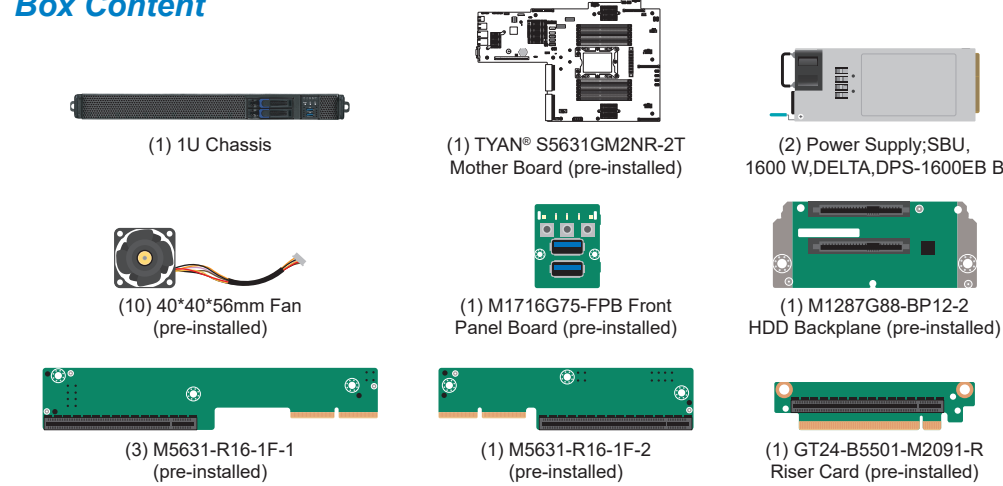


1 General Information

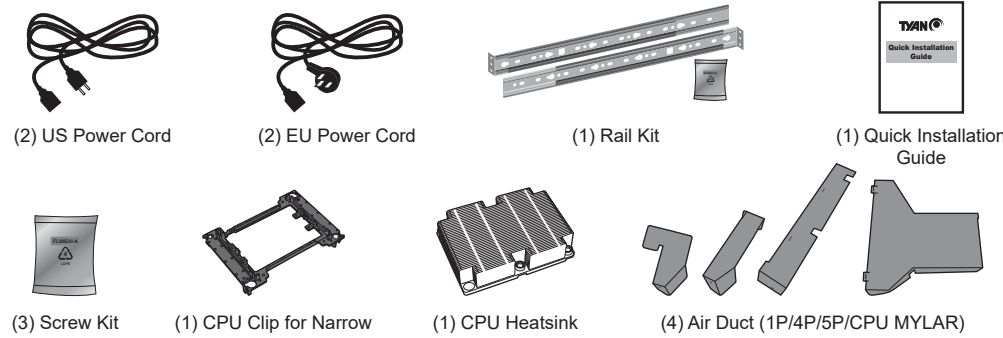
Read Me First

1. The Barebone User's Manual is available for download from our Web site at <http://www.tyan.com>. Make sure to read all precautions and instructions before you start installing the server system.
2. Refer all servicing to qualified personnel to avoid the risk of damage to the server system.
3. Exercise normal ESD (Electrostatic Discharge) procedures during system integration. TYAN/MiTAC recommends wearing gloves and an anti-static wrist strap to avoid possible damage to the equipment.
4. Current processor socket design places the pins on the motherboard instead of the processor itself. Exercise caution when installing the processors as the manufacturer's warranty does not cover damage inflicted upon the motherboard, including damage to the CPU sockets.

Box Content



Accessory Kit



Required Hardware Components

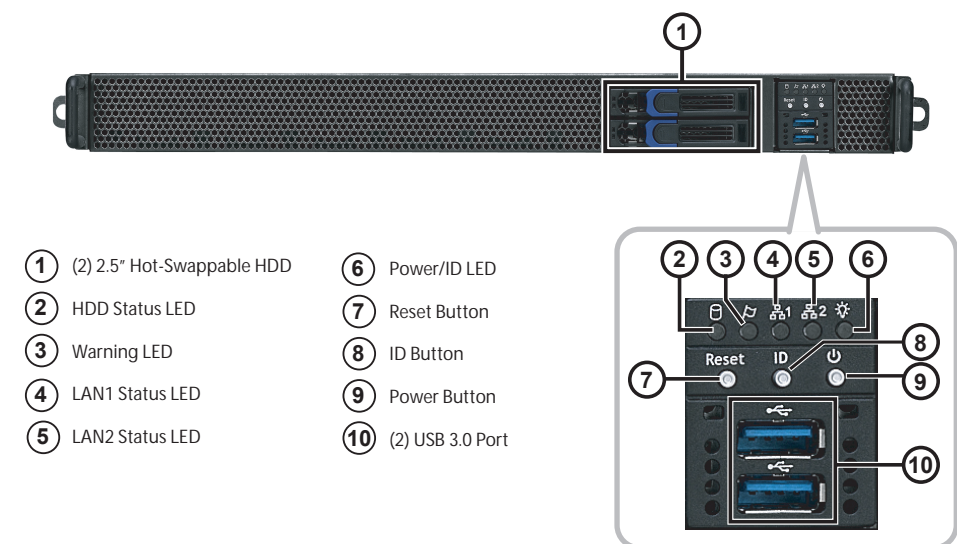
- Minimum Hardware Requirements**
- To avoid integration difficulties and possible board damage, your system must meet the following minimum requirements:
- Processor: Intel® Xeon® Scalable Processor Family
  - Memory: DDR-4 up to 2666 MHz R-DIMM/LR-DIMM
  - Hard Disk Drives: 2.5" SATA/SAS HDD
  - Rack Mount Kit: Standard 19" equipment rack
- NOTE:** The updated hardware requirements of the system please refer to the barebones user's manual on our website at [www.tyan.com](http://www.tyan.com)

Tools Required

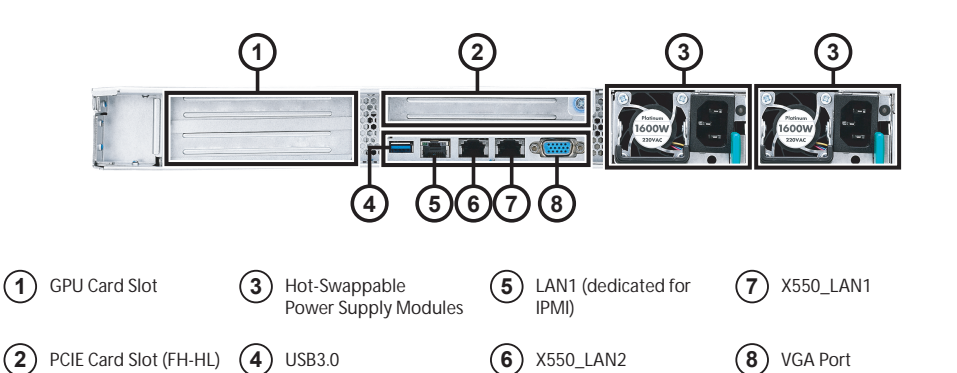


2 About the Product

System Front View



System Rear View

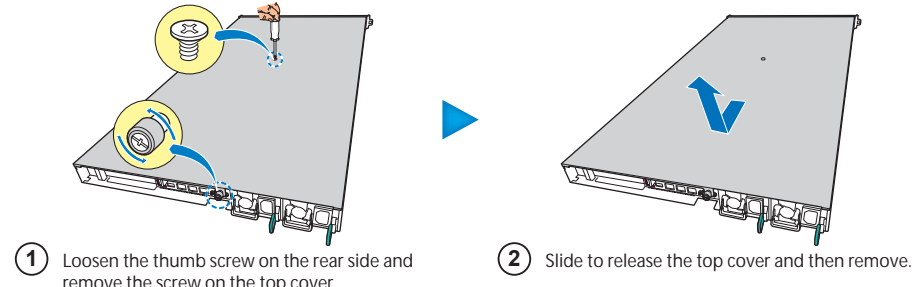


4 System Installation

Open the Chassis

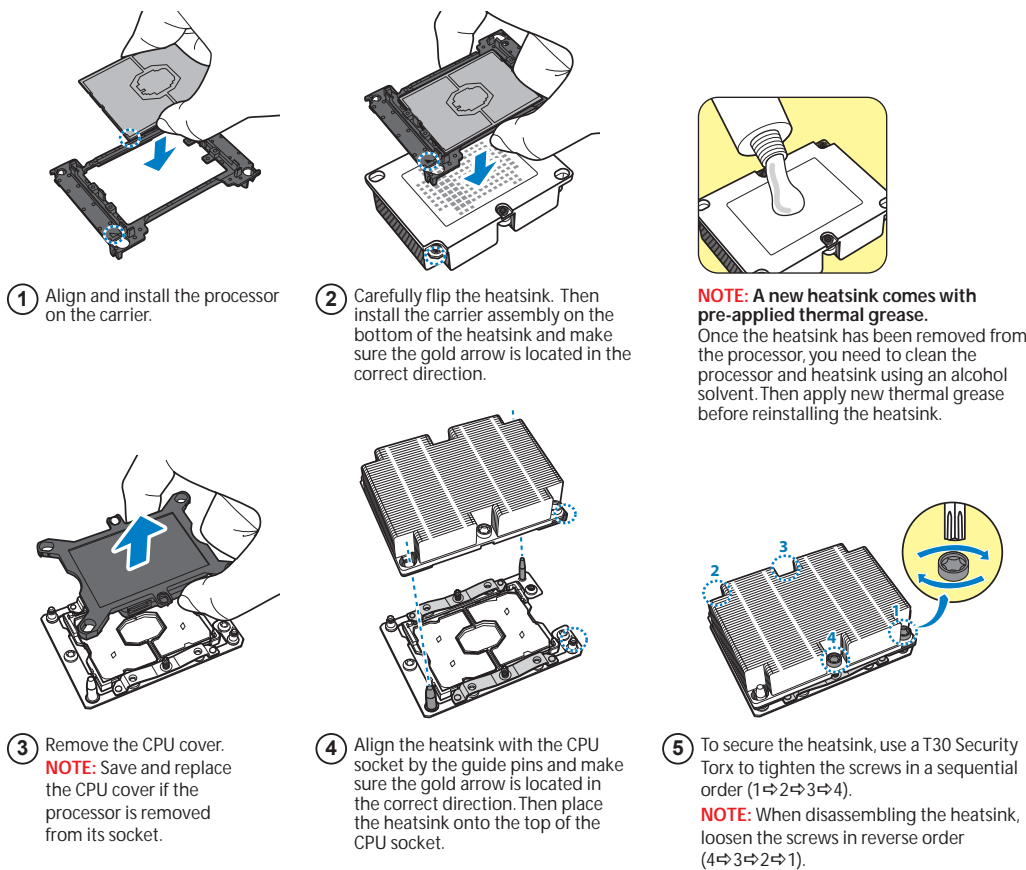
Preparing the Chassis

Read normal ESD (Electrostatic Discharge) procedures. Place your TYAN® Server Chassis on a flat anti-static surface to perform the following integration procedures. Read ESD procedures before reaching inside to install components.

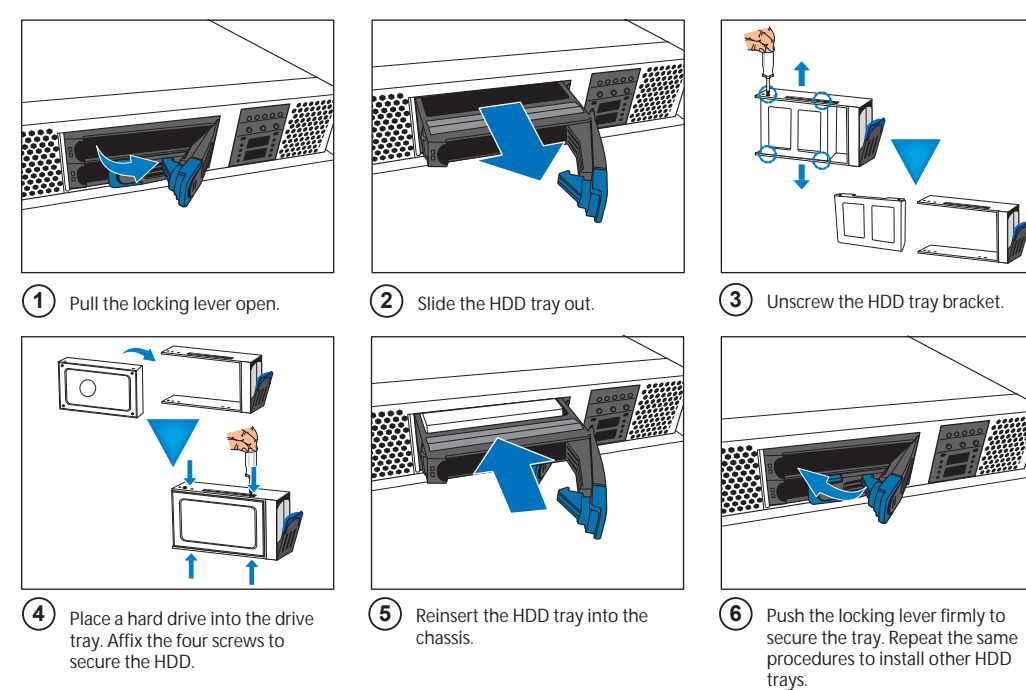


5 System Installation

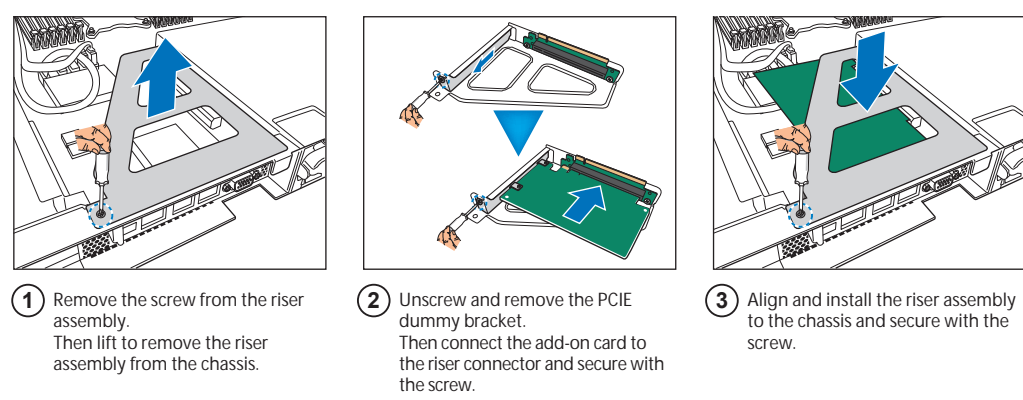
Install the Processor



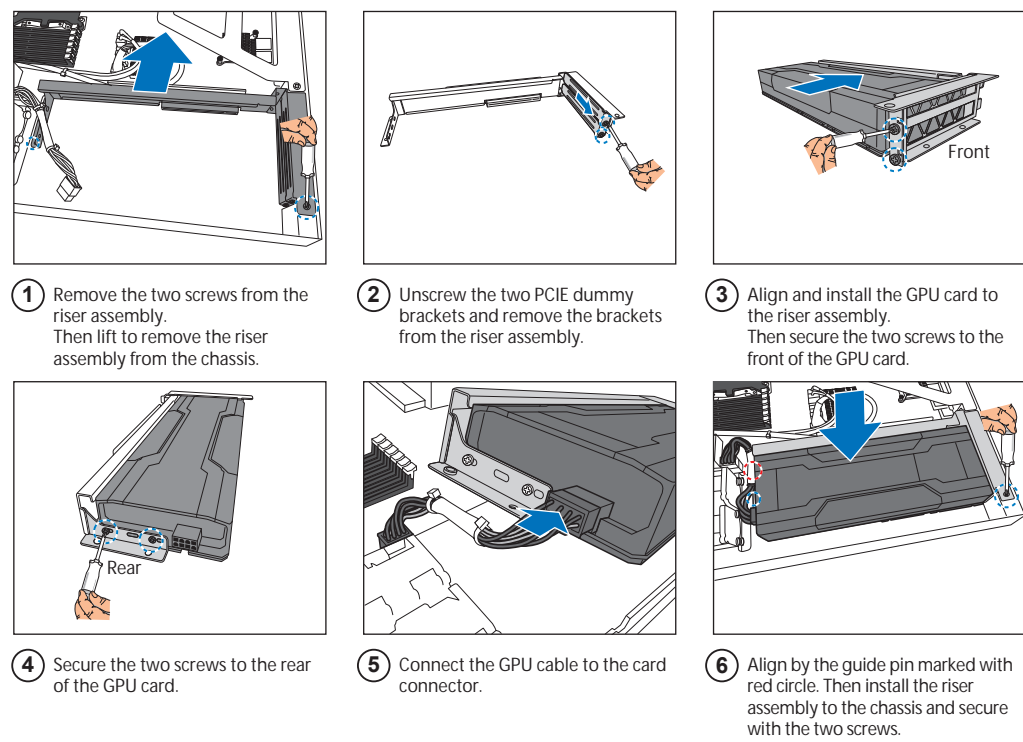
Install Front 2.5" Hard Disk Drives



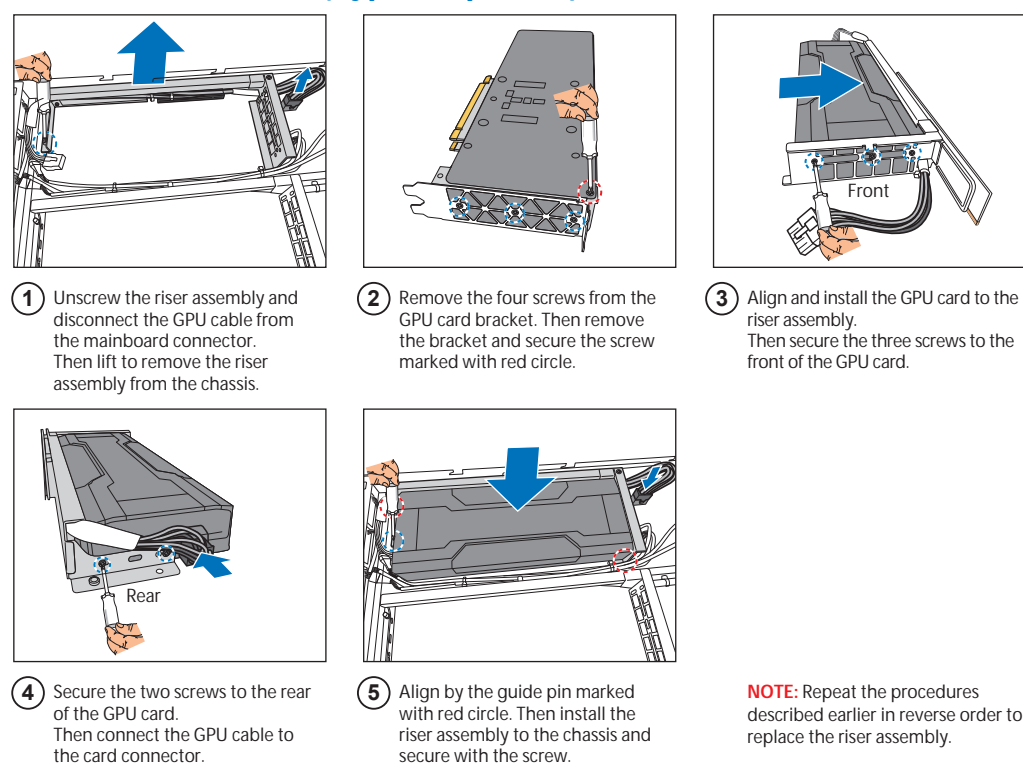
Install the Add-On Card (Optional)



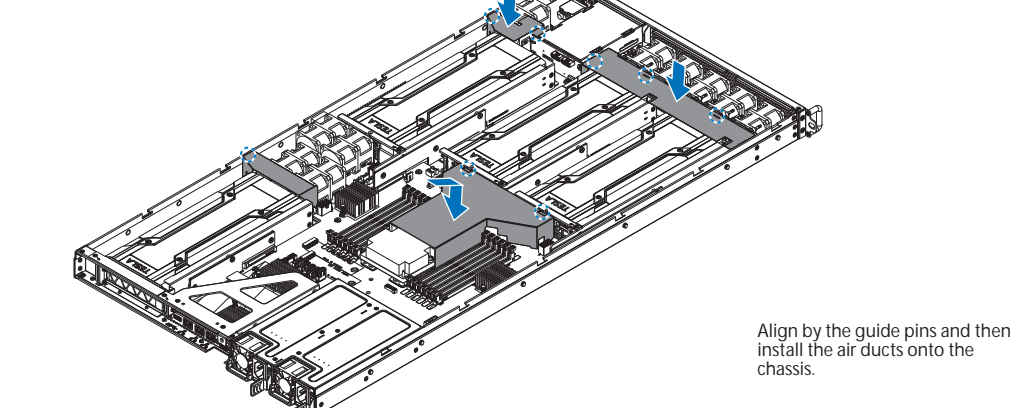
Install the GPU Card (Type1, Optional)



Install the GPU Card (Type2, Optional)

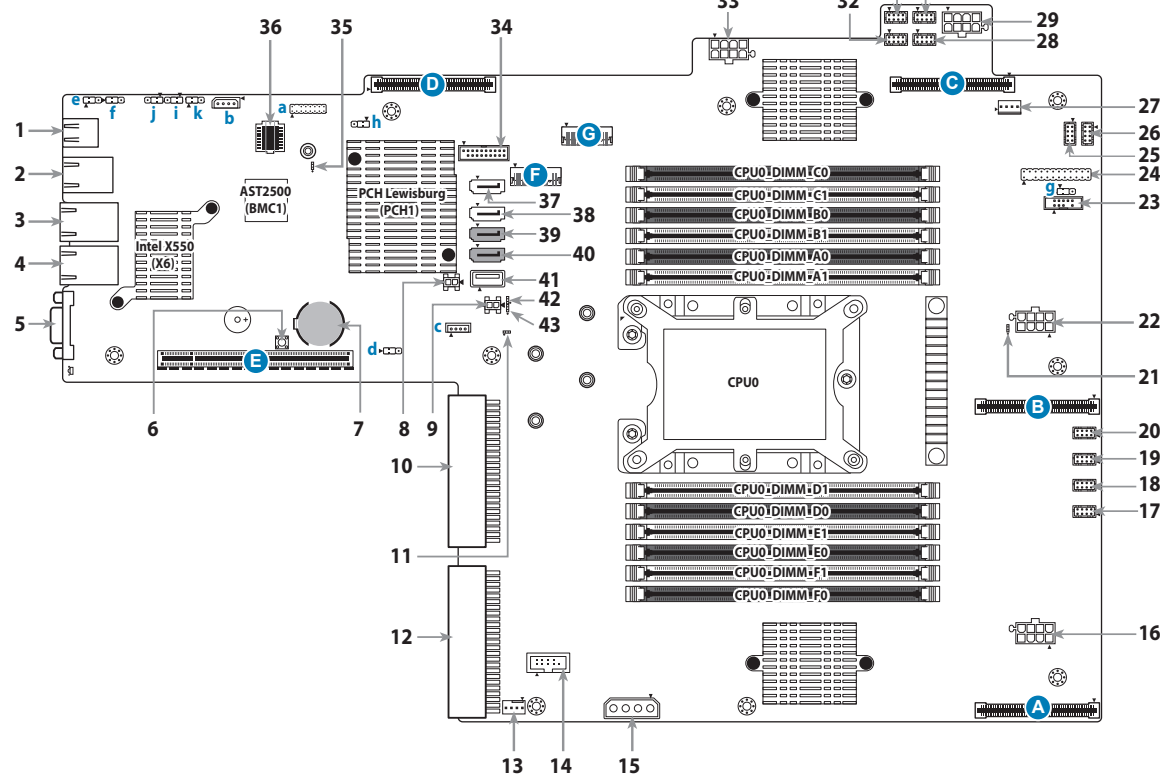


Install the Air Duct



3 Motherboard Placement

Motherboard Placement



CONNECTORS

1. USB 3.0 Port (J3)
2. RJ45 LAN Port (LAN1)
3. RJ45 LAN Port #1 (X550\_LAN2)
4. RJ45 LAN Port #1 (X550\_LAN1)
5. VGA Port (VGA1)
6. Clear CMOS Button (CLEAR\_BTN1)
7. Battery Socket/Battery (CR1/BT1)
8. 2-PIN Power Connector for SATA DOM (DOM\_SV\_PW2)
9. 2-PIN Power Connector for SATA DOM (DOM\_SV\_PW1)
10. 50-PIN Power Card Edge (PSU1)
11. PCH PWOK LED (PCH\_PWOK\_LED1)
12. 50-PIN Power Card Edge (PSU0)
13. CPU0 FAN (CPU0\_FAN\_1)
14. COM Header (COM1)
15. 4-PIN Power Connector (PWR1)
16. 8-PIN Power Connector for GPU Card (PE\_PW4)
17. SYS\_FAN\_6 (FAN6)
18. SYS\_FAN\_5 (FAN5)
19. SYS\_FAN\_4 (FAN4)
20. SYS\_FAN\_3 (FAN3)
21. CPU0 PWOK LED (P0\_PG\_LED1)
22. 8-PIN Power Connector for GPU Card (PE\_PW1)
23. PCH SATA SGPIO Header for HD BP (SSATA\_SGPIO1)

SLOTS

- | Label | Description                               |
|-------|---|
| A     | 120Pin Mini-PCIe Slot For GPU Card (J113) |
| B     | 120Pin Mini-PCIe Slot For GPU Card (J112) |
| C     | 120Pin Mini-PCIe Slot For GPU Card (J115) |
| D     | 120Pin Mini-PCIe Slot For GPU Card (J114) |
| E     | 164Pin PCIe16 Slot (J5)                   |
| F     | 75Pin M.2 PCIe4 Mini Card edge (M2_1)     |
| G     | 75Pin M.2 PCIe4 Mini Card edge (M2_2)     |

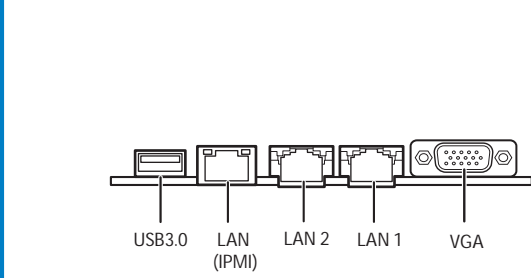
24. Front Panel Header (FPIO\_1)
25. SYS\_FAN\_2 (FAN2)
26. SYS\_FAN\_1 (FAN1)
27. Small 4-PIN Power Header (J116)
28. SYS\_FAN\_8 (FAN8)
29. 8-PIN Power Connector for GPU Card (PE\_PWS)
30. SYS\_FAN\_7 (FAN7)
31. SYS\_FAN\_9 (FAN9)
32. SYS\_FAN\_10 (FAN10)
33. 8-PIN Power Connector for GPU Card (PE\_PW2)
34. USB3.0 Connector (USB3\_FPIO1)
35. BMC LED (BMC\_LED1)
36. BIOS Socket/BIOS (BIOS\_SOCKET1/BIOS\_SPI1)
37. 7-PIN SATA Connector for SATA DOM (SSATA5\_DOM2)
38. 7-PIN SATA Connector for SATA DOM (SSATA4\_DOM1)
39. 7-PIN SATA Connector (SATA3)
40. 7-PIN SATA Connector (SATA2)
41. Vertical Type-A USB3.0 Connector (TYPEA\_USB1)
42. CATERR LED (CAT\_LED1)
43. CPU Error LED (ERR\_LED1)

JUMPER

- | Label | Description                              |
|-------|--|
| a     | TYAN Module Header (DBG_HD1)             |
| b     | IPMB Pin Header (IPMB_HD1)               |
| c     | Intel VROC Key Header (J2)               |
| d     | ME Recovery Mode Jumper (3PHD3)          |
| e/f   | BMC COM PORT Select Jumper (3PHD6/3PHD7) |
| g     | NVIDIA GPU card Jumper (3PHD8)           |
| h     | PSU Alert Function Jumper (3PHD9)        |
| i/j   | Disable LAN0/LAN1 Jumper (3PHD14/3PHD15) |
| k     | Select SPI Path Jumper (J109)            |
- NOTE:** There is risk when setting the jumper by yourself.

5 I/O Ports

Locate the External I/O Port



6 Caution

CPU Cover for DOA/RMA

**NOTE:** Please save and replace the CPU Cover when returning the server board for service.

