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Intel® Server Board SE7501CW2 Quick Start User's Guide

Start Here

Thank you for buying an Intel® Server Board. The following information will help you prepare your server board for integration with your selected server chassis.

This guide is for technically qualified persons. Expanded installation instructions and complete product information are available in the *Intel® Server Board SE7501CW2 Product Guide* located on the Resource CD.

Minimum Hardware Requirements

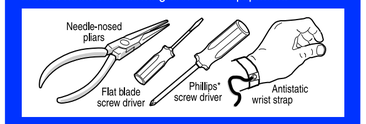
To avoid integration difficulties and possible board damage, your system must meet the following minimum requirements:

- **Processor:** Minimum of one Intel® Xeon™ processor with 512KB L2 cache support
- **Memory:** Minimum of one 128 MB, DDR200/266-compliant registered SDRAM 184-pin gold DIMMs.
- **Power:** Minimum of 450W with 2A of standby current, which meets the SSI EPS 12V specification.

Additional resources and support for your server board, including supported processors, tested chassis, qualified memory and chassis components, specifications, and software updates, can be found at: *http://support.intel.com/support/motherboards/server/SE7501CW2*

Before you begin

You will need the following tools and equipment:



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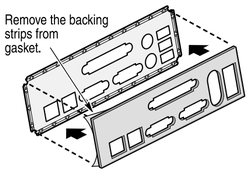
1 Available only to Intel® Channel Program Members, part of Intel® e-Business Network.

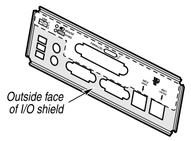
1 Installing the I/O Shield and Gasket

A Attaching the Gasket to the I/O Shield



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

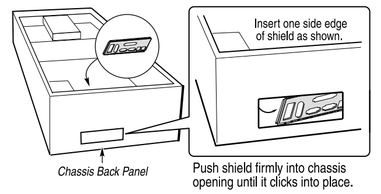
B Attaching the Label to the I/O Shield



Remove the backing from the label included with your server board.

Press the label onto the outside face of the I/O shield.

C Installing the I/O Shield

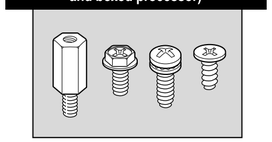


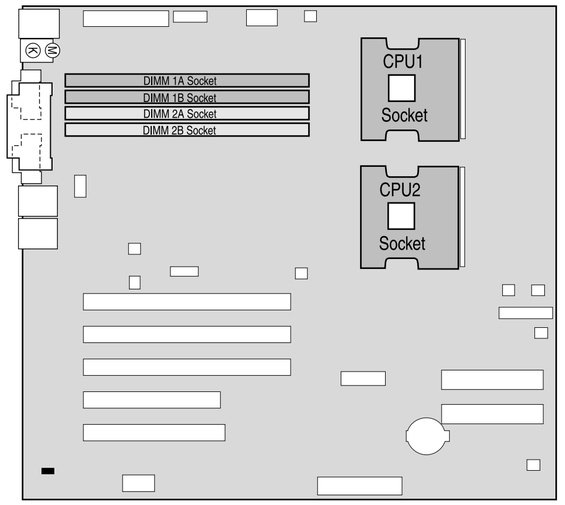
Push shield firmly into chassis opening until it clicks into place.

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

Fastener Identification Guide

(Fasteners are included with chassis and boxed processor)



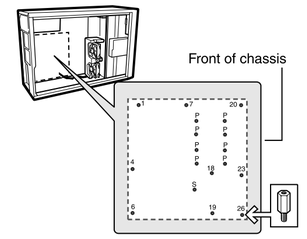


2 Installing the Chassis Standoffs

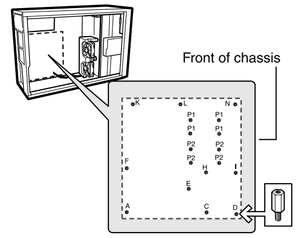
Standoffs are included with your chassis. Standoff numbering varies by chassis. Standoff locations for the Intel Server Chassis SC5200 and SC5250-E are shown below.

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® SC5200 chassis:
Install standoffs in positions 7, 18, 19, S and in the eight positions marked P.



For the Intel® SC5250-E chassis:
Install standoffs in positions L, H, C, E, the four positions marked P1, and the four positions marked P2.

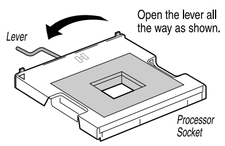


5 Installing the Processor[s]

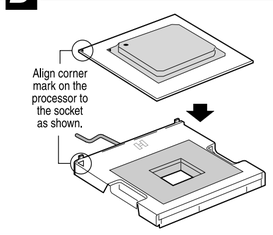
Notes and Cautions:

1. 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.
2. If installing a SECOND processor, verify that the processors are identical, same voltage and speed. *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 the processor is oriented properly.
5. 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.

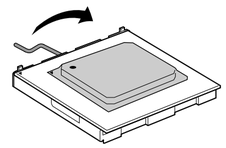
A Open the Socket Lever



B Install the Processor

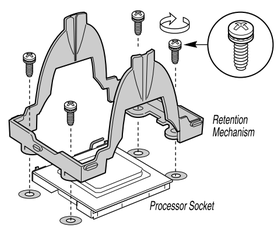


C Close the Socket Lever

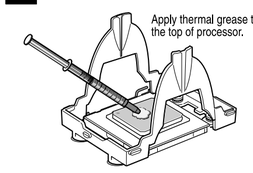


D Install the Retention Mechanism

SC5200: use fasteners provided with boxed processor.
SC5250-E: use slightly shorter fasteners provided with chassis.



E Apply Thermal Grease

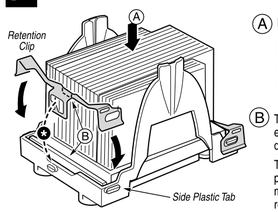


WARNING: Installation and service of this product to be performed only by qualified service personnel to avoid risk of injury from electrical shock or energy hazard.

See the *Intel Server Board SE7501CW2 Product Guide* located on the CD that came with your server board for product safety and EMC regulatory compliance information.

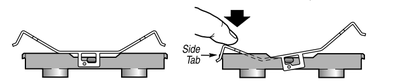
If you are not familiar with ESD (Electro-Static Discharge) procedures to be used during system assembly, complete ESD Procedures are described in your *Intel Server Board SE7501CW2 Product Guide.*

F Installing the Heat Sink and Retention Clips



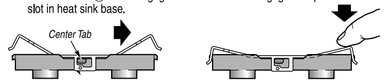
A Place heat sink onto processor.
Heat sink styles may differ. If your heat sink has a flat edge (as shown), the flat edge must face the back of the chassis.

B Tab at inside of retention clip engages slot on heat sink during installation.
The center slot in the clip provides room for side-to-side motion while you engage the retention clip tabs.



1 Position clip as shown. Make sure tab Ⓑ above engages slot in heat sink base.

3 Press downward on retention clip end to engage side plastic tab.

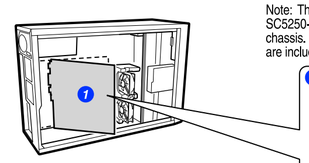


2 Slide clip in direction shown. *Note location of center plastic tab.*

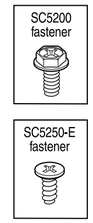
4 Snap other end as shown.

5 Repeat steps 1 - 4 for clip at other side of heat sink.

3 Installing the Server Board



Note: The SC5200 Base and Base Redundant Power Chassis and the SC5250-E Chassis use different fasteners to attach the server board to the chassis. Be sure to use the fastener indicated for your chassis. Fasteners are included with your chassis.



1 Place the board into the chassis, making sure that the back panel I/O shield openings and the chassis standoffs align correctly. When using the SC5200 chassis, insert the I/O connector side (back) of the board first. When using the SC5250-E chassis, insert the front of the board first, then slide the board back so the I/O connectors fit through the I/O shield.

2 Attach the board with the screws at the 10 locations marked in the figure.

4 Installing Memory

DIMM Memory Modules

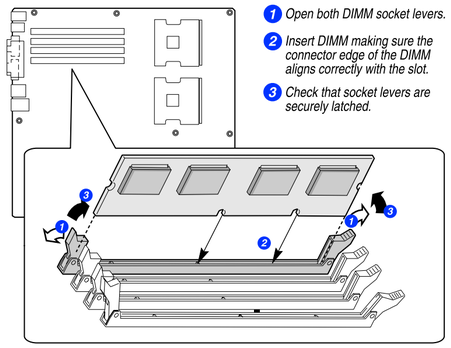
Notes and Cautions:

A single DIMM can be used in the first slot of Bank 1. Bank 1 must be fully populated before populating Bank 2. Memory in Bank 2 must be populated in pairs. See the illustration at the center of this page.

The DIMM size, speed and vendor must be the same within a bank. However, the DIMM size can vary between banks. For example, Bank 1 can use two 128 MB DIMMs and Bank 2 can use two 256 MB DIMMs.

See *"Minimum Hardware Requirements"* in the Start Here box above left for correct DIMM specifications.

Avoid touching gold contacts when handling or installing DIMMs.



1 *Open both DIMM socket levers.*

2 *Insert DIMM making sure the connector edge of the DIMM aligns correctly with the slot.*

3 *Check that socket levers are securely latched.*

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