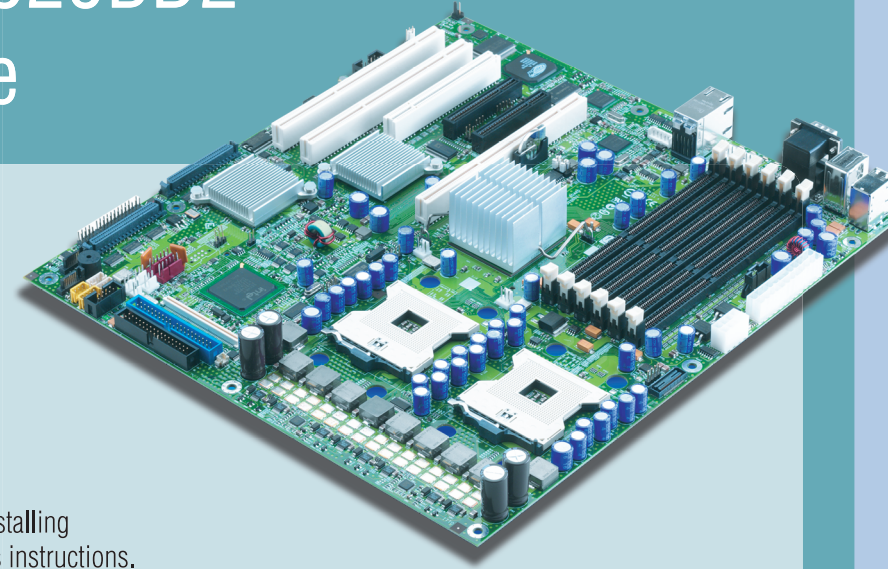


# Intel® Server Board SE7520BD2 Quick Start User's Guide



Thank you for buying an Intel® Server Board. The following information will help you integrate your Intel® Server Board SE7520BD2 into a server chassis.

The Intel® Server Chassis SC5300, and the Intel® Entry Server Chassis SC5275-E and SC5295-E are designed for use with the Intel® Server Board SE7520BD2. Server Chassis support depends on the version of the board you purchased. See the *Intel® Server Board SE7520BD2 User Guide* to determine chassis compatibility. When installing the server board into a reference chassis, refer to the reference chassis instructions.

If you are not familiar with ESD (Electrostatic Discharge) procedures used during system integration, see the *Intel® Server Board SE7520BD2 User Guide*.

The User Guide and other supporting documents are located on the web at <http://support.intel.com/support/motherboards/server/SE7520BD2>. You can also find the User Guide and other documentation on the CD that came with your Intel® Server Board SE7520BD2.

## 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/sb/cs-010770.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.

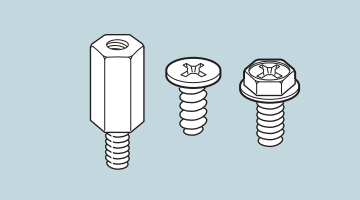
## Caution

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



## Minimum Hardware Requirements

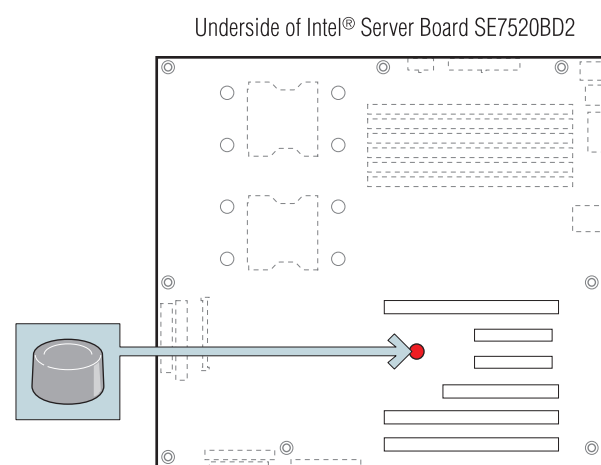
To avoid integration difficulties and possible board damage, your system must meet the following minimum requirements:

- Processor: Minimum of one Intel® Xeon™ processor with 800-MHz system bus.
- Memory:
  - DDR1 version, product codes SE7520BD2, SE7520BD2SCSI, SE7520BD2V:
  - Minimum of one 256MB, DDR266/333 compliant, registered SDRAM 184-pin DIMM.
  - DDR2 version, product codes SE7520BD2SCSID2, SE7520BD2SATAD2, SE7520BD2VD2:
  - Minimum of one 256MB, DDR2-400 compliant, registered SDRAM 240-pin DIMM.
- Power: Minimum of 600W with 2A of standby current, which meets the SSI EPS 12V specification.

## 4 Install the Server Board Bumper

If installing this server board in an Intel® Server Chassis, use the bumper provided with the chassis. Only use the bumper that ships with the server board when installing the board into a non-Intel chassis.

Remove the paper coating from the bumper. Adhere the bumper to the underside of the server board, inside the silk-screened circle. The installation location is under the PCI slot area, as shown in the diagram below.



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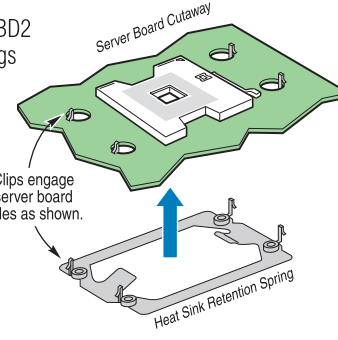


## 5 Install the Server Board

### A. Heat Sink Retention Spring

The Intel® Server Board SE7520BD2 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.

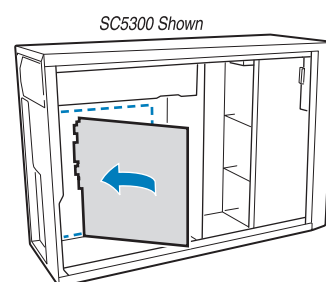


### B. Insert the Server Board

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.

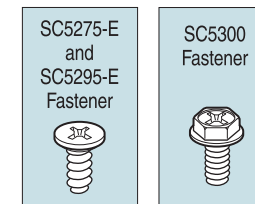
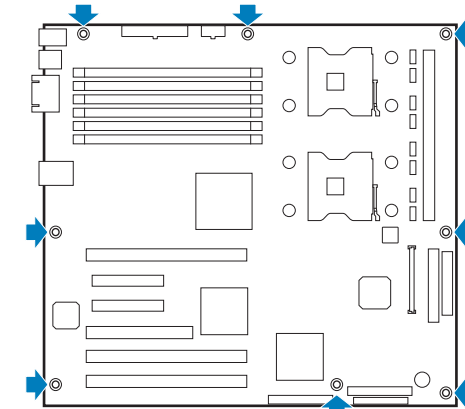
When using the Intel® Entry Server Chassis SC5275-E or SC5295-E, insert the front of the board first, then slide the board back so the I/O connectors fit through the I/O shield.



### C. Attach the Server Board

Note: The Intel® Server Chassis SC5300, and the Intel® Entry Server Chassis SC5275-E and SC5295-E use different fasteners to attach the server board to the chassis. Use the fastener indicated for your chassis.

Use screws to attach the board to the server at the 8 locations indicated by the blue arrows.

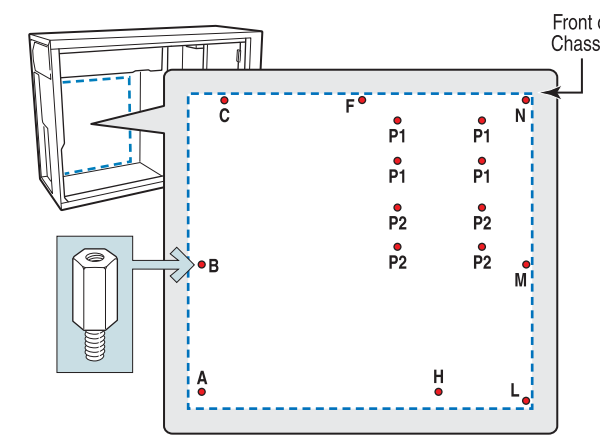


## 3 Installing the Chassis Standoffs

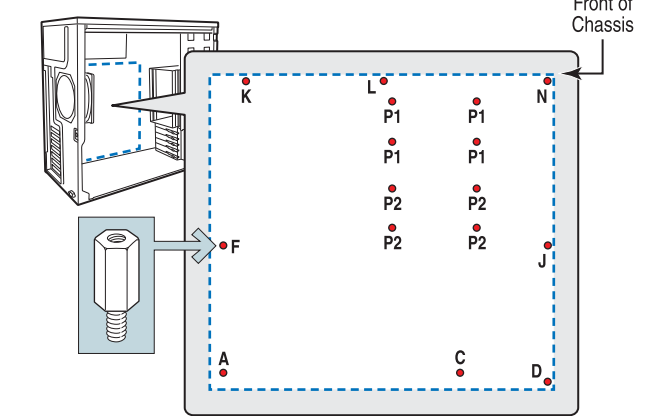
Standoffs are included with your chassis. Standoff numbering varies by chassis. Standoff locations for the Intel® Server Chassis SC5300 and the Intel® Entry Server Chassis SC5275-E and SC5295-E are shown here.

### For the Intel® Server Chassis SC5300:

If standoffs are not already in place, install them in positions A, B, C, F, H, L, M, N, and in the four positions marked P1 and the four positions marked P2.

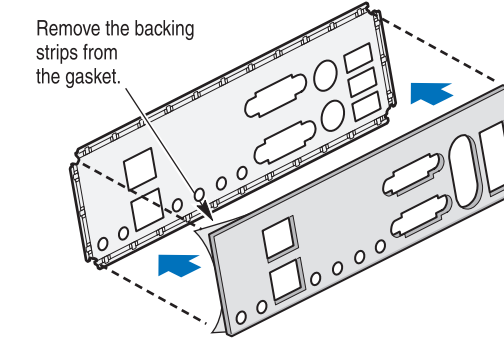


**For the Intel® Entry Server Chassis SC5275-E and SC5295-E:**  
If standoffs are not already in place, install them in positions A, C, D, F, J, K, L, N, and in the four positions marked P1 and the four positions marked P2.



## 2 Installing the I/O Shield and Gasket

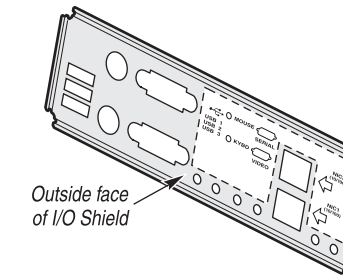
### A. Attach the Gasket to the I/O Shield



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

Note: USB 3 (top) is available **only** on product codes SE7520BD2 and SE7520BD2SCSI.

### B. Attach the Label to the I/O Shield

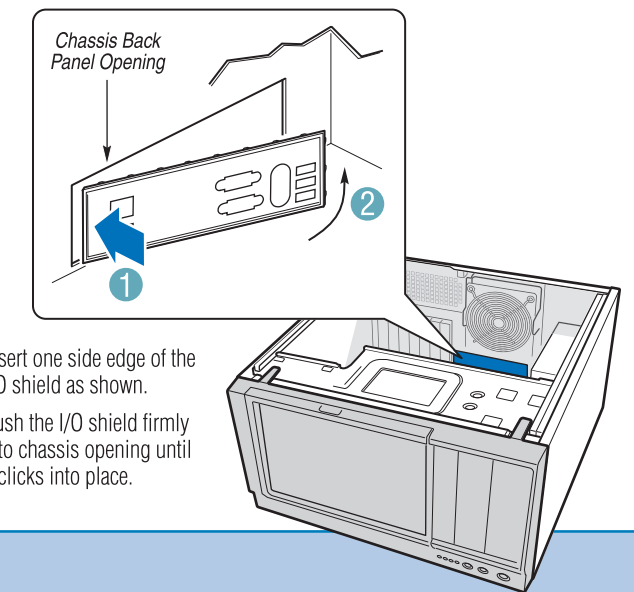


Remove the backing from the I/O shield label that was included with your server board.

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

### C. Install the I/O Shield

The I/O shield installs from the **inside** of the chassis. The label should be visible from the outside of the chassis.



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

## 6 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 Processor Socket 1.
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 that no bent pins are present on the processor.

### D. Install the Heat Sink

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

- A. Lightly tighten each fastener, going around the heat sink in a clockwise direction.
- B. Securely re-tighten each fastener again in the same order as performed in step A.

Note: This heat sink is for the Intel® Server Chassis SC5300. A fan-cooled (active) heat sink is required for the Intel® Entry Server Chassis SC5275-E and SC5295-E.

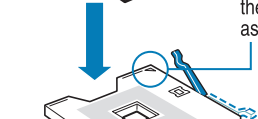
### A. Open the Socket Lever

Open the lever all the way as shown.

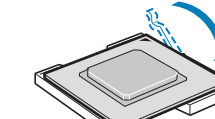


### B. Install the Processor

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



### C. Close the Socket Lever



See processor documentation for additional information.

