

7 Make Server Board Power Connections

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

A Attach the main power connector to the server board.

B Attach the CPU power connector as shown.

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.

8 Install Floppy Drive, Optical Drive (SATA or IDE) and Hard Drive(s)

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

For the Intel® Entry Server Chassis SC5299-E, see the Quick Start User's Guide accompanying the chassis.

9 Connect Drives/Front Panel Connector/ External USB to Server Board

Make the following cable connections to the server board as shown:

- A** USB Cable
 - Note location of missing pin when aligning connector.
- B** Floppy Cable
- C** Front Panel Cable
 - Note location of missing pin when aligning connector.
- D** Serial ATA (SATA) Cable(s)
 - Connect SATA Data Cables to server board here.
 - Begin cable connections at the SATA 0 location.

10 Chassis Fan Connections

For the Intel® Entry Server Chassis SC5299-E, see the Quick Start User's Guide accompanying the chassis for specific system fan connection requirements.

For a non-Intel server chassis, see the "Making Connections ... Quick Reference" section below, and the documentation accompanying your chassis for specific chassis fan connection requirements.

Attach chassis fans with 4-pin connectors here.

IMPORTANT NOTE: Return to your Intel® Server Chassis Quick Start User's Guide, or your non-Intel chassis documentation to finish installation and configuration of your Intel® Server Board S3200SH / S3210SH.

Return to this document to finish up, including software, BIOS, drivers and operating system installation.

11 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.

CAUTION: See your chassis documentation for AC power and grounding requirements.

12 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/s3210sh>. If new versions are available, update the BIOS on your server. See the User Guide on the Intel® Server Deployment Toolkit 2.0 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 2.0 CD. If using a Microsoft® Windows® operating system, the Intel® Deployment Assistant 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.

Reference

Accessories and Order Codes	
Intel® Entry Server Chassis SC5299-E with fixed 420W power supply	SC5299UP
Intel® Entry Server Chassis SC5299-E with fixed 420W power supply and North American power cord	SC5299UPNA

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

Making Connections to the Server Board ... Quick Reference

Required Connections for Selected Chassis SC5299-E

C. +12V CPU Power Connector	■
F. Main Power Connector	■
J. Front Panel Connector	■

■ = Make this connection

CPU/System Fan Connections for Selected Chassis SC5299-E

A. CPU 1 Fan Connector	■
B. System Fan 1 Connector	■
D. System Fan 4 Connector	■
E. System Fan 3 Connector	■
G. System Fan 2 Connector	■

■ = Make this connection

System Fan Connections: For a non-Intel server chassis, see the documentation that came with your chassis for fan connection requirements.

Optional Connections for Selected Chassis SC5299-E

H. Floppy Drive Connector	■
I. SATA Connectors	■
K. SATA Connectors	■
L. USB	■

■ = Make this connection

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

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/s3210sh>

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.
- Remove and replace DIMMs one DIMM at a time to isolate which one is causing problems.
- Remember, it is strongly recommended that all DIMMs be:
 - DDR2 667/800 compliant unbuffered, ECC or non-ECC.
 - The same speed.
 - From the same manufacturer.
 - Installed beginning with DIMM 1A.
- Your power supply must provide a minimum of 350W with 2A standby current, which complies with the SSI EPS 12V specification.
- Please consult the power budget tool on <http://support.intel.com/support/motherboards/server/s3210sh> to determine the power requirement of your system.

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 350W power supply.

Intel® Server Board S3200SHV / S3210SHLC Component Layout

Legend:

- ⓐ Not Available on the Intel® Server Board S3200SHV.
- ⓑ Not Available on the Intel® Server Board S3200SHV.
- ⓒ Intel® Adaptive Slt 6 functions as either a PCI Express* x16 (x8 lane) Connector or a Riser Card Slot in a 1U Chassis for S3210SHLC; PCI Express x16 Connector (x8 lane) for S3200SHV.
- ⓓ Not Available on the Intel® Server Board S3200SHV.

Note: Not all components, jumpers and connectors are described in this diagram. Refer to your Server Board User's Guide on the Intel® Server Deployment Toolkit 2.0 CD for additional information.

