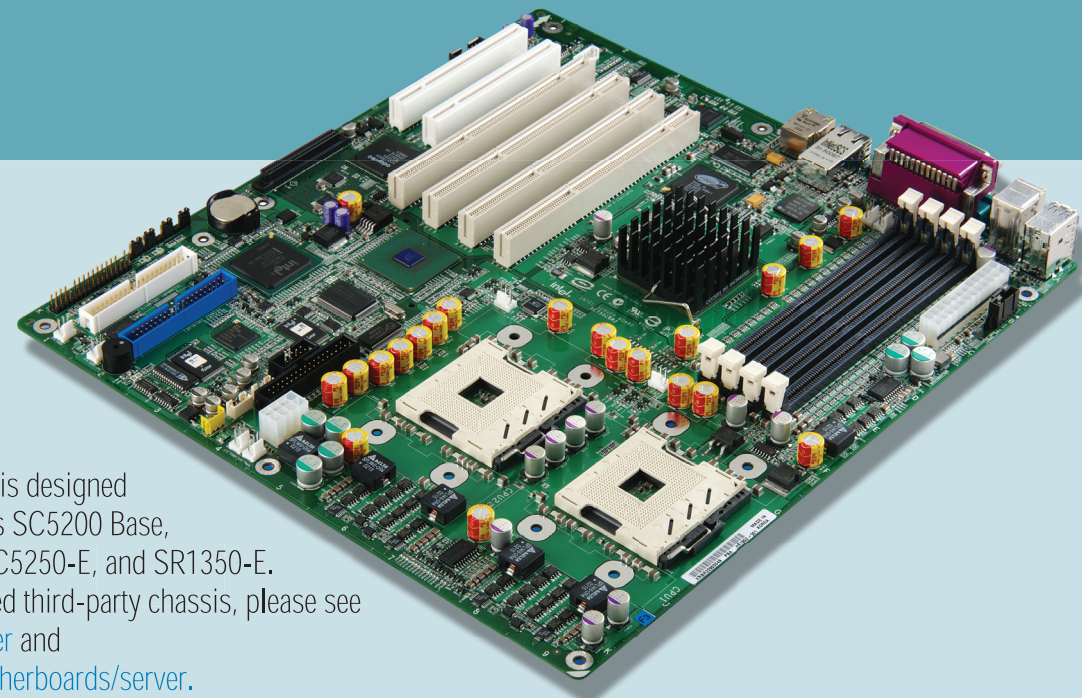




Intel® Server Board SE7501BR2 Quick Start User's Guide



Thank you for buying an Intel® Server Board. The following information will help you to integrate your Intel® Server Board SE7501BR2 into a server chassis.

The Intel® Server Board SE7501BR2 is designed for use with the Intel® Server Chassis SC5200 Base, SC5200-BRP and SC5200-HSRP, SC5250-E, and SR1350-E. For details on these products or tested third-party chassis, please see <http://www.intel.com/go/serverbuilder> and <http://support.intel.com/support/motherboards/server>. Server board and chassis Product Guides are also available on the CD that accompanied your Intel® Server Board SE7501BR2.

If you are not familiar with ESD (Electrostatic Discharge) procedures used during system integration, please see the Intel® Server Board SE7501BR2 Product Guide, available on the CD or at <http://support.intel.com/support/motherboards/server/se7501br2manual.htm>.

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- 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.

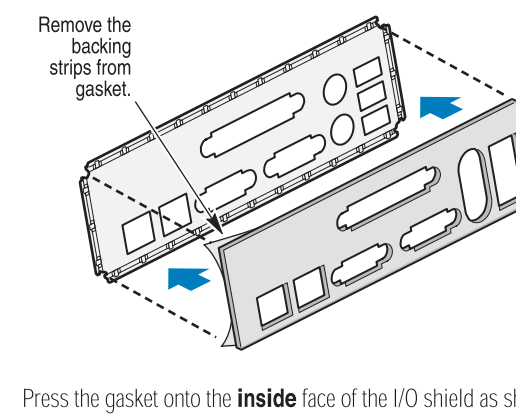
1 Preparing the Chassis

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.

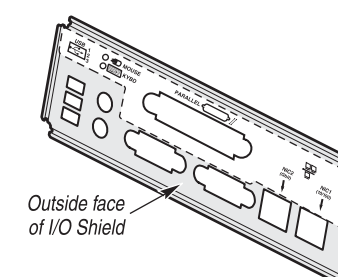
2 Installing the I/O Shield and Gasket

A. Attach the Gasket to the I/O Shield

For the Intel® Server Chassis SR1350-E, see your SR1350-E Quick Start User's Guide for I/O shield installation instructions.



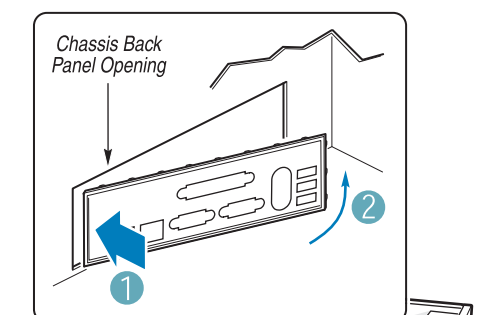
B. Attach the Label to the I/O Shield



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

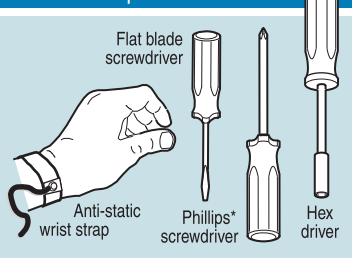
C. Install the I/O Shield

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

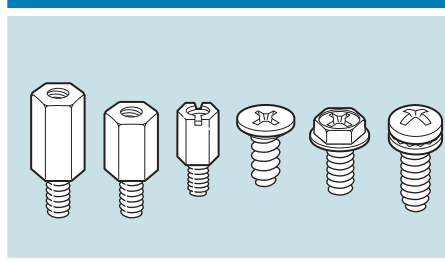


- 1 Insert one side edge of shield as shown.
- 2 Push shield firmly into chassis opening until it clicks into place.

Tools Required



Fastener Identification Guide



Minimum Hardware Requirements

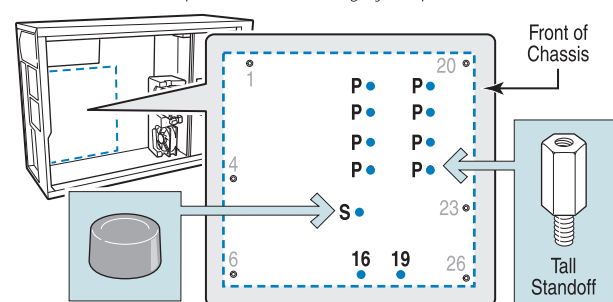
To avoid integration difficulties and possible board damage, your system must meet the following minimum requirements:

- Processor: Minimum of one Intel® Xeon™ processor with 512KB L2 cache support.
- 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 EPS 12V specification.

3 Install the Chassis Standoffs and Bumper

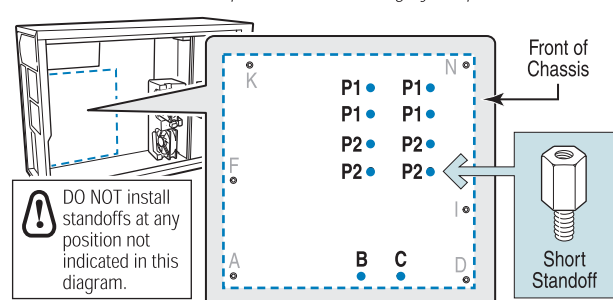
Use the standoffs that are included with your chassis. Standoff numbering in other chassis may be different. If using a non-Intel chassis, refer to documentation provided by your chassis vendor for standoff placement information.

For the Intel® Server Chassis SC5200: Install standoffs in positions **16** and **19**, and in the eight positions marked **P**. Standoff positions shown in gray are pre-installed.



A self-adhesive rubber bumper is included with your chassis. Remove the backing paper and place the bumper directly over the chassis hole marked **S**. Note: This is the only chassis that requires a bumper.

For the Intel® Server Chassis SC5250-E: Install standoffs in positions **B** and **C**, and in the eight positions marked **P1-P2**. Standoff positions shown in gray are pre-installed.

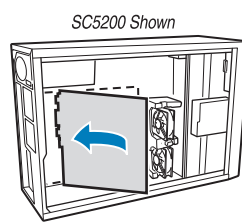


For the Intel® Server Chassis SR1350-E: All standoffs are factory-installed. Note that one mounting hole on your server board will not be used in this chassis.

4 Installing the Server Board

A. Insert the Server Board

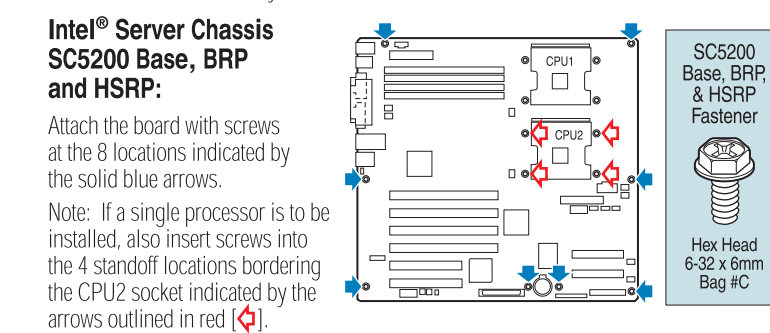
Place the board into the chassis, making sure that back panel I/O shield openings and chassis standoffs align correctly.



- When using the Intel® Server Chassis **SC5200**, insert the I/O connector side [back] of the board first.
- When using the Intel® Server Chassis **SC5250-E**, insert the front of the board first, then slide the board back so the I/O connectors fit through the I/O shield.
- When using the 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

Note: The Intel® Server Chassis SC5200 Base, BRP and HSRP, and the Intel® Server Chassis SC5250-E use different fasteners to attach the server board to the chassis. Use the fastener indicated for your chassis.



Intel® Server Chassis SC5250-E: Push down firmly over the two "snap-top" standoffs that are indicated by the arrows outlined in blue [◀]. This will engage the snap-top standoffs to the server board. Use screws to attach the board to the server at the 6 locations indicated by the solid blue arrows in the figure [▶].

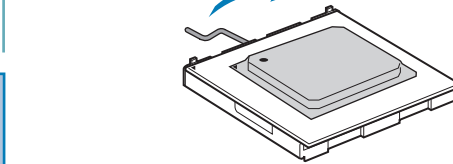
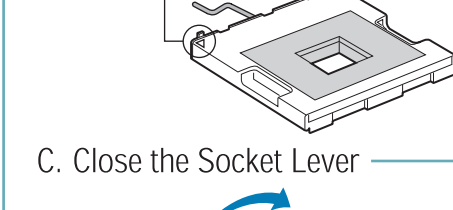
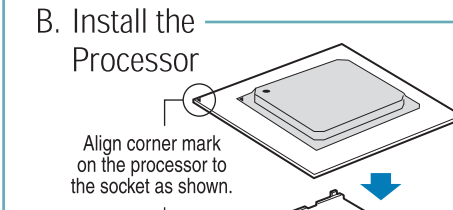
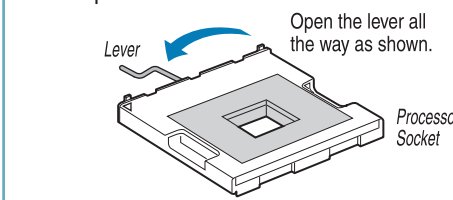
Note: If a single processor is to be installed, also insert screws into the 4 standoff locations bordering the CPU2 socket indicated by the arrows outlined in red [◀].

5 Installing the Processor[s]

Notes and Cautions

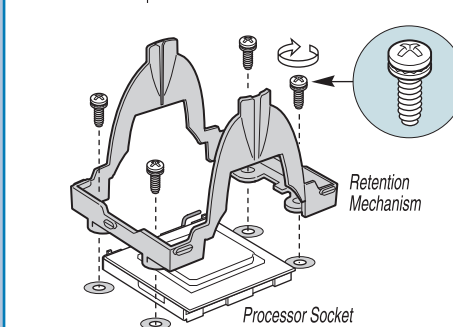
1. If installing the server board in the Intel® SC5200 Hot Swap Redundant Power Chassis, disregard steps 5 and 6 and instead refer to the Intel® Server Board SE7501BR2 Product Guide for processor installation instructions.
2. In the Intel® Server Chassis SC5200 Base, or Base Redundant Power, or in the Intel® Server Chassis SC5250-E, use these instructions for installing the processor instead of the instructions that came with your boxed processor.
3. In the Intel® Server Chassis SR1350-E, follow the instructions in the Intel® Server Chassis SR1350-E Quick Start User's Guide to install the processor.
4. 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. Refer to the Reference section on reverse side for processor socket locations.
5. If installing a SECOND processor, verify that the processors are identical, same voltage and speed. **Do not mix processors of different types or frequencies.**
6. When unpacking a processor, hold by the edges only to avoid touching the pins.
7. This server board has "zero-insertion force" sockets. If processor does not drop easily into socket holes, make sure lever is in the full-up position and the processor is oriented properly.
8. Use the retention mechanism clips that come with your boxed processor. The Intel® Xeon™ processors 400 MHz and the Intel® Xeon™ processors 533 MHz use slightly different clips. Use only the clips that come with your processor(s).

A. Open the Socket Lever



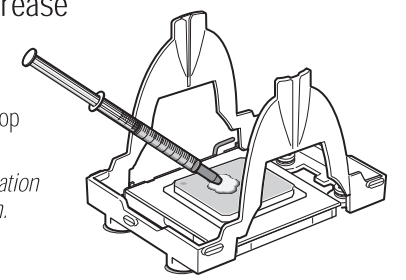
D. Install the Retention Mechanism

SC5200: Use fasteners provided with boxed processor. **SC5250-E:** Use the slightly shorter fasteners provided with the chassis.

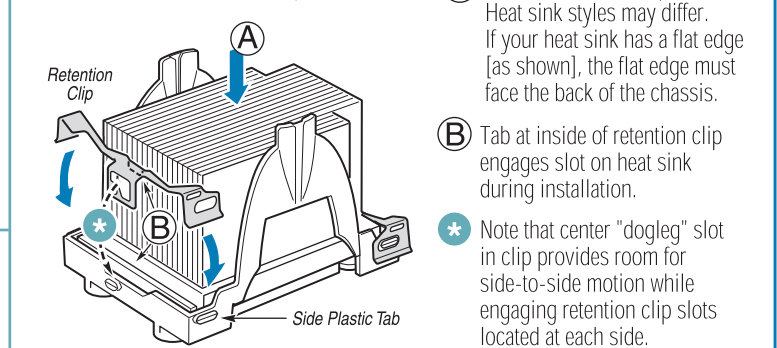


E. Apply Thermal Grease

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



F. Install the Heat Sink and Retention Clips



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

- 1 Position clip as shown. Make sure tab @ 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.

