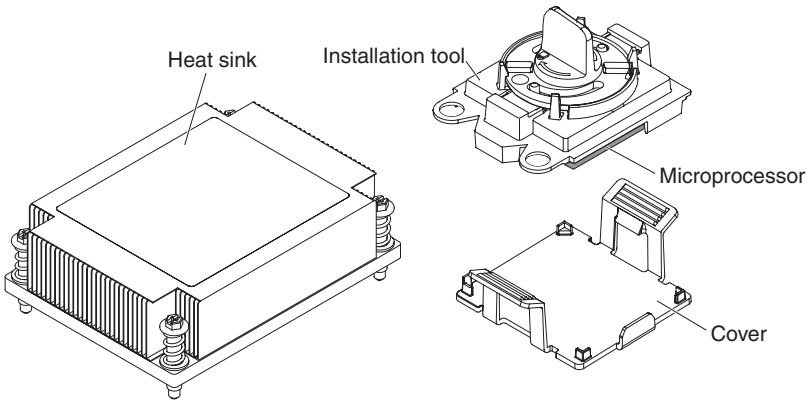
System x3630 M4 Microprocessor Option Kit

See the server documentation for detailed instructions for installing this option in the server.



The option kit contains the following items:

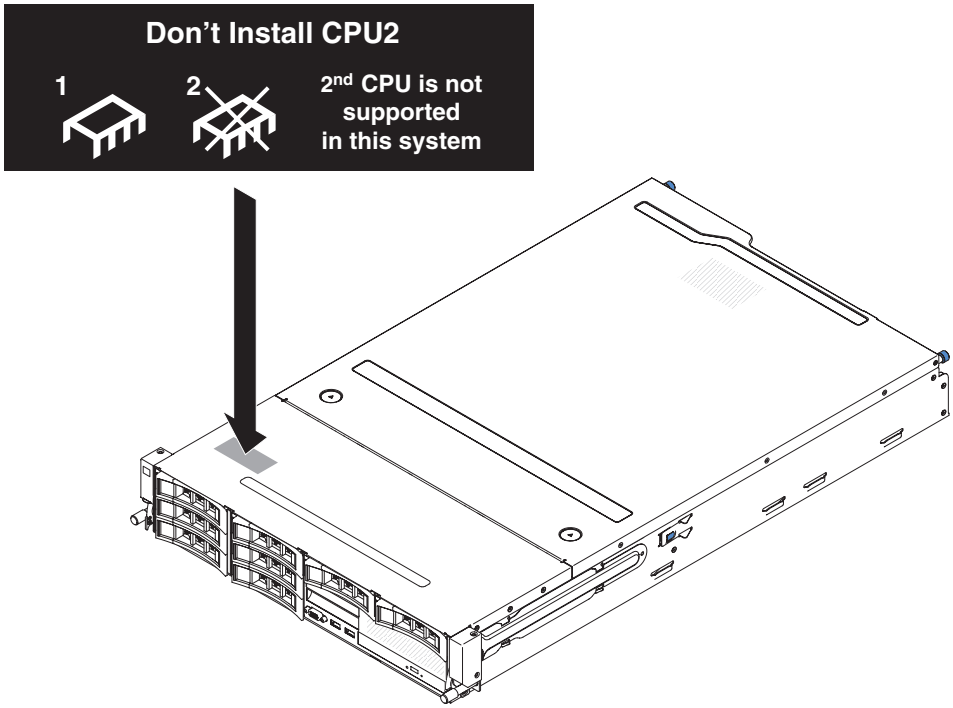
- One microprocessor installation tool assembly, which consists of the following components:
  - Installation tool
  - Microprocessor
  - Microprocessor cover
- One heat sink
- IBM warranty information document
- Important notices document
- This document

Use this microprocessor option kit to add an additional microprocessor to the server (depending on your model). The installation of a microprocessor must be performed by a trained technician.

Notes:

1. The microprocessor installation tool assembly, shown in the illustration, consists of the installation tool, the microprocessor, and a microprocessor cover. The tool is designed to protect the microprocessor from damage during installation. Do not remove the microprocessor cover until you are instructed to do so. (Your installation tool might be slightly different from the one shown.)

2. Before you install the microprocessor, make sure that the latest level of code or firmware is installed in the server. To obtain the latest code or firmware and update instructions, go to http://www.ibm.com/systems/support/.
3. If you are installing microprocessor Intel E5-1403, E5-1407 or Intel E5-1410, attach the microprocessor information label on the front of the server as the following illustration shows.



Store this document with your other product documentation for future reference.

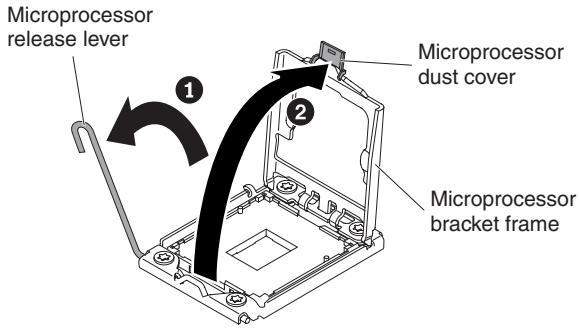
The product-specific documentation is provided on the IBM *Documentation* CD that comes with your server. IBM maintains pages on the World Wide Web where you can get the latest technical information and download device drivers and updates. To access these pages, go to http://www.ibm.com/systems/support/ and follow the instructions.

Installing the microprocessor

To install the microprocessor, complete the following steps:

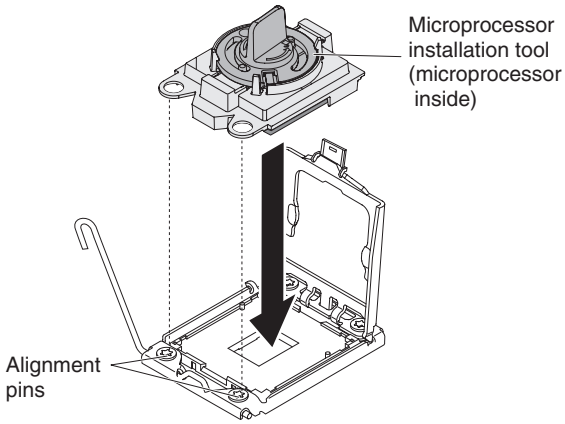
1. See the server *Problem Determination and Service Guide* for installation guidelines and additional safety information.
2. If the server is operating, turn off the server and peripheral devices and disconnect the power cords and all external cables.
3. Remove the cover, using the instructions in your server documentation.
4. If you have the optional hot-swap rear hard disk drive cage installed, rotate it up, using the instructions in your server documentation.
5. Remove the PCI riser-card assembly, using the instructions in your server documentation.
6. Remove the air baffle, using the instructions in your server documentation.
7. If a memory module is inserted into DIMM connector 12, remove it from the server, using the instructions in your server documentation.
8. Locate microprocessor socket 2 on the system board.

9. Open the microprocessor bracket frame by lifting up the tab on the top edge. Keep the bracket frame in the open position.

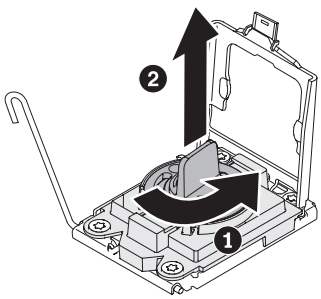


10. The microprocessor is preinstalled in the installation tool, release the sides of the cover and remove the cover from the installation tool.
11. Install the microprocessor:
    a. Align the installation tool with the microprocessor socket as shown in the following illustration.

    Note: The microprocessor fits only one way on the socket.



    b. Twist the handle on the microprocessor tool counterclockwise to insert the microprocessor into the socket.



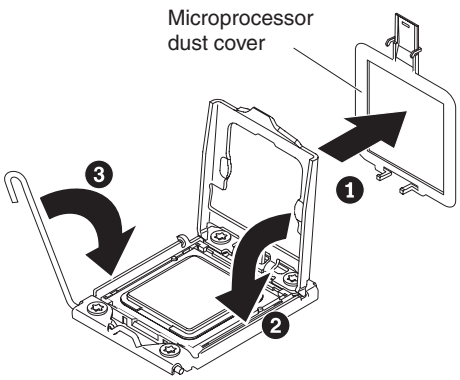
Attention:

- Do not press the microprocessor into the socket.
- Do not touch exposed pins of the microprocessor socket. The pins on the socket are fragile. Any damage to the pins may require replacing the system board.
- Make sure that the microprocessor is oriented and aligned correctly in the socket before you try to close the microprocessor retainer.
- Do not touch the thermal material on the bottom of the heat sink or on top of the microprocessor. Touching the thermal material will contaminate it and destroys its even distribution. If the thermal material on the microprocessor or heat sink becomes contaminated, you must replace the thermal grease.

c. Remove the microprocessor dust cover and store it in a safe place.

d. Close the microprocessor bracket frame.

e. Close the microprocessor release lever by pressing down on the end, moving it back under the release lever holder underneath the microprocessor bracket.



12. Install the heat sink, using the instructions in your server documentation.
13. If a memory module was removed from DIMM connector 12, reinstall it, using the instructions in your server documentation.
14. Reinstall the air baffle, using the instructions in your server documentation.
15. Reinstall the PCI riser-card assembly, using the instructions in your server documentation.
16. If you have the optional hot-swap rear hard disk drive cage installed, rotate it down, using the instructions in your server documentation.
17. Replace the cover, using the instructions in your server documentation.
18. Reconnect the power cords and any cables that you removed.
19. Turn on the peripheral devices and the server.

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