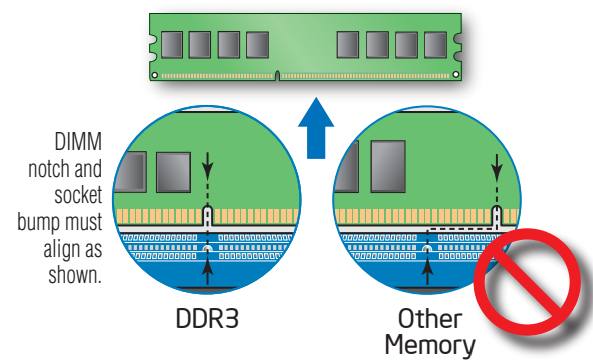


7 Install DIMM Memory Modules

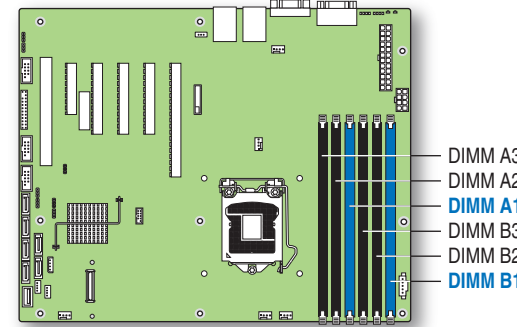
DDR3 DIMM Memory Identification:

CAUTION: Observe normal ESD (ElectroStatic Discharge) procedures to avoid possible damage to system components.

This server board supports up to 6 DDR3-800/1066/1333 ECC RDIMM or 1066/1333 ECC UDIMM.



Memory Configurations and Population Order:



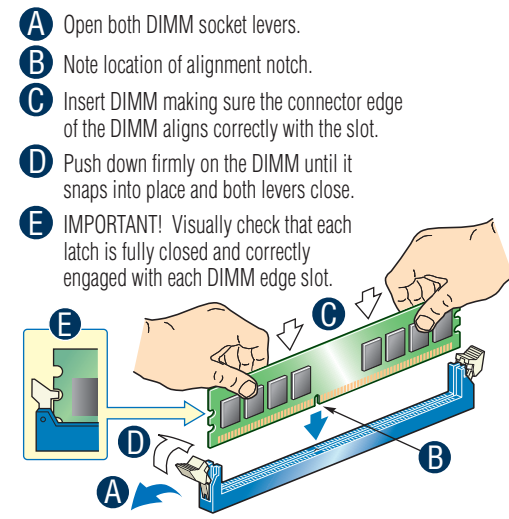
Memory Type: Minimum of one 1 GB, DDR3 800/1066/1333 MHz ECC RDIMM or 1066/1333 MHz ECC UDIMM.

Note: For additional memory configurations, see the User Guide on the Intel® Server Deployment Toolkit CD that accompanied your Intel® Server Board S3420GP, or go to: <http://www.intel.com/support/motherboards/server/s3420gp>

Memory sizing and configuration is supported only for qualified DIMMs approved by Intel®. For a list of supported memory, see the tested memory list at <http://serverconfigurator.intel.com/default.aspx>

To Install DIMMs:

CAUTION: Avoid touching contacts when handling or installing DIMMs.

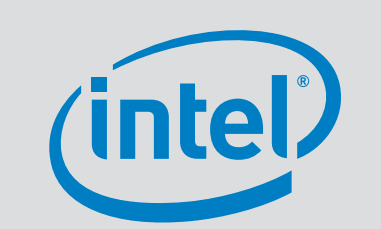
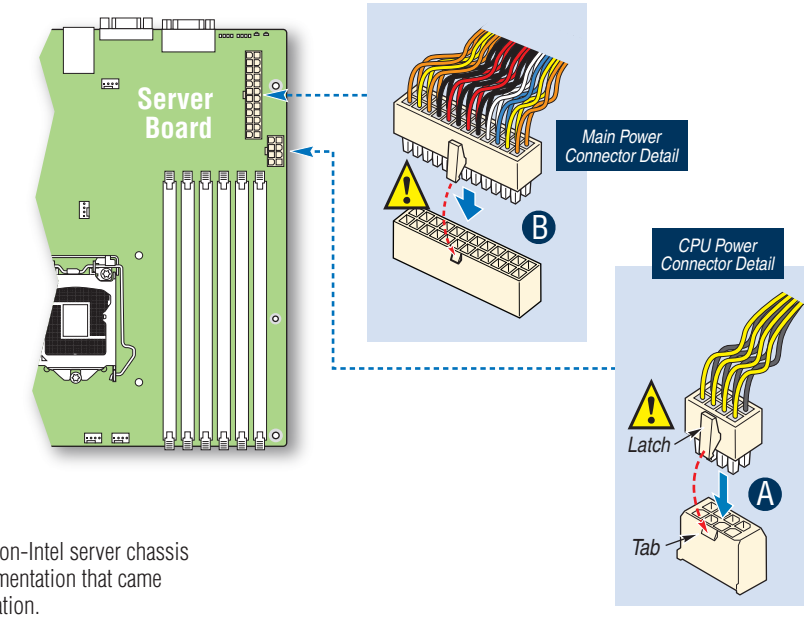


8 Make Server Board Power Connections

- A Attach the CPU power connector.
- B Attach the main power connector.

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

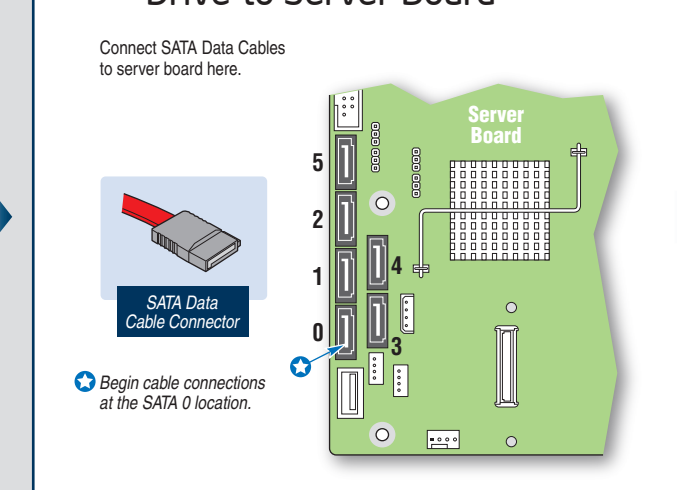
IMPORTANT NOTE: If you are using a non-Intel server chassis with an ATX power supply, see the documentation that came with your chassis for installation information.



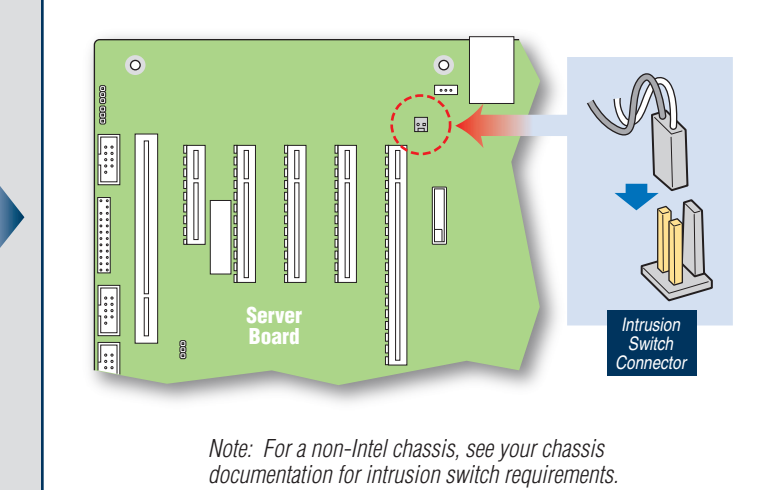
9 Install Optical Drive and Hard Drive(s)

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

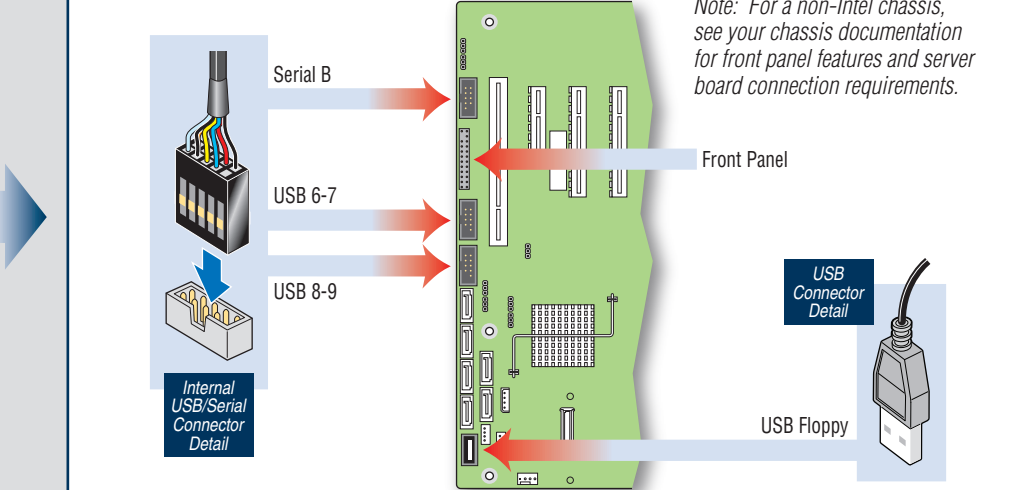
10 Connect Hard Drives/Optical Drive to Server Board



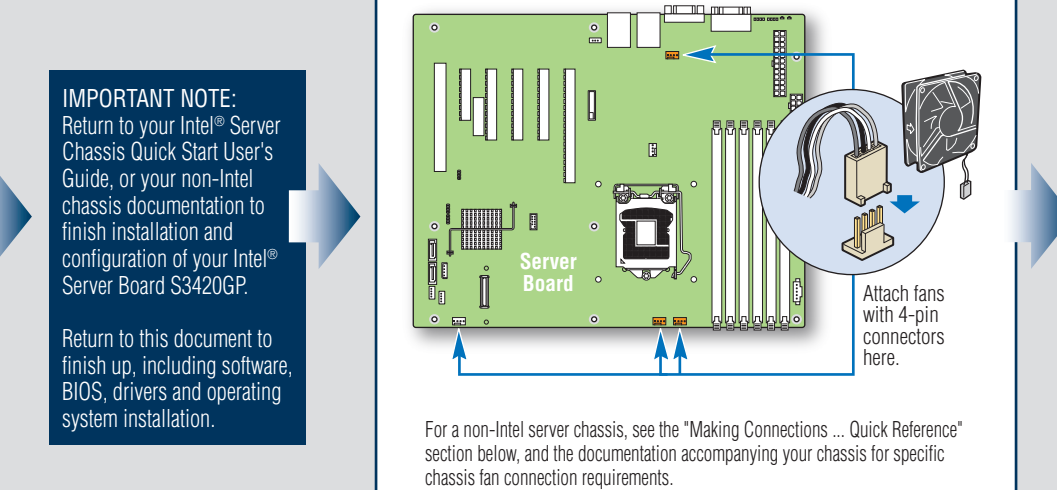
11 Attach Intrusion Switch Cable



12 Attach Front Panel, Serial, and USB Connections



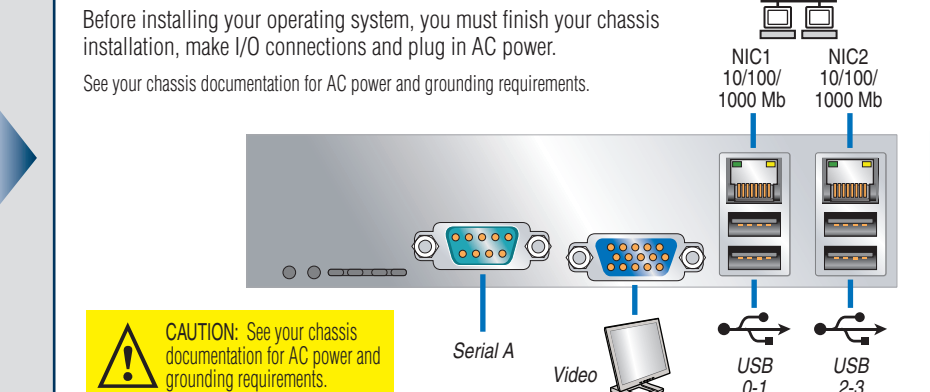
13 Chassis Fan Connections



14 Install Add-in Card[s]

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

15 Finishing Up



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://www.intel.com/support/motherboards/server/s3420gp>

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.

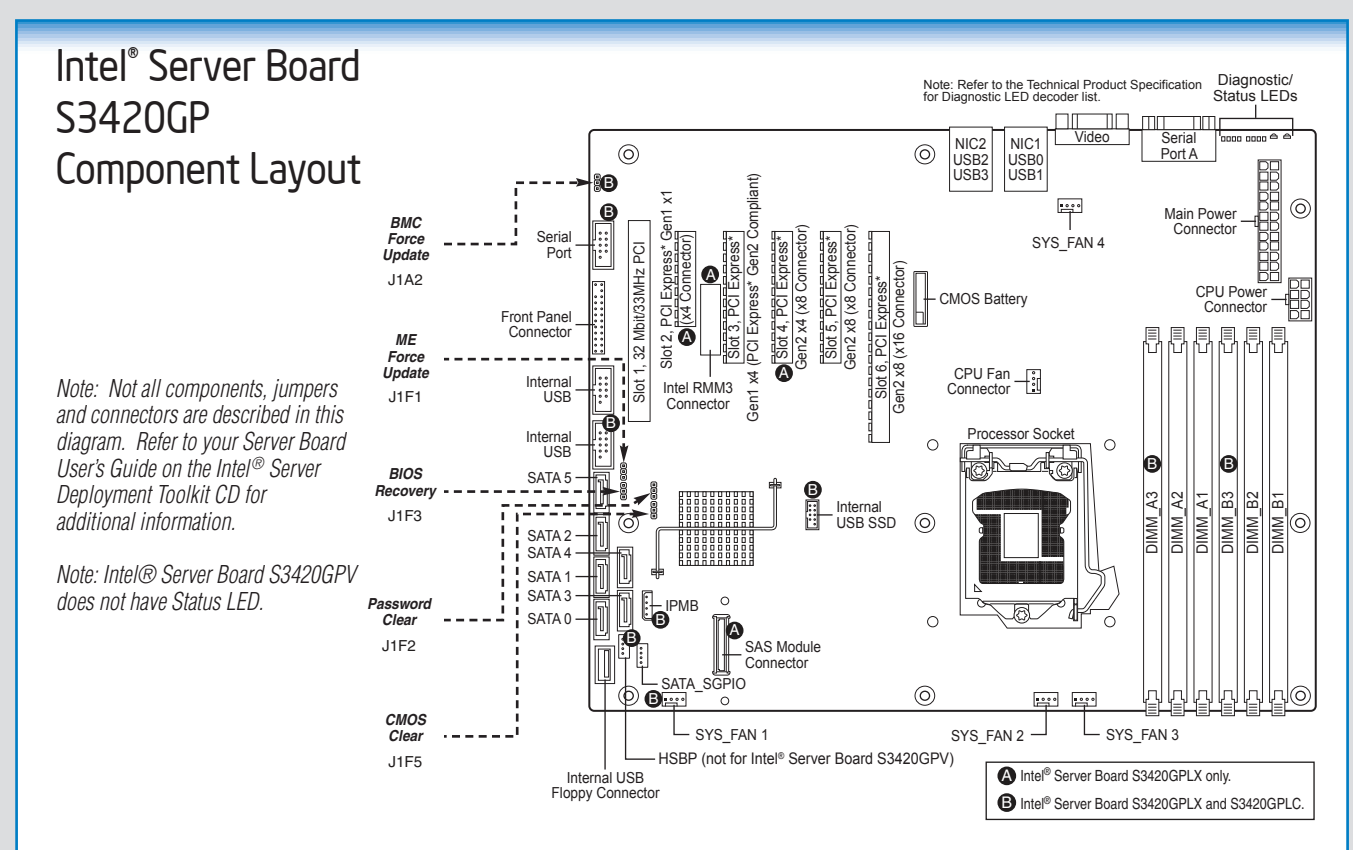
D. Install Operating System Drivers: With the operating system running, insert the Intel® Server Deployment Toolkit CD. If using a Microsoft Windows® operating system, the Intel® Deployment Assistant will autoun and allow you to select the appropriate drivers to install. On other operating systems, browse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

Common Problems and Solutions

For a list of hardware components that have been tested with this system, see: <http://www.intel.com/support/motherboards/server/s3420gp/>

- The system does not boot or show video at power-on.
- Check that the +12V CPU power connector is plugged in. Without this cable, the processors will not have any power.
- Only Intel® Xeon® processors 3400 series with 95 W and less Thermal Design Power (TDP) are supported on this server board. Previous generation Intel® Xeon® processors are not supported. Beep code 1-5-2-1 in a system means you do not have Intel® Xeon® processors 3400 sequence installed.
- The system generates the memory error beep code and POST diagnostic LED message (0XE8-0XEE) that means some memory errors in early POST.
- Remember, all DIMMs must be:
 - DDR3 800/1066/1333 MHz ECC Registered DIMM or 1066/1333 MHz ECC Unbuffered DIMM.
 - From the same manufacturer.
 - Installed beginning with DIMM A1.

The system sometimes works, but is exhibiting erratic behavior.



Accessories and Order Codes

ATX I/O Shield	AXXTIO
Intel® Remote Management Module 3	AXXRMM3
Intel® SAS Entry RAID Module	AXXASAMOD
SATA Slim-Line DVD	AXXSATDVD

Additional Reference documents available at: <http://www.intel.com/support/motherboards/server/s3420gp/>

A complete list of accessories and spares can be found at: <http://www.intel.com/support/motherboards/server/s3420gp> (search for the document titled "Spares and Configuration Guide".)

Available Documents

Document/Tool	Content
Technical Product Specification	In-depth technical information
Spares, Parts List, and Configuration Guide	Supported accessories and spares list
Server Configurator Tool	Tested peripherals and operating systems list Tested memory list Supported processors list
Software and Drivers	Up-to-date firmware, driver and utility information

Additional Reference documents available at: <http://www.intel.com/support/motherboards/server/s3420gp/>

Making Connections to the Server Board ... Quick Reference

Required Connections	
A. +12V CPU Power Connector	■
B. Main Power Connector	■
C. Front Panel Header	■

■ = Make this connection

CPU/System Fan Connections	
D. System Fan 1 Header	■
E. System Fan 2 Header	■
F. System Fan 3 Header	■
G. System Fan 4 Header	■
H. CPU Fan Header	■

■ = Make this connection

Optional Connections	
I. HSBP (not for Intel® Server Board S3420GPV)	■
J. USB 6-9	■
K. SATA Connectors	■
L. Serial B	■
M. Chassis Intrusion Header	■
N. IPMB	■
O. SATA SGPIO	■
P. Internal USB SSD	■
Q. SAS Module Header	■

■ = Make this connection

Note: For a non-Intel Chassis, see your chassis documentation for server board connection information.

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.

IMPORTANT Note: Cables should be tied for better airflow. Use cable-ties as necessary.