

10 Servicing the Hard Disk Drives

- Remove the drive tray by pressing the green button, opening the lever, and pulling out the hard drive/tray assembly.
- Remove four screws securing the drive to the tray and remove drive.
- Install new drive into tray and secure with four screws.
- With the drive tray locking lever in the fully open position, slide the hard drive/tray assembly into the chassis opening until it stops, then close the lever, pressing until it snaps shut.

CAUTION: If you install fewer than six drives, empty drive bays must be occupied by trays with baffles to maintain proper system cooling.

Important Note! If you install fewer than six drives, HDD Bay 0 must be occupied first, then HDD Bay 1, and so on.

11 Installing Hardware RAID5 Components (optional)

Check Battery Connection

- The RAID IBBU has an internal battery power cable. Open the IBBU case lid as shown. If necessary, use a small flat-blade screwdriver to pry open each corner of the lid.
- If the battery power cable is not connected, connect the cable now.

Do not close the lid.

Connect RAID Battery Cable

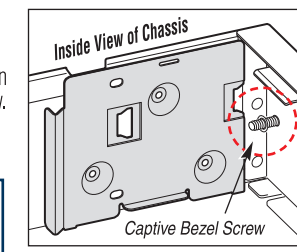
- Lift the battery assembly out of the case and insert the battery cable through the case opening as shown.
- Attach the cable to the battery connector as shown.
- Replace the battery assembly into the case and close and latch the IBBU case lid.

CAUTION: To avoid possible damage to the battery, note the appearance of the cable connector and connect as indicated.

Remove the Bezel

The captive bezel screw also secures the RAID battery when installed.

If you have not already done so, loosen the bezel screw and remove the bezel now. See Step 2 on the front side of this document.



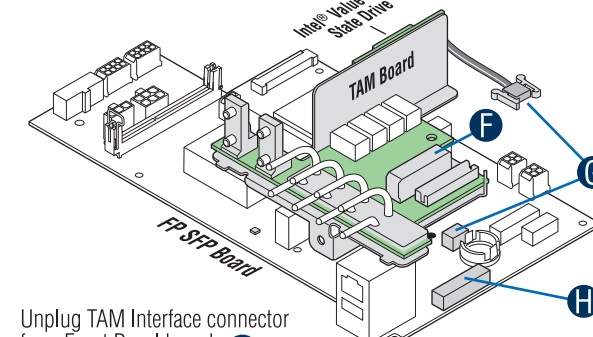
Disconnect the TAM Board

For ease of installation, remove the TAM board before installing the RAID battery.

NOTE: Chassis NOT shown for clarity!

- Unplug Telco Alarms connector from TAM board.
- Disconnect the Intel® Value Solid State Drive Cable from Front Panel board.

Note: This optional accessory component may not be installed.



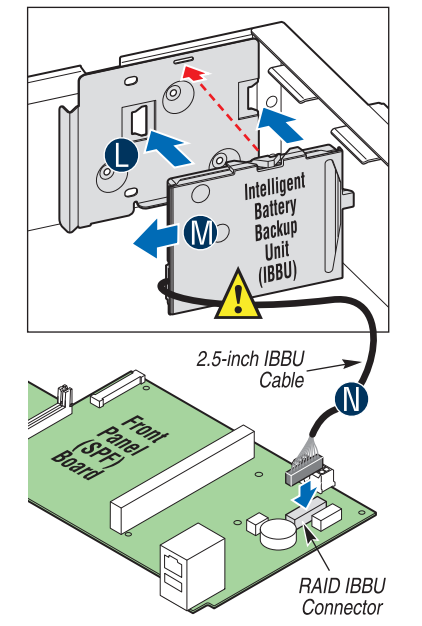
Remove the TAM Board

- Remove the screw securing the TAM board to the Front Panel board standoff.
- Remove the screw securing the TAM board to the chassis front panel.
- To remove the TAM board, slide toward the rear about 1/4-inch to disengage the buttons and lightpipes, then lift.

Install RAID Battery

- The RAID IBBU has two hooks on the underside. Place IBBU on edge and align these hooks with the matching chassis tabs.
- Then slide the IBBU toward the back panel to lock into place. Note: Check that the top tab snaps into the small slot.
- Connect the 2.5-inch IBBU power cable to the front panel board as shown.

Note: You will not use the longer cable.



CAUTION: Route the IBBU power cable flush around the battery edge as shown above to avoid interference with the system fan module. Use cable ties if needed.

Install RAID DIMM and RAID Key

- 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. Using both hands, push down firmly on both sides of the DIMM until it snaps into place and the levers close.
- Install RAID activation key by inserting into RAID key socket as shown. Make sure socket metal clips snap securely over top edge of key.

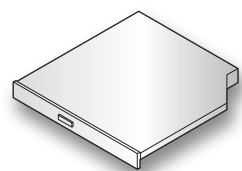
CAUTION: Avoid touching contacts when handling or installing the RAID DIMM.

Finish integration of this component

Re-install the TAM board and the front bezel by reversing the disassembly procedures from sub-step 12 to sub-step 6.

12 Installing an Optical Device (optional)

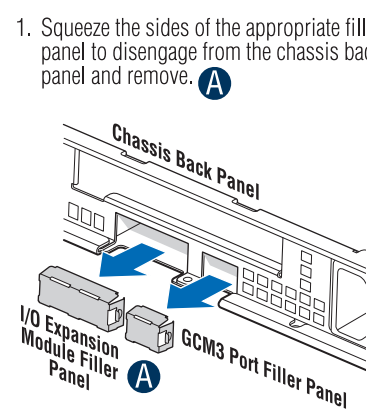
To install an optional optical device, see the Kontron Carrier Grade Server TIGH2U Product Guide on the CD accompanying your system.



13 Installing I/O Expansion Module (optional)

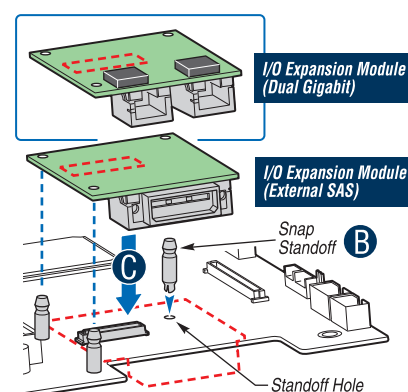
Remove Module Filler Panels

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



Install I/O Expansion Module

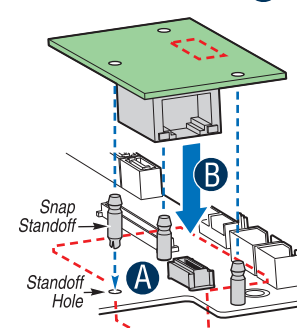
- Squeeze the sides of the appropriate filler panel to disengage from the chassis back panel and remove.
- Snap the three standoffs into the server board first.
- Attach module to the server board connector and matching standoffs.



14 Installing Intel® Remote Management Module 2 (optional)

Install Intel® RMM2 NIC Module

- Snap the three standoffs into the server board first.
- Attach module to the server board connector and matching standoffs.



Install Intel® RMM2 Module

- Insert the standoff into the hole labeled TH4 on the Intel® Remote Management Module 2. The standoff installs on the bottom side of the Intel® Remote Management Module 2.
- Attach the Intel® Remote Management Module 2 to the server board Advanced Server Management Interface connector and snap the standoff into the matching hole in the server board.

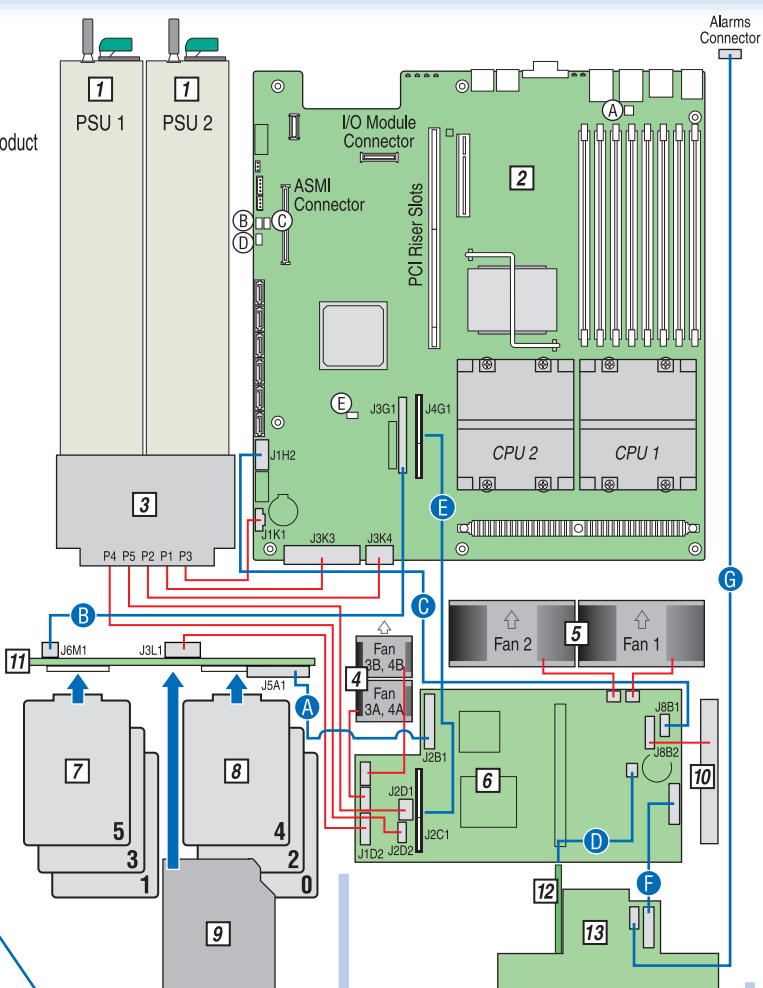
Reference

Server System Cabling and Component Diagram

IMPORTANT NOTE: See your Kontron Carrier Grade Server TIGH2U Product Guide for complete cabling and server board component descriptions.

System Components Legend

- | | |
|---|--|
| 1 Power Supplies | 7 SAS HDD 1, 3, 5 |
| 2 Server Board | 8 SAS HDD 0, 2, 4 |
| 3 Power Distribution Board | 9 Optical Device (optional) |
| 4 40 MM PCI Fans | 10 Intel® RAID Smart Battery (IBBU) (optional) |
| Fans 3A and 3B are under Fans 4A and 4B | 11 SAS Backplane Board |
| 5 System Fan Module | 12 Intel® Value Solid State Drive (optional) |
| 6 Front Panel (SFP) Board | 13 TAM Board |



- #### Connections Legend
- A Flex Cable (80-way)
 - B IDE Signal Cable (44-way)
 - C Front Panel Serial Port Cable (12-way)
 - D Intel® Value Solid State Drive Signal and Power Cable (6-way)
 - E Bridge Board Connection (120-way)
 - F TAM Board Signal Cable (24-way)
 - G Telco Alarms Signal Cable (15-way)

- #### Jumpers Legend
- A J8A3 DCD/DSR serial
 - B J1D2 BIOS Password Clear
 - C J1D1 BMC Force Update
 - D J1D3 CMOS Clear
 - E J3H1 BIOS Bank Select

Front Panel (SFP) Board/TAM Board Connector/Component Layout

- SAS Backplane Power
- PCI Fan Power 1
- PCI Fan Power 2
- SFP Power Conns. (2)
- Bridge Board Connector
- Standby Power Conn.
- Flex Conn.
- Intel® Value Solid State Drive (optional)
- RAID DIMM Socket (optional component)
- System Fan 1 Power
- System Fan 2 Power
- Serial Connector
- RAID BBU Connector (optional component)
- TAM Interface Conn.
- Intel® Value Solid State Drive Connector (optional component)
- RAID Key (optional component)
- TAM Interface Conn.

CAUTIONS: See product documentation for detailed service instructions. Observe normal ESD precautions when installing components. See product documentation for detailed ESD procedures.

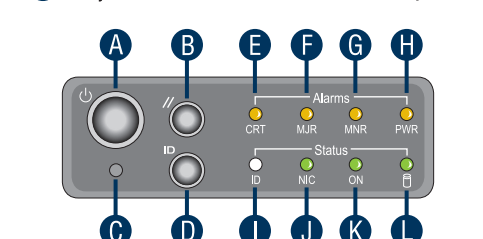
Color Key
— = Power
— = Data

Front Panel Controls and Features (Bezel Removed)

LED	Functional Description of HDD Status LEDs	Indicated Status
Activity	Steady Green	Drive Ready for Access
	Blinking Green	Drive Being Accessed (active)
	Off (not lit)	No Drive Installed
Fault	Steady Amber	Fault
	Off (not lit)	Normal

Control Panel

- | | |
|----------------------|---------------------|
| A Power Switch | G Minor Alarm LED |
| B Reset Switch | H Power Alarm LED |
| C NMI Switch | I System ID LED |
| D ID Switch | J NIC LED |
| E Critical Alarm LED | K Main Power LED |
| F Major Alarm LED | L Disk Activity LED |



LED	Functional Description of Status LEDs	Indicated Status
E	Amber or Red	Critical System Fault
F	Amber or Red	Major System Fault
G	Amber	Minor System Fault
H	Amber	Power System Fault
I	White	System Identification
J	Green	NIC Activity
K	Green	DC Power Available
L	Green	HDD Activity
L	Amber	HDD Fault

Back Panel Controls and Features

- A Low-profile Add-in Card Bracket
- B Full-height Add-in Card Bracket
- C Ground Studs for DC Input (2)
- D Power Supply Filler Panel or Optional Power Supply #2
- E Power Supply #1 (hot-swappable if two power supplies are installed)
- F GCM3 Port or Filler Panel
- G I/O Expansion Module or Filler Panel
- H USB Port 0 and USB Port 1
- I Video Connector
- J RJ45 NIC 2 Connector
- K RJ45 NIC 1 Connector
- L RJ45 Serial Port (COM2/Serial B)
- M PS/2 Mouse/Keyboard Connectors
- N PS Status LED
- O Telco Alarms Connector