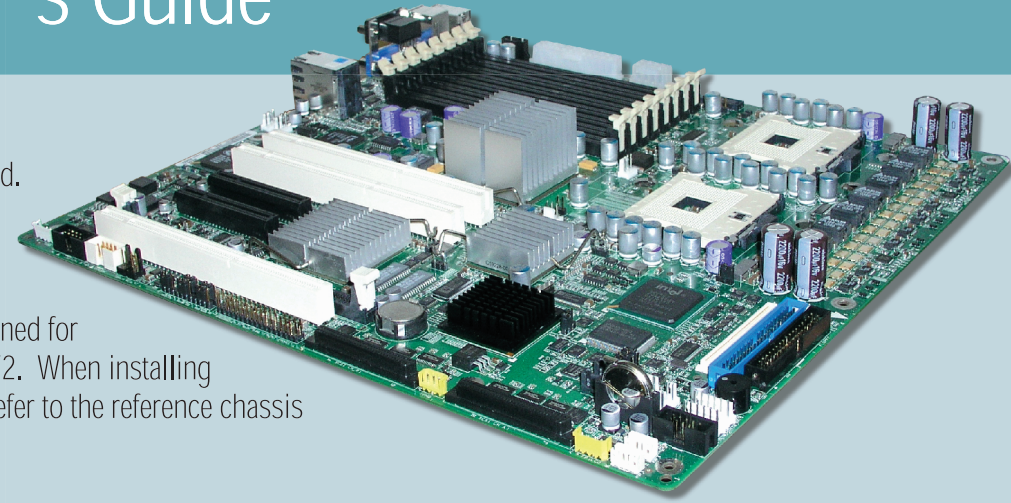




Intel® Server Board SE7520AF2 Quick Start User's Guide



Thank you for buying an Intel® Server Board. The following information will help you to prepare your chassis for integration with your Intel® Server Board SE7520AF2. The Intel® Server Chassis SC5300 is designed for use with the Intel® Server Board SE7520AF2. When installing the server board into a reference chassis, refer to the reference chassis instructions.

These guides and other supporting documents (including a list of supported server boards) are located on the web at <http://support.intel.com/support/motherboards/server/se7520af2/>. You can also find the guides on the CD that accompanied the Intel® Server Board SE7520AF2.

If you are not familiar with ESD (Electrostatic Discharge) procedures used during system integration, please see the Intel® Server Board SE7520AF2 Product Guide, available on the CD or at <http://support.intel.com/support/motherboards/server/se7520af2/>.

Warning

Read all caution and safety statements in this document before performing any of the instructions. Also see the *Intel® Server Board and Server Chassis Safety Information* document at: <http://support.intel.com/support/motherboards/server/se7520af2/> for complete safety information.

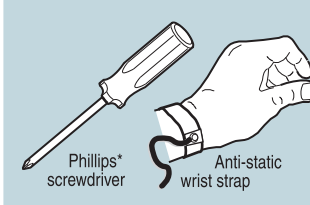
Warning

Installation and service of this product to be performed only by qualified service personnel to avoid risk of injury from electrical shock or energy hazard.

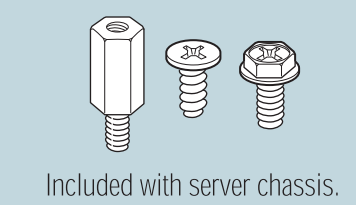
Caution

Observe normal ESD (Electrostatic Discharge) procedures during system integration to avoid possible damage to server board and/or other components.

Tools Required



Fastener Identification Guide



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¹Available only to Intel® Channel Program Members, part of the Intel® e-Business Network.

Minimum Hardware Requirements

To avoid integration difficulties and possible board damage, your system must meet the following minimum requirements:

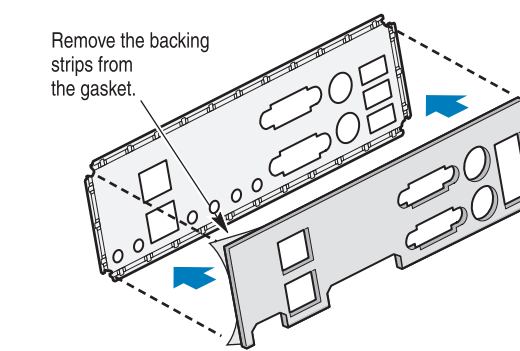
- Processor: Minimum of one Intel® Xeon™ processor with 1 MB L2 cache and an 800MHz system bus.
- Memory: Minimum of one 256 MB, DDR2-400 compliant registered SDRAM 240-pin DIMM.
- Power: Recommended minimum of 600W with 2A of standby current, which meets the SSI EPS 12V specification.

1 Preparing the Chassis

When using an Intel® Server Chassis, begin with the Quick Start User's Guide that came with your chassis. Return to this document when directed by the server chassis Quick Start User's Guide. If using a non-Intel server chassis, refer to the documentation that came with your chassis for preparatory steps.

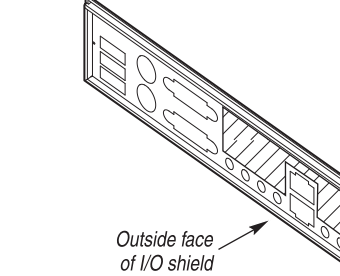
2 Installing the I/O Shield and Gasket

A. Attach the Gasket to the I/O Shield



Press the gasket onto the **inside** face of the I/O shield as shown.

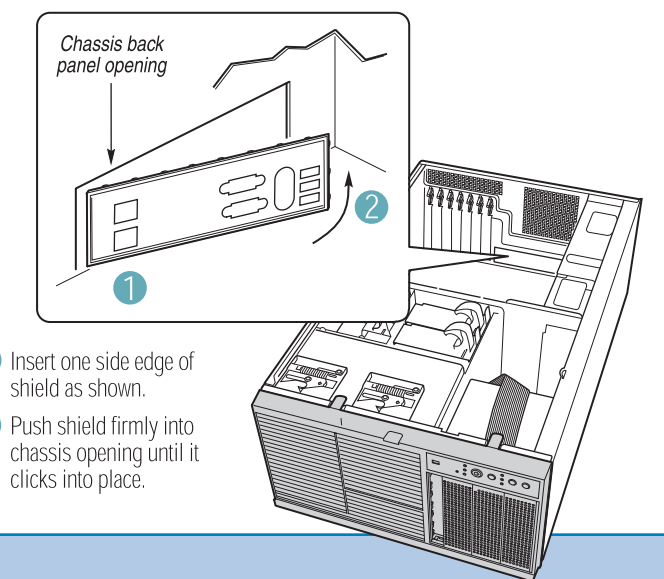
B. Attach the Label to the I/O Shield



Remove the backing from the label included with your server board. Press the label onto the outside face of the I/O shield.

C. Install the I/O shield

Shield installs from **inside** of the chassis. The label must be visible from the outside of the chassis.



- 1 Insert one side edge of shield as shown.
- 2 Push shield firmly into chassis opening until it clicks into place.

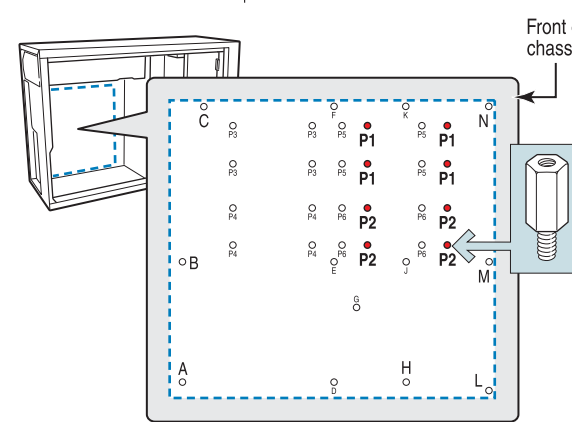
3 Installing the Chassis Standoffs and Server Board Bumpers

A. Install the Chassis Standoffs

Standoffs are included with your chassis. Standoff numbering varies by chassis. Standoff locations for the Intel® Server Chassis SC5300 are shown below.

For the Intel® Server Chassis SC5300:

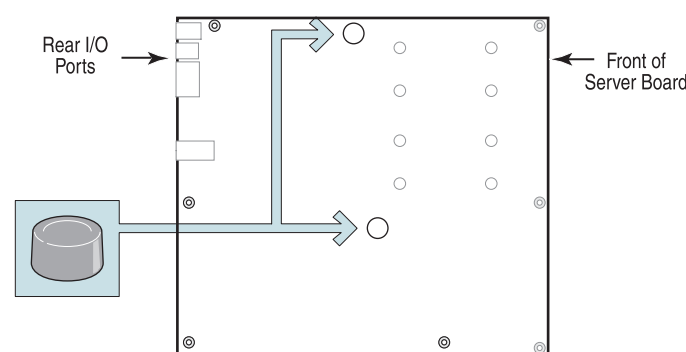
Standoffs are pre-installed in positions A, B, C, H, L, M, N. Install standoffs in the four positions marked P1 and in the four positions marked P2.



B. Install the Server Board Bumpers

For the Intel® Server Chassis SC5300:

Server board bumpers are included with your chassis. Install two bumpers on the underside of the server board at the positions marked on the silkscreen with white circles.

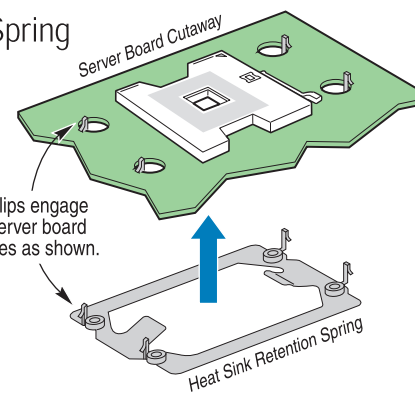


4 Install the Server Board

A. Heat Sink Retention Spring

The Intel® Server Board SE7520AF2 has two heat sink retention springs installed. Make sure that these springs are correctly in place before installing the server board.

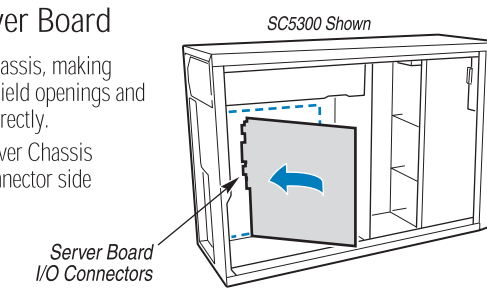
A sheet of white mylar insulating material is held to the server board by the retention springs. Do not remove this insulating material.



B. Insert the Server Board

Place the board into the chassis, making sure that back panel I/O shield openings and chassis standoffs align correctly.

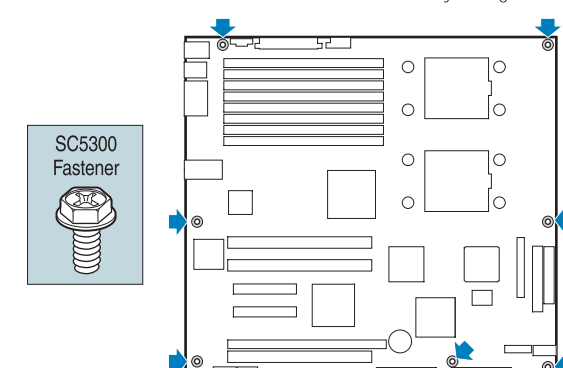
When using the Intel® Server Chassis SC5300, insert the I/O connector side (back) of the board first.



C. Attach the Server Board

Intel® Server Chassis SC5300

Attach the board with the screws at the 7 locations indicated by the figure.

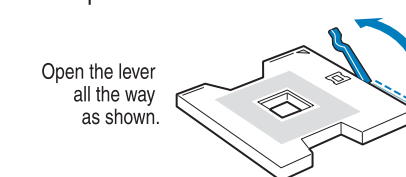


5 Install the Processor[s] and Heat Sink[s]

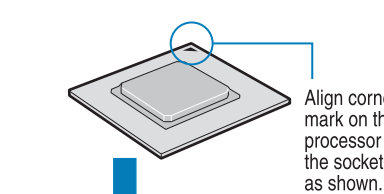
Notes and Cautions

1. If only ONE processor is to be used, it must be installed in the CPU 1 socket, closest to the edge of the server board.
2. Do not mix processors of different types or frequencies.
3. When unpacking a processor, hold by the edges only to avoid touching the pins.
4. This server board has "zero-insertion force" sockets. If processor does not drop easily into socket holes, make sure lever is in the full-open position and verify none of the processor pins is bent.
5. The heat sink has thermal interface material on the underside of it. Use caution so that you do not damage the thermal interface material.

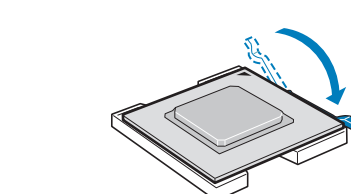
A. Open the Socket Lever



B. Install the Processor



C. Close the Socket Lever

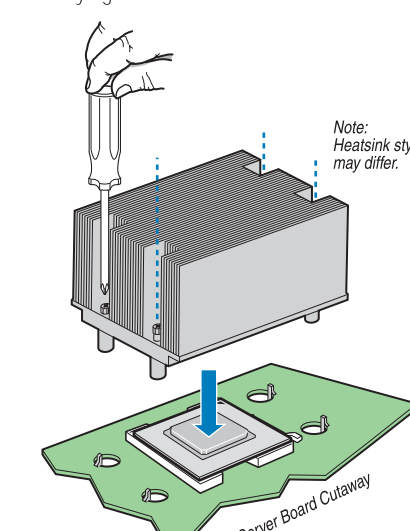


D. Install the Heat Sink

When installing the server board into the Intel Server Chassis SC5300, use only a passive 2U heat sink.

The heat sink attaches directly to the chassis using the standoffs installed in Step 3. Each heat sink has four captive fasteners that should be tightened using the following procedure:

- A. Lightly tighten each fastener with Phillips screwdriver. Do not fully tighten one fastener at a time. Doing so would cause the heat sink to be positioned at an angle over the processor instead of flatly on top of it.
- B. Securely tighten each fastener.

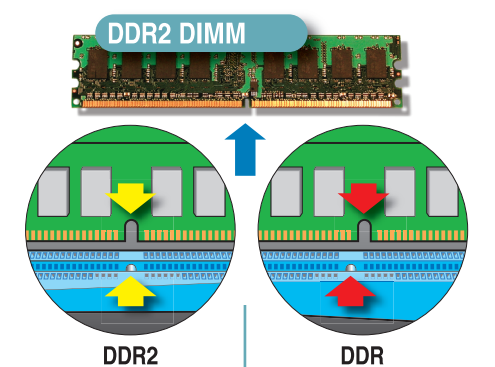


6 DDR2 DIMM Memory Identification

This server board does not support DDR memory for the main memory. You must install DDR2 DIMMs in the system memory sockets (DIMM Banks 1 - 4) to avoid possible damage to server board DIMM sockets.

The RAID DIMM supports DDR333 memory. Do not install a DDR2 DIMM in the RAID DIMM memory socket.

See the Reference section on the reverse side of this document to identify the sockets.



This illustration shows the correct alignment between the DDR2 DIMM notch and the server board DIMM Socket.

This illustration shows the misalignment between the DDR DIMM notch and the server board DDR2 DIMM Socket.

Attempting to insert a DDR DIMM into the server board DDR2 DIMM socket may result in damage to the server board.

Proceed to Step 7 for DIMM memory installation.

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