

# Intel® Server Board S2400SC

## Quick Start User's Guide

Thank you for buying the Intel® Server Board S2400SC. The following information will help you integrate your new server board into a server chassis. The Intel® Server Board S2400SC is designed for use with the Intel® Server Chassis P4000 series.

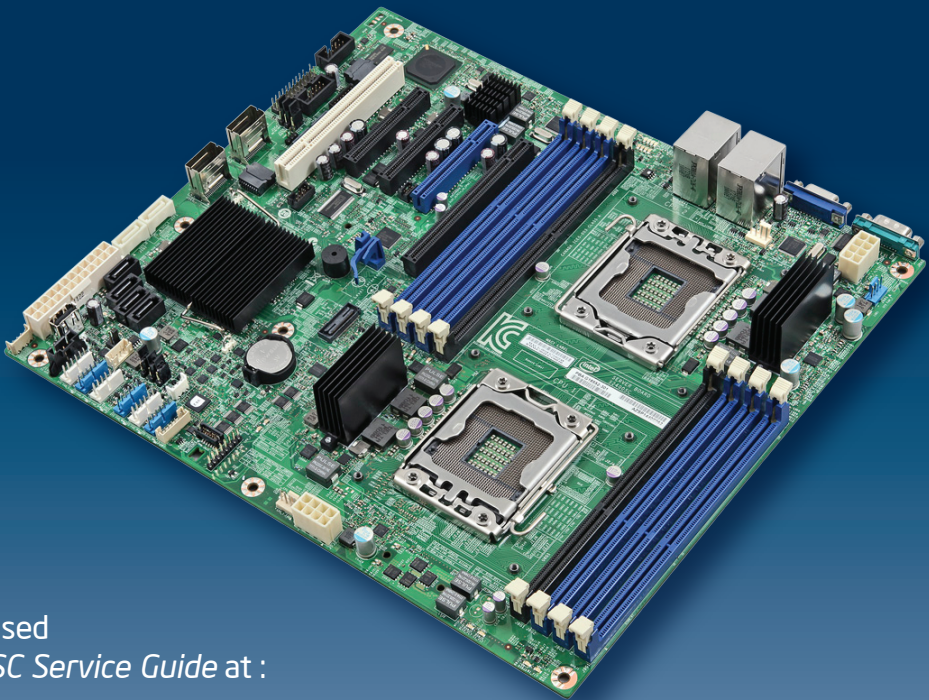
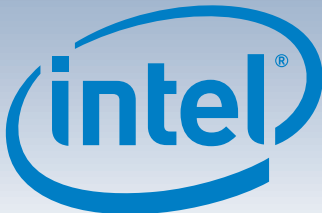
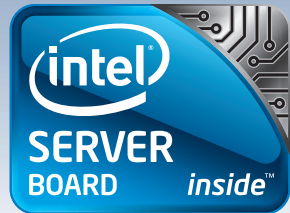
For details on these chassis or to select a third-party chassis, please visit:  
<http://www.intel.com/go/serverbuilder> and  
<http://www.intel.com/support/motherboards/server>.

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, please see the *Intel® Server Board S2400SC Service Guide* at:  
<http://www.intel.com/support/motherboards/server>.

Please boot to the Intel® Server Deployment Toolkit CD first for BIOS and firmware configuration and updates.

Read all cautions and warnings first before starting your server system integration.



### 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 E5-2400 series with compatible heat sink(s). Maximum 95-W processor.
- **Memory Type:** Minimum of one 1 GB, 240-pin, RDIMM or UDIMM, DDR3-1066, DDR3-1333, or DDR3-1600.
- **AC Power:** SSI EPS 12V compliant power supply. Recommend minimum of 460, or calculate your system power demand with the power budget tool.

For a complete list of compatible processors and memory, see [http://www.intel.com/p/en\\_US/support/](http://www.intel.com/p/en_US/support/).

### 1 Preparing the Chassis

Observe normal ESD (Electrostatic Discharge) procedures.

Place your Intel® Server Chassis on a flat anti-static surface to perform the following integration procedures. Observe ESD procedures before reaching inside to make server board connections or install components.

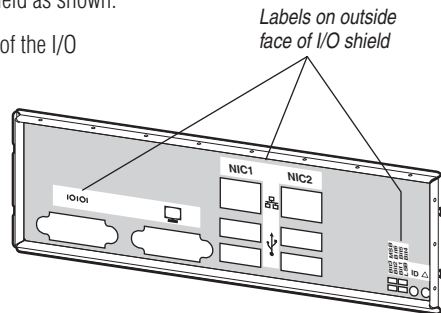
### 2 Installing the I/O Shield and Attach I/O Labels

**Note:** The I/O shield and label installation procedures shown below apply to the Intel® Server Chassis P4000 series.

Attach the Labels to the I/O Shield (optional)

**Note:** Make sure you install the labels on the correct side of the I/O shield. Note the orientation of the cutouts in the drawing before attaching your labels.

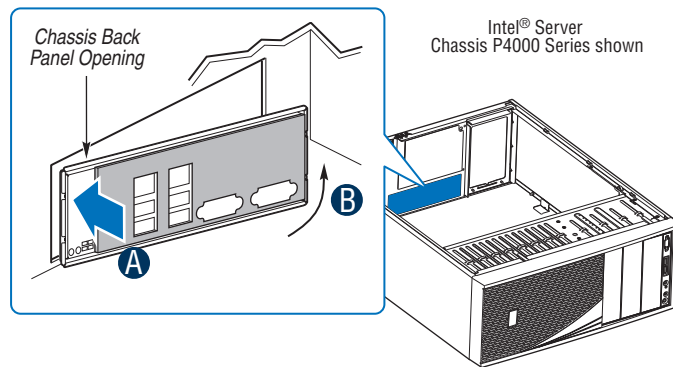
- Remove the backing from one of the four I/O shield labels included with your server board.
- Press the label onto the I/O shield as shown.
- Repeat steps to install the rest of the I/O shield labels.



#### Install the I/O shield

I/O Shield should be installed from **inside** of the chassis. The labels should be visible from the **outside** of the chassis.

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



### 3 Install the Chassis Bumpers

**NOTE:** If you are using an Intel Server Chassis you must install the chassis bumpers included with the chassis. Refer to your *Intel® Server Board and Intel® Server Chassis Quick-Start User's Guide* for proper bumper installation guidelines. If you are using a non-Intel server chassis that includes bumpers, refer to the non-Intel server chassis documentation for the correct bumper installation procedure. If the non-Intel server chassis does not include bumpers, then you should consult with the chassis vendor to determine whether bumpers are required or not.

#### Prepare Server Board

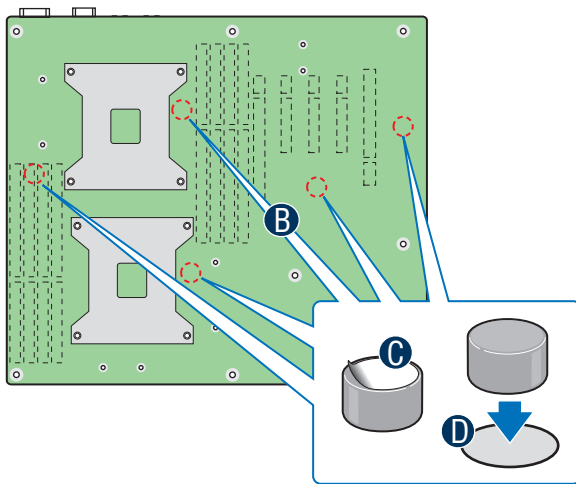
- Rotate board to show underside and hold upright as shown.

**CAUTION:** To avoid damage to the board, do not lay flat with the component side down.

- Locate the five circles as shown.

#### Attach the Bumpers

- Remove the backing from each bumper.
- Press a bumper onto each of the five circles.



### 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://www.intel.com/p/en\\_US/support/](http://www.intel.com/p/en_US/support/) for complete safety information.

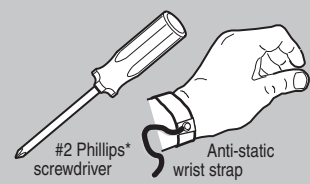
### Warning

Installation and service of this product should only be performed 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



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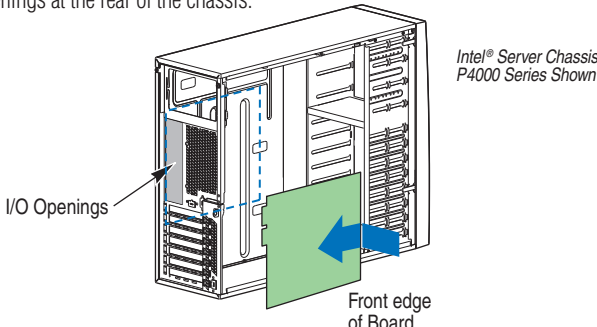
### 4 Install the Server Board

**IMPORTANT NOTE:** If you are using a non-Intel server chassis, see your chassis documentation for preparatory steps prior to server board installation.

#### A. Insert the Server Board

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

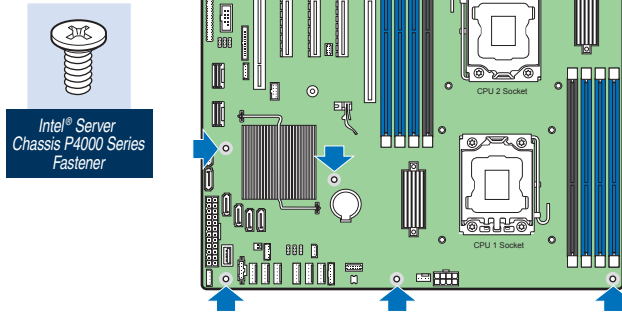
- When using the Intel® Server Chassis P4000 series, insert the front of the board first, then slide the board back so the I/O connectors fit through the I/O openings at the rear of the chassis.



#### B. Attach the Server Board

The directions below are for the Intel® Server Chassis P4000 series. For a non-Intel server chassis, use the fasteners that came with your chassis.

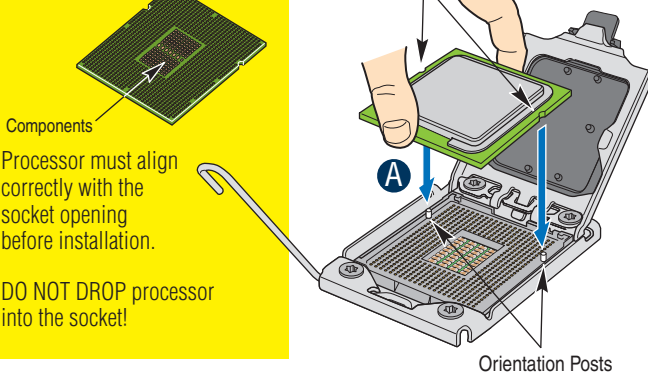
Use screws to attach the board to the chassis at the 9 locations indicated by the solid blue arrows in the figure [4].



### 5b Install the Processor(s) ... continued

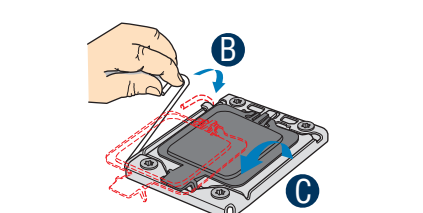
#### D. Install the Processor

**CAUTION:** The underside of the processor has components that may damage the socket wires if installed improperly.



#### E. Close Load Plate and Socket Lever

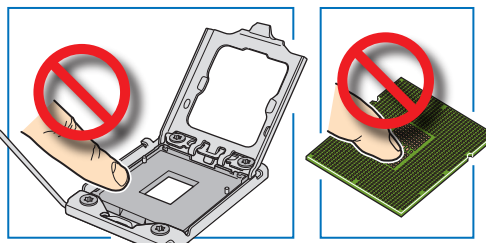
- Close the load plate all the way as shown.
- Close the socket lever.
- Remove the protective cover after it been automatically disengaged from the load plate.



### 5a Install the Processor(s)

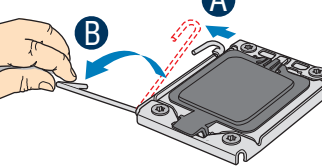
#### Cautions:

1. When opening a socket, DO NOT TOUCH the gold socket wires.
2. When unpacking a processor, hold by the edges only to avoid touching the gold contact wires.



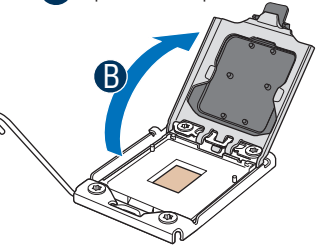
#### A. Open the Socket Lever

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



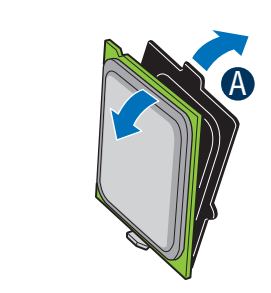
#### B. Open the Load Plate

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



#### C. Remove the Processor Protective Cover

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

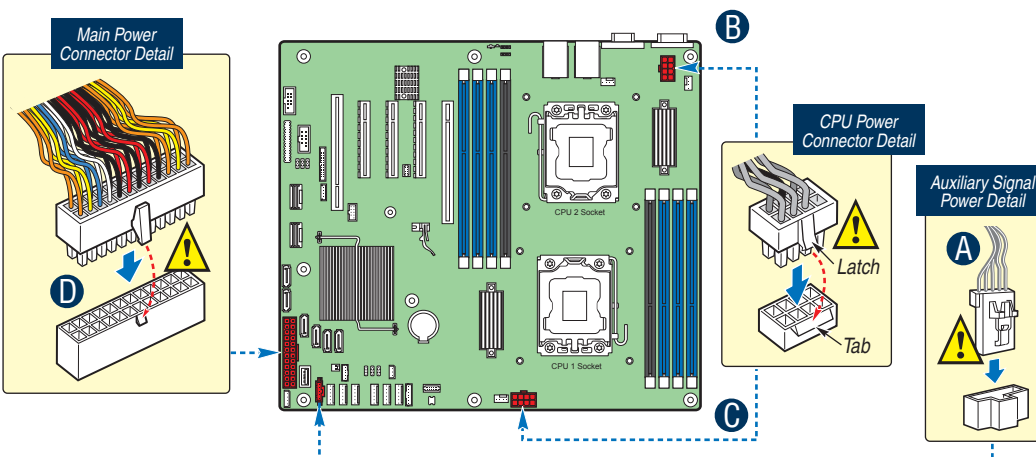


### 6 Make Server Board Power Connections

- Attach auxiliary power signal connector to the server board.
- Attach the CPU 1 power connector to the server board.
- Attach the CPU 2 power connector to the server board.
- Attach the main power connector to the server board.

**CAUTION:** Note the location of the latch on each power cable connector and align it with the matching tab on each server board socket.

**IMPORTANT NOTE:** If you are using a non-Intel server chassis with an ATX power supply, see the documentation that came with your chassis for installation information.



### 7 Install DIMM Memory Modules

#### DDR3 DIMM Memory Identification:

- CAUTION:** Observe normal ESD (Electrostatic Discharge) procedures to avoid possible damage to system components.
- This server board supports up to 8 DDR3 800/1066/1333/1600 ECC UDIMM/RDIMM.

