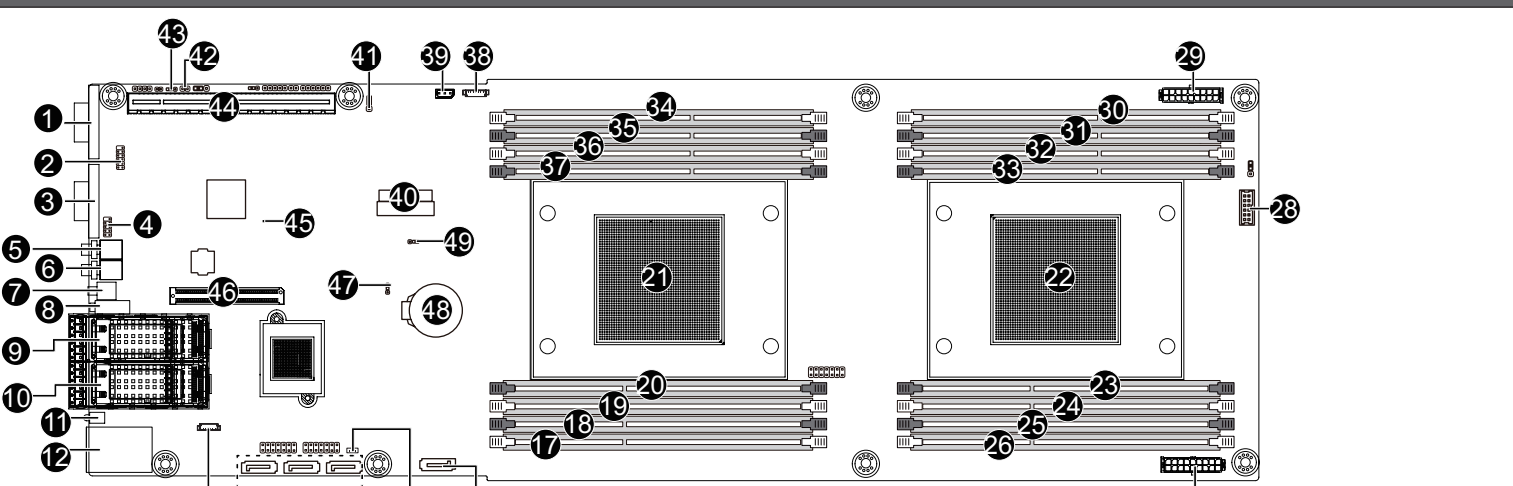


H270-T70 Quick Installation Guide/H270-T70 快速安装说明

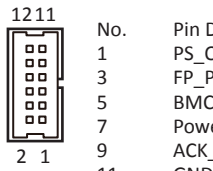
Motherboard Components/ 主板组件



No.	Code	Description
41	S3_MASK	S3 Power On Select jumper 1-2 Close: Stop an initial power on when BMC is not ready. 2-3 Close: Keep initial power on. (Default setting)
42	BIOS_PWD	Clearing Supervisor Password jumper 1-2 Close: Normal operation. (Default setting) 2-3 Close: Skip supervisor password.
43	CASE_OPEN	Chassis intrusion alert header
44	PCIE_1	Half-length low-profile slot with PCIe x16 (Gen3 x16 bus) connector
45	LED_BMC	BMC frmware readiness LED
46	MEZZ_1	Mezzanine PCIe x8 (Gen3 x8 bus) connector
47	BIOS_RCVR	BIOS recovery jumper 1-2 Close: Normal operation. (Default setting) 2-3 Close: BIOS recovery mode.
48	BAT1	Battery socket
49	CLR_CMOS	Clear CMOS jumper 1-2 Close: Normal operation (Default setting) 2-3 Close: Clear CMOS data.

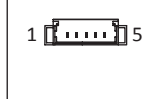
No.	Code	Description	No.	Code	Description
1	VGA_1	Rear VGA port	21	CPU0	Cavium ThunderX CN88xx ARMv8 SoC processor (Primary CPU)
2	F_VGA1	Front VGA header	22	CPU1	Cavium ThunderX CN88xx ARMv8 SoC processor (Secondary CPU)
3	COM1	Rear serial port	23	DIMM_P1_H1	Channel 4 slot 1 (for secondary CPU)
4	COM2	Front serial port header	24	DIMM_P1_H0	Channel 4 slot 0 (for secondary CPU)
5	SW_PWR	Power button w/LED	25	DIMM_P1_F1	Channel 2 slot 1 (for secondary CPU)
6	SW_ID	ID switch button w/LED	26	DIMM_P1_F0	Channel 2 slot 0 (for secondary CPU)
7	SW_RST_NMI	Reset button (top)	27	ATX1	18 pin power connector
8	LED_LAN	QSFP LAN link/activity/speed LED for port #1 and port #2	28	FP_1	Front panel header
9	QSFP_1	QSFP LAN port #1	29	ATX2	18 pin power connector
10	QSFP_2	QSFP LAN port #2	30	DIMM_P1_E0	Channel 1 slot 0 (for secondary CPU)
11	LED_STA	System status LED	31	DIMM_P1_E1	Channel 1 slot 1 (for secondary CPU)
12	USB3_MLAN	BMC management LAN port (top)/USB 3.0 ports (bottom)	32	DIMM_P1_G0	Channel 3 slot 0 (for secondary CPU)
13	SATA_SGP1	SATA SGPIO header	33	DIMM_P1_G1	Channel 3 slot 1 (for secondary CPU)
14	SATA3/SATA2/SATA1	SATA 6Gb/s connectors	34	DIMM_P1_B0	Channel 2 slot 0 (for primary CPU)
15	SATA_DOM0	SATA0 port DOM support jumper	35	DIMM_P0_B1	Channel 2 slot 1 (for primary CPU)
16	SATA0	SATA 6Gb/s connector	36	DIMM_P0_D0	Channel 4 slot 0 (for primary CPU)
17	DIMM_P0_A0	Channel 1 slot 0 (for primary CPU)	37	DIMM_P0_D1	Channel 4 slot 1 (for primary CPU)
18	DIMM_P0_A1	Channel 1 slot 1 (for primary CPU)	38	BMC_SGPIO1	BMC SGPIO header
19	DIMM_P0_C0	Channel 3 slot 0 (for primary CPU)	39	IPMB	IPMB connector
20	DIMM_P0_C1	Channel 3 slot 1 (for primary CPU)	40	F_USB3	USB 3.0 header

Front Panel Header/ 前面板接头



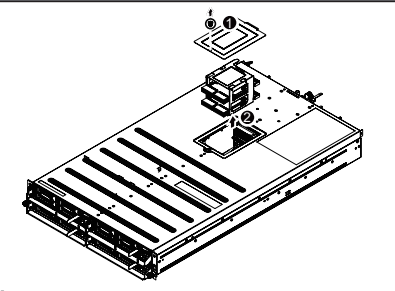
No.	Pin Define	No.	Pin Define
1	PS_ON_N_LF	2	SMBus Clock
3	FP_PSU	4	SMBus Data
5	BMC_FCB_N	6	System Status LED (Green)
7	Power Button	8	System Status LED (Amber)
9	ACK_BMC_N	10	ID LED
11	GND	12	ID Button

SATA SGPIO Header/SATA SGPIO 接头



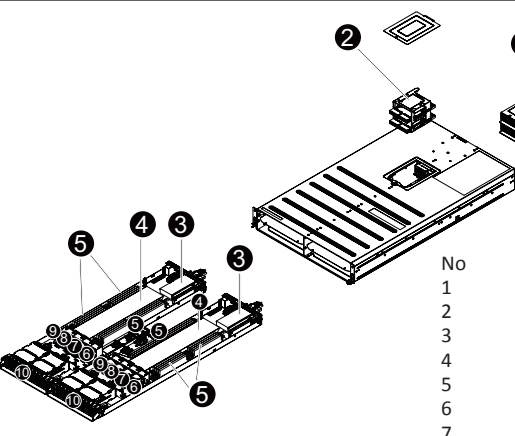
No.	Pin Define
1	SGPIO_SATA_DATAOUT_R
2	GND
3	SGPIO_SATA_DIN
4	SGPIO_SATA_LOAD_R
5	SGPIO_SATA_CLOCK_R

Power Supply Board Cage/ 电源箱



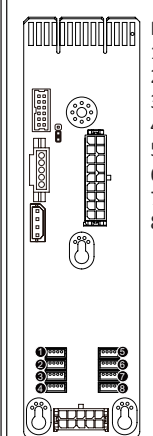
CAUTION!
Before you remove or install power supply board cage cover: Make sure the system is not turned on or connected to AC power.
注意！
在替换或安装电源主板前，请注意下列事项：
确保系统未开启且未连接到交流电源。

System Components/ 系统组件



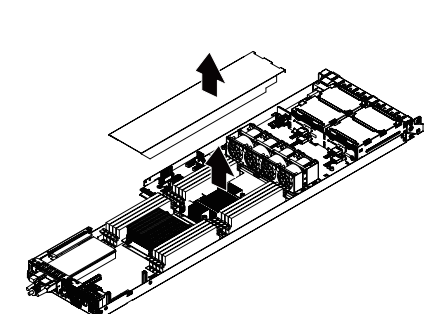
No	Description
1	Power module
2	Power supply board cage
3	PCI Express card
4	Fan duct
5	Memory module
6	System fan #1/#2 (FAN1/FAN2)
7	System fan #3/#4 (FAN3/FAN4)
8	System fan #5/#6 (FAN5/FAN6)
9	System fan #7/#8 (FAN7/FAN8)
10	HDD bays

PDB Components/ 配电板组件



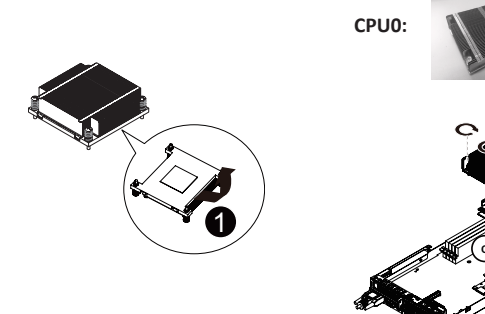
No	Description
1	System fan #1 (FAN1)
2	System fan#2 (FAN2)
3	System fan #3(FAN3)
4	System fan #4 (FAN4)
5	System fan #5 (FAN5)
6	System fan #6 (FAN6)
7	System fan #7 (FAN7)
8	System fan #8 (FAN8)

Fan Duct/ 导风罩

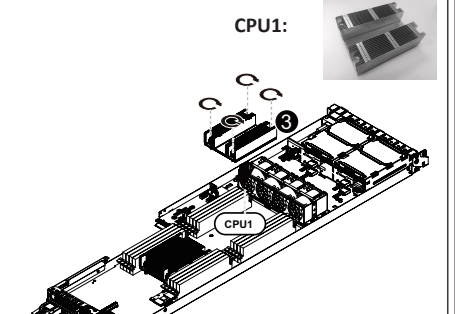


Heat Sink/ 散热装置

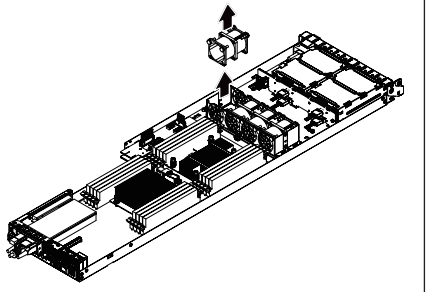
CPU0:



CPU1:



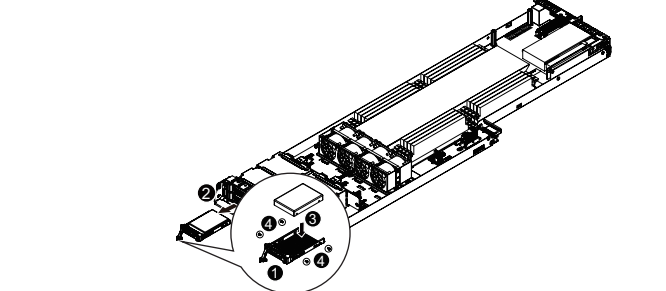
System Fan/ 系统风扇



CAUTION!
Before you remove or install the system fan: Make sure the system is not turned on or connected to the AC power. Disconnect all necessary cable connections. Failure to observe these warnings could result in personal injury or damage to the equipment.
注意！
确保系统未开机且未连接到交流电源。断开所有必要的线缆连接。若不遵循这些警告，可能造成人员伤害或设备损坏。

Hard Disk Drive and Back Plane Board/ 硬盘驱动器与硬盘驱动器底板

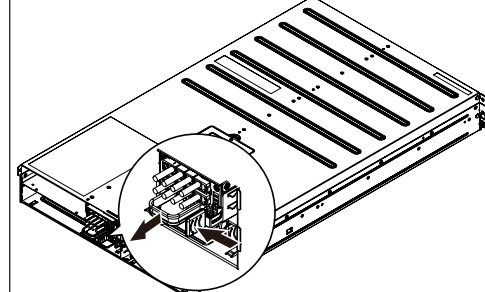
HDD Installation



HDD Backplane Board Components

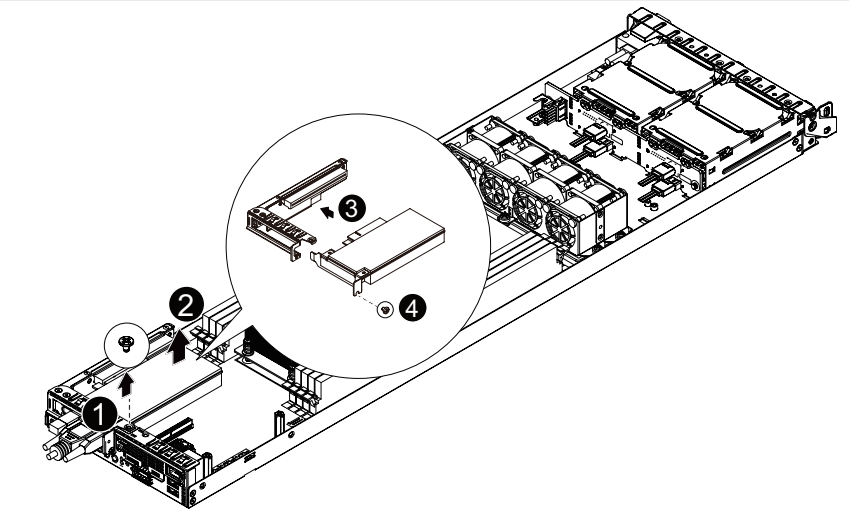
No	Description	No	Description
1	SATA0	4	SATA4
2	SATA1	5	IPMB
3	SATA2	6	SATA_SGPIO

Power Supply/ 电源



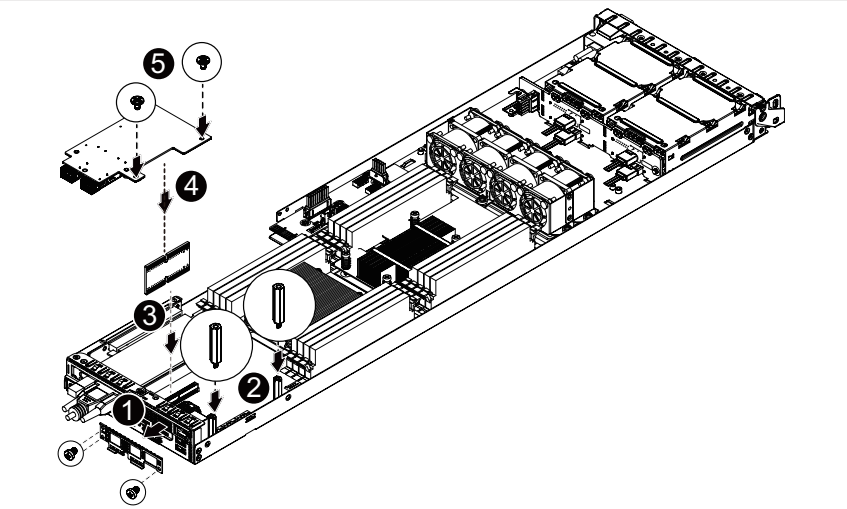
CAUTION!
Before you remove or install the power supplies: Make sure the system is not turned on or connected to AC power.
注意！
在替换或安装电源前，请注意下列事项：
确保系统未开启且未连接到交流电源。

PCI Express Expansion Card/PCI Express 扩展卡



CAUTION!
Before you remove or install the PCI express card: Voltages can be present within the server whenever an AC power source is connected. This voltage is present even when the main power switch is in the off position. Ensure that the system is powered-down and all power sources have been disconnected from the server prior to installing a PCI express card.
注意！
连接了交流电源时，服务器内可能存在电压。甚至在主电源开关处于关闭位置时，也存在此电压。在安装PCI卡之前，确保系统处于关机状态并且断开服务器的所有电源。若不遵循这些警告，可能造成人员伤害或设备损坏。

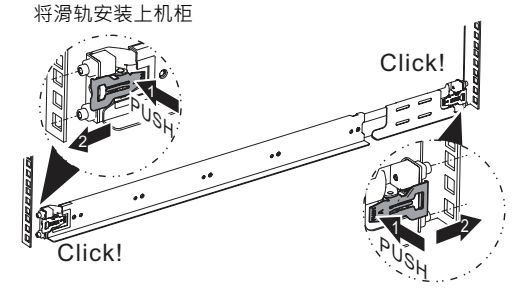
Add-on Card (Optional)/ 附加卡 (选购)



CAUTION!
Before you remove or install the Add-on card: Voltages can be present within the server whenever an AC power source is connected. This voltage is present even when the main power switch is in the off position. Ensure that the system is powered-down and all power sources have been disconnected from the server prior to installing an add-on card.
注意！
连接了交流电源时，服务器内可能存在电压。甚至在主电源开关处于关闭位置时，也存在此电压。在安装附加卡之前，确保系统处于关机状态并且断开服务器的所有电源。若不遵循这些警告，可能造成人员伤害或设备损坏。

Rail Kit/ 导轨

Attach the rails to the rack.
将滑轨安装上机柜

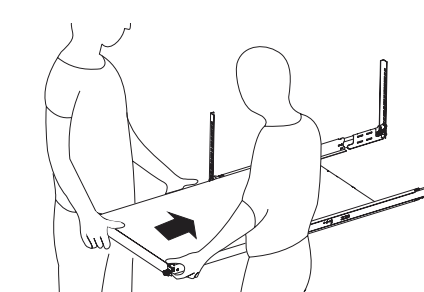


Click!

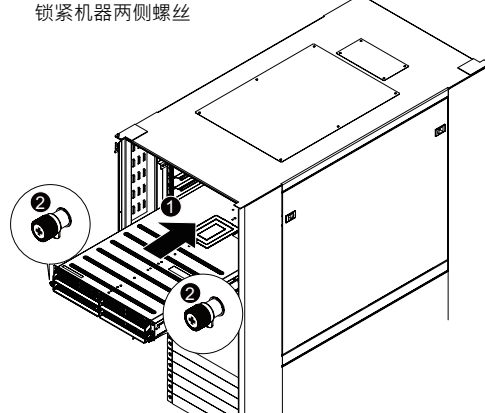
Install into the chassis.
安装机箱

(A) Two persons lift required.
请确保至少两人操作安装

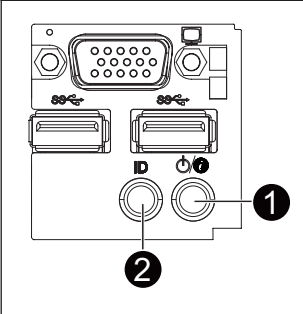
(B) Insert the chassis directly on the L bracket.
正确地机箱安装在华轨大号叶片上



Tighten the positioning screws
锁紧机器两侧螺丝




Front Panel LEDs and Buttons/ 前面板 LED 说明



No.	Name	Color	Status	Description
1	Power Button and Status LED	Green	Solid On	System is operating normally.
			Solid On	Critical condition, may indicates: Power module failure System fan failure Power supply voltage issue System temperature
		Amber	Blink	Non-critical condition, may indicates: Redundant power module failure Temperature and voltage issue Chassis intrusion
			Off	System is not ready, may indicates: POST error NMI error Processor or terminator missing
2	ID Button w/LED	Blue	On	Unit selected for identification.
		N/A	Off	No identification.

WEEE Symbol Statement

 The symbol shown below is on the product or on its packaging, which indicates that this product must not be disposed of with other waste. Instead, the device should be taken to the waste collection centers for activation of the treatment, collection, recycling and disposal procedure. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local government office, your household waste disposal service or where you purchased the product for details of environmentally safe recycling.



- When your electrical or electronic equipment is no longer useful to you, "take it back" to your local or regional waste collection administration for recycling.
- If you need further assistance in recycling, reusing in your "end of life" product, you may contact us at the Customer Care number listed in your product's user's manual and we will be glad to help you with your effort.

Restriction of Hazardous Substances (RoHS) Directive Statement

GIGABYTE products have not intended to add and safe from hazardous substances (Cd, Pb, Hg, Cr+6, PBDE and PBB). The parts and components have been carefully selected to meet RoHS requirement. Moreover, we at GIGABYTE are continuing our efforts to develop products that do not use internationally banned toxic chemicals.

限制使用有害物质 (RoHS) 指令声明

GIGABYTE产品未故意添加和使用有害物质（Cd、Pb、Hg、Cr+6、PBDE和PBB）。所有部件和元件均经过严格挑选，符合RoHS要求。此外，我们GIGABYTE一直致力于开发不使用国际上禁止的有毒化学品的产品。

California Proposition 65 Warning

WARNING:
This product contains a chemicals , including lead, known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, please visit: <http://www.p65warnings.ca.gov/>



Battery Warning:
Incorrectly installing a battery or using incompatible battery may increase the risk of ifre explosion. Replace the battery only with the same or equivalent type.

- Do not disassemble, crush, puncture batteries.
- Do not store or place your battery pack next to or in a heat source such as a fire, heatgenerating appliance, can or exhaust vent. Heating battery cells to temperatures above 65oC (149oF) can cause explosion or fire.
- Do not attempt to open or service batteries. Do not dispose of batteries in a fire or with household waste.



电池警告：
电池安装不当或使用不兼容的电池会增加火灾爆炸风险。更换电池时，只可使用相同或同等类型的电池。

- 请勿拆解、挤压、刺破电池。
- 请勿将电池存放或放置在热源中或旁边，如火源、产生热的设备、罐体或排气口。电池温度升至65oC (149oF)以上可能导致爆炸或火灾。
- 请勿尝试打开或维修电池。电池废弃时，请勿投入火中或者作为家庭废弃物进行处理。

中华人民共和国电子信息产品中有毒有害物质或元素的名称及含量标识格式

依照中华人民共和国的有毒有害物质的限制要求(China RoHS)提供以下的表格：

						
关于符合中国《电子信息产品污染控制管理办法》的声明 Management Methods on Control of Pollution from Electronic Information Products (China RoHS Declaration)						
产品中有毒有害物质或元素的名称及含量 Hazardous Substances Table						
部件名称 (Parts)	铅 (Pb)	有毒有害物质或元素 (Hazardous Substances) 汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
PCB板 PCB	○	○	○	○	○	○
结构件及风扇 Mechanical parts and Fan	×	○	○	○	○	○
芯片及其他主动零件 Chip and other Active components	×	○	○	○	○	○
连接器 Connectors	×	○	○	○	○	○
被动电子元器件 Passive Components	×	○	○	○	○	○
线材 Cables	○	○	○	○	○	○
焊接金属 Soldering metal	○	○	○	○	○	○
助焊剂、散热膏、标签及其他耗材 Flux, Solder Paste, Label and other Consumable Materials	○	○	○	○	○	○
○ :表示该有毒有害物质在该部件所有均质材料中的含量均在SJ/T11363-2006标准规定的限量要求以下。 Indicates that this hazardous substance contained in all homogenous materials of this part is below the limit requirement SJ/T 11363-2006						
× :表示该有毒有害物质至少在该部件的某一均质材料中的含量超出SJ/T11363-2006标准规定的限量要求。 Indicates that this hazardous substance contained in at least one of the homogenous materials of this part is above the limit requirement in SJ/T 11363-2006						
对销售之目的所受售产品，本表显示我公司供应链的电子信息产品可能包含这些物质。注意：在所售产品中可能会也可能不会含有所有列出的部件。 This table shows where these substances may be found in the supply chain of our electronic information products, as of the date of the sale of the enclosed products. Note that some of the component types listed above may or may not be a part of the enclosed product.						

Ambient Operation

This equipment should not be operated above an ambient operation temperature of 35 degrees centigrade.

Restricted Access Location

- This server is intended for installation only in restricted access locations where .
- Access can only be gained by SERVICE PERSONS who have been instructed about the reasons for the restrictions applied to the location and about any precautions that shall be taken.
 - Access is through the use of a TOOL or lock and key, or other means of security, and is controlled by the authority responsible for the location.



The system may have more than one power supply cable. To reduce the risk of electrical shock, a trained service technician may need to disconnect all power supply cables before servicing the system.

Power Supply

CAUTION: The power supplies in your system may produce high voltages and energy hazards, which can cause bodily harms. Unless you are instructed otherwise, only trained service technicians are authorized to remove the covers and access any of the components inside the system.

Reliable Earthing:

CAUTION: Do not connect or disconnect any cables or perform installation, maintenance, or reconfiguration of this server during an electrical storm
CAUTION: Connect all power cords to a properly wired and grounded electrical outlet.

Hazardous FAN

CAUTION: This server contains hazardous moving fan blades, keep fingers and other bodyparts away.
Disconnect all power supply cords before servicing. Connect power supply cord only after all the covers are properly installed.

Hazardous Energy



CAUTION: This server contains hazardous energy over 240VA on the backplane. To prevent accidental short circuit, always insert the HDD trays after servicing.

Rack Mount Instructions

The following or similar rack-mount instructions are included with the installation instructions:

A) Elevated Operating Ambient - If installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment may be greater than room ambient. Therefore, consideration should be given to installing the equipment in an environment compatible with the maximum ambient temperature (Tma) specified by the manufacturer.

B) Reduced Air Flow - Installation of the equipment in a rack should be such that the amount of air flow required for safe operation of the equipment is not compromised.

C) Mechanical Loading - Mounting of the equipment in the rack should be such that a hazardous condition is not achieved due to uneven mechanical loading.

D) Circuit Overloading - Consideration should be given to the connection of the equipment to the supply circuit and the effect that overloading of the circuits might have on overcurrent protection and supply wiring. Appropriate consideration of equipment nameplate ratings should be used when addressing this concern.

E) Reliable Earthing - Reliable earthing of rack-mounted equipment should be maintained. Particular attention should be given to supply connections other than direct connections to the branch circuit (e.g. use of power strips)."

Disconnect 2 power supply cords before servicing



CAUTION: Slider/rail mounted equipment is not to be used as a shelf or a work space.

FCC Statement

This device complies with Part 15 of the FCC Rules.
Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) This device must accept any interference received, including interference that may cause undesired operation.

CAN ICES-3 (A)/NMB-3(A)

声明 本系统功率大于 1300W



CAUTION: Whenever you need to lift the system, get others to assist you.
To avoid injury, do not attempt to lift the system by yourself.

Connect With Us

For more information, visit our website at:
<http://b2b.gigabyte.com>

You are a professional?
Get access to our complete source of sales & marketing materials at:
<http://reseller.b2b.gigabyte.com>



<https://www.facebook.com/gigabyteserver>