010c200dffff or

0x816f010c200dffff

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0139

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** No action; information only.

816f010c-200effff Uncorrectable error recovery

detected for

 $[Physical Memory Element Name] \ on \\ Subsystem \ [Memory Element Name].$ 

(DIMM 14)

**Explanation:** This message is for the use case when an implementation has detected a Memory uncorrectable

error recovery.

May also be shown as 816f010c200effff or

0x816f010c200effff

Severity: Info

**Alert Category:** Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0139

SNMP Trap ID: 41

Automatically notify Support: No

User response: No action; information only.

816f010c-200fffff Uncorrectable error recovery

detected for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName].

(DIMM 15)

**Explanation:** This message is for the use case when an implementation has detected a Memory uncorrectable

error recovery.

May also be shown as 816f010c200fffff or

0x816f010c200fffff

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0139

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** No action; information only.

816f010c-2010ffff Uncorrectable error recovery

detected for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName].

(DIMM 16)

**Explanation:** This message is for the use case when an implementation has detected a Memory uncorrectable error recovery.

May also be shown as 816f010c2010ffff or 0x816f010c2010ffff

Severity: Info

**Alert Category:** Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0139

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** No action; information only.

816f010c-2581ffff Uncorrectable error recovery

detected for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (All DIMMS)

**Explanation:** This message is for the use case when an implementation has detected a Memory uncorrectable error recovery.

May also be shown as 816f010c2581ffff or 0x816f010c2581ffff

**Severity:** Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0139

SNMP Trap ID: 41

Automatically notify Support: No

User response: No action; information only. One of

the DIMMs:

816f010d-0400ffff The Drive

[StorageVolumeElementName] has been enabled. (Drive 0)

**Explanation:** This message is for the use case when an implementation has detected a Drive was Enabled.

May also be shown as 816f010d0400ffff or 0x816f010d0400ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0167

SNMP Trap ID: 5

**Automatically notify Support:** No

**User response:** No action; information only.

816f010d-0401ffff The Drive

[StorageVolumeElementName] has been enabled. (Drive 1)

**Explanation:** This message is for the use case when an implementation has detected a Drive was Enabled.

May also be shown as 816f010d0401ffff or

0x816f010d0401ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0167

**SNMP Trap ID:** 5

Automatically notify Support: No

**User response:** No action; information only.

816f010d-0402ffff The Drive

[StorageVolumeElementName] has been enabled. (Drive 2)

**Explanation:** This message is for the use case when an implementation has detected a Drive was Enabled.

May also be shown as 816f010d0402ffff or

0x816f010d0402ffff

**Severity:** Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0167

SNMP Trap ID: 5

Automatically notify Support: No

**User response:** No action; information only.

816f010d-0403ffff The Drive

[StorageVolumeElementName] has been enabled. (Drive 3)

**Explanation:** This message is for the use case when an implementation has detected a Drive was Enabled.

May also be shown as 816f010d0403ffff or

0x816f010d0403ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0167

SNMP Trap ID: 5

Automatically notify Support: No

#### 816f010d-0404ffff • 816f010d-0409ffff

816f010d-0404ffff The Drive

[StorageVolumeElementName] has been enabled. (Drive 4)

**Explanation:** This message is for the use case when an implementation has detected a Drive was Enabled.

May also be shown as 816f010d0404ffff or

0x816f010d0404ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0167

**SNMP Trap ID:** 5

Automatically notify Support: No

**User response:** No action; information only.

816f010d-0405ffff The Drive

[StorageVolumeElementName] has been enabled. (Drive 5)

**Explanation:** This message is for the use case when an implementation has detected a Drive was Enabled.

May also be shown as 816f010d0405ffff or

0x816f010d0405ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0167

SNMP Trap ID: 5

Automatically notify Support: No

**User response:** No action; information only.

816f010d-0406ffff The Drive

[StorageVolumeElementName] has been enabled. (Drive 6)

**Explanation:** This message is for the use case when an implementation has detected a Drive was Enabled.

May also be shown as 816f010d0406ffff or

0x816f010d0406ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0167

SNMP Trap ID: 5

Automatically notify Support: No

**User response:** No action; information only.

816f010d-0407ffff The Drive

[StorageVolumeElementName] has been

enabled. (Drive 7)

**Explanation:** This message is for the use case when an implementation has detected a Drive was Enabled.

May also be shown as 816f010d0407ffff or

0x816f010d0407ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0167

SNMP Trap ID: 5

Automatically notify Support: No

**User response:** No action; information only.

816f010d-0408ffff The Drive

[StorageVolumeElementName] has been

enabled. (Drive 8)

**Explanation:** This message is for the use case when an implementation has detected a Drive was Enabled.

May also be shown as 816f010d0408ffff or

0x816f010d0408ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0167

SNMP Trap ID: 5

Automatically notify Support: No

**User response:** No action; information only.

816f010d-0409ffff The Drive

[StorageVolumeElementName] has been

enabled. (Drive 9)

**Explanation:** This message is for the use case when an implementation has detected a Drive was Enabled.

May also be shown as 816f010d0409ffff or

0x816f010d0409ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0167

SNMP Trap ID: 5

Automatically notify Support: No

816f010d-040affff The Drive

[StorageVolumeElementName] has been enabled. (Drive 10)

**Explanation:** This message is for the use case when an implementation has detected a Drive was Enabled.

May also be shown as 816f010d040affff or 0x816f010d040affff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0167

**SNMP Trap ID:** 5

Automatically notify Support: No

**User response:** No action; information only.

816f010d-040bffff The Drive

[StorageVolumeElementName] has been enabled. (Drive 11)

**Explanation:** This message is for the use case when an implementation has detected a Drive was Enabled.

May also be shown as 816f010d040bffff or 0x816f010d040bffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0167

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

816f010d-040cffff The Drive

[StorageVolumeElementName] has been enabled. (Drive 12)

**Explanation:** This message is for the use case when an implementation has detected a Drive was Enabled.

May also be shown as 816f010d040cffff or 0x816f010d040cffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0167

SNMP Trap ID: 5

Automatically notify Support: No

**User response:** No action; information only.

816f010d-040dffff The Drive

[StorageVolumeElementName] has been enabled. (Drive 13)

**Explanation:** This message is for the use case when an implementation has detected a Drive was Enabled.

May also be shown as 816f010d040dffff or 0x816f010d040dffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0167

**SNMP Trap ID:** 5

Automatically notify Support: No

**User response:** No action; information only.

816f010f-2201ffff The System

[ComputerSystemElementName] has recovered from a firmware hang. (Firmware Error)

**Explanation:** This message is for the use case when an implementation has recovered from a System Firmware Hang.

May also be shown as 816f010f2201ffff or

0x816f010f2201ffff

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0187

SNMP Trap ID: 50

Automatically notify Support: No

**User response:** No action; information only.

816f0113-0301ffff System

[ComputerSystemElementName] has recovered from a bus timeout. (CPU 1 PECI)

**Explanation:** This message is for the use case when an implemenation has detected that a system has

recovered from a Bus Timeout.

May also be shown as 816f01130301ffff or

0x816f01130301ffff

**Severity:** Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0225

SNMP Trap ID: 50

#### 816f0113-0302ffff • 816f0125-0c01ffff

Automatically notify Support: No

#### User response:

- (Trained technician only) Replace microprocessor n (see Removing a microprocessor and heat sink and Replacing a microprocessor and heat sink).
- 2. If the problem persists and there is no other CPU with the same error indication, replace the system board.
- 3. (Trained technician only) Replace the system board (see Removing the system board and Replacing the system board). (n = microprocessor number)

#### 816f0113-0302ffff System

[ComputerSystemElementName] has recovered from a bus timeout. (CPU 2 PECI)

**Explanation:** This message is for the use case when an implementaion has detected that a system has recovered from a Bus Timeout.

May also be shown as 816f01130302ffff or 0x816f01130302ffff

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0225

SNMP Trap ID: 50

Automatically notify Support: No

#### User response:

- (Trained technician only) Replace microprocessor n (see Removing a microprocessor and heat sink and Replacing a microprocessor and heat sink).
- 2. If the problem persists and there is no other CPU with the same error indication, replace the system board.
- 3. (Trained technician only) Replace the system board (see Removing the system board and Replacing the system board). (n = microprocessor number)

#### 816f011b-0701ffff The connector

[PhysicalConnectorElementName] configuration error has been repaired. (Front USB)

**Explanation:** This message is for the use case when an implementation has detected an Interconnect Configuration was Repaired.

May also be shown as 816f011b0701ffff or 0x816f011b0701ffff

**Severity:** Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0267

SNMP Trap ID: 50

Automatically notify Support: No

**User response:** No action; information only.

## 816f0125-0b01ffff [ManagedElementName] detected as present. (PCI Riser 1)

**Explanation:** This message is for the use case when an implementation has detected a Managed Element is now Present.

May also be shown as 816f01250b01ffff or 0x816f01250b01ffff

Severity: Info

Alert Category: System - Other

**Serviceable:** No

CIM Information: Prefix: PLAT and ID: 0390

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

## 816f0125-0b02ffff [ManagedElementName] detected as present. (PCI Riser 2)

**Explanation:** This message is for the use case when an implementation has detected a Managed Element is now Present.

May also be shown as 816f01250b02ffff or 0x816f01250b02ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0390

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

## 816f0125-0c01ffff [ManagedElementName] detected as present. (Front Panel)

**Explanation:** This message is for the use case when an implementation has detected a Managed Element is now Present.

May also be shown as 816f01250c01ffff or 0x816f01250c01ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

#### 816f0125-2c01ffff • 816f020d-0401ffff

CIM Information: Prefix: PLAT and ID: 0390

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

## 816f0125-2c01ffff [ManagedElementName] detected as present. (Mezz Card)

**Explanation:** This message is for the use case when an implementation has detected a Managed Element is now Present.

May also be shown as 816f01252c01ffff or 0x816f01252c01ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0390

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

#### 816f0207-0301ffff [ProcessorElementName] has Recovered from FRB1/BIST condition. (CPU 1)

**Explanation:** This message is for the use case when an implementation has detected a Processor Recovered - FRB1/BIST condition.

May also be shown as 816f02070301ffff or 0x816f02070301ffff

Severity: Info

Alert Category: Critical - CPU

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0045

SNMP Trap ID: 40

Automatically notify Support: No

**User response:** No action; information only.

#### 816f0207-0302ffff [ProcessorElementName] has Recovered from FRB1/BIST condition. (CPU 2)

**Explanation:** This message is for the use case when an implementation has detected a Processor Recovered - FRB1/BIST condition.

May also be shown as 816f02070302ffff or 0x816f02070302ffff

Severity: Info

Alert Category: Critical - CPU

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0045

SNMP Trap ID: 40

Automatically notify Support: No

**User response:** No action; information only.

#### 816f0207-2584ffff [ProcessorElementName] has Recovered from FRB1/BIST condition. (All CPUs)

**Explanation:** This message is for the use case when an implementation has detected a Processor Recovered - FRB1/BIST condition.

May also be shown as 816f02072584ffff or

0x816f02072584ffff

Severity: Info

**Alert Category:** Critical - CPU

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0045

SNMP Trap ID: 40

Automatically notify Support: No

**User response:** No action; information only. One of

the CPUs:

# 816f020d-0400ffff Failure no longer Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 0)

**Explanation:** This message is for the use case when an implementation has detected an Array Failure is no longer Predicted.

May also be shown as 816f020d0400ffff or

0x816f020d0400ffff

Severity: Info

Alert Category: System - Predicted Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0169

SNMP Trap ID: 27

Automatically notify Support: No

**User response:** No action; information only.

# 816f020d-0401ffff Failure no longer Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 1)

**Explanation:** This message is for the use case when an implementation has detected an Array Failure is no longer Predicted.

#### 816f020d-0402ffff • 816f020d-0406ffff

May also be shown as 816f020d0401ffff or 0x816f020d0401ffff

Severity: Info

Alert Category: System - Predicted Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0169

SNMP Trap ID: 27

Automatically notify Support: No

**User response:** No action; information only.

816f020d-0402ffff Failure no longer Predicted on

drive [StorageVolumeElementName] for array [ComputerSystemElementName].

(Drive 2)

**Explanation:** This message is for the use case when an implementation has detected an Array Failure is no

longer Predicted.

May also be shown as 816f020d0402ffff or

0x816f020d0402ffff

Severity: Info

Alert Category: System - Predicted Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0169

SNMP Trap ID: 27

Automatically notify Support: No

**User response:** No action; information only.

816f020d-0403ffff Failure no longer Predicted on

drive [StorageVolumeElementName] for array [ComputerSystemElementName].

(Drive 3)

Explanation: This message is for the use case when an implementation has detected an Array Failure is no

longer Predicted.

May also be shown as 816f020d0403ffff or

0x816f020d0403ffff

**Severity:** Info

**Alert Category:** System - Predicted Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0169

SNMP Trap ID: 27

Automatically notify Support: No

**User response:** No action; information only.

816f020d-0404ffff Failure no longer Predicted on drive [StorageVolumeElementName] for

array [ComputerSystemElementName]. (Drive 4)

**Explanation:** This message is for the use case when an implementation has detected an Array Failure is no

longer Predicted.

May also be shown as 816f020d0404ffff or

0x816f020d0404ffff

Severity: Info

Alert Category: System - Predicted Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0169

SNMP Trap ID: 27

Automatically notify Support: No

**User response:** No action; information only.

816f020d-0405ffff Failure no longer Predicted on drive [StorageVolumeElementName] for

array [ComputerSystemElementName].

(Drive 5)

**Explanation:** This message is for the use case when an implementation has detected an Array Failure is no

longer Predicted.

May also be shown as 816f020d0405ffff or

0x816f020d0405ffff

**Severity:** Info

Alert Category: System - Predicted Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0169

SNMP Trap ID: 27

Automatically notify Support: No

**User response:** No action; information only.

816f020d-0406ffff Failure no longer Predicted on drive [StorageVolumeElementName] for

array [ComputerSystemElementName].

(Drive 6)

**Explanation:** This message is for the use case when an implementation has detected an Array Failure is no

longer Predicted.

May also be shown as 816f020d0406ffff or

0x816f020d0406ffff

Severity: Info

Alert Category: System - Predicted Failure

Serviceable: No

#### 816f020d-0407ffff • 816f020d-040bffff

CIM Information: Prefix: PLAT and ID: 0169

SNMP Trap ID: 27

Automatically notify Support: No

**User response:** No action; information only.

816f020d-0407ffff Failure no longer Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName].

(Drive 7)

**Explanation:** This message is for the use case when an implementation has detected an Array Failure is no longer Predicted.

May also be shown as 816f020d0407ffff or 0x816f020d0407ffff

Severity: Info

Alert Category: System - Predicted Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0169

SNMP Trap ID: 27

Automatically notify Support: No

User response: No action; information only.

816f020d-0408ffff Failure no longer Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName].

(Drive 8)

**Explanation:** This message is for the use case when an implementation has detected an Array Failure is no longer Predicted.

May also be shown as 816f020d0408ffff or 0x816f020d0408ffff

Severity: Info

Alert Category: System - Predicted Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0169

SNMP Trap ID: 27

Automatically notify Support: No

**User response:** No action; information only.

816f020d-0409ffff Failure no longer Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName].

(Drive 9)

**Explanation:** This message is for the use case when an implementation has detected an Array Failure is no longer Predicted.

May also be shown as 816f020d0409ffff or

0x816f020d0409ffff

Severity: Info

Alert Category: System - Predicted Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0169

SNMP Trap ID: 27

Automatically notify Support: No

**User response:** No action; information only.

816f020d-040affff Failure no longer Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 10)

**Explanation:** This message is for the use case when an implementation has detected an Array Failure is no

longer Predicted.

May also be shown as 816f020d040affff or

0x816f020d040affff

Severity: Info

Alert Category: System - Predicted Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0169

SNMP Trap ID: 27

Automatically notify Support: No

**User response:** No action; information only.

816f020d-040bffff Failure no longer Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName].

(Drive 11)

**Explanation:** This message is for the use case when an implementation has detected an Array Failure is no longer Predicted.

May also be shown as 816f020d040bffff or 0x816f020d040bffff

**Severity:** Info

**Alert Category:** System - Predicted Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0169

SNMP Trap ID: 27

Automatically notify Support: No

**User response:** No action; information only.

#### 816f020d-040cffff • 816f030c-2002ffff

816f020d-040cffff Failure no longer Predicted on

drive [StorageVolumeElementName] for array [ComputerSystemElementName].

(Drive 12)

**Explanation:** This message is for the use case when an implementation has detected an Array Failure is no

longer Predicted.

May also be shown as 816f020d040cffff or

0x816f020d040cffff

**Severity:** Info

Alert Category: System - Predicted Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0169

SNMP Trap ID: 27

Automatically notify Support: No

**User response:** No action; information only.

816f020d-040dffff Failure no longer Predicted on

drive [StorageVolumeElementName] for array [ComputerSystemElementName].

(Drive 13)

**Explanation:** This message is for the use case when an implementation has detected an Array Failure is no

longer Predicted.

May also be shown as 816f020d040dffff or

0x816f020d040dffff

**Severity:** Info

**Alert Category:** System - Predicted Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0169

SNMP Trap ID: 27

Automatically notify Support: No

**User response:** No action; information only.

816f0308-0a01ffff [PowerSupplyElementName] has returned to a Normal Input State.

(Power Supply 1)

Explanation: This message is for the use case when an implementation has detected a Power Supply that has

input that has returned to normal.

May also be shown as 816f03080a01ffff or

0x816f03080a01ffff

**Severity:** Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0099

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

816f0308-0a02ffff [PowerSupplyElementName] has returned to a Normal Input State.

(Power Supply 2)

**Explanation:** This message is for the use case when an implementation has detected a Power Supply that has

input that has returned to normal.

May also be shown as 816f03080a02ffff or

0x816f03080a02ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0099

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

816f030c-2001ffff Scrub Failure for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName]has

recovered. (DIMM 1)

**Explanation:** This message is for the use case when an implementation has detected a Memory Scrub failure

recovery.

May also be shown as 816f030c2001ffff or

0x816f030c2001ffff

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0137

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** No action; information only.

816f030c-2002ffff Scrub Failure for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName]has

recovered. (DIMM 2)

**Explanation:** This message is for the use case when an implementation has detected a Memory Scrub failure

recovery.

May also be shown as 816f030c2002ffff or

0x816f030c2002ffff

**Severity:** Info

#### 816f030c-2003ffff • 816f030c-2007ffff

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0137

SNMP Trap ID: 41

Automatically notify Support: No

User response: No action; information only.

816f030c-2003ffff Scrub Failure for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName]has recovered. (DIMM 3)

**Explanation:** This message is for the use case when an implementation has detected a Memory Scrub failure recovery.

May also be shown as 816f030c2003ffff or 0x816f030c2003ffff

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0137

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** No action; information only.

816f030c-2004ffff Scrub Failure for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName]has recovered. (DIMM 4)

**Explanation:** This message is for the use case when an implementation has detected a Memory Scrub failure recovery.

May also be shown as 816f030c2004ffff or 0x816f030c2004ffff

Severity: Info

**Alert Category:** Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0137

SNMP Trap ID: 41

**Automatically notify Support:** No

**User response:** No action; information only.

816f030c-2005ffff Scrub Failure for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName]has

recovered. (DIMM 5)

**Explanation:** This message is for the use case when an

implementation has detected a Memory Scrub failure

recovery.

May also be shown as 816f030c2005ffff or

0x816f030c2005fffff

Severity: Info

**Alert Category:** Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0137

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** No action; information only.

816f030c-2006ffff Scrub Failure for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName]has recovered. (DIMM 6)

recovered. (Divilvi o)

**Explanation:** This message is for the use case when an implementation has detected a Memory Scrub failure

recovery.

May also be shown as 816f030c2006ffff or

0x816f030c2006ffff

**Severity:** Info

**Alert Category:** Critical - Memory

**Serviceable:** No

CIM Information: Prefix: PLAT and ID: 0137

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** No action; information only.

816f030c-2007ffff Scrub Failure for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName]has recovered. (DIMM 7)

**Explanation:** This message is for the use case when an implementation has detected a Memory Scrub failure recovery.

May also be shown as 816f030c2007ffff or

0x816f030c2007ffff

Severity: Info

**Alert Category:** Critical - Memory

Serviceable: No

**CIM Information: Prefix:** PLAT and **ID:** 0137

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** No action; information only.

#### 816f030c-2008ffff • 816f030c-200dffff

816f030c-2008ffff Scrub Failure for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName]has recovered. (DIMM 8)

**Explanation:** This message is for the use case when an implementation has detected a Memory Scrub failure

recovery.

May also be shown as 816f030c2008ffff or

0x816f030c2008ffff

**Severity:** Info

**Alert Category:** Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0137

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** No action; information only.

816f030c-2009ffff Scrub Failure for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName]has

recovered. (DIMM 9)

Explanation: This message is for the use case when an implementation has detected a Memory Scrub failure

recovery.

May also be shown as 816f030c2009ffff or

0x816f030c2009ffff

**Severity:** Info

**Alert Category:** Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0137

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** No action; information only.

816f030c-200affff Scrub Failure for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName]has

recovered. (DIMM 10)

**Explanation:** This message is for the use case when an implementation has detected a Memory Scrub failure

recovery.

May also be shown as 816f030c200affff or

0x816f030c200affff

Severity: Info

**Alert Category:** Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0137

SNMP Trap ID: 41

Automatically notify Support: No

User response: No action; information only.

816f030c-200bffff Scrub Failure for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName]has

recovered. (DIMM 11)

**Explanation:** This message is for the use case when an implementation has detected a Memory Scrub failure

recovery.

May also be shown as 816f030c200bffff or

0x816f030c200bffff

Severity: Info

**Alert Category:** Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0137

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** No action; information only.

816f030c-200cffff Scrub Failure for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName]has

recovered. (DIMM 12)

**Explanation:** This message is for the use case when an implementation has detected a Memory Scrub failure

recovery.

May also be shown as 816f030c200cffff or

0x816f030c200cffff

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0137

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** No action; information only.

816f030c-200dffff Scrub Failure for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName]has

recovered. (DIMM 13)

**Explanation:** This message is for the use case when an implementation has detected a Memory Scrub failure

recovery.

May also be shown as 816f030c200dffff or 0x816f030c200dffff

**Severity:** Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0137

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** No action; information only.

816f030c-200effff Scrub Failure for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName]has recovered. (DIMM 14)

**Explanation:** This message is for the use case when an implementation has detected a Memory Scrub failure

recovery.

May also be shown as 816f030c200effff or 0x816f030c200effff

Severity: Info

**Alert Category:** Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0137

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** No action; information only.

816f030c-200fffff Scrub Failure for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName]has

recovered. (DIMM 15)

**Explanation:** This message is for the use case when an implementation has detected a Memory Scrub failure

recovery.

May also be shown as 816f030c200fffff or

0x816f030c200fffff

**Severity:** Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0137

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** No action; information only.

816f030c-2010ffff Scrub Failure for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName]has

recovered. (DIMM 16)

**Explanation:** This message is for the use case when an implementation has detected a Memory Scrub failure

recovery.

May also be shown as 816f030c2010ffff or

0x816f030c2010ffff

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0137

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** No action; information only.

816f030c-2581ffff Scrub Failure for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName]has recovered. (All DIMMS)

**Explanation:** This message is for the use case when an implementation has detected a Memory Scrub failure

recovery.

May also be shown as 816f030c2581ffff or

0x816f030c2581ffff

**Severity:** Info

**Alert Category:** Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0137

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** No action; information only. One of

the DIMMs:

816f0313-1701ffff System

[ComputerSystemElementName] has recovered from an NMI. (NMI State)

**Explanation:** This message is for the use case when an implementation has detected a Software NMI has been

Recovered from.

May also be shown as 816f03131701ffff or

0x816f03131701ffff

Severity: Info

**Alert Category:** Critical - Other

Serviceable: No

#### 816f040c-2001ffff • 816f040c-2006ffff

CIM Information: Prefix: PLAT and ID: 0230

SNMP Trap ID: 50

Automatically notify Support: No

**User response:** No action; information only.

816f040c-2001ffff [PhysicalMemoryElementName] Enabled on Subsystem [MemoryElementName]. (DIMM 1)

**Explanation:** This message is for the use case when an implementation has detected that Memory has been

Enabled.

May also be shown as 816f040c2001ffff or 0x816f040c2001ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0130

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

816f040c-2002ffff [PhysicalMemoryElementName] Enabled on Subsystem [MemoryElementName]. (DIMM 2)

**Explanation:** This message is for the use case when an implementation has detected that Memory has been

Enabled.

May also be shown as 816f040c2002ffff or

0x816f040c2002ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0130

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

816f040c-2003ffff [PhysicalMemoryElementName] Enabled on Subsystem [MemoryElementName]. (DIMM 3)

**Explanation:** This message is for the use case when an implementation has detected that Memory has been Enabled.

May also be shown as 816f040c2003ffff or

0x816f040c2003ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0130

**SNMP Trap ID:** 

Automatically notify Support: No

User response: No action; information only.

816f040c-2004ffff [PhysicalMemoryElementName]
Enabled on Subsystem
[MemoryElementName]. (DIMM 4)

**Explanation:** This message is for the use case when an implementation has detected that Memory has been

Enabled.

May also be shown as 816f040c2004ffff or

0x816f040c2004ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0130

**SNMP Trap ID:** 

Automatically notify Support: No

User response: No action; information only.

816f040c-2005ffff [PhysicalMemoryElementName] Enabled on Subsystem [MemoryElementName]. (DIMM 5)

**Explanation:** This message is for the use case when an implementation has detected that Memory has been

Enabled.

May also be shown as 816f040c2005ffff or

0x816f040c2005ffff

Severity: Info

**Alert Category:** System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0130

**SNMP Trap ID:** 

**Automatically notify Support:** No

**User response:** No action; information only.

816f040c-2006ffff [PhysicalMemoryElementName] Enabled on Subsystem [MemoryElementName]. (DIMM 6)

**Explanation:** This message is for the use case when an implementation has detected that Memory has been

Enabled.

May also be shown as 816f040c2006ffff or 0x816f040c2006ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0130

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

#### 816f040c-2007ffff [PhysicalMemoryElementName] Enabled on Subsystem [MemoryElementName]. (DIMM 7)

**Explanation:** This message is for the use case when an implementation has detected that Memory has been Enabled.

May also be shown as 816f040c2007ffff or 0x816f040c2007ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0130

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

#### 816f040c-2008ffff [PhysicalMemoryElementName] Enabled on Subsystem [MemoryElementName]. (DIMM 8)

**Explanation:** This message is for the use case when an implementation has detected that Memory has been Enabled.

May also be shown as 816f040c2008ffff or 0x816f040c2008ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0130

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

#### 816f040c-2009ffff [PhysicalMemoryElementName] Enabled on Subsystem [MemoryElementName]. (DIMM 9)

**Explanation:** This message is for the use case when an implementation has detected that Memory has been

Enabled.

May also be shown as 816f040c2009ffff or

0x816f040c2009ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0130

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

#### 816f040c-200affff [PhysicalMemoryElementName] Enabled on Subsystem [MemoryElementName]. (DIMM 10)

**Explanation:** This message is for the use case when an implementation has detected that Memory has been Enabled.

May also be shown as 816f040c200affff or

0x816f040c200affff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0130

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

#### 816f040c-200bffff [PhysicalMemoryElementName] Enabled on Subsystem [MemoryElementName]. (DIMM 11)

**Explanation:** This message is for the use case when an implementation has detected that Memory has been Enabled.

May also be shown as 816f040c200bffff or

0x816f040c200bffff

Severity: Info

**Alert Category:** System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0130

**SNMP Trap ID:** 

#### 816f040c-200cffff • 816f040c-2581ffff

Automatically notify Support: No

**User response:** No action; information only.

816f040c-200cffff [PhysicalMemoryElementName] Enabled on Subsystem [MemoryElementName]. (DIMM 12)

**Explanation:** This message is for the use case when an implementation has detected that Memory has been

Enabled.

May also be shown as 816f040c200cffff or

0x816f040c200cffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0130

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

816f040c-200dffff [PhysicalMemoryElementName] Enabled on Subsystem [MemoryElementName]. (DIMM 13)

**Explanation:** This message is for the use case when an implementation has detected that Memory has been

Enabled.

May also be shown as 816f040c200dffff or

0x816f040c200dffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0130

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

816f040c-200effff [PhysicalMemoryElementName] Enabled on Subsystem [MemoryElementName]. (DIMM 14)

**Explanation:** This message is for the use case when an implementation has detected that Memory has been

Enabled.

May also be shown as 816f040c200effff or

0x816f040c200effff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0130

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

816f040c-200fffff [PhysicalMemoryElementName] Enabled on Subsystem [MemoryElementName]. (DIMM 15)

**Explanation:** This message is for the use case when an implementation has detected that Memory has been

Enabled.

May also be shown as 816f040c200fffff or

0x816f040c200fffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0130

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

816f040c-2010ffff [PhysicalMemoryElementName] Enabled on Subsystem [MemoryElementName]. (DIMM 16)

**Explanation:** This message is for the use case when an implementation has detected that Memory has been

Enabled.

May also be shown as 816f040c2010ffff or

0x816f040c2010ffff

**Severity:** Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0130

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

816f040c-2581ffff [PhysicalMemoryElementName] Enabled on Subsystem [MemoryElementName]. (All DIMMS)

**Explanation:** This message is for the use case when an implementation has detected that Memory has been Enabled.

Enabled.

May also be shown as 816f040c2581ffff or

0x816f040c2581ffff

Severity: Info

#### 816f0413-2582ffff • 816f050c-2001ffff

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0130

**SNMP Trap ID:** 

Automatically notify Support: No

User response: No action; information only. One of

the DIMMs:

816f0413-2582ffff A PCI PERR recovery has occurred on system

[ComputerSystemElementName]. (PCIs)

**Explanation:** This message is for the use case when an implementation has detected a PCI PERR recovered.

May also be shown as 816f04132582ffff or

0x816f04132582ffff

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0233

**SNMP Trap ID:** 50

Automatically notify Support: No

**User response:** No action; information only.

816f0507-0301ffff [ProcessorElementName] has Recovered from a Configuration Mismatch. (CPU 1)

**Explanation:** This message is for the use case when an implementation has Recovered from a Processor

Configuration Mismatch.

May also be shown as 816f05070301ffff or 0x816f05070301ffff

Severity: Info

ocvenity. Inno

Alert Category: Critical - CPU

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0063

SNMP Trap ID: 40

**Automatically notify Support:** No

**User response:** No action; information only.

816f0507-0302ffff [ProcessorElementName] has Recovered from a Configuration Mismatch. (CPU 2)

**Explanation:** This message is for the use case when an implementation has Recovered from a Processor

Configuration Mismatch.

May also be shown as 816f05070302ffff or

0x816f05070302fffff

Severity: Info

Alert Category: Critical - CPU

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0063

SNMP Trap ID: 40

Automatically notify Support: No

**User response:** No action; information only.

816f0507-2584ffff [ProcessorElementName] has Recovered from a Configuration Mismatch. (All CPUs)

Explanation: This message is for the use case when an

implementation has Recovered from a Processor

Configuration Mismatch.

May also be shown as 816f05072584ffff or

0x816f05072584ffff

**Severity:** Info

Alert Category: Critical - CPU

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0063

SNMP Trap ID: 40

Automatically notify Support: No

**User response:** No action; information only. One of

the CPUs:

816f050c-2001ffff Memory Logging Limit Removed for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 1)

**Explanation:** This message is for the use case when an implementation has detected that the Memory Logging

Limit has been Removed.

May also be shown as 816f050c2001ffff or

0x816f050c2001ffff

**Severity:** Info

**Alert Category:** Warning - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0145

SNMP Trap ID: 43

Automatically notify Support: No

**User response:** No action; information only.

#### 816f050c-2002ffff • 816f050c-2007ffff

816f050c-2002ffff Memory Logging Limit Removed for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

(DIMM 2)

**Explanation:** This message is for the use case when an implementation has detected that the Memory Logging

Limit has been Removed.

May also be shown as 816f050c2002ffff or 0x816f050c2002ffff

Severity: Info

Alert Category: Warning - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0145

SNMP Trap ID: 43

Automatically notify Support: No

**User response:** No action; information only.

816f050c-2003ffff Memory Logging Limit Removed for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

(DIMM 3)

**Explanation:** This message is for the use case when an implementation has detected that the Memory Logging Limit has been Removed.

Mary also he sharen as 8166050c

May also be shown as 816f050c2003ffff or 0x816f050c2003ffff

Severity: Info

**Alert Category:** Warning - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0145

SNMP Trap ID: 43

Automatically notify Support: No

**User response:** No action; information only.

816f050c-2004ffff Memory Logging Limit Removed for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

(DIMM 4)

**Explanation:** This message is for the use case when an implementation has detected that the Memory Logging Limit has been Removed.

May also be shown as 816f050c2004ffff or

0x816f050c2004ffff **Severity:** Info

Alert Category: Warning - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0145

SNMP Trap ID: 43

Automatically notify Support: No

**User response:** No action; information only.

816f050c-2005ffff Memory Logging Limit Removed for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

(DIMM 5)

**Explanation:** This message is for the use case when an implementation has detected that the Memory Logging

Limit has been Removed.

May also be shown as 816f050c2005ffff or

0x816f050c2005ffff

**Severity:** Info

**Alert Category:** Warning - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0145

SNMP Trap ID: 43

Automatically notify Support: No

**User response:** No action; information only.

816f050c-2006ffff Memory Logging Limit Removed for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 6)

**Explanation:** This message is for the use case when an implementation has detected that the Memory Logging Limit has been Removed.

May also be shown as 816f050c2006ffff or

0x816f050c2006ffff

Severity: Info

Alert Category: Warning - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0145

SNMP Trap ID: 43

Automatically notify Support: No

**User response:** No action; information only.

816f050c-2007ffff Memory Logging Limit Removed for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 7)

**Explanation:** This message is for the use case when an implementation has detected that the Memory Logging

Limit has been Removed.

May also be shown as 816f050c2007ffff or 0x816f050c2007ffff

Severity: Info

Alert Category: Warning - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0145

SNMP Trap ID: 43

Automatically notify Support: No

User response: No action; information only.

816f050c-2008ffff Memory Logging Limit Removed for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

(DIMM 8)

**Explanation:** This message is for the use case when an implementation has detected that the Memory Logging Limit has been Removed.

May also be shown as 816f050c2008ffff or 0x816f050c2008ffff

Severity: Info

**Alert Category:** Warning - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0145

SNMP Trap ID: 43

Automatically notify Support: No

**User response:** No action; information only.

816f050c-2009ffff Memory Logging Limit Removed for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

(DIMM 9)

**Explanation:** This message is for the use case when an implementation has detected that the Memory Logging Limit has been Removed.

May also be shown as 816f050c2009ffff or 0x816f050c2009ffff

**Severity:** Info

Alert Category: Warning - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0145

SNMP Trap ID: 43

Automatically notify Support: No

**User response:** No action; information only.

816f050c-200affff Memory Logging Limit Removed for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 10)

**Explanation:** This message is for the use case when an implementation has detected that the Memory Logging

Limit has been Removed.

May also be shown as 816f050c200affff or

0x816f050c200affff

Severity: Info

Alert Category: Warning - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0145

SNMP Trap ID: 43

Automatically notify Support: No

**User response:** No action; information only.

816f050c-200bffff Memory Logging Limit Removed for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 11)

**Explanation:** This message is for the use case when an implementation has detected that the Memory Logging

Limit has been Removed.

May also be shown as 816f050c200bffff or

0x816f050c200bfffff

**Severity:** Info

Alert Category: Warning - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0145

SNMP Trap ID: 43

Automatically notify Support: No

**User response:** No action; information only.

816f050c-200cffff Memory Logging Limit Removed for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 12)

**Explanation:** This message is for the use case when an implementation has detected that the Memory Logging Limit has been Removed.

May also be shown as 816f050c200cffff or 0x816f050c200cffff

Severity: Info

Alert Category: Warning - Memory

Serviceable: No

#### 816f050c-200dffff • 816f050c-2581ffff

CIM Information: Prefix: PLAT and ID: 0145

SNMP Trap ID: 43

Automatically notify Support: No

**User response:** No action; information only.

816f050c-200dffff Memory Logging Limit Removed for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

(DIMM 13)

**Explanation:** This message is for the use case when an implementation has detected that the Memory Logging Limit has been Removed.

May also be shown as 816f050c200dffff or 0x816f050c200dffff

Severity: Info

Alert Category: Warning - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0145

SNMP Trap ID: 43

Automatically notify Support: No

**User response:** No action; information only.

816f050c-200effff Memory Logging Limit Removed

for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

(DIMM 14)

**Explanation:** This message is for the use case when an implementation has detected that the Memory Logging Limit has been Removed.

May also be shown as 816f050c200effff or 0x816f050c200effff

**Severity:** Info

Alert Category: Warning - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0145

SNMP Trap ID: 43

Automatically notify Support: No

**User response:** No action; information only.

816f050c-200fffff Memory Logging Limit Removed

for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

(DIMM 15)

**Explanation:** This message is for the use case when an implementation has detected that the Memory Logging Limit has been Removed.

May also be shown as 816f050c200fffff or

0x816f050c200fffff

Severity: Info

Alert Category: Warning - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0145

SNMP Trap ID: 43

Automatically notify Support: No

User response: No action; information only.

816f050c-2010ffff Memory Logging Limit Removed for [PhysicalMemoryElementName] on

Subsystem [MemoryElementName].

(DIMM 16)

**Explanation:** This message is for the use case when an implementation has detected that the Memory Logging

Limit has been Removed.

May also be shown as 816f050c2010ffff or

0x816f050c2010ffff

Severity: Info

Alert Category: Warning - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0145

SNMP Trap ID: 43

Automatically notify Support: No

User response: No action; information only.

816f050c-2581ffff Memory Logging Limit Removed

for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (All

DIMMS)

**Explanation:** This message is for the use case when an implementation has detected that the Memory Logging

Limit has been Removed.

May also be shown as 816f050c2581ffff or

0x816f050c2581ffff

**Severity:** Info

**Alert Category:** Warning - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0145

SNMP Trap ID: 43

Automatically notify Support: No

User response: No action; information only. One of

the DIMMs:

#### 816f050d-0400ffff • 816f050d-0405ffff

816f050d-0400ffff Critical Array

[ComputerSystemElementName] has

deasserted. (Drive 0)

Explanation: This message is for the use case when an implementation has detected that an Critiacal Array has

deasserted.

May also be shown as 816f050d0400ffff or

0x816f050d0400ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0175

SNMP Trap ID: 5

Automatically notify Support: No

**User response:** No action; information only.

816f050d-0401ffff Critical Array

[ComputerSystemElementName] has deasserted. (Drive 1)

**Explanation:** This message is for the use case when an implementation has detected that an Critiacal Array has deasserted.

May also be shown as 816f050d0401ffff or

0x816f050d0401ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0175

SNMP Trap ID: 5

Automatically notify Support: No

**User response:** No action; information only.

816f050d-0402ffff Critical Array

[ComputerSystemElementName] has

deasserted. (Drive 2)

**Explanation:** This message is for the use case when an implementation has detected that an Critiacal Array has

deasserted.

May also be shown as 816f050d0402ffff or

0x816f050d0402ffff

**Severity:** Info

Alert Category: Critical - Hard Disk drive

Serviceable: No.

CIM Information: Prefix: PLAT and ID: 0175

SNMP Trap ID: 5

Automatically notify Support: No

**User response:** No action; information only.

816f050d-0403ffff Critical Array

[ComputerSystemElementName] has

deasserted. (Drive 3)

**Explanation:** This message is for the use case when an implementation has detected that an Critiacal Array has

deasserted.

May also be shown as 816f050d0403ffff or

0x816f050d0403ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0175

SNMP Trap ID: 5

Automatically notify Support: No

**User response:** No action; information only.

816f050d-0404ffff Critical Array

[ComputerSystemElementName] has deasserted. (Drive 4)

**Explanation:** This message is for the use case when an implementation has detected that an Critiacal Array has

deasserted.

May also be shown as 816f050d0404ffff or

0x816f050d0404ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0175

SNMP Trap ID: 5

Automatically notify Support: No

**User response:** No action; information only.

816f050d-0405ffff Critical Array

[ComputerSystemElementName] has deasserted. (Drive 5)

**Explanation:** This message is for the use case when an implementation has detected that an Critiacal Array has

deasserted.

May also be shown as 816f050d0405ffff or

0x816f050d0405ffff

**Severity:** Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

#### 816f050d-0406ffff • 816f050d-040bffff

CIM Information: Prefix: PLAT and ID: 0175

SNMP Trap ID: 5

Automatically notify Support: No

**User response:** No action; information only.

816f050d-0406ffff Critical Array

[ComputerSystemElementName] has deasserted. (Drive 6)

**Explanation:** This message is for the use case when an implementation has detected that an Critiacal Array has deasserted.

May also be shown as 816f050d0406ffff or 0x816f050d0406ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0175

**SNMP Trap ID:** 5

Automatically notify Support: No

**User response:** No action; information only.

816f050d-0407ffff Critical Array

[ComputerSystemElementName] has deasserted. (Drive 7)

**Explanation:** This message is for the use case when an implementation has detected that an Critiacal Array has deasserted.

May also be shown as 816f050d0407ffff or 0x816f050d0407ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0175

SNMP Trap ID: 5

Automatically notify Support: No

**User response:** No action; information only.

816f050d-0408ffff Critical Array

[ComputerSystemElementName] has deasserted. (Drive 8)

**Explanation:** This message is for the use case when an implementation has detected that an Critiacal Array has deasserted.

May also be shown as 816f050d0408ffff or 0x816f050d0408ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0175

**SNMP Trap ID:** 5

Automatically notify Support: No

User response: No action; information only.

816f050d-0409ffff Critical Array

[ComputerSystemElementName] has deasserted. (Drive 9)

**Explanation:** This message is for the use case when an implementation has detected that an Critiacal Array has deasserted.

May also be shown as 816f050d0409ffff or

0x816f050d0409ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0175

**SNMP Trap ID:** 5

**Automatically notify Support:** No

User response: No action; information only.

816f050d-040affff Critical Array

[ComputerSystemElementName] has deasserted. (Drive 10)

**Explanation:** This message is for the use case when an implementation has detected that an Critiacal Array has deasserted.

May also be shown as 816f050d040affff or

0x816f050d040affff

Severity: Info

**Alert Category:** Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0175

**SNMP Trap ID:** 5

Automatically notify Support: No

**User response:** No action; information only.

816f050d-040bffff Critical Array

[ComputerSystemElementName] has deasserted. (Drive 11)

**Explanation:** This message is for the use case when an implementation has detected that an Critiacal Array has

deasserted.

May also be shown as 816f050d040bffff or 0x816f050d040bffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0175

SNMP Trap ID: 5

Automatically notify Support: No

**User response:** No action; information only.

#### 816f050d-040cffff Critical Array

[ComputerSystemElementName] has deasserted. (Drive 12)

**Explanation:** This message is for the use case when an implementation has detected that an Critiacal Array has deasserted.

May also be shown as 816f050d040cffff or 0x816f050d040cffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0175

SNMP Trap ID: 5

Automatically notify Support: No

**User response:** No action; information only.

#### 816f050d-040dffff Critical Array

[ComputerSystemElementName] has deasserted. (Drive 13)

**Explanation:** This message is for the use case when an implementation has detected that an Critiacal Array has deasserted.

May also be shown as 816f050d040dffff or 0x816f050d040dffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0175

SNMP Trap ID: 5

Automatically notify Support: No

**User response:** No action; information only.

816f0607-0301ffff An SM BIOS Uncorrectable CPU

complex error for

[ProcessorElementName] has deasserted.

(CPU 1)

**Explanation:** This message is for the use case when an

SM BIOS Uncorrectable CPU complex error has

deasserted.

May also be shown as 816f06070301ffff or

0x816f06070301ffff

Severity: Info

Alert Category: Critical - CPU

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0817

SNMP Trap ID: 40

Automatically notify Support: No

**User response:** No action; information only.

### 816f0607-0302ffff An SM BIOS Uncorrectable CPU

complex error for

[ProcessorElementName] has deasserted.

(CPU 2)

**Explanation:** This message is for the use case when an

SM BIOS Uncorrectable CPU complex error has

deasserted.

May also be shown as 816f06070302ffff or

0x816f06070302fffff

Severity: Info

Alert Category: Critical - CPU

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0817

SNMP Trap ID: 40

Automatically notify Support: No

**User response:** No action; information only.

#### 816f0607-2584ffff An SM BIOS Uncorrectable CPU

complex error for

 $[Processor Element Name]\ has\ deasserted.$ 

(All CPUs)

**Explanation:** This message is for the use case when an

SM BIOS Uncorrectable CPU complex error has

deasserted.

May also be shown as 816f06072584ffff or

0x816f06072584ffff

Severity: Info

Alert Category: Critical - CPU

Serviceable: No

#### 816f0608-1301ffff • 816f060d-0404ffff

CIM Information: Prefix: PLAT and ID: 0817

SNMP Trap ID: 40

Automatically notify Support: No

User response: No action; information only. One of

the CPUs:

816f0608-1301ffff [PowerSupplyElementName] Configuration is OK. (PS Configuration)

**Explanation:** This message is for the use case when an implementation when a Power Supply configuration is

May also be shown as 816f06081301ffff or

0x816f06081301ffff

Severity: Info

Alert Category: Critical - Power

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0105

SNMP Trap ID: 4

Automatically notify Support: No

**User response:** No action; information only.

816f060d-0400ffff Array in system

[ComputerSystemElementName] has been restored. (Drive 0)

**Explanation:** This message is for the use case when an implementation has detected that a Failed Array has

been Restored.

May also be shown as 816f060d0400ffff or

0x816f060d0400ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0177

SNMP Trap ID: 5

Automatically notify Support: No

**User response:** No action; information only.

816f060d-0401ffff Array in system

[ComputerSystemElementName] has been restored. (Drive 1)

**Explanation:** This message is for the use case when an implementation has detected that a Failed Array has

been Restored.

May also be shown as 816f060d0401ffff or

0x816f060d0401ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

**CIM Information: Prefix:** PLAT and **ID:** 0177

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

816f060d-0402ffff Array in system

[ComputerSystemElementName] has been restored. (Drive 2)

**Explanation:** This message is for the use case when an implementation has detected that a Failed Array has

been Restored.

May also be shown as 816f060d0402ffff or

0x816f060d0402ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0177

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

816f060d-0403ffff Array in system

[ComputerSystemElementName] has been restored. (Drive 3)

**Explanation:** This message is for the use case when an implementation has detected that a Failed Array has

been Restored.

May also be shown as 816f060d0403ffff or

0x816f060d0403ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0177

SNMP Trap ID: 5

Automatically notify Support: No

**User response:** No action; information only.

816f060d-0404ffff Array in system

[ComputerSystemElementName] has

been restored. (Drive 4)

**Explanation:** This message is for the use case when an implementation has detected that a Failed Array has

been Restored.

#### 816f060d-0405ffff • 816f060d-0409ffff

May also be shown as 816f060d0404ffff or 0x816f060d0404ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0177

SNMP Trap ID: 5

Automatically notify Support: No

**User response:** No action; information only.

#### 816f060d-0405ffff Array in system

[ComputerSystemElementName] has been restored. (Drive 5)

**Explanation:** This message is for the use case when an implementation has detected that a Failed Array has been Restored.

May also be shown as 816f060d0405ffff or 0x816f060d0405ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0177

SNMP Trap ID: 5

Automatically notify Support: No

**User response:** No action; information only.

#### 816f060d-0406ffff Array in system

[ComputerSystemElementName] has been restored. (Drive 6)

**Explanation:** This message is for the use case when an implementation has detected that a Failed Array has been Restored.

May also be shown as 816f060d0406ffff or 0x816f060d0406ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0177

SNMP Trap ID: 5

Automatically notify Support: No

**User response:** No action; information only.

816f060d-0407ffff Array in system

[ComputerSystemElementName] has been restored. (Drive 7)

**Explanation:** This message is for the use case when an implementation has detected that a Failed Array has

been Restored.

May also be shown as 816f060d0407ffff or

0x816f060d0407ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0177

**SNMP Trap ID:** 5

Automatically notify Support: No

**User response:** No action; information only.

#### 816f060d-0408ffff Array in system

[ComputerSystemElementName] has been restored. (Drive 8)

**Explanation:** This message is for the use case when an implementation has detected that a Failed Array has

been Restored.

May also be shown as 816f060d0408ffff or

0x816f060d0408ffff

Severity: Info

**Alert Category:** Critical - Hard Disk drive

Serviceable: No

**CIM Information: Prefix:** PLAT and **ID:** 0177

SNMP Trap ID: 5

Automatically notify Support: No

**User response:** No action; information only.

#### 816f060d-0409ffff Array in system

[ComputerSystemElementName] has been restored. (Drive 9)

**Explanation:** This message is for the use case when an implementation has detected that a Failed Array has been Restored.

May also be shown as 816f060d0409ffff or 0x816f060d0409ffff

**Severity:** Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0177

**SNMP Trap ID:** 5

#### 816f060d-040affff • 816f070c-2002ffff

Automatically notify Support: No

**User response:** No action; information only.

816f060d-040affff Array in system

[ComputerSystemElementName] has been restored. (Drive 10)

**Explanation:** This message is for the use case when an implementation has detected that a Failed Array has

been Restored.

May also be shown as 816f060d040affff or

0x816f060d040affff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0177

SNMP Trap ID: 5

Automatically notify Support: No

**User response:** No action; information only.

816f060d-040bffff Array in system

[ComputerSystemElementName] has been restored. (Drive 11)

**Explanation:** This message is for the use case when an implementation has detected that a Failed Array has

been Restored.

May also be shown as 816f060d040bffff or

0x816f060d040bffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0177

SNMP Trap ID: 5

Automatically notify Support: No

**User response:** No action; information only.

816f060d-040cffff Array in system

[ComputerSystemElementName] has been restored. (Drive 12)

**Explanation:** This message is for the use case when an implementation has detected that a Failed Array has

been Restored.

May also be shown as 816f060d040cffff or

0x816f060d040cffff

**Severity:** Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0177

**SNMP Trap ID:** 5

Automatically notify Support: No

User response: No action; information only.

816f060d-040dffff Array in system

[ComputerSystemElementName] has been restored. (Drive 13)

Explanation: This message is for the use case when an implementation has detected that a Failed Array has

been Restored.

May also be shown as 816f060d040dffff or

0x816f060d040dffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0177

SNMP Trap ID: 5

Automatically notify Support: No

**User response:** No action; information only.

816f070c-2001ffff Configuration error for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName]has

deasserted. (DIMM 1)

Explanation: This message is for the use case when an implementation has detected a Memory DIMM

configuration error has deasserted.

May also be shown as 816f070c2001ffff or

0x816f070c2001ffff

Severity: Info

**Alert Category:** Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0127

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** No action; information only.

816f070c-2002ffff Configuration error for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName]has

deasserted. (DIMM 2)

**Explanation:** This message is for the use case when an implementation has detected a Memory DIMM

configuration error has deasserted.

May also be shown as 816f070c2002ffff or

0x816f070c2002fffff

Severity: Info

**Alert Category:** Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0127

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** No action; information only.

816f070c-2003ffff Configuration error for

 $[Physical Memory Element Name] \ on \\ Subsystem \ [Memory Element Name] has$ 

deasserted. (DIMM 3)

**Explanation:** This message is for the use case when an

implementation has detected a Memory DIMM

configuration error has deasserted.

May also be shown as 816f070c2003ffff or

0x816f070c2003ffff

**Severity:** Info

**Alert Category:** Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0127

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** No action; information only.

816f070c-2004ffff Configuration error for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName]has

deasserted. (DIMM 4)

**Explanation:** This message is for the use case when an

implementation has detected a Memory DIMM

configuration error has deasserted.

May also be shown as 816f070c2004ffff or

0x816f070c2004ffff

Severity: Info

**Alert Category:** Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0127

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** No action; information only.

816f070c-2005ffff Configuration error for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName]has

deasserted. (DIMM 5)

**Explanation:** This message is for the use case when an

implementation has detected a Memory DIMM

configuration error has deasserted.

May also be shown as 816f070c2005ffff or

0x816f070c2005ffff

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0127

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** No action; information only.

816f070c-2006ffff Configuration error for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName]has

deasserted. (DIMM 6)

**Explanation:** This message is for the use case when an

implementation has detected a Memory DIMM

configuration error has deasserted.

May also be shown as 816f070c2006ffff or

0x816f070c2006ffff

Severity: Info

**Alert Category:** Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0127

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** No action; information only.

816f070c-2007ffff Configuration error for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName]has

deasserted. (DIMM 7)

**Explanation:** This message is for the use case when an

implementation has detected a Memory DIMM

configuration error has deasserted.

May also be shown as 816f070c2007ffff or

0x816f070c2007ffff

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

#### 816f070c-2008ffff • 816f070c-200cffff

CIM Information: Prefix: PLAT and ID: 0127

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** No action; information only.

816f070c-2008ffff Configuration error for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName]has

deasserted. (DIMM 8)

**Explanation:** This message is for the use case when an implementation has detected a Memory DIMM

configuration error has deasserted.

May also be shown as 816f070c2008ffff or

0x816f070c2008ffff

Severity: Info

**Alert Category:** Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0127

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** No action; information only.

816f070c-2009ffff Configuration error for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName]has

deasserted. (DIMM 9)

Explanation: This message is for the use case when an implementation has detected a Memory DIMM

configuration error has deasserted.

May also be shown as 816f070c2009ffff or

0x816f070c2009ffff

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0127

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** No action; information only.

816f070c-200affff Configuration error for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName]has

deasserted. (DIMM 10)

**Explanation:** This message is for the use case when an

implementation has detected a Memory DIMM

configuration error has deasserted.

May also be shown as 816f070c200affff or

0x816f070c200affff

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0127

SNMP Trap ID: 41

Automatically notify Support: No

User response: No action; information only.

816f070c-200bffff Configuration error for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName]has

deasserted. (DIMM 11)

**Explanation:** This message is for the use case when an

implementation has detected a Memory DIMM

configuration error has deasserted.

May also be shown as 816f070c200bffff or

0x816f070c200bffff

Severity: Info

**Alert Category:** Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0127

SNMP Trap ID: 41

Automatically notify Support: No

User response: No action; information only.

816f070c-200cffff Configuration error for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName]has

deasserted. (DIMM 12)

Explanation: This message is for the use case when an

implementation has detected a Memory DIMM

configuration error has deasserted.

May also be shown as 816f070c200cffff or

0x816f070c200cfffff

**Severity:** Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0127

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** No action; information only.

816f070c-200dffff Configuration error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has

deasserted. (DIMM 13)

**Explanation:** This message is for the use case when an implementation has detected a Memory DIMM configuration error has deasserted.

May also be shown as 816f070c200dffff or 0x816f070c200dffff

**Severity:** Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0127

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** No action; information only.

816f070c-200effff Configuration error for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName]has deasserted. (DIMM 14)

**Explanation:** This message is for the use case when an implementation has detected a Memory DIMM

configuration error has deasserted.

May also be shown as 816f070c200effff or 0x816f070c200effff

**Severity:** Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0127

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** No action; information only.

816f070c-200fffff Configuration error for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName]has

deasserted. (DIMM 15)

**Explanation:** This message is for the use case when an implementation has detected a Memory DIMM

configuration error has deasserted.

May also be shown as 816f070c200fffff or 0x816f070c200fffff

Severity: Info

**Alert Category:** Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0127

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** No action; information only.

816f070c-2010ffff Configuration error for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName]has

deasserted. (DIMM 16)

**Explanation:** This message is for the use case when an

implementation has detected a Memory DIMM

configuration error has deasserted.

May also be shown as 816f070c2010ffff or

0x816f070c2010ffff

Severity: Info

**Alert Category:** Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0127

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** No action; information only.

816f070c-2581ffff Configuration error for

[PhysicalMemoryElementName] on Subsystem [MemoryElementName]has

deasserted. (All DIMMS)

**Explanation:** This message is for the use case when an

implementation has detected a Memory DIMM

configuration error has deasserted.

May also be shown as 816f070c2581ffff or

0x816f070c2581ffff

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0127

SNMP Trap ID: 41

Automatically notify Support: No

**User response:** No action; information only. One of

the DIMMs:

816f070d-0400ffff Rebuild completed for Array in system [ComputerSystemElementName].

(Drive 0)

Explanation: This message is for the use case when an implementation has detected that an Array Rebuild has

Completed.

#### 816f070d-0401ffff • 816f070d-0405ffff

May also be shown as 816f070d0400ffff or

0x816f070d0400ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0179

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

 $816f070d\hbox{-}0401ffff \quad Rebuild \ completed \ for \ Array \ in \\ system \ [Computer System Element Name].$ 

(Drive 1)

**Explanation:** This message is for the use case when an implementation has detected that an Array Rebuild has

Completed.

May also be shown as 816f070d0401ffff or

0x816f070d0401ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0179

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

816f070d-0402ffff Rebuild completed for Array in system [ComputerSystemElementName].

(Drive 2)

**Explanation:** This message is for the use case when an implementation has detected that an Array Rebuild has

Completed.

May also be shown as 816f070d0402ffff or

0x816f070d0402ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0179

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

816f070d-0403ffff Rebuild completed for Array in system [ComputerSystemElementName].

(Drive 3)

**Explanation:** This message is for the use case when an implementation has detected that an Array Rebuild has

Completed.

May also be shown as 816f070d0403ffff or

0x816f070d0403ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0179

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

816f070d-0404ffff Rebuild completed for Array in system [ComputerSystemElementName].

(Drive 4)

**Explanation:** This message is for the use case when an implementation has detected that an Array Rebuild has

Completed.

May also be shown as 816f070d0404ffff or

0x816f070d0404ffff

**Severity:** Info

**Alert Category:** System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0179

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

816f070d-0405ffff Rebuild completed for Array in system [ComputerSystemElementName].

(Drive 5)

**Explanation:** This message is for the use case when an implementation has detected that an Array Rebuild has

Completed.

May also be shown as 816f070d0405ffff or

0x816f070d0405ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0179

SNMP Trap ID:

#### 816f070d-0406ffff • 816f070d-040bffff

Automatically notify Support: No

**User response:** No action; information only.

816f070d-0406ffff Rebuild completed for Array in system [ComputerSystemElementName].

(Drive 6)

**Explanation:** This message is for the use case when an implementation has detected that an Array Rebuild has Completed.

May also be shown as 816f070d0406ffff or 0x816f070d0406ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0179

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

816f070d-0407ffff Rebuild completed for Array in system [ComputerSystemElementName].

(Drive 7)

**Explanation:** This message is for the use case when an implementation has detected that an Array Rebuild has Completed.

May also be shown as 816f070d0407ffff or 0x816f070d0407ffff

**Severity:** Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0179

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

816f070d-0408ffff Rebuild completed for Array in system [ComputerSystemElementName]. (Drive 8)

**Explanation:** This message is for the use case when an implementation has detected that an Array Rebuild has Completed.

May also be shown as 816f070d0408ffff or 0x816f070d0408ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0179

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

816f070d-0409ffff Rebuild completed for Array in system [ComputerSystemElementName].

(Drive 9)

**Explanation:** This message is for the use case when an implementation has detected that an Array Rebuild has Completed.

May also be shown as 816f070d0409ffff or

0x816f070d0409ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0179

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

816f070d-040affff Rebuild completed for Array in system [ComputerSystemElementName].

(Drive 10)

**Explanation:** This message is for the use case when an implementation has detected that an Array Rebuild has Completed.

May also be shown as 816f070d040affff or

0x816f070d040affff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0179

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

816f070d-040bffff Rebuild completed for Array in system [ComputerSystemElementName]. (Drive 11)

**Explanation:** This message is for the use case when an implementation has detected that an Array Rebuild has Completed.

May also be shown as 816f070d040bffff or

0x816f070d040bffff

Severity: Info

#### 816f070d-040cffff • 816f0813-2581ffff

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0179

**SNMP Trap ID:** 

Automatically notify Support: No

User response: No action; information only.

816f070d-040cffff Rebuild completed for Array in system [ComputerSystemElementName]. (Drive 12)

**Explanation:** This message is for the use case when an implementation has detected that an Array Rebuild has Completed.

May also be shown as 816f070d040cffff or

0x816f070d040cffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0179

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

816f070d-040dffff Rebuild completed for Array in system [ComputerSystemElementName]. (Drive 13)

Explanation: This message is for the use case when an implementation has detected that an Array Rebuild has Completed.

May also be shown as 816f070d040dffff or 0x816f070d040dffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0179

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

816f0807-0301ffff [ProcessorElementName] has been Enabled. (CPU 1)

**Explanation:** This message is for the use case when an implementation has detected a Processor has been Enabled.

May also be shown as 816f08070301ffff or 0x816f08070301ffff

Severity: Info

**Alert Category:** System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0060

**SNMP Trap ID:** 

Automatically notify Support: No

User response: No action; information only.

816f0807-0302ffff [ProcessorElementName] has been Enabled. (CPU 2)

**Explanation:** This message is for the use case when an implementation has detected a Processor has been

Enabled.

May also be shown as 816f08070302ffff or

0x816f08070302ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0060

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

816f0807-2584ffff [ProcessorElementName] has been Enabled. (All CPUs)

**Explanation:** This message is for the use case when an implementation has detected a Processor has been Enabled.

May also be shown as 816f08072584ffff or

0x816f08072584ffff Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0060

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only. One of

the CPUs:

816f0813-2581ffff System

[ComputerSystemElementName]has recovered from an Uncorrectable Bus

Error. (DIMMs)

**Explanation:** This message is for the use case when an implementation has detected a that a system has recovered from a Bus Uncorrectable Error.

May also be shown as 816f08132581ffff or 0x816f08132581ffff

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0241

SNMP Trap ID: 50

Automatically notify Support: No

**User response:** No action; information only.

816f0813-2582ffff System

[ComputerSystemElementName]has recovered from an Uncorrectable Bus Error. (PCIs)

**Explanation:** This message is for the use case when an implementation has detected a that a system has recovered from a Bus Uncorrectable Error.

May also be shown as 816f08132582ffff or 0x816f08132582ffff

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0241

SNMP Trap ID: 50

Automatically notify Support: No

**User response:** No action; information only.

816f0813-2584ffff System

[ComputerSystemElementName]has recovered from an Uncorrectable Bus Error. (CPUs)

Explanation: This message is for the use case when an

implementation has detected a that a system has recovered from a Bus Uncorrectable Error.

May also be shown as 816f08132584ffff or 0x816f08132584ffff

**Severity:** Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0241

SNMP Trap ID: 50

Automatically notify Support: No

**User response:** No action; information only.

816f090c-2001ffff [PhysicalMemoryElementName] on Subsystem [MemoryElementName] is no longer Throttled. (DIMM 1)

**Explanation:** This message is for the use case when an implementation has detected Memory is no longer

Throttled.

May also be shown as 816f090c2001ffff or

0x816f090c2001ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0143

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

816f090c-2002ffff [PhysicalMemoryElementName] on Subsystem [MemoryElementName] is no longer Throttled. (DIMM 2)

**Explanation:** This message is for the use case when an implementation has detected Memory is no longer

Throttled.

May also be shown as 816f090c2002ffff or

0x816f090c2002fffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0143

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

816f090c-2003ffff [PhysicalMemoryElementName] on Subsystem [MemoryElementName] is no longer Throttled. (DIMM 3)

**Explanation:** This message is for the use case when an implementation has detected Memory is no longer Throttled.

May also be shown as 816f090c2003ffff or 0x816f090c2003ffff

Severity: Info

**Alert Category:** System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0143

**SNMP Trap ID:** 

#### 816f090c-2004ffff • 816f090c-2009ffff

Automatically notify Support: No

**User response:** No action; information only.

816f090c-2004ffff [PhysicalMemoryElementName] on Subsystem [MemoryElementName] is no longer Throttled. (DIMM 4)

**Explanation:** This message is for the use case when an implementation has detected Memory is no longer

Throttled.

May also be shown as 816f090c2004ffff or

0x816f090c2004ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0143

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

816f090c-2005ffff [PhysicalMemoryElementName] on Subsystem [MemoryElementName] is no longer Throttled. (DIMM 5)

**Explanation:** This message is for the use case when an implementation has detected Memory is no longer Throttled.

May also be shown as 816f090c2005ffff or 0x816f090c2005ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0143

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

816f090c-2006ffff [PhysicalMemoryElementName] on Subsystem [MemoryElementName] is no longer Throttled. (DIMM 6)

**Explanation:** This message is for the use case when an implementation has detected Memory is no longer Throttled.

May also be shown as 816f090c2006ffff or 0x816f090c2006ffff

**Severity:** Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0143

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

816f090c-2007ffff [PhysicalMemoryElementName] on Subsystem [MemoryElementName] is no longer Throttled. (DIMM 7)

**Explanation:** This message is for the use case when an implementation has detected Memory is no longer

Throttled.

May also be shown as 816f090c2007ffff or

0x816f090c2007ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0143

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

816f090c-2008ffff [PhysicalMemoryElementName] on Subsystem [MemoryElementName] is no longer Throttled. (DIMM 8)

**Explanation:** This message is for the use case when an implementation has detected Memory is no longer Throttled.

May also be shown as 816f090c2008ffff or

0x816f090c2008ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0143

**SNMP Trap ID:** 

**Automatically notify Support:** No

**User response:** No action; information only.

816f090c-2009ffff [PhysicalMemoryElementName] on Subsystem [MemoryElementName] is no longer Throttled. (DIMM 9)

**Explanation:** This message is for the use case when an implementation has detected Memory is no longer Throttled.

May also be shown as 816f090c2009ffff or

0x816f090c2009ffff

Severity: Info

#### 816f090c-200affff • 816f090c-200effff

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0143

**SNMP Trap ID:** 

Automatically notify Support: No

User response: No action; information only.

816f090c-200affff [PhysicalMemoryElementName] on Subsystem [MemoryElementName] is no longer Throttled. (DIMM 10)

**Explanation:** This message is for the use case when an implementation has detected Memory is no longer

Throttled.

May also be shown as 816f090c200affff or

0x816f090c200affff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0143

**SNMP Trap ID:** 

Automatically notify Support: No

User response: No action; information only.

816f090c-200bffff [PhysicalMemoryElementName] on Subsystem [MemoryElementName] is no longer Throttled. (DIMM 11)

**Explanation:** This message is for the use case when an implementation has detected Memory is no longer Throttled.

May also be shown as 816f090c200bffff or 0x816f090c200bffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0143

**SNMP Trap ID:** 

**Automatically notify Support:** No

**User response:** No action; information only.

816f090c-200cffff [PhysicalMemoryElementName] on Subsystem [MemoryElementName] is no longer Throttled. (DIMM 12)

**Explanation:** This message is for the use case when an implementation has detected Memory is no longer Throttled.

May also be shown as 816f090c200cffff or

0x816f090c200cfffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0143

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

816f090c-200dffff [PhysicalMemoryElementName] on Subsystem [MemoryElementName] is no longer Throttled. (DIMM 13)

**Explanation:** This message is for the use case when an implementation has detected Memory is no longer

Throttled.

May also be shown as 816f090c200dffff or

0x816f090c200dffff

**Severity:** Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0143

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

816f090c-200effff [PhysicalMemoryElementName] on Subsystem [MemoryElementName] is no longer Throttled. (DIMM 14)

**Explanation:** This message is for the use case when an implementation has detected Memory is no longer Throttled.

May also be shown as 816f090c200effff or 0x816f090c200effff

Severity: Info

**Alert Category:** System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0143

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

816f090c-200fffff [PhysicalMemoryElementName] on Subsystem [MemoryElementName] is no

longer Throttled. (DIMM 15)

**Explanation:** This message is for the use case when an implementation has detected Memory is no longer

Throttled.

May also be shown as 816f090c200fffff or 0x816f090c200fffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0143

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

816f090c-2010ffff [PhysicalMemoryElementName] on Subsystem [MemoryElementName] is no longer Throttled. (DIMM 16)

**Explanation:** This message is for the use case when an implementation has detected Memory is no longer

Throttled.

May also be shown as 816f090c2010ffff or 0x816f090c2010ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0143

**SNMP Trap ID:** 

Automatically notify Support: No

**User response:** No action; information only.

816f0a07-0301ffff The Processor

[ProcessorElementName] is no longer operating in a Degraded State. (CPU 1)

**Explanation:** This message is for the use case when an implementation has detected a Processor is no longer running in the Degraded state.

May also be shown as 816f0a070301ffff or 0x816f0a070301ffff

**Severity:** Info

Alert Category: Warning - CPU

Serviceable: No.

CIM Information: Prefix: PLAT and ID: 0039

SNMP Trap ID: 42

Automatically notify Support: No

**User response:** No action; information only.

816f0a07-0302ffff The Processor

[ProcessorElementName] is no longer operating in a Degraded State. (CPU 2)

**Explanation:** This message is for the use case when an implementation has detected a Processor is no longer

running in the Degraded state.

May also be shown as 816f0a070302ffff or

0x816f0a070302ffff

Severity: Info

Alert Category: Warning - CPU

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0039

SNMP Trap ID: 42

Automatically notify Support: No

**User response:** No action; information only.

816f0a0c-2001ffff An Over-Temperature Condition

has been removed on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

(DIMM 1)

**Explanation:** This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Removed.

May also be shown as 816f0a0c2001ffff or

0x816f0a0c2001ffff Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0147

SNMP Trap ID: 0

Automatically notify Support: No

**User response:** No action; information only.

816f0a0c-2002ffff An Over-Temperature Condition

has been removed on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

(DIMM 2)

**Explanation:** This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Removed.

May also be shown as 816f0a0c2002ffff or

0x816f0a0c2002ffff

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0147

**SNMP Trap ID:** 0

Automatically notify Support: No

**User response:** No action; information only.

816f0a0c-2003ffff An Over-Temperature Condition

has been removed on the

[PhysicalMemoryElementName] on Subsystem [MemoryElementName].

(DIMM 3)

**Explanation:** This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Removed.

May also be shown as 816f0a0c2003ffff or

0x816f0a0c2003ffff

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

**CIM Information: Prefix:** PLAT and **ID:** 0147

**SNMP Trap ID:** 0

Automatically notify Support: No

**User response:** No action; information only.

816f0a0c-2004ffff An Over-Temperature Condition

has been removed on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

(DIMM 4)

**Explanation:** This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Removed.

May also be shown as 816f0a0c2004ffff or 0x816f0a0c2004ffff

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0147

SNMP Trap ID: 0

Automatically notify Support: No

User response: No action; information only.

816f0a0c-2005ffff An Over-Temperature Condition

has been removed on the

[PhysicalMemoryElementName] on Subsystem [MemoryElementName].

(DIMM 5)

**Explanation:** This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Removed.

May also be shown as 816f0a0c2005ffff or

0x816f0a0c2005ffff

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0147

**SNMP Trap ID:** 0

Automatically notify Support: No

**User response:** No action; information only.

816f0a0c-2006ffff An Over-Temperature Condition

has been removed on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

(DIMM 6)

**Explanation:** This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Removed.

May also be shown as 816f0a0c2006ffff or

0x816f0a0c2006ffff

**Severity:** Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0147

SNMP Trap ID: 0

Automatically notify Support: No

**User response:** No action; information only.

816f0a0c-2007ffff An Over-Temperature Condition

has been removed on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

(DIMM 7)

**Explanation:** This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Removed.

May also be shown as 816f0a0c2007ffff or

0x816f0a0c2007ffff

Severity: Info

Alert Category: Critical - Temperature

#### 816f0a0c-2008ffff • 816f0a0c-200cffff

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0147

**SNMP Trap ID:** 0

Automatically notify Support: No

**User response:** No action; information only.

816f0a0c-2008ffff An Over-Temperature Condition

has been removed on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

(DIMM 8)

**Explanation:** This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Removed.

May also be shown as 816f0a0c2008ffff or 0x816f0a0c2008ffff

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0147

SNMP Trap ID: 0

Automatically notify Support: No

**User response:** No action; information only.

816f0a0c-2009ffff An Over-Temperature Condition

has been removed on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

(DIMM 9)

**Explanation:** This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Removed.

May also be shown as 816f0a0c2009ffff or 0x816f0a0c2009ffff

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0147

**SNMP Trap ID:** 0

Automatically notify Support: No

**User response:** No action; information only.

816f0a0c-200affff An Over-Temperature Condition

has been removed on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

(DIMM 10)

**Explanation:** This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Removed.

May also be shown as 816f0a0c200affff or

0x816f0a0c200affff

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0147

**SNMP Trap ID:** 0

Automatically notify Support: No

User response: No action; information only.

816f0a0c-200bffff An Over-Temperature Condition

has been removed on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

(DIMM 11)

**Explanation:** This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Removed.

May also be shown as 816f0a0c200bffff or

0x816f0a0c200bffff **Severity:** Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0147

SNMP Trap ID: 0

**Automatically notify Support:** No

**User response:** No action; information only.

816f0a0c-200cffff An Over-Temperature Condition

has been removed on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

(DIMM 12)

**Explanation:** This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Removed.

May also be shown as 816f0a0c200cffff or

0x816f0a0c200cffff

**Severity:** Info

**Alert Category:** Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0147

SNMP Trap ID: 0

Automatically notify Support: No

**User response:** No action; information only.

816f0a0c-200dffff An Over-Temperature Condition

has been removed on the

[PhysicalMemoryElementName] on Subsystem [MemoryElementName].

(DIMM 13)

**Explanation:** This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Removed.

May also be shown as 816f0a0c200dffff or 0x816f0a0c200dffff

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0147

**SNMP Trap ID:** 0

Automatically notify Support: No

**User response:** No action; information only.

816f0a0c-200effff An Over-Temperature Condition

has been removed on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 14)

**Explanation:** This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Removed.

May also be shown as 816f0a0c200effff or 0x816f0a0c200effff

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0147

**SNMP Trap ID:** 0

Automatically notify Support: No

**User response:** No action; information only.

816f0a0c-200fffff An Over-Temperature Condition

has been removed on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

(DIMM 15)

**Explanation:** This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Removed.

May also be shown as 816f0a0c200fffff or

0x816f0a0c200fffff

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0147

SNMP Trap ID: 0

Automatically notify Support: No

**User response:** No action; information only.

816f0a0c-2010ffff An Over-Temperature Condition

has been removed on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

(DIMM 16)

**Explanation:** This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Removed.

May also be shown as 816f0a0c2010ffff or

0x816f0a0c2010ffff

**Severity:** Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0147

SNMP Trap ID: 0

Automatically notify Support: No

**User response:** No action; information only.

816f0a13-0301ffff System

[ComputerSystemElementName] has recovered from a Fatal Bus Error. (CPU 1

PECI)

**Explanation:** This message is for the use case when an

implementation has detected that a system has

recovered from a Bus Fatal Error.

May also be shown as 816f0a130301ffff or

0x816f0a130301fffff

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0245

SNMP Trap ID: 50

Automatically notify Support: No

**User response:** No action; information only.

#### 816f0a13-0302ffff

816f0a13-0302ffff System

[ComputerSystemElementName] has recovered from a Fatal Bus Error. (CPU 2 PECI)

**Explanation:** This message is for the use case when an

implementation has detected that a system has

recovered from a Bus Fatal Error.

May also be shown as 816f0a130302ffff or 0x816f0a130302fffff

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0245

**SNMP Trap ID:** 50

Automatically notify Support: No

**User response:** No action; information only.

# Appendix B. UEFI/POST error codes

UEFI/POST diagnostic error codes can be generated when the server starts or while the server is running. UEFI/POST codes are logged in the IMM event log in the server.

For each event code, the following fields are displayed:

#### **Event identifier**

An identifier that uniquely identifies an event.

# **Event description**

The logged message string that appears for an event.

# **Explanation**

Additional information to explain why the event occurred.

# Severity

An indication of the level of concern for the condition. The severity is abbreviated in the event log to the first character. The following severities can be displayed.

Table 16. Event severity levels

| Severity      | Description   |
|---------------|---|
| Informational | An informational message is something that was recorded for<br>audit purposes, usually a user action or a change of states that is<br>normal behavior.  |
| Warning       | A warning is not as severe as an error, but if possible, the condition should be corrected before it becomes an error. It might also be a condition that requires additional monitoring or maintenance. |
| Error         | An error typically indicates a failure or critical condition that impairs service or an expected function.  |

# User response

The actions that you should take to resolve the event.

Perform the steps in the order shown until the problem is solved. After you perform all of the actions that are described in this field, if you cannot solve the problem, contact Lenovo Support.

The following is the list of the UEFI/POST error codes and suggested actions to correct the detected problems.

I.11002

[I.11002] A processor mismatch has been detected between one or more processors in the system.

**Explanation:** One or More Mismatched Processors

Detected

Severity: Error

**User response:** Complete the following steps:

- 1. This message could occur with messages about other Processor configuration problems. Resolve those messages first.
- 2. If the problem persists, ensure that matching processors are installed (i.e., matching option part numbers, etc)
- 3. Verify that the Processor's are installed in the correct sockets according to the service information for this product. If not, correct that problem.

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# I.18005 • I.1800A

- Check IBM support site for an applicable service bulletin or firmware update that applies to this Processor error.
- (Trained Service technician only) Replace mismatching processor. Inspect Processor socket and replace the system board first if socket is damaged.

#### I.18005

[I.18005] A discrepancy has been detected in the number of cores reported by one or more processor packages within the system.

Explanation: Processors have mismatched number of

cores

Severity: Error

**User response:** Complete the following steps:

- If this is a newly installed option, ensure that matching Processors are installed in the correct Processor sockets according to the service information for this product.
- 2. Check IBM support site for an applicable service bulletin that applies to this Processor error.
- (Trained Service technician only) Replace Processor. Inspect Processor socket and replace the system board first if socket is damaged.

### I.18006

[I.18006] A mismatch between the maximum allowed QPI link speed has been detected for one or more processor packages.

Explanation: Processors have mismatched QPI Speed

Severity: Error

**User response:** Complete the following steps:

- If this is a newly installed option, ensure that matching Processor CPUs are installed in the correct ProcessorCPU sockets according to the service information for this product
- Check IBM support site for an applicable retain tipservice bulletin or firmware update that applies to this Processor error.
- (Trained Service technician only) Replace Processor. Inspect Processor socket and replace the system board first if socket is damaged.

### I.18007

[I.18007] A power segment mismatch has been detected for one or more processor packages.

Explanation: Processors have mismatched Power

Segments

Severity: Error

**User response:** Complete the following steps:

Processors installed do not have the same power requirements

- 2. Ensure that all Processors have matching power requirements (such as 65, 95, or 130 Watts)
- 3. If power requirements match, check IBM support site for an applicable service bulletin or firmware update that applies to this Processor error.
- (Trained Service technician only) Replace Processor. Inspect Processor socket and replace the system board first if socket is damaged

#### I.18008

[I.18008] A mismatch has been detected between Processors frequency and DDR3 DIMMs frequency.

**Explanation:** Processors have mismatched Internal DDR3 Frequency

Severity: Error

**User response:** Complete the following steps:

- Verify that matching DIMMs are installed in the correct population sequence, according to the service information for this product. Correct any configuration issues found.
- (Trained Service technician only) Replace associated Processor. Inspect Processor socket and replace the system board first if socket is damaged

#### I.18009

[I.18009] A core speed mismatch has been detected for one or more processor packages.

**Explanation:** Processors have mismatched Core Speed

Severity: Error

**User response:** Complete the following steps:

- Verify that matching processors are installed in the correct processor sockets according to the service information for this product. Correct any mismatch issues found.
- 2. Check IBM support site for an applicable service bulletin or firmware update that applies to this Processor error.
- 3. (Trained Service technician only) Replace Processor. Inspect Processor socket and replace the system board first if socket is damaged.

### I.1800A

[I.1800A] A mismatch has been detected between the speed at which a QPI link has trained between two or more processor packages.

**Explanation:** Processors have mismatched Bus Speed

Severity: Error

**User response:** Complete the following steps:

 Verify that the Processor is a valid option that is listed as a Server Proven device for this system. If not, remove the Processor and install a Server Proven one.

- 2. Verify that matching Processors are installed in the correct Processor sockets according to the service information for this product. Correct any mismatch found.
- Check IBM support site for an applicable service bulletin or firmware update that applies to this processor error.
- 4. (Trained Service technician only) Replace the Processor. Inspect Processor socket and replace the system board first if socket is damaged

# I.1800B

[I.1800B] A cache size mismatch has been detected for one or more processor

**Explanation:** Processors have one or more cache levels with mismatched size

Severity: Error

**User response:** Complete the following steps:

- 1. Verify that matching processors are installed in the correct processor sockets according to the service information for this product. Correct any mismatch
- Check IBM support site for an applicable service bulletin or firmware update that applies to this Processor error.
- (Trained Service technician only) Inspect Processor socket and replace the system board first if socket is damaged.

# I.1800C

[I.1800C] A cache type mismatch has been detected for one or more processor packages.

**Explanation:** Processors have one or more cache levels with mismatched type

Severity: Error

**User response:** Complete the following steps:

- Verify that matching Processors are installed in the correct Processor sockets according to the service information for this product. Correct any mismatch
- 2. Check IBM support site for an applicable service bulletin or firmware update that applies to this Processor error.
- (Trained Service technician only) Inspect Processor socket and replace the system board first if socket is damaged.

#### I.1800D

[I.1800D] A cache associativity mismatch has been detected for one or more processor packages.

**Explanation:** Processors have one or more cache levels with mismatched associativity

**Severity:** Error

**User response:** Complete the following steps:

- Verify that matching Processors are installed in the correct Processor sockets according to the service information for this product. Correct any mismatch
- Check IBM support site for an applicable service bulletin or firmware update that applies to this Processor error.
- (Trained Service technician only) Inspect Processor socket and replace the system board first if socket is damaged.

#### I.1800E

[I.1800E] A processor model mismatch has been detected for one or more processor packages.

**Explanation:** Processors have mismatched Model

Number

Severity: Error

**User response:** Complete the following steps:

- 1. Verify that matching Processors are installed in the correct Processor sockets according to the service information for this product. Correct any mismatch found.
- Check IBM support site for an applicable service bulletin or firmware update that applies to this Processor error.
- (Trained Service technician only) Inspect Processor socket and replace the system board first if socket is damaged.

#### I.1800F

[I.1800F] A processor family mismatch has been detected for one or more processor packages.

**Explanation:** Processors have mismatched Family

Severity: Error

**User response:** Complete the following steps:

- 1. Verify that matching Processors are installed in the correct Processor sockets according to the service information for this product. Correct any mismatch
- Check IBM support site for an applicable service bulletin or firmware update that applies to this
- (Trained Service technician only) Inspect Processor socket and replace the system board first if socket is damaged.

#### I.18010

[I.18010] A processor stepping mismatch has been detected for one or more processor packages.

**Explanation:** Processors of the same model have mismatched Stepping ID

**Severity:** Error

# I.2018002 • I.3818002

**User response:** Complete the following steps:

- Verify that matching Processors are installed in the correct Processor sockets according to the service information for this product.
- Check IBM support site for an applicable service bulletin or firmware update that applies to this Processor error.
- (Trained Service technician only) Inspect Processor socket and replace the system board first if socket is damaged.

#### I.2018002

[I.2018002] The device found at Bus % Device % Function % could not be configured due to resource constraints. The Vendor ID for the device is % and the Device ID is %.

Explanation: OUT\_OF\_RESOURCES (PCI Option

ROM)

Severity: Info

**User response:** Complete the following steps:

- If this PCIe device and/or any attached cables were recently installed, moved, serviced or upgraded, reseat adapter and any attached cables.
- Check IBM support site for any applicable service bulletin or UEFI or adapter firmware update that applies to this error. NOTE: It may be necessary to disable unused option ROMs from UEFI F1 setup or ASU or using adapter manufacturer utilities so that adapter firmware can be updated.
- 3. Move card to a different slot. If slot not available or error re-occurs, replace adapter.
- 4. (Trained Service technician only) If adapter was moved to a different slot and error did not re-occur, verify that this is not a system limitation and then replace the system board. Also, if this is not the initial installation and the error persists after adapter replacement, replace system board.

#### I.2018003

[I.2018003] A bad option ROM checksum was detected for the device found at Bus % Device % Function %. The Vendor ID for the device is % and the Device ID is %.

**Explanation:** ROM CHECKSUM ERROR

Severity: Error

**User response:** Complete the following steps:

- 1. If this PCIe device and/or any attached cables were recently installed, moved, serviced or upgraded, reseat adapter and any attached cables.
- 2. Move adapter to a different system slot, if available.
- 3. Check IBM support site for any applicable service bulletin or UEFI or adapter firmware update that applies to this error. NOTE: It may be necessary to

configure slot to Gen1 or to use special utility software so that adapter firmware can be upgraded. Gen1/Gen2 settings can be configured via F1 Setup -> System Settings -> Devices and I/O Ports -> PCIe Gen1/Gen2/Gen3 Speed Selection, or the ASU Utility.

4. Replace adapter.

I.3048005

[I.3048005] UEFI has booted from the backup flash bank.

Explanation: Booting Backup UEFI Image

Severity: Info

**User response:** Complete the following steps:

 Refer to service information for this product section on UEFI Recovery to return system to primary hank

I.3808004

[I.3808004] The IMM System Event log (SEL) is full.

**Explanation:** IPMI System Event Log is Full

**Severity:** Info

**User response:** Complete the following steps:

 Use F1 Setup to access System Event Logs Menu and Choose Clear IMM System Event Log and Restart Server.

I.3818001

[I.3818001] The firmware image capsule signature for the currently booted flash bank is invalid.

**Explanation:** Current Bank CRTM Capsule Update Signature Invalid

Severity: Info

**User response:** Complete the following steps:

- 1. Reboot system. Will come up on backup UEFI image. Reflash the primary UEFI image.
- If error does not persist no additional recovery action is required.
- 3. If error persists, or boot is unsuccessful, (Trained service technician only) Replace the system board.

I.3818002

[I.3818002] The firmware image capsule signature for the non-booted flash bank is invalid.

**Explanation:** Opposite Bank CRTM Capsule Update Signature Invalid

Severity: Info

- Reflash backup UEFI image.
- If error does not persist no additional recovery action is required.

If error persists, or boot is unsuccessful, (Trained service technician only) Replace the system board.

I.3818003 [I.3818003] The CRTM flash driver could not lock the secure flash region.

Explanation: CRTM Could not lock secure flash region

Severity: Info

**User response:** Complete the following steps:

- If system failed to boot successfully, DC cycle system.
- 2. If system boots to F1 setup, the system needs to be turned off. Then, flash UEFI image through IMM web interface and reset bank to primary (if required). If system boots without error, recovery is complete and no additional action is required.
- If system fails to boot, or if flash attempt fails, (Trained service technician only) Replace the system board.

I.58015 [I.58015] Memory spare copy initiated.

**Explanation:** Spare Copy Started

Severity: Info

User response: Complete the following steps:
 No user required for this event. This is for informational purposes only.

I.580A4 [I.580A4] Memory population change detected.

**Explanation:** DIMM Population Change Detected

Severity: Info

**User response:** Complete the following steps:

 If DIMMs have not been added, changed, disabled or re-enabled, check system event log for uncorrected DIMM failures and resolve the failures if found.

I.580A5 [I.580A5] Mirror Fail-over complete.
DIMM number % has failed over to to

the mirrored copy.

**Explanation:** DIMM Mirror Fail-over Detected

Severity: Info

**User response:** Complete the following steps:

 Check the system-event log for uncorrected DIMM failures and replace those DIMMs.

I.580A6 [I.580A6] Memory spare copy has completed successfully.

Consum Consum Consum la ta

**Explanation:** Spare Copy Complete

Severity: Info

**User response:** Complete the following steps:

 Check system log for related DIMM failures and replace those DIMMs.

S.1100B [S.1100B] CATERR(IERR) has asserted on processor %.

Explanation: Processor CATERR(IERR) has asserted

Severity: Error

**User response:** Complete the following steps:

- Check IBM support site for an applicable service bulletin or firmware update that applies to this Processor error.
- 2. (Trained Service technician only) Replace the Processor. Inspect Processor socket and replace the system board first if socket is damaged.

S.1100C [S.1100C] An uncorrectable error has been detected on processor %.

**Explanation:** Uncorrectable processor error detected

Severity: Error

**User response:** Complete the following steps:

- Check IBM support site for an applicable service bulletin or firmware update that applies to this error.
- 2. Reboot system.
- 3. (Trained Service technician only) Replace the Processor. Inspect Processor socket and replace the system board first if socket is damaged.

S.2011001 [S.2011001] An Uncorrected PCIe Error has Occurred at Bus % Device % Function %. The Vendor ID for the device is % and the Device ID is %.

Explanation: PCI SERR Detected

**Severity:** Error

- If this node and/or any attached cables were recently installed, moved, serviced or upgraded, a. Reseat Adapter and any attached cables. b. Reload the latest Device Driver c. If device is not recognized, reconfiguring slot to Gen1 or Gen2 may be required. Gen1/Gen2 settings can be configured via F1 Setup -> System Settings -> Devices and I/O Ports -> PCIe Gen1/Gen2/Gen3 Speed Selection, or the ASU Utility.
- Check IBM support site for an applicable device driver, firmware update, revision of service information for this product or other information that applies to this error. Load new device driver and any required firmware updates.

# S.2018001 • S.3050007

- If problem persists, then remove Adapter Card. If system reboots successfully without the adapter, replace that card.
- (Trained Service technician only) Replace the processor.
- (Trained Service technician only) Replace the system board.

#### S.2018001

[S.2018001] An Uncorrected PCIe Error has Occurred at Bus % Device % Function %. The Vendor ID for the device is % and the Device ID is %.

Explanation: PCIe Uncorrected Error Detected

Severity: Error

**User response:** Complete the following steps:

- If this node and/or any attached cables were recently installed, moved, serviced or upgraded, a. Reseat Adapter and any attached cables. b. Reload the latest Device Driver c. If device is not recognized, reconfiguring slot to Gen1 or Gen2 may be required. Gen1/Gen2 settings can be configured via F1 Setup -> System Settings -> Devices and I/O Ports -> PCIe Gen1/Gen2/Gen3 Speed Selection, or the ASU Utility.
- Check IBM support site for an applicable device driver, firmware update, version of service information for this product or other information that applies to this error. Load new device driver and any required firmware updates.
- 3. If problem persists, then remove Adapter Card. If system reboots successfully without the adapter, replace that card.
- 4. Trained Service technician only) Replace the processor.
- 5. (Trained Service technician only) Replace the system board.

#### S.3020007

[S.3020007] A firmware fault has been detected in the UEFI image.

**Explanation:** Internal UEFI Firmware Fault Detected, System halted

Severity: Error

**User response:** Complete the following steps:

- Check IBM support site for an applicable service bulletin or firmware update that applies to this error.
- 2. Reflash UEFI image.
- 3. (Trained service technician only) Replace the system board.

S.3028002

[S.3028002] Boot permission timeout detected.

**Explanation:** Boot Permission Negotiation Timeout

**Severity:** Error

**User response:** Complete the following steps:

- Check IMM logs for communication errors and resolve.
- 2. Reseat system
- If problem persists escalate to the next level of support

#### S.3030007

[S.3030007] A firmware fault has been detected in the UEFI image.

**Explanation:** Internal UEFI Firmware Fault Detected, System halted

Severity: Error

**User response:** Complete the following steps:

- Check IBM support site for an applicable service bulletin or firmware update that applies to this error.
- 2. Reflash UEFI image.
- (Trained service technician only) Replace the system board.

# S.3040007

[S.3040007] A firmware fault has been detected in the UEFI image.

**Explanation:** Internal UEFI Firmware Fault Detected, System halted

Severity: Error

**User response:** Complete the following steps:

- Check IBM support site for an applicable service bulletin or firmware update that applies to this error.
- 2. Reflash UEFI image.
- 3. (Trained service technician only) Replace the system board.

#### S.3050007

[S.3050007] A firmware fault has been detected in the UEFI image.

**Explanation:** Internal UEFI Firmware Fault Detected, System halted

Severity: Error

- Check IBM support site for an applicable service bulletin or firmware update that applies to this error.
- 2. Reflash UEFI image.
- (Trained service technician only) Replace the system board.

S.3058004

[S.3058004] A Three Strike boot failure has occurred. The system has booted with default UEFI settings.

**Explanation:** POST failure has occurred! System booted with default settings.

Severity: Error

**User response:** Complete the following steps:

- 1. This event resets UEFI to the default settings for the next boot. If successful, user is forced into F1 setup. Original UEFI settings are still present.
- 2. If User did not intentionally trigger the reboots, check logs for probable cause.
- 3. Undo recent system changes (settings or devices added). If not recent system changes, remove all options then remove CMOS battery for 30 seconds to clear CMOS contents. Verify that the system boots. Then, re-install options one at a time to locate the problem.
- Check IBM support site for an applicable service bulletin or firmware update that applies to this error.
- 5. Reflash UEFI firmware.
- 6. Remove and re-install CMOS battery for 30 seconds to clear CMOS contents
- (Trained service technician only) Replace the system board.

# S.3060007 [S.3060007] A firmware fault has been detected in the UEFI image.

**Explanation:** Internal UEFI Firmware Fault Detected, System halted

Severity: Error

**User response:** Complete the following steps:

- Check IBM support site for an applicable service bulletin or firmware update that applies to this error.
- 2. Reflash UEFI image.
- 3. (Trained service technician only) Replace the system board.

# S.3070007 [S.3070007] A firmware fault has been detected in the UEFI image.

**Explanation:** Internal UEFI Firmware Fault Detected, System halted

Severity: Error

**User response:** Complete the following steps:

- Check IBM support site for an applicable service bulletin or firmware update that applies to this error.
- 2. Reflash UEFI image.

3. (Trained service technician only) Replace the system board.

#### S.3108007

[S.3108007] The default system settings have been restored.

Explanation: System Configuration Restored to

Defaults

Severity: Error

**User response:** Complete the following steps:

 Check IBM support site for an applicable service bulletin or firmware update that applies to this error.

#### S.3818004

[S.3818004] The CRTM flash driver could not successfully flash the staging area. A failure occurred.

**Explanation:** CRTM Update Failed

Severity: Error

**User response:** Complete the following steps:

- Continue booting sytem. If system does not reset, manually reset the system.
- 2. If the error is not reported on the subsequent boot, no additional recovery action is required.
- If the error persists, continue booting system and reflash UEFI image.
- 4. (Trained service technician only) Replace the system board.

### S.3818007

[S.3818007] The firmware image capsules for both flash banks could not be verified.

**Explanation:** CRTM image capsule could not be

verified

Severity: Error

- If system failed to boot successfully, DC cycle system.
- If system boots to F1 setup, the system needs to be turned off. Then, flash UEFI image through IMM web interface and reset bank to primary (if required). If system boots without error, recovery is complete and no additional action is required.
- If system fails to boot, or if flash attempt fails, (Trained service technician only) Replace the system board.

S.51003

[S.51003] An uncorrectable memory error was detected in DIMM slot % on rank %. [S.51003] An uncorrectable memory error was detected on processor % channel %. The failing DIMM within the channel could not be determined. [S.51003] An uncorrectable memory error has been detected during POST.

**Explanation:** Fatal Memory Error Occurred

**Severity:** Error

User response: Complete the following steps:

- If the node has recently been installed, moved, serviced, or upgraded, verify that the DIMM is properly seated and visually verify that there is no foreign material in any DIMM connector on that memory channel. If either of these conditions is found, correct and retry with the same DIMM. (Note: Event Log may contain a recent 00580A4 event denoting detected change in DIMM population that could be related to this problem.)
- If no problem is observed on the DIMM connectors or the problem persists, replace the DIMM identified by LightPath and/or event log entry.
- If problem re-occurs on the same DIMM connector, replace the other DIMMs on the same memory channel.
- 4. Check IBM support site for an applicable service bulletin or firmware update that applies to this memory error.
- 5. (Trained Service technician only) If problem re-occurs on the same DIMM connector, inspect connector for damage. If found, replace system board.
- 6. (Trained Service technician only) Replace the Processor. Inspect Processor socket and replace the system board first if socket is damaged.

S.51006

[S.51006] A memory mismatch has been detected. Please verify that the memory configuration is valid.

**Explanation:** One or More Mismatched DIMMs

Detected

Severity: Error

User response: Complete the following steps:

- Could follow an uncorrectable memory error or failed memory test. Check log and service that event first. DIMMs disabled by other errors or actions could cause this event.
- Verify that the DIMMs are installed in the correct population sequence, according to the service information for this product.
- 3. Disable memory mirroring and sparing. If this action eliminates the mismatch, check IBM Support site for information related to this problem.

- 4. Reflash UEFI firmware.
- 5. Replace DIMM
- 6. (Trained Service technician only) Replace Processor.

S.51009

[S.51009] No system memory has been detected.

**Explanation:** No Memory Detected

Severity: Error

**User response:** Complete the following steps:

- Make sure that one or more DIMMs are installed in the server.
- If no memory fault is recorded in the logs and no DIMM connector error LEDs are lit, verify that all DIMM connectors are enabled using the Setup utility or the Advanced Settings Utility (ASU).
- 3. Re-Install all DIMMs verifying the correct population sequence, according to the service information for this product.
- (Trained service technician only) Replace the processor.
- 5. (Trained service technician only) Replace the system board.

S.58008

[S.58008] A DIMM has failed the POST memory test.

**Explanation:** DIMM Failed Memory Test

Severity: Error

- You must AC-cycle the system to re-enable affected DIMM connector or re-enable manually using F1 setup
- 2. If the node has been recently installed, serviced, moved, or upgraded, check to ensure that DIMMs are firmly seated and that no foreign material can be seen in the DIMM connector. If either condition is observed, correct and retry with the same DIMM. (Note: Event Log may contain a recent 00580A4 event denoting detected change in DIMM population that could be related to this problem.)
- 3. If problem persists, replace the DIMM identified by LightPath and/or event log entry.
- 4. If problem re-occurs on the same DIMM connector, swap the other DIMMs on the same memory channel across channels one at a time to a different memory channel or Processor. (check service information for this product/Install guide for population requirements for sparing/paring modes). If problem follows a moved DIMM to a different memory channel, replace that DIMM.
- Check IBM support site for an applicable service bulletin or firmware update that applies to this memory error.

- (Trained service technician only) If problem stays with the original DIMM connector, re-inspect DIMM connector for foreign material and remove, if found. If connector is damaged, replace system board.
- 7. (Trained service technician only) Remove affected Processor and inspect Processor socket pins for damaged or mis-aligned pins. If damage is found, or this is an upgrade Processor, replace system board. If there are multiple Processor's, swap Processor's to move affected Procesor to another Processor socket and retry. If problem follows the affected Processor (or there is only one Processor), replace the affected Processor.
- 8. (Trained Service technician only) Replace the system board.

#### S.68005

[S.68005] An error has been detected by the the IIO core logic on Bus %. The Global Fatal Error Status register contains %. The Global Non-Fatal Error Status register contains %. Please check error logs for the presence of additional downstream device error data.

**Explanation:** Critical IOH-PCI Error

Severity: Error

**User response:** Complete the following steps:

- Check log for a separate error for an associated PCIe device and service that error.
- 2. Check IBM support site for an applicable service bulletin or firmware update for the system or adapter that applies to this error.
- (Trained Service technician only) Replace the system board.

# S.680B8

[S.680B8] Internal QPI Link Failure Detected.

**Explanation:** Internal QPI Link Failure Detected

Severity: Error

**User response:** Complete the following steps:

- Check IBM support site for an applicable service bulletin or firmware update that applies to this error.
- Inspect processor socket for foreign debris or damage. If debris is found remove debris.
- 3. If error recurs, or socket damage is found, replace the system board (Trained Service technician only).
- 4. (Trained Service Technician Only) Replace the processor.

S.680B9

[S.680B9] External QPI Link Failure Detected.

**Explanation:** External QPI Link Failure Detected

**Severity:** Error

**User response:** Complete the following steps:

- Check IBM support site for an applicable service bulletin or firmware update that applies to this error.
- Inspect processor socket for foreign debris or damage. If debris is found remove debris.
- 3. If error recurs, or socket damage is found, replace the system board (Trained Service technician only) .

# W.11004

[W.11004] A processor within the system has failed the BIST.

**Explanation:** Processor Self Test Failure Detected

Severity: Error

**User response:** Complete the following steps:

- 1. If the Processor or firmware was just updated, check IBM support site for an applicable service bulletin or firmware update that applies to this Processor error.
- 2. (Trained service technician only) If there are multiple Processor's, swap Processor's to move affected Processor to another Processor socket and retry. If problem follows the affected Processor, or this is a single Processor system, replace the Processor. Inspect Processor socket on each Processor removal and replace system board first if damaged or mis-aligned pins are found.

#### W.3048006

[W.3048006] UEFI has booted from the backup flash bank due to an Automatic Boot Recovery (ABR) event.

**Explanation:** Automated Boot Recovery, Booting

Backup UEFI Image

Severity: Warning

- Check IBM support site for an applicable service bulletin or firmware update that applies to this error.
- Reflash Primary UEFI image. Refer to UEFI Recovery section of service information for this product.
- 3. (Trained service technician only) Replace the system board.

W.305000A [W.305000A] An invalid date and time have been detected.

**Explanation:** RTC Date and Time Incorrect

Severity: Warning

**User response:** Complete the following steps:

- 1. Check IMM/chassis event log. This event should immediately precede 0068002 error. Service that event or any other battery related errors.
- 2. Use F1 Setup to reset date and time. If problem returns after a system reset, replace CMOS battery.
- 3. If problem persists then check IBM support site for an applicable service bulletin or firmware update that applies to this error.
- 4. Trained Service technician only) Replace the system board.

#### [W.3058009] DRIVER HEALTH W.3058009 PROTOCOL: Missing Configuration. Requires Change Settings From F1.

**Explanation:** DRIVER HEALTH PROTOCOL: Missing Configuration. Requires Change Settings From F1

Severity: Warning

**User response:** Complete the following steps:

- 1. Go to System Settings > Settings > Driver Health Status List and find a driver/controller reporting Configuration Required status.
- 2. Search for the driver menu from System Settings and change settings appropriately.
- 3. Save settings and restart system.

#### W.305800A [W.305800A] DRIVER HEALTH PROTOCOL: Reports 'Failed' Status Controller.

**Explanation:** DRIVER HEALTH PROTOCOL: Reports

'Failed' Status Controller

Severity: Warning

**User response:** Complete the following steps:

- 1. Reboot the system.
- 2. If problem persists, switch to backup UEFI or reflash current UEFI image.
- (Trained Service Technician Only) Replace system board.

#### W.305800B [W.305800B] DRIVER HEALTH PROTOCOL: Reports 'Reboot' Required Controller.

**Explanation:** DRIVER HEALTH PROTOCOL: Reports

'Reboot' Required Controller

Severity: Warning

**User response:** Complete the following steps:

- 1. No action required system will reboot at the end of POST.
- 2. If problem persists, switch to backup UEFI or reflash current UEFI image.
- (Trained Service Technician Only) Replace system board.

#### W.305800C [W.305800C] DRIVER HEALTH PROTOCOL: Reports 'System Shutdown' Required Controller.

**Explanation:** DRIVER HEALTH PROTOCOL: Reports 'System Shutdown' Required Controller

Severity: Warning

**User response:** Complete the following steps:

- 1. Reboot the system.
- 2. If problem persists, switch to backup UEFI or reflash current UEFI image.
- (Trained Service Technician Only) Replace system board.

#### W.305800D [W.305800D] DRIVER HEALTH **PROTOCOL: Disconnect Controller** Failed. Requires 'Reboot'.

**Explanation:** DRIVER HEALTH PROTOCOL: Disconnect Controller Failed. Requires 'Reboot'

Severity: Warning

**User response:** Complete the following steps:

- 1. Reboot the system to reconnect the controller.
- 2. If problem persists, switch to backup UEFI or reflash current UEFI image.
- (Trained Service Technician Only) Replace system board.

#### W.305800E [W.305800E] DRIVER HEALTH PROTOCOL: Reports Invalid Health Status Driver.

**Explanation:** DRIVER HEALTH PROTOCOL: Reports Invalid Health Status Driver

Severity: Warning

**User response:** Complete the following steps:

- Reboot the system.
- If problem persists, switch to backup UEFI or reflash current UEFI image.
- (Trained Service Technician Only) Replace system board.

W.3808000 [W.3808000] An IMM communication failure has occurred.

**Explanation:** IMM Communication Failure

Severity: Warning

User response: Complete the following steps:

- 1. Reset IMM.
- 2. Remove and re-install power from the system. Then reboot the entire system.
- Check IBM support site for an applicable service bulletin or firmware update that applies to this error.
- 4. Reflash UEFI Firmware.

(Trained service technician only) Replace the system board.

# W.3808002 [W.3808002] An error occurred while saving UEFI settings to the IMM.

**Explanation:** Error Updating System Configuration to IMM

Severity: Warning

**User response:** Complete the following steps:

- 1. Use F1 Setup, Verify Settings and Save Settings to recover settings.
- 2. Reset IMM.
- 3. Remove and re-install power from the system. Then reboot the entire system.
- Check IBM support site for an applicable service bulletin or firmware update that applies to this error.
- 5. Reflash IMM Firmware.
- 6. Remove and re-install CMOS battery for 30 seconds to clear CMOS contents.
- 7. (Trained Service technician only) Replace the system board.

# W.3808003 .[W.3808003] Unable to retrieve the system configuration from the IMM.

**Explanation:** Error Retrieving System Configuration from IMM

Severity: Warning

**User response:** Complete the following steps:

- 1. Use F1 Setup, Verify Settings and Save Settings to recover settings.
- 2. Reset IMM.
- 3. Remove and re-install power from the system. Then reboot the entire system.
- Check IBM support site for an applicable service bulletin or firmware update that applies to this error.
- 5. Reflash IMM Firmware.
- 6. Remove and re-install CMOS battery for 30 seconds to clear CMOS contents.
- (Trained Service technician only) Replace the system board.

W.3818005 [W.3818005] The CRTM flash driver

could not successfully flash the staging area. The update was aborted

**Explanation:** CRTM Update Aborted

Severity: Warning

**User response:** Complete the following steps:

- Continue booting system. If system does not reset, manually reset the system.
- 2. If the error is not reported on the subsequent boot, no additional recovery action is required.
- If the event persists, continue booting system and reflash UEFI image.
- 4. (Trained service technician only) Replace the system board.

# W.381800D [W.381800D] TPM physical presence is in asserted state

**Explanation:** TPM physical presence is in asserted

Severity: Warning

**User response:** Complete the following steps:

- 1. Complete any administrative tasks requiring the TPM physical presence switch to be in the "ON" position..
- 2. Restore the physical presence switch to the "OFF" position and reboot the system.
- 3. (Trained service technician only) Replace the system board.

# W.3938002 [W.3938002] A boot configuration error has been detected.

**Explanation:** Boot Configuration Error

Severity: Warning

**User response:** Complete the following steps:

- F1 Setup -> Save Settings
- 2. Retry OOB config update

# W.50001 [W.50001] A DIMM has been disabled due to an error detected during POST.

**Explanation:** DIMM Disabled

Severity: Info

- 1. If the DIMM was disabled because of a memory fault, follow the procedure for that event.
- 2. If no memory fault is recorded in the logs and no DIMM connector error LEDs are lit, re-enable the DIMM through the Setup utility or the Advanced Settings Utility (ASU).
- 3. If problem persists, Power cycle the node.

# W.58001 • W.68002

- 4. Reset IMM to default settings.
- 5. Reset UEFI to default settings.
- 6. Reflash IMM and UEFI firmware.
- (Trained Service technician only) Replace system board.

#### W.58001

[W.58001] The PFA Threshold limit (correctable error logging limit) has been exceeded on DIMM number % at address %. MC5 Status contains % and MC5 Misc contains %.

**Explanation:** DIMM PFA Threshold Exceeded

Severity: Error

**User response:** Complete the following steps:

- If the node has recently been installed, moved, serviced, or upgraded, verify that the DIMM is properly seated and visually verify that there is no foreign material in any DIMM connector on that memory channel. If either of these conditions is found, correct and retry with the same DIMM. (Note: Event Log may contain a recent 00580A4 event denoting detected change in DIMM population that could be related to this problem.)
- 2. Check IBM support site for an applicable firmware update that applies to this memory error. The release notes will list the known problems the update addresses.
- 3. If the previous steps do not resolve the problem, at the next maintenance opportunity, replace the affected DIMM (as indicated by LightPath and/or failure log entry).
- 4. If PFA re-occurs on the same DIMM connector, swap the other DIMMs on the same memory channel one at a time to a different memory channel or Processor. (check service information for this product/Install guide for population requirements for sparing/paring modes). If PFA follows a moved DIMM to any DIMM connector on the different memory channel, replace the moved DIMM.
- 5. Check IBM support site for an applicable Service Bulletins (Service bulletins) that applies to this memory error. (Link to IBM support service bulletins)
- (Trained service technician only) If problem continues to re-occur on the same DIMM connector, inspect DIMM connector for foreign material and remove, if found. If connector is damaged, replace system board.
- (Trained service technician only) Remove affected Processor and inspect Processor socket pins for damaged or mis-aligned pins. If damage is found or Processor is an upgrade part, replace system board.
- 8. (Trained Service technician only) Replace affected processor.
- 9. (Trained Service technician only) Replace system board.

W.58007

[W.58007] Invalid memory configuration (Unsupported DIMM Population) detected. Please verify memory configuration is valid.

**Explanation:** Unsupported DIMM Population

**Severity:** Error

**User response:** Complete the following steps:

- Could follow an uncorrectable memory error or failed memory test. Check log and service that event first. DIMMs disabled by other errors or actions could cause this event.
- 2. Ensure that the DIMM connectors are populated according to the guidelines in the service information for this product.

#### W.580A1

[W.580A1] Invalid memory configuration for Mirror Mode. Please correct memory configuration.

**Explanation:** Unsupported DIMM Population for

Mirror Mode

Severity: Error

**User response:** Complete the following steps:

- If a DIMM connector error LED is lit, resolve the failure.
- 2. Make sure that the DIMM connectors are correctly populated for mirroring mode, according to the service information for this product.

## W.580A2

[W.580A2] Invalid memory configuration for Sparing Mode. Please correct memory configuration.

**Explanation:** Unsupported DIMM Population for

Spare Mode

Severity: Error

**User response:** Complete the following steps:

1. Make sure that the DIMM connectors are correctly populated for sparing mode, according to the service information for this product.

W.68002

[W.68002] A CMOS battery error has been detected

**Explanation:** CMOS Battery Fault

Severity: Error

- If the system was recently Installed, Moved, or Serviced, makesure the batter is properly seated.
- Check IBM support site for an applicable service bulletin or firmware update that applies to this error
- 3. Replace CMOS Battery

4. (Trained Service technician only) Replace the system board.

# Appendix C. DSA diagnostic test results

After running the DSA diagnostic tests, use this information to resolve any issues that were found.

# DSA Broadcom network test results

The following messages can result when you run the Broadcom network test.

405-000-000 BRCM:TestControlRegisters Test Passed

**Explanation:** The test passed.

Severity: Event
Serviceable: No
Recoverable: No

Automatically notify Support: No

Related Links:

IBM Support WebsiteLatest level of DSA

· Latest level of BMC/IMM

405-001-000 BRCM:TestMIIRegisters Test Passed

**Explanation:** The test passed.

Severity: Event
Serviceable: No
Recoverable: No

Automatically notify Support: No

**Related Links:** 

IBM Support WebsiteLatest level of DSA

· Latest level of BMC/IMM

405-002-000 BRCM:TestEEPROM Test Passed

**Explanation:** The test passed.

Severity: Event
Serviceable: No
Recoverable: No

Automatically notify Support: No

Related Links:

IBM Support Website Latest level of DSA

Latest level of BMC/IMM

 ${\bf 405\text{-}003\text{-}000} \quad BRCM: TestInternal Memory\ Test\ Passed$ 

**Explanation:** The test passed.

Severity: Event
Serviceable: No
Recoverable: No

Automatically notify Support: No

**Related Links:** 

IBM Support Website

Latest level of DSA

Latest level of BMC/IMM

405-004-000 BRCM:TestInterrupt Test Passed

**Explanation:** The test passed.

Severity: Event
Serviceable: No
Recoverable: No

Automatically notify Support: No

**Related Links:** 

• IBM Support Website

· Latest level of DSA

Latest level of BMC/IMM

405-005-000 BRCM:TestLoopbackMAC Test Passed

**Explanation:** The test passed.

Severity: Event
Serviceable: No
Recoverable: No

Automatically notify Support: No

**Related Links:** 

• IBM Support Website

Latest level of DSA

· Latest level of BMC/IMM

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# 405-006-000 • 405-805-000

405-006-000 BRCM:TestLoopbackPhysical Test

**Passed** 

**Explanation:** The test passed.

Severity: Event
Serviceable: No
Recoverable: No

Automatically notify Support: No

**Related Links:** 

IBM Support Website Latest level of DSA

· Latest level of BMC/IMM

405-007-000 BRCM:TestLEDs Test Passed

**Explanation:** The test passed.

Severity: Event
Serviceable: No
Recoverable: No

Automatically notify Support: No

**Related Links:** 

IBM Support Website Latest level of DSA

· Latest level of BMC/IMM

405-800-000 BRCM:TestControlRegisters Test

**Aborted** 

**Explanation:** The control registers test was canceled.

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

Related Links:

IBM Support Website Latest level of DSA

· Latest level of BMC/IMM

405-801-000 BRCM:TestMIIRegisters Test Aborted

**Explanation:** The MII register test was canceled.

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

**Related Links:** 

• IBM Support Website

· Latest level of DSA

Latest level of BMC/IMM

405-802-000 BRCM:TestEEPROM Test Aborted

**Explanation:** The EEPROM test was canceled.

**Severity:** Warning **Serviceable:** No **Recoverable:** No

Automatically notify Support: No

**Related Links:** 

• IBM Support Website

Latest level of DSA

· Latest level of BMC/IMM

405-803-000 BRCM:TestInternalMemory Test

Aborted

**Explanation:** The internal memory test was canceled.

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

**Related Links:** 

IBM Support Website

· Latest level of DSA

Latest level of BMC/IMM

405-804-000 BRCM:TestInterrupt Test Aborted

**Explanation:** The interrupt test was canceled.

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

**Related Links:** 

• IBM Support Website

· Latest level of DSA

Latest level of BMC/IMM

405-805-000 BRCM:TestLoopbackMAC Test Aborted

Explanation: Loopback testing at the MAC layer was

canceled.

**Severity:** Warning **Serviceable:** No **Recoverable:** No

Automatically notify Support: No

#### Related Links:

- IBM Support Website
- · Latest level of DSA
- · Latest level of BMC/IMM

# 405-806-000 BRCM:TestLoopbackPhysical Test Aborted

**Explanation:** Loopback testing at the physical layer

was canceled.

Severity: Warning
Serviceable: No
Recoverable: No

Automatically notify Support: No

#### **Related Links:**

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

#### 405-807-000 BRCM:TestLEDs Test Aborted

**Explanation:** Verification of status LEDs was canceled.

Severity: Warning
Serviceable: No
Recoverable: No

Automatically notify Support: No

#### **Related Links:**

- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

#### 405-900-000 BRCM:TestControlRegisters Test Failed

Explanation: A failure was detected while testing

internal MAC registers

Severity: Error Serviceable: Yes Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

- Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
- 2. Rerun the test.
- If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

# **Related Links:**

- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

# 405-901-000 BRCM:TestMIIRegisters Test Failed

**Explanation:** A failure was detected while testing

internal PHY registers.

Severity: Error
Serviceable: Yes
Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- 1. Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
- 2. Rerun the test.
- 3. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

#### **Related Links:**

- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

#### 405-902-000 BRCM:TestEPROM Test Failed

**Explanation:** A failure was detected while testing

non-volatile RAM. **Severity:** Error

**Serviceable:** Yes **Recoverable:** No

Automatically notify Support: No

**User response:** Complete the following steps:

- 1. Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
- 2. Rerun the test.
- 3. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

### **Related Links:**

- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

# 405-903-000 BRCM:TestInternalMemory Test Failed

Explanation: A failure was detected while testing

Severity: Error
Serviceable: Yes
Recoverable: No

internal memory.

Automatically notify Support: No

User response: Complete the following steps:

- Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
- 2. Rerun the test.
- 3. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

#### **Related Links:**

- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

#### 405-904-000 BRCM:TestInterrupt Test Failed

Explanation: A failure was detected while testing

interrupts.

Severity: Error Serviceable: Yes Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
- 2. Rerun the test.
- 3. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

### Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

### 405-905-000 BRCM:TestLoopbackMAC Test Failed

**Explanation:** BRCM:TestLoopbackMAC Test Failed.

Severity: Error Serviceable: Yes Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
- 2. Rerun the test.
- 3. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

#### **Related Links:**

- IBM Support Website
- Latest level of DSA
- · Latest level of BMC/IMM

# 405-906-000 BRCM:TestLoopbackPhysical Test Failed

Explanation: A failure was detected during the

loopback test at the physical layer.

Severity: Error Serviceable: Yes Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
- 2. Rerun the test.
- 3. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

# **Related Links:**

- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

# 405-907-000 BRCM:TestLEDs Test Failed

**Explanation:** A failure was detected while verifying operation of the status LEDs.

Severity: Error
Serviceable: Yes
Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

 Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.

- 2. Rerun the test.
- If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

#### **Related Links:**

- IBM Support Website
- · Latest level of DSA
- · Latest level of BMC/IMM

# **DSA Brocade test results**

The following messages can result when you run the Brocade test.

218-000-000 Brocade:MemoryTest Passed

**Explanation:** The test passed.

Severity: Event
Serviceable: No
Recoverable: No

Automatically notify Support: No

**Related Links:** 

IBM Support Website

· Latest level of DSA

· Latest level of BMC/IMM

218-001-000 Brocade:ExternalLoopbackTest Passed

**Explanation:** The test passed.

Severity: Event
Serviceable: No
Recoverable: No

Automatically notify Support: No

Related Links:

• IBM Support Website

Latest level of DSA

Latest level of BMC/IMM

218-002-000 Brocade:SerdesLoopbackTest Passed

**Explanation:** The test passed.

Severity: Event
Serviceable: No
Recoverable: No

Automatically notify Support: No

**Related Links:** 

IBM Support Website

· Latest level of DSA

Latest level of BMC/IMM

218-003-000 Brocade:PCILoopbackTest Passed

**Explanation:** The test passed.

Severity: Event
Serviceable: No
Recoverable: No

Automatically notify Support: No

**Related Links:** 

IBM Support WebsiteLatest level of DSA

Latest level of BMC/IMM

 ${\bf 218\text{-}004\text{-}000} \quad Brocade: External Eth Loop back Test$ 

**Passed** 

**Explanation:** The test passed.

Severity: Event
Serviceable: No
Recoverable: No

Automatically notify Support: No

**Related Links:** 

IBM Support Website

Latest level of DSA

Latest level of BMC/IMM

218-005-000 Brocade:SerdesEthLoopbackTest Passed

**Explanation:** The test passed.

Severity: Event
Serviceable: No
Recoverable: No

Automatically notify Support: No

Related Links:

• IBM Support Website

· Latest level of DSA

Latest level of BMC/IMM

218-006-000 Brocade:InternalLoopbackTest Passed

**Explanation:** The test passed.

**Severity:** Event

# 218-800-000 • 218-806-000

**Serviceable:** No **Recoverable:** No

Automatically notify Support: No

**Related Links:** 

IBM Support Website Latest level of DSA

· Latest level of BMC/IMM

218-800-000 Brocade:MemoryTest Aborted

**Explanation:** The test was canceled.

Severity: Warning
Serviceable: No
Recoverable: No

Automatically notify Support: No

**Related Links:** 

IBM Support Website Latest level of DSA

· Latest level of BMC/IMM

218-801-000 Brocade:ExternalLoopbackTest Aborted

**Explanation:** The test was canceled.

Severity: Warning
Serviceable: No
Recoverable: No

Automatically notify Support: No

Related Links:

IBM Support Website Latest level of DSA

Latest level of BMC/IMM

218-802-000 Brocade:SerdesLoopbackTest Aborted

**Explanation:** The test was canceled.

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

**Related Links:** 

IBM Support Website Latest level of DSA

Latest level of BMC/IMM

218-803-000 Brocade:PCILoopbackTest Aborted

**Explanation:** The test was canceled.

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

**Related Links:** 

IBM Support Website Latest level of DSA

Latest level of BMC/IMM

218-804-000 Brocade:ExternalEthLoopbackTest

Aborted

**Explanation:** The test was canceled.

Severity: Warning
Serviceable: No
Recoverable: No

Automatically notify Support: No

**Related Links:** 

• IBM Support Website

Latest level of DSA

Latest level of BMC/IMM

 ${\bf 218\text{-}805\text{-}000} \quad Brocade: Serdes Eth Loop back Test\ Aborted$ 

**Explanation:** The test was canceled.

Severity: Warning
Serviceable: No
Recoverable: No

Automatically notify Support: No

**Related Links:** 

• IBM Support Website

· Latest level of DSA

Latest level of BMC/IMM

218-806-000 Brocade:InternalLoopbackTest Aborted

**Explanation:** The test was canceled.

Severity: Warning
Serviceable: No
Recoverable: No

Automatically notify Support: No

Related Links:

IBM Support Website

Latest level of DSA

· Latest level of BMC/IMM

# 218-900-000 Brocade:MemoryTest Failed

**Explanation:** A failure was detected while testing the adapter memory.

Severity: Error
Serviceable: Yes
Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Rerun the test.

2. Verify whether the firmware is at proper level.

3. Rerun the test.

4. If the problem remains, contact your IBM technical-support representative.

#### **Related Links:**

IBM Support Website

· Latest level of DSA

· Latest level of BMC/IMM

#### 218-901-000 Brocade:ExternalLoopbackTest Failed

Explanation: A failure was detected during the

Loopback test.

Severity: Error Serviceable: Yes Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

1. Check cable connections.

2. Rerun the test.

3. Verify whether the firmware is at proper level.

4. Rerun the test.

5. If the problem remains, contact your IBM technical-support representative.

### **Related Links:**

IBM Support Website

· Latest level of DSA

Latest level of BMC/IMM

#### 218-902-000 Brocade:SerdesLoopbackTest Failed

Explanation: A failure was detected during the

Loopback test.

Severity: Error
Serviceable: Yes
Recoverable: No

#### Automatically notify Support: No

**User response:** Complete the following steps:

1. Rerun the test.

2. Verify whether the firmware is at proper level.

3. Rerun the test.

4. If the problem remains, contact your IBM technical-support representative.

#### **Related Links:**

• IBM Support Website

· Latest level of DSA

Latest level of BMC/IMM

#### 218-903-000 Brocade:PCILoopbackTest Failed

Explanation: A failure was detected during the

Loopback test.

Severity: Error Serviceable: Yes Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

1. Rerun the test.

2. Verify whether the firmware is at proper level.

3. Rerun the test.

4. If the problem remains, contact your IBM technical-support representative.

#### **Related Links:**

IBM Support Website

Latest level of DSA

· Latest level of BMC/IMM

# 218-904-000 Brocade:ExternalEthLoopbackTest Failed

Explanation: A failure was detected during the

Loopback test.

Severity: Error
Serviceable: Yes
Recoverable: No

**Automatically notify Support:** No

**User response:** Complete the following steps:

1. Check or replace SFP/cable.

2. Rerun the test.

3. Verify whether the firmware is at proper level.

4. Rerun the test.

5. If the problem remains, contact your IBM technical-support representative.

# **Related Links:**

IBM Support Website

# 218-905-000 • 180-901-000

Latest level of DSA

Latest level of BMC/IMM

218-905-000 Brocade:SerdesEthLoopbackTest Failed

Explanation: A failure was detected during the

Loopback test.

Severity: Error Serviceable: Yes Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Rerun the test.

2. Verify whether the firmware is at proper level.

3. Rerun the test.

4. If the problem remains, contact your IBM technical-support representative.

**Related Links:** 

IBM Support Website

· Latest level of DSA

Latest level of BMC/IMM

218-906-000 Brocade:InternalLoopbackTest Failed

Explanation: A failure was detected during the

Loopback test.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

1. Rerun the test.

2. Verify whether the firmware is at proper level.

3. Rerun the test.

4. If the problem remains, contact your IBM technical-support representative.

**Related Links:** 

• IBM Support Website

· Latest level of DSA

· Latest level of BMC/IMM

# DSA checkpoint panel test results

The following messages can result when you run the checkpoint panel test.

180-000-000 Check-point Panel Test Passed

Explanation: Check-point Panel Test Passed.

Severity: Event
Serviceable: No
Recoverable: No

Automatically notify Support: No

Related Links:

IBM Support Website

Latest level of DSA

· Latest level of BMC/IMM

2. Verify that the Baseboard Management Controller (BMC) is working.

3. Run the test again.

4. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

**Related Links:** 

IBM Support Website

Latest level of DSA

Latest level of BMC/IMM

180-901-000 Check-point Panel Test Failed

Explanation: Check-point Panel Test Failed. Operator

reported incorrect display.

Severity: Error
Serviceable: Yes
Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

1. Check the operator information panel cabling for loose or broken connections at both ends or damage to the cable.

2. Replace the information panel cable if damage is present.

3. Run the test again.

180-801-000 Check-point Panel Test Aborted

**Explanation:** Check-point Panel Test Aborted. BMC is unable to verify that the operator information panel

**Severity:** Warning **Serviceable:** Yes

Recoverable: No

cable is connected.

Automatically notify Support: No

**User response:** Complete the following steps:

 Inspect and reseat operator information panel cable at both ends.

- 4. Replace the operator information panel assembly.
- 5. Run the test again.
- If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

#### Related Links:

- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

· Latest level of BMC/IMM

resource unavailability error.

Severity: Warning

Serviceable: Yes

089-802-000 CPU Stress Test Aborted

Explanation: CPU Stress Test Aborted. System

# **DSA CPU stress test results**

The following messages can result when you run the CPU stress test.

089-000-000 CPU Stress Test Passed
Explanation: CPU Stress Test Passed.

Severity: Event
Serviceable: No
Recoverable: No

Automatically notify Support: No

#### **Related Links:**

IBM Support WebsiteLatest level of DSA

Latest level of BMC/IMM

Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

1. Turn off and restart the system.

2. Make sure that the DSA Diagnostic code is at the latest level.

3. Run the test again.

- 4. Check system firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
- 5. Run the test again.

IBM Support Website

Latest level of BMC/IMM

Latest level of DSA

**Related Links:** 

- 6. If the system has stopped responding, turn off and restart the system and then run the test again.
- 7. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

#### 089-801-000 CPU Stress Test Aborted

Explanation: CPU Stress Test Aborted. Internal

Severity: Warning
Serviceable: Yes
Recoverable: No

Program Error.

Automatically notify Support: No

**User response:** Complete the following steps:

1. Turn off and restart the system.

- 2. Make sure that the DSA Diagnostic code is at the latest level.
- 3. Run the test again.
- 4. Check system firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component. The latest level firmware for this component can be found in reference to this system type at the IBM Support website.
- 5. Run the test again.
- 6. If the system has stopped responding, turn off and restart the system and then run the test again.
- 7. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

## 089-803-000 CPU Stress Test Aborted

**Explanation:** CPU Stress Test Aborted. Memory size is insufficient to run the test. At least 1GB is required.

Severity: Warning Serviceable: Yes Recoverable: No

Automatically notify Support: No

### l Links: Related Links:

- IBM Support Website
- Latest level of DSA

# Related Links:

- IBM Support Website
- Latest level of DSA

# 089-804-000 • 516-800-000

Latest level of BMC/IMM

089-804-000 CPU Stress Test Aborted

Explanation: CPU Stress Test Aborted. User pressed

Ctrl-C.

Severity: Warning Serviceable: Yes Recoverable: No

Automatically notify Support: No

**Related Links:** 

IBM Support Website Latest level of DSA

Latest level of BMC/IMM

089-901-000 CPU Stress Test FailedExplanation: CPU Stress Test Failed.

Severity: Error Serviceable: Yes Recoverable: No

# Automatically notify Support: No

**User response:** Complete the following steps:

- 1. If the system has stopped responding, turn off and restart the system and then run the test again.
- 2. Make sure that the DSA Diagnostic code is at the latest level.
- 3. Run the test again.
- 4. Check system firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
- 5. Run the test again.
- 6. If the system has stopped responding, turn off and restart the system and then run the test again.
- 7. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

#### **Related Links:**

- IBM Support Website
- · Latest level of DSA
- · Latest level of BMC/IMM

# **DSA Emulex adapter test results**

The following messages can result when you run the Emulex adapter test.

516-000-000 ELXUCNA: NIC MAC LoopBackTest

**Passed** 

**Explanation:** The test passed.

Severity: Event
Serviceable: No
Recoverable: No

Automatically notify Support: No

**Related Links:** 

IBM Support Website Latest level of DSA

Latest level of BMC/IMM

Latest level of DSA

516-001-000 ELXUCNA: NIC PHY LoopBackTest

**Passed** 

**Explanation:** The test passed.

Severity: Event
Serviceable: No
Recoverable: No

Automatically notify Support: No

**Related Links:** 

IBM Support Website

· Latest level of DSA

Latest level of BMC/IMM

516-002-000 ELXUCNA: ELXUCNA: NIC LED(Beacon)Test Passed

**Explanation:** The test passed.

Severity: Event
Serviceable: No
Recoverable: No

Automatically notify Support: No

**Related Links:** 

IBM Support Website

· Latest level of DSA

Latest level of BMC/IMM

516-800-000 ELXUCNA: NIC MAC LoopBackTest

**Aborted** 

**Explanation:** Loopback testing at the MAC layer was

canceled.

Severity: Warning
Serviceable: No
Recoverable: No

Automatically notify Support: No

#### Related Links:

- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

## 516-801-000 ELXUCNA: NIC PHY LoopBackTest Aborted

Explanation: Loopback testing at the physical layer

was canceled.

**Severity:** Warning **Serviceable:** No **Recoverable:** No

Automatically notify Support: No

#### Related Links:

- IBM Support Website
- · Latest level of DSA
- · Latest level of BMC/IMM

# 516-802-000 ELXUCNA: ELXUCNA: NIC LED(Beacon)Test Aborted

**Explanation:** Verification of status LEDs was canceled.

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

#### **Related Links:**

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

# 516-900-000 ELXUCNA: NIC MAC LoopBackTest Failed

Explanation: A failure was detected during the

loopback test at the MAC layer.

Severity: Error Serviceable: Yes Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
- 2. Rerun the test.

3. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

#### **Related Links:**

- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

# 516-901-000 ELXUCNA: NIC PHY LoopBackTest Failed

**Explanation:** A failure was detected during the

loopback test at the physical layer.

Severity: Error
Serviceable: Yes
Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
- 2. Rerun the test.
- 3. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

#### **Related Links:**

- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

# 516-902-000 ELXUCNA: ELXUCNA: NIC LED(Beacon)Test Failed

**Explanation:** A failure was detected while verifying operation of the status LEDs.

Severity: Error
Serviceable: Yes
Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
- 2. Rerun the test.
- 3. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

## **Related Links:**

• IBM Support Website

· Latest level of DSA

· Latest level of BMC/IMM

# **DSA EXA port ping test results**

The following messages can result when you run the EXA port ping test.

401-000-000 EXA Port Ping Test Passed

**Explanation:** EXA Port Ping Test Passed.

Severity: Event
Serviceable: No
Recoverable: No

Automatically notify Support: No

**Related Links:** 

• IBM Support Website

· Latest level of DSA

Latest level of BMC/IMM

401-801-000 EXA Port Ping Test Aborted

Explanation: EXA Port Ping Test Aborted. Unable to

get device base address.

Severity: Warning
Serviceable: Yes
Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Remove power cables, wait for 45 seconds, reconnect and rerun the test

reconnect and rerun the test.

2. Make sure that the scalability cable connections are as per specification.

3. Make sure that DSA and BIOS/uEFI are at the latest level.

4. If the problem remains, contact your technical-service representative.

**Related Links:** 

• IBM Support Website

· Latest level of DSA

· Latest level of BMC/IMM

401-802-000 EXA Port Ping Test Aborted

Explanation: EXA Port Ping Test Aborted. Port

connections may not be correct.

Severity: Warning

**Serviceable:** Yes **Recoverable:** No

**Automatically notify Support:** No

**User response:** Complete the following steps: 1. Remove power cables, wait for 45 seconds,

reconnect and rerun the test.

2. Make sure that the scalability cable connections are as per specification.

3. Make sure that DSA and BIOS/uEFI are at the latest level.

4. If the problem remains, contact your technical-service representative.

**Related Links:** 

• IBM Support Website

· Latest level of DSA

Latest level of BMC/IMM

401-901-001 EXA Port Ping Test Failed

**Explanation:** EXA Port Ping Test Failed.

Severity: Error Serviceable: Yes Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

 Remove power cables, wait for 45 seconds, reconnect and rerun the test.

2. Make sure that the scalability cable connections are as per specification.

3. Check scalability cables for loose connections.

4. Replace the scalability cable(s) for specified port(s).

5. If the problem remains, contact your technical-service representative.

**Related Links:** 

IBM Support Website

· Latest level of DSA

Latest level of BMC/IMM

# DSA hard drive test results

The following messages can result when you run the hard drive test.

217-000-000 HDD Test Passed

Explanation: HDD Stress Test Passed.

Severity: Event
Serviceable: No
Recoverable: No

Automatically notify Support: No

# **Related Links:**

IBM Support Website Latest level of DSA

Latest level of BMC/IMM

217-800-000 HDD Test Aborted

**Explanation:** HDD Test Aborted. The test was

canceled.

Severity: Warning
Serviceable: Yes
Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Check cable connections.

2. Rerun the test.

Verify that Hard drive supports self test and self test logging.

4. If the problem remains, contact your technical-support representative.

#### **Related Links:**

IBM Support Website Latest level of DSA

Latest level of BMC/IMM

## 217-900-000 HDD Test Failed

**Explanation:** HDD Test Failed. The hard drive self-test

detected a failure.

Severity: Error

Serviceable: Yes

Recoverable: No

**Automatically notify Support:** No

**User response:** Complete the following steps:

1. Check cable connections.

2. Rerun the test.

3. Verify the firmware is at the latest level.

4. Rerun the test.

5. If the problem remains, contact your technical-support representative.

#### **Related Links:**

IBM Support Website

Latest level of DSA

Latest level of BMC/IMM

# **DSA Intel network test results**

The following messages can result when you run the Intel network test.

406-000-000 IANet:Registers Test Passed

**Explanation:** The test passed.

Severity: Event
Serviceable: No
Recoverable: No

Automatically notify Support: No

# **Related Links:**

IBM Support WebsiteLatest level of DSA

Latest level of BMC/IMM

406-001-000 IANet:EEPROM Test Passed

**Explanation:** The test passed.

Severity: Event
Serviceable: No
Recoverable: No

Automatically notify Support: No

# **Related Links:**

• IBM Support Website

· Latest level of DSA

· Latest level of BMC/IMM

406-002-000 IANet:FIFO Test Passed

**Explanation:** The test passed.

Severity: Event
Serviceable: No
Recoverable: No

Automatically notify Support: No

#### **Related Links:**

IBM Support Website

· Latest level of DSA

Latest level of BMC/IMM

406-003-000 IANet:Interrupts Test Passed

**Explanation:** The test passed.

# 406-004-000 • 406-900-000

Severity: Event
Serviceable: No
Recoverable: No

Automatically notify Support: No

#### **Related Links:**

IBM Support Website Latest level of DSA

Latest level of BMC/IMM

# 406-004-000 IANet:Loopback Test Passed

**Explanation:** The test passed.

Severity: Event Serviceable: No Recoverable: No

Automatically notify Support: No

#### **Related Links:**

IBM Support Website Latest level of DSA

· Latest level of BMC/IMM

## 406-800-000 IANet:Registers Test Aborted

**Explanation:** Registers test was canceled.

**Severity:** Warning **Serviceable:** No **Recoverable:** No

Automatically notify Support: No

#### **Related Links:**

IBM Support Website Latest level of DSA

Latest level of BMC/IMM

# 406-801-000 IANet:EEPROM Test Aborted

**Explanation:** EEPROM test was canceled.

Severity: Warning
Serviceable: No
Recoverable: No

Automatically notify Support: No

# **Related Links:**

IBM Support Website Latest level of DSA

· Latest level of BMC/IMM

# 406-802-000 IANet:FIFO Test Aborted

Explanation: FIFO test was canceled.

Severity: Warning
Serviceable: No
Recoverable: No

Automatically notify Support: No

#### **Related Links:**

IBM Support WebsiteLatest level of DSA

• Latest level of BMC/IMM

# 406-803-000 IANet:Interrupts Test Aborted

**Explanation:** Interrupt test was canceled.

**Severity:** Warning **Serviceable:** No **Recoverable:** No

Automatically notify Support: No

#### **Related Links:**

IBM Support Website Latest level of DSA

· Latest level of BMC/IMM

# 406-804-000 IANet:Loopback Test Aborted

**Explanation:** Loopback test was canceled.

Severity: Warning
Serviceable: No
Recoverable: No

Automatically notify Support: No

### **Related Links:**

IBM Support WebsiteLatest level of DSA

· Latest level of BMC/IMM

## 406-900-000 IANet:Registers Test Failed

Explanation: A failure was detected during the

Severity: Error
Serviceable: Yes
Recoverable: No

Registers test.

Automatically notify Support: No

**User response:** Complete the following steps:

 Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.

- 2. Rerun the test.
- If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

#### **Related Links:**

- IBM Support Website
- Latest level of DSA
- · Latest level of BMC/IMM

#### 406-901-000 IANet:EEPROM Test Failed

**Explanation:** A failure was detected during the

EEPROM test.

Severity: Error Serviceable: Yes Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- 1. Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
- 2. Rerun the test.
- If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

#### **Related Links:**

- IBM Support Website
- Latest level of DSA
- · Latest level of BMC/IMM

# 406-902-000 IANet:FIFO Test Failed

Explanation: A failure was detected during the FIFO

test.

Severity: Error Serviceable: Yes Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

- 1. Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
- 2. Rerun the test.
- If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

#### **Related Links:**

- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

### 406-903-000 IANet:Interrupts Test Failed

Explanation: A failure was detected during the

Interrupt test.

Severity: Error
Serviceable: Yes
Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
- 2. Rerun the test.
- 3. Check interrupt assignments in the PCI Hardware section of the DSA Diagnostic Log. If the ethernet device is sharing interrupts, if possible modify the interrupt assignments using F1 Setup to assign a unique interrupt to the device.
- 4. Rerun the test.
- 5. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

#### **Related Links:**

- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

# 406-904-000 IANet:Loopback Test Failed

Explanation: A failure was detected during the

Loopback test.

Severity: Error Serviceable: Yes Recoverable: No

**Automatically notify Support:** No

- 1. Check the Ethernet cable for damage and ensure correct cable type and attachment.
- 2. Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
- 3. Rerun the test.

4. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

IBM Support Website

Latest level of DSA

· Latest level of BMC/IMM

#### Related Links:

# DSA LSI hard drive test results

The following messages can result when you run the LSI hard drive test.

407-000-000 LSIESG:DiskDefaultDiagnostic Test

**Passed** 

**Explanation:** The test passed.

Severity: Event
Serviceable: No
Recoverable: No

Automatically notify Support: No

**Related Links:** 

IBM Support Website Latest level of DSA

· Latest level of BMC/IMM

407-800-000 LSIESG:DiskDefaultDiagnostic Test

Aborted

**Explanation:** The test was canceled.

Severity: Warning
Serviceable: No
Recoverable: No

Automatically notify Support: No

Related Links:

• IBM Support Website

Latest level of DSA

Latest level of BMC/IMM

407-900-000 LSIESG:DiskDefaultDiagnostic Test

Failed

**Explanation:** The hard drive self-test detected a

failure.

Severity: Error
Serviceable: Yes
Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

1. Check cable connections.

2. Rerun the test.

3. Verify whether the firmware is at the latest level.

4. Rerun the test.

5. If the problem remains, contact your IBM

technical-support representative.

**Related Links:** 

• IBM Support Website

· Latest level of DSA

Latest level of BMC/IMM

# **DSA Mellanox adapter test results**

The following messages can result when you run the Mellanox adapter test.

408-000-000 MLNX:MLNX\_DiagnosticTestEthernetPort

Test Passed

**Explanation:** Port Test Passed.

Severity: Event
Serviceable: No
Recoverable: No

Automatically notify Support: No

Related Links:

IBM Support Website Latest level of DSA

Latest level of BMC/IMM

408-001-000 MLNX:MLNX\_DiagnosticTestIBPort Test

Passed

**Explanation:** Port Test Passed.

Severity: Event
Serviceable: No
Recoverable: No

Automatically notify Support: No

**Related Links:** 

IBM Support Website Latest level of DSA

· Latest level of BMC/IMM

 $408\text{-}800\text{-}000 \quad MLNX: MLNX\_Diagnostic Test Ethernet Port$ 

**Test Aborted** 

**Explanation:** Port Test was canceled.

**Severity:** Warning **Serviceable:** No **Recoverable:** No

Automatically notify Support: No

**Related Links:** 

IBM Support WebsiteLatest level of DSA

Latest level of BMC/IMM

408-801-000 MLNX:MLNX\_DiagnosticTestIBPort Test

Aborted

**Explanation:** Port Test was canceled.

Severity: Warning
Serviceable: No
Recoverable: No

Automatically notify Support: No

Related Links:

IBM Support Website

Latest level of DSA

Latest level of BMC/IMM

408-900-000 MLNX:MLNX\_DiagnosticTestEthernetPort

**Test Failed** 

**Explanation:** Port Test Failed.

Severity: Error Serviceable: Yes Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- Make sure that the physical link of the port under test in the active state.
- If these condition was met but the test keeps failing the port's adapter might be faulty.
- 3. Try replacing the adapter and repeating the test.

**Related Links:** 

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

408-901-000 MLNX:MLNX\_DiagnosticTestIBPort Test

**Failed** 

**Explanation:** Port Test Failed.

Severity: Error Serviceable: Yes Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- 1. Make sure that the physical link of the port under test in the active state and a subnet manager running on the fabric to which the port is attached.
- 2. If these condition was met but the test keeps failing the port's adapter might be faulty.
- 3. Try replacing the adapter and repeating the test.

#### **Related Links:**

- IBM Support Website
- · Latest level of DSA
- · Latest level of BMC/IMM

# DSA memory isolation test results

The following messages can result when you run the memory isolation test.

201-000-000 Standalone Memory Test Passed

Explanation: Quick/Full Memory Test All CPUs

Passed.

Severity: Event Serviceable: No Recoverable: No

Automatically notify Support: No

**Related Links:** 

IBM Support Website Latest level of DSA

Latest level of BMC/IMM

201-000-001 Standalone Memory Test Passed

**Explanation:** Quick/Full Memory Test CPU 1 Passed.

Severity: Event
Serviceable: No
Recoverable: No

Automatically notify Support: No

**Related Links:** 

IBM Support Website Latest level of DSA

Latest level of BMC/IMM

201-000-002 Standalone Memory Test Passed

**Explanation:** Quick/Full Memory Test CPU 2 Passed.

Severity: Event
Serviceable: No
Recoverable: No

Automatically notify Support: No

Related Links:

IBM Support Website Latest level of DSA

· Latest level of BMC/IMM

201-000-003 Standalone Memory Test Passed

Explanation: Quick/Full Memory Test CPU 3 Passed.

Severity: Event
Serviceable: No
Recoverable: No

Automatically notify Support: No

**Related Links:** 

IBM Support Website
Latest level of DSA

Latest level of BMC/IMM

201-000-004 Standalone Memory Test Passed

Explanation: Quick/Full Memory Test CPU 4 Passed.

Severity: Event
Serviceable: No
Recoverable: No

Automatically notify Support: No

**Related Links:** 

IBM Support WebsiteLatest level of DSA

· Latest level of BMC/IMM

201-811-000 Standalone Memory Test Aborted

**Explanation:** Unable to Locate SMBIOS key "\_SM\_".

Severity: Warning
Serviceable: No
Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.

2. If the problem remains, contact your technical-service representative.

Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.

4. Make sure that DSA and BIOS/uEFI are at the latest level.

**Related Links:** 

• IBM Support Website

Latest level of DSA

Latest level of BMC/IMM

201-811-001 Standalone Memory Test Aborted

Explanation: Unable to Locate SMBIOS key "\_SM\_".

**Severity:** Warning **Serviceable:** No **Recoverable:** No

# Automatically notify Support: No

**User response:** Complete the following steps:

- Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### Related Links:

- IBM Support Website
- · Latest level of DSA
- · Latest level of BMC/IMM

201-811-002 Standalone Memory Test Aborted

Explanation: Unable to Locate SMBIOS key "\_SM\_".

Severity: Warning
Serviceable: No
Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

# Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-811-003 Standalone Memory Test Aborted

**Explanation:** Unable to Locate SMBIOS key "\_SM\_".

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

 Perform the actions mentioned one at a time and try the test after each action.

- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

## 201-812-000 Standalone Memory Test Aborted

**Explanation:** Memory test is not supported for this

system.

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- IBM Support Website
- Latest level of DSA
- · Latest level of BMC/IMM

#### 201-812-001 Standalone Memory Test Aborted

**Explanation:** Memory test is not supported for this system.

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.

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- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level

#### Related Links:

- IBM Support Website
- · Latest level of DSA
- · Latest level of BMC/IMM

## 201-812-002 Standalone Memory Test Aborted

Explanation: Memory test is not supported for this

system.

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- · IBM Support Website
- · Latest level of DSA
- · Latest level of BMC/IMM

#### 201-812-003 Standalone Memory Test Aborted

**Explanation:** Memory test is not supported for this

system.

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

- Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.

4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

# 201-813-000 Standalone Memory Test Aborted

**Explanation:** Chipset Error: Can not turn OFF ECC

error reporting in CPU.

Severity: Warning
Serviceable: No
Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- IBM Support Website
- Latest level of DSA
- · Latest level of BMC/IMM

#### 201-813-001 Standalone Memory Test Aborted

Explanation: Chipset Error: Can not turn OFF ECC

error reporting in CPU.

Severity: Warning
Serviceable: No
Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

### **Related Links:**

• IBM Support Website

- Latest level of DSA
- Latest level of BMC/IMM

## 201-813-002 Standalone Memory Test Aborted

**Explanation:** Chipset Error: Can not turn OFF ECC

error reporting in CPU.

Severity: Warning
Serviceable: No
Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

- Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- Make sure that DSA and BIOS/uEFI are at the latest level.

## **Related Links:**

- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

## 201-813-003 Standalone Memory Test Aborted

**Explanation:** Chipset Error: Can not turn OFF ECC

error reporting in CPU.

Serviceable: No Recoverable: No

Severity: Warning

Automatically notify Support: No

User response: Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- Make sure that DSA and BIOS/uEFI are at the latest level.

# Related Links:

- IBM Support Website
- · Latest level of DSA
- · Latest level of BMC/IMM

# 201-814-000 Standalone Memory Test Aborted

Explanation: Chipset Error: Can not disable Scubbing

feature for CPU.

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

### **Related Links:**

- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

#### 201-814-001 Standalone Memory Test Aborted

**Explanation:** Chipset Error: Can not disable Scubbing

feature for CPU.

Severity: Warning
Serviceable: No
Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

#### 201-814-002 Standalone Memory Test Aborted

Explanation: Chipset Error: Can not disable Scubbing

feature for CPU.

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- · IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

#### 201-814-003 Standalone Memory Test Aborted

Explanation: Chipset Error: Can not disable Scubbing

feature for CPU.

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

#### 201-815-000 Standalone Memory Test Aborted

**Explanation:** Program Error with Quick Memory

Menu Option Selection.

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- IBM Support Website
- · Latest level of DSA
- · Latest level of BMC/IMM

#### 201-815-001 Standalone Memory Test Aborted

**Explanation:** Program Error with Quick Memory

Menu Option Selection.

Severity: Warning
Serviceable: No
Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

#### 201-815-002 Standalone Memory Test Aborted

**Explanation:** Program Error with Quick Memory

Menu Option Selection.

**Severity:** Warning **Serviceable:** No **Recoverable:** No

Automatically notify Support: No

**User response:** Complete the following steps:

- Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- IBM Support Website
- Latest level of DSA
- · Latest level of BMC/IMM

#### 201-815-003 Standalone Memory Test Aborted

**Explanation:** Program Error with Quick Memory

Menu Option Selection.

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- IBM Support Website
- Latest level of DSA
- · Latest level of BMC/IMM

### 201-816-000 Standalone Memory Test Aborted

Explanation: Program Error with Full Memory Menu

Option Selection.

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- IBM Support Website
- Latest level of DSA
- · Latest level of BMC/IMM

#### 201-816-001 Standalone Memory Test Aborted

**Explanation:** Program Error with Full Memory Menu

Option Selection.

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

#### 201-816-002 Standalone Memory Test Aborted

**Explanation:** Program Error with Full Memory Menu

Option Selection.

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- · IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

#### 201-816-003 Standalone Memory Test Aborted

**Explanation:** Program Error with Full Memory Menu

Option Selection.

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- IBM Support Website
- Latest level of DSA
- · Latest level of BMC/IMM

## 201-818-000 Standalone Memory Test Aborted

**Explanation:** Unable to Locate SMBIOS key "\_SM\_".

**Severity:** Warning Serviceable: No Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

## **Related Links:**

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

## 201-818-001 Standalone Memory Test Aborted

**Explanation:** Unable to Locate SMBIOS key "\_SM\_".

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

## **Related Links:**

- **IBM Support Website**
- Latest level of DSA
- Latest level of BMC/IMM

## 201-818-002 Standalone Memory Test Aborted

**Explanation:** Unable to Locate SMBIOS key "\_SM\_".

**Severity:** Warning Serviceable: No

Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

201-818-003 Standalone Memory Test Aborted

**Explanation:** Unable to Locate SMBIOS key "\_SM\_".

Severity: Warning
Serviceable: No
Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### Related Links:

- IBM Support Website
- · Latest level of DSA
- · Latest level of BMC/IMM

## 201-819-000 Standalone Memory Test Aborted

**Explanation:** The start-end address ranges in the restricted area of the memory.

**Severity:** Warning **Serviceable:** No **Recoverable:** No

Automatically notify Support: No

**User response:** Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

## 201-819-001 Standalone Memory Test Aborted

Explanation: The start-end address ranges in the

restricted area of the memory.

Severity: Warning
Serviceable: No
Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

#### 201-819-002 Standalone Memory Test Aborted

**Explanation:** The start-end address ranges in the

restricted area of the memory.

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.

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- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level

#### Related Links:

- IBM Support Website
- · Latest level of DSA
- · Latest level of BMC/IMM

#### 201-819-003 Standalone Memory Test Aborted

Explanation: The start-end address ranges in the

restricted area of the memory.

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- · IBM Support Website
- · Latest level of DSA
- · Latest level of BMC/IMM

#### 201-820-000 Standalone Memory Test Aborted

**Explanation:** Memory Upper limit is less than 16

Mbytes.

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.

4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

## 201-820-001 Standalone Memory Test Aborted

**Explanation:** Memory Upper limit is less than 16

Mbytes.

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### Related Links:

- IBM Support Website
- Latest level of DSA
- · Latest level of BMC/IMM

#### 201-820-002 Standalone Memory Test Aborted

**Explanation:** Memory Upper limit is less than 16

Mbytes.

Severity: Warning
Serviceable: No
Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

### **Related Links:**

• IBM Support Website

- · Latest level of DSA
- · Latest level of BMC/IMM

## 201-820-003 Standalone Memory Test Aborted

Explanation: Memory Upper limit is less than 16

Mbytes.

Severity: Warning
Serviceable: No
Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

- Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- Make sure that DSA and BIOS/uEFI are at the latest level.

## **Related Links:**

- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

## 201-821-000 Standalone Memory Test Aborted

**Explanation:** Variable range MTRR registers are larger

than fixed range MTRR registers.

Severity: Warning Serviceable: No Recoverable: No

**Automatically notify Support:** No

**User response:** Complete the following steps:

- Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- Make sure that DSA and BIOS/uEFI are at the latest level.

## Related Links:

- IBM Support Website
- · Latest level of DSA
- · Latest level of BMC/IMM

#### 201-821-001 Standalone Memory Test Aborted

**Explanation:** Variable range MTRR registers are larger

than fixed range MTRR registers.

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

#### 201-821-002 Standalone Memory Test Aborted

**Explanation:** Variable range MTRR registers are larger

than fixed range MTRR registers.

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

#### 201-821-003 Standalone Memory Test Aborted

Explanation: Variable range MTRR registers are larger

than fixed range MTRR registers.

Severity: Warning
Serviceable: No
Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- · IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

#### 201-822-000 Standalone Memory Test Aborted

**Explanation:** Invalid MTRR service request.

**Severity:** Warning **Serviceable:** No **Recoverable:** No

**Automatically notify Support:** No

**User response:** Complete the following steps:

- Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### Related Links:

- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

#### 201-822-001 Standalone Memory Test Aborted

Explanation: Invalid MTRR service request.

**Severity:** Warning

**Serviceable:** No **Recoverable:** No

Automatically notify Support: No

**User response:** Complete the following steps:

- Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

#### 201-822-002 Standalone Memory Test Aborted

**Explanation:** Invalid MTRR service request.

**Severity:** Warning **Serviceable:** No **Recoverable:** No

Automatically notify Support: No

**User response:** Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

### Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

## 201-822-003 Standalone Memory Test Aborted

**Explanation:** Invalid MTRR service request.

Severity: Warning Serviceable: No Recoverable: No

**Automatically notify Support:** No

- Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- Make sure that DSA and BIOS/uEFI are at the latest level.

## **Related Links:**

- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

## 201-824-000 Standalone Memory Test Aborted

**Explanation:** Node Interleave feature must be OFF. Go to Setup and disable Node Interleave option and then re-run the test.

**Severity:** Warning **Serviceable:** No **Recoverable:** No

Automatically notify Support: No

**User response:** Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

## 201-824-001 Standalone Memory Test Aborted

**Explanation:** Node Interleave feature must be OFF. Go to Setup and disable Node Interleave option and then re-run the test.

**Severity:** Warning **Serviceable:** No **Recoverable:** No

Automatically notify Support: No

User response: Complete the following steps:

 Perform the actions mentioned one at a time and try the test after each action.

- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

#### 201-824-002 Standalone Memory Test Aborted

**Explanation:** Node Interleave feature must be OFF. Go to Setup and disable Node Interleave option and then re-run the test.

Severity: Warning
Serviceable: No
Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

## Related Links:

- IBM Support Website
- Latest level of DSA
- · Latest level of BMC/IMM

## 201-824-003 Standalone Memory Test Aborted

**Explanation:** Node Interleave feature must be OFF. Go to Setup and disable Node Interleave option and then re-run the test.

Severity: Warning
Serviceable: No
Recoverable: No

Automatically notify Support: No

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.

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- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level

#### Related Links:

- IBM Support Website
- Latest level of DSA
- · Latest level of BMC/IMM

#### 201-826-000 Standalone Memory Test Aborted

**Explanation:** BIOS: Memory Controller has been disabled. Go to Setup and Enable Memory Controller.

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- · IBM Support Website
- · Latest level of DSA
- · Latest level of BMC/IMM

#### 201-826-001 Standalone Memory Test Aborted

**Explanation:** BIOS: Memory Controller has been disabled. Go to Setup and Enable Memory Controller.

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.

4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- IBM Support Website
- Latest level of DSA
- · Latest level of BMC/IMM

#### 201-826-002 Standalone Memory Test Aborted

**Explanation:** BIOS: Memory Controller has been disabled. Go to Setup and Enable Memory Controller.

Severity: Warning
Serviceable: No
Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

#### 201-826-003 Standalone Memory Test Aborted

**Explanation:** BIOS: Memory Controller has been disabled. Go to Setup and Enable Memory Controller.

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

### **Related Links:**

• IBM Support Website

- · Latest level of DSA
- Latest level of BMC/IMM

### 201-827-000 Standalone Memory Test Aborted

**Explanation:** BIOS: ECC function has been disabled by BIOS. Go to Setup and enable ECC generation.

Severity: Warning
Serviceable: No
Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- Make sure that DSA and BIOS/uEFI are at the latest level.

## **Related Links:**

- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

## 201-827-001 Standalone Memory Test Aborted

**Explanation:** BIOS: ECC function has been disabled by BIOS. Go to Setup and enable ECC generation.

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- Make sure that DSA and BIOS/uEFI are at the latest level.

## **Related Links:**

- IBM Support Website
- · Latest level of DSA
- · Latest level of BMC/IMM

## 201-827-002 Standalone Memory Test Aborted

**Explanation:** BIOS: ECC function has been disabled by

BIOS. Go to Setup and enable ECC generation.

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

#### 201-827-003 Standalone Memory Test Aborted

**Explanation:** BIOS: ECC function has been disabled by BIOS. Co to Setup and enable ECC generation.

BIOS. Go to Setup and enable ECC generation.

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

- IBM Support Website
- Latest level of DSA
- · Latest level of BMC/IMM

#### 201-844-000 Standalone Memory Test Aborted

**Explanation:** Chipset Error: Problem in masking MSR

machine check control MASK registers.

**Severity:** Warning Serviceable: No Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

#### 201-844-001 Standalone Memory Test Aborted

**Explanation:** Chipset Error: Problem in masking MSR

machine check control MASK registers.

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

#### 201-844-002 Standalone Memory Test Aborted

**Explanation:** Chipset Error: Problem in masking MSR

machine check control MASK registers.

**Severity:** Warning Serviceable: No Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- **IBM Support Website**
- Latest level of DSA
- Latest level of BMC/IMM

#### 201-844-003 Standalone Memory Test Aborted

Explanation: Chipset Error: Problem in masking MSR

machine check control MASK registers.

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

#### 201-845-000 Standalone Memory Test Aborted

Explanation: Chipset Error: Problem clearing MSR

machine check control registers.

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

#### 201-845-001 Standalone Memory Test Aborted

**Explanation:** Chipset Error: Problem clearing MSR

machine check control registers.

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- IBM Support Website
- Latest level of DSA
- · Latest level of BMC/IMM

#### 201-845-002 Standalone Memory Test Aborted

Explanation: Chipset Error: Problem clearing MSR

machine check control registers.

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

## 201-845-003 Standalone Memory Test Aborted

Explanation: Chipset Error: Problem clearing MSR

machine check control registers.

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-859-000 Standalone Memory Test Aborted

**Explanation:** INVALID XSECSRAT type.

**Severity:** Warning Serviceable: No Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- **IBM Support Website**
- Latest level of DSA
- Latest level of BMC/IMM

201-859-001 Standalone Memory Test Aborted

Explanation: INVALID XSECSRAT type.

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

## Related Links:

- **IBM Support Website**
- Latest level of DSA
- · Latest level of BMC/IMM

201-859-002 Standalone Memory Test Aborted

**Explanation:** INVALID XSECSRAT type.

Severity: Warning Serviceable: No

Recoverable: No

**Automatically notify Support:** No

**User response:** Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

## **Related Links:**

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-859-003 Standalone Memory Test Aborted

**Explanation:** INVALID XSECSRAT type.

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-860-000 Standalone Memory Test Aborted

**Explanation:** No OEM0 type 1 found.

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

1. Perform the actions mentioned one at a time and

try the test after each action.

- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level

#### **Related Links:**

- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

201-860-001 Standalone Memory Test Aborted

**Explanation:** No OEM0 type 1 found.

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

## Related Links:

- IBM Support Website
- · Latest level of DSA
- · Latest level of BMC/IMM

201-860-002 Standalone Memory Test Aborted

**Explanation:** No OEM0 type 1 found.

Severity: Warning Serviceable: No Recoverable: No

**Automatically notify Support:** No

**User response:** Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.

4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

#### 201-860-003 Standalone Memory Test Aborted

**Explanation:** No OEM0 type 1 found.

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

### **Related Links:**

- IBM Support Website
- Latest level of DSA
- · Latest level of BMC/IMM

## 201-861-000 Standalone Memory Test Aborted

**Explanation:** No SRAT type 1 found.

Severity: Warning
Serviceable: No
Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

- IBM Support Website
- Latest level of DSA

Latest level of BMC/IMM

201-861-001 Standalone Memory Test Aborted

**Explanation:** No SRAT type 1 found.

Severity: Warning
Serviceable: No
Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

## **Related Links:**

- · IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

201-861-002 Standalone Memory Test Aborted

**Explanation:** No SRAT type 1 found.

**Severity:** Warning **Serviceable:** No **Recoverable:** No

**Automatically notify Support:** No

**User response:** Complete the following steps:

- Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- · IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

201-861-003 Standalone Memory Test Aborted

**Explanation:** No SRAT type 1 found.

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-862-000 Standalone Memory Test Aborted

**Explanation:** No OEM1 structure found.

Severity: Warning
Serviceable: No
Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

## **Related Links:**

- IBM Support Website
- Latest level of DSA
- · Latest level of BMC/IMM

201-862-001 Standalone Memory Test Aborted

**Explanation:** No OEM1 structure found.

**Severity:** Warning **Serviceable:** No

Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### Related Links:

- IBM Support Website
- · Latest level of DSA
- · Latest level of BMC/IMM

201-862-002 Standalone Memory Test Aborted

**Explanation:** No OEM1 structure found.

Severity: Warning
Serviceable: No
Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### Related Links:

- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

201-862-003 Standalone Memory Test Aborted

**Explanation:** No OEM1 structure found.

**Severity:** Warning **Serviceable:** No **Recoverable:** No

Automatically notify Support: No

**User response:** Complete the following steps:

 Perform the actions mentioned one at a time and try the test after each action.

- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- IBM Support Website
- Latest level of DSA
- · Latest level of BMC/IMM

#### 201-863-000 Standalone Memory Test Aborted

**Explanation:** No IBMERROR key in OEM1 structure.

Severity: Warning
Serviceable: No
Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

## **Related Links:**

- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

## 201-863-001 Standalone Memory Test Aborted

**Explanation:** No IBMERROR key in OEM1 structure.

Severity: Warning
Serviceable: No
Recoverable: No

**Automatically notify Support:** No

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.

4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

IBM Support Website

· Latest level of DSA

· Latest level of BMC/IMM

201-863-002 Standalone Memory Test Aborted

**Explanation:** No IBMERROR key in OEM1 structure.

Severity: Warning
Serviceable: No
Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.

2. If the problem remains, contact your technical-service representative.

Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.

4. Make sure that DSA and BIOS/uEFI are at the latest level.

### **Related Links:**

IBM Support Website

· Latest level of DSA

Latest level of BMC/IMM

201-863-003 Standalone Memory Test Aborted

**Explanation:** No IBMERROR key in OEM1 structure.

Severity: Warning
Serviceable: No
Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.

2. If the problem remains, contact your technical-service representative.

3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.

4. Make sure that DSA and BIOS/uEFI are at the latest level.

## Related Links:

- IBM Support Website
- Latest level of DSA

Latest level of BMC/IMM

201-864-000 Standalone Memory Test Aborted

**Explanation:** No GAS located in OEM1.

**Severity:** Warning **Serviceable:** No **Recoverable:** No

Automatically notify Support: No

**User response:** Complete the following steps:

 Perform the actions mentioned one at a time and try the test after each action.

2. If the problem remains, contact your technical-service representative.

3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.

4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

IBM Support Website

· Latest level of DSA

Latest level of BMC/IMM

201-864-001 Standalone Memory Test Aborted

Explanation: No GAS located in OEM1.

Severity: Warning
Serviceable: No
Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.

2. If the problem remains, contact your technical-service representative.

3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.

4. Make sure that DSA and BIOS/uEFI are at the latest level

- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

201-864-002 Standalone Memory Test Aborted

**Explanation:** No GAS located in OEM1.

Severity: Warning
Serviceable: No
Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

201-864-003 Standalone Memory Test Aborted

**Explanation:** No GAS located in OEM1.

Severity: Warning
Serviceable: No
Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

## **Related Links:**

- IBM Support Website
- Latest level of DSA
- · Latest level of BMC/IMM

201-865-000 Standalone Memory Test Aborted

**Explanation:** No XSECSRAT key in OEM0 structure.

**Severity:** Warning **Serviceable:** No

Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- IBM Support Website
- · Latest level of DSA
- · Latest level of BMC/IMM

#### 201-865-001 Standalone Memory Test Aborted

**Explanation:** No XSECSRAT key in OEM0 structure.

**Severity:** Warning **Serviceable:** No **Recoverable:** No

Automatically notify Support: No

**User response:** Complete the following steps:

- Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- IBM Support Website
- Latest level of DSA
- · Latest level of BMC/IMM

## 201-865-002 Standalone Memory Test Aborted

**Explanation:** No XSECSRAT key in OEM0 structure.

Severity: Warning
Serviceable: No
Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.

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- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-865-003 Standalone Memory Test Aborted

**Explanation:** No XSECSRAT key in OEM0 structure.

**Severity:** Warning Serviceable: No Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

## **Related Links:**

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-866-000 Standalone Memory Test Aborted

Explanation: EFI-SAL Invalid parameter from

GetMemoryMap function.

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.

4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

#### 201-866-001 Standalone Memory Test Aborted

**Explanation:** EFI-SAL Invalid parameter from

GetMemoryMap function.

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- **IBM Support Website**
- Latest level of DSA
- Latest level of BMC/IMM

#### 201-866-002 Standalone Memory Test Aborted

Explanation: EFI-SAL Invalid parameter from GetMemoryMap function.

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

• IBM Support Website

- · Latest level of DSA
- · Latest level of BMC/IMM

## 201-866-003 Standalone Memory Test Aborted

**Explanation:** EFI-SAL Invalid parameter from

GetMemoryMap function.

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

- Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- Make sure that DSA and BIOS/uEFI are at the latest level.

## **Related Links:**

- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

#### 201-867-000 Standalone Memory Test Aborted

**Explanation:** EFI/SAL: Buffer not allocated.

**Severity:** Warning **Serviceable:** No **Recoverable:** No

Automatically notify Support: No

User response: Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- Make sure that DSA and BIOS/uEFI are at the latest level.

#### Related Links:

- IBM Support Website
- · Latest level of DSA
- · Latest level of BMC/IMM

## 201-867-001 Standalone Memory Test Aborted

**Explanation:** EFI/SAL: Buffer not allocated.

Severity: Warning
Serviceable: No
Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

## **Related Links:**

- IBM Support Website
- Latest level of DSA
- · Latest level of BMC/IMM

## 201-867-002 Standalone Memory Test Aborted

**Explanation:** EFI/SAL: Buffer not allocated.

Severity: Warning
Serviceable: No
Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

## **Related Links:**

- IBM Support Website
- Latest level of DSA
- · Latest level of BMC/IMM

## 201-867-003 Standalone Memory Test Aborted

**Explanation:** EFI/SAL: Buffer not allocated.

**Severity:** Warning **Serviceable:** No

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Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

- Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- · IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

#### 201-868-000 Standalone Memory Test Aborted

**Explanation:** EFI/SAL: Buffer allocated in

GetMemoryMap too small.

**Severity:** Warning **Serviceable:** No **Recoverable:** No

Automatically notify Support: No

**User response:** Complete the following steps:

- Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level

## **Related Links:**

- · IBM Support Website
- Latest level of DSA
- · Latest level of BMC/IMM

## 201-868-001 Standalone Memory Test Aborted

**Explanation:** EFI/SAL: Buffer allocated in

GetMemoryMap too small.

Severity: Warning
Serviceable: No
Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

#### 201-868-002 Standalone Memory Test Aborted

Explanation: EFI/SAL: Buffer allocated in

GetMemoryMap too small.

Severity: Warning
Serviceable: No
Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

#### 201-868-003 Standalone Memory Test Aborted

**Explanation:** EFI/SAL: Buffer allocated in

GetMemoryMap too small.

Severity: Warning
Serviceable: No
Recoverable: No

Automatically notify Support: No

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.

- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- Make sure that DSA and BIOS/uEFI are at the latest level.

#### Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

#### 201-869-000 Standalone Memory Test Aborted

Explanation: EFI/SAL Invalid parameter from

GetMemoryMap function.

Severity: Warning
Serviceable: No
Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

#### 201-869-001 Standalone Memory Test Aborted

Explanation: EFI/SAL Invalid parameter from

GetMemoryMap function.

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.

4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

#### 201-869-002 Standalone Memory Test Aborted

**Explanation:** EFI/SAL Invalid parameter from

GetMemoryMap function.

Severity: Warning
Serviceable: No
Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- IBM Support Website
- Latest level of DSA
- · Latest level of BMC/IMM

## 201-869-003 Standalone Memory Test Aborted

**Explanation:** EFI/SAL Invalid parameter from

GetMemoryMap function.

Severity: Warning
Serviceable: No
Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

IBM Support Website

## 201-870-000 • 201-871-000

Latest level of DSA

Latest level of BMC/IMM

201-870-000 Standalone Memory Test Aborted

Explanation: CPU Doamin in ACPI not valid.

Severity: Warning
Serviceable: No
Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

- Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- IBM Support Website
- Latest level of DSA
- · Latest level of BMC/IMM

201-870-001 Standalone Memory Test Aborted

**Explanation:** CPU Doamin in ACPI not valid.

Severity: Warning
Serviceable: No
Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

## Related Links:

- · IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-870-002 Standalone Memory Test Aborted

**Explanation:** CPU Doamin in ACPI not valid.

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-870-003 Standalone Memory Test Aborted

**Explanation:** CPU Doamin in ACPI not valid.

**Severity:** Warning **Serviceable:** No **Recoverable:** No

Automatically notify Support: No

**User response:** Complete the following steps:

- Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

## **Related Links:**

- IBM Support Website
- Latest level of DSA
- · Latest level of BMC/IMM

201-871-000 Standalone Memory Test Aborted

**Explanation:** Data Mis-compare encountered.

**Severity:** Warning **Serviceable:** No

Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

## **Related Links:**

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-871-001 Standalone Memory Test Aborted

**Explanation:** Data Mis-compare encountered.

Severity: Warning
Serviceable: No
Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### Related Links:

- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

201-871-002 Standalone Memory Test Aborted

**Explanation:** Data Mis-compare encountered.

Severity: Warning
Serviceable: No
Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

 Perform the actions mentioned one at a time and try the test after each action.

- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

## 201-871-003 Standalone Memory Test Aborted

**Explanation:** Data Mis-compare encountered.

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

## **Related Links:**

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

## 201-877-000 Standalone Memory Test Aborted

**Explanation:** BIOS: Sparing in Extended PCI reg. must be OFF. Go to setup and disable sparing.

Severity: Warning
Serviceable: No
Recoverable: No

Automatically notify Support: No

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.

## 201-877-001 • 201-878-000

4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

#### 201-877-001 Standalone Memory Test Aborted

Explanation: BIOS: Sparing in Extended PCI reg. must

be OFF. Go to setup and disable sparing.

Severity: Warning
Serviceable: No
Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### Related Links:

- IBM Support Website
- · Latest level of DSA
- · Latest level of BMC/IMM

#### 201-877-002 Standalone Memory Test Aborted

Explanation: BIOS: Sparing in Extended PCI reg. must

be OFF. Go to setup and disable sparing.

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

IBM Support Website

- · Latest level of DSA
- · Latest level of BMC/IMM

## 201-877-003 Standalone Memory Test Aborted

Explanation: BIOS: Sparing in Extended PCI reg. must

be OFF. Go to setup and disable sparing.

Severity: Warning
Serviceable: No
Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

### 201-878-000 Standalone Memory Test Aborted

**Explanation:** Sparing feature must be turned OFF. Go

to setup and turn the sparing feature OFF.

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

#### 201-878-001 Standalone Memory Test Aborted

**Explanation:** Sparing feature must be turned OFF. Go to setup and turn the sparing feature OFF.

to setup and turn the sparing feature OFF.

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- IBM Support Website
- · Latest level of DSA
- · Latest level of BMC/IMM

#### 201-878-002 Standalone Memory Test Aborted

**Explanation:** Sparing feature must be turned OFF. Go to setup and turn the sparing feature OFF.

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- IBM Support Website
- · Latest level of DSA
- · Latest level of BMC/IMM

#### 201-878-003 Standalone Memory Test Aborted

**Explanation:** Sparing feature must be turned OFF. Go to setup and turn the sparing feature OFF.

Severity: Warning
Serviceable: No
Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

#### 201-885-000 Standalone Memory Test Aborted

**Explanation:** Processor does not support MTRR register manipulation. Can not write to memory without cache.

Severity: Warning
Serviceable: No
Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

#### 201-885-001 Standalone Memory Test Aborted

**Explanation:** Processor does not support MTRR register manipulation. Can not write to memory

without cache.

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

- Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### Related Links:

- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

### 201-885-002 Standalone Memory Test Aborted

**Explanation:** Processor does not support MTRR register manipulation. Can not write to memory without cache.

williout cache.

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- IBM Support Website
- · Latest level of DSA
- · Latest level of BMC/IMM

#### 201-885-003 Standalone Memory Test Aborted

**Explanation:** Processor does not support MTRR register manipulation. Can not write to memory

without cache.

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

### 201-886-000 Standalone Memory Test Aborted

Explanation: Memory Upper limit is less than 16

Mbytes.

Severity: Warning
Serviceable: No
Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- Make sure that DSA and BIOS/uEFI are at the latest level.

- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

201-886-001 Standalone Memory Test Aborted

Explanation: Memory Upper limit is less than 16

Mbytes.

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- IBM Support Website
- Latest level of DSA
- · Latest level of BMC/IMM

#### 201-886-002 Standalone Memory Test Aborted

**Explanation:** Memory Upper limit is less than 16

Mbytes.

Severity: Warning
Serviceable: No
Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- IBM Support Website
- Latest level of DSA
- · Latest level of BMC/IMM

## 201-886-003 Standalone Memory Test Aborted

**Explanation:** Memory Upper limit is less than 16

Mbytes.

**Severity:** Warning **Serviceable:** No **Recoverable:** No

Automatically notify Support: No

**User response:** Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.

#### **Related Links:**

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

#### 201-899-000 Standalone Memory Test Aborted

**Explanation:** Memory Diagnostics Test Aborted by

user.

Severity: Warning
Serviceable: No
Recoverable: No

Automatically notify Support: No

## Related Links:

- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

## 201-899-001 Standalone Memory Test Aborted

Explanation: Memory Diagnostics Test Aborted by

user.

Severity: Warning
Serviceable: No
Recoverable: No

Automatically notify Support: No

- IBM Support Website
- · Latest level of DSA
- · Latest level of BMC/IMM

201-899-002 Standalone Memory Test Aborted

Explanation: Memory Diagnostics Test Aborted by

user.

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

#### **Related Links:**

IBM Support WebsiteLatest level of DSA

· Latest level of BMC/IMM

201-899-003 Standalone Memory Test Aborted

Explanation: Memory Diagnostics Test Aborted by

user.

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

#### **Related Links:**

IBM Support Website

· Latest level of DSA

Latest level of BMC/IMM

## 201-901-000 Standalone Memory Test Failed

**Explanation:** Memory Diagnostics Test Failed.

Severity: Error Serviceable: Yes Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest
- 5. Replace any DIMMS(s) mentioned in error, one by one.
- Make sure that all DIMMs are enabled in the Configuration/Setup Utility program.

7. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

#### **Related Links:**

IBM Support Website

· Latest level of DSA

Latest level of BMC/IMM

## 201-901-001 Standalone Memory Test Failed

**Explanation:** Memory Diagnostics Test Failed.

Severity: Error
Serviceable: Yes
Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.
- Replace any DIMMS(s) mentioned in error, one by one.
- 6. Make sure that all DIMMs are enabled in the Configuration/Setup Utility program.
- 7. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

#### **Related Links:**

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

#### 201-901-002 Standalone Memory Test Failed

**Explanation:** Memory Diagnostics Test Failed.

Severity: Error
Serviceable: Yes
Recoverable: No

Automatically notify Support: No

- Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.

- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.
- Replace any DIMMS(s) mentioned in error, one by one.
- 6. Make sure that all DIMMs are enabled in the Configuration/Setup Utility program.
- If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

#### **Related Links:**

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-901-003 Standalone Memory Test Failed

**Explanation:** Memory Diagnostics Test Failed.

Severity: Error
Serviceable: Yes
Recoverable: No

## Automatically notify Support: No

**User response:** Complete the following steps:

- 1. Perform the actions mentioned one at a time and try the test after each action.
- 2. If the problem remains, contact your technical-service representative.
- 3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
- 4. Make sure that DSA and BIOS/uEFI are at the latest level.
- Replace any DIMMS(s) mentioned in error, one by one.
- 6. Make sure that all DIMMs are enabled in the Configuration/Setup Utility program.
- 7. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

2. Make sure that the DSA Diagnostic code is at the

4. If the system has stopped responding, turn off and

5. Check the system firmware level and upgrade if

Run the memory diagnostic to identify the specific

7. If the failure remains, refer to "Troubleshooting by

symptom" in the system "Installation and Service

#### **Related Links:**

- IBM Support Website
- · Latest level of DSA

latest level.

necessary.

failing DIMM.

3. Run the test again.

restart the system.

· Latest level of BMC/IMM

# **DSA** memory stress test results

The following messages can result when you run the memory stress test.

202-000-000 MemStr Test Passed

**Explanation:** Test Passed.

Severity: Event
Serviceable: No
Recoverable: No

Automatically notify Support: No

#### **Related Links:**

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

- Guide" for the next corrective action.

  Related Links:
- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

#### 202-801-000 MemStr Test Aborted

**Explanation:** Internal program error.

Severity: Warning Serviceable: Yes Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

1. Turn off and restart the system.

#### 202-802-000 MemStr Test Aborted

**Explanation:** Memory size is insufficient to run the

test. At least 1 GB is required.

Severity: Warning
Serviceable: Yes
Recoverable: No

## 202-803-000 • 202-902-000

Automatically notify Support: No

**Related Links:** 

• IBM Support Website

· Latest level of DSA

· Latest level of BMC/IMM

202-803-000 MemStr Test Aborted

**Explanation:** User pressed Ctrl-C.

Severity: Warning Serviceable: Yes Recoverable: No

Automatically notify Support: No

**Related Links:** 

IBM Support Website

· Latest level of DSA

· Latest level of BMC/IMM

202-901-000 MemStr Test Failed

**Explanation:** Test Failed.

Severity: Error Serviceable: Yes Recoverable: No

**Automatically notify Support:** No

**User response:** Complete the following steps:

- Execute the standard DSA memory diagnostics to validate all memory.
- 2. Make sure that the DSA Diagnostic code is at the latest level.
- 3. Turn off the system and disconnect it from power.
- 4. Reseat the memory cards and DIMMs.
- Reconnect the system to power and turn the system on.
- 6. Run the test again.
- 7. Execute the standard DSA memory diagnostics to validate all memory.
- 8. If the failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

#### **Related Links:**

- IBM Support Website
- · Latest level of DSA
- · Latest level of BMC/IMM

202-902-000 MemStr Test Failed

**Explanation:** Memory size is insufficient to run the

test.

Severity: Error Serviceable: Yes Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- Ensure that all memory is enabled by checking the "Available System Memory" in the "Resource Utilization" section of the DSA Diagnostic Event log.
- 2. If necessary, access the Configuration/Setup Utility program by pressing F1 during system boot and enable all memory.
- 3. Make sure that the DSA Diagnostic code is at the latest level.
- 4. Run the test again.
- Execute the standard DSA memory diagnostics to validate all memory.
- 6. If the failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

#### **Related Links:**

- IBM Support Website
- · Latest level of DSA
- · Latest level of BMC/IMM

## **DSA Nvidia GPU test results**

The following messages can result when you run the Nvidia GPU test.

409-000-000 NVIDIA User Diagnostic Test Passed

**Explanation:** NVIDIA User Diagnostic test passed.

Severity: Event Serviceable: No Recoverable: No

Automatically notify Support: No

**Related Links:** 

IBM Support Website Latest level of DSA

· Latest level of BMC/IMM

409-003-000 Nvidia::DiagnosticServiceProvider::Bandwidth

Test Passed

**Explanation:** Nvidia GPU Bandwidth test passed.

Severity: Event
Serviceable: No
Recoverable: No

Automatically notify Support: No

**Related Links:** 

IBM Support Website Latest level of DSA

Latest level of BMC/IMM

409-004-000 Nvidia::DiagnosticServiceProvider::Query

**Test Passed** 

Explanation: Nvidia GPU Query test passed.

Severity: Event
Serviceable: No
Recoverable: No

Automatically notify Support: No

**Related Links:** 

IBM Support Website Latest level of DSA

Latest level of BMC/IMM

409-005-000 Nvidia::DiagnosticServiceProvider::Matrix

**Test Passed** 

**Explanation:** Nvidia GPU Matrix test passed.

Severity: Event Serviceable: No Recoverable: No

Automatically notify Support: No

Related Links:

• IBM Support Website

· Latest level of DSA

Latest level of BMC/IMM

409-006-000 Nvidia::DiagnosticServiceProvider::Binomial

**Test Passed** 

**Explanation:** Nvidia GPU Binomial test passed.

Severity: Event
Serviceable: No
Recoverable: No

Automatically notify Support: No

**Related Links:** 

IBM Support Website

Latest level of DSA

Latest level of BMC/IMM

409-800-000 NVIDIA User Diagnostic Test Aborted

Explanation: NVIDIA User Diagnostic test was

canceled.

Severity: Event
Serviceable: No
Recoverable: No

Automatically notify Support: No

**Related Links:** 

• IBM Support Website

· Latest level of DSA

Latest level of BMC/IMM

409-803-000 Nvidia::DiagnosticServiceProvider::Bandwidth

**Test Aborted** 

**Explanation:** Nvidia GPU Bandwidth test was

canceled.

Severity: Warning
Serviceable: No
Recoverable: No

Automatically notify Support: No

**Related Links:** 

• IBM Support Website

· Latest level of DSA

Latest level of BMC/IMM

409-804-000 Nvidia::DiagnosticServiceProvider::Query

Test Aborted

**Explanation:** Nvidia GPU Query test was canceled.

Severity: Warning

## 409-805-000 • 409-904-000

**Serviceable:** No **Recoverable:** No

Automatically notify Support: No

#### **Related Links:**

IBM Support Website Latest level of DSA

· Latest level of BMC/IMM

## 409-805-000 Nvidia::DiagnosticServiceProvider::Matrix

**Test Aborted** 

**Explanation:** Nvidia GPU Matrix test was canceled.

Severity: Warning
Serviceable: No
Recoverable: No

Automatically notify Support: No

## Related Links:

IBM Support Website Latest level of DSA

Latest level of BMC/IMM

# 409-806-000 Nvidia::DiagnosticServiceProvider::Binomial

**Test Aborted** 

Explanation: Nvidia GPU Binomial test was canceled.

Severity: Warning Serviceable: No Recoverable: No

Automatically notify Support: No

## Related Links:

IBM Support Website Latest level of DSA

Latest level of BMC/IMM

## 409-900-000 NVIDIA User Diagnostic Test Failed

**Explanation:** NVIDIA User Diagnostic Test Failed.

Severity: Event
Serviceable: Yes
Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- 1. Verify that the GPU is seated in the PCIe slot correctly by reseating the GPU. Then power cycle the system.
- 2. Verify that the power connectors to the GPU are connected firmly. Then power cycle the system.

- 3. Run nvidia-smi -q In some cases this will report a poorly connected power cable.
- 4. Rerun the diagnostics, using the same GPU, on system that is known to be working. A variety of system issues can cause diagnostic failure.
- 5. If the problem remains, contact your IBM technical-support representative.

#### **Related Links:**

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

## ${\bf 409\text{-}903\text{-}000} \quad Nvidia:: Diagnostic Service Provider:: Bandwidth$

**Test Failed** 

**Explanation:** Nvidia GPU Bandwidth Test Failed.

Severity: Error
Serviceable: Yes
Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- 1. Verify that the GPU is seated in the PCIe slot correctly by reseating the GPU. Then power cycle the system.
- 2. Verify that the power connectors to the GPU are connected firmly. Then power cycle the system.
- 3. Run nvidia-smi -q In some cases this will report a poorly connected power cable.
- 4. Rerun the diagnostics, using the same GPU, on system that is known to be working. A variety of system issues can cause diagnostic failure.
- 5. If the problem remains, contact your IBM technical-support representative.

## Related Links:

- IBM Support Website
- Latest level of DSA
- · Latest level of BMC/IMM

# 409-904-000 Nvidia::DiagnosticServiceProvider::Query Test Failed

**Explanation:** Nvidia GPU Query Test Failed.

Severity: Error
Serviceable: Yes
Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

 Verify that the GPU is seated in the PCIe slot correctly by reseating the GPU. Then power cycle the system.

- Verify that the power connectors to the GPU are connected firmly. Then power cycle the system.
- 3. Run nvidia-smi -q In some cases this will report a poorly connected power cable.
- 4. Rerun the diagnostics, using the same GPU, on system that is known to be working. A variety of system issues can cause diagnostic failure.
- 5. If the problem remains, contact your IBM technical-support representative.

## **Related Links:**

- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

409-905-000 Nvidia::DiagnosticServiceProvider::Matrix

Test Failed

Explanation: Nvidia GPU Matrix Test Failed.

Severity: Error Serviceable: Yes Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- Verify that the GPU is seated in the PCIe slot correctly by reseating the GPU. Then power cycle the system.
- Verify that the power connectors to the GPU are connected firmly. Then power cycle the system.
- Run nvidia-smi -q In some cases this will report a poorly connected power cable.
- Rerun the diagnostics, using the same GPU, on system that is known to be working. A variety of system issues can cause diagnostic failure.

5. If the problem remains, contact your IBM technical-support representative.

#### **Related Links:**

- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

409-906-000 Nvidia::DiagnosticServiceProvider::Binomial Test Failed

**Explanation:** Nvidia GPU Binomial Test Failed.

Severity: Error
Serviceable: Yes
Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- 1. Verify that the GPU is seated in the PCIe slot correctly by reseating the GPU. Then power cycle the system.
- 2. Verify that the power connectors to the GPU are connected firmly. Then power cycle the system.
- 3. Run nvidia-smi -q In some cases this will report a poorly connected power cable.
- 4. Rerun the diagnostics, using the same GPU, on system that is known to be working. A variety of system issues can cause diagnostic failure.
- 5. If the problem remains, contact your IBM technical-support representative.

#### **Related Links:**

- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

# DSA optical drive test results

The following messages can result when you run the optical drive test.

215-000-000 Optical Drive Test Passed

**Explanation:** Optical Drive Test Passed.

Severity: Event
Serviceable: No
Recoverable: No

Automatically notify Support: No

## Related Links:

- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

**Explanation:** Optical Drive Test Aborted. Unable to

communicate with driver.

Severity: Warning
Serviceable: Yes
Recoverable: No

**Automatically notify Support:** No

- 1. Make sure that the DSA Diagnostic code is at the latest level.
- 2. Run the test again.
- 3. Check the drive cabling for loose or broken connections at both ends or damage to the cable. Replace the cable if damage is present.
- 4. Run the test again.

## 215-802-000 • 215-901-000

- 5. Check system firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
- 6. Run the test again.

#### Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

## 215-802-000 Optical Drive Test Aborted

**Explanation:** Optical Drive Test Aborted. A read error was encountered.

Severity: Warning Serviceable: Yes Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- 1. Insert a new CD or DVD into the drive and wait for 15 seconds for the media to be recognized. Rerun
- 2. Check the drive cabling for loose or broken connections at both ends or damage to the cable. Replace the cable if damage is present.
- 3. Run the test again.
- 4. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

## Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

#### 215-803-000 Optical Drive Test Failed

**Explanation:** Optical Drive Test Failed. Disk may be in use by the operating system.

**Severity:** Error Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

- 1. Wait for the system activity to cease
- 2. Run the test again
- 3. Turn off and restart the system.
- 4. Run the test again.

## **Related Links:**

IBM Support Website

- Latest level of DSA
- Latest level of BMC/IMM

## 215-804-000 Optical Drive Test Aborted

**Explanation:** Optical Drive Test Aborted. The media

tray is open.

Severity: Warning Serviceable: Yes Recoverable: No

**Automatically notify Support:** No

**User response:** Complete the following steps:

- 1. Close the media tray and wait for 15 seconds for the media to be recognized. Run the test again.
- 2. Insert a new CD or DVD into the drive and wait for 15 seconds for the media to be recognized. Rerun
- 3. Check the drive cabling for loose or broken connections at both ends or damage to the cable. Replace the cable if damage is present.
- 4. Run the test again.
- 5. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

#### Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

## 215-901-000 Optical Drive Test Aborted

**Explanation:** Optical Drive Test Aborted. Drive media is not detected.

**Severity:** Warning Serviceable: Yes Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- 1. Insert a new CD or DVD into the drive and wait for 15 seconds for the media to be recognized. Rerun the test.
- 2. Check the drive cabling for loose or broken connections at both ends or damage to the cable. Replace the cable if damage is present.
- 3. Run the test again.
- 4. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

## **Related Links:**

IBM Support Website

· Latest level of DSA

· Latest level of BMC/IMM

215-902-000 Optical Drive Test Failed

Explanation: Optical Drive Test Failed. Read

miscompare.

Severity: Error Serviceable: Yes Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- Insert a new CD or DVD into the drive and wait for 15 seconds for the media to be recognized. Rerun the test.
- Check the drive cabling for loose or broken connections at both ends or damage to the cable. Replace the cable if damage is present.
- 3. Run the test again.
- If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

#### Related Links:

- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

215-903-000 Optical Drive Test Aborted

**Explanation:** Optical Drive Test Aborted. Could not

access the device.

Severity: Warning
Serviceable: Yes
Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- Insert a new CD or DVD into the drive and wait for 15 seconds for the media to be recognized. Rerun the test.
- 2. Check the drive cabling for loose or broken connections at both ends or damage to the cable. Replace the cable if damage is present.
- 3. Run the test again.
- 4. Check system firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
- 5. Run the test again.
- 6. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

#### **Related Links:**

- IBM Support Website
- Latest level of DSA
- · Latest level of BMC/IMM

# DSA system management test results

The following messages can result when you run the system management test.

166-000-001 IMM I2C Test Passed

**Explanation:** IMM I2C Test Passed.

Severity: Event
Serviceable: No
Recoverable: No

Automatically notify Support: No

#### **Related Links:**

- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

166-801-001 IMM I2C Test Aborted

**Explanation:** IMM returned incorrect response length.

Severity: Warning
Serviceable: Yes

Recoverable: No

Automatically notify Support: No

**User response:** Perform the actions mentioned one at a time and try the test after each action:

- 1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
- 2. Make sure that DSA and BMC/IMM are at the latest level.

## **Related Links:**

- IBM Support Website
- Latest level of DSA
- · Latest level of BMC/IMM

166-802-001 IMM I2C Test Aborted

Explanation: Test cannot be completed for unknown

reason.

Severity: Warning

## 166-803-001 • 166-807-001

**Serviceable:** Yes **Recoverable:** No

Automatically notify Support: No

**User response:** Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.

2. Make sure that DSA and BMC/IMM are at the latest level.

#### Related Links:

- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

166-803-001 IMM I2C Test Aborted

**Explanation:** Node Busy. Try later.

Severity: Warning
Serviceable: Yes
Recoverable: No

Automatically notify Support: No

**User response:** Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.

2. Make sure that DSA and BMC/IMM are at the latest level.

#### Related Links:

- IBM Support Website
- · Latest level of DSA
- · Latest level of BMC/IMM

166-804-001 IMM I2C Test Aborted

**Explanation:** Invalid Command.

**Severity:** Warning **Serviceable:** Yes **Recoverable:** No

Automatically notify Support: No

**User response:** Perform the actions mentioned one at a time and try the test after each action:

- 1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
- 2. Make sure that DSA and BMC/IMM are at the latest level.

#### **Related Links:**

- · IBM Support Website
- · Latest level of DSA

Latest level of BMC/IMM

166-805-001 IMM I2C Test Aborted

**Explanation:** Invalid Command for given LUN.

Severity: Warning Serviceable: Yes Recoverable: No

Automatically notify Support: No

**User response:** Perform the actions mentioned one at a time and try the test after each action:

- 1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
- 2. Make sure that DSA and BMC/IMM are at the latest level.

#### **Related Links:**

- IBM Support Website
- · Latest level of DSA
- · Latest level of BMC/IMM

166-806-001 IMM I2C Test Aborted

**Explanation:** Timeout while processing command.

Severity: Warning
Serviceable: Yes
Recoverable: No

Automatically notify Support: No

**User response:** Perform the actions mentioned one at a time and try the test after each action:

- 1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
- 2. Make sure that DSA and BMC/IMM are at the latest level.

## **Related Links:**

- IBM Support Website
- · Latest level of DSA
- · Latest level of BMC/IMM

166-807-001 IMM I2C Test Aborted

**Explanation:** Out of space.

Severity: Warning
Serviceable: Yes
Recoverable: No

Automatically notify Support: No

**User response:** Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.

2. Make sure that DSA and BMC/IMM are at the latest level.

#### **Related Links:**

- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

#### 166-808-001 IMM I2C Test Aborted

**Explanation:** Reservation Canceled or Invalid

Reservation ID.

Severity: Warning Serviceable: Yes Recoverable: No

Automatically notify Support: No

**User response:** Perform the actions mentioned one at a time and try the test after each action:

- 1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
- 2. Make sure that DSA and BMC/IMM are at the latest level.

#### **Related Links:**

- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

#### 166-809-001 IMM I2C Test Aborted

Explanation: Request data truncated.

**Severity:** Warning **Serviceable:** Yes **Recoverable:** No

Automatically notify Support: No

**User response:** Perform the actions mentioned one at a time and try the test after each action:

- 1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
- 2. Make sure that DSA and BMC/IMM are at the latest level.

#### **Related Links:**

- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

#### 166-810-001 IMM I2C Test Aborted

Explanation: Request data length invalid.

**Severity:** Warning **Serviceable:** Yes

Recoverable: No

Automatically notify Support: No

**User response:** Perform the actions mentioned one at a time and try the test after each action:

- 1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
- 2. Make sure that DSA and BMC/IMM are at the latest level.

#### Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

#### 166-811-001 IMM I2C Test Aborted

Explanation: Request data field length limit exceeded.

Severity: Warning
Serviceable: Yes
Recoverable: No

Automatically notify Support: No

**User response:** Perform the actions mentioned one at a time and try the test after each action:

- 1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
- 2. Make sure that DSA and BMC/IMM are at the latest level.

#### Related Links:

- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

#### 166-812-001 IMM I2C Test Aborted

**Explanation:** Parameter out of range.

Severity: Warning
Serviceable: Yes
Recoverable: No

Automatically notify Support: No

**User response:** Perform the actions mentioned one at a time and try the test after each action:

- 1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
- 2. Make sure that DSA and BMC/IMM are at the latest level.

- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

166-813-001 IMM I2C Test Aborted

Explanation: Cannot return number of requested data

bytes.

**Severity:** Warning **Serviceable:** Yes **Recoverable:** No

Automatically notify Support: No

**User response:** Perform the actions mentioned one at a time and try the test after each action:

- 1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
- 2. Make sure that DSA and BMC/IMM are at the latest level.

#### Related Links:

- · IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

#### 166-814-001 IMM I2C Test Aborted

Explanation: Requested Sensor, data, or record not

present.

Severity: Warning Serviceable: Yes Recoverable: No

Automatically notify Support: No

**User response:** Perform the actions mentioned one at a time and try the test after each action:

- 1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
- Make sure that DSA and BMC/IMM are at the latest level.

#### **Related Links:**

- IBM Support Website
- · Latest level of DSA
- · Latest level of BMC/IMM

#### 166-815-001 IMM I2C Test Aborted

Explanation: Invalid data field in Request.

**Severity:** Warning **Serviceable:** Yes **Recoverable:** No

Automatically notify Support: No

**User response:** Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.

2. Make sure that DSA and BMC/IMM are at the latest level.

#### **Related Links:**

- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

#### 166-816-001 IMM I2C Test Aborted

Explanation: Command illegal for specified sensor or

record type.

Severity: Warning
Serviceable: Yes
Recoverable: No

Automatically notify Support: No

**User response:** Perform the actions mentioned one at a time and try the test after each action:

- 1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
- 2. Make sure that DSA and BMC/IMM are at the latest level.

#### **Related Links:**

- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

#### 166-817-001 IMM I2C Test Aborted

Explanation: Command response could not be

provided.

Severity: Warning Serviceable: Yes Recoverable: No

Automatically notify Support: No

**User response:** Perform the actions mentioned one at a time and try the test after each action:

- 1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
- 2. Make sure that DSA and BMC/IMM are at the latest level.

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

166-818-001 IMM I2C Test Aborted

Explanation: Cannot execute duplicated request.

Severity: Warning
Serviceable: Yes
Recoverable: No

Automatically notify Support: No

**User response:** Perform the actions mentioned one at a time and try the test after each action:

- 1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
- 2. Make sure that DSA and BMC/IMM are at the latest level.

#### **Related Links:**

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

#### 166-819-001 IMM I2C Test Aborted

**Explanation:** Command response could not be provided. SDR Repository in?update mode.

Severity: Warning Serviceable: Yes Recoverable: No

Automatically notify Support: No

**User response:** Perform the actions mentioned one at a time and try the test after each action:

- 1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
- 2. Make sure that DSA and BMC/IMM are at the latest level.

#### **Related Links:**

- IBM Support Website
- · Latest level of DSA
- · Latest level of BMC/IMM

#### 166-820-001 IMM I2C Test Aborted

**Explanation:** Command response could not be provided. Device in firmware update mode.

Severity: Warning Serviceable: Yes Recoverable: No

Automatically notify Support: No

**User response:** Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.

2. Make sure that DSA and BMC/IMM are at the latest level.

#### **Related Links:**

- IBM Support Website
- · Latest level of DSA
- · Latest level of BMC/IMM

#### 166-821-001 IMM I2C Test Aborted

**Explanation:** Command response could not be provided. BMC initialization in progress.

Severity: Warning
Serviceable: Yes
Recoverable: No

Automatically notify Support: No

**User response:** Perform the actions mentioned one at a time and try the test after each action:

- 1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
- 2. Make sure that DSA and BMC/IMM are at the latest level.

#### **Related Links:**

- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

#### 166-822-001 IMM I2C Test Aborted

Explanation: Destination unavailable.

**Severity:** Warning **Serviceable:** Yes **Recoverable:** No

Automatically notify Support: No

**User response:** Perform the actions mentioned one at a time and try the test after each action:

- 1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
- 2. Make sure that DSA and BMC/IMM are at the latest level.

#### **Related Links:**

- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

#### 166-823-001 IMM I2C Test Aborted

**Explanation:** Cannot execute command. Insufficient privilege level.

Severity: Warning

#### 166-824-001 • 166-905-001

**Serviceable:** Yes **Recoverable:** No

Automatically notify Support: No

**User response:** Perform the actions mentioned one at a time and try the test after each action:

- 1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
- 2. Make sure that DSA and BMC/IMM are at the latest level.

#### Related Links:

- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

#### 166-824-001 IMM I2C Test Aborted

**Explanation:** Cannot execute command.

Severity: Warning Serviceable: Yes Recoverable: No

Automatically notify Support: No

**User response:** Perform the actions mentioned one at a time and try the test after each action:

- 1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
- 2. Make sure that DSA and BMC/IMM are at the latest level.

#### Related Links:

- IBM Support Website
- · Latest level of DSA
- · Latest level of BMC/IMM

#### 166-901-001 IMM I2C Test Failed

**Explanation:** IMM Indicates failure in RTMM bus

(BUS 0).

Severity: Error Serviceable: Yes Recoverable: No

Automatically notify Support: No

**User response:** Perform the actions mentioned one at a time and try the test after each action:

- 1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
- 2. Make sure that DSA and BMC/IMM are at the latest level.
- 3. Run the test again.

4. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

#### **Related Links:**

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

#### 166-904-001 IMM I2C Test Failed

**Explanation:** IMM Indicates failure in PCA9543--4-Channel I2C Switch (BUS 3).

Severity: Error
Serviceable: Yes
Recoverable: No

Automatically notify Support: No

**User response:** Perform the actions mentioned one at a time and try the test after each action:

- 1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
- 2. Make sure that DSA and BMC/IMM are at the latest level.
- 3. Run the test again.
- 4. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

#### **Related Links:**

- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

#### 166-905-001 IMM I2C Test Failed

**Explanation:** IMM Indicates failure in Power paddle card (BUS 4).

Severity: Error Serviceable: Yes Recoverable: No

Automatically notify Support: No

**User response:** Perform the actions mentioned one at a time and try the test after each action:

- 1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
- 2. Make sure that DSA and BMC/IMM are at the latest level.
- 3. Run the test again.
- 4. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

166-908-001 IMM I2C Test Failed

**Explanation:** IMM Indicates failure in the PCA9557

bus (BUS 7).

Severity: Error Serviceable: Yes Recoverable: No

Automatically notify Support: No

User response: Perform the actions mentioned one at

a time and try the test after each action:

- 1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
- 2. Make sure that DSA and BMC/IMM are at the latest level.
- 3. Run the test again.
- 4. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

#### Related Links:

- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

### **DSA** tape drive test results

The following messages can result when you run the tape drive test.

264-000-000 Tape Test Passed

**Explanation:** Tape Test Passed.

Severity: Event
Serviceable: No
Recoverable: No

Automatically notify Support: No

#### **Related Links:**

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

264-901-000 Tape Test Failed

**Explanation:** An error was found in the tape alert log.

Severity: Error Serviceable: Yes Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- Clean the tape drive using the appropriate cleaning media and install new media.
- 2. Run the test again.
- 3. Clear the error log.
- 4. Run the test again.
- 5. Make sure that the drive firmware is at the latest level.
- 6. Rerun the test after upgrading to the latest firmware level
- 7. If the failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

#### **Related Links:**

- IBM Support Website
- Latest level of DSA
- · Latest level of BMC/IMM

264-902-000 Tape Test Failed

**Explanation:** Tape Test Failed. Media is not detected.

Severity: Error
Serviceable: Yes
Recoverable: No

**Automatically notify Support:** No

**User response:** Complete the following steps:

- Clean the tape drive using the appropriate cleaning media and install new media.
- 2. Run the test again.
- 3. Make sure that the drive firmware is at the latest level.
- Rerun the test after upgrading to the latest firmware level.
- If the failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

#### **Related Links:**

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

264-903-000 Tape Test Failed

**Explanation:** Tape Test Failed. Media is not detected.

Severity: Error
Serviceable: Yes

Recoverable: No

**Automatically notify Support:** No

**User response:** Complete the following steps:

- 1. Clean the tape drive using the appropriate cleaning media and install new media.
- 2. Run the test again.
- 3. Make sure that the drive firmware is at the latest
- 4. Rerun the test after upgrading to the latest firmware level.
- 5. If the failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

#### Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

Tape Test Failed 264-904-000

**Explanation:** Tape Test Failed. Drive hardware error.

Severity: Error Serviceable: Yes Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- 1. Check the tape drive cabling for loose or broken connections or damage to the cable. Replace the cable if damage is present.
- 2. Clean the tape drive using the appropriate cleaning media and install new media.
- 3. Run the test again.
- 4. Make sure that the drive firmware is at the latest
- 5. Rerun the test after upgrading to the latest firmware
- 6. If the failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

#### **Related Links:**

- **IBM Support Website**
- Latest level of DSA
- Latest level of BMC/IMM

264-905-000 Tape Test Failed

Explanation: Tape Test Failed. Software error: invalid

request.

Severity: Error Serviceable: Yes Recoverable: No

**Automatically notify Support:** No

**User response:** Complete the following steps:

- 1. If the system has stopped responding, turn off and restart the system.
- 2. Check the system firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
- 3. Run the test again.
- 4. If the system has stopped responding, turn off and restart the system.
- 5. Make sure that the drive firmware is at the latest level.
- 6. Run the test again.
- 7. If the failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

#### Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

264-906-000 Tape Test Failed

**Explanation:** Tape Test Failed. Unrecognized error.

Severity: Error Serviceable: Yes Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- 1. Clean the tape drive using the appropriate cleaning media and install new media.
- 2. Run the test again.
- 3. Make sure that the drive firmware is at the latest
- 4. Rerun the test after upgrading to the latest firmware level.
- 5. Make sure that the DSA Diagnostic code is at the latest level.
- 6. Run the test again.
- 7. Check the system firmware level and upgrade if necessary.
- 8. Run the test again.
- 9. If the failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

- IBM Support Website
- Latest level of DSA

#### · Latest level of BMC/IMM

#### 264-907-000 Tape Test Failed

**Explanation:** An error was found in the block address

somewhere.

Severity: Error
Serviceable: Yes
Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

 Clean the tape drive using the appropriate cleaning media and install new media.

#### **Related Links:**

- IBM Support Website
- · Latest level of DSA
- Latest level of BMC/IMM

#### 264-908-000 Tape Test Failed

Explanation: An error was found in getting tape

capacity.

Severity: Error Serviceable: Yes Recoverable: No

Automatically notify Support: No

**User response:** Complete the following steps:

- 1. Make sure that medium is present.
- Clean the tape drive using the appropriate cleaning media and install new media.

- IBM Support Website
- · Latest level of DSA
- · Latest level of BMC/IMM

### Appendix D. Getting help and technical assistance

If you need help, service, or technical assistance or just want more information about IBM products, you will find a wide variety of sources available from IBM to assist you.

Use this information to obtain additional information about IBM and IBM products, determine what to do if you experience a problem with your IBM system or optional device, and determine whom to call for service, if it is necessary.

### Before you call

Before you call, make sure that you have taken these steps to try to solve the problem yourself.

If you believe that you require IBM to perform warranty service on your IBM product, the IBM service technicians will be able to assist you more efficiently if you prepare before you call.

- Check all cables to make sure that they are connected.
- Check the power switches to make sure that the system and any optional devices are turned on.
- Check for updated software, firmware, and operating-system device drivers for your IBM product. The IBM Warranty terms and conditions state that you, the owner of the IBM product, are responsible for maintaining and updating all software and firmware for the product (unless it is covered by an additional maintenance contract). Your IBM service technician will request that you upgrade your software and firmware if the problem has a documented solution within a software upgrade.
- If you have installed new hardware or software in your environment, check http://www.ibm.com/systems/info/x86servers/serverproven/compat/us/ to make sure that the hardware and software is supported by your IBM product.
- Go to http://www.ibm.com/supportportal to check for information to help you solve the problem.
- Gather the following information to provide to IBM Support. This data will help IBM Support quickly provide a solution to your problem and ensure that you receive the level of service for which you might have contracted.
  - Hardware and Software Maintenance agreement contract numbers, if applicable
  - Machine type number (IBM 4-digit machine identifier)
  - Model number
  - Serial number
  - Current system UEFI and firmware levels
  - Other pertinent information such as error messages and logs
- Go to http://www.ibm.com/support/entry/portal/Open\_service\_request/ to submit an Electronic Service Request. Submitting an Electronic Service Request will start the process of determining a solution to your problem by making the pertinent information available to IBM Support quickly and efficiently. IBM service technicians can start working on your solution as soon as you have completed and submitted an Electronic Service Request.

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You can solve many problems without outside assistance by following the troubleshooting procedures that IBM provides in the online help or in the documentation that is provided with your IBM product. The documentation that comes with IBM systems also describes the diagnostic tests that you can perform. Most systems, operating systems, and programs come with documentation that contains troubleshooting procedures and explanations of error messages and error codes. If you suspect a software problem, see the documentation for the operating system or program.

### Using the documentation

Information about your IBM system and preinstalled software, if any, or optional device is available in the documentation that comes with the product. That documentation can include printed documents, online documents, readme files, and help files.

See the troubleshooting information in your system documentation for instructions for using the diagnostic programs. The troubleshooting information or the diagnostic programs might tell you that you need additional or updated device drivers or other software. IBM maintains pages on the World Wide Web where you can get the latest technical information and download device drivers and updates. To access these pages, go to http://www.ibm.com/supportportal.

### Getting help and information from the World Wide Web

Up-to-date information about IBM products and support is available on the World Wide Web.

On the World Wide Web, up-to-date information about IBM systems, optional devices, services, and support is available at http://www.ibm.com/supportportal. IBM System x information is at http://www.ibm.com/systems/x/. IBM BladeCenter information is at http://www.ibm.com/systems/bladecenter/. IBM IntelliStation information is at http://www.ibm.com/systems/intellistation.

### How to send DSA data to IBM

Use the IBM Enhanced Customer Data Repository to send diagnostic data to IBM.

Before you send diagnostic data to IBM, read the terms of use at http://www-05.ibm.com/de/support/ecurep/terms.html.

You can use any of the following methods to send diagnostic data to IBM:

- Standard upload: http://www.ibm.com/de/support/ecurep/send\_http.html
- Standard upload with the system serial number: http://www.ecurep.ibm.com/app/upload\_hw
- **Secure upload:** http://www.ibm.com/de/support/ecurep/send\_http.html#secure
- **Secure upload with the system serial number:** https://www.ecurep.ibm.com/app/upload\_hw

### Creating a personalized support web page

You can create a personalized support web page by identifying IBM products that are of interest to you.

To create a personalized support web page, go to http://www.ibm.com/support/mynotifications/. From this personalized page, you can subscribe to weekly email notifications about new technical documents, search for information and downloads, and access various administrative services.

### Software service and support

Through IBM Support Line, you can get telephone assistance, for a fee, with usage, configuration, and software problems with your IBM products.

For more information about Support Line and other IBM services, see http://www.ibm.com/services/ or see http://www.ibm.com/planetwide/ for support telephone numbers. In the U.S. and Canada, call 1-800-IBM-SERV (1-800-426-7378).

### Hardware service and support

You can receive hardware service through your IBM reseller or IBM Services.

To locate a reseller authorized by IBM to provide warranty service, go to http://www.ibm.com/partnerworld/pwhome.nsf/weblook/index\_us.html and click **Business Partner Locator**. For IBM support telephone numbers, see http://www.ibm.com/planetwide/ . In the U.S. and Canada, call 1-800-IBM-SERV (1-800-426-7378).

In the U.S. and Canada, hardware service and support is available 24 hours a day, 7 days a week. In the U.K., these services are available Monday through Friday, from 9 a.m. to 6 p.m.

### **IBM Taiwan product service**

Use this information to contact IBM Taiwan product service.

台灣IBM產品服務聯絡方式: 台灣國際商業機器股份有限公司 台北市松仁路7號3樓 電話:0800-016-888

IBM Taiwan product service contact information:

IBM Taiwan Corporation 3F, No 7, Song Ren Rd. Taipei, Taiwan Telephone: 0800-016-888

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### Important notes

Processor speed indicates the internal clock speed of the microprocessor; other factors also affect application performance.

CD or DVD drive speed is the variable read rate. Actual speeds vary and are often less than the possible maximum.

When referring to processor storage, real and virtual storage, or channel volume, KB stands for 1024 bytes, MB stands for 1,048,576 bytes, and GB stands for 1,073,741,824 bytes.

When referring to hard disk drive capacity or communications volume, MB stands for 1,000,000 bytes, and GB stands for 1,000,000 bytes. Total user-accessible capacity can vary depending on operating environments.

Maximum internal hard disk drive capacities assume the replacement of any standard hard disk drives and population of all hard disk drive bays with the largest currently supported drives that are available from IBM.

Maximum memory might require replacement of the standard memory with an optional memory module.

Each solid-state memory cell has an intrinsic, finite number of write cycles that the cell can incur. Therefore, a solid-state device has a maximum number of write cycles that it can be subjected to, expressed as total bytes written (TBW). A device that has exceeded this limit might fail to respond to system-generated commands or might be incapable of being written to. IBM is not responsible for replacement of a device that has exceeded its maximum guaranteed number of program/erase cycles, as documented in the Official Published Specifications for the device.

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Some software might differ from its retail version (if available) and might not include user manuals or all program functionality.

### Particulate contamination

**Attention:** Airborne particulates (including metal flakes or particles) and reactive gases acting alone or in combination with other environmental factors such as humidity or temperature might pose a risk to the device that is described in this document.

Risks that are posed by the presence of excessive particulate levels or concentrations of harmful gases include damage that might cause the device to malfunction or cease functioning altogether. This specification sets forth limits for particulates and gases that are intended to avoid such damage. The limits must not be viewed or used as definitive limits, because numerous other factors, such as temperature or moisture content of the air, can influence the impact of particulates or environmental corrosives and gaseous contaminant transfer. In the absence of specific limits that are set forth in this document, you must implement practices that maintain particulate and gas levels that are consistent with the protection of human health and safety. If IBM determines that the levels of particulates or gases in your environment have caused damage to the device, IBM may condition provision of repair or replacement of devices or parts on implementation of appropriate remedial measures to mitigate such environmental contamination. Implementation of such remedial measures is a customer responsibility.

Table 17. Limits for particulates and gases

| Contaminant | Limits  |
|-------------|---|
| Particulate | • The room air must be continuously filtered with 40% atmospheric dust spot efficiency (MERV 9) according to ASHRAE Standard 52.21.   |
|             | <ul> <li>Air that enters a data center must be filtered to 99.97% efficiency or<br/>greater, using high-efficiency particulate air (HEPA) filters that meet<br/>MIL-STD-282.</li> </ul> |
|             | • The deliquescent relative humidity of the particulate contamination must be more than $60\%^2$ .  |
|             | The room must be free of conductive contamination such as zinc whiskers.  |
| Gaseous     | <ul> <li>Copper: Class G1 as per ANSI/ISA 71.04-1985<sup>3</sup></li> <li>Silver: Corrosion rate of less than 300 Å in 30 days</li> </ul>   |

Table 17. Limits for particulates and gases (continued)

#### Contaminant Limits

- <sup>1</sup> ASHRAE 52.2-2008 Method of Testing General Ventilation Air-Cleaning Devices for Removal Efficiency by Particle Size. Atlanta: American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.
- <sup>2</sup> The deliquescent relative humidity of particulate contamination is the relative humidity at which the dust absorbs enough water to become wet and promote ionic conduction.
- <sup>3</sup> ANSI/ISA-71.04-1985. Environmental conditions for process measurement and control systems: Airborne contaminants. Instrument Society of America, Research Triangle Park, North Carolina, U.S.A.

#### **Documentation format**

The publications for this product are in Adobe Portable Document Format (PDF) and should be compliant with accessibility standards. If you experience difficulties when you use the PDF files and want to request a web-based format or accessible PDF document for a publication, direct your mail to the following address:

Information Development IBM Corporation 205/A015 3039 E. Cornwallis Road P.O. Box 12195 Research Triangle Park, North Carolina 27709-2195 U.S.A.

In the request, be sure to include the publication part number and title.

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This product may not be certified in your country for connection by any means whatsoever to interfaces of public telecommunications networks. Further certification may be required by law prior to making any such connection. Contact an IBM representative or reseller for any questions.

#### **Electronic emission notices**

When you attach a monitor to the equipment, you must use the designated monitor cable and any interference suppression devices that are supplied with the monitor.

### Federal Communications Commission (FCC) statement

**Note:** This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

Properly shielded and grounded cables and connectors must be used in order to meet FCC emission limits. IBM is not responsible for any radio or television interference caused by using other than recommended cables and connectors or by unauthorized changes or modifications to this equipment. Unauthorized changes or modifications could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that might cause undesired operation.

### **Industry Canada Class A emission compliance statement**

This Class A digital apparatus complies with Canadian ICES-003.

### Avis de conformité à la réglementation d'Industrie Canada

Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

### Australia and New Zealand Class A statement

**Attention:** This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

### **European Union EMC Directive conformance statement**

This product is in conformity with the protection requirements of EU Council Directive 2004/108/EC on the approximation of the laws of the Member States relating to electromagnetic compatibility. IBM cannot accept responsibility for any failure to satisfy the protection requirements resulting from a nonrecommended modification of the product, including the fitting of non-IBM option cards.

**Attention:** This is an EN 55022 Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Responsible manufacturer:

International Business Machines Corp. New Orchard Road Armonk, New York 10504 914-499-1900

European Community contact:

IBM Deutschland GmbH Technical Regulations, Department M372 IBM-Allee 1, 71139 Ehningen, Germany Telephone: +49 7032 15 2941

Email: lugi@de.ibm.com

### Germany Class A statement

Deutschsprachiger EU Hinweis: Hinweis für Geräte der Klasse A EU-Richtlinie zur Elektromagnetischen Verträglichkeit

Dieses Produkt entspricht den Schutzanforderungen der EU-Richtlinie 2004/108/EG zur Angleichung der Rechtsvorschriften über die elektromagnetische Verträglichkeit in den EU-Mitgliedsstaaten und hält die Grenzwerte der EN 55022 Klasse A ein.

Um dieses sicherzustellen, sind die Geräte wie in den Handbüchern beschrieben zu installieren und zu betreiben. Des Weiteren dürfen auch nur von der IBM empfohlene Kabel angeschlossen werden. IBM übernimmt keine Verantwortung für die Einhaltung der Schutzanforderungen, wenn das Produkt ohne Zustimmung der IBM verändert bzw. wenn Erweiterungskomponenten von Fremdherstellern ohne Empfehlung der IBM gesteckt/eingebaut werden.

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Dieses Produkt entspricht dem Gesetz über die elektromagnetische Verträglichkeit von Geräten (EMVG). Dies ist die Umsetzung der EU-Richtlinie 2004/108/EG in der Bundesrepublik Deutschland.

### Zulassungsbescheinigung laut dem Deutschen Gesetz über die elektromagnetische Verträglichkeit von Geräten (EMVG) (bzw. der EMC EG Richtlinie 2004/108/EG) für Geräte der Klasse A

Dieses Gerät ist berechtigt, in Übereinstimmung mit dem Deutschen EMVG das EG-Konformitätszeichen - CE - zu führen.

Verantwortlich für die Einhaltung der EMV Vorschriften ist der Hersteller:

International Business Machines Corp. New Orchard Road Armonk, New York 10504 914-499-1900

Der verantwortliche Ansprechpartner des Herstellers in der EU ist:

IBM Deutschland GmbH Technical Regulations, Abteilung M372 IBM-Allee 1, 71139 Ehningen, Germany Telephone: +49 7032 15 2941 Email: lugi@de.ibm.com

#### Generelle Informationen:

Das Gerät erfüllt die Schutzanforderungen nach EN 55024 und EN 55022 Klasse Α.

### Japan VCCI Class A statement

この装置は、クラス A 情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。 VCCI-A

This is a Class A product based on the standard of the Voluntary Control Council for Interference (VCCI). If this equipment is used in a domestic environment, radio interference may occur, in which case the user may be required to take corrective actions.

# Japan Electronics and Information Technology Industries Association (JEITA) statement

高調波ガイドライン準用品

Japan Electronics and Information Technology Industries Association (JEITA) Confirmed Harmonics Guidelines with Modifications (products greater than 20 A per phase)

### **Korea Communications Commission (KCC) statement**

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This is electromagnetic wave compatibility equipment for business (Type A). Sellers and users need to pay attention to it. This is for any areas other than home.

### Russia Electromagnetic Interference (EMI) Class A statement

ВНИМАНИЕ! Настоящее изделие относится к классу А. В жилых помещениях оно может создавать радиопомехи, для снижения которых необходимы дополнительные меры

# People's Republic of China Class A electronic emission statement

声 明 此为 A 级产品。在生活环境中, 该产品可能会造成无线电干扰。 在这种情况下,可能需要用户对其 干扰采取切实可行的措施。

### **Taiwan Class A compliance statement**

警告使用者: 這是甲類的資訊產品,在 居住的環境中使用時,可 能會造成射頻干擾,在這 種情況下,使用者會被要 求採取某些適當的對策。

## Power cord safety statement

**Attention:** Use No. 26 AWG or larger UL-listed or CSA certified telecommunication line cord.

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