

### 11 Installing a SysCon Board (Optional)

- Using the shorter 4-inch SysCon cable in the kit, plug one end into the SysCon board as shown. **A**  
*Note that cable ends are identical.*
- Secure the SysCon board by attaching it to the PCI fan bracket with the two black push rivets in the kit. **B**
- Plug the other end of the SysCon cable into the connector on the front panel (EFP) board as shown. **C**

### 12 Installing a 4xGbE LAN Card for Front Panel Access (Optional)

Steps 12 through 16

- Remove the PCI riser assembly from the chassis and lay it upside down. See **5**
- Remove add-in card filler panel. **A**
- Connect four cables to LAN card. **B**  
*Note color coding.*
- Connect LED ribbon cable. **C**  
*Note red stripe.*
- Install LAN card into PCI Riser assembly slot. **E**
- Secure LAN card to PCI Riser assembly with screw as shown. **F**

*Note: Follow steps exactly for ease of installation.*

### 13 Removing the Front Panel 4xGbE Filler Panel

If installing a LAN card for the first time, remove the filler panel:

- Remove both screws as shown above. **A**
- Rotate the bottom edge of filler panel outward, lower filler panel slightly to disengage the retention tabs at the top, and remove. **B**

### 14 Routing the cables within the System

- Remove the factory installed PCI support bracket by removing two screws as shown at right. Replace with the separately-orderable PCI support bracket with a cable opening. **A**
- Install the PCI riser assembly back into the chassis. See **5**
- Visually check that all cables exit the LAN card correctly as installed in Step 12, and that the cables go through the cable opening as shown. **B**

*Note: Power supply modules and other components not shown for clarity.*

### 15 Attaching the Escutcheon

- Insert the retention tabs located at the top of the escutcheon into the front panel notches, then rotate bottom edge toward chassis. **A**
- Attach the escutcheon with two screws as shown. **B**

### 16 Installing the GbE Connector in the Front Panel Escutcheon

• Front panel sheet metal NOT SHOWN for clarity.

- Insert connector from back side of front panel as shown. *Note that when viewed from the front, each port is assigned a letter. Install into escutcheon with letters reading as shown at right. DO NOT install upside down.* **A**
- Attach the GbE connector with two screws using a small Phillips screwdriver. **B**

### 17 Installing an Optical Device (Optional)

- Remove the two screws on the front panel and remove the filler panel from the chassis. **A**
- Insert the interposer board connector into the port on the back of the optical drive. **B**
- Secure the interposer board connection with two screws, as shown. **C**
- Place the optical device into the tray. **D**
- Insert the device/tray/interposer board assembly into the chassis opening and secure with the blue captive thumbscrew. **E**
- Connect the IDE cable (end labeled "Drive") to the interposer board. **F**
- Connect the power cable to the interposer board. **G**

See the System Cabling Diagram at left below for completing cable connections to the front panel board and server board.

### 18 Installing Intel® Remote Management Modules (Optional)

**Remove Module Filler Panel**

Prior to installing the Intel® RMM Modules, you must remove the matching module filler panel.

- Squeeze the sides of the filler panel to disengage from the chassis back panel and remove. **A**

**Install Intel® RMM NIC Module**

- Snap the two standoffs into the server board first. **A**
- Attach module to the server board connector and matching standoffs. **B**

**Install Intel® RMM Module**

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

## Reference

### Server System Cabling and Component Diagram

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

**Cable Legend**  
█ BLUE indicates Data Cable  
█ RED indicates Power Cable

**Power Distribution Board/Ethernet Front Panel (EFP) Board Connector/Component Layout**

- PDB Power Harness
- SFP Power Conn.
- Flex Cable Conn.
- SATA HDD 1
- Fan 3 Power
- Fan 2 Power
- Fan 1 Power
- SATA HDD Power
- SATA HDD 0
- Optical Drive Power
- SysCon Board Connector
- Fan 4 Power

**System Components**

- Power Supplies
- Server Board
- Power Distribution Board (PDB)
- Flex Cable
- Fan Module
- Ethernet Front Panel (EFP) Board
- PCI Fan
- Optical Device
- SATA HDD 1
- SATA HDD 0

**Connections**

- Power Supply/Power Dist. Board (PDB) Interconnect
- Power Dist. Board (PDB) to Server Board Interconnect
- Flex Cable Interconnect
- Optical Device Data
- Fan Module Power
- SATA HDD Power
- Optical Device Power
- SATA HDD Data
- Power Dist. Board (PDB) to Ethernet Front Panel (EFP) Board Interconnect
- PCI Fan Power

**IMPORTANT NOTE:** See your Intel® IP Network Server NSW1U Product Guide for complete cabling and server board component descriptions.

### Front Panel Controls and Features (Bezel Removed)

Anti-static connection is available only with the bezel removed.

COM2/Serial B serial port connector RJ45

Optical Device (optional) or Filler Panel (shown here)

USB Port 2, 4xGbE NIC Ports, Control Panel, Hard Disk Drive Bay 1, Hard Disk Drive Bay 0

**Control Panel**

- A Power LED
- B Status LED
- C Disk Activity LED
- D NIC Activity LED
- E ID LED
- F Power Switch
- G Reset Switch
- H NMI Switch
- I ID Switch

LED	Functional Description of Status LEDs	Indicated Status
A	Steady Green	Power On
	Off (not lit)	Power Off or Disrupted
	Steady Green	Standby or Ready
B	Blinking Green	Degraded Operation
	Steady Amber	Fatal Fault Condition
C	Green	Drive Activity
D	Green	NIC Activity
	Off (not lit)	No NIC Activity
E	Blue/Off	Toggled by ID Switch

### Back Panel Controls and Features

AC PS, DC PS

- A COM2/Serial B Serial Port Connector (RJ45)
- B NIC Port 3 Connector
- C NIC Port 2 Connector
- D PCI Cage Thumbscrew
- E PCI-X\*/PCIe\* I/O Bracket or Filler Panel (shown)
- F Power Supply #1 (hot-swappable)
- G Power Supply #2 (optional) (hot-swappable)
- H PS/2 Mouse/Keyboard Connectors
- I Video Connector
- J USB 0
- K USB 1
- L NIC Port 4 Connector
- M NIC Port 1 Connector
- N Remote Management Module (RMM) Connector (optional) or Filler Panel
- O Ground Studs for DC Input (2)
- P PS Status LED
- Q Handle to remove PS
- R AC Power IN
- S DC Power IN

### Accessories and Order Codes NSW1U-B

NSW1U/TIGW1U SysCon Board	TMWYSYCON01W
NSW1U/TIGW1U PCI Express* Riser	TMWPCIESSR01W
NSW1U/TIGW1U PCI-X* Riser	TMWPCIXRSR01W
NSW1U/TIGW1U AC Power Supply	TMWACPSU01W
NSW1U/TIGW1U DC Power Supply	TMWDCPSU01W
NSW1U/TIGW1U Power Distribution Board	TMWPD01W
NSW1U Ethernet Front Panel - Front NIC with Bypass	NSWBYPSSBRD01W
NSW1U/TIGW1U CPU Heatsink	TMWHSNK01W
NSW1U Fanset Upgrade/Spare	NSWFANSET01W
NSW1U/TIGW1U System Cables (flex CD-ROM power and signal, SATA signal) Spare	TMWCBL01W
NSW1U/TIGW1U CD-ROM Carrier; i/f Board	TMWCDRMC01W
NSW1U/TIGW1U CD-ROM Filler	NSWCDFILL01W
NSW1U SATA HDD Carrier	NSWSATAHDD01W
Intel(R) Remote Management Module 2 (RMM2)	AXXRM2
NSW1U-F Bezel - Front NIC	NSWFBL02W
NSW1U Baseboard - Rear NIC	NSWBSBRDR01W
NSW1U/TIGW1U Cable Management Bracket	NSWCBLBRK01W
NSW1U-F/NSW1U-B NIC Cable Kit	NSWDBCBL01W
Intel® PRO/1000 PT Quad Port Bypass Server Adapter	EXP19014PT
Intel® PRO/1000 PT Quad Port Bypass Server Adapter (NIC in front)	EXP19024PT

A complete list of accessories and spares can be found at: <http://support.intel.com/support/telecom/computeboards/nsw1u/>

