



### 7 Install DIMM Memory Modules

DDR3 DIMM Memory Identification:

**CAUTION:** This server board supports up to 8 DDR3-800/1066/1333 ECC RDIMM and ECC UDIMM.

DIMM notch and socket bump must align as shown.

DDR3

### Memory Configurations and Population Order:

Memory Type: Minimum of one 1 GB, DDR3 800/1066/1333 MHz compliant 240-pin DIMM.

Note: For additional memory configurations, see the User Guide on the Intel® Server Deployment Toolkit CD that accompanied your Intel® Server Board S5500BC, or go to: <http://support.intel.com/support/motherboards/server/s5500bc>

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://support.intel.com/support/motherboards/server/s5500bc/compat.htm>

### To Install DIMMs:

**CAUTION:** Avoid touching contacts when handling or installing DIMMs.

- Open both DIMM socket levers.
- Note location of alignment notch.
- Insert DIMM making sure the connector edge of the DIMM aligns correctly with the slot.
- Push down firmly on the DIMM until it snaps into place and both levers close.
- IMPORTANT!** Visually check that each latch is fully closed and correctly engaged with each DIMM edge slot.

### 8 Make Server Board Power Connections

- Attach the CPU power connector.
- Attach the main power connector.
- Attach the AUX power connector if you are using the Intel® Server Chassis SC5650.

**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

Connect SATA Data Cables to server board here.

Begin cable connections at the SATA 0 location.

SATA Data Cable Connector

### 11 Attach Intrusion Switch Cable

Intrusion Switch Connector

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

### 12 Attach Front Panel, Serial, and USB Connections

USB 0-1, USB 2-3, Serial B, Front Panel

Note: For a non-Intel chassis, see your chassis documentation for front panel features and server board connection requirements.

**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 S5500BC and Intel® Server Boards S5500BCR.

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

### 13 Chassis Fan Connections

Attach fans with 4-pin connectors here.

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.

### 14 Install Add-in Cards

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

For the Intel® Server Chassis SC5650, see the Quick Start User's Guide accompanying the chassis.

### 15 Finishing Up

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

Serial A, Video, USB 6-7, USB 8-9, NIC1 10/100/1000 Mb, NIC2 10/100/1000 Mb

See your chassis documentation for AC power and grounding requirements.

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

### 16 Software • BIOS, Drivers, and Operating System Installation

- 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/s5500bc>. 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.
- Configure your RAID Controller:** Use the instructions provided with the RAID controller.
- Install your Operating System:** Use the instructions provided with the RAID controller and with the operating system.
- 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.

## 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/s5500bc/>

- 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 5500 series and 5600 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 5500 series and 5600 series installed or first processor socket is empty.
- The system generates the memory error beep code and POST diagnostic LED message (0XE0-0XEF) that means some memory errors in early POST.
  - Remember, all DIMMs must be:
    - DDR3 800/1066/1333 MT/s ECC Registered DIMM and 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	AXXTD
Intel® Remote Management Module 3	AXRMM3
Intel® RAID Activation Key	AXRRAK5
Intel® Local Control Panel (LCD)	AXLCPFD
SATA Slim-Line DVD	AXSATADVD

Additional Reference documents available at: <http://support.intel.com/support/motherboards/server/s5500bc/>

A complete list of accessories and spares can be found at: <http://support.intel.com/support/motherboards/server/s5500bc> (search for the document titled "Spares and Configuration Guide".)

#### Available Documents

Document Type	Content
Technical Product Specification	In-depth technical information
Spares and Configuration Guide	Supported accessories and spares list
Tested Hardware and Operating System List	Tested peripherals and operating systems list
Tested Memory List	Tested memory list
Tested Processor List	Supported processors list
Software and Drivers	Up-to-date firmware, driver and utility information

Additional Reference documents available at: <http://support.intel.com/support/motherboards/server/s5500bc/>

### Making Connections to the Server Board ... Quick Reference

Required Connections	Intel® Server Chassis SC5650
A. +12V CPU Power Connector	■
N. Main Power Connector	■
O. Auxiliary Power Connector	■
P. Front Panel Header	■

CPU/System Fan Connections	Intel® Server Chassis SC5650
B. System Fan 1 Header	■
C. System Fan 2 Header	■
D. System Fan 3 Header	■
Q. CPU1 Fan Header	■
R. CPU2 Fan Header	■

Optional Connections	Intel® Server Chassis SC5650
L. HSBP_A	■
I. SATA RAID Key	■
G. USB 0-1	■
H. USB 2-3	■
F. SATA connectors	■
M. Serial B	■
J. Chassis Intrusion Header	■
K. IPMB	■
E. SATA SGPIO	■

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

### Intel® Server Board S5500BC Component Layout

Note: Refer to the Technical Product Specification for BIT3 Diagnostic LED decoder list.

See your Intel® Server Board S5500BC User's Guide for expanded component and connection information.