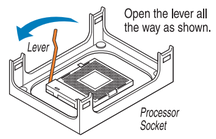
Side 2

6 Install the Processor

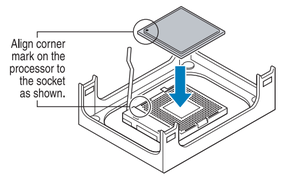
Notes and Cautions

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

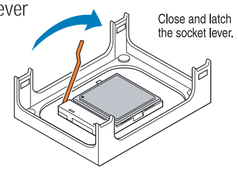
A. Open the Socket Lever



B. Install the Processor



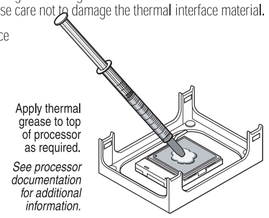
C. Close the Socket Lever



D. Apply Thermal Grease [if necessary]

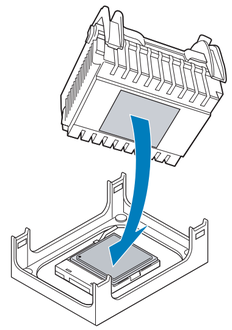
Note: The bottom of the heat sink may have thermal interface material (TIM) already applied. If so, removing the backing sheet from the TIM and disregard the step below. Use care not to damage the thermal interface material.

If there is no thermal interface material, use the syringe included with your boxed processor to apply the thermal interface material to the top of the processor as shown.



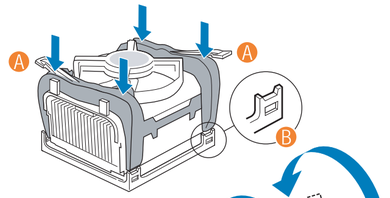
E. Install the Heat Sink

Place the heat sink on top of the processor.

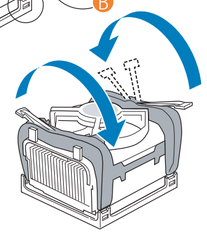


F. Secure the Heat Sink

1. With the clip levers on the heat sink assembly in the fully open position (A below), push down on the 4 corners of the clip frame to secure the retention mechanism hooks (see detail B below).



2. Firmly push the levers closed in the directions shown. It may be necessary to exert pressure to close the levers.



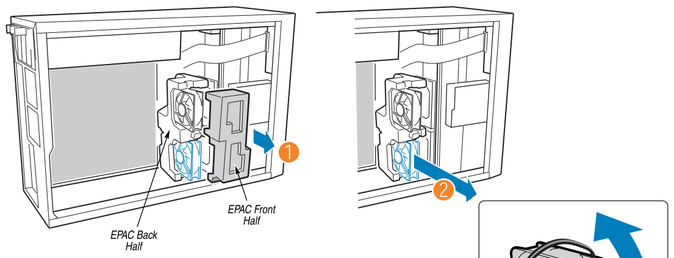
Accessories and Order Codes	
Intel® RAID Controller SRCU42L	SRCU42L
Intel® RAID Controller SRCZCR	SRCZCR
Intel® Server Chassis SC5200 BRP	KHD3RP450
Intel® Entry Server Chassis SC5250-E (beige)	KPTBASE450
Intel® Entry Server Chassis SC5250-E (black)	KPTBASE450BLK
Hot-swap SCSI drive bay upgrade kit	AXX2HSDRVUG
SATA drive bay upgrade kit	ASATAHSDB

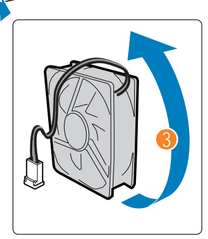
A complete list of accessories and spares can be found at: www.intel.com/go/serverbuilder

7 Change Chassis EPAC Fan Configuration [SC5200 only]

For the Intel® Server Chassis SC5200-BRP:

The "foam EPAC" shown below contains two chassis fans. The bottom fan must be reconfigured to accomodate the Intel® Entry Server Board SE7210TP1-E fan connector locations.





1. Remove front half of foam EPAC by pulling outward as shown.
2. Carefully slide the bottom fan from the back half of EPAC.
3. Rotate the fan until the power cable is located at upper corner as shown.
4. Re-insert fan into EPAC slot and replace front half of foam EPAC. *Fan power cable should exit toward server board. Air flow must be from front to back.*

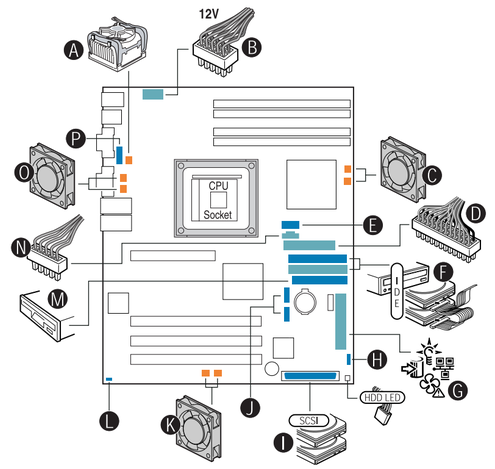
8 Making Connections to the Server Board ... *Quick Reference*

Intel® Entry Server Chassis SC5250-E Note: When installing your server board into the Intel® Entry Server Chassis SC5250-E, install the hard drive bay before making your connections. See the Intel® Entry Server Chassis SC5250-E Quick Start User's Guide for instructions on installing the drive bay.

Required Connections for Selected Chassis	SC5200-BRP	SC5250-E
N. Auxiliary Power Connector	■	⊘
D. Main Power Connector	■	■
B. +12V CPU Power Connector	■	■
F. Primary IDE Connector (bottom, black connector)	■	■
G. Front Panel Connector	■	■

CPU/System Fan Connections for Selected Chassis	SC5200-BRP	SC5250-E
A. CPU Fan Connector	CPU Fan	CPU Fan
C. System Fan 1 Header	EPAC Fan (top)	FRONT Fan
C. System Fan 2 Header	EPAC Fan (bottom)	⊘
O. System Fan 3 Header	REAR Fan	REAR Fan
O. System Fan 4 Header	REAR Fan	⊘
K. System Fan 5 Header	⊘	⊘
K. System Fan 6 Header	⊘	⊘

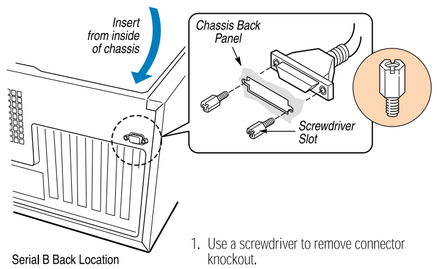
Optional Connections for Selected Chassis	SC5200-BRP	SC5250-E
H. Hot-swap Backplane Headers	■	■
F. Secondary IDE Connector (top, white connector)	■	■
M. Floppy Connector	■	■
E. Front USB Header	■	■
P. Serial B Header	■	■
L. Chassis Intrusion Header	■	■
I. SCSI Connector	■	■
J. SATA Connectors	■	■



Note: Not all optional connections are shown in this diagram. Refer to the Reference section of this Quick Start User's Guide, your Intel® Entry Server Board SE7210TP1-E User Guide, and your server chassis documentation for additional connection information.

9 Install the Serial B Cable (optional)

For the Intel® Server Chassis SC5200 BRP, and Intel® Entry Server Chassis SC5250-E, you can connect the Serial B cable to the back of the chassis.



1. Use a screwdriver to remove connector knockout.
2. Install the Serial B cable by inserting it into the chassis back panel cutout and attaching the two hex screws as shown.
3. Attach the other end to the Serial B connector on the server board. *See Reference section below for the connector location.*

10 Finishing Up

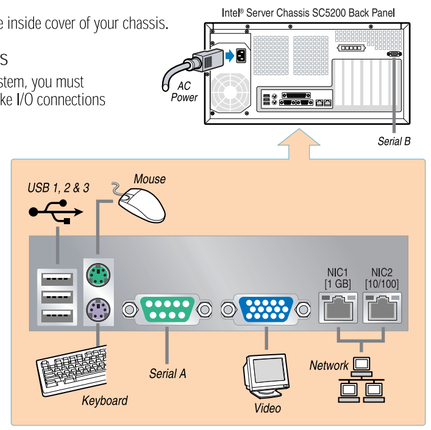
A. Configuration Label

Attach the configuration label to the inside cover of your chassis.

B. Back Panel Connections

Before installing your operating system, you must finish your chassis installation, make I/O connections and plug in AC power.

1. Replace the chassis cover.
2. See your chassis documentation to complete rack or pedestal installation.
3. Connect your keyboard, mouse, video, and other I/O cables as shown.
4. Connect the AC power cable last.



C. Drivers and Software

Use the CD[s] that came with your Intel® Entry Server Board SE7210TP1-E to install drivers and software.

Look on the main BIOS Setup screen to determine the installed BIOS and firmware versions. Compare these to the available versions at http://support.intel.com/support/motherboards/server/se7210tp1-e. If new versions are available, update the BIOS and firmware on your server. See the User Guide on the CD for update instructions.

Software

Getting Started with Intel® Server Management and Intel® SMaRT Tool (optional)

Intel® Server Management software and the Service Partition provide real-time monitoring and alerting for your Intel® Entry Server Board SE7210TP1-E, as well as emergency remote management and remote server update. Intel® Server Management is implemented by installing the software within the client-server architecture.

The Intel® Server Maintenance and Reference Training (SMaRT) Tool is an interactive software utility that provides support information to assist with the maintenance and repair of Intel®-based server systems and accessories. The Intel® SMaRT Tool features visual, step-by-step instructions for replacing parts, a complete Field Replacement Unit (FRU) database containing part numbers and images, product spares lists, and worldwide Intel Support information.

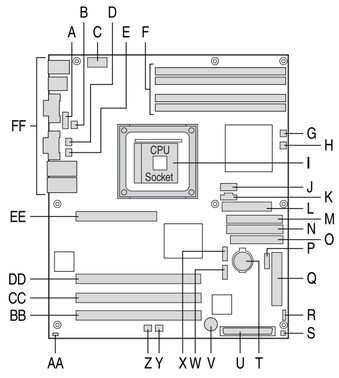
Intel® Server Management provides an interface to the Intel® SMaRT Tool so error detection and alerting are combined with interactive maintenance and repair assistance. To activate Intel® Server Management's interface with the Intel® SMaRT Tool, both software programs need to be installed.

For more information on Intel® Server Management and the Intel® SMaRT Tool, refer to the CDs that was included with your Intel® Entry Server Board SE7210TP1-E.

Reference

Server Board Component Layout

A. Serial B Connector
B. CPU Fan Connector
C. Processor Power Connector
D. System Fan 3 Header
E. System Fan 4 Header
F. DIMM Sockets
G. System Fan 2 Header
H. System Fan 1 Header
I. CPU Socket
J. Front Panel USB Connector
K. Auxiliary Power Connector
L. Main Power Connector
M. Secondary IDE Connector
N. Primary IDE Connector
O. Floppy Disk Drive Connector
P. LCD Connector
Q. Front Panel Connector
R. Hot Swap Backplane Connector
S. SCSI LED Header
T. Battery
U. LVD SCSI Connector (optional)
V. Speaker
W. SATA A1 Connector
X. SATA A2 Connector
Y. System Fan 6 Header
Z. System Fan 5 Header
AA. Chassis Intrusion Connector
BB. 64/66 PCI-X RAIDIOS Slot
CC. 64/66 PCI-X Slot
DD. 64/66 PCI-X Slot
EE. 32/33 PCI-X Slot
FF. System I/O Connectors



Note: PCI-X Slot 1 supports RAIDIOS Zero Channel RAID (ZCR) cards, such as the Intel® RAID Controller SRCZCR.

Common Problems and Solutions

For a list of hardware components that have been tested with this system, see: http://support.intel.com/support/motherboards/server/se7210tp1-e

The system does not boot or show video at power-on.

- Check that +12V CPU power connector is plugged in. Without this cable the processors will not have any power.
- Remove and replace DIMMs one bank at a time to isolate which one is causing problems.
- Remember, all DIMMs must be:
  - Registered DDR266-compliant 2.5V SDRAM (DDR200 DIMMS can be used if a 400 MHz Intel Xeon processor is installed).
  - The same speed.
  - From the same manufacturer.
  - Installed beginning with DIMM 1A.
  - Paired with identical DIMMs in a bank.
- Your power supply must provide a minimum of 450W with 2A standby current, which complies with the SSI EPS 12V specification.

The system sometimes works, but is exhibiting erratic behavior.

- This is typically the result of using an under-rated power supply. Make sure you are using at least a 450 W power supply which meets the SSI EPS 12V specification. For more information, see: http://www.ssiforum.org