



Intel® Entry Server Board SE7221BA1-E Quick Start User's Guide



Thank you for buying the Intel® Entry Server Board SE7221BA1-E. The following information will help you integrate your new server board into a server chassis.

For details on this chassis or to select a third party chassis, please see <http://www.intel.com/go/serverbuilder> and <http://support.intel.com/support/motherboards/server>.

When installing the server board into a reference chassis, refer to the reference chassis instructions.

User Guides are also available on the CD that accompanied your Intel® Entry Server Board SE7221BA1-E.

If you are not familiar with ESD (Electrostatic Discharge) procedures used during system integration, please see the Intel® Entry Server Board SE7221BA1-E User's Guide, available on the CD or at <http://support.intel.com/support/motherboards/server/SE7221BA1-E/manual.htm>

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/safecert.htm> 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.

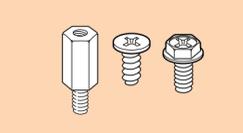
Caution

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:

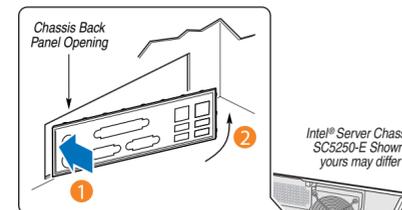
- Processor: One Intel® Pentium® 4 processor. Minimum 520 with HT Technology in the LGA775 package.
- Memory: Minimum of one 128 MB, DDR2 533 MHz or DDR2 400 MHz unbuffered, 240-pin gold SDRAM DIMM.
- Power: Minimum of 300W with 1.2A of standby current.

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

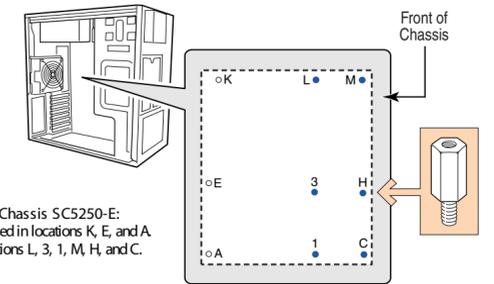
Shield installs from inside of chassis.



- 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

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

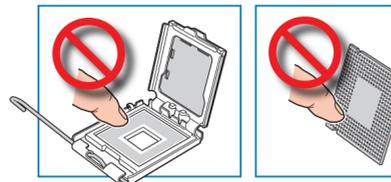


For the Intel® Server Chassis SC5250-E: Standoffs are pre-installed in locations K, E, and A. Install standoffs in positions L, 3, 1, M, H, and C.

4 Install the Processor

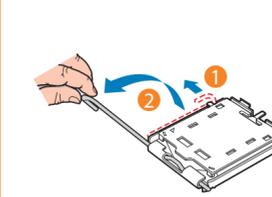
Notes and Cautions:

1. When unpacking a processor, hold by the edges only to avoid touching the pins.
2. This server board has a "zero-insertion force" socket. If processor does not drop easily into socket, make sure lever is in the full-open position.



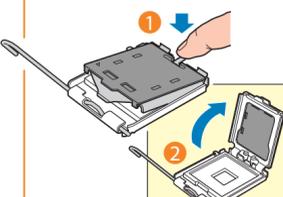
A. Open the Socket Lever

- 1 Push the lever handle down and away from the socket to release it.
- 2 Pull the lever and open all the way.



B. Open the Load Plate

- 1 Push the rear tab with your finger tip to bring the front end of the load plate up slightly.
- 2 Open the load plate as shown.



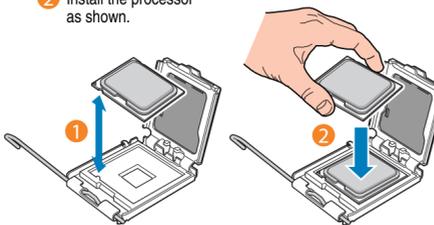
C. Remove the Processor Protective Cover

- 1 Take the processor out of the box and remove the protective shipping cover.



D. Install the Processor

- 1 Orient the processor with the socket so that the processor cutout matches the socket notch.
- 2 Install the processor as shown.



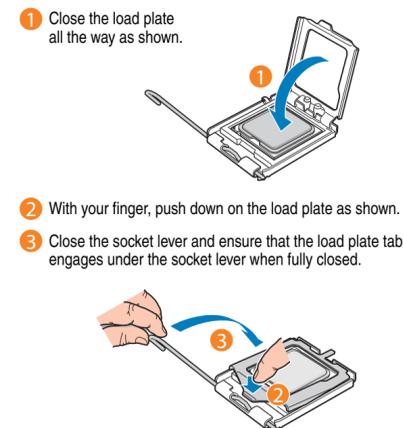
E. Remove Socket Protective Cover

- 1 Grasp the socket protective cover tab and pull away from the load plate as shown.
- 2 Remove the socket protective cover and store for future use.



F. Close Load Plate and Socket Lever

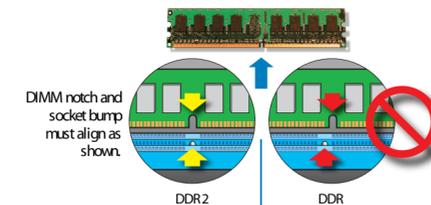
- 1 Close the load plate all the way as shown.
- 2 With your finger, push down on the load plate as shown.
- 3 Close the socket lever and ensure that the load plate tab engages under the socket lever when fully closed.



5 Install DIMM Memory

This server board does not support DDR memory. You must install DDR2 DIMMs to avoid possible damage to server board DIMM sockets.

DDR2 DIMM Memory Identification:



Notes and Cautions: One, two, or four DIMMs can be installed. When a single DIMM is used, it must be installed in the socket labeled Channel A DIMM 0.

Population Order: A0, B0, A1 and B1.

Memory Type: Minimum of one 128 MB, DDR2 400/533 MHz unbuffered 240-pin gold SDRAM DIMM.

For dual-channel interleaved operation a minimum of two DIMMs must be installed and they must be in Channel A DIMM 0 and Channel B DIMM 0.

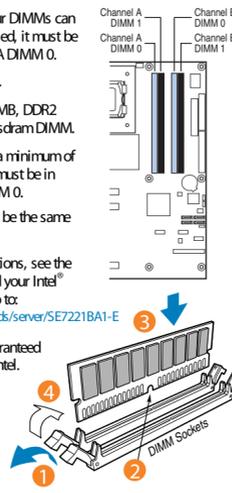
The DIMM size, speed and vendor must be the same within a bank.

Note: For additional memory configurations, see the User Guide on the CD that accompanied your Intel® Entry Server Board SE7221BA1-E, or go to <http://support.intel.com/support/motherboards/server/SE7221BA1-E>

Memory sizing and configuration is guaranteed only for qualified DIMMs approved by Intel.

To Install DIMMs:

- 1 Open both DIMM socket levers.
- 2 Note location of alignment notch.
- 3 Insert DIMM making sure the connector edge of the DIMM aligns correctly with the slot.
- 4 Push down firmly on the DIMM until it snaps into place and both levers close.



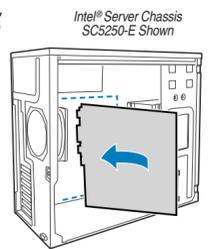
Avoid touching gold contacts when handling or installing DIMMs.

6 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 SC5250-E, insert the I/O connector side (back) of the board first.

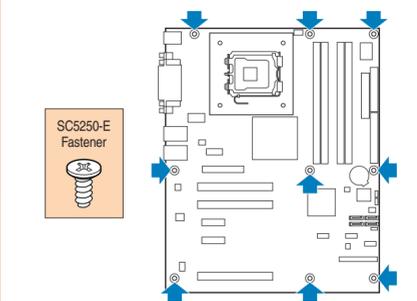


B. Attach the Server Board

Note: The Intel® Server Chassis SC5250-E and a reference chassis may use different fasteners to attach the server board to the chassis. Use the fastener indicated for your chassis.

Intel® Server Chassis SC5250-E

- 1 Use screws to attach the board to the chassis at the 9 locations indicated by the solid blue arrows in the figure (▲).



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