6 Make Server Board Power Connection

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

Ⓐ Attach the power connector to the server board.

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.

Tab
Main Power
Latch
Ⓐ
Power Connector from Power Supply
Ⓐ
Main Power Connector Detail

Power Connector

7 Install SATA Drive(s)

See the documentation that came with your server chassis for SATA optical drive and SATA hard drive installation.

8 Connect Hard Drives/Optical Drive to Server Board

Connect your SATA optical drive and SATA hard drives to these server board SATA connectors as shown.

2 3 SATA
0 1 Connectors
Server Board

SATA Data Cable Connector

9 Attach Intrusion Switch Cable

Intrusion Connector
Server Board

Intrusion Switch Connector

Note: This connection is not used in an Intel® Server Chassis. For a non-intel chassis, see your chassis documentation for intrusion switch capability, location and connection requirements.

10 Server Board USB Connection

USB Connector
Server Board

USB Connector Detail

Attach control panel USB-0 connector to server board as shown.

11 Front Panel Connection

The Intel® Server Board X38ML has a 2 x 8 (16-pin) front panel header. See your chassis documentation for front panel connection requirements.

Server Board

Front Panel Connector

Attach the chassis front panel cable here.

12 Chassis Fan Connections

The Intel® Server Board X38ML has three fan headers. See your chassis documentation for fan connection requirements.

System Fans
Server Board

System Fan Headers

13 Install Add-in Cards

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

14 Finishing Up

Before installing your operating system, you must finish your chassis installation, make I/O connections and plug in AC power. See your chassis documentation for completing and powering up your system.

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

NIC1-2
Network
AC Power
Serial Port
USB 1-2
Video

15 Software • BIOS, Drivers, and Operating System Installation

A. Run the FRUSDR from the Intel® Server Deployment Toolkit 2.0 CD to load the appropriate sensor data to onboard server management components.

B. 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/x38ml 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.

C. Configure your RAID Controller: Use the instructions provided with the RAID controller.

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

E. 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 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.

Reference

Accessories and Order Codes

1U Passive Heatsink (Intel)	AXXUPHSLW
Infiniband DDR HCA card, 20 Gb/s, PCI Express* x8	AXXIBDDRPT

Server Board SKU

10-pack Intel® Server Board X38ML (horizontal power connector)	BMLBB

Server System SKU

1U integrated system with two Intel® Server Boards X38ML, two heat sinks, one power supply, and one chassis	SR1520ML

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

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/x38ml/

The system does not boot or show video at power-on.
• Check that the main power connector is plugged in.
• Remove and replace DIMMs one at a time to isolate which one is causing problems.
• Remember, all DIMMs must be DDR2 667/800 MHz compliant 240-pin DIMMs
• Your power supply must provide a minimum of 270W with 1.5A of 5V standby current.

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 270W power supply.

Server Board X38ML Component Layout

See your Intel® Server Board X38ML User's Guide for expanded component and connection information.

NIC 1 J3A1
USB NIC 2 Serial VGA
J1A2
J1A3
J1A4
Intrusion
USB
SATA 2 SATA 3
SATA 0 SATA 1
POST LEDs
J6B1
PCI Express x16 Riser Socket
Battery
DIMM Socket B2
DIMM Socket B1
DIMM Socket A2
DIMM Socket A1
CPU Socket
2 x 9 Main Power Conn. System Fan Headers Front Panel

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