



# Intel® IP Network Server NSI2U Hardware Reference Guide

Thank you for buying an Intel® Server System. The following information will help you use and maintain your Intel® IP Network Server NSI2U.

This Guide is for technically qualified service persons. Expanded installation instructions and complete product information are available in the Intel® IP Network Server NSI2U User Guide.

These guides and other supporting documents are located on the web at <http://support.intel.com/support/motherboards/server/nsi2u/manual.htm>

If you are not familiar with ESD (Electrostatic Discharge) procedures used during system integration, please go to the web at <http://support.intel.com/support/motherboards/server/nsi2u/manual.htm>

## Warning

Read all caution and safety statements in this document before performing any of the instructions. Also see the *Intel® Server Board and Server Chassis Safety Information* document at: <http://support.intel.com/support/motherboards/server/safecert.htm> for complete safety information.

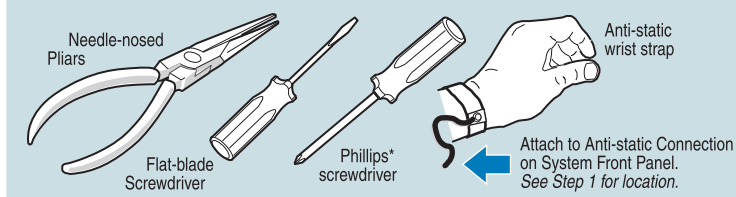
## Warning

Installation and service of this product to be performed only by qualified service personnel to avoid risk of injury from electrical shock or energy hazard.

## Caution

Observe normal ESD (Electrostatic Discharge) procedures during system integration to avoid possible damage to server board and/or other components.

## Tools Required



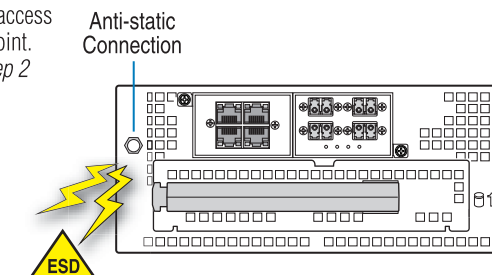
## Minimum Hardware Requirements

To avoid integration difficulties and possible board damage, your system must meet the following minimum requirements:

- Processor: Minimum of one Intel® Xeon™ processor with 2 MB cache support.
- Memory: Minimum of two 256 MB (512 MB), DDR2-400/533-compliant Registered ECC SDRAM 240-pin gold DIMMs.
- AC Power: 600W with 1.2A of 5V standby current.

## 1 Ground Strap Attachment Location

You must remove the bezel to access the ground strap attachment point. If the bezel is installed, see Step 2 at right. Attach ground strap to anti-static connection point.



## 2 Remove the Bezel and Cable Management Arm

- Remove left-side screw to release the cable management arm.
- Remove right-side screw to release the bezel and remove.

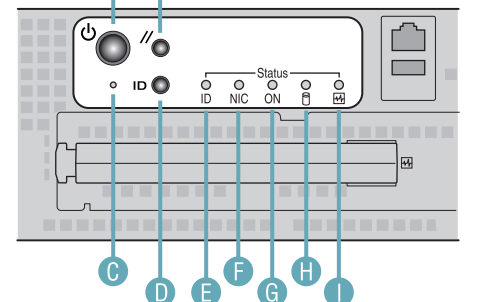
## 3 Removing the Top Cover

- Remove the shipping screw.
- Push **BLUE** locking button, slide cover rearward, then lift up and remove.

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

## 5 Front Panel Controls and Features

- A Power Switch
- B Reset Switch
- C NMI Switch
- D ID Switch
- E ID LED
- F NIC Activity LED
- G Status LED
- H HDD1 Activity LED
- I HDD0 Activity LED

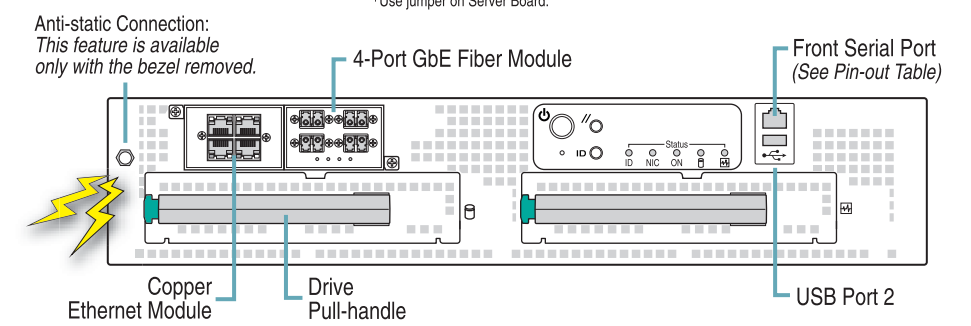


LED	Functional Description of Status LEDs when Lit
G	Power ON LED (Green)
H	Disk Activity (All Hard Drives) (Activity = Green, Fault = Red)
I	System Status LED (No Fault = Green, Fault = Red)

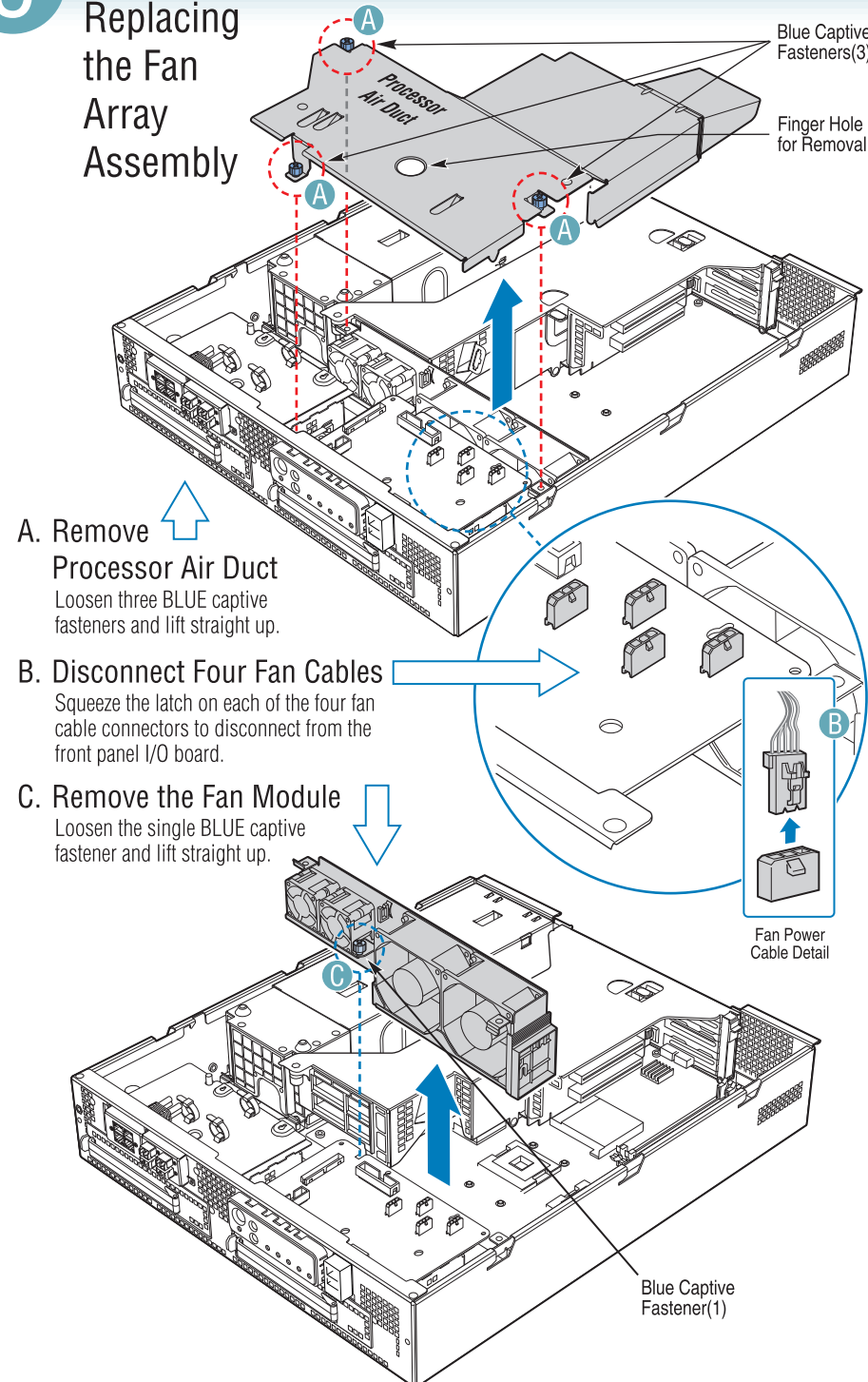
### Serial Port Connector Pin-out

Pin	Description	Pin	Description
1	RTS	5	EMP_INUSE_L
2	DTR	6	RXD
3	TXD	7	DSR/DCD <sup>1</sup>
4	GND	8	CTS

<sup>1</sup>Use jumper on Server Board.



## 8 Replacing the Fan Array Assembly



**A. Remove Processor Air Duct**  
Loosen three BLUE captive fasteners and lift straight up.

**B. Disconnect Four Fan Cables**  
Squeeze the latch on each of the four fan cable connectors to disconnect from the front panel I/O board.

**C. Remove the Fan Module**  
Loosen the single BLUE captive fastener and lift straight up.

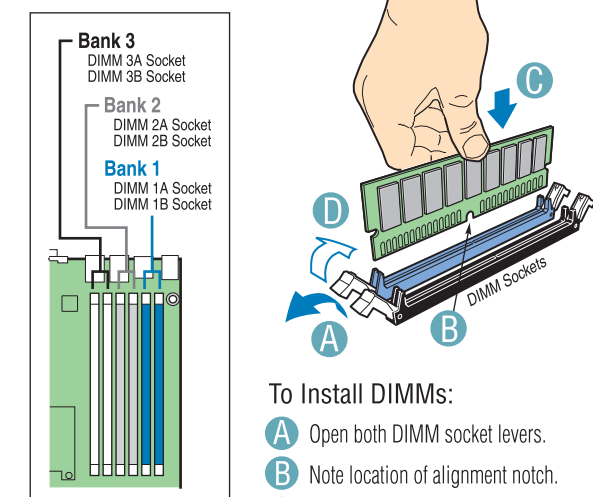
## 7 Installing Memory

**Memory Type:** Minimum of two 256 MB, DDR2-400/533 compliant Registered ECC or non-ECC, SPD SDRAM 240-pin gold DIMMs.

**Notes and Cautions:** Bank 1 (DIMM1A and DIMM1B) must be fully populated before populating Bank 2 (DIMM2A and DIMM2B). Memory must be populated in pairs.

The DIMM size, speed and vendor must be the same within a bank. However, the DIMM size can vary between banks. For example, Bank 1 can use two 256 MB DIMMs and Bank 2 can use two 512 MB DIMMs.

*Note: For additional memory configurations, see the User Guide on the CD that accompanied your Intel® IP Network Server NSI2U.*



### To Install DIMMs:

- 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.
- Push down firmly on the DIMM until it snaps into place and both levers close.

Observe normal ESD precautions when installing DIMMs.

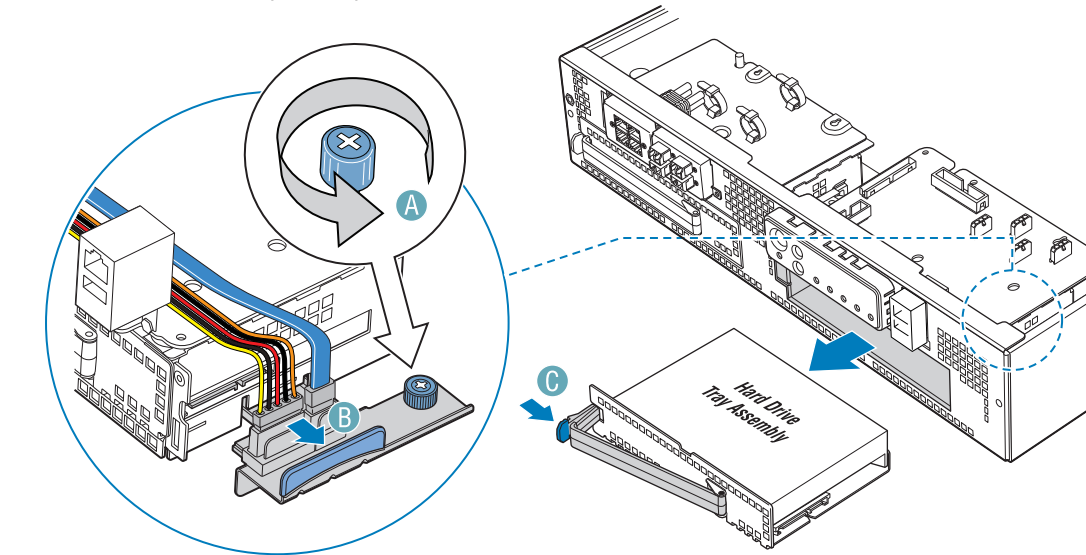
## 6 Servicing the Hard Disk Drives

**Remove the Bezel and Top Cover**  
See Steps 2 and 3 above...

### Remove the Hard Drive Tray

**CAUTION:** Hard disk drives are **NOT** hot-swap. See your Intel® IP Network Server NSI2U User Guide for detailed hard disk drive service procedures.

- Unscrew the **BLUE** thumbscrew.
- Push on the **BLUE** touchpoint to disengage the SATA connector bracket from the SATA drive. *Note: It is not necessary to disconnect SATA data and power cables to remove the drive carrier from the chassis.*
- Press the **BLUE** tab on the drive latch, pull handle outward to disengage drive tray, and slide hard drive tray assembly out of chassis.



### Remove the Hard Drive

- Remove four screws securing drive to hard drive tray.
- Remove drive and insert new drive. Secure new drive with four screws.
- Re-insert drive tray assembly into chassis, making sure **BLUE** latch handle locks into place.
- Engage SATA connector bracket by pressing the **BLUE** touchpoint toward the drive connectors.