

Power Systems

*Event Codes for the 8335-GTC,
8335-GTG, 8335-GTH, 8335-GTW, and
8335-GTX*

IBM

Power Systems

*Event Codes for the 8335-GTC,
8335-GTG, 8335-GTH, 8335-GTW, and
8335-GTX*

IBM

Note

Before using this information and the product it supports, read the information in “Safety notices” on page v, “Notices” on page 23, the *IBM Systems Safety Notices* manual, G229-9054, and the *IBM Environmental Notices and User Guide*, Z125-5823.

This edition applies to IBM Power Systems™ servers that contain the POWER9™ processor and to all associated models.

© Copyright IBM Corporation 2017, 2019.

US Government Users Restricted Rights – Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

Contents

Safety notices	v
FQPSP_{XXXXXXXX} Event Codes	1
Notices	23
Accessibility features for IBM Power Systems servers	24
Privacy policy considerations	25
Trademarks	26
Electronic emission notices	26
Class A Notices	26
Class B Notices	30
Terms and conditions	33

Safety notices

Safety notices may be printed throughout this guide:

- **DANGER** notices call attention to a situation that is potentially lethal or extremely hazardous to people.
- **CAUTION** notices call attention to a situation that is potentially hazardous to people because of some existing condition.
- **Attention** notices call attention to the possibility of damage to a program, device, system, or data.

World Trade safety information

Several countries require the safety information contained in product publications to be presented in their national languages. If this requirement applies to your country, safety information documentation is included in the publications package (such as in printed documentation, on DVD, or as part of the product) shipped with the product. The documentation contains the safety information in your national language with references to the U.S. English source. Before using a U.S. English publication to install, operate, or service this product, you must first become familiar with the related safety information documentation. You should also refer to the safety information documentation any time you do not clearly understand any safety information in the U.S. English publications.

Replacement or additional copies of safety information documentation can be obtained by calling the IBM Hotline at 1-800-300-8751.

German safety information

Das Produkt ist nicht für den Einsatz an Bildschirmarbeitsplätzen im Sinne § 2 der Bildschirmarbeitsverordnung geeignet.

Laser safety information

IBM® servers can use I/O cards or features that are fiber-optic based and that utilize lasers or LEDs.

Laser compliance

IBM servers may be installed inside or outside of an IT equipment rack.

DANGER: When working on or around the system, observe the following precautions:

Electrical voltage and current from power, telephone, and communication cables are hazardous. To avoid a shock hazard:

- If IBM supplied the power cord(s), connect power to this unit only with the IBM provided power cord. Do not use the IBM provided power cord for any other product.
- Do not open or service any power supply assembly.
- Do not connect or disconnect any cables or perform installation, maintenance, or reconfiguration of this product during an electrical storm.
- The product might be equipped with multiple power cords. To remove all hazardous voltages, disconnect all power cords.
 - For AC power, disconnect all power cords from their AC power source.
 - For racks with a DC power distribution panel (PDP), disconnect the customer's DC power source to the PDP.
- When connecting power to the product ensure all power cables are properly connected.

- For racks with AC power, connect all power cords to a properly wired and grounded electrical outlet. Ensure that the outlet supplies proper voltage and phase rotation according to the system rating plate.
- For racks with a DC power distribution panel (PDP), connect the customer's DC power source to the PDP. Ensure that the proper polarity is used when attaching the DC power and DC power return wiring.
- Connect any equipment that will be attached to this product to properly wired outlets.
- 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.
- Do not attempt to switch on power to the machine until all possible unsafe conditions are corrected.
- Assume that an electrical safety hazard is present. Perform all continuity, grounding, and power checks specified during the subsystem installation procedures to ensure that the machine meets safety requirements.
- Do not continue with the inspection if any unsafe conditions are present.
- Before you open the device covers, unless instructed otherwise in the installation and configuration procedures: Disconnect the attached AC power cords, turn off the applicable circuit breakers located in the rack power distribution panel (PDP), and disconnect any telecommunications systems, networks, and modems.

DANGER:

- Connect and disconnect cables as described in the following procedures when installing, moving, or opening covers on this product or attached devices.

To Disconnect:

1. Turn off everything (unless instructed otherwise).
2. For AC power, remove the power cords from the outlets.
3. For racks with a DC power distribution panel (PDP), turn off the circuit breakers located in the PDP and remove the power from the Customer's DC power source.
4. Remove the signal cables from the connectors.
5. Remove all cables from the devices.

To Connect:

1. Turn off everything (unless instructed otherwise).
2. Attach all cables to the devices.
3. Attach the signal cables to the connectors.
4. For AC power, attach the power cords to the outlets.
5. For racks with a DC power distribution panel (PDP), restore the power from the Customer's DC power source and turn on the circuit breakers located in the PDP.
6. Turn on the devices.

Sharp edges, corners and joints may be present in and around the system. Use care when handling equipment to avoid cuts, scrapes and pinching. (D005)

(R001 part 1 of 2):

DANGER: Observe the following precautions when working on or around your IT rack system:

- Heavy equipment—personal injury or equipment damage might result if mishandled.
- Always lower the leveling pads on the rack cabinet.
- Always install stabilizer brackets on the rack cabinet unless the earthquake option is to be installed.
- To avoid hazardous conditions due to uneven mechanical loading, always install the heaviest devices in the bottom of the rack cabinet. Always install servers and optional devices starting from the bottom of the rack cabinet.
- Rack-mounted devices are not to be used as shelves or work spaces. Do not place objects on top of rack-mounted devices. In addition, do not lean on rack mounted devices and do not use them to stabilize your body position (for example, when working from a ladder).



- Each rack cabinet might have more than one power cord.
 - For AC powered racks, be sure to disconnect all power cords in the rack cabinet when directed to disconnect power during servicing.
 - For racks with a DC power distribution panel (PDP), turn off the circuit breaker that controls the power to the system unit(s), or disconnect the customer's DC power source, when directed to disconnect power during servicing.
- Connect all devices installed in a rack cabinet to power devices installed in the same rack cabinet. Do not plug a power cord from a device installed in one rack cabinet into a power device installed in a different rack cabinet.
- An electrical outlet that is not correctly wired could place hazardous voltage on the metal parts of the system or the devices that attach to the system. It is the responsibility of the customer to ensure that the outlet is correctly wired and grounded to prevent an electrical shock. (R001 part 1 of 2)

(R001 part 2 of 2):

CAUTION:

- Do not install a unit in a rack where the internal rack ambient temperatures will exceed the manufacturer's recommended ambient temperature for all your rack-mounted devices.
- Do not install a unit in a rack where the air flow is compromised. Ensure that air flow is not blocked or reduced on any side, front, or back of a unit used for air flow through the unit.
- Consideration should be given to the connection of the equipment to the supply circuit so that overloading of the circuits does not compromise the supply wiring or overcurrent protection. To provide the correct power connection to a rack, refer to the rating labels located on the equipment in the rack to determine the total power requirement of the supply circuit.
- *(For sliding drawers.)* Do not pull out or install any drawer or feature if the rack stabilizer brackets are not attached to the rack or if the rack is not bolted to the floor. Do not pull out more than one drawer at a time. The rack might become unstable if you pull out more than one drawer at a time.



- *(For fixed drawers.)* This drawer is a fixed drawer and must not be moved for servicing unless specified by the manufacturer. Attempting to move the drawer partially or completely out of the rack might cause the rack to become unstable or cause the drawer to fall out of the rack. (R001 part 2 of 2)

CAUTION:

Removing components from the upper positions in the rack cabinet improves rack stability during relocation. Follow these general guidelines whenever you relocate a populated rack cabinet within a room or building.

- Reduce the weight of the rack cabinet by removing equipment starting at the top of the rack cabinet. When possible, restore the rack cabinet to the configuration of the rack cabinet as you received it. If this configuration is not known, you must observe the following precautions:
 - Remove all devices in the 32U position (compliance ID RACK-001 or 22U (compliance ID RR001) and above.
 - Ensure that the heaviest devices are installed in the bottom of the rack cabinet.
 - Ensure that there are little-to-no empty U-levels between devices installed in the rack cabinet below the 32U (compliance ID RACK-001 or 22U (compliance ID RR001) level, unless the received configuration specifically allowed it.
- If the rack cabinet you are relocating is part of a suite of rack cabinets, detach the rack cabinet from the suite.
- If the rack cabinet you are relocating was supplied with removable outriggers they must be reinstalled before the cabinet is relocated.
- Inspect the route that you plan to take to eliminate potential hazards.
- Verify that the route that you choose can support the weight of the loaded rack cabinet. Refer to the documentation that comes with your rack cabinet for the weight of a loaded rack cabinet.
- Verify that all door openings are at least 760 x 230 mm (30 x 80 in.).
- Ensure that all devices, shelves, drawers, doors, and cables are secure.
- Ensure that the four leveling pads are raised to their highest position.
- Ensure that there is no stabilizer bracket installed on the rack cabinet during movement.
- Do not use a ramp inclined at more than 10 degrees.
- When the rack cabinet is in the new location, complete the following steps:
 - Lower the four leveling pads.
 - Install stabilizer brackets on the rack cabinet or in an earthquake environment bolt the rack to the floor.
 - If you removed any devices from the rack cabinet, repopulate the rack cabinet from the lowest position to the highest position.
- If a long-distance relocation is required, restore the rack cabinet to the configuration of the rack cabinet as you received it. Pack the rack cabinet in the original packaging material, or equivalent. Also lower the leveling pads to raise the casters off of the pallet and bolt the rack cabinet to the pallet.

(R002)

(L001)



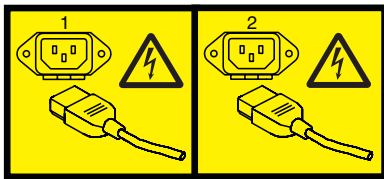
DANGER: Hazardous voltage, current, or energy levels are present inside any component that has this label attached. Do not open any cover or barrier that contains this label. (L001)

(L002)

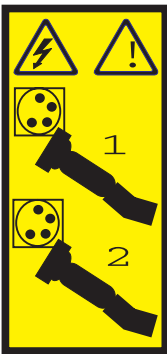


DANGER: Rack-mounted devices are not to be used as shelves or work spaces. Do not place objects on top of rack-mounted devices. In addition, do not lean on rack-mounted devices and do not use them to stabilize your body position (for example, when working from a ladder). (L002)

(L003)



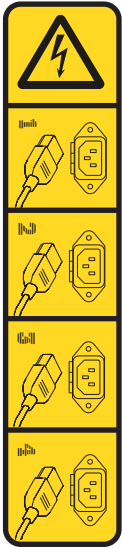
or



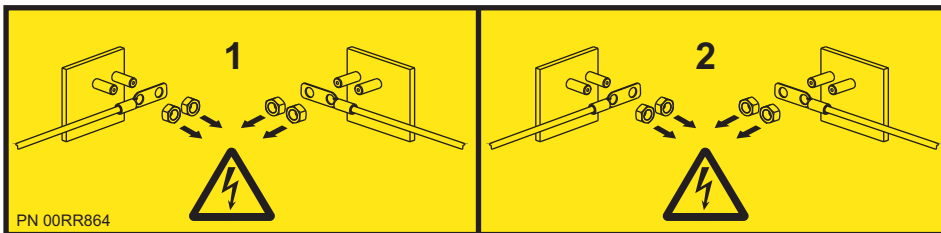
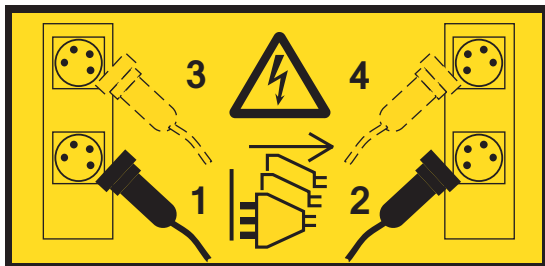
or



or



or



DANGER: Multiple power cords. The product might be equipped with multiple AC power cords or multiple DC power cables. To remove all hazardous voltages, disconnect all power cords and power cables. (L003)

(L007)



CAUTION: A hot surface nearby. (L007)

(L008)



CAUTION: Hazardous moving parts nearby. (L008)

All lasers are certified in the U.S. to conform to the requirements of DHHS 21 CFR Subchapter J for class 1 laser products. Outside the U.S., they are certified to be in compliance with IEC 60825 as a class 1 laser product. Consult the label on each part for laser certification numbers and approval information.

CAUTION:

This product might contain one or more of the following devices: CD-ROM drive, DVD-ROM drive, DVD-RAM drive, or laser module, which are Class 1 laser products. Note the following information:

- **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 the controls or adjustments or performance of procedures other than those specified herein might result in hazardous radiation exposure.**

(C026)

CAUTION:

Data processing environments can contain equipment transmitting on system links with laser modules that operate at greater than Class 1 power levels. For this reason, never look into the end of an optical fiber cable or open receptacle. Although shining light into one end and looking into the other end of a disconnected optical fiber to verify the continuity of optic fibers may not injure the eye, this procedure is potentially dangerous. Therefore, verifying the continuity of optical fibers by shining light into one end and looking at the other end is not recommended. To verify continuity of a fiber optic cable, use an optical light source and power meter. (C027)

CAUTION:

This product contains a Class 1M laser. Do not view directly with optical instruments. (C028)

CAUTION:

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

- Laser radiation when open.
- Do not stare into the beam, do not view directly with optical instruments, and avoid direct exposure to the beam. (C030)

(C030)

CAUTION:

The battery contains lithium. To avoid possible explosion, do not burn or charge the battery.

Do Not:

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

Exchange only with the IBM-approved part. Recycle or discard the battery as instructed by local regulations. In the United States, IBM has a process for the collection of this battery. For information, call 1-800-426-4333. Have the IBM part number for the battery unit available when you call. (C003)

CAUTION:

Regarding IBM provided VENDOR LIFT TOOL:

- Operation of LIFT TOOL by authorized personnel only.
- LIFT TOOL intended for use to assist, lift, install, remove units (load) up into rack elevations. It is not to be used loaded transporting over major ramps nor as a replacement for such designated tools like pallet jacks, walkies, fork trucks and such related relocation practices. When this is not practicable, specially trained persons or services must be used (for instance, riggers or movers).
- Read and completely understand the contents of LIFT TOOL operator's manual before using. Failure to read, understand, obey safety rules, and follow instructions may result in property damage and/or personal injury. If there are questions, contact the vendor's service and support. Local paper manual must remain with machine in provided storage sleeve area. Latest revision manual available on vendor's web site.
- Test verify stabilizer brake function before each use. Do not over-force moving or rolling the LIFT TOOL with stabilizer brake engaged.
- Do not raise, lower or slide platform load shelf unless stabilizer (brake pedal jack) is fully engaged. Keep stabilizer brake engaged when not in use or motion.
- Do not move LIFT TOOL while platform is raised, except for minor positioning.
- Do not exceed rated load capacity. See LOAD CAPACITY CHART regarding maximum loads at center versus edge of extended platform.
- Only raise load if properly centered on platform. Do not place more than 200 lb (91 kg) on edge of sliding platform shelf also considering the load's center of mass/gravity (CoG).
- Do not corner load the platforms, tilt riser, angled unit install wedge or other such accessory options. Secure such platforms -- riser tilt, wedge, etc options to main lift shelf or forks in all four (4x or all other provisioned mounting) locations with provided hardware only, prior to use. Load objects are designed to slide on/off smooth platforms without appreciable force, so take care not to push or lean. Keep riser tilt [adjustable angling platform] option flat at all times except for final minor angle adjustment when needed.
- Do not stand under overhanging load.
- Do not use on uneven surface, incline or decline (major ramps).
- Do not stack loads.
- Do not operate while under the influence of drugs or alcohol.
- Do not support ladder against LIFT TOOL (unless the specific allowance is provided for one following qualified procedures for working at elevations with this TOOL).
- Tipping hazard. Do not push or lean against load with raised platform.
- Do not use as a personnel lifting platform or step. No riders.
- Do not stand on any part of lift. Not a step.
- Do not climb on mast.
- Do not operate a damaged or malfunctioning LIFT TOOL machine.
- Crush and pinch point hazard below platform. Only lower load in areas clear of personnel and obstructions. Keep hands and feet clear during operation.
- No Forks. Never lift or move bare LIFT TOOL MACHINE with pallet truck, jack or fork lift.
- Mast extends higher than platform. Be aware of ceiling height, cable trays, sprinklers, lights, and other overhead objects.
- Do not leave LIFT TOOL machine unattended with an elevated load.
- Watch and keep hands, fingers, and clothing clear when equipment is in motion.
- Turn Winch with hand power only. If winch handle cannot be cranked easily with one hand, it is probably over-loaded. Do not continue to turn winch past top or bottom of platform travel. Excessive unwinding will detach handle and damage cable. Always hold handle when lowering, unwinding. Always assure self that winch is holding load before releasing winch handle.
- A winch accident could cause serious injury. Not for moving humans. Make certain clicking sound is heard as the equipment is being raised. Be sure winch is locked in position before releasing handle. Read instruction page before operating this winch. Never allow winch to unwind freely. Freewheeling will cause uneven cable wrapping around winch drum, damage cable, and may cause serious injury.
- This TOOL must be maintained correctly for IBM Service personnel to use it. IBM shall inspect condition and verify maintenance history before operation. Personnel reserve the right not to use

TOOL if inadequate. (C048)

Power and cabling information for NEBS (Network Equipment-Building System) GR-1089-CORE

The following comments apply to the IBM servers that have been designated as conforming to NEBS (Network Equipment-Building System) GR-1089-CORE:

The equipment is suitable for installation in the following:

- Network telecommunications facilities
- Locations where the NEC (National Electrical Code) applies

The intrabuilding ports of this equipment are suitable for connection to intrabuilding or unexposed wiring or cabling only. The intrabuilding ports of this equipment *must not* be metalically connected to the interfaces that connect to the OSP (outside plant) or its wiring. These interfaces are designed for use as intrabuilding interfaces only (Type 2 or Type 4 ports as described in GR-1089-CORE) and require isolation from the exposed OSP cabling. The addition of primary protectors is not sufficient protection to connect these interfaces metalically to OSP wiring.

Note: All Ethernet cables must be shielded and grounded at both ends.

The ac-powered system does not require the use of an external surge protection device (SPD).

The dc-powered system employs an isolated DC return (DC-I) design. The DC battery return terminal *shall not* be connected to the chassis or frame ground.

The dc-powered system is intended to be installed in a common bonding network (CBN) as described in GR-1089-CORE.

FQPSPxxxxxx Event Codes

This information provides descriptions and service actions for FQPSPxxxxxx event codes on 8335-GTC, 8335-GTG, 8335-GTH, 8335-GTW, and 8335-GTX systems.

FQPSPAA0000M

Explanation: Message: A vital system component has been disabled

Severity: Critical

Serviceable: Yes

Call Home Candidate: No

Affected Subsystem: Canister/Appliance

Event type: Unrecoverable Hardware Failure

Response: Check for other serviceable events in the logs and resolve those first.

FQPSPAA0001M

Explanation: Message: An unknown problem occurred

Severity: Critical

Serviceable: Yes

Call Home Candidate: Yes

Affected Subsystem: Canister/Appliance

Event type: Unrecoverable Hardware Failure

Response: Go to Contacting IBM service and support.

FQPSPAA0007G

Explanation: Message: A system checkstop occurred

Severity: Warning

Serviceable: Yes

Call Home Candidate: No

Affected Subsystem: Canister/Appliance

Event type: Unrecoverable Hardware Failure

Response: Check for a serviceable log entry following this one, and resolve that issue.

FQPSPAA0008M

Explanation: Message: Hostboot procedure callout

Severity: Critical

Serviceable: Yes

Call Home Candidate: Yes

Affected Subsystem: Canister/Appliance

Event type: Unrecoverable Hardware Failure

Response: Contact your next level of service, and review the eSEL details.

FQPSPAA0009M

Explanation: Message: System performance is degraded

Severity: Critical

Serviceable: Yes

Call Home Candidate: No

Affected Subsystem: Canister/Appliance

Event type: Firmware/Software Failure

Response: Go to Getting fixes and update the system firmware to the most recent level of firmware that is available. If this SEL event continues to be logged, go to Collecting diagnostic data. Then, go to Contacting IBM service and support.

FQPSPAA0010M

Explanation: Message: The host did not shutdown within the configured time

Severity: Critical

Serviceable: Yes

Call Home Candidate: No

Affected Subsystem: Canister/Appliance

Event type: Firmware/Software Failure

Response: The host OS might be hung. You may choose to wait for the OS or attempt a hard power off of the system.

FQPSPAA0011M

Explanation: Message: An error was detected with the base platform, but was not able to be deciphered.

Contact your next level of support.

Severity: Critical

Serviceable: Yes

Call Home Candidate: Yes

Affected Subsystem: Canister/Appliance

Event type: Unrecoverable Hardware Failure

Response: Contact your next level of service, and review the eSEL details.

FQPSPAA0013G

Explanation: Message: The system backplane has exceeded a correctable error threshold

Severity: Warning

Serviceable: Yes

Call Home Candidate: No

Affected Subsystem: Canister/Appliance

Event type: PFA

Response: Replace the system backplane.

FQPSPAA0013M

Explanation: Message: The system backplane has failed

FQPSPAA0014I • FQPSPCA0062M

Severity: Critical
Serviceable: Yes
Call Home Candidate: Yes
Affected Subsystem: Canister/Appliance
Event type: Unrecoverable Hardware Failure

Response: Replace the system backplane.

FQPSPAA0014I

Explanation: Message: The system backplane has recovered from an error
Severity: Information
Serviceable: No
Call Home Candidate: No
Affected Subsystem: Canister/Appliance
Event type: Recovery

Response: No service action is required - This alert is for informational purposes only.

FQPSPCA0056M

Explanation: Message: Fan %x is not functional. **Note:** %x indicates the fan number. To determine the fan number, view details for the serviceable event that sent you here.

Severity: Critical
Serviceable: Yes
Call Home Candidate: Yes
Affected Subsystem: Cooling
Event type: Uncorrectable Hardware Failure

Response: Replace the specified fan. If the problem persists, replace the fan card.

FQPSPCA0057M

Explanation: Message: Unable to set fan speed for fan %x. **Note:** %x indicates the fan number. To determine the fan number, view details for the serviceable event that sent you here.

Severity: Critical
Serviceable: Yes
Call Home Candidate: No
Affected Subsystem: Cooling
Event type: Communication Failure/Timeout

Response: Ensure the fan is fully seated. If the problem persists, replace the fan. If the problem still persists, replace the fan card.

FQPSPCA0058M

Explanation: Message: Unable to read fan %x rotor %y speed **Note:** %x indicates the fan number, %y indicates the fan rotor. To determine the fan number, view details for the serviceable event that sent you here.

Severity: Critical
Serviceable: Yes
Call Home Candidate: No
Affected Subsystem: Cooling

Event type: Communication Failure/Timeout

Response: Ensure the specified fan is fully seated. If the problem persists, replace the specified fan. If the problem continues to persist, replace the fan card.

FQPSPCA0059M

Explanation: Message: Unable to read ambient temperature

Severity: Critical
Serviceable: Yes
Call Home Candidate: No
Affected Subsystem: Cooling
Event type: Communication Failure/Timeout

Response: If the system was recently installed, moved, serviced, or upgraded, ensure the operator panel cable is fully seated.

FQPSPCA0060M

Explanation: Message: Unable to read DIMM %x power consumption. **Note:** %x indicates the DIMM number. To determine the DIMM number, view details for the serviceable event that sent you here.

Severity: Critical
Serviceable: Yes
Call Home Candidate: No
Affected Subsystem: Cooling
Event type: Communication Failure/Timeout

Response: If the system was recently installed, moved, serviced, or upgraded, ensure the specified DIMM is fully seated. Replace the DIMM. Replace the system backplane. Replace the CPU.

FQPSPCA0061M

Explanation: Message: Unable to read GPU %x core temperature. **Note:** %x indicates the GPU number. To determine the GPU number, view details for the serviceable event that sent you here.

Severity: Critical
Serviceable: Yes
Call Home Candidate: No
Affected Subsystem: Cooling
Event type: Communication Failure/Timeout

Response: If the system was recently installed, moved, serviced, or upgraded, ensure the specified GPU is fully seated. Replace the system backplane. Replace the GPU.

FQPSPCA0062M

Explanation: Message: Unable to read CPU %x core %y temperature. **Note:** %x indicates the CPU number and %y indicates the core number. To determine the CPU number, view details for the serviceable event that sent you here.

Severity: Critical
Serviceable: Yes

Call Home Candidate: No
 Affected Subsystem: Cooling
 Event type: Communication Failure/Timeout

Response: If the system was recently installed, moved, serviced, or upgraded, ensure the specified CPU is fully seated. Replace the system backplane. Replace the CPU.

FQPSPCA0063M

Explanation: Message: Unable to read CPU %x VCS voltage regulator temperature. **Note:** %x indicates the CPU number. To determine the CPU number, view details for the serviceable event that sent you here.

Severity: Critical
 Serviceable: Yes
 Call Home Candidate: No
 Affected Subsystem: Cooling
 Event type: Communication Failure/Timeout

Response: Replace the system backplane.

FQPSPCA0064M

Explanation: Message: Power supply %x fan has failed. **Note:** %x indicates the power supply number. To determine the power supply number, view details for the serviceable event that sent you here.

Severity: Critical
 Serviceable: Yes
 Call Home Candidate: Yes
 Affected Subsystem: Cooling
 Event type: Unrecoverable Hardware Failure

Response: Ensure the power supply fan is not blocked. Replace the specified power supply.

FQPSPCA0065M

Explanation: Message: Power supply %x is too hot. **Note:** %x indicates the power supply number. To determine the power supply number, view details for the serviceable event that sent you here.

Severity: Critical
 Serviceable: Yes
 Call Home Candidate: No
 Affected Subsystem: Cooling
 Event type: Environmental

Response: Ensure the air inlets and outlets of the system are not blocked. Ensure the power supply fan is functional. Check for system fan alerts and resolve those.

FQPSPCA0066M

Explanation: Message: GPU %x suffered an over-temperature fault. **Note:** %x indicates the GPU number. To determine the GPU number, view details for the serviceable event that sent you here.

Severity: Critical
 Serviceable: Yes
 Call Home Candidate: No

Affected Subsystem: Cooling
 Event type: Environmental

Response: Ensure air input to the system is not blocked. If water cooled, ensure the water lines are properly connected. Check for serviceable fan events and resolve those.

FQPSPCA0067F

Explanation: Message: The system shut down due to not having enough functional fans.

Severity: Warning
 Serviceable: No
 Call Home Candidate: No
 Affected Subsystem: Cooling
 Event type: Unrecoverable Hardware Failure

Response: Look for serviceable system events that are related to fans and occurred around the same time as the problem that you are working on and resolve those first.

FQPSPCA0068F

Explanation: Message: The system was shut down due to a power fault being detected.

Severity: Warning
 Serviceable: No
 Call Home Candidate: No
 Affected Subsystem: Cooling
 Event type: Environmental

Response: Look for serviceable system events that are related to system power and occurred around the same time as the problem that you are working on and resolve those first.

FQPSPCA0069F

Explanation: Message: The system was shut down due to a processor going over temperature

Severity: Warning
 Serviceable: No
 Call Home Candidate: No
 Affected Subsystem: Cooling
 Event type: Environmental

Response: Look for serviceable system events that are related to system cooling and occurred around the same time as the problem that you are working on and resolve those first. Ensure all cooling devices are functional and fix them if they are not. Ensure the heatsink or coldplate is securely fastened to the CPUs.

FQPSPCA0070F

Explanation: Message: The system was shut down due to a GPU going over temperature

Severity: Warning
 Serviceable: No
 Call Home Candidate: No

FQPSPCA0071M • FQPSPCR0007M

Affected Subsystem: Cooling
Event type: Environmental

Response: Look for serviceable system events that are related to system cooling and occurred around the same time as the problem that you are working on and resolve those first. Ensure all cooling devices are functional. Ensure the heatsink or coldplate is securely fastened to the GPU.

FQPSPCA0071M

Explanation: Message: Fan %x has not been detected.
Note: %x indicates the fan number. To determine the fan number, view details for the serviceable event that sent you here.

Severity: Critical
Serviceable: Yes

Call Home Candidate: No

Affected Subsystem: Cooling

Event type: Uncorrectable Hardware Failure

Response: Ensure the specified fan is properly installed in the chassis. Replace the specified fan. Replace the fan card.

FQPSPCA0072M

Explanation: Message: Three or more CPU cores were over temperature, initiating a thermal shutdown.

Severity: Critical
Serviceable: Yes

Call Home Candidate: Yes

Affected Subsystem: Cooling

Event type: Environmental

Response: Ensure that the ambient temperature is within operating specifications. Ensure that there are no blockages to the air inlet and outlets. If blockages are found, remove them. Ensure that all of the fans are working properly by looking for serviceable events related to fans and resolving them.

FQPSPCR0003M

Explanation: Message: A system firmware error occurred.

Severity: Critical
Serviceable: Yes

Call Home Candidate: Yes

Affected Subsystem: Systems Management - Core / Virtual Appliance

Event type: Firmware/Software Failure

Response: Go to Getting fixes and update the system firmware to the most recent level of firmware that is available. If this SEL event continues to be logged, go to Collecting diagnostic data. Then, go to Contacting IBM service and support.

FQPSPCR0004M

Explanation: Message: A system firmware error occurred.

Severity: Critical

Serviceable: Yes

Call Home Candidate: No

Affected Subsystem: Systems Management - Core / Virtual Appliance

Event type: Firmware/Software Failure

Response: Go to Getting fixes and update the system firmware to the most recent level of firmware that is available. If this SEL event continues to be logged, go to Collecting diagnostic data. Then, go to Contacting IBM service and support.

FQPSPCR0005M

Explanation: Message: A system firmware error occurred.

Severity: Critical

Serviceable: Yes

Call Home Candidate: No

Affected Subsystem: Systems Management - Core / Virtual Appliance

Event type: Firmware/Software Failure

Response: Go to Getting fixes and update the system firmware to the most recent level of firmware that is available. If this SEL event continues to be logged, go to Collecting diagnostic data. Then, go to Contacting IBM service and support.

FQPSPCR0006M

Explanation: Message: A system firmware error occurred.

Severity: Critical

Serviceable: Yes

Call Home Candidate: No

Affected Subsystem: Systems Management - Core / Virtual Appliance

Event type: Firmware/Software Failure

Response: Go to Getting fixes and update the system firmware to the most recent level of firmware that is available. If this SEL event continues to be logged, go to Collecting diagnostic data. Then, go to Contacting IBM service and support.

FQPSPCR0007M

Explanation: Message: A system firmware error occurred.

Severity: Critical

Serviceable: Yes

Call Home Candidate: No

Affected Subsystem: Systems Management - Core / Virtual Appliance

Event type: Firmware/Software Failure

Response: Go to Getting fixes and update the system

firmware to the most recent level of firmware that is available. If this SEL event continues to be logged, go to Collecting diagnostic data. Then, go to Contacting IBM service and support.

FQPSPCR0008M

Explanation: Message: A system firmware error occurred.

Severity: Critical

Serviceable: Yes

Call Home Candidate: No

Affected Subsystem: Systems Management - Core / Virtual Appliance

Event type: Firmware/Software Failure

Response: Go to Getting fixes and update the system firmware to the most recent level of firmware that is available. If this SEL event continues to be logged, go to Collecting diagnostic data. Then, go to Contacting IBM service and support.

FQPSPCR0011M

Explanation: Message: The service processor detected a problem during the early boot process

Severity: Critical

Serviceable: Yes

Call Home Candidate: No

Affected Subsystem: Systems Management - Core / Virtual Appliance

Event type: Firmware/Software Failure

Response: Search for nearby serviceable alerts and resolve those first.

FQPSPCR0020F

Explanation: Message: An internal operation has timed out

Severity: Warning

Serviceable: No

Call Home Candidate: No

Affected Subsystem: Systems Management - Core / Virtual Appliance

Event type: Monitoring Agent

Response: Update to the most recent version of firmware. For information about updating system firmware, see Getting fixes. If the problem persists or you are on the most recent version of firmware, reboot the BMC. If this SEL event continues to be logged, go to Collecting diagnostic data. Then, go to Contacting IBM service and support

FQPSPCR0021F

Explanation: Message: An internal failure has occurred while performing an operation.

Severity: Warning

Serviceable: No

Call Home Candidate: No

Affected Subsystem: Systems Management - Core / Virtual Appliance

Event type: Firmware/Software Failure

Response: Update to the most recent version of firmware. For information about updating system firmware, see Getting fixes. If the problem persists or you are on the most recent version of firmware, reboot the BMC. If this SEL event continues to be logged, go to Collecting diagnostic data. Then, go to Contacting IBM service and support

FQPSPCR0022F

Explanation: Message: The user has insufficient privileges

Severity: Warning

Serviceable: No

Call Home Candidate: No

Affected Subsystem: Systems Management - Core / Virtual Appliance

Event type: Security

Response: Check the user permissions and contact the system administrator if they are not sufficient.

FQPSPCR0023M

Explanation: Message: Hostboot has become unresponsive

Severity: Critical

Serviceable: Yes

Call Home Candidate: No

Affected Subsystem: Systems Management - Core / Virtual Appliance

Event type: Firmware/Software Failure

Response: Ensure the opal-prd service is running by running the command **sudo systemctl status opal-prd**. If the service is shown as deactivated, start it by using the command **sudo systemctl start opal-prd**. If the status shows the service cannot be found, you must install it. If the problem persists, flash the system pnr. For information about updating system firmware, see Getting fixes.

FQPSPCR0024G

Explanation: Message: Failed to read from I2C device

Severity: Warning

Serviceable: Yes

Call Home Candidate: No

Affected Subsystem: Systems Management - Core / Virtual Appliance

Event type: Communication Failure/Timeout

Response: Try the operation again. If the problem persists, flash the BMC firmware. For information about updating system firmware, see Getting fixes.

FQPSPCR0025G

Explanation: Message: Unable to read the manifest file
Severity: Warning
Serviceable: Yes
Call Home Candidate: No
Affected Subsystem: Systems Management - Core / Virtual Appliance
Event type: Firmware/Software Failure

Response: Try the operation again. If the problem persists, flash the BMC firmware. For information about updating system firmware, see Getting fixes.

FQPSPCR0026G

Explanation: Message: Unable to decompress the tar file
Severity: Warning
Serviceable: Yes
Call Home Candidate: No
Affected Subsystem: Systems Management - Core / Virtual Appliance
Event type: Firmware/Software Failure

Response: Try the operation again. If the problem persists, flash the BMC firmware. For information about updating system firmware, see Getting fixes.

FQPSPCR0027G

Explanation: Message: Unable to process the image provided
Severity: Warning
Serviceable: Yes
Call Home Candidate: No
Affected Subsystem: Systems Management - Core / Virtual Appliance
Event type: Firmware/Software Failure

Response: Try the operation again. If the problem persists, flash the BMC firmware. For information about updating system firmware, see Getting fixes.

FQPSPCR0028M

Explanation: Message: Unable to verify the system firmware
Severity: Critical
Serviceable: Yes
Call Home Candidate: No
Affected Subsystem: Systems Management - Core / Virtual Appliance
Event type: Firmware/Software Not Valid

Response: Ensure you have provided a valid firmware image from Fix Central and try the update again.

FQPSPCR0029M

Explanation: Message: A system firmware error occurred.
Severity: Critical
Serviceable: Yes
Call Home Candidate: No
Affected Subsystem: Systems Management - Core / Virtual Appliance
Event type: Firmware/Software Failure

Response: Check for other serviceable events in the logs and resolve those first.

FQPSPCR0030F

Explanation: Message: An invalid argument was provided to a command
Severity: Warning
Serviceable: No
Call Home Candidate: No
Affected Subsystem: Systems Management - Core / Virtual Appliance
Event type: Firmware/Software Failure

Response: If this is a persistent issue, flash or update the BMC firmware. If the problem still persists, contact your next level of support. For information about updating system firmware, see Getting fixes. For information on how to contact support, see Contacting IBM service and support.

FQPSPCR0031G

Explanation: Message: Internal error, unable to associate LED to inventory
Severity: Warning
Serviceable: Yes
Call Home Candidate: No
Affected Subsystem: Systems Management - Core / Virtual Appliance
Event type: Firmware/Software Failure

Response: If this event is persistently occurring, update the firmware. If the problem still persists, contact your next level of service and review the BMC dump details

FQPSPCR0033G

Explanation: Message: Failed to read from FSI Device
Severity: Warning
Serviceable: Yes
Call Home Candidate: No
Affected Subsystem: Systems Management - Core / Virtual Appliance
Event type: Communication Failure/Timeout

Response: Update to the latest version of the OpenBMC tool and check the error logs again. This specific alert ID has been deprecated.

FQPSPCR0034G

Explanation: Message: Failed to write to I2C Device
 Severity: Warning
 Serviceable: Yes
 Call Home Candidate: No
 Affected Subsystem: Systems Management - Core / Virtual Appliance
 Event type: Communication Failure/Timeout
Response: Update to the latest version of the OpenBMC tool and check the error logs again. This specific alert ID has been deprecated.

FQPSPCR0035G

Explanation: Message: Failed to write to FSI Device
 Severity: Warning
 Serviceable: Yes
 Call Home Candidate: No
 Affected Subsystem: Systems Management - Core / Virtual Appliance
 Event type: Communication Failure/Timeout
Response: Update to the latest version of the OpenBMC tool and check the error logs again. This specific alert ID has been deprecated.

FQPSPCR0036F

Explanation: Message: Unable to open a file in BMC filesystem.
 Severity: Warning
 Serviceable: No
 Call Home Candidate: No
 Affected Subsystem: Systems Management - Core / Virtual Appliance
 Event type: Firmware/Software Failure
Response: Unable to open the specified file. It might not exist.

FQPSPCR0037F

Explanation: Message: Unable to find a file in BMC filesystem.
 Severity: Warning
 Serviceable: No
 Call Home Candidate: No
 Affected Subsystem: Systems Management - Core / Virtual Appliance
 Event type: Firmware/Software Failure
Response: Unable to find the specified file. It might not exist.

FQPSPCR0038F

Explanation: Message: Unable to write a file in BMC filesystem.
 Severity: Warning
 Serviceable: No
 Call Home Candidate: No

Affected Subsystem: Systems Management - Core / Virtual Appliance
 Event type: Firmware/Software Failure

Response: Unable to write the specified file. It might not exist.

FQPSPCR0039F

Explanation: Message: An invalid host system control command was provided.
 Severity: Warning
 Serviceable: No
 Call Home Candidate: No
 Affected Subsystem: Systems Management - Core / Virtual Appliance
 Event type: Firmware/Software Failure
Response: Ensure a proper host control command is provided and try again.

FQPSPCR0040F

Explanation: Message: An error occurred working with an IPMI sensor
 Severity: Warning
 Serviceable: No
 Call Home Candidate: No
 Affected Subsystem: Systems Management - Core / Virtual Appliance
 Event type: Communication Failure/Timeout
Response: Update to the latest version of the OpenBMC tool and check the error logs again. This specific alert ID has been deprecated.

FQPSPCR0041F

Explanation: Message: An error occurred on the I2C interface
 Severity: Warning
 Serviceable: No
 Call Home Candidate: No
 Affected Subsystem: Systems Management - Core / Virtual Appliance
 Event type: Communication Failure/Timeout
Response: Update to the latest version of the OpenBMC tool and check the error logs again. This specific alert ID has been deprecated.

FQPSPCR0042F

Explanation: Message: An error occurred on the FSI interface
 Severity: Warning
 Serviceable: No
 Call Home Candidate: No
 Affected Subsystem: Systems Management - Core / Virtual Appliance
 Event type: Communication Failure/Timeout
Response: Update to the latest version of the

FQPSPCR0043F • FQPSPCR0048M

OpenBMC tool and check the error logs again. This specific alert ID has been deprecated.

FQPSPCR0043F

Explanation: Message: Failure to read from host CFAM interface
Severity: Warning
Serviceable: No
Call Home Candidate: No
Affected Subsystem: Systems Management - Core / Virtual Appliance
Event type: Communication Failure/Timeout

Response: Ensure the opal-prd service is running by running the command `sudo systemctl status opal-prd`. If the service is shown as deactivated, start it by using the command `sudo systemctl start opal-prd`. If the status shows the service cannot be found, you must install it. If the problem persists, flash the system pnor. For information about updating system firmware, see Getting fixes.

FQPSPCR0044F

Explanation: Message: Failure to write to host CFAM interface
Severity: Warning
Serviceable: No
Call Home Candidate: No
Affected Subsystem: Systems Management - Core / Virtual Appliance
Event type: Communication Failure/Timeout

Response: Ensure the opal-prd service is running by running the command `sudo systemctl status opal-prd`. If the service is shown as deactivated, start it by using the command `sudo systemctl start opal-prd`. If the status shows the service cannot be found, you must install it. If the problem persists, flash the system pnor. For information about updating system firmware, see Getting fixes.

FQPSPCR0045M

Explanation: Message: Failed to open OCC connection
Severity: Critical
Serviceable: Yes
Call Home Candidate: Yes
Affected Subsystem: Systems Management - Core / Virtual Appliance
Event type: Communication Failure/Timeout

Response: Ensure the opal-prd service is running by running the command `sudo systemctl status opal-prd`. If the service is shown as deactivated, start it by using the command `sudo systemctl start opal-prd`. If the status shows the service cannot be found, you must install it. If the problem persists, flash the system pnor. For information about updating system firmware, see Getting fixes.

FQPSPCR0046M

Explanation: Message: Failed to read from OCC
Severity: Critical
Serviceable: Yes
Call Home Candidate: Yes
Affected Subsystem: Systems Management - Core / Virtual Appliance
Event type: Communication Failure/Timeout

Response: Ensure the opal-prd service is running by running the command `sudo systemctl status opal-prd`. If the service is shown as deactivated, start it by using the command `sudo systemctl start opal-prd`. If the status shows the service cannot be found, you must install it. If the problem persists, flash the system pnor. For information about updating system firmware, see Getting fixes.

FQPSPCR0047M

Explanation: Message: Failed to write to OCC
Severity: Critical
Serviceable: Yes
Call Home Candidate: Yes
Affected Subsystem: Systems Management - Core / Virtual Appliance
Event type: Communication Failure/Timeout

Response: Ensure the opal-prd service is running by running the command `sudo systemctl status opal-prd`. If the service is shown as deactivated, start it by using the command `sudo systemctl start opal-prd`. If the status shows the service cannot be found, you must install it. If the problem persists, flash the system pnor. For information about updating system firmware, see Getting fixes.

FQPSPCR0048M

Explanation: Message: Failure to configure OCC
Severity: Critical
Serviceable: Yes
Call Home Candidate: Yes
Affected Subsystem: Systems Management - Core / Virtual Appliance
Event type: Communication Failure/Timeout

Response: Ensure the opal-prd service is running by running the command `sudo systemctl status opal-prd`. If the service is shown as deactivated, start it by using the command `sudo systemctl start opal-prd`. If the status shows the service cannot be found, you must install it. If the problem persists, flash the system pnor. For information about updating system firmware, see Getting fixes.

FQPSPCR0050F

Explanation: Message: Internal method error with LED Mapper.

Severity: Warning

Serviceable: No

Call Home Candidate: No

Affected Subsystem: Systems Management - Core / Virtual Appliance

Event type: Firmware/Software Failure

Response: If this event is persistently occurring, update the firmware. If the problem still persists, contact your next level of service and review the BMC dump details

FQPSPCR0051F

Explanation: Message: Internal error. LED Mapper object not found.

Severity: Warning

Serviceable: No

Call Home Candidate: No

Affected Subsystem: Systems Management - Core / Virtual Appliance

Event type: Firmware/Software Failure

Response: If this event is persistently occurring, update the firmware. If the problem still persists, contact your next level of service and review the BMC dump details

FQPSPCR0052F

Explanation: Message: Failed to read from the ambient temperature sensor on the system backplane

Severity: Warning

Serviceable: No

Call Home Candidate: No

Affected Subsystem: Systems Management - Core / Virtual Appliance

Event type: Communication Failure/Timeout

Response: If the problem persists, replace the power switch and cable

FQPSPCR0053F

Explanation: Message: Failed to read from the ambient temperature sensor on the system backplane

Severity: Warning

Serviceable: No

Call Home Candidate: No

Affected Subsystem: Systems Management - Core / Virtual Appliance

Event type: Communication Failure/Timeout

Response: If the problem persists, replace the power switch and cable

FQPSPCR0054F

Explanation: Message: Failed to read from the CPU %x VDD/VCS VRM on the system backplane. **Note:** %x indicates the CPU number. To determine the CPU number, view details for the serviceable event that sent you here.

Severity: Warning

Serviceable: No

Call Home Candidate: No

Affected Subsystem: Systems Management - Core / Virtual Appliance

Event type: Communication Failure/Timeout

Response: If the problem persists, replace the system backplane.

FQPSPCR0055F

Explanation: Message: Failed to read from the CPU %x VDN/VDDR VRM on the system backplane. **Note:** %x indicates the CPU number. To determine the CPU number, view details for the serviceable event that sent you here.

Severity: Warning

Serviceable: No

Call Home Candidate: No

Affected Subsystem: Systems Management - Core / Virtual Appliance

Event type: Communication Failure/Timeout

Response: If the problem persists, replace the system backplane.

FQPSPCR0056F

Explanation: Message: Failed to read from the PCIe temperature sensor on the system backplane

Severity: Warning

Serviceable: No

Call Home Candidate: No

Affected Subsystem: Systems Management - Core / Virtual Appliance

Event type: Communication Failure/Timeout

Response: If the problem persists, replace the system backplane.

FQPSPCR0057F

Explanation: Message: Failed to read from the fan control device on the system backplane

Severity: Warning

Serviceable: No

Call Home Candidate: No

Affected Subsystem: Systems Management - Core / Virtual Appliance

Event type: Communication Failure/Timeout

Response: If the problem persists, replace the system backplane.

FQPSPCR0058F

Explanation: Message: Failed to write to the fan control device on the system backplane
 Severity: Warning
 Serviceable: No
 Call Home Candidate: No
 Affected Subsystem: Systems Management - Core / Virtual Appliance
 Event type: Communication Failure/Timeout
Response: If the problem persists, replace the system backplane.

FQPSPCR0059F

Explanation: Message: Failed to read from the power sequencer chip on the system backplane
 Severity: Warning
 Serviceable: No
 Call Home Candidate: No
 Affected Subsystem: Systems Management - Core / Virtual Appliance
 Event type: Communication Failure/Timeout
Response: If the problem persists, replace the system backplane.

FQPSPCR0060F

Explanation: Message: Failed to read from power supply %x. **Note:** %x indicates the power supply number. To determine the power supply number, view details for the serviceable event that sent you here.
 Severity: Warning
 Serviceable: No
 Call Home Candidate: No
 Affected Subsystem: Systems Management - Core / Virtual Appliance
 Event type: Communication Failure/Timeout
Response: If the problem persists, replace the specified power supply

FQPSPCR0061F

Explanation: Message: Failed to write to CPU %x over FSI. **Note:** %x indicates the CPU number. To determine the CPU number, view details for the serviceable event that sent you here.
 Severity: Warning
 Serviceable: No
 Call Home Candidate: No
 Affected Subsystem: Systems Management - Core / Virtual Appliance
 Event type: Communication Failure/Timeout
Response: If the problem persists, replace the specified. If the problem persists replace the system backplane. If it still persists, replace the BMC card.

FQPSPCR0062F

Explanation: Message: Failed to read from CPU %x over FSI. **Note:** %x indicates the CPU number. To determine the CPU number, view details for the serviceable event that sent you here.
 Severity: Warning
 Serviceable: No
 Call Home Candidate: No
 Affected Subsystem: Systems Management - Core / Virtual Appliance
 Event type: Communication Failure/Timeout
Response: If the problem persists, replace the specified. If the problem persists replace the system backplane. If it still persists, replace the BMC card.

FQPSPCR0063F

Explanation: Message: Failed to read from the OCC on CPU %x. **Note:** %x indicates the CPU number. To determine the CPU number, view details for the serviceable event that sent you here.
 Severity: Warning
 Serviceable: No
 Call Home Candidate: No
 Affected Subsystem: Systems Management - Core / Virtual Appliance
 Event type: Communication Failure/Timeout
Response: Ensure the opal-prd service is running by running the command sudo systemctl status opal-prd. If the service is shown as deactivated, start it by using the command sudo systemctl start opal-prd. If the status shows the service cannot be found, you must install it. If the problem persists, flash the system pnor. For information about updating system firmware, see Getting fixes.

FQPSPCR0064I

Explanation: Message: OCC metric data collected
 Severity: Information
 Serviceable: No
 Call Home Candidate: No
 Affected Subsystem: Systems Management - Core / Virtual Appliance
 Event type: Status
Response: No service action is required - This alert is for informational purposes only.

FQPSPCR0067M

Explanation: Message: The PNOR and BMC code levels are not compatible and the system will not boot
 Severity: Critical
 Serviceable: Yes
 Call Home Candidate: No
 Affected Subsystem: Systems Management - Core / Virtual Appliance
 Event type: Firmware/Software Not Valid

Response: Ensure the PNOR and BMC code levels are from the same fix pack, and they have the same priority level on the BMC.

FQPSPCR0068G

Explanation: Message: The specified user privileges already exist
 Severity: Warning
 Serviceable: Yes
 Call Home Candidate: No
 Affected Subsystem: Systems Management - Core / Virtual Appliance
 Event type: Firmware/Software Failure

Response: Check the command for setting user privileges is correct. Ensure the specified user does not already have the existing privileges.

FQPSPCR0069G

Explanation: Message: The specified user name already exists
 Severity: Warning
 Serviceable: Yes
 Call Home Candidate: No
 Affected Subsystem: Systems Management - Core / Virtual Appliance
 Event type: Firmware/Software Failure

Response: Check the command that was provided and ensure the new user name is unique.

FQPSPCR0070G

Explanation: Message: The specified user name does not exist
 Severity: Warning
 Serviceable: Yes
 Call Home Candidate: No
 Affected Subsystem: Systems Management - Core / Virtual Appliance
 Event type: Firmware/Software Failure

Response: Check the command that was provided and ensure the specified user name exists.

FQPSPCR0071G

Explanation: Message: The specified user name cannot be assigned to the specified group
 Severity: Warning
 Serviceable: Yes
 Call Home Candidate: No
 Affected Subsystem: Systems Management - Core / Virtual Appliance
 Event type: Firmware/Software Failure

Response: Ensure the user name meets the naming conventions for the group, and is not already in the specified group.

FQPSPCR0072G

Explanation: Message: The specified user does not have sufficient privileges
 Severity: Warning
 Serviceable: Yes
 Call Home Candidate: No
 Affected Subsystem: Systems Management - Core / Virtual Appliance
 Event type: Firmware/Software Failure

Response: The specified user name does not have permission to perform the specified action.

FQPSPCR0073G

Explanation: Message: Insufficient resources to modify users
 Severity: Warning
 Serviceable: Yes
 Call Home Candidate: No
 Affected Subsystem: Systems Management - Core / Virtual Appliance
 Event type: Firmware/Software Failure

Response: The BMC does not have enough remaining resources to modify users. Consider removing some user names to make adequate space.

FQPSPCR0074G

Explanation: Message: The specified operation is not allowed
 Severity: Warning
 Serviceable: Yes
 Call Home Candidate: No
 Affected Subsystem: Systems Management - Core / Virtual Appliance
 Event type: Firmware/Software Failure

Response: Ensure the specified operation is correct.

FQPSPCR0075G

Explanation: Message: The provided certificate is not valid
 Severity: Warning
 Serviceable: Yes
 Call Home Candidate: No
 Affected Subsystem: Systems Management - Core / Virtual Appliance
 Event type: Firmware/Software Failure

Response: Ensure the certificate follows the PEM format and is not expired. Also ensure there are no missing fields or information. After verifying and making corrections, try uploading to the BMC again.

FQPSPCR0076G

Explanation: Message: Unable to verify a server's CA certificate
 Severity: Warning
 Serviceable: Yes
 Call Home Candidate: No
 Affected Subsystem: Systems Management - Core / Virtual Appliance
 Event type: Firmware/Software Failure

Response: Ensure the BMC has the Certificate Authority (CA) certificate for the external server it is accessing. For example an LDAP server's CA certificate. This can be uploaded to the BMC using the OpenBMC tool.

FQPSPCR0077F

Explanation: Message: An error occurred on the GPIO interface
 Severity: Warning
 Serviceable: No
 Call Home Candidate: No
 Affected Subsystem: Systems Management - Core / Virtual Appliance
 Event type: Communication Failure/Timeout

Response: If this event is persistently occurring, update the firmware. If the problem still persists, contact your next level of service and review the BMC dump details

FQPSPDM0000M

Explanation: Message: Unable to create a BMC dump due to dumps being disabled on this system.
 Severity: Critical
 Serviceable: Yes
 Call Home Candidate: No
 Affected Subsystem: Systems Management - Data Management
 Event type: Firmware/Software Failure

Response: Enable BMC dumps for the system.

FQPSPDM0001M

Explanation: Message: There is no more space available for dump files. Please delete some.
 Severity: Critical
 Serviceable: Yes
 Call Home Candidate: No
 Affected Subsystem: Systems Management - Data Management
 Event type: Firmware/Software Failure

Response: Clear some of the BMC dumps as the BMC storage space is full. This can be accomplished using the OpenBMC tool as follows: **openbmctool -U <username> -P <password> -H <BMC host name or BMC IP> dump delete <number of dump or keyword "all">**

FQSPPEM0003G

Explanation: Message: Failed to find an alert in the CSM RAS event types table
 Severity: Warning
 Serviceable: Yes
 Call Home Candidate: No
 Affected Subsystem: Systems Management - Events / Monitoring
 Event type: Firmware/Software Failure

Response: Contact your next level of service, see Contacting IBM service and support.

FQSPPIN0000M

Explanation: Message: Connection timed out. Ensure you have network connectivity to the BMC.
 Severity: Critical
 Serviceable: Yes
 Call Home Candidate: No
 Affected Subsystem: Interconnect Networking
 Event type: Communication Failure/Timeout

Response: Verify network connectivity between the two systems and the bmc is functional.

FQSPPIN0001M

Explanation: Message: Connection Error. View additional details for more information
 Severity: Critical
 Serviceable: Yes
 Call Home Candidate: No
 Affected Subsystem: Interconnect Networking
 Event type: Communication Failure/Timeout

Response: Correct the issue highlighted in additional details and try again.

FQSPMA0043M

Explanation: Message: An error occurred with a memory DIMM and automated isolation was not possible
 Severity: Critical
 Serviceable: Yes
 Call Home Candidate: No
 Affected Subsystem: Memory
 Event type: Unrecoverable Hardware Failure

Response: Search for a FQPSPMA0007I event. If you find one of these events, replace the DIMM indicated in the event. If it is DIMM1, replace DIMM1 and so on. If the replacement of the DIMM does not resolve the problem, replace the system backplane. To identify the physical location and removal and replacement procedure, see 8335-GTC, 8335-GTG, 8335-GTH, 8335-GTW, or 8335-GTX locations. If you did not find one of these events, or if you found one of these events but the replacement of hardware did not resolve the problem, go to Contacting IBM service and support.

FQSPMA0044M

Explanation: Message: A memory configuration error has been detected.

Severity: Critical
 Serviceable: Yes
 Call Home Candidate: No
 Affected Subsystem: Memory
 Event type: Unrecoverable Hardware Failure

Response: Ensure all DIMMs are properly seated and you are following the DIMM plugging rules. See Memory plugging rules in the 8335-GTC, 8335-GTG, 8335-GTH, 8335-GTW, or 8335-GTX system.

FQSPMA0045M

Explanation: Message: An uncorrectable memory problem occurred.

Severity: Critical
 Serviceable: Yes
 Call Home Candidate: Yes
 Affected Subsystem: Memory
 Event type: Unrecoverable Hardware Failure

Response: Look for system events that are related to memory and occurred around the same time as the problem that you are working on and resolve those first. If you did not find any serviceable events related to memory, replace system processor CPU 0. If the problem persists, replace CPU 1. To identify the physical location and removal and replacement procedure, see 8335-GTC, 8335-GTG, 8335-GTH, 8335-GTW, or 8335-GTX locations.

FQSPMA0055M

Explanation: Message: DIMM %x has not been detected. **Note:** %x indicates the DIMM number. To determine the DIMM number, view details for the serviceable event that sent you here.

Severity: Critical
 Serviceable: Yes
 Call Home Candidate: No
 Affected Subsystem: Memory
 Event type: Uncorrectable Hardware Failure

Response: Ensure the DIMM is properly seated. If the problem persists, replace the system backplane. If the problem continues, replace the specified CPU.

FQSPMA0056M

Explanation: Message: DIMM %x is not functional. **Note:** %x indicates the DIMM number. To determine the DIMM number, view details for the serviceable event that sent you here.

Severity: Critical
 Serviceable: Yes
 Call Home Candidate: Yes
 Affected Subsystem: Memory
 Event type: Uncorrectable Hardware Failure

Response: Replace the specified DIMM.

FQSPMA0057M

Explanation: Message: DIMM %x has failed. **Note:** %x indicates the DIMM number. To determine the DIMM number, view details for the serviceable event that sent you here.

Severity: Critical
 Serviceable: Yes
 Call Home Candidate: Yes
 Affected Subsystem: Memory
 Event type: Unrecoverable Hardware Failure

Response: Replace the specified DIMM.

FQSPMA0058M

Explanation: Message: A memory bus error occurred.

Severity: Critical
 Serviceable: Yes
 Call Home Candidate: Yes
 Affected Subsystem: Memory
 Event type: Unrecoverable Hardware Failure

Response: Go to Getting fixes and update the system firmware to the most recent level of firmware that is available. If this SEL event continues to be logged, go to Collecting diagnostic data. Then, go to Contacting IBM service and support.

FQSPMA0059G

Explanation: Message: DIMM %x has exceeded a correctable error threshold. **Note:** %x indicates the DIMM number. To determine the DIMM number, view details for the serviceable event that sent you here.

Severity: Warning
 Serviceable: Yes
 Call Home Candidate: No
 Affected Subsystem: Memory
 Event type: PFA

Response: Replace the specified DIMM.

FQSPMA0060I

Explanation: Message: DIMM %x has recovered from an error. **Note:** %x indicates the DIMM number. To determine the DIMM number, view details for the serviceable event that sent you here.

Severity: Information
 Serviceable: No
 Call Home Candidate: No
 Affected Subsystem: Memory
 Event type: Recovery

Response: No service action is required - This alert is for informational purposes only.

FQSPPOS0000G

Explanation: Message: The soft power off of the host has timed out

Severity: Warning

Serviceable: Yes

Call Home Candidate: No

Affected Subsystem: Host Operating System

Event type: Monitoring Agent

Response: Hard power off the system. If the problem persists reinstall the operating system.

FQSPPPU0059M

Explanation: Message: A CPU problem was detected.

Severity: Critical

Serviceable: Yes

Call Home Candidate: Yes

Affected Subsystem: Processing

Event type: Unrecoverable Hardware Failure

Response: Replace system processor CPU 0. If the replacement of CPU 0 does not resolve the problem, replace CPU 1. If CPU 1 does not resolve the problem, replace the system backplane. To identify the physical location and removal and replacement procedure, see 8335-GTC, 8335-GTG, 8335-GTH, 8335-GTW, or 8335-GTX locations. If the replacement of the system processor and the system backplane does not resolve the problem, go to Contacting IBM service and support.

FQSPPPU0060M

Explanation: Message: A FSI path error has occurred.

Severity: Critical

Serviceable: Yes

Call Home Candidate: Yes

Affected Subsystem: Processing

Event type: Unrecoverable Hardware Failure

Response: Replace system processor CPU 0. If the replacement of CPU 0 does not resolve the problem, replace CPU 1. If CPU 1 does not resolve the problem, replace the system backplane. To identify the physical location and removal and replacement procedure, see 8335-GTC, 8335-GTG, 8335-GTH, 8335-GTW, or 8335-GTX locations. If the replacement of the system processor and the system backplane does not resolve the problem, go to Contacting IBM service and support.

FQSPPPU0061M

Explanation: Message: An external processor interface problem has occurred

Severity: Critical

Serviceable: Yes

Call Home Candidate: Yes

Affected Subsystem: Processing

Event type: Unrecoverable Hardware Failure

Response: Replace the system backplane. If the replacement of the system backplane does not resolve

the problem, replace system processor CPU 0. If CPU 0 does not fix the problem, replace CPU 1. To identify the physical location and removal and replacement procedure, see 8335-GTC, 8335-GTG, 8335-GTH, 8335-GTW, or 8335-GTX locations. If the replacement of the system backplane and the system processor does not resolve the problem, go to Contacting IBM service and support.

FQSPPPU0062M

Explanation: Message: An internal processor interface problem has occurred

Severity: Critical

Serviceable: Yes

Call Home Candidate: Yes

Affected Subsystem: Processing

Event type: Unrecoverable Hardware Failure

Response: Replace system processor CPU 0. If the replacement of CPU 0 does not resolve the problem, replace CPU 1. If CPU 1 does not resolve the problem, replace the system backplane. To identify the physical location and removal and replacement procedure, see 8335-GTC, 8335-GTG, 8335-GTH, 8335-GTW, or 8335-GTX locations. If the replacement of the system processor and the system backplane does not resolve the problem, go to Contacting IBM service and support.

FQSPPPU0063M

Explanation: Message: One or more processor sensors detected an over temperature condition.

Severity: Critical

Serviceable: Yes

Call Home Candidate: No

Affected Subsystem: Processing

Event type: Unrecoverable Hardware Failure

Response: Ensure that the ambient temperature is within operating specifications. Ensure that there are no blockages to the air inlet and outlets. If blockages are found, remove them. Ensure that all of the fans are working properly by looking for serviceable events related to fans and resolving them.

FQSPPPU0085M

Explanation: Message: CPU %x has not been detected.

Note: %x indicates the CPU number. To determine the CPU number, view details for the serviceable event that sent you here.

Severity: Critical

Serviceable: Yes

Call Home Candidate: Yes

Affected Subsystem: Processing

Event type: Uncorrectable Hardware Failure

Response: Ensure the specified CPU is properly seated. If the problem persists, replace the system backplane. If the problem continues, replace the specified CPU.

FQSPPU0087M

Explanation: Message: CPU %x core %y has not been detected. **Note:** %x indicates the CPU number and %y indicates the CPU core number. To determine the CPU number and CPU core number, view details for the serviceable event that sent you here.

Severity: Critical
 Serviceable: Yes
 Call Home Candidate: Yes
 Affected Subsystem: Processing
 Event type: Uncorrectable Hardware Failure

Response: Ensure the specified CPU is properly seated. If the problem persists, replace the system backplane. If the problem continues, replace the specified CPU.

FQSPPU0088M

Explanation: Message: CPU %x is not functional. **Note:** %x indicates the CPU number. To determine the CPU number, view details for the serviceable event that sent you here.

Severity: Critical
 Serviceable: Yes
 Call Home Candidate: Yes
 Affected Subsystem: Processing
 Event type: Uncorrectable Hardware Failure

Response: Replace the specified CPU.

FQSPPU0089M

Explanation: Message: CPU %x core %y is not functional. **Note:** %x indicates the CPU number and %y indicates the CPU core number. To determine the CPU number and CPU core number, view details for the serviceable event that sent you here.

Severity: Critical
 Serviceable: Yes
 Call Home Candidate: Yes
 Affected Subsystem: Processing
 Event type: Uncorrectable Hardware Failure

Response: Replace the specified CPU.

FQSPPU0090M

Explanation: Message: CPU %x has failed. **Note:** %x indicates the CPU number. To determine the CPU number, view details for the serviceable event that sent you here.

Severity: Critical
 Serviceable: Yes
 Call Home Candidate: Yes
 Affected Subsystem: Processing
 Event type: Unrecoverable Hardware Failure

Response: Replace the specified CPU.

FQSPPU0091M

Explanation: Message: CPU %x core %y has failed. **Note:** %x indicates the CPU number and %y indicates the CPU core number. To determine the CPU number and CPU core number, view details for the serviceable event that sent you here.

Severity: Critical
 Serviceable: Yes
 Call Home Candidate: Yes
 Affected Subsystem: Processing
 Event type: Unrecoverable Hardware Failure

Response: Replace the specified CPU.

FQSPPU0092M

Explanation: Message: An error occurred with a GPU and automated isolation was not possible

Severity: Critical
 Serviceable: Yes
 Call Home Candidate: Yes
 Affected Subsystem: Processing
 Event type: Unrecoverable Hardware Failure

Response: Replace the GPUs one at a time until the problem is resolved. If the problem persists replace the system backplane.

FQSPPU0093G

Explanation: Message: CPU %x has exceeded a correctable error threshold. **Note:** %x indicates the CPU number. To determine the CPU number, view details for the serviceable event that sent you here.

Severity: Warning
 Serviceable: Yes
 Call Home Candidate: No
 Affected Subsystem: Processing
 Event type: PFA

Response: Replace the specified CPU.

FQSPPU0094G

Explanation: Message: CPU %x core %y has exceeded a correctable error threshold. **Note:** %x indicates the CPU number, %y indicates the CPU core number. To determine the CPU number and CPU core number, view details for the serviceable event that sent you here.

Severity: Warning
 Serviceable: Yes
 Call Home Candidate: No
 Affected Subsystem: Processing
 Event type: PFA

Response: Replace the specified CPU.

FQSPPU0095I

Explanation: Message: CPU %x has recovered from an error. **Note:** %x indicates the CPU number. To determine the CPU number, view details for the serviceable event that sent you here.

Severity: Information

Serviceable: No

Call Home Candidate: No

Affected Subsystem: Processing

Event type: Recovery

Response: No service action is required - This alert is for informational purposes only.

FQSPPU0096I

Explanation: Message: CPU %x core %y has recovered from an error. **Note:** %x indicates the CPU number, %y indicates the CPU core number. To determine the CPU number and CPU core number, view details for the serviceable event that sent you here.

Severity: Information

Serviceable: No

Call Home Candidate: No

Affected Subsystem: Processing

Event type: Recovery

Response: No service action is required - This alert is for informational purposes only.

FQSPPU0097M

Explanation: Message: Unable to detect master processor on FSI bus

Severity: Critical

Serviceable: Yes

Call Home Candidate: Yes

Affected Subsystem: Processing

Event type: Communication Failure/Timeout

Response: Replace CPU 0. If the problem persists replace the system backplane. If it still persists, replace the BMC card.

FQSPPU0098M

Explanation: Message: Unable to detect slave processor on FSI bus

Severity: Critical

Serviceable: Yes

Call Home Candidate: Yes

Affected Subsystem: Processing

Event type: Communication Failure/Timeout

Response: Replace CPU 1. If the problem persists replace the system backplane. If it still persists, replace the BMC card.

FQSPPW0009M

Explanation: Message: Power Supply %x input out of range **Note:** %x indicates the power supply number. To determine the power supply number, view details for the serviceable event that sent you here.

Severity: Critical

Serviceable: Yes

Call Home Candidate: No

Affected Subsystem: Power

Event type: Unrecoverable Hardware Failure

Response: Ensure that the AC Power cable is receiving the correct voltage.

FQSPPW0012M

Explanation: Message: A system power problem has occurred

Severity: Critical

Serviceable: Yes

Call Home Candidate: No

Affected Subsystem: Power

Event type: Unrecoverable Hardware Failure

Response: Complete the service action indicated for any events that are related to power and occurred prior to this event.

FQSPPW0015M

Explanation: Message: Power Supply %y has not been detected. **Note:** %x indicates the power supply number. To determine the power supply number, view details for the serviceable event that sent you here.

Severity: Critical

Serviceable: Yes

Call Home Candidate: Yes

Affected Subsystem: Power

Event type: Uncorrectable Hardware Failure

Response: Replace the specified power supply.

FQSPPW0022M

Explanation: Message: Power supply %x is not functional. **Note:** %x indicates the power supply number. To determine the power supply number, view details for the serviceable event that sent you here.

Severity: Critical

Serviceable: Yes

Call Home Candidate: Yes

Affected Subsystem: Power

Event type: Uncorrectable Hardware Failure

Response: Replace the specified power supply.

FQSPPW0023M

Explanation: Message: Unable to read the output current from power supply %x. **Note:** %x indicates the power supply number. To determine the power supply number, view details for the serviceable event that sent

you here.

Severity: Critical

Serviceable: Yes

Call Home Candidate: No

Affected Subsystem: Power

Event type: Communication Failure/Timeout

Response: Ensure the specified power supply is fully seated and has good input. If the problem persists, replace the specified power supply.

FQSPPW0024M

Explanation: Message: Unable to read GPU %x power.

Note: %x indicates the GPU number. To determine the GPU number, view details for the serviceable event that sent you here.

Severity: Critical

Serviceable: Yes

Call Home Candidate: No

Affected Subsystem: Power

Event type: Communication Failure/Timeout

Response: If the system was recently installed, moved, serviced, or upgraded, ensure the specified GPU is properly seated. Replace the system backplane. Replace the specified GPU.

FQSPPW0025M

Explanation: Message: Unable to read CPU %x I/O power. **Note:** %x indicates the CPU number. To determine the CPU number, view details for the serviceable event that sent you here.

Severity: Critical

Serviceable: Yes

Call Home Candidate: No

Affected Subsystem: Power

Event type: Communication Failure/Timeout

Response: If the system was recently installed, moved, serviced, or upgraded, ensure the specified CPU is properly seated. Replace the system backplane. Replace the specified CPU.

FQSPPW0026M

Explanation: Message: Unable to read CPU %x memory power. **Note:** %x indicates the CPU number. To determine the CPU number, view details for the serviceable event that sent you here.

Severity: Critical

Serviceable: Yes

Call Home Candidate: No

Affected Subsystem: Power

Event type: Communication Failure/Timeout

Response: If the system was recently installed, moved, serviced, or upgraded, ensure the specified CPU is properly seated. Replace the system backplane. Replace the specified CPU.

FQSPPW0027M

Explanation: Message: Unable to read CPU %x power. **Note:** %x indicates the CPU number. To determine the CPU number, view details for the serviceable event that sent you here.

Severity: Critical

Serviceable: Yes

Call Home Candidate: No

Affected Subsystem: Power

Event type: Communication Failure/Timeout

Response: If the system was recently installed, moved, serviced, or upgraded, ensure the specified CPU is properly seated. Replace the system backplane. Replace the specified CPU.

FQSPPW0028M

Explanation: Message: Unable to read power supply %x input power. **Note:** %x indicates the power supply number. To determine the power supply number, view details for the serviceable event that sent you here.

Severity: Critical

Serviceable: Yes

Call Home Candidate: No

Affected Subsystem: Power

Event type: Communication Failure/Timeout

Response: Ensure the power supply and line cord are properly seated. Replace the power supply. Replace the system backplane.

FQSPPW0029M

Explanation: Message: Unable to read storage %x power. **Note:** %x indicates the storage device number. To determine the storage device number, view details for the serviceable event that sent you here.

Severity: Critical

Serviceable: Yes

Call Home Candidate: No

Affected Subsystem: Power

Event type: Communication Failure/Timeout

Response: If the system was recently installed, moved, serviced, or upgraded, ensure the specified storage device is properly seated, and ensure all cables between the system backplane and disk drive and fan card are properly seated. Replace the system backplane. Replace the disk drive and fan card.

FQSPPW0030M

Explanation: Message: Unable to read total power consumption

Severity: Critical

Serviceable: Yes

Call Home Candidate: No

Affected Subsystem: Power

Event type: Communication Failure/Timeout

Response: Flash and or update the BMC firmware. If

FQSPPW0031M • FQSPPW0038F

the problem persists, replace the system backplane. For information about updating system firmware, see Getting fixes.

FQSPPW0031M

Explanation: Message: Unable to read power supply %x input voltage. **Note:** %x indicates the power supply number. To determine the power supply number, view details for the serviceable event that sent you here.

Severity: Critical

Serviceable: Yes

Call Home Candidate: No

Affected Subsystem: Power

Event type: Communication Failure/Timeout

Response: Ensure the power supply and line cord are properly seated. Replace the power supply. Replace the system backplane.

FQSPPW0032M

Explanation: Message: Unable to read power supply %x output voltage. **Note:** %x indicates the power supply number. To determine the power supply number, view details for the serviceable event that sent you here.

Severity: Critical

Serviceable: Yes

Call Home Candidate: No

Affected Subsystem: Power

Event type: Communication Failure/Timeout

Response: Ensure the power supply and line cord are properly seated. Replace the power supply. Replace the system backplane.

FQSPPW0033M

Explanation: Message: Power supply %x input fault detected. **Note:** %x indicates the power supply number. To determine the power supply number, view details for the serviceable event that sent you here.

Severity: Critical

Serviceable: Yes

Call Home Candidate: No

Affected Subsystem: Power

Event type: Unrecoverable Hardware Failure

Response: Ensure the input voltage to the specified power supply is within the operating specifications for the specified power supply.

FQSPPW0034M

Explanation: Message: Power supply %x has failed to power on when it needed to. **Note:** %x indicates the power supply number. To determine the power supply number, view details for the serviceable event that sent you here.

Severity: Critical

Serviceable: Yes

Call Home Candidate: Yes

Affected Subsystem: Power

Event type: Unrecoverable Hardware Failure

Response: Replace the specified power supply.

FQSPPW0035M

Explanation: Message: Power supply %x output current is too high. **Note:** %x indicates the power supply number. To determine the power supply number, view details for the serviceable event that sent you here.

Severity: Critical

Serviceable: Yes

Call Home Candidate: Yes

Affected Subsystem: Power

Event type: Unrecoverable Hardware Failure

Response: Replace the specified power supply.

FQSPPW0036M

Explanation: Message: Power supply %x output voltage is too high. **Note:** %x indicates the power supply number. To determine the power supply number, view details for the serviceable event that sent you here.

Severity: Critical

Serviceable: Yes

Call Home Candidate: Yes

Affected Subsystem: Power

Event type: Unrecoverable Hardware Failure

Response: Replace the specified power supply.

FQSPPW0037M

Explanation: Message: Power supply %x has initiated a power off due to a failure. **Note:** %x indicates the power supply number. To determine the power supply number, view details for the serviceable event that sent you here.

Severity: Critical

Serviceable: Yes

Call Home Candidate: Yes

Affected Subsystem: Power

Event type: Unrecoverable Hardware Failure

Response: Replace the specified power supply.

FQSPPW0038F

Explanation: Message: The system power failed to turn on

Severity: Warning

Serviceable: No

Call Home Candidate: No

Affected Subsystem: Power

Event type: Environmental

Response: Look for system events that are related to system power and occurred around the same time as

the problem that you are working on and resolve those first.

FQSPPW0038M

Explanation: Message: GPU %x suffered a power fault . **Note:** %x indicates the GPU number. To determine the GPU number, view details for the serviceable event that sent you here.

Severity: Critical
 Serviceable: Yes
 Call Home Candidate: No
 Affected Subsystem: Power
 Event type: Environmental

Response: Check for serviceable power events and resolve those.

FQSPPW0041M

Explanation: Message: The power sequencer chip detected a fault

Severity: Critical
 Serviceable: Yes
 Call Home Candidate: Yes
 Affected Subsystem: Power
 Event type: Environmental

Response: Look for system events that are related to system power and occurred around the same time as the problem that you are working on and resolve those first.

FQSPPW0042M

Explanation: Message: The power sequencer chip detected a PGOOD_5P0V fault

Severity: Critical
 Serviceable: Yes
 Call Home Candidate: Yes
 Affected Subsystem: Power
 Event type: Environmental

Response: Replace the disk drive and fan board. Replace the system backplane.

FQSPPW0043M

Explanation: Message: The power sequencer chip detected a MEM_GOOD0 fault

Severity: Critical
 Serviceable: Yes
 Call Home Candidate: Yes
 Affected Subsystem: Power
 Event type: Environmental

Response: Remove the DIMMS attached to CPU 0. If the problem persists, replace the system backplane. Otherwise, Reinstall the DIMMS one at a time, IPLing the system after each DIMM install until the problem returns. Replace the DIMM that caused the fault to return.

FQSPPW0044M

Explanation: Message: The power sequencer chip detected a MEM_GOOD1 fault

Severity: Critical
 Serviceable: Yes
 Call Home Candidate: Yes
 Affected Subsystem: Power
 Event type: Environmental

Response: Remove the DIMMS attached to CPU 1. If the problem persists, replace the system backplane. Otherwise, Reinstall the DIMMS one at a time, IPLing the system after each DIMM install until the problem returns. Replace the DIMM that caused the fault to return.

FQSPPW0045M

Explanation: Message: The power sequencer chip detected a GPU_PGOOD fault for GPU %x

Severity: Critical
 Serviceable: Yes
 Call Home Candidate: Yes
 Affected Subsystem: Power
 Event type: Environmental

Response: Replace the specified GPU. If the problem persists, then replace the system backplane.

FQSPPW0046M

Explanation: Message: The power sequencer chip detected a TH_OVERT fault

Severity: Critical
 Serviceable: Yes
 Call Home Candidate: Yes
 Affected Subsystem: Power
 Event type: Environmental

Response: Ensure that the ambient temperature is within operating specifications. Ensure that there are no blockages to the air inlet and outlets. If blockages are found, remove them. Ensure that all of the fans are working properly by looking for serviceable events related to fans and resolving them.

FQSPPW0047M

Explanation: Message: The power sequencer chip detected a fault on 5.0VCS rail.

Severity: Critical
 Serviceable: Yes
 Call Home Candidate: Yes
 Affected Subsystem: Power
 Event type: Environmental

Response: Replace the system backplane.

FQSPPW0048M

Explanation: Message: The power sequencer chip detected a fault on 12.0V rail.

Severity: Critical

Serviceable: Yes

Call Home Candidate: Yes

Affected Subsystem: Power

Event type: Environmental

Response: Check for event FQSPPW0047M and resolve that first. If the problem persists, replace the power supplies one at a time until the problem is resolved. If the problem persists, replace the system backplane.

FQSPPW0049M

Explanation: Message: The power sequencer chip detected a fault on 3.3V rail.

Severity: Critical

Serviceable: Yes

Call Home Candidate: Yes

Affected Subsystem: Power

Event type: Environmental

Response: Check for events FQSPPW0047M and FQSPPW0048M and resolve those first, in that order. If the problem persists, remove the PCIe adapters. If the problem persists, replace the system backplane. Otherwise, reinstall the PCIe adapters one at a time, IPLing the system after each PCIe install until the problem returns. Replace the PCIe adapter that caused the fault to return.

FQSPPW0050M

Explanation: Message: The power sequencer chip detected a fault on 1.8V rail.

Severity: Critical

Serviceable: Yes

Call Home Candidate: Yes

Affected Subsystem: Power

Event type: Environmental

Response: Check for events FQSPPW0047M, FQSPPW0048M, and FQSPPW0049M and resolve those first, in that order. If the problem persists, replace the system backplane.

FQSPPW0051M

Explanation: Message: The power sequencer chip detected a fault on 1.1V rail.

Severity: Critical

Serviceable: Yes

Call Home Candidate: Yes

Affected Subsystem: Power

Event type: Environmental

Response: Check for events FQSPPW0047M, FQSPPW0048M, FQSPPW0049M and FQSPPW0050M and resolve those first, in that order.

If the problem persists, replace the system backplane.

FQSPPW0052M

Explanation: Message: The power sequencer chip detected a fault on 1.0V rail.

Severity: Critical

Serviceable: Yes

Call Home Candidate: Yes

Affected Subsystem: Power

Event type: Environmental

Response: Check for events FQSPPW0047M, FQSPPW0048M, FQSPPW0049M, FQSPPW0050M and FQSPPW0051M and resolve those first, in that order. If the problem persists, replace the system backplane.

FQSPPW0053M

Explanation: Message: The power sequencer chip detected a fault on 0.9V rail.

Severity: Critical

Serviceable: Yes

Call Home Candidate: Yes

Affected Subsystem: Power

Event type: Environmental

Response: Check for events FQSPPW0047M, FQSPPW0048M, FQSPPW0049M, FQSPPW0050M, FQSPPW0051M and FQSPPW0052M and resolve those first, in that order. If the problem persists, replace the system backplane.

FQSPPW0054M

Explanation: Message: The power sequencer chip detected a fault on VDN-A rail.

Severity: Critical

Serviceable: Yes

Call Home Candidate: Yes

Affected Subsystem: Power

Event type: Environmental

Response: Check for events FQSPPW0047M, FQSPPW0048M, FQSPPW0049M, FQSPPW0050M, FQSPPW0051M, FQSPPW0052M and FQSPPW0053M and resolve those first, in that order. If the problem persists, replace CPU 0. If the problem persists replace the system backplane.

FQSPPW0055M

Explanation: Message: The power sequencer chip detected a fault on VDN-B rail.

Severity: Critical

Serviceable: Yes

Call Home Candidate: Yes

Affected Subsystem: Power

Event type: Environmental

Response: Check for events FQSPPW0047M, FQSPPW0048M, FQSPPW0049M, FQSPPW0050M,

FQSPPW0051M, FQSPPW0052M and FQSPPW0053M and resolve those first, in that order. If the problem persists, replace CPU 1. If the problem persists, replace the system backplane.

FQSPPW0056M

Explanation: Message: The power sequencer chip detected a fault on AVDD rail.

Severity: Critical
 Serviceable: Yes
 Call Home Candidate: Yes
 Affected Subsystem: Power
 Event type: Environmental

Response: Check for events FQSPPW0047M, FQSPPW0048M, FQSPPW0049M, FQSPPW0050M, FQSPPW0051M, FQSPPW0052M, FQSPPW0053M, FQSPPW0054M and FQSPPW0055M and resolve those first, in that order. If the problem persists, replace the CPUs one at a time, and IPL the system after each replacement. If the problem persists, replace the system backplane.

FQSPPW0057M

Explanation: Message: The power sequencer chip detected a fault on VIO-A rail.

Severity: Critical
 Serviceable: Yes
 Call Home Candidate: Yes
 Affected Subsystem: Power
 Event type: Environmental

Response: Check for events FQSPPW0047M, FQSPPW0048M, FQSPPW0049M, FQSPPW0050M, FQSPPW0051M, FQSPPW0052M and FQSPPW0053M and resolve those first, in that order. If the problem persists, replace CPU 0. If the problem persists replace the system backplane.

FQSPPW0058M

Explanation: Message: The power sequencer chip detected a fault on VIO-B rail.

Severity: Critical
 Serviceable: Yes
 Call Home Candidate: Yes
 Affected Subsystem: Power
 Event type: Environmental

Response: Check for events FQSPPW0047M, FQSPPW0048M, FQSPPW0049M, FQSPPW0050M, FQSPPW0051M, FQSPPW0052M and FQSPPW0053M and resolve those first, in that order. If the problem persists, replace CPU 1. If the problem persists replace the system backplane.

FQSPPW0059M

Explanation: Message: The power sequencer chip detected a fault on VDD-A rail.

Severity: Critical
 Serviceable: Yes
 Call Home Candidate: Yes
 Affected Subsystem: Power
 Event type: Environmental

Response: Check for events FQSPPW0047M, FQSPPW0048M, FQSPPW0049M, FQSPPW0050M, FQSPPW0051M, FQSPPW0052M and FQSPPW0053M and resolve those first, in that order. If the problem persists, replace CPU 0. If the problem persists replace the system backplane.

FQSPPW0060M

Explanation: Message: The power sequencer chip detected a fault on VDD-B rail.

Severity: Critical
 Serviceable: Yes
 Call Home Candidate: Yes
 Affected Subsystem: Power
 Event type: Environmental

Response: Check for events FQSPPW0047M, FQSPPW0048M, FQSPPW0049M, FQSPPW0050M, FQSPPW0051M, FQSPPW0052M and FQSPPW0053M and resolve those first, in that order. If the problem persists, replace CPU 1. If the problem persists replace the system backplane.

FQSPPW0061M

Explanation: Message: The power sequencer chip detected a fault on VCS-A rail.

Severity: Critical
 Serviceable: Yes
 Call Home Candidate: Yes
 Affected Subsystem: Power
 Event type: Environmental

Response: Check for events FQSPPW0047M, FQSPPW0048M, FQSPPW0049M, FQSPPW0050M, FQSPPW0051M, FQSPPW0052M and FQSPPW0053M and resolve those first, in that order. If the problem persists, replace CPU 0. If the problem persists replace the system backplane.

FQSPPW0062M

Explanation: Message: The power sequencer chip detected a fault on VCS-B rail.

Severity: Critical
 Serviceable: Yes
 Call Home Candidate: Yes
 Affected Subsystem: Power
 Event type: Environmental

Response: Check for events FQSPPW0047M, FQSPPW0048M, FQSPPW0049M, FQSPPW0050M,

FQSPPW0063G • FQSPTR0001M

FQSPPW0051M, FQSPPW0052M and FQSPPW0053M and resolve those first, in that order. If the problem persists, replace CPU 1. If the problem persists replace the system backplane.

FQSPPW0063G

Explanation: Message: The system unexpectedly shutdown.

Severity: Warning

Serviceable: Yes

Call Home Candidate: No

Affected Subsystem: Power

Event type: Unrecoverable Hardware Failure

Response: Look for serviceable system events that are related to system power and occurred around the same time as the problem that you are working on and resolve those first.

FQSPPW0064M

Explanation: Message: Power supply input fault detected, but unable to isolate to a specific power supply

Severity: Critical

Serviceable: Yes

Call Home Candidate: No

Affected Subsystem: Power

Event type: Unrecoverable Hardware Failure

Response: Verify the line cords are securely seated to both power supplies.

FQSPSB0001M

Explanation: Message: The system backplane has encountered a critical failure.

Severity: Critical

Serviceable: Yes

Call Home Candidate: Yes

Affected Subsystem: System Board

Event type: Uncorrectable Hardware Failure

Response: Replace the system backplane.

FQSPSB0005M

Explanation: Message: A bus error occurred.

Severity: Critical

Serviceable: Yes

Call Home Candidate: Yes

Affected Subsystem: System Board

Event type: Unrecoverable Hardware Failure

Response: Search for serviceable CPU events. If you find one of these events, resolve it. If the resolution of those serviceable events does not resolve the problem, replace the system backplane. To identify the physical location and removal and replacement procedure, see 8335-GTC, 8335-GTG, 8335-GTH, 8335-GTW, or 8335-GTX locations. If you did not find one of these events, or if you found one of these events but the

replacement of hardware did not resolve the problem, go to Contacting IBM service and support.

FQSPSB0012M

Explanation: Message: The system backplane could not be detected

Severity: Critical

Serviceable: Yes

Call Home Candidate: No

Affected Subsystem: System Board

Event type: Uncorrectable Hardware Failure

Response: If the machine was recently installed, moved, serviced, or upgraded, reseal the bmc card. Replace the system backplane.

FQSPSE0065M

Explanation: Message: Firmware security validation failed

Severity: Critical

Serviceable: Yes

Call Home Candidate: No

Affected Subsystem: Systems Management - Security

Event type: Security

Response: Replace both CPUs.

FQSPSE0066I

Explanation: Message: Firmware security validation passed

Severity: Information

Serviceable: No

Call Home Candidate: No

Affected Subsystem: Systems Management - Security

Event type: Security

Response: No service action is required - This alert is for informational purposes only.

FQSPTR0001M

Explanation: Message: A problem with the time of day clock and or clock function has been detected.

Severity: Critical

Serviceable: Yes

Call Home Candidate: Yes

Affected Subsystem: Time Reference

Event type: Unrecoverable Hardware Failure

Response: Replace the system backplane. If the replacement of the system backplane does not resolve the problem, replace system processor CPU 0. If CPU 0 does not fix the problem, replace CPU 1. To identify the physical location and removal and replacement procedure, see 8335-GTC, 8335-GTG, 8335-GTH, 8335-GTW, or 8335-GTX locations. If the replacement of the system backplane and the system processor does not resolve the problem, go to Contacting IBM service and support.

Notices

This information was developed for products and services offered in the US.

IBM may not offer the products, services, or features discussed in this document in other countries. Consult your local IBM representative for information on the products and services currently available in your area. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any IBM intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any non-IBM product, program, or service.

IBM may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not grant you any license to these patents. You can send license inquiries, in writing, to:

*IBM Director of Licensing
IBM Corporation
North Castle Drive, MD-NC119
Armonk, NY 10504-1785
US*

INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some jurisdictions do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. IBM may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

Any references in this information to non-IBM websites are provided for convenience only and do not in any manner serve as an endorsement of those websites. The materials at those websites are not part of the materials for this IBM product and use of those websites is at your own risk.

IBM may use or distribute any of the information you provide in any way it believes appropriate without incurring any obligation to you.

The performance data and client examples cited are presented for illustrative purposes only. Actual performance results may vary depending on specific configurations and operating conditions.

Information concerning non-IBM products was obtained from the suppliers of those products, their published announcements or other publicly available sources. IBM has not tested those products and cannot confirm the accuracy of performance, compatibility or any other claims related to non-IBM products. Questions on the capabilities of non-IBM products should be addressed to the suppliers of those products.

Statements regarding IBM's future direction or intent are subject to change or withdrawal without notice, and represent goals and objectives only.

All IBM prices shown are IBM's suggested retail prices, are current and are subject to change without notice. Dealer prices may vary.

This information is for planning purposes only. The information herein is subject to change before the products described become available.

This information contains examples of data and reports used in daily business operations. To illustrate them as completely as possible, the examples include the names of individuals, companies, brands, and products. All of these names are fictitious and any similarity to actual people or business enterprises is entirely coincidental.

If you are viewing this information in softcopy, the photographs and color illustrations may not appear.

The drawings and specifications contained herein shall not be reproduced in whole or in part without the written permission of IBM.

IBM has prepared this information for use with the specific machines indicated. IBM makes no representations that it is suitable for any other purpose.

IBM's computer systems contain mechanisms designed to reduce the possibility of undetected data corruption or loss. This risk, however, cannot be eliminated. Users who experience unplanned outages, system failures, power fluctuations or outages, or component failures must verify the accuracy of operations performed and data saved or transmitted by the system at or near the time of the outage or failure. In addition, users must establish procedures to ensure that there is independent data verification before relying on such data in sensitive or critical operations. Users should periodically check IBM's support websites for updated information and fixes applicable to the system and related software.

Homologation statement

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.

Accessibility features for IBM Power Systems servers

Accessibility features assist users who have a disability, such as restricted mobility or limited vision, to use information technology content successfully.

Overview

The IBM Power Systems servers include the following major accessibility features:

- Keyboard-only operation
- Operations that use a screen reader

The IBM Power Systems servers use the latest W3C Standard, WAI-ARIA 1.0 (www.w3.org/TR/wai-aria/), to ensure compliance with US Section 508 (www.access-board.gov/guidelines-and-standards/communications-and-it/about-the-section-508-standards/section-508-standards) and Web Content Accessibility Guidelines (WCAG) 2.0 (www.w3.org/TR/WCAG20/). To take advantage of accessibility features, use the latest release of your screen reader and the latest web browser that is supported by the IBM Power Systems servers.

The IBM Power Systems servers online product documentation in IBM Knowledge Center is enabled for accessibility. The accessibility features of IBM Knowledge Center are described in the Accessibility section of the IBM Knowledge Center help (www.ibm.com/support/knowledgcenter/doc/kc_help.html#accessibility).

Keyboard navigation

This product uses standard navigation keys.

Interface information

The IBM Power Systems servers user interfaces do not have content that flashes 2 - 55 times per second.

The IBM Power Systems servers web user interface relies on cascading style sheets to render content properly and to provide a usable experience. The application provides an equivalent way for low-vision users to use system display settings, including high-contrast mode. You can control font size by using the device or web browser settings.

The IBM Power Systems servers web user interface includes WAI-ARIA navigational landmarks that you can use to quickly navigate to functional areas in the application.

Vendor software

The IBM Power Systems servers include certain vendor software that is not covered under the IBM license agreement. IBM makes no representation about the accessibility features of these products. Contact the vendor for accessibility information about its products.

Related accessibility information

In addition to standard IBM help desk and support websites, IBM has a TTY telephone service for use by deaf or hard of hearing customers to access sales and support services:

TTY service
800-IBM-3383 (800-426-3383)
(within North America)

For more information about the commitment that IBM has to accessibility, see IBM Accessibility (www.ibm.com/able).

Privacy policy considerations

IBM Software products, including software as a service solutions, (“Software Offerings”) may use cookies or other technologies to collect product usage information, to help improve the end user experience, to tailor interactions with the end user, or for other purposes. In many cases no personally identifiable information is collected by the Software Offerings. Some of our Software Offerings can help enable you to collect personally identifiable information. If this Software Offering uses cookies to collect personally identifiable information, specific information about this offering’s use of cookies is set forth below.

This Software Offering does not use cookies or other technologies to collect personally identifiable information.

If the configurations deployed for this Software Offering provide you as the customer the ability to collect personally identifiable information from end users via cookies and other technologies, you should seek your own legal advice about any laws applicable to such data collection, including any requirements for notice and consent.

For more information about the use of various technologies, including cookies, for these purposes, see IBM’s Privacy Policy at <http://www.ibm.com/privacy> and IBM’s Online Privacy Statement at <http://www.ibm.com/privacy/details> the section entitled “Cookies, Web Beacons and Other Technologies” and the “IBM Software Products and Software-as-a-Service Privacy Statement” at <http://www.ibm.com/software/info/product-privacy>.

Trademarks

IBM, the IBM logo, and ibm.com are trademarks or registered trademarks of International Business Machines Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on the web at Copyright and trademark information at www.ibm.com/legal/copytrade.shtml.

Electronic emission notices

When attaching a monitor to the equipment, you must use the designated monitor cable and any interference suppression devices supplied with the monitor.

Class A Notices

The following Class A statements apply to the IBM servers that contain the POWER9 processor and its features unless designated as electromagnetic compatibility (EMC) Class B in the feature information.

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 may cause undesired operation.

Industry Canada Compliance Statement

CAN ICES-3 (A)/NMB-3(A)

European Community Compliance Statement

This product is in conformity with the protection requirements of EU Council Directive 2014/30/EU 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 non-recommended modification of the product, including the fitting of non-IBM option cards.

European Community contact:

IBM Deutschland GmbH

Technical Regulations, Abteilung M456

IBM-Allee 1, 71139 Ehningen, Germany

Tel: +49 800 225 5426

email: halloibm@de.ibm.com

Warning: 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.

VCCI Statement - Japan

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

The following is a summary of the VCCI Japanese statement in the box above:

This is a Class A product based on the standard of the VCCI Council. 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 Statement

This statement explains the Japan JIS C 61000-3-2 product wattage compliance.

(一社) 電子情報技術産業協会 高調波電流抑制対策実施
要領に基づく定格入力電力値： Knowledge Centerの各製品の
仕様ページ参照

This statement explains the Japan Electronics and Information Technology Industries Association (JEITA) statement for products less than or equal to 20 A per phase.

高調波電流規格 JIS C 61000-3-2 適合品

This statement explains the JEITA statement for products greater than 20 A, single phase.

高調波電流規格 JIS C 61000-3-2 準用品

本装置は、「高圧又は特別高圧で受電する需要家の高調波抑制対策ガイドライン」対象機器（高調波発生機器）です。

- 回路分類：6（単相、PFC回路付）
- 換算係数：0

This statement explains the JEITA statement for products greater than 20 A per phase, three-phase.

高調波電流規格 JIS C 61000-3-2 準用品

本装置は、「高圧又は特別高圧で受電する需要家の高調波抑制対策ガイドライン」対象機器（高調波発生機器）です。

- 回路分類 : 5 (3相、PFC回路付)
- 換算係数 : 0

Electromagnetic Interference (EMI) Statement - People's Republic of China

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。

Declaration: This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may need to perform practical action.

Electromagnetic Interference (EMI) Statement - Taiwan

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。

The following is a summary of the EMI Taiwan statement above.

Warning: This is a Class A product. In a domestic environment this product may cause radio interference in which case the user will be required to take adequate measures.

IBM Taiwan Contact Information:

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

Electromagnetic Interference (EMI) Statement - Korea

이 기기는 업무용 환경에서 사용할 목적으로 적합성평가를 받은 기기로서 가정용 환경에서 사용하는 경우 전파간섭의 우려가 있습니다.

Germany Compliance Statement

Deutschsprachiger EU Hinweis: Hinweis für Geräte der Klasse A EU-Richtlinie zur Elektromagnetischen Verträglichkeit

Dieses Produkt entspricht den Schutzanforderungen der EU-Richtlinie 2014/30/EU zur Angleichung der Rechtsvorschriften über die elektromagnetische Verträglichkeit in den EU-Mitgliedsstaaten und hält die Grenzwerte der EN 55022 / EN 55032 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 von IBM verändert bzw. wenn Erweiterungskomponenten von Fremdherstellern ohne Empfehlung von IBM gesteckt/eingebaut werden.

EN 55022 / EN 55032 Klasse A Geräte müssen mit folgendem Warnhinweis versehen werden:
"Warnung: Dieses ist eine Einrichtung der Klasse A. Diese Einrichtung kann im Wohnbereich Funk-Störungen verursachen; in diesem Fall kann vom Betreiber verlangt werden, angemessene Maßnahmen zu ergreifen und dafür aufzukommen."

Deutschland: Einhaltung des Gesetzes über die elektromagnetische Verträglichkeit von Geräten

Dieses Produkt entspricht dem "Gesetz über die elektromagnetische Verträglichkeit von Geräten (EMVG)". Dies ist die Umsetzung der EU-Richtlinie 2014/30/EU in der Bundesrepublik Deutschland.

Zulassungsbescheinigung laut dem Deutschen Gesetz über die elektromagnetische Verträglichkeit von Geräten (EMVG) (bzw. der EMC Richtlinie 2014/30/EU) 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
Tel: 914-499-1900

Der verantwortliche Ansprechpartner des Herstellers in der EU ist:
IBM Deutschland GmbH
Technical Relations Europe, Abteilung M456
IBM-Allee 1, 71139 Ehningen, Germany
Tel: +49 (0) 800 225 5426
email: HalloIBM@de.ibm.com

Generelle Informationen:

Das Gerät erfüllt die Schutzanforderungen nach EN 55024 und EN 55022 / EN 55032 Klasse A.

Electromagnetic Interference (EMI) Statement - Russia

ВНИМАНИЕ! Настоящее изделие относится к классу А.
В жилых помещениях оно может создавать
радиопомехи, для снижения которых необходимы
дополнительные меры

Class B Notices

The following Class B statements apply to features designated as electromagnetic compatibility (EMC) Class B in the feature installation information.

Federal Communications Commission (FCC) Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult an IBM-authorized dealer or service representative for help.

Properly shielded and grounded cables and connectors must be used in order to meet FCC emission limits. Proper cables and connectors are available from IBM-authorized dealers. IBM is not responsible for any radio or television interference caused by unauthorized changes or modifications to this equipment. Unauthorized changes or modifications could void the user's authority to operate this 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 may cause undesired operation.

Industry Canada Compliance Statement

CAN ICES-3 (B)/NMB-3(B)

European Community Compliance Statement

This product is in conformity with the protection requirements of EU Council Directive 2014/30/EU 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 non-recommended modification of the product, including the fitting of non-IBM option cards.

European Community contact:
IBM Deutschland GmbH
Technical Regulations, Abteilung M456
IBM-Allee 1, 71139 Ehningen, Germany
Tel: +49 800 225 5426
email: halloibm@de.ibm.com

VCCI Statement - Japan

この装置は、クラスB情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。

取扱説明書に従って正しい取り扱いをして下さい。 VCCI-B

Japan Electronics and Information Technology Industries Association Statement

This statement explains the Japan JIS C 61000-3-2 product wattage compliance.

(一社) 電子情報技術産業協会 高調波電流抑制対策実施
要領に基づく定格入力電力値 : Knowledge Centerの各製品の
仕様ページ参照

This statement explains the Japan Electronics and Information Technology Industries Association (JEITA) statement for products less than or equal to 20 A per phase.

高調波電流規格 JIS C 61000-3-2 適合品

This statement explains the JEITA statement for products greater than 20 A, single phase.

高調波電流規格 JIS C 61000-3-2 準用品

本装置は、「高圧又は特別高圧で受電する需要家の高調波抑制対策ガイドライン」対象機器（高調波発生機器）です。

- 回路分類 : 6 (単相、PFC回路付)
- 換算係数 : 0

This statement explains the JEITA statement for products greater than 20 A per phase, three-phase.

高調波電流規格 JIS C 61000-3-2 準用品

本装置は、「高圧又は特別高圧で受電する需要家の高調波抑制対策ガイドライン」対象機器（高調波発生機器）です。

- 回路分類 : 5 (3相、PFC回路付)
- 換算係数 : 0

IBM Taiwan Contact Information

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

Germany Compliance Statement

Deutschsprachiger EU Hinweis: Hinweis für Geräte der Klasse B EU-Richtlinie zur Elektromagnetischen Verträglichkeit

Dieses Produkt entspricht den Schutzanforderungen der EU-Richtlinie 2014/30/EU zur Angleichung der Rechtsvorschriften über die elektromagnetische Verträglichkeit in den EU-Mitgliedsstaaten und hält die Grenzwerte der EN 55022/ EN 55032 Klasse B 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 von IBM verändert bzw. wenn Erweiterungskomponenten von Fremdherstellern ohne Empfehlung von IBM gesteckt/eingebaut werden.

Deutschland: Einhaltung des Gesetzes über die elektromagnetische Verträglichkeit von Geräten

Dieses Produkt entspricht dem "Gesetz über die elektromagnetische Verträglichkeit von Geräten (EMVG)". Dies ist die Umsetzung der EU-Richtlinie 2014/30/EU in der Bundesrepublik Deutschland.

Zulassungsbescheinigung laut dem Deutschen Gesetz über die elektromagnetische Verträglichkeit von Geräten (EMVG) (bzw. der EMC Richtlinie 2014/30/EU) für Geräte der Klasse B

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

Tel: 914-499-1900

Der verantwortliche Ansprechpartner des Herstellers in der EU ist:

IBM Deutschland GmbH
Technical Relations Europe, Abteilung M456
IBM-Allee 1, 71139 Ehningen, Germany
Tel: +49 (0) 800 225 5426
email: HalloIBM@de.ibm.com

Generelle Informationen:

Das Gerät erfüllt die Schutzanforderungen nach EN 55024 und EN 55022/ EN 55032 Klasse B.

Terms and conditions

Permissions for the use of these publications are granted subject to the following terms and conditions.

Applicability: These terms and conditions are in addition to any terms of use for the IBM website.

Personal Use: You may reproduce these publications for your personal, noncommercial use provided that all proprietary notices are preserved. You may not distribute, display or make derivative works of these publications, or any portion thereof, without the express consent of IBM.

Commercial Use: You may reproduce, distribute and display these publications solely within your enterprise provided that all proprietary notices are preserved. You may not make derivative works of these publications, or reproduce, distribute or display these publications or any portion thereof outside your enterprise, without the express consent of IBM.

Rights: Except as expressly granted in this permission, no other permissions, licenses or rights are granted, either express or implied, to the publications or any information, data, software or other intellectual property contained therein.

IBM reserves the right to withdraw the permissions granted herein whenever, in its discretion, the use of the publications is detrimental to its interest or, as determined by IBM, the above instructions are not being properly followed.

You may not download, export or re-export this information except in full compliance with all applicable laws and regulations, including all United States export laws and regulations.

IBM MAKES NO GUARANTEE ABOUT THE CONTENT OF THESE PUBLICATIONS. THE PUBLICATIONS ARE PROVIDED "AS-IS" AND WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY, NON-INFRINGEMENT, AND FITNESS FOR A PARTICULAR PURPOSE.

