8 Identify and Install Memory DIMMs

⚠ You must install the correct DIMMs to avoid possible damage to server board DIMM sockets. This server board requires DDR2 400-compliant DIMMs.

The illustration below shows the correct alignment between the DIMM notch and the server board DIMM socket. DDR and DDR2 DIMM notches align differently. Before installing your DIMMs, make sure the notch in the DIMM aligns correctly with your server board.
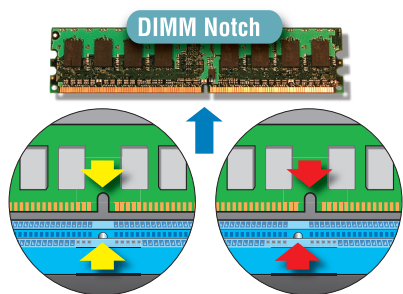
DIMM Notch

Memory Type: Minimum of one 256MB, DDR2 400-compliant registered SDRAM 240-pin DIMM.

Notes:
- A single DIMM can be used in Socket DIMM1B.
- Bank 1 (DIMM1A and DIMM1B) must be fully populated before populating Bank 2 (DIMM2A and DIMM2B).
- Memory in Bank 2 must be populated in pairs.
- 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 256 MB DIMMs and Bank 2 can use two 512 MB DIMMs.

Bank 1
DIMM 1B Socket
DIMM 1A Socket

Bank 2
DIMM 2B Socket
DIMM 2A Socket
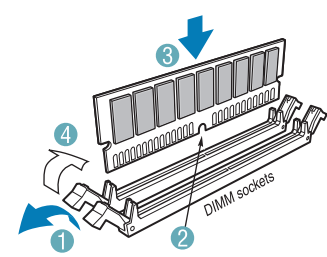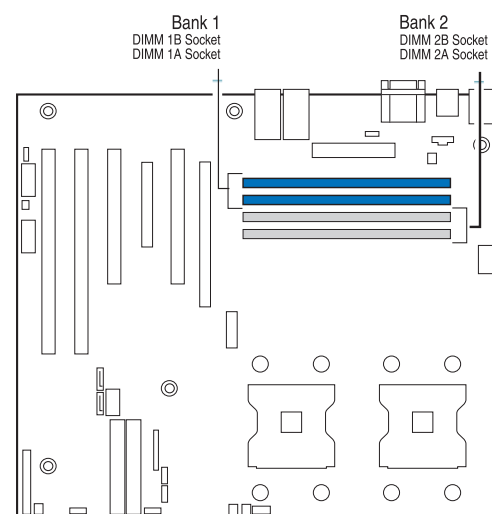
DIMM sockets

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. Check that socket levers are securely latched.

⚠ Avoid touching gold contacts when handling or installing DIMMs.

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

9 Make Connections to the Server Board

Intel® Entry Server Chassis SC5275-E Note: Install the hard drive bay before making your connections. See the Quick Start User's Guide that came with your server chassis for instructions.

Intel® Entry Server Chassis SC5295-E Note: Before making server board connections, return to the Quick Start User's Guide that came with your server chassis. When directed by the server chassis Quick Start User's Guide, return to this document to make your server board connections.

Required Connections for Selected Chassis

|		SC5275E	SC5295DP, SC5295BRP SC5295WS
A.	Main Power Connector	■	■
C.	Auxiliary Signal Connector	■	■
E.	+12V CPU Power Connector	■	■
K.	Front Panel Connector	■	■
O.	Chassis Intrusion Header	■	■

■ = Make this connection   ⊘ = Do not connect

CPU/System Fan Connections for Selected Chassis

		SC5275E	SC5295DP, SC5295BRP SC5295WS
B.	System Fan 1 Header	Connect only for memory cooler (see note below)	Rear Fan
D.	System Fan 2 Header	Rear Fan	Connect only for SC5295WS memory cooler (see note below)
G.	CPU1 Fan Header [right]	CPU 1 Fan	CPU 1 Fan
G.	CPU2 Fan Header [left] ... if CPU2 is installed	CPU 2 Fan	CPU 2 Fan
F.	System Fan 5 Header	⊘	⊘
H.	System Fan 4 Header [top]	⊘	Hot-swap Backplane Fan (if installed)
H.	System Fan 3 Header[bottom]	Drive Bay Fan or Hot-swap Backplane Fan	⊘

■ = Make this connection   ⊘ = Do not connect
Note: If 1GB or higher DIMMs are installed, a memory cooler kit is required.

Optional Connections for Selected Chassis

		SC5275E	SC5295DP, SC5295BRP SC5295WS
L.	Hot-swap Backplane Headers	■	
I.	IDE Connector	■	
J.	Floppy Connector	■	
M.	SATA A1 [top]	■	
M.	SATA A2 [bottom]	■	
N.	USB 3-4 Header		■
P.	Serial B Header		■

■ = Make this connection   ⊘ = Do not connect
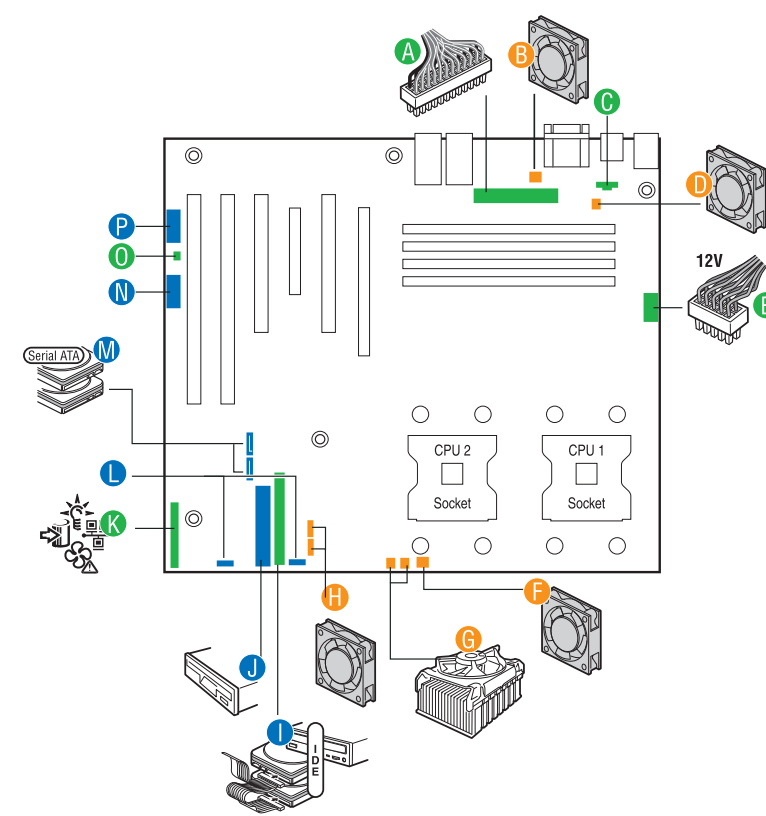
10 Install the Serial B Cable [optional]

For either the Intel® Entry Server Chassis SC5275-E or the Intel® Entry Server Chassis SC5295, you can connect the Serial B cable to the rear of the chassis. See the Reference section below for the location of the serial B header on the server board.

Insert from inside of chassis

Chassis Back Panel

Serial B Back Panel Location
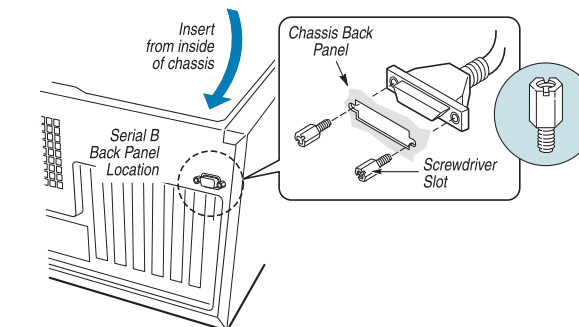
Screwdriver Slot

1. Use a screwdriver to remove the 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.

11 Finish Up the Hardware

A. Complete Chassis Installation Steps
Return to the Quick Start User's Guide that came with your chassis to complete any remaining chassis configuration steps.
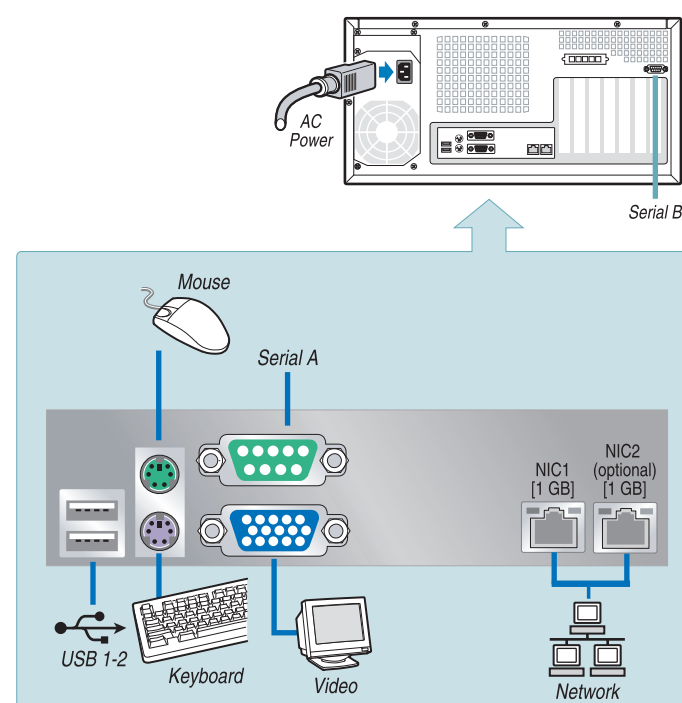
B. Configuration Label
Attach the configuration label to the inside cover of your chassis.

C. 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. Connect your keyboard, mouse, video, and other I/O cables as shown.
3. Connect the AC power cable last.

AC Power

Serial B

Mouse

Serial A

NIC1 [1 GB]

NIC2 (optional) [1 GB]

USB 1-2

Keyboard

Video

Network

12 Drivers, Firmware, and Software

A. Confirm BIOS Version
Look on the Server/System Management screen in the BIOS Setup Utility to determine the installed BIOS version. Compare these to the versions at
http://support.intel.com/support/motherboards/server/SE7525RP2/
http://support.intel.com/support/motherboards/server/SE7320EP2/
If new versions are available, update the BIOS on your server. See the User Guide on the Intel® Server Deployment Toolkit CD for update instructions.

B. Configure your RAID Controller (optional)
Use the instructions provided with the RAID controller.

C. Install your Operating System
Use the instructions provided with the RAID controller and with the operating system.

D. Install Operating System Drivers
With the operating system running, insert the Intel® Server Deployment Toolkit CD. If using a Windows operating system, the Express Installer will autorun and allow you to select the appropriate drivers to install. On other operating systems, browse the CD folders to locate and install the driver files.

E. Install Intel® Server Management 8 (optional)
With the operating system running, insert the Intel Server Management 8 CD that came with your server board. On a Windows operating system, the Setup program will auto-run. Follow the on-screen instructions. For installation details, see Getting Started with Intel® Server Manager 8, located on the ISM CD.

F. Install Intel® SMaRT Tool (optional)
With the operating system running, insert the Intel® Server Deployment Toolkit CD. The Express Installer will autorun. Click Intel® SMaRT Tool at the left side of the screen. Follow the on-screen instructions. For information about Intel® SMaRT Tool, see http://developer.intel.com/design/servers/smarttool/index.htm.

Reference

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/se7525rp2/
http://support.intel.com/support/motherboards/server/se7320ep2/

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.
- If configuring with only one processor verify that the processor is in the Primary Processor socket (CPU 1).
- Remove and replace DIMMs one bank at a time to isolate which one is causing problems.
- Remember, all DIMMs must be:
  - Registered DDR2-400 compliant.
  - The same speed.
  - From the same manufacturer.
  - Installed beginning with DIMM 1B.
  - Installed with no empty sockets in between filled sockets.
- Your power supply must provide a minimum of 600W 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 an adequate power supply. A minimum 450W power supply is required.

Accessories and Order Codes

Intel® Entry Server Chassis SC5275-E	SC5275E
Intel® Entry Server Chassis SC5295-E DP (450W power supply)	SC5295DP
Intel® Entry Server Chassis SC5295-E BRP (500W redundant power supply)	SC5295BRP
Intel® Entry Server Chassis SC5295-E WS (600W power supply)	SC5295WS
Intel® Entry Server Chassis SC5295-E WS Hot-swap Conversion Kit	APP3HSDBKIT
Intel® Server Chassis SC5300 Hot-swap SCSI Drive Bay Upgrade Kit (six-drive bay)	AXX6SCSIDB
Intel® Server Chassis SC5300 Hot-swap SATA Drive Bay Upgrade Kit	AXX6SATADB
Memory Cooler Kit	FSWMEMFAN
Intel® RAID Controller SRCU42L	SRCU42L
Intel® RAID Controller SRCU16	SRCU16

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

Server Board Component Layout
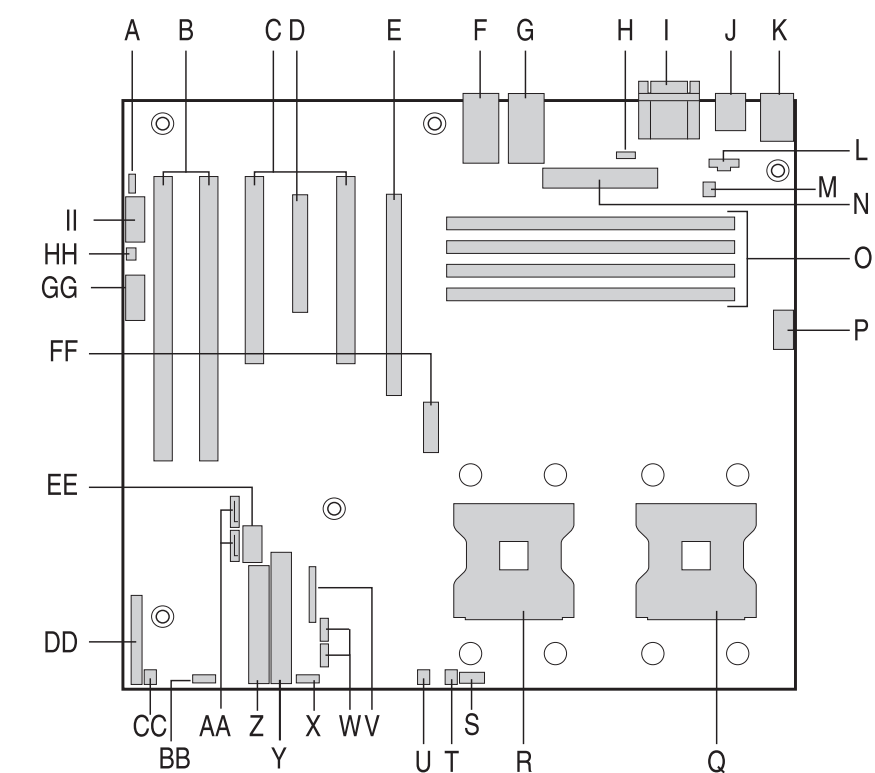
A: SCSI LED Connector
B: PCI-X Slot 1, 64/66; PCI-X Slot 2, 64/66
C: PCI Slots 3 and 5, 32/33
D: x4 PCI-Express Slot 4
E: x16 PCI-Express Slot 6. Only on Server Board SE7525RP2
F: NIC2 10/100/1000Mb (optional)
G: NIC1 10/100/1000Mb
H: System Fan 1 Header
I: Serial A (top) Video (bottom)
J: Keyboard (top) Mouse (bottom)
K: USB 2.0 Ports (two)
L: Auxiliary Power Signal
M: System Fan 2 Header
N: Main Power Connector
O: DIMM Sockets (from top to bottom: 1B, 1A, 2B, 2A)
P: +12V CPU Power Connector
Q: Processor 1 Socket
R: Processor 2 Socket
S: System Fan 5 Header
T: Processor 1 Fan Header
U: Processor 2 Fan Header
V: Jumper Block
W: System Fan 4 Header (top) System Fan 3 Header (bottom)
X: HSBP B Header
Y: IDE Connector
Z: Floppy Drive Connector
AA: SATA A1 Connector (top) SATA A2 Connector (bottom)
BB: HSBP A Header
CC: FP Enable Temperature Sensor Header
DD: Front Panel Connector
EE: OEM BMC Connector
FF: Battery
GG: USB 3 and 4 Header
HH: Chassis Intrusion Header
II: Serial B Header