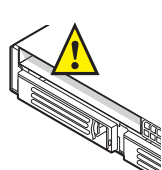


## 9 Install Optical Device (optional)

### 1. Remove the Empty Tray

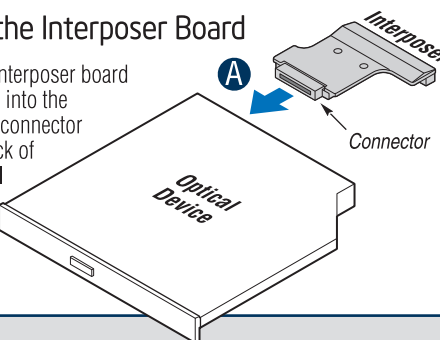
- A Remove the empty tray and screw from the accessory kit box.



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

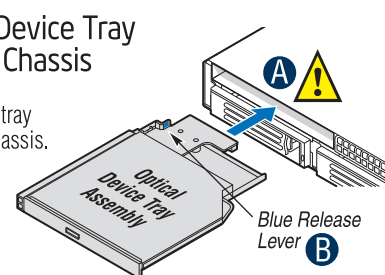
### 2. Install the Interposer Board

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



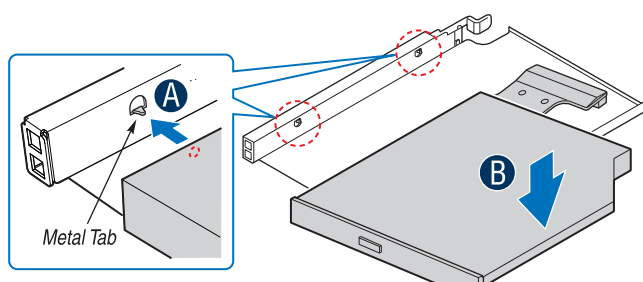
### 4. Install Optical Device Tray Assembly into Chassis

- A Insert optical device tray assembly into the chassis.  
B Verify that the blue release lever on the tray locks into place.



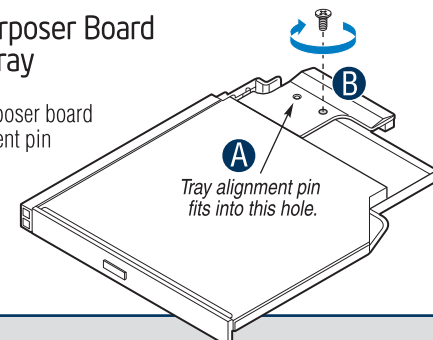
### 3. Install Device into the Tray

- 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.



### 5. Secure Interposer Board to Device Tray

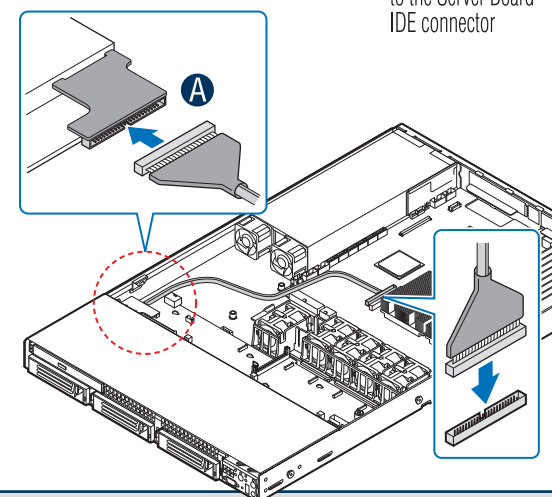
- A Make sure interposer board fits onto alignment pin on device tray.  
B Attach with screw as shown.



## Install Optical Device Data Cable

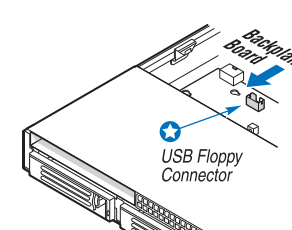
Note: Both ends of the IDE cable are labeled.

- A Connect one end of the IDE cable to the rear of the interposer board.  
B Connect the opposite end of the IDE cable to the Server Board IDE connector



## Install USB Floppy (optional)

- For installing the optional USB floppy drive, note the location of the backplane USB floppy connector below and refer to the documentation that came with the device for installation instructions.

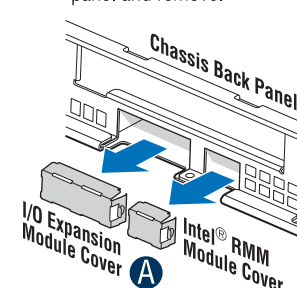


## 10 Install I/O Expansion Module (optional)

### Remove Module Covers

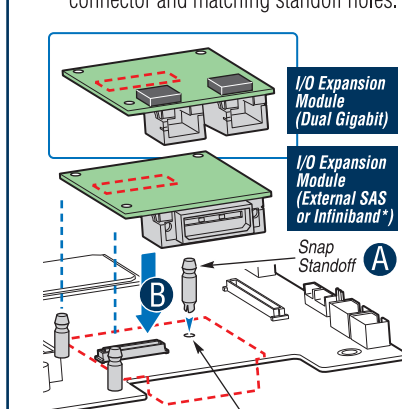
Prior to installing the I/O Module and/or the Intel® RMM Modules, you must remove the corresponding module cover(s).

- A Squeeze the sides of each cover to disengage from the chassis back panel and remove.



### Install I/O Expansion Module

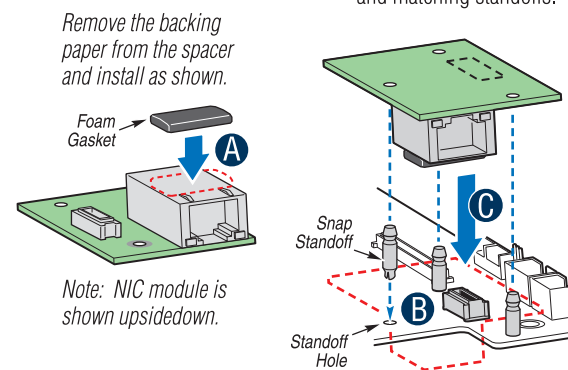
- A Install the three standoffs to the server board first.  
B Attach module to the server board connector and matching standoff holes.



## 11 Install Intel® Remote Management Modules (optional)

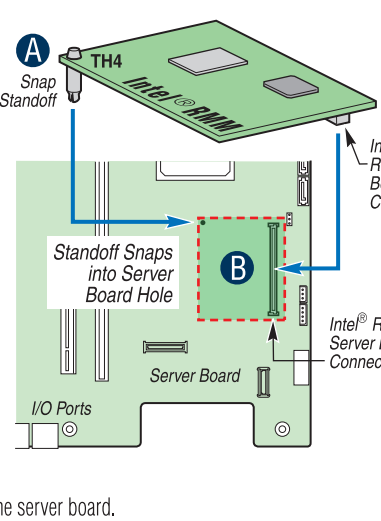
### Install Intel® RMM NIC Module

- 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.



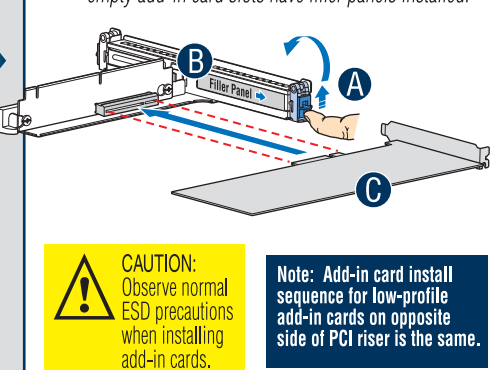
### Install Intel® RMM Module

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



## 12 Install Add-in Card(s)

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

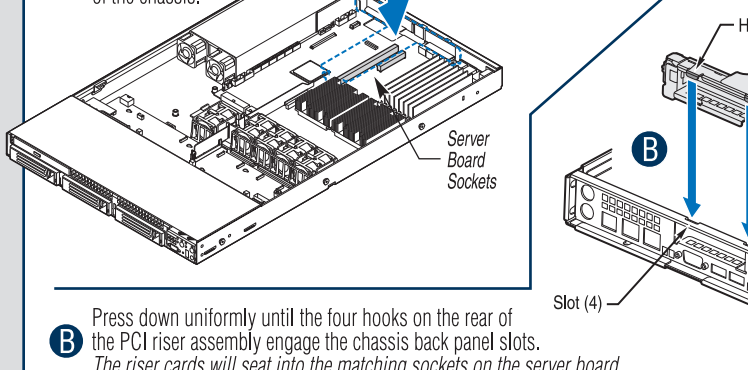


**CAUTION:** Observe normal ESD precautions when installing add-in cards.

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

## 13 Install PCI Add-in Card Riser Assembly

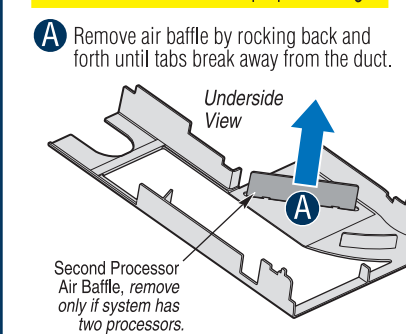
- A Position riser card edge connector(s) over the server board riser socket(s) and align the four hooks in the riser with the slots at the back of the chassis.  
B Press down uniformly until the four hooks on the rear of the PCI riser assembly engage the chassis back panel slots. The riser cards will seat into the matching sockets on the server board.



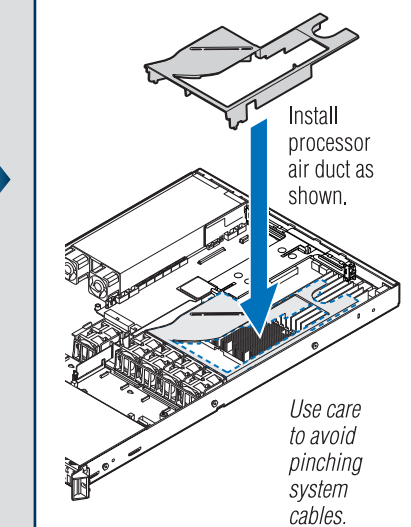
## 14 Second Processor Duct Modification

IMPORTANT NOTE: If you are NOT installing a second processor, disregard this step.

- CAUTION:** For a single processor configuration, the air baffle must be installed to ensure proper cooling.



## 15 Install Processor Air Duct

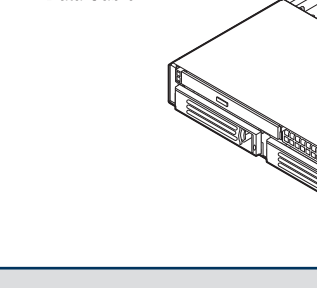


## 16 Install Air Baffle

The baffle is held in place by two snap-standoffs on the chassis floor.

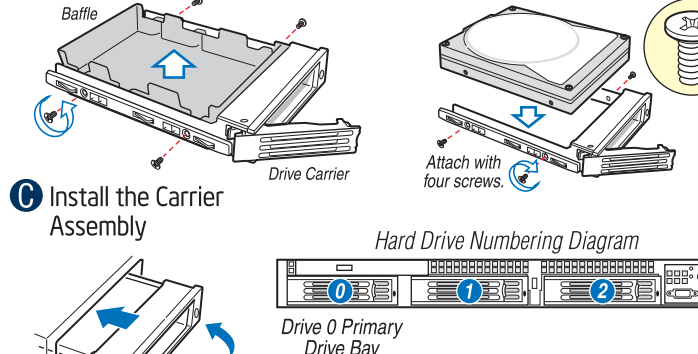
- A Route all applicable cables (see below) through the large notch and snap air baffle into place.

**Cabling Legend:**  
Cables routing through LARGE notch:  
• Main Power Cable  
• CPU Power Cable  
• Power Signal Cable  
• Optical Drive Data Cable



## 17 Install Hard Drives/Carriers

- A Remove the Plastic Air Baffle  
B Install the Hard Disk Drive  
C Install the Carrier Assembly



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.

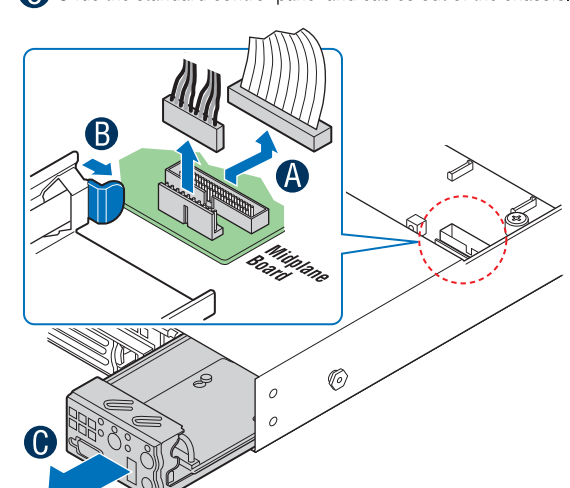
**CAUTIONS:** If you install less than three drives or devices, empty drive bays must be occupied by carriers with baffles to maintain proper system cooling.  
To avoid possible damage to your chassis, use only carriers that came with your server system.

Repeat these steps for each installed hard drive

## 18 Install Intel® Local Control Panel (optional)

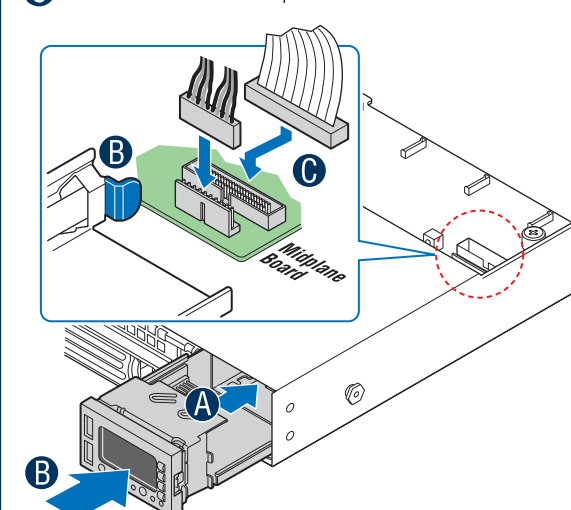
### Remove Standard Control Panel

- A Disconnect the two cables from the midplane board as shown.  
B Press the blue lever to release the control panel from the chassis.  
C Slide the standard control panel and cables out of the chassis.

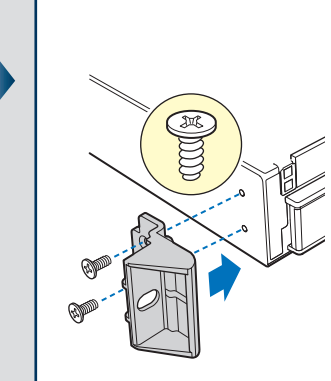


### Install Intel® Local Control Panel

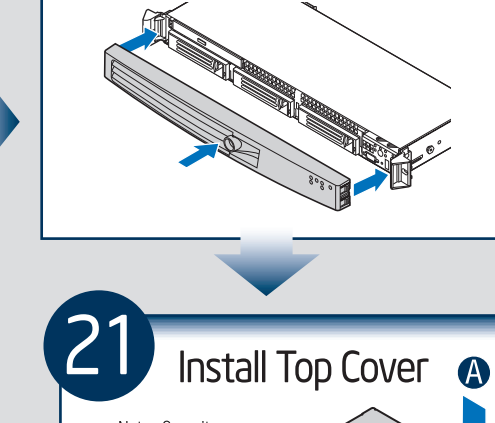
- A Feed local control panel cables into chassis opening.  
B Slide control panel fully into chassis until locking lever engages.  
C Connect two cables to midplane board as shown.



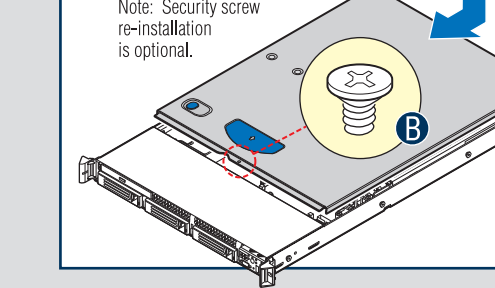
## 19 Install Rack Handles



## 20 Install Bezel (optional)



## 21 Install Top Cover

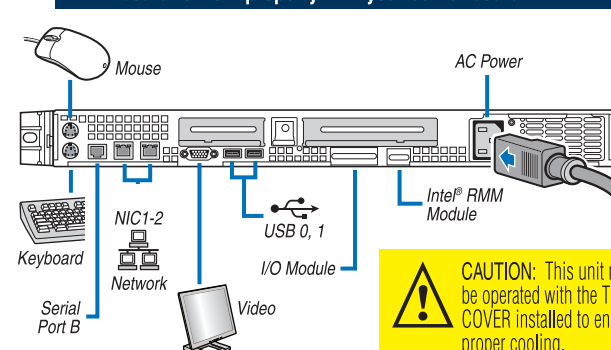


## 22 Finishing Up

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.

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



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

## 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 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.

**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 Management Software from <http://support.intel.com/support/motherboards/server/chassis/sr1500>.

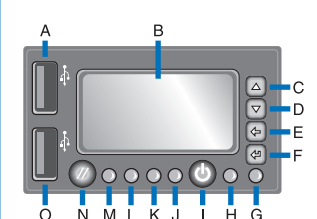
**F. Install Intel® SmaRT Tool (optional):** With the operating system running, insert the Intel® Server Deployment Toolkit 2.0 CD. The Express Installer will autoun. Click Intel® SmaRT Tool at the left side of the screen. Follow the on-screen instructions. For information about Intel® SmaRT Tool, see <http://developer.intel.com/design/servers/smarttool/index.htm>.

## Reference

### Front Panel Controls and Indicators

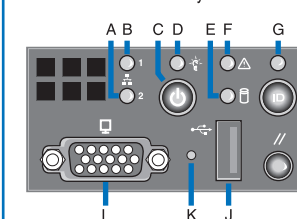
#### Intel® Local Control Panel

- A. USB 2.0 Port  
B. LCD Display  
C. Menu Control Button  
D. Menu Control Button  
E. Menu Control Button  
F. LCD Activity LED  
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 Reset Button  
I. USB  
J. NMI (recessed)  
K. Video



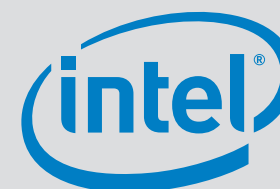
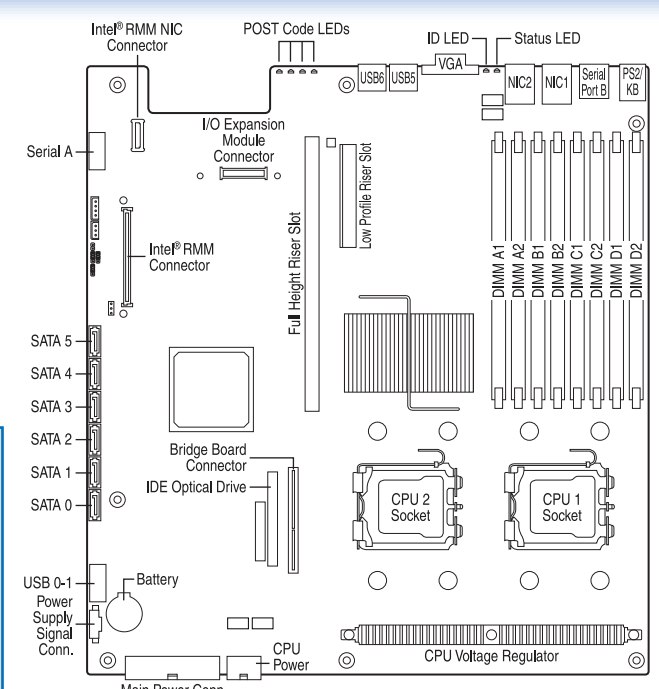
#### Optional Accessories and Order Codes

Tool-less Rail Kit	AXXHERRAIL
Cable Management Arm	AXXRACKCARM
Basic Slide Rail Kit	AXXBASICRAIL
Fixed Bracket Kit	AXXBACKET
Bezel for Standard Control Panel	ADRBZBLACK
Bezel for Intel® Local Control Panel	ADRLCDBEZEL
Slimline CD-ROM Drive	AXXSCD

Slimline DVD-ROM/CD-ROM Drive	AXXDVDCDR
Intel® Local Control Panel	AXXLCPRACK
Dual Gigabit I/O Expansion Module	AXXGBIOMOD
SAS I/O Expansion Module	AXXSASIOMOD
Full Height PCI-X* Riser	ADWPICXR
Intel® Remote Management Module	AXXRMM

### Intel® Server Board S5000PAL Component Layout

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



A complete list of accessories and spares can be found at: [www.intel.com/go/serverbuilder](http://www.intel.com/go/serverbuilder)