Intel® 5000 Sequence Processor Integration

Warning, Important Safety Instructions

System power on/off: The power button DOES NOT turn off the system AC power. To remove power from system, you must unplug the AC power cord from the wall outlet. Make sure the AC power cord is unplugged before you open the chassis, add, or remove any components.

Hazardous conditions, devices and cables: Hazardous electrical conditions may be present on power, telephone, and communication cables. Turn off the server workstation and disconnect the power cord, telecommunications systems, networks, and modems attached to the server workstation before opening it. Otherwise, personal injury or equipment damage can result.

Electrostatic discharge (ESD) and ESD protection: ESD can damage disk drives, boards, and other parts. We recommend that you perform all procedures in this chapter only at an ESD workstation. If one is not available, provide some ESD protection by wearing an antistatic wrist strap attached to chassis ground any unpainted metal surface on your server workstation when handling parts.

ESD and handling boards: Always handle boards carefully. They can be extremely sensitive to ESD. Hold boards only by their edges. After removing a board from its protective wrapper or from the server workstation , place the board component side up on a grounded, static free surface. Use a conductive foam pad if available but not the board wrapper. Do not slide board over any surface.
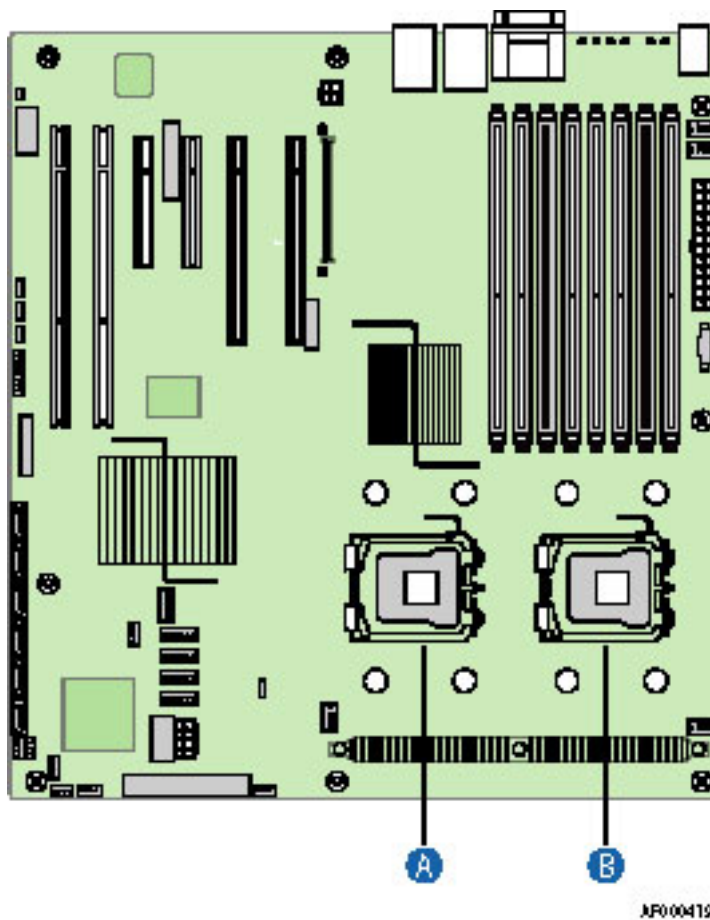
Installing the Processor

Note:

- *Do not touch the contacts on either the processor or the processor socket.*
- *Do not force the processor socket into place. When correctly aligned, the socket will easily drop into place.*

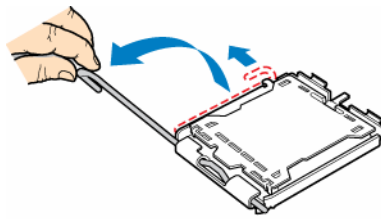To install a processor, follow these instructions:
1. Observe safety and ESD precautions.
2. Turn off all peripheral devices connected to the server. Turn off the server.
3. Disconnect the AC power cord from the server.
4. Remove the chassis cover. See the documentation that came with your chassis for instructions on removing the cover.
5. Locate the processor sockets (see Figure 1).

Callout	Processor Socket
A.	CPU_2
Callout	Processor Socket
B.	CPU_1

Figure 1. Example: Locating Processor Sockets.
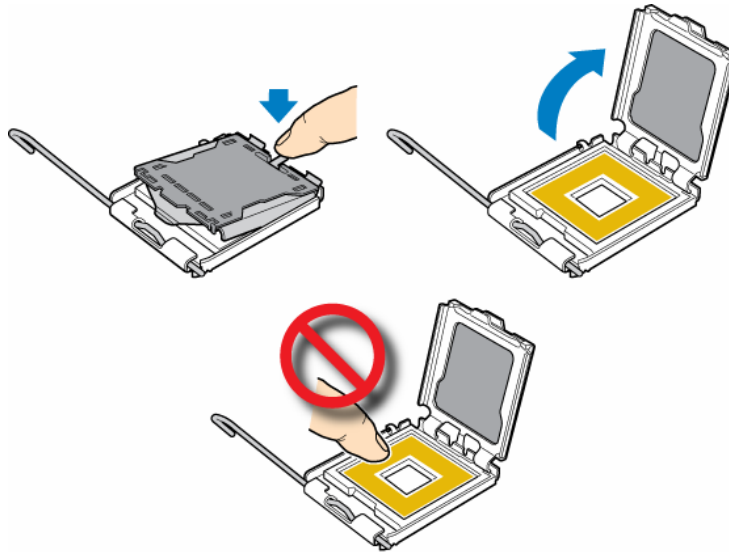Note: Consult Your Board Documentation for Proper Socket Location

6. Disconnect and remove any components necessary to access the processor sockets. See the documentation that came with your chassis for instructions on removing chassis components.

7. Push down on the lever attached to the processor socket. While holding the lever down, pull it towards the center of the board to disengage the lever from the hook. Fully open the lever. See Figure 2.

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Figure 2. Opening Processor Socket Lever

8. Push down on the rear tab of the load plate to swing the front of the load plate up slightly. Fully open the load plate. See Figure 3.

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Figure 3. Opening Load Plate

9. If the protective cover is attached from the load plate, remove it and store it for future use. See Figure 4.
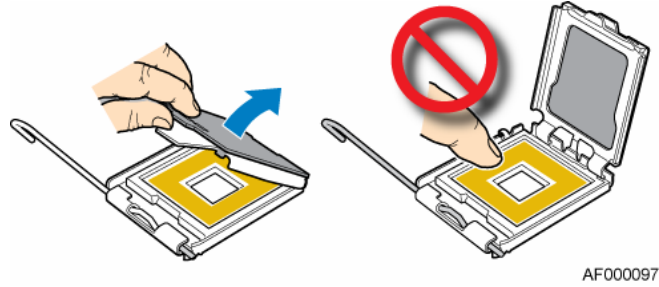
Figure 4. Removing Protective Cover from Load Plate

10. Remove the processor from the box and remove the protective shipping cover.

11. Set the processor in the socket with the processor cutouts matching the processor socket notches. See Figure 5.
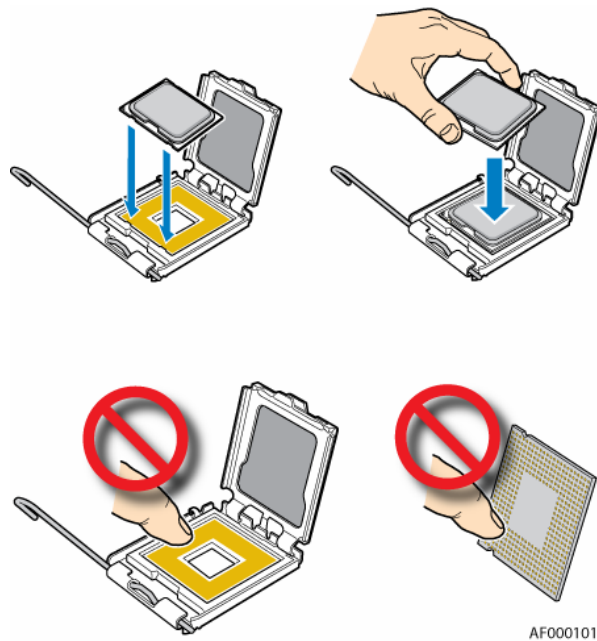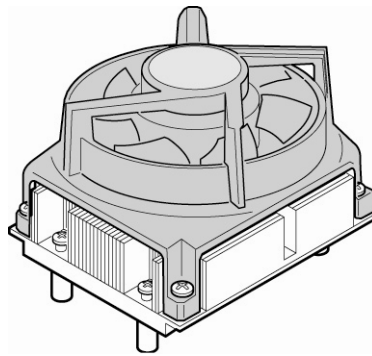

Figure 5. Setting Processor in Place

12. Close the load plate.

13. Close the socket lever. Push downward on the socket lever while pushing it toward the center of the processor socket to engage it under the hook on the processor socket.

Installing the Heat Sink(s)

> *Note:* *The heat sink has thermal interface material (TIM) located on the bottom of it. Use caution when handling the heat sink so you do not damage the TIM.*

Each processor requires a heat sink. Depending on your chassis, you may need to use either a active (Figure 6) or an passive heat sink (Figure 7). An active heat sink has a fan attached to the top of it and a cable that needs to be connected to the server board.

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Figure 6. Active Heat Sink (Cable Not Shown)

Use the following steps to install a heat sink.

1. Set the heat sink over the processor, lining up the four captive screws with the four posts surrounding the processor.

2. Loosely screw in the captive screws on the heat sink corners in the order shown by Figure 7. Do not fully tighten one screw before loosely attaching the others.

3. In the same order, gradually and equally tighten each captive screw until each is firmly tightened. Do not fully tighten one screw at a time.
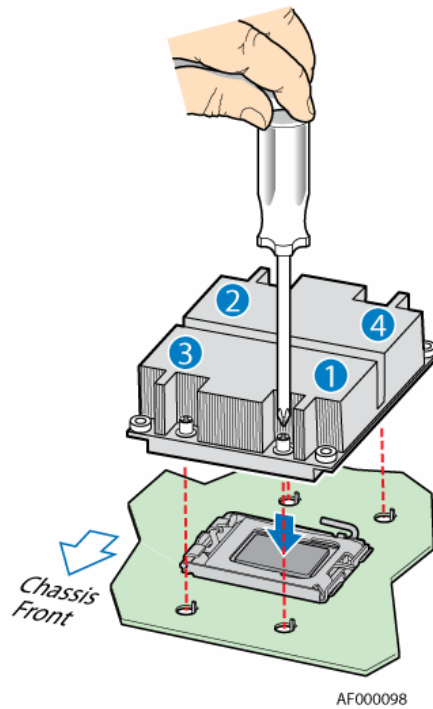
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Figure 7. Installing Heat Sink (Passive Heat Sink Shown)

4. Active heat sink only: Connect the heat sink cable to the server board. Reference you board documentation for proper fan header location.

5. Reinstall and reconnect any parts you removed or disconnected to reach the processor sockets. See the documentation that came with your chassis for instructions on installing chassis components.

6. Replace the chassis cover and reconnect the AC power cord. See the documentation that came with your chassis for instructions on installing the cover.