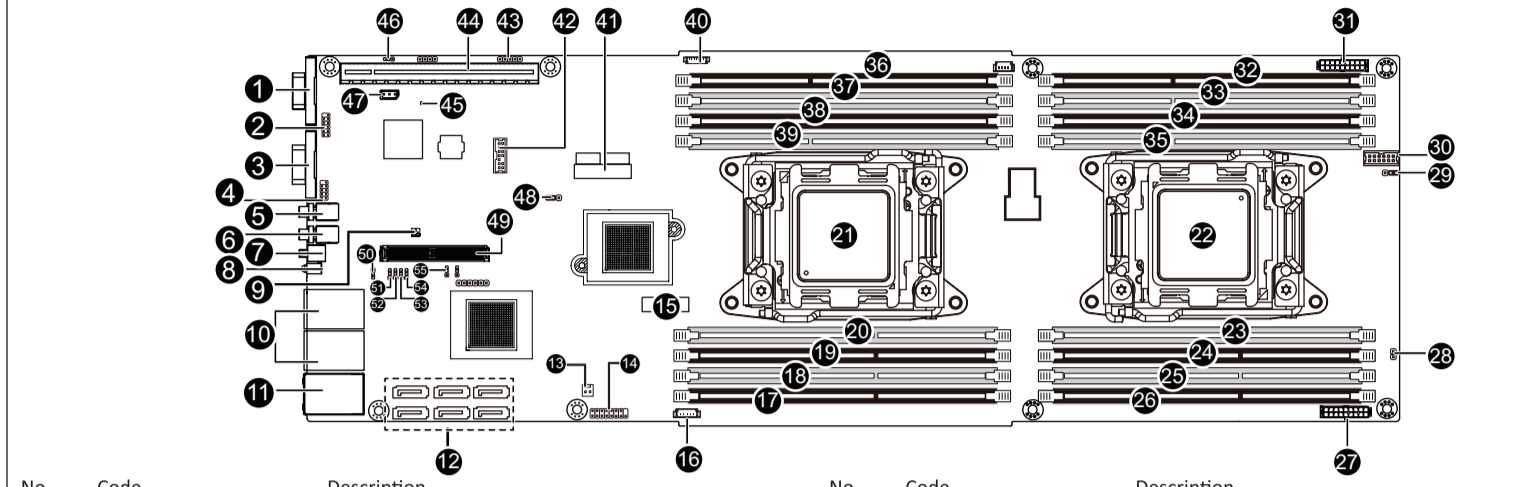


H27N-H70 Quick Installation Guide/H270N-H70 快速安装说明

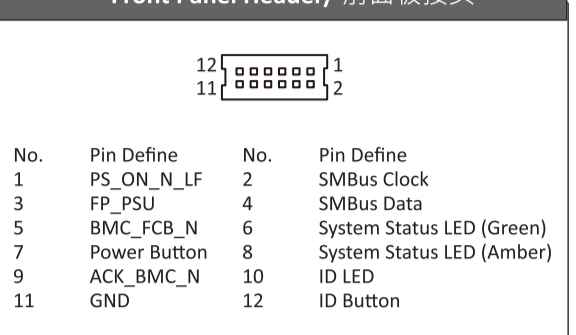
Motherboard Components/ 主板组件



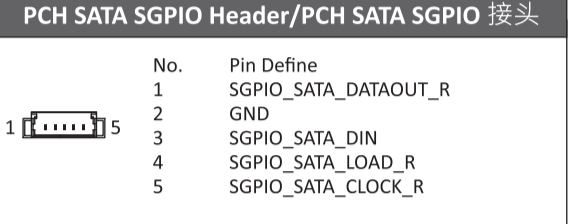
No.	Code	Description	No.	Code	Description
1	VGA_1	Rear VGA port	21	CPU0	Intel LGA2011-3 Socket R (Primary CPU)
2	F_VGA1	Front VGA header	22	CPU1	Intel LGA2011-3 Socket R (Secondary CPU)
3	COM1	Rear serial port	23	DIMM_P1_H1	Channel 4 slot 1 (for secondary CPU)
4	COM2	Front serial port header	24	DIMM_P1_H0	Channel 4 slot 0 (for secondary CPU)
5	SW_PWR1	Power button w/LED	25	DIMM_P1_G1	Channel 3 slot 1 (for secondary CPU)
6	SW_ID	ID switch button w/LED	26	DIMM_P1_G0	Channel 3 slot 0 (for secondary CPU)
7	SW_RST_NMI	Reset button (top)/NMI button (bottom)	27	SSI_2XP2	18 pin power connector
8	LED_STA	System status LED	28	BMC_RST	BMC reset header
9	SW_RAID	Software RAID Key header	29	ACK_SEL	4 Nodes System and Rack System switch jumper
10	LAN1/LAN2	LAN ports	30	FP_1	Front panel header
11	USB3_MLAN	BMC management LAN port (top)/USB 3.0 ports (bottom)	31	SSI_2XP2	18 pin power connector
12	SATA3/SATA1/SATA2/SATA3/SATA4/SATA5	SATA 6Gb/s connectors	32	DIMM_P1_E0	Channel 1 slot 0 (for secondary CPU)
13	SATA_POWER	SATA Power connector	33	DIMM_P1_E1	Channel 1 slot 1 (for secondary CPU)
14	F_MLAN	Front panel Management LAN cable header	34	DIMM_P1_F0	Channel 2 slot 0 (for secondary CPU)
15	BAT1	Battery socket	35	DIMM_P1_F1	Channel 2 slot 1 (for secondary CPU)
16	SATA_SGP1	SATA SGPIO header	36	DIMM_PO_C0	Channel 3 slot 0 (for primary CPU)
17	DIMM_PO_A0	Channel 1 slot 0 (for primary CPU)	37	DIMM_PO_C1	Channel 3 slot 1 (for primary CPU)
18	DIMM_PO_A1	Channel 1 slot 1 (for primary CPU)	38	DIMM_PO_D0	Channel 4 slot 0 (for primary CPU)
19	DIMM_PO_B0	Channel 2 slot 0 (for primary CPU)	39	DIMM_PO_D1	Channel 4 slot 1 (for primary CPU)
20	DIMM_PO_B1	Channel 2 slot 1 (for primary CPU)	40	BMC_SGPIO	BMC SGPIO header
			41	F_USB3	USB 3.0 header
			42	TPM	TPM module connector

No.	Code	Description
43	PMBUS	PMBus header
44	PCI_E1	Half-length low-profile slot with PCIe x16 (Gen3 x16 bus) connector
45	LED_BMC	BMC firmware readiness LED
46	SMB_SEL	SMBus Select jumper
47	IPMB	IPMB connector
48	CLR_CMOS	Clear CMOS jumper
49	MEZZ_1	1-2 Close: Normal operation (Default setting) 2-3 Close: Clear CMOS data.
50	S3_MASK	Mezzanine PCIe x8 (Gen3 x8 bus) connector
51	BIOS_WP	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)
52	BIOS_RCVR	BIOS write protect jumper 1-2 Close: Normal operation. (Default setting) 2-3 Close: Enable BIOS write protection. BIOS recovery jumper
53	BIOS_PWD	1-2 Close: Normal operation. (Default setting) Clearing Supervisor Password jumper 1-2 Close: Normal operation. (Default setting)
54	ME_UPDATE	2-3 Close: Skip supervisor password. ME update jumper 1-2 Close: Normal operation. (Default setting) 2-3 Close: ME update mode.
55	PMBUS_SEL	PMBus Power Select Jumper 1-2 Close: PMBus connects to PCH. 2-3 Close: PMBus connects to BMC.

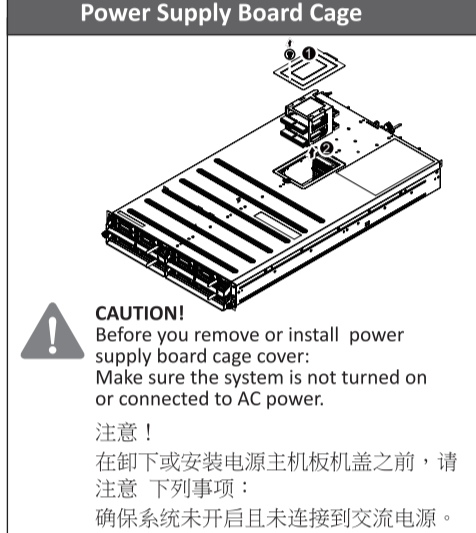
Front Panel Header/ 前面板接头



PCH SATA SGPIO Header/PCH SATA SGPIO 接头

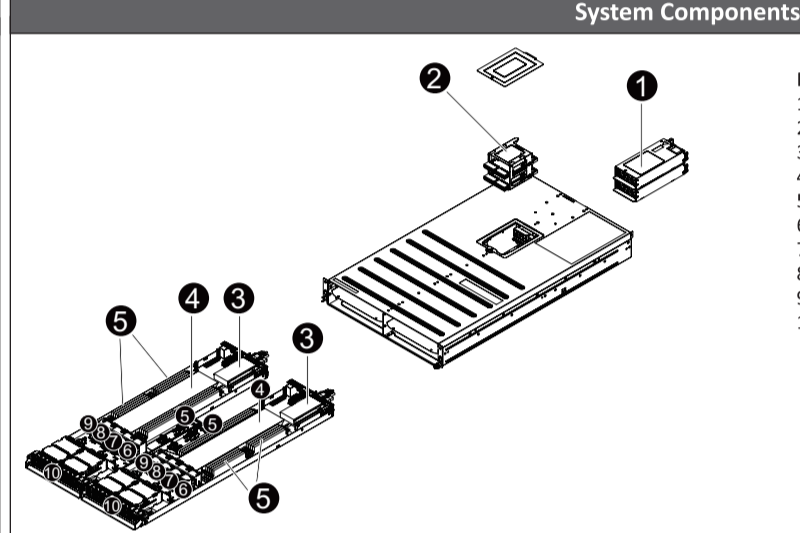


Power Supply Board Cage



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!
在卸下或安装电源主板机盖之前, 请确保系统未开启且未连接到交流电源。

System Components



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 (SYS_FAN1/2)
7	System fan #3/#4 (SYS_FAN3/4)
8	System fan #5/#6 (SYS_FAN5/6)
9	System fan #7/#8 (SYS_FAN7/8)
10	HDD bays

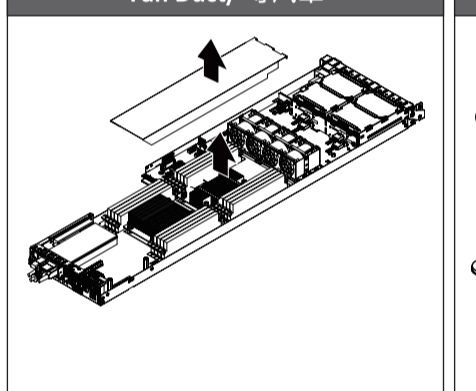
Memory Population Configuration/ 安装内存

Type	Ranks Per DIMM and Data Width	Speed (MT/s)		
		Slot Per Channel (SPC) and DIMM Per Channel (DPC)	1 Slot Per Channel	2 Slot Per Channel
RDIMM	SRx4	1DPC	2133	1866
		2DPC	2133	1866
RDIMM	DRx8	1DPC	2133	1866
		2DPC	2133	1866
RDIMM	DRx4	1DPC	2133	1866
		2DPC	2133	1866
LRDIMM	QRx4	1DPC	2133	2133

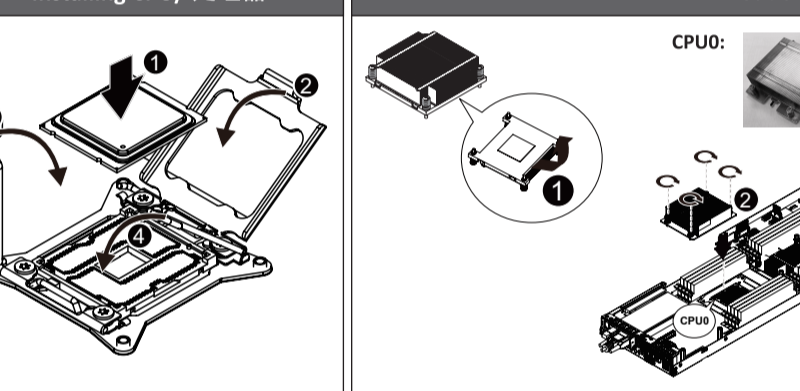
● When only one DIMM is used, it must be populated in memory slot0 first.
● Memory populated sequence must be followed with slot0/slot1.
● System will not boot normally with incorrect populated sequence.

● 只使用一个DIMM时, 必须安装到内存槽槽0。
● 内存安装顺序必须是槽槽0/槽槽1。
● 若安装顺序有误, 系统将不能正常开机。

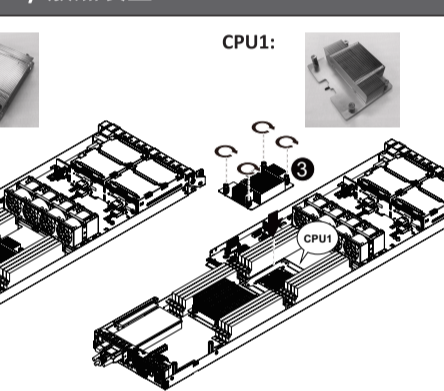
Fan Duct/ 导风罩



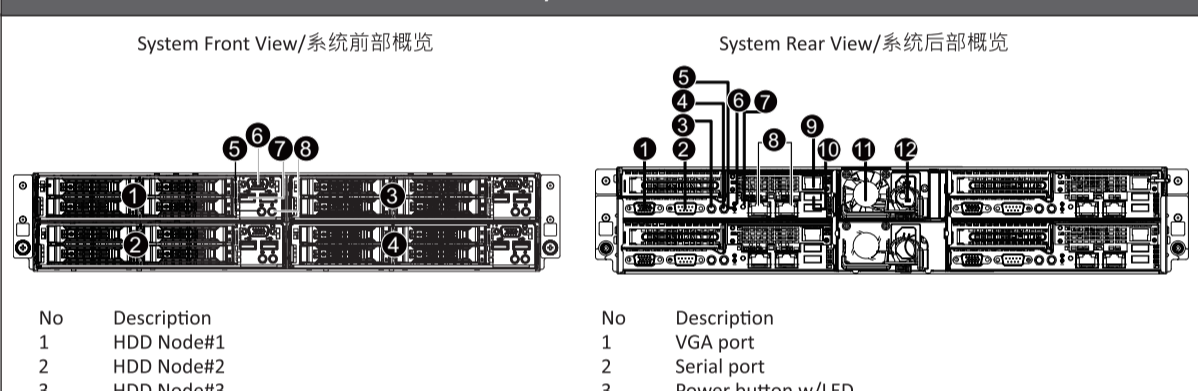
Installing CPU/ 处理器



Heat Sink/ 散热装置

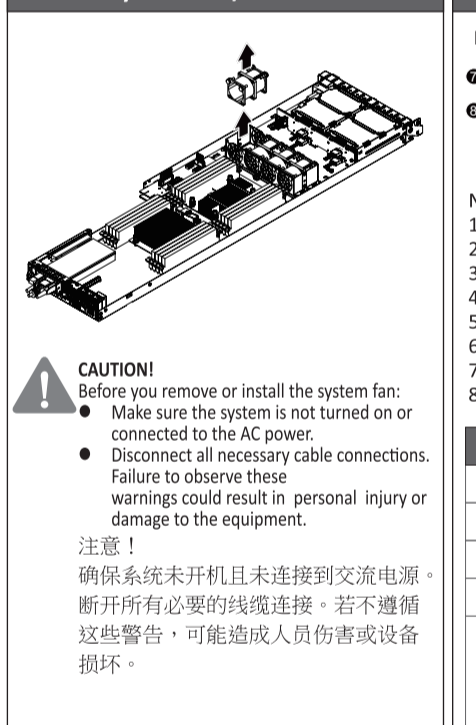


Front & Rear/ 系统前部与后部概观



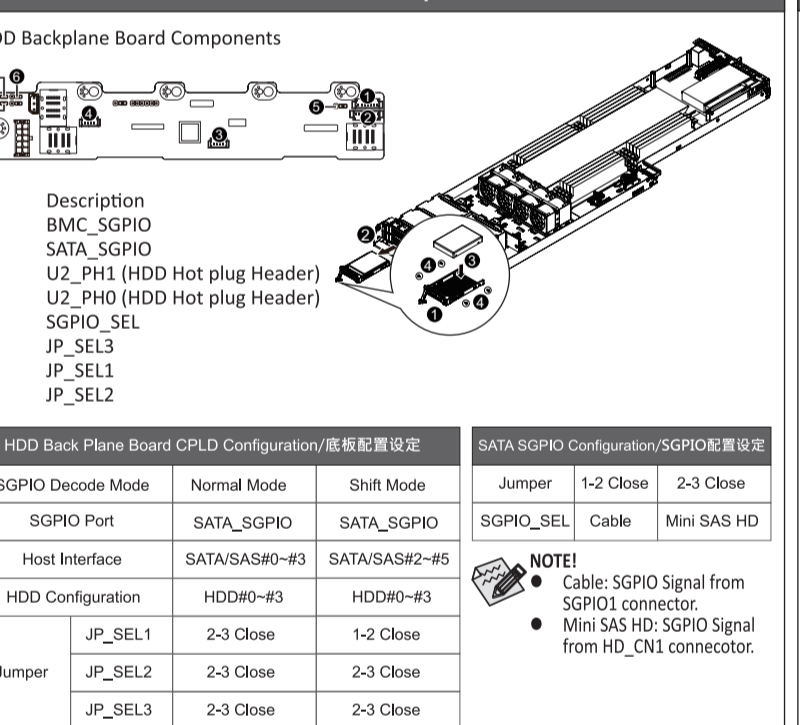
No.	Description	No.	Description
1	HDD Node#1	1	VGA port
2	HDD Node#2	2	Serial port
3	HDD Node#3	3	Power button w/LED
4	HDD Node#4	4	ID button w/LED
5	ID button w/LED	5	NMI button
6	VGA port	6	Reset button
7	USB 3.0 ports	7	System status LED
8	Power button w/LED	8	GbE LAN ports
		9	10/100/1000 Server management LAN port
		10	USB 3.0 ports
		11	Power supply fan
		12	Power supply module cord socket

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 Backplane Board CPLD Configuration/ 板载配置设置			SATA SGPIO Configuration/SGPIO板载设置		
SGPIO Decode Mode	Normal Mode	Shift Mode	Jumper	1-2 Close	2-3 Close
SGPIO Port	SATA_SGPIO	SATA_SGPIO	SGPIO_SEL	Cable	Mini SAS HD
Host Interface	SATA/SAS0-#3	SATA/SAS2-#5	NOTE! Cable: SGPIO Signal from SGPIO connector. Mini SAS HD: SGPIO Signal from HD_CNL1 connector.		
HDD Configuration	HDD0-#3	HDD0-#3			
Jumper	JP_SEL1	2-3 Close	1-2 Close		
	JP_SEL2	2-3 Close	2-3 Close		
	JP_SEL3	2-3 Close	2-3 Close		

Power Supply/ 电源



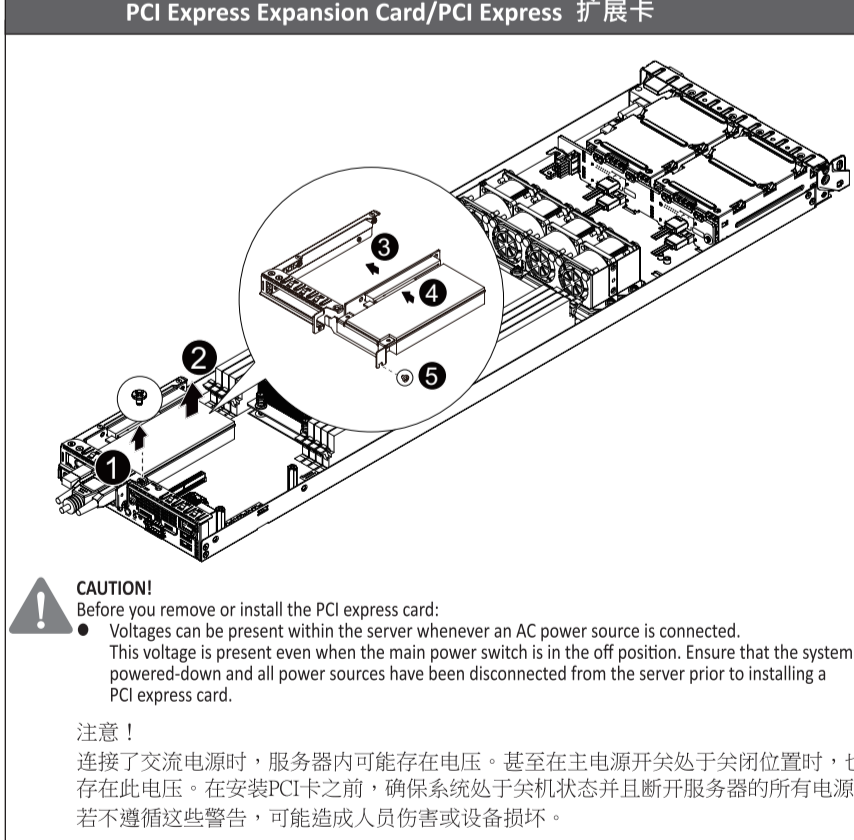
CAUTION!
Before you remove or install the power supplies:
Make sure the system is not turned on or connected to AC power.
注意!
在替换或安装电源前, 请确保系统未开启且未连接到交流电源。

State	Description	State	Description
Green On	System is powered on	Blue On	Unit selected for identification.
Off	System is powered off	Off	System is powered off

⑧ ⑨ 10/100/1000 LAN LED:

State	Description
Yellow On	1Gbps data arte
Green On	100Mbps data arte
Off	10Mbps data arte

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)



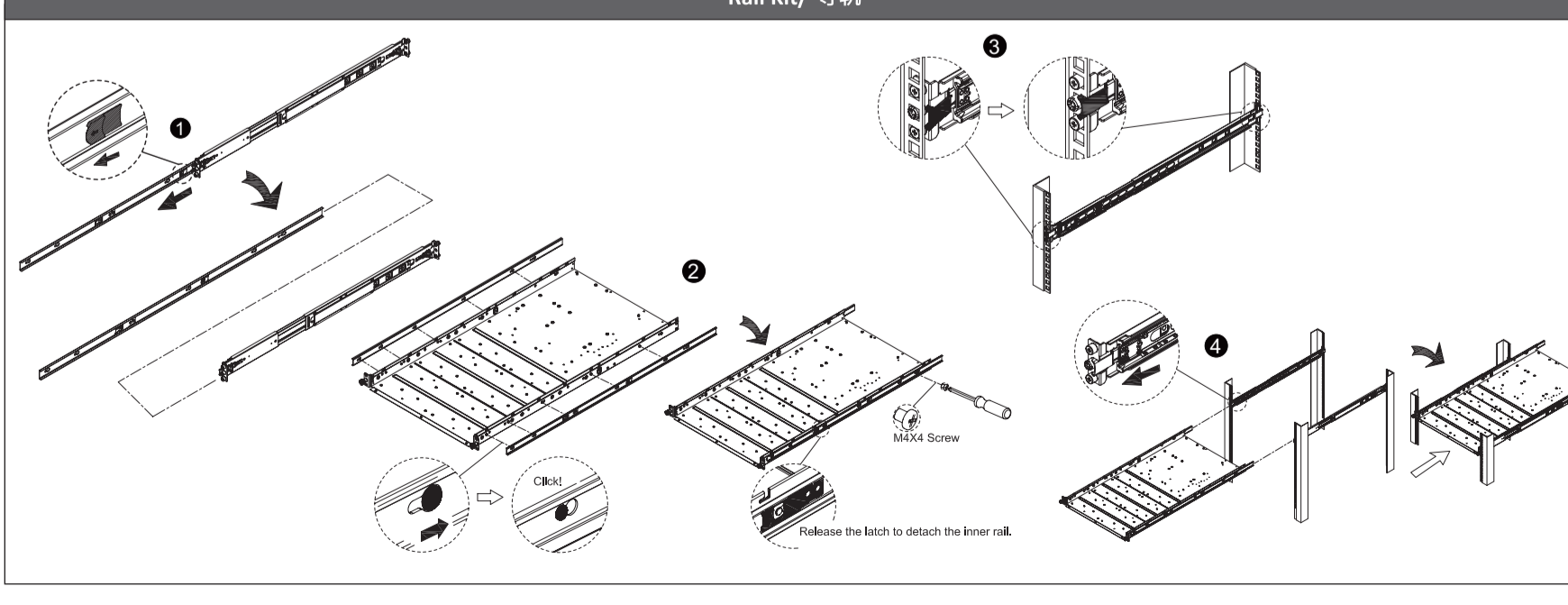
CAUTION!
Before you remove or install the Add-on card:
Voltages can be present within the server whenever an AC power source is connected. This voltage is present even when the main power switch is in the off position. Ensure that the system is powered-down and all power sources have been disconnected 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。

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.	
			Off	Degrade condition, may indicate: CPU failure, DIMM failed	
			Solid On	Critical condition, may indicate: Power module failure, System fan failure, Power supply voltage issue, System temperature	
			Blink	Non-critical condition, may indicate: Redundant power module failure, Temperature and voltage issue, Chassis intrusion	
			N/A	N/A	System is not ready, may indicate: POST error, NMI error, Processor or terminator missing
			N/A	Off	No identification.
2	ID Button w/LED	Blue	On	Unit selected for identification.	
		N/A	Off	No identification.	

编号	名称	颜色	状态	说明
1	Power Button and Status LED	绿色	恒亮	系统正常运行。
			不亮	故障警告, 可能为下列状况: 处理器故障 内存故障
			恒亮	严重故障, 可能为下列状况: 电源模块故障 系统风扇故障 电源电压问题 系统温度超出问题
			闪烁	非严重故障, 可能为下列状况: 冗余电源模块故障 温度和电压问题 机箱入侵
			无亮灯	系统未正常运行, 可能为下列状况: POST 错误 NMI 错误 处理器或终结器缺失
			无亮灯	无识别功能。
2	ID按钮和LED	蓝色	恒亮	系统识别功能。
		无亮灯	不亮	无系统识别功能。

Rail Kit/ 导轨



Regulatory Notices

Connect With Us

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 chemical, 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 fire 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, heat-generating appliance, car or exhaust vent. Heating battery cells to temperatures above 65°C (149°F) 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、罐体或排气管口。电池温度升至65°C (149°F)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)	有毒有害物质或元素 (Hazardous Substances)				
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr(VI))	多溴联苯 (PBDE)
PCB板 PCB	○	○	○	○	○
结构件及风扇 Mechanical parts and Fan	×	○	○	○	○
芯片及其他主动元件 Chip and other Active components	×	○	○	○	○
连接器 Connectors	×	○	○	○	○
被动电子元件 Passive Components	×	○	○	○	○
线材 Cables	○	○	○	○	○
焊接金属 Soldering metal	○	○	○	○	○
助焊剂、焊锡膏、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 homogeneous 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 homogeneous materials of this part is above the limit requirement in SJ/T 11363-2006

对销售之目的供货产品，本表显示我公司供应链的电子产品信息可能包含这些物质。注意：在所需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.

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