9 Install Intel® Remote Management Modules (optional)

Install Intel® RMM NIC Module

Install Foam Gasket

A A self-adhesive foam gasket is required to protect the underside of the NIC module.

Remove the backing paper from the spacer and install as shown.

Foam Gasket

Note: NIC module is shown upsidedown.

Snap Standoff

Standoff Hole

B Install the three standoffs to the server board first.

C Attach module to the server board connector and matching standoffs.

Install Intel® RMM Module

A Insert the standoff into the hole labeled TH4 on the Intel® Remote Management Module. The standoff installs on the bottom side of the Intel® Remote Management Module.

TH4
Snap Standoff

Standoff Snaps into Server Board Hole

I/O Ports

Server Board

B Attach the Intel® Remote Management Module to the server board connector and snap the standoff into the matching hole in the server board.

Intel® RMM Board Conn.

Intel® RMM Server Board Connector

10 Install Optical Device (optional)

1. Remove the Empty Tray

A Remove the empty tray and screw from the accessory kit box.

✿ For installing the optional USB floppy drive in place of a CD-ROM, see #5 below right.

⚠ **CAUTION:** To maintain proper system cooling, a filler blank must be installed if you do not install a device at this location.

2. Install the Interposer Board

A Plug the interposer board connector into the matching connector on the back of the optical device.

Interposer
Connector
Optical Device

3. Install Device into the Tray

A Align the two holes on the left edge of the optical device with the two metal tabs in the tray.

B Lower opposite side of optical device into tray until it clicks into place.

Drive Tray
Metal Tab

4. Secure Interposer Board to Device Tray

A Make sure interposer board fits onto alignment pin on device tray.

B Attach with screw as shown.

Tray alignment pin fits into this hole.

5. Install Optical Device Tray Assembly into the Chassis

✿ For installing the optional USB floppy drive, note the location of the backplane USB connector at right and refer to the documentation that came with the device.

A Insert optical device tray assembly into the chassis.

B Verify that the blue release lever on the tray locks into place.

USB Connector
Interposer Board
Backplane
Optical Drive Tray Assembly
Release Lever

11 Install Add-in Card(s) ▪ Full-height Side of PCI Riser Shown

A Open rear retention clip by pushing blue slide upward and rotating clip fully open.
B Open front retention clip by rotating 90 degrees outward.
C Remove filler panel from the selected add-in card slot.
D Insert add-in card until it seats in riser connector.
E Close both retention clips. Note: Make sure that all empty add-in card slots have filler panels installed.

⚠ **CAUTION:** Observe normal ESD precautions when installing add-in cards.

Note: Add-in card install sequence for low-profile add-in cards on opposite side of PCI riser is the same.

Full-height Add-in Card

12 Install PCI Add-in Card Riser Assembly

To install the riser assembly:

A Position riser card edge connector(s) over the server board riser socket(s) and align the three hooks in the riser with the slots at the back of the chassis.

Chassis Hooks (3)
Riser Connector
PCI Riser Assembly
Server Board Sockets

Note: The PCI riser assembly includes an intrusion switch that engages the system cover. Do not use the intrusion header located on the server board.

Slot (3)
Hook (3)
Riser Socket
Chassis Rear Panel

B Press down uniformly until the three hooks on the rear of the PCI riser assembly engage the chassis back panel slots. The riser cards will seat into the matching sockets on the server board.

13 Second Processor Duct Modification

Configure Processor Air Duct for Two Processors:

Note: This step only applies if your system has **two** processors. If only one processor is installed, leave the air dam in place and proceed to Step 15.

⚠ **CAUTION:** The CPU air dam must be in place for single processor configurations to ensure proper system cooling. Retain the air dam for future use.

A Turn processor air duct over to reveal underside.

B Remove CPU air dam by sliding slotted holes off of duct pins.

Memory Air Deflector
CPU Air Dam

Note: Remove memory air deflector when using full-height DIMM form factor.

Underside view of Processor Air Duct

14 Install Processor Air Duct

Install processor air duct as shown.

Use care to avoid pinching system cables.

15 Install Hard Drives/Carriers

A Remove the Plastic Air Baffle
B Install the Hard Disk Drive

Baffle
Drive Carrier
Attach with four screws.

C Install the Carrier Assembly

Hard Drive Numbering Diagram

Note: Carrier lever must be held in the FULLY OPEN position to install into chassis. Slide carrier into chassis until it stops, then rotate the lever until it snaps shut.

Drive 0 Primary Drive Bay

⚠ **CAUTIONS:** If you install less than six drives or devices, empty drive bays must be occupied by carriers with baffles to maintain proper system cooling.

To avoid possible damage to your chassis, use only carriers that came with your server system.

Repeat these steps for each installed hard drive

16 Install 6th Hard Drive or Tape Drive (optional)

See the chassis user's guide for optional sixth hard disk drive or tape drive installation instructions.

17 Install Second Power Supply Module (optional)

A Use the 'finger hole' to remove the filler panel.

Finger Hole

B Insert the power supply module into the power supply cage until it clicks into place.

Handle
Power Supply Latch

To remove a power supply module, release latch and pull out of the chassis by the handle.

18 Install Intel® Local Control Panel (optional)

Remove Standard Control Panel Module

A Press the blue locking lever to release the control panel from the chassis.
B Slide the standard control panel out of the chassis.

Midplane Board
Locking Lever

A Slide Intel® Local Control Panel into chassis.
B Make sure control panel engages the backplane connector and the blue locking lever snaps into place.

Locking Lever
Midplane Board
Backplane Connector

19 Install Rack Handles

20 Install Bezel (optional)

Standard Control Panel Bezel

Intel® Local Control Panel Bezel

Select the bezel that matches your control panel and install as shown.

21 Install Top Cover

Note: Security screw re-installation is optional.

22 Finishing Up

Before installing your operating system, you must finish your system installation and connect back panel I/O connectors and AC power.

1. Replace the system cover.
2. Connect your keyboard, mouse, video and other I/O cables/devices as shown. Then connect the AC power cord(s).

IMPORTANT NOTE: You must download and install the latest Intel® RMM software for the Intel® RMM boards to work properly with your server board.

Mouse
Serial Port A
AC Power

⚠ **CAUTION:** This unit must be operated with the TOP COVER installed to ensure proper cooling.

Keyboard
Serial Port B
NIC1-2
Network
USB 0, 1
Video
I/O Module
Intel® RMM NIC Module

23 Software ▪ BIOS, Drivers, and Operating System Installation

A. Update the System Software:
1. Boot from the Intel® Server Deployment Toolkit 2.0 CD.
2. Use the Wizard to access the latest versions on the Internet and update the BIOS, firmware, and FRUSDRs. (Downloaded files on a USB key may also be used).

B. Configure your RAID Controller: If using a RAID card, use the instructions provided with the RAID controller. If using on-board RAID, you must activate RAID in the BIOS setup. See the Intel® 5000 Series Chipsets Server Board Family Datasheet for more information.

C. Install your Operating System: Use the instructions provided with the RAID controller and with the operating system.
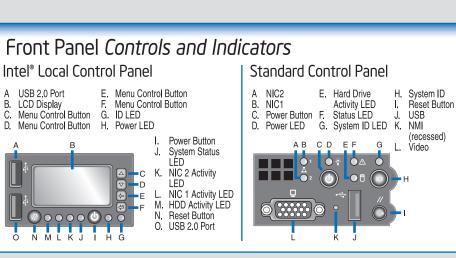
D. Install Operating System Drivers: With the operating system running, insert the Intel® Server Deployment Toolkit 2.0 CD. If using a Microsoft® Windows® operating system, the Express Installer will autorun and allow you to select the appropriate drivers to install. On other operating systems, browse the CD folders to locate and install the driver files.

E. Install Intel® Remote Management Software: If you installed the Intel® Remote Management Module and the Intel® RMM NIC, download and install the Intel® Remote Manamgement Software from http://support.intel.com/support/motherboards/server/chassis/sr2500.

F. Install Intel® SMaRT Tool (optional): With the operating system running, insert the Intel® Server Deployment Toolkit 2.0 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.

Front Panel Controls and Indicators

Intel® Local Control Panel

A. USB 2.0 Port
B. LCD Display
C. Menu Control Button
D. Menu Control Button
E. Menu Control Button
F. Menu Control Button
G. ID LED
H. Power LED
I. Power Button
J. System Status LED
K. NIC 2 Activity LED
L. NIC 1 Activity LED
M. HDD Activity LED
N. Reset Button
O. USB 2.0 Port

Standard Control Panel

A. NIC2
B. NIC1
C. Power Button
D. Power LED
E. Hard Drive Activity LED
F. Status LED
G. System ID LED
H. System ID
I. Reset Button
J. USB
K. NMI (recessed)
L. Video

Intel® Server Board S5000PAL Component Layout

See your Intel® Server Board S5000PAL User's Guide for expanded component and connection information.

Intel® RMM NIC Connector
POST Code LEDs
ID LED
Status LED
I/O Expansion Module Connector
Intel® RMM Connector
Low Profile Riser Slot
Full Height Riser Slot
DIMM A1 A2 B1 B2 C1 C2 D1 D2
Serial A
SATA 5
SATA 4
SATA 3
SATA 2
SATA 1
SATA 0
Bridge Board Connector
IDE Optical Drive
USB 0-1
Power Supply Signal Conn.
Battery
CPU 2 Socket
CPU 1 Socket
Main Power Conn.
CPU Power
CPU Voltage Regulator

Optional Accessories and Order Codes

Tool-less Rail Kit	AXXHERAIL
Cable Management Arm	AXXRACKCARM
Basic Slide Rail Kit	AXXBASICRAIL
Fixed Rack Brackets	AXXBRACKETS
Bezel for Standard Control Panel	ADRBEZBLACK
Bezel for Intel® Local Control Panel	ADRLCDBEZEL
Intel® Remote Management Module	AXXRMM

Slimline DVD-ROM/CD-ROM Drive	AXXDVDCDR
750W Power Supply	ASR2500PS
Sixth SAS/SATA Drive Mounting Kit	ASR2500SIXDRV
USB Floppy	AXXUSBFLOPPY
SAS/SATA Tape Drive Mounting Kit	ASR2500SATAPE
Intel® Local Control Panel	ASR2500LCP

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

Reference

(intel)