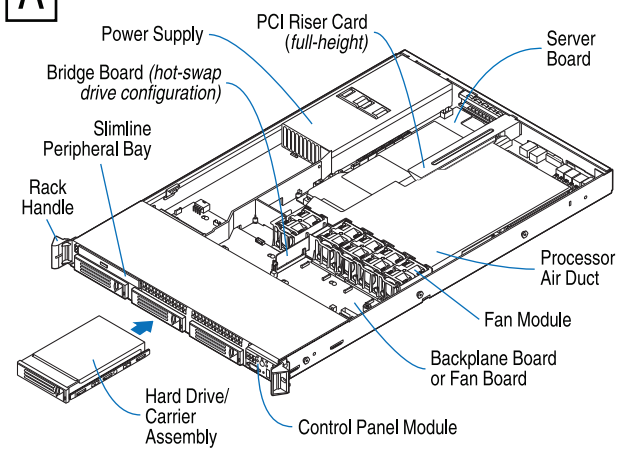
System Quick Reference

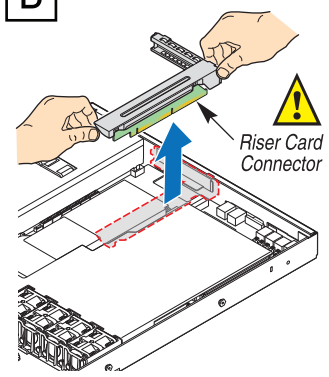
IMPORTANT NOTE: *Please read all Warnings and Cautions before servicing this system!*

Warning! Prior to performing the listed procedures, you must power down the system and remove the AC power cord.

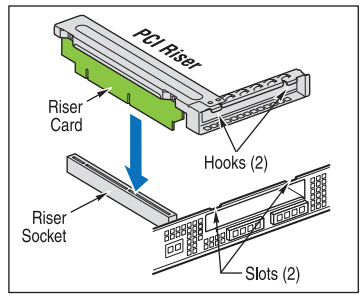
A Major Server System Components



B PCI Add-in Card Riser Assembly Removal/Installation



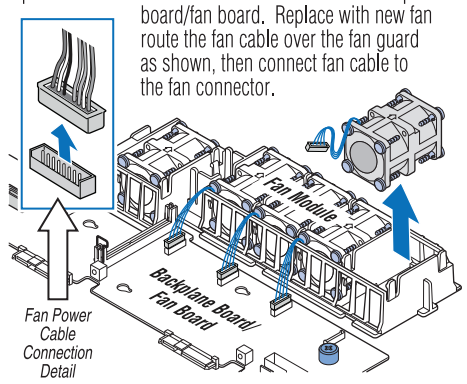
To remove the riser assembly:
Grasp the riser with both hands and pull up to release riser assembly. *Lift straight up.*



To install the riser assembly:
Align the two hooks on the riser assembly with the slots at the back of the chassis. Press down uniformly until the two hooks engage the chassis back panel slots. The riser card will plug into the matching socket on the server board. Ensure the riser card is fully seated in the socket.

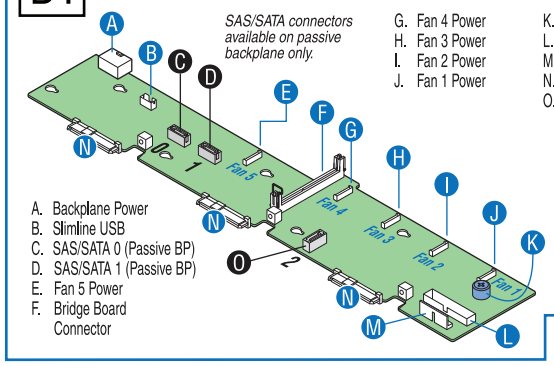
C Fan Replacement

To remove a fan: Remove the PCI riser assembly and processor air duct. Disconnect fan cable from backplane board/fan board. Replace with new fan route the fan cable over the fan guard as shown, then connect fan cable to the fan connector.



D1 SAS/SATA Backplane Diagram

Hot-swap drive system only, for fixed drive system...go to step D2

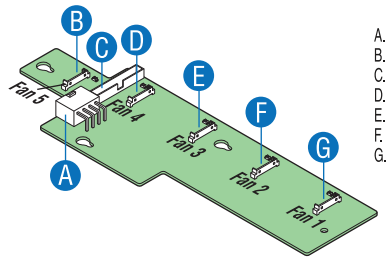


A. Backplane Power
B. Slimline USB
C. SAS/SATA 0 (Passive BP)
D. SAS/SATA 1 (Passive BP)
E. Fan 5 Power
F. Bridge Board Connector
G. Fan 4 Power
H. Fan 3 Power
I. Fan 2 Power
J. Fan 1 Power
K. Thumbscrew
L. Control Panel Data
M. Control Panel USB
N. HDD Connectors
O. SAS/SATA 2 (Passive BP)

CAUTION
Drive carriers must be removed before removing the backplane.

D2 Fan Board Diagram

Fixed drive system only, for Hot-swap drive system ... go to step D1



A. Fan Board Power
B. Fan 5 Power
C. Fan Control Data
D. Fan 4 Power
E. Fan 3 Power
F. Fan 2 Power
G. Fan 1 Power

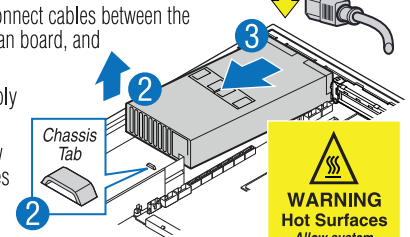
Warning! Top cover must be in place when removing and installing hard drives and when system is powered ON.

E Power Supply Replacement

To remove the power supply:

1. **Hot-swap drive system**: Disconnect cables between the power supply, server board and the backplane.
   Fixed drive system: Disconnect cables between the power supply, server board, fan board, and the hard disk drives.
2. Lift up on back of power supply slightly to clear chassis tab.
3. Slide in the direction of arrow until power supply disengages from chassis back panel and remove.
4. Install new power supply, reconnect all power cables disconnected in step 1 above.

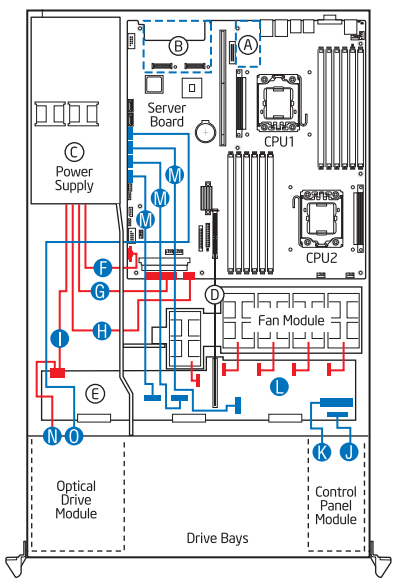
CAUTION: Disconnect AC power cord before servicing.



WARNING
Hot Surfaces
Allow system components to cool before touching

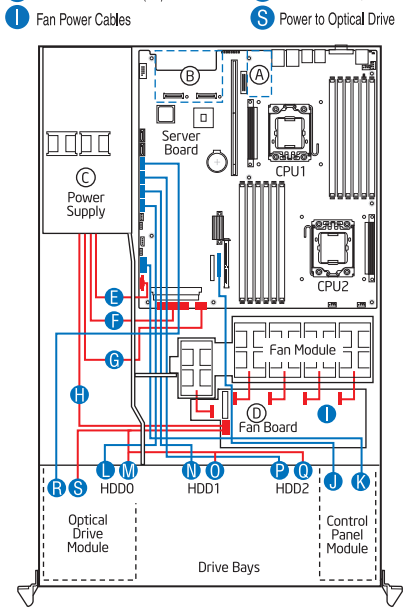
F1 Hot-swap System Cabling Diagram

A. Intel® Remote Management Module 3 *(optional)*
B. I/O Module *(optional)*
C. Power Supply
D. Bridge Board
E. Backplane Board *(passive shown)*
F. Power to Server Board *(Aux. - P4)*
G. Power to Server Board *(Main - P1)*
H. Power to Server Board *(CPU - P2)*
I. Power to Backplane Board (P3)
J. Control Panel USB
K. Control Panel Data
L. Fan Power Cables
M. SATA Data to HDD 0, 1, 2
N. Power to Optical Drive
O. SATA Data to Optical Drive



F2 Fixed System Cabling Diagram

A. Intel® Remote Management Module 3 *(optional)*
B. I/O Module *(optional)*
C. Power Supply
D. Fan Board
E. Power to Server Board *(Aux. - P4)*
F. Power to Server Board *(Main - P1)*
G. Power to Server Board *(CPU - P2)*
H. Power to Fan Board (P3)
I. Fan Power Cables
J. Control Panel Data
K. Control Panel USB
L. SATA Data to Fixed HDD 0
M. Power to Fixed HDD 0
N. SATA Data to Fixed HDD 1
O. Power to Fixed HDD 1
P. SATA Data to Fixed HDD 2
Q. Power to Fixed HDD 2
R. SATA Data to Optical Drive
S. Power to Optical Drive

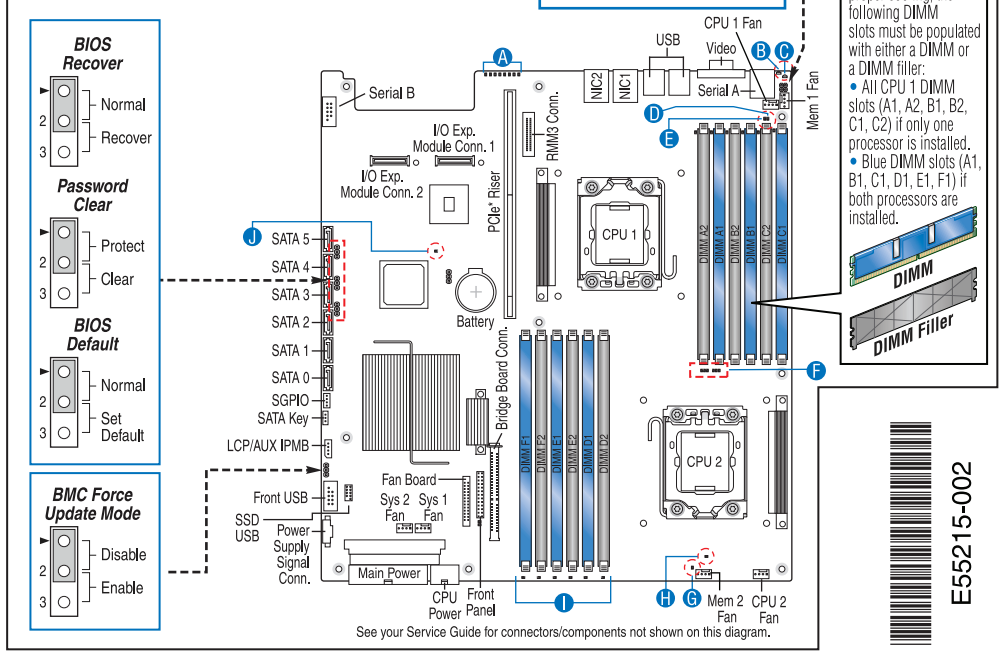


Server Board Configuration Diagram

CAUTION Danger of explosion if battery is replaced incorrectly. The lithium battery in the real-time clock must be replaced with the same or equivalent type part. Contact your service representative to obtain a qualified replacement part. Dispose of used parts in accordance with local regulations. **DO NOT dispose of in fire.**

Fault LED Legend

A. POST Code LEDs
B. ID LED
C. Status LED
D. Mem 1 Fan Fault
E. CPU 1 Fan Fault
F. CPU 1 DIMM Fault
G. CPU 2 Fan Fault
H. Mem 2 Fan Fault
I. CPU 2 DIMM Fault
J. 5V Standby



See your Service Guide for connectors/components not shown on this diagram.

E55215-002