

8 Make Server Board Power Connections

A Attach the main power connector to the server board.
B Attach the CPU power connector to the server board as shown.

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.

9 Install Floppy Drive, Optical Drive and Hard Drive(s)

See the documentation that came with your server chassis for drive installation.

For the Intel® Server Chassis SC5295-E or the Intel® Server Chassis SR1475, see the Quick Start User's Guide accompanying each chassis.

10 CD-ROM/Floppy/Front Panel Cable Routing

For the Intel® Server Chassis SC5295-E, complete this step.

A Remove blue add-in card retention clip by pressing two tabs and rotating outward to disengage from chassis. HDD cables and server board cables are located behind the clip. This clip will be re-installed after hard drives are installed.

B Route cables as shown below according to the following legend:

- Front Panel Ribbon Cable
- SATA Hard Disk Drive Cables
- CD-ROM/Floppy Cables

CAUTION: To maintain proper airflow, use care to avoid blocking fans or add-in cards.

Use Cable-ties as necessary.

11 Connect Drives/Front Control Panel to Server Board

12 Intrusion Switch

For a non-Intel chassis, see your chassis documentation for intrusion switch requirements.

13 Chassis Fan Connections

For the Intel® Server Chassis SC5295-E or the Intel® Server Chassis SR1475, see the "Making Connections ..." section below, and the Quick Start User's Guide accompanying each chassis for specific chassis fan connection requirements.

14 Install Add-in Cards

See the documentation that came with your server chassis for add-in card installation.

For the Intel® Server Chassis SC5295-E or the Intel® Server Chassis SR1475, see the Quick Start User's Guide accompanying each chassis.

15 Finishing Up

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

A See your chassis documentation to complete rack or pedestal installation.

B Connect your keyboard, mouse, video, and other I/O cables as shown.

C Connect the AC power cable last.

16 Software - BIOS, Drivers, and Operating System Installation

A. Confirm BIOS Version: Look on the Server/System Management screen in the BIOS Setup Utility to determine the installed BIOS version. Compare this to the versions at: <http://support.intel.com/support/motherboards/server/se7230nh1-e/>. 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: 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 Microsoft® 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® 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

Making Connections to the Server Board ... Quick Reference

Required Connections for Selected Chassis

	SC5295-E	SR1475
A. Chassis Intrusion	■	■
E. +12V CPU Power Connector	■	■
K. SATA Connectors (left...SATA2, right...SATA3)	■	■
L. Front Panel Connector	■	■
M. SATA Connectors (top...SATA0, bottom...SATA1)	■	■
N. Front Panel USB	■	■
O. Main Power Connector	■	■

■ = Make this connection

CPU/System Fan Connections for Selected Chassis

	SC5295-E	SR1475
B. CPU Fan Connector	■	
C. System Fan 2 Connector	■	
D. System Fan 1 Connector		■
F. System Fan 4 Connector		■
G. System Fan 3 Connector		■
P. System Fan 5 Connector		■
Q. System Fan 6 Connector		■
R. System Fan 7 Connector		■
S. System Fan 8 Connector		■

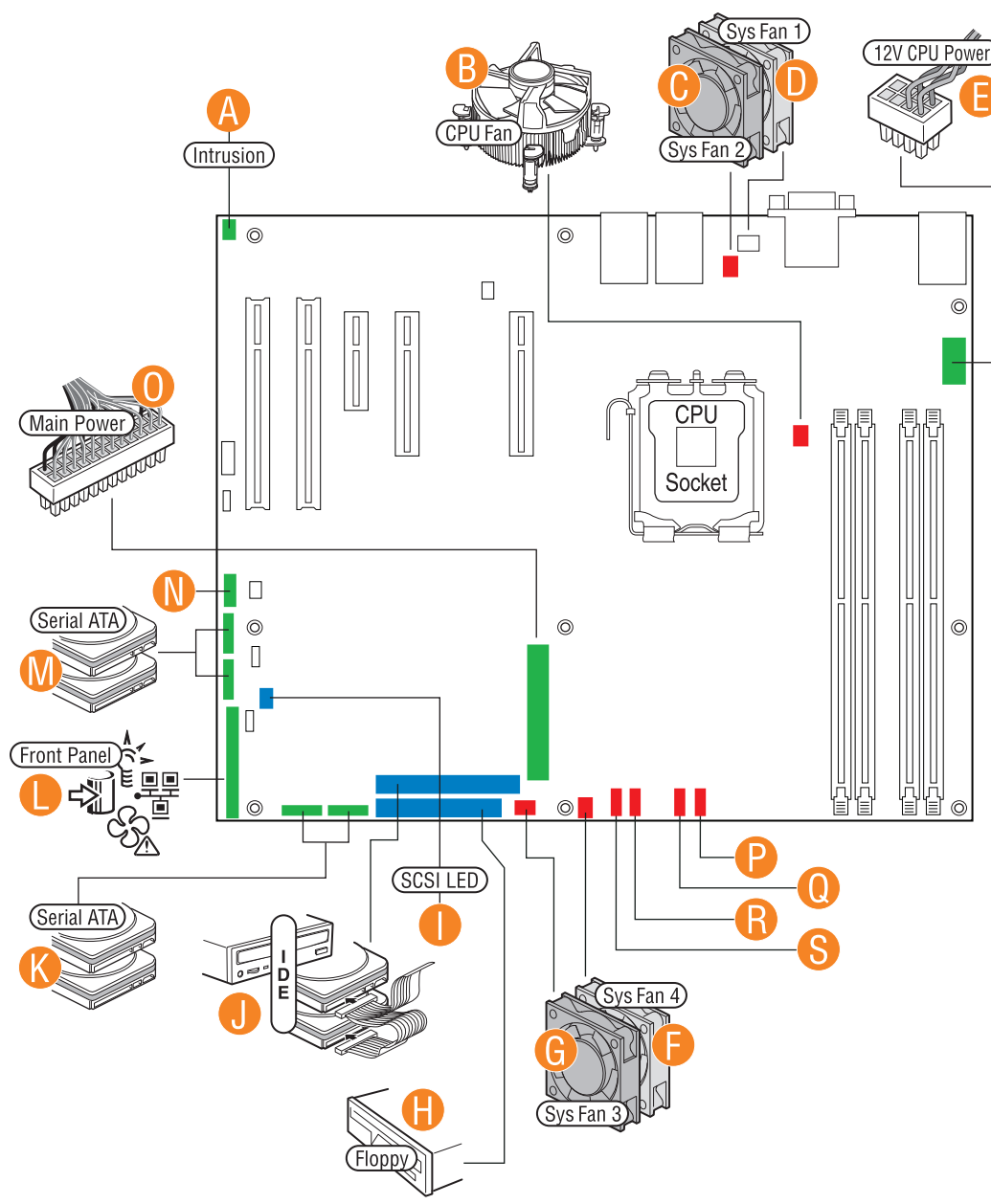
■ = Make this connection

Optional Connections for Selected Chassis

	SC5295-E	SR1475
H. Floppy Drive Connector	■	■
I. SCSI HDD LED Header	■	■
J. Primary IDE Connector	■	■

■ = Make this connection

Note: Not all optional connections are shown in this diagram. Refer to your Intel® Server Board SE7230NH1-E User Guide, and your server chassis documentation for additional connection information.



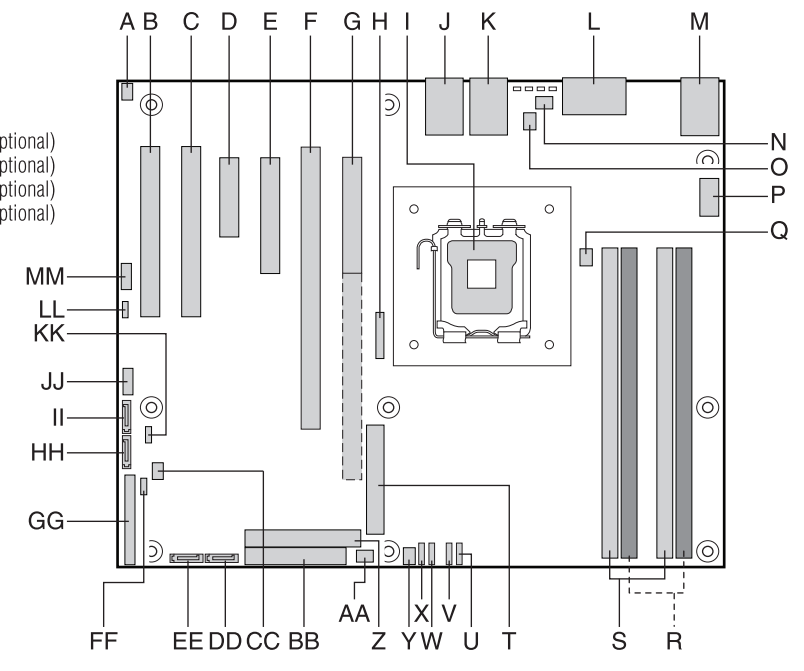
Accessories and Order Codes

Intel® Server Chassis SC5295-E	SC5295EUP
Intel® Server Chassis SR1475	SR1475
Bezel/Standard Control Panel	ADWBZBLACK
Rail Kit	AXXHERAIL
Slimline Floppy	AXXSFLIPPY
Slimline CD	AXXSCD
DVD/CDR	AXXSDVDCDR
SATA Hot-Swap Backplane Kit	A1400SATAKIT
SCSI Hot-Swap Backplane Kit	A1400SCSICIT
Rack Mounting Kit	AXX1U2URAIL
Fixed Drive SCSI Cable Kit	ABKSCSICABLE
1U Full Height PCI-X Riser	ABKPCIXUP
1U Full Height PCI Express Riser (1x8 slot)	ABKPCIEXPUP
Intel® RAID Controller SRCS16	SRCS16

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

Server Board SE7230NH1-E Component Layout

- A. Chassis Intrusion Header
- B. PCI (32bit/33MHz) Slot 1
- C. PCI (32bit/33MHz) Slot 2
- D. PCI-Express™ x4 (x1 Lane) Slot 3
- E. PCI-Express™ x8 (x4 Lane) Slot 4 (Optional)
- F. PCI-X™ (64bit/100MHz) Slot 5 (Optional)
- G. PCI-Express™ x8 (x8 Lane) Slot 6 or Riser Card Slot in 1U Chassis (Optional)
- H. Battery
- I. 775 Land (LGA) CPU Socket
- J. NIC 1 (top), USB 1, USB 2
- K. NIC 2
- L. Serial Port (top), VGA Port
- M. Mouse (top), keyboard
- N. System Fan 1 Connector
- O. System Fan 2 Module Connector
- P. 2 x 4 CPU Power Connector
- Q. CPU Fan Connector
- R. DIMM Sockets (black -- from left to right: DIMM 2A, DIMM 2B.)
- S. DIMM Sockets (blue -- from left to right: DIMM 1A, DIMM 1B.)
- T. Main Power Connector
- U. System Fan 8 Connector (Optional)
- V. System Fan 7 Connector (Optional)
- W. System Fan 6 Connector (Optional)
- X. System Fan 5 Connector (Optional)
- Y. System Fan 4 Connector
- Z. IDE Connector
- AA. System Fan 3 Connector
- BB. Floppy Connector
- CC. SCSI LED Connector
- DD. SATA Port 3
- EE. SATA Port 2
- FF. CMOS Config Jumper
- GG. Front Panel Connector
- HH. SATA Port 1
- II. SATA Port 0
- JJ. External USB Connector
- KK. Clear CMOS Jumper
- LL. HSBP Connector
- MM. RMC Connector



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/se7230nh1-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 processor will not have any power.
 - Beep code 4-3-2-1 in a system using an Intel® Pentium® 4 Processor (minimum of 2.8 GHz) means you have unrecognized or bad memory.
 - Remove and replace DIMMs one bank at a time to isolate which one is causing problems.
 - Remember, all DIMMs must be:
 - DDR2 400/533/667 compliant unbuffered, ECC or non-ECC, SPD SDRAM 240-pin gold DIMMs.
 - The same speed.
 - From the same manufacturer.
 - Installed beginning with DIMM 1A.
 - 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 450W power supply.