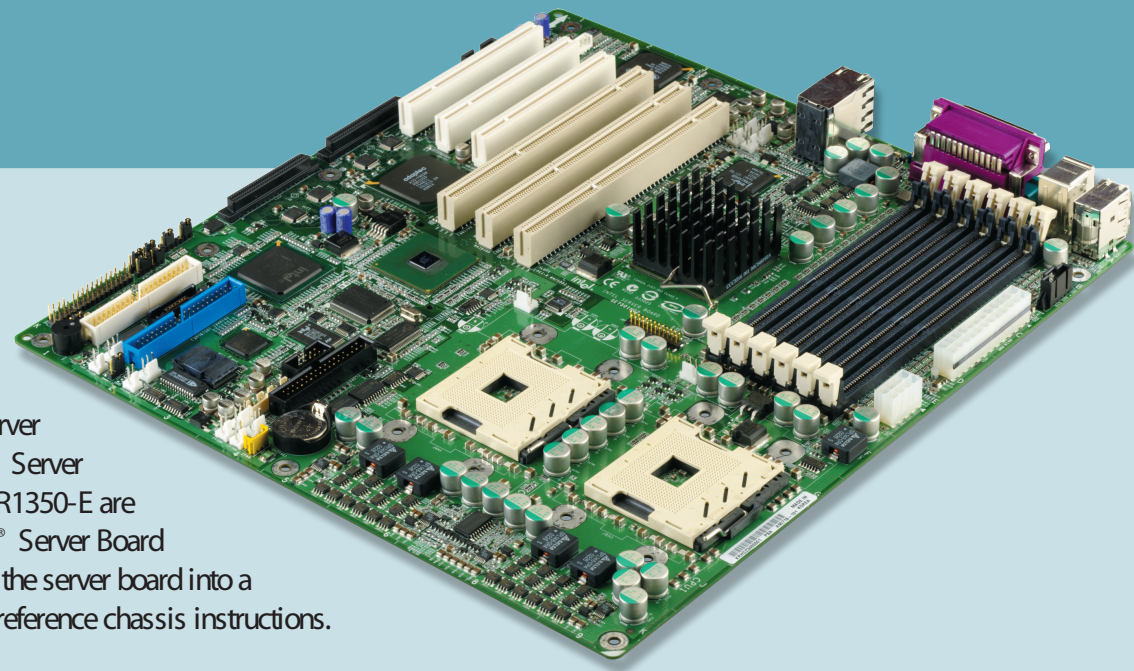




Intel® Server Board SE7501HG2 Quick Start User's Guide

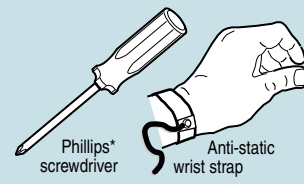


Thank you for buying an Intel® Server Board. The following information will help you to prepare your chassis for integration with your Intel® Server Board SE7501HG2. The Intel® Server Chassis SC5200 family and SR1350-E are designed for use with the Intel® Server Board SE7501HG2. When installing the server board into a reference chassis, refer to the reference chassis instructions.

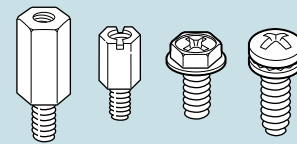
For more detailed information, refer to the product guide on the CD that accompanied the Intel® Server Board SE7501HG2. This guide and other supporting documents (including a list of supported server products) are also located on the web at <http://support.intel.com/support/motherboards/server>.

If you are not familiar with ESD (Electrostatic Discharge) procedures used during system integration, see the complete ESD procedures described in your product guide. For more details on Intel® server chassis, please see www.intel.com/go/serverbuilder

Tools Required



Fastener Identification Guide



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 512KB L2 cache support with or without 1 MB integrated L3 cache.
 - Memory: Minimum of two identical 128 MB ECC, DDR200/266-compliant registered SDRAM 184-pin gold DIMMs. DDR200 DIMMs can be used only when a 400 MHz processor is installed.
 - Power: Minimum of 450W with 2A of standby current, which meets the SSI SP5 12V specification.

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- Sales tools, such as videos and presentations
- Training information, such as the Intel® Online Learning Center
- Support Information and much more

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

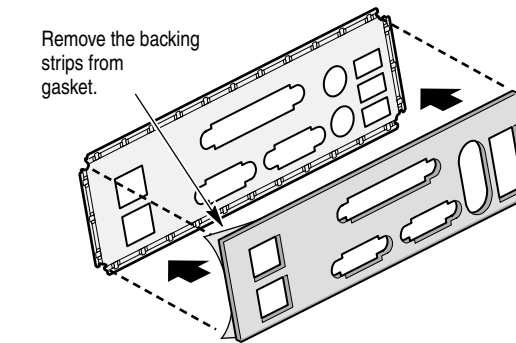
WARNING: Installation and service of this product to be performed only by qualified service personnel to avoid risk of injury from electrical shock or energy hazard.

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

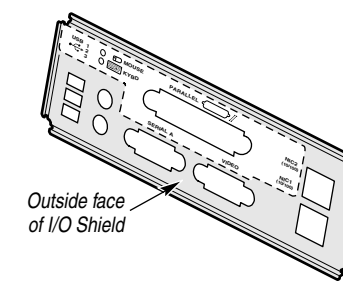
A. Attach the Gasket to the I/O Shield



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

For the Intel® Server Chassis SR1350-E, the gasket is factory-installed. See your Intel® Server Chassis SR1350-E Quick Start Guide for specific gasket installation instructions.

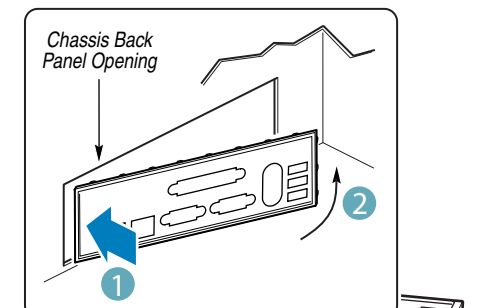
B. Attach the Label to the I/O Shield



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 should be visible from the outside of the chassis.

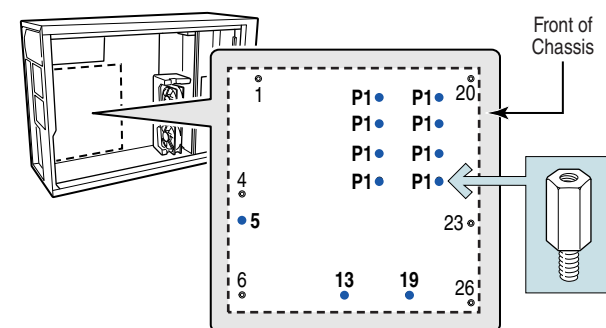


- 1 Insert one side edge of shield as shown.
- 2 Push shield firmly into chassis opening until it clicks into place.

3 Install the Chassis Standoffs

Standoffs are included with your chassis. Standoff numbering in other chassis may be different. If you are using a non-Intel chassis, you may need to install the adhesive-backed standoff included with your server board. This standoff is used when the non-Intel chassis does not include a standoff hole in one of the referenced locations. Refer to documentation provided by your chassis vendor for standoff placement information.

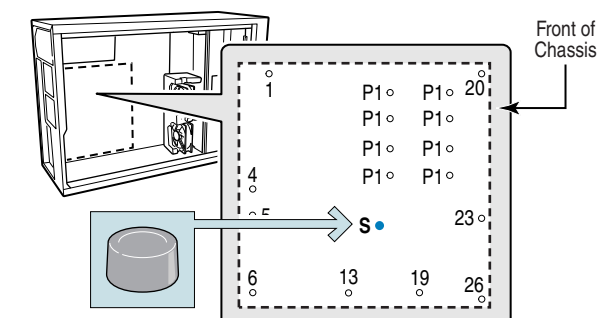
For the Intel® Server Chassis SC5200:
Install standoffs in positions 5, 13 and 19, and in the eight positions marked P1.



For the Intel® Server Chassis SR1350-E:
All standoffs are factory-installed. Note that two mounting holes on your server board will not be used in this chassis.

Install the Rubber Bumper

For the Intel® Server Chassis SC5200, a self-adhesive rubber bumper is included with your chassis. Remove the backing paper and place the bumper directly over the hole marked "S".

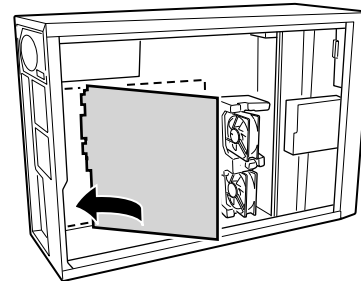


For the Intel® Server Chassis SR1350-E, the rubber bumper is not required.

4 Installing the Server Board

A. Insert the Server Board

Intel® Server Chassis SC5200
Place the board into the chassis, making sure that back panel I/O shield openings and chassis standoffs align correctly. Insert the I/O connector side (back edge) of the board first.

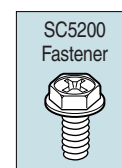
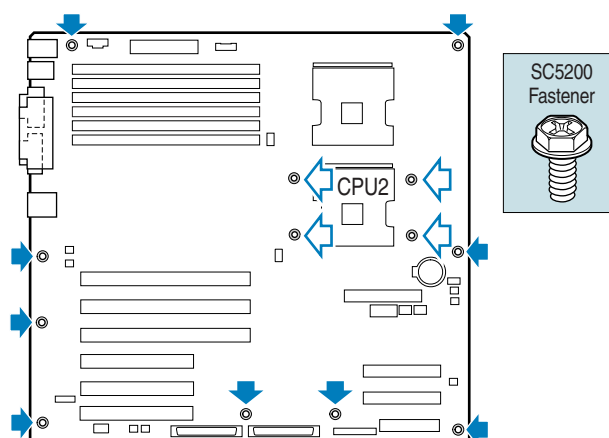


Intel® Server Chassis SR1350-E
Connectors located at the left edge of the server board may not be accessible after installing the board into this chassis. Make these connections before inserting your server board into the chassis. See your Intel® Server Chassis SR1350-E Quick Start Guide for specific server board installation instructions.

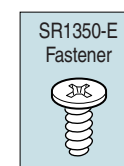
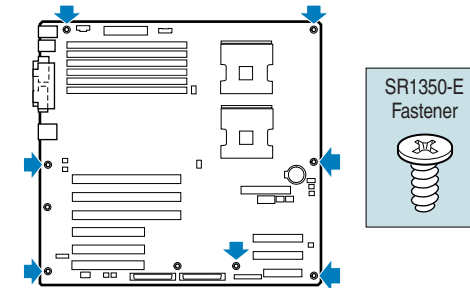
B. Attach the Server Board

Intel® Server Chassis SC5200
Use screws to attach the board to the server at the 9 locations indicated by the solid blue arrows in the figure below (A).

Note: If a single processor is to be installed, also insert screws into the 4 standoff locations bordering the CPU2 socket indicated by the arrows outlined in blue (B).



Intel® Server Chassis SR1350-E
Install screws at the 7 locations indicated by the figure that have matching standoffs. Your server board may include a mounting hole that does not match a standoff. If so, do not insert a screw into this mounting hole. Screws come with server chassis.



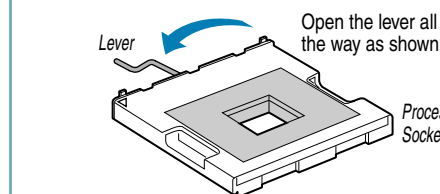
See your Intel® Server Chassis SR1350-E Quick Start Guide for specific server board installation instructions.

5 Installing the Processor(s)

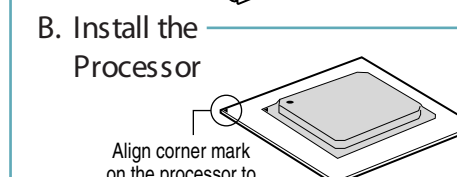
Notes and Cautions

1. The following processor install procedure applies to the Intel® Server Chassis SC5200 and Intel® Server Chassis SC5200-BRP only. For the Intel® Server Chassis SR1350-E, refer to the Intel® Server Chassis SR1350-E Quick Start User's Guide. For the Intel® Server Chassis SC5200-HSRP, see the Note on Step 5 (D) and disregard Step 6. The wind tunnel is not used in the Intel® Server Chassis SC5200-HSRP. Instead, use the clear plastic ducting that is included with the chassis.
2. If only ONE processor is to be used, it must be installed in the processor socket labeled CPU1, located closest to the corner of the server board.
3. If installing a SECOND processor, verify that the processors are identical with the same cache size, processor speed and processor system bus speed and stepping. Do not mix processors of different types or frequencies.
4. When unpacking a processor, hold only by the edges to avoid touching the pins.
5. This server board has "zero-insertion force" sockets. If the processor does not drop easily into socket holes, make sure lever is in the full-open position and processor is oriented properly.
6. Use the retention mechanism clips that come with your boxed processor. The Intel® Xeon™ 400 MHz processors and the Intel® Xeon™ 533 MHz processors use slightly different clips. Use only the clips that come with your processor(s).

A. Open the Socket Lever



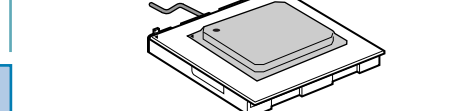
Open the lever all the way as shown.



Align corner mark on the processor to the socket as shown.

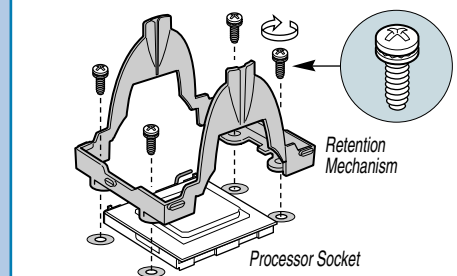


C. Close the Socket Lever



D. Install the Retention Mechanism

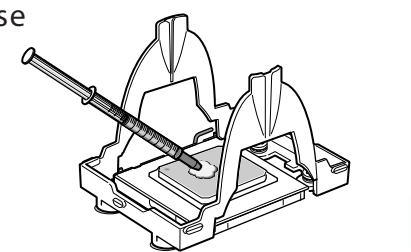
For the Intel® Server Chassis SC5200:
Use the fasteners provided with the boxed processor(s).



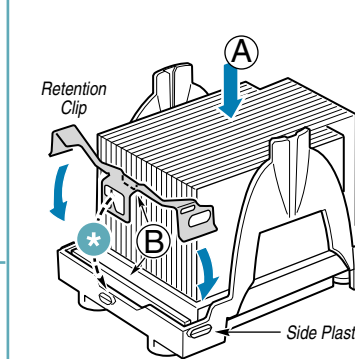
Note: For the Intel® Server Chassis SC5200-HSRP, use the retention mechanism that comes with the chassis. Do not use the retention mechanism that comes with the processor.

E. Apply Thermal Grease

Apply thermal grease to top of processor as required. See processor documentation for additional information.

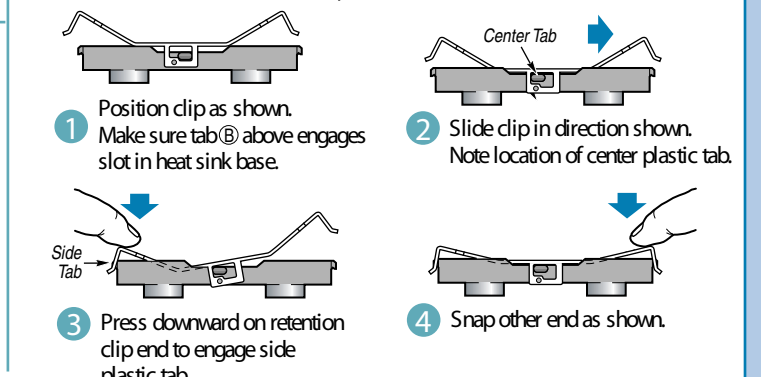


F. Install the Heat Sink and Retention Clips



- A Place the heat sink onto processor. Heat sink styles may differ. If your heat sink has a flat edge (as shown), the flat edge must face the back of the chassis.
 - B The tab at inside of the retention clip engages slot on the heat sink during installation.
- * Note that center "dogleg" slot in clip provides room for side-to-side motion while engaging retention clip slots located at each side.

NOTE: For ease of installation, BOTH retention clips should be installed simultaneously.



- 1 Position clip as shown. Make sure tab (B) above engages slot in heat sink base.
- 2 Slide clip in direction shown. Note location of center plastic tab.
- 3 Press downward on retention clip end to engage side plastic tab.
- 4 Snap other end as shown.

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