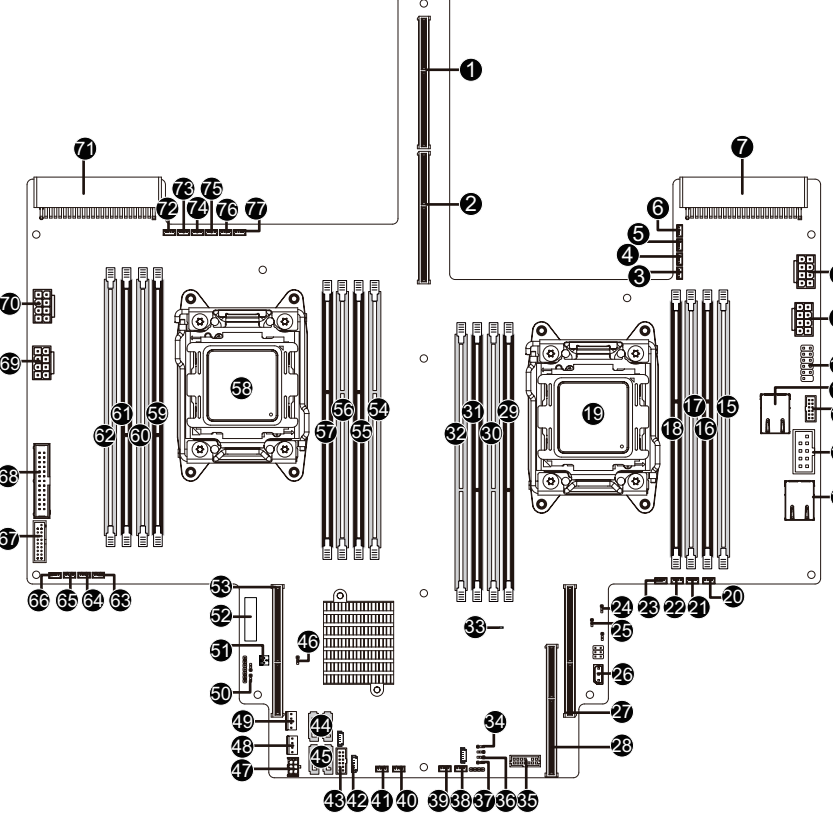


G190-H44 Quick Installation Guide/G190-H44 快速安装说明

Motherboard Components/ 主板组件



No. Code Description

1 PCIE_1 Supports 1 x full-length full-height slot (PCIe x16)

2 PCIE_3 Supports 1 x full-length full-height slot (PCIe x16)

3 GPU_FAN15 GPU fan #15

4 GPU_FAN16 GPU fan #16

5 GPU_FAN17 GPU fan #17

6 GPU_FAN18 GPU fan #18

7 PSU2 Hot-plug PSU module connector#2/

No. Code Description

8 P12V_GPU3 8 pin power connector (for GPU card bay #3)

9 P12V_GPU4 8 pin power connector (for GPU card bay #4)

10 F_VGA1 Front VGA header

11 LAN1 GbE LAN port #1

12 LAN_FP Front panel header for LAN LED and temperature

13 COM1 Serial port cable connector

14 LAN2 GbE LAN port #2

15 DIMM_P1_E0 Channel 1 slot 0 (for secondary CPU)

16 DIMM_P1_E1 Channel 1 slot 1 (for secondary CPU)

17 DIMM_P1_F0 Channel 2 slot 0 (for secondary CPU)

18 DIMM_P1_F1 Channel 2 slot 1 (for secondary CPU)

19 CPU1 Intel LGA2011 Socket R3 (Secondary CPU)

20 GPU_FAN8 GPU fan #8

21 GPU_FAN7 GPU fan #7

22 GPU_FAN6 GPU fan #6

23 GPU_FAN5 GPU fan #5

24 BIOS_PWD Clearing Supervisor Password jumper

25 BIOS_WP BIOS write protect jumper

26 IPMB IPMB connector

27 PCIE_4 Supports 1 x full-length full-height slot (PCIe x16)

28 PCIE_5 Supports 2 x full-length low-profile slots (2 x PCIe x8)

29 DIMM_P1_H1 Channel 3 slot 1 (for secondary CPU)

30 DIMM_P1_H0 Channel 3 slot 0 (for secondary CPU)

31 DIMM_P1_G1 Channel 4 slot 1 (for secondary CPU)

32 DIMM_P1_G0 Channel 4 slot 0 (for secondary CPU)

33 LED_BMC BMC firmware readiness LED

34 PMBUS_SEL PMBus Power Select Jumper

35 TPM TPM module connector

36 ME_UPDATE ME update jumper

37 S3_MASK S3 Power On Select jumper

38 SYS_FAN4 System fan #4

No. Code Description

39 SYS_FAN3 System fan #3

40 SYS_FAN2 System fan #2

41 SYS_FAN1 System fan #1

42 SATA_SGP1 SATA SGPIO header

43 BP_1 HDD back plane board header

44 COM2 SATA3 6Gb/s connectors

45 SATA2/SATA3 SATA3 6Gb/s connectors

46 CLR_CMOS Clear CMOS jumper

47 BP8_PWR 6 pin power connector for HDD back plane board

48 HDD_PWR1 HDD power connector #1 (For 1.8" SSD HD)

49 HDD_PWR2 HDD power connector #2 (For 1.8" SSD HD)

50 BIOS_RCVR BIOS recovery jumper

51 SW_RAID Intel/LSI Software RAID Key jumper

52 BAT Battery socket

53 PCIE_2 Supports 1 x full-length full-height slot (PCIe x16)

54 DIMM_P0_A0 Channel 1 slot 0 (for primary CPU)

55 DIMM_P0_A1 Channel 1 slot 1 (for primary CPU)

56 DIMM_P0_B0 Channel 2 slot 0 (for primary CPU)

57 DIMM_P0_B1 Channel 2 slot 1 (for primary CPU)

58 CPU0 Intel LGA2011 Socket R3 (Primary CPU)

59 DIMM_P0_D1 Channel 4 slot 1 (for primary CPU)

60 DIMM_P0_D0 Channel 4 slot 0 (for primary CPU)

61 DIMM_P0_C1 Channel 3 slot 1 (for primary CPU)

62 DIMM_P0_C0 Channel 3 slot 0 (for primary CPU)

63 GPU_FAN1 GPU fan #1

64 GPU_FAN2 GPU fan #2

65 GPU_FAN3 GPU fan #3

66 GPU_FAN4 GPU fan #4

67 F_USB3 USB 3.0 header

68 FP_1 Front panel header

69 P12V_GPU2 8 pin power connector (for GPU card bay #2)

70 P12V_GPU1 8 pin power connector (for GPU card bay #1)

71 PSU1 Hot-plug PSU module connector#1

72 GPU_FAN9 GPU fan #9

73 GPU_FAN10 GPU fan #10

74 GPU_FAN11 GPU fan #11

75 GPU_FAN12 GPU fan #12

No. Code Description

76 GPU_FAN13 GPU fan #13

77 GPU_FAN14 GPU fan #14

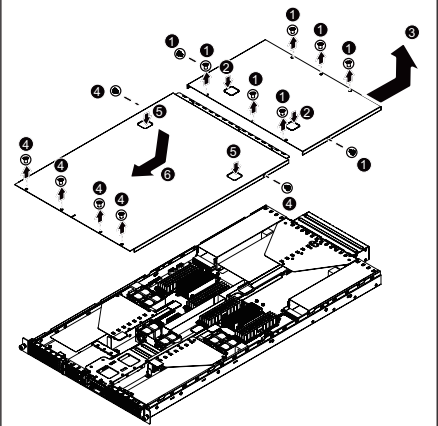
Front Panel Header/ 前面板接头

No.	Pin Define	No.	Pin Define
26	MLAN_MDI_P0	2	MLAN_MDI_N0
1	MLAN_MDI_P1	4	MLAN_MDI_N1
3	MLAN_MDI_P2	6	MLAN_MDI_N2
5	MLAN_MDI_P3	8	MLAN_MDI_N3
7	GND	10	LED_NIC_P0_1000
9	3.3V Standby	12	LED_NIC_P0_100
11	Power Button	14	LED_NIC_P0_ACT
13	Reset Button	16	System Status LED+
15	NMI Switch	18	Power LED
17	ID Switch	20	ID LED
19	SMBus Clock	22	HDD LED-
21	SMBus Data	24	HDD LED+
23	5V Standby	26	

HDD Back Plane Board Header/ 接硬盘驱动器头

No.	Pin Define	No.	Pin Define
12	BP_SGCLK	2	GND
11	BP_SGLD	4	BP_RST_N_R
1	BP_SGDIN	6	BP_ITAG_EN
3	BP_SGDOUT	8	BP_BMC_SDA
5	BP_BMC_SCL	10	BP_BMC_SDA
7	BP_BMC_SDA	12	BP_BMC_SDA
9	BP_BMC_SDA		
11	BP_BMC_SDA		

System Cover/ 机箱盖



CAUTION!
Before you remove or install the system cover:
Make sure the system is not turned on or connected to AC power.
注意！
在卸下或安装系统机盖之前，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 HDD bays

2 GPU bay#1

3 GPU bay#2

4 GPU bay#3

5 GPU bay#4

6 System fan #1/#2 (SYS_FAN1/2)

7 System fan #3/#4 (SYS_FAN3/4)

8 GPU Fan #3/#4 (GPU_FAN3/GPU_FAN4)

9 GPU Fan #1/#2 (GPU_FAN1/GPU_FAN2)

10 GPU Fan #5/#6 (GPU_FAN5/GPU_FAN6)

No. Description

11 GPU Fan #7/#8 (GPU_FAN7/GPU_FAN8)

12 GPU Fan #9/#10 (GPU_FAN9/GPU_FAN10)

13 GPU Fan #11/#12 (GPU_FAN11/GPU_FAN12)

14 GPU Fan #13/#14 (GPU_FAN13/GPU_FAN14)

15 GPU Fan #15/#16 (GPU_FAN15/GPU_FAN16)

16 GPU Fan #17/#18 (GPU_FAN17/GPU_FAN18)

17 Memory slots

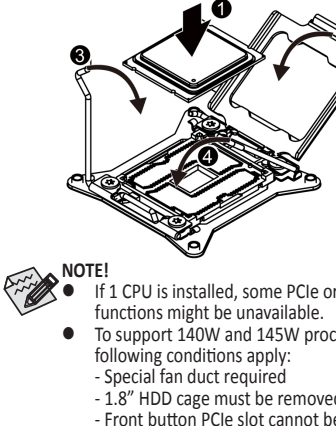
18 CPU heat sink

19 Power supply cage

CAUTION!
To connect system fan connector, follow the instruction:
● Blue/Red cable connect to odd numbered connector.
● White/Amber cable connect to even numbered connector.

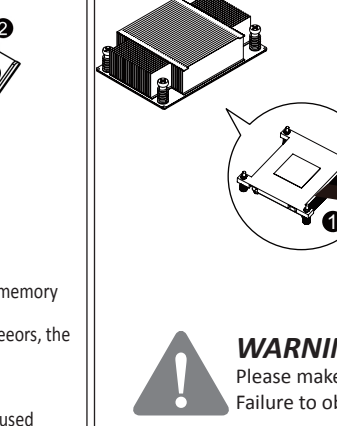
注意！
● 蓝/红电缆连接于单数风扇插座。
● 白/橘电缆连接于双数风扇插座。

Installing CPU/ 处理器



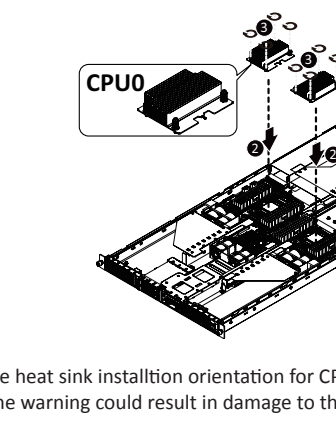
NOTE!
● If 1 CPU is installed, some PCIe or memory functions might be unavailable.
● To support 140W and 145W proceessors, the following conditions apply:
- Special fan duct required
- 1.8" HDD cage must be removed
- Front button PCIe slot cannot be used

Heat Sink/ 散热装置



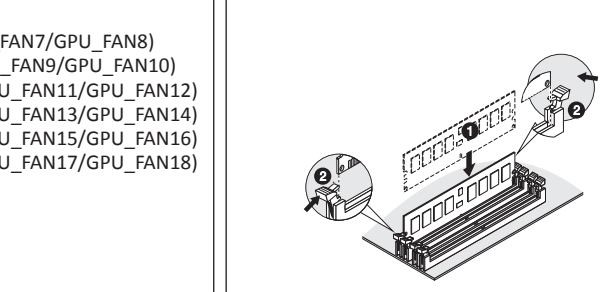
WARNING!
Please make sure the heat sink installation orientation for CPU0 and CPU1.
Failure to observe the warning could result in damage to the equipment.

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。

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

1DPC

1DPC

2DPC

RDIMM	SRx4	2133	2133	1866
RDIMM	SRx8	2133	2133	1866
RDIMM	DRx8	2133	2133	1866
RDIMM	DRx4	2133	2133	1866
LRDIMM	QRx4	2133	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/slot2
● 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/槽槽2。
● 若安装顺序有误，系统将不能正常引导。

Front & Rear/ 系统前部与后部概览

System Front View

No. Description

1 HDD bay#0

2 HDD bay#1

3 Front panel LEDs and buttons

4 10/100/1000 Server management LAN port

5 USB 3.0 ports

6 GbE LAN ports

7 VGA port

8 COM port

System Rear View

No. Description

1 Power supply fan

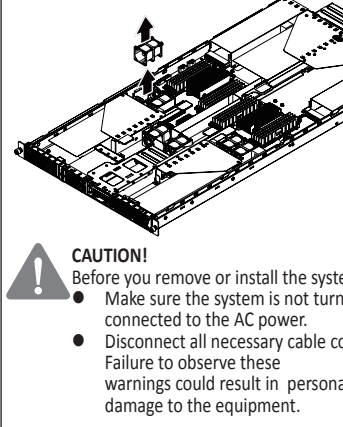
2 Power supply module cord socket

Speed LED Link/Activity LED

10/100/1000 LAN LED:

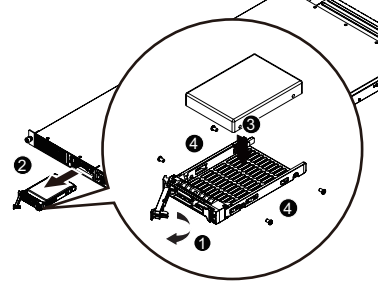
State	Description
Yellow On	1Gbps data arte
Green On	100Mbps data arte
Off	10Mbps data arte

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 Components

No. Description

1 HDD#0

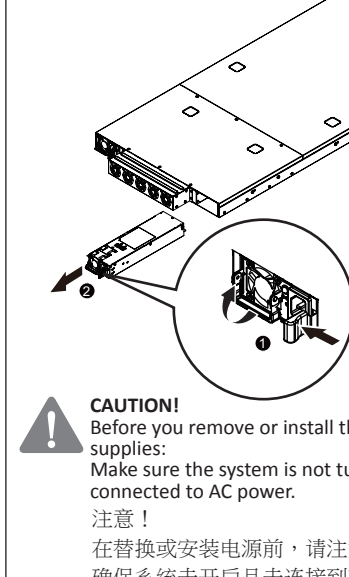
2 HDD#1

3 SATA_SGP1

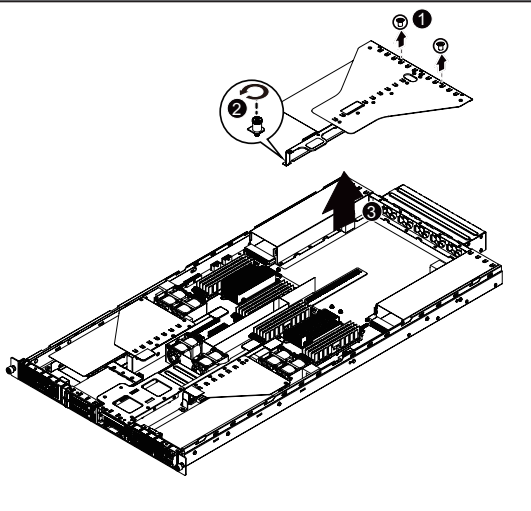
4 A_SEL1

HDD Back Plane Board CPLD Configuration		
SGPIO Decode Mode	Normal Mode	Shift Mode
SGPIO Port	SATA_SGP1	
Host Interface	SATA/SAS#0-#3	SATA/SAS#2-#5
HDD Configuration	HDD#0-#1	HDD#0-#1
Jumper	A_SEL1	2-3 Close
		1-2 Close

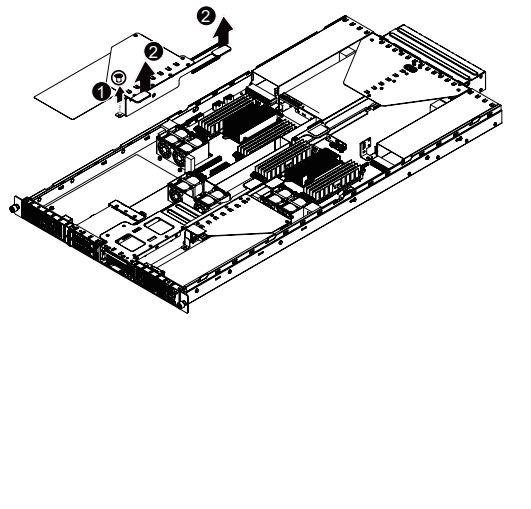
GPU Card



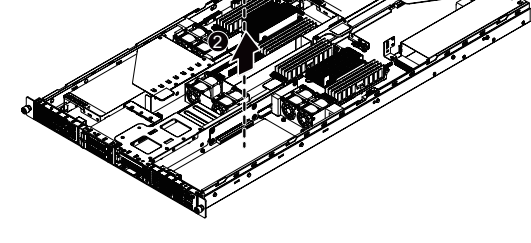
GPU Card



Step 3. Follow the instructions that come with your bracket box for how to instillation the card bracket to GPU card.
步骤三：安装GPU卡，请参照铁件配件盒里的安装说明



Step 3. Follow the instructions that come with your bracket box for how to instillation the card bracket to GPU card.
步骤三：安装GPU卡，请参照铁件配件盒里的安装说明



Step 3. Follow the instructions that come with your bracket box for how to instillation the card bracket to GPU card.
步骤三：安装GPU卡，请参照铁件配件盒里的安装说明

Front Panel LEDs and Buttons/ 前面板 LED 说明



No.	Name	Color	Status	Description
1	ID Button w/LED		Solid On	Press the button to activate system identification.
2	Power Button w/LED	Green	Solid On	System is powered on.
		Green	Blink	System is in ACPI S1 state (sleep mode).
		N/A	Off	System is not powered on or in ACPI S5 state (power off). System is in ACPI S4 state (hibernate mode).
3	Reset Button			Press the button to reset the system.
4	NMI Button			Press the button server generates a NMI to the processor if the multiple-bit ECC errors occur, which effectively halt the server.
5	HDD Status LED	Green	On	HDD locate
			Blink	HDD access
		Amber	On	HDD access
		Green/Amber	Blink	HDD fault
		N/A	Off	No HDD access or no HDD fault.
6	Sytem Status LED	Green	Solid On	System is operating normally.
		Amber	Solid On	May indicates the following: Power module failure System fan failure Power supply voltage issue System temperature/voltage issue Current error/Processor error/ Critical memory error
			Blink	
		N/A	Off	System is not ready, may indicates the following: POST error NMI error Processor or terminator missing/ Critical memory error

编号	名称	颜色	状态	说明
1	ID按钮和LED		恒亮	按下按钮启动系统识别功能。
2	电源按钮和LED	绿色	恒亮	系统处于开机状态。
		绿色	闪烁	系统处于ACPI S1状态（睡眠模式）。
		无亮灯	不亮	系统未开机或处于ACPI S5状态（关机状态）。系统处于ACPI S4状态（休眠模式）。
3	复位按钮			按此按钮启动系统。
4	NMI按钮			如果发生了ECC错误，按此按钮时服务器会生成一个NMI并发送到处理器，从而有效地中断服务器。
5	硬盘驱动器LED	绿色	亮	硬盘驱动器定位
			闪烁	硬盘驱动器访问
		橙色	亮	硬盘驱动器访问
		绿色/橙色	闪烁	硬盘故障
		无亮灯	不亮	无硬盘驱动器访问
6	系统状态LED	绿色	恒亮	正在运行或正常操作
		橙色	恒亮	当LED稳定点亮时，检查下列项目： 电源模块故障 系统风扇故障 电源电压问题 系统温度/电压问题 系统错误/处理器错误/内存错误
			闪烁	
		无亮灯	不亮	系统未就绪就，检查下列项目： 开机自检错误 NMI错误 处理器错误或终端程序错误/内存错误



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 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/>

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.

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, can or exhaust vent. Heating battery cells to temperatures above 650C (1490F) 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准

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)	汞(Hg)	镉(Cd)	多溴联苯(PBB)	多溴二苯醚(PBDE)
PC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	○	○	○	○	○
焊锡金属	○	○	○	○	○
Soldering metal	○	○	○	○	○
树脂、塑料、帘帘及其他耗材	○	○	○	○	○
Resin, Plastic, Paint 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

X: 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

对销售之日的所售产品,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.