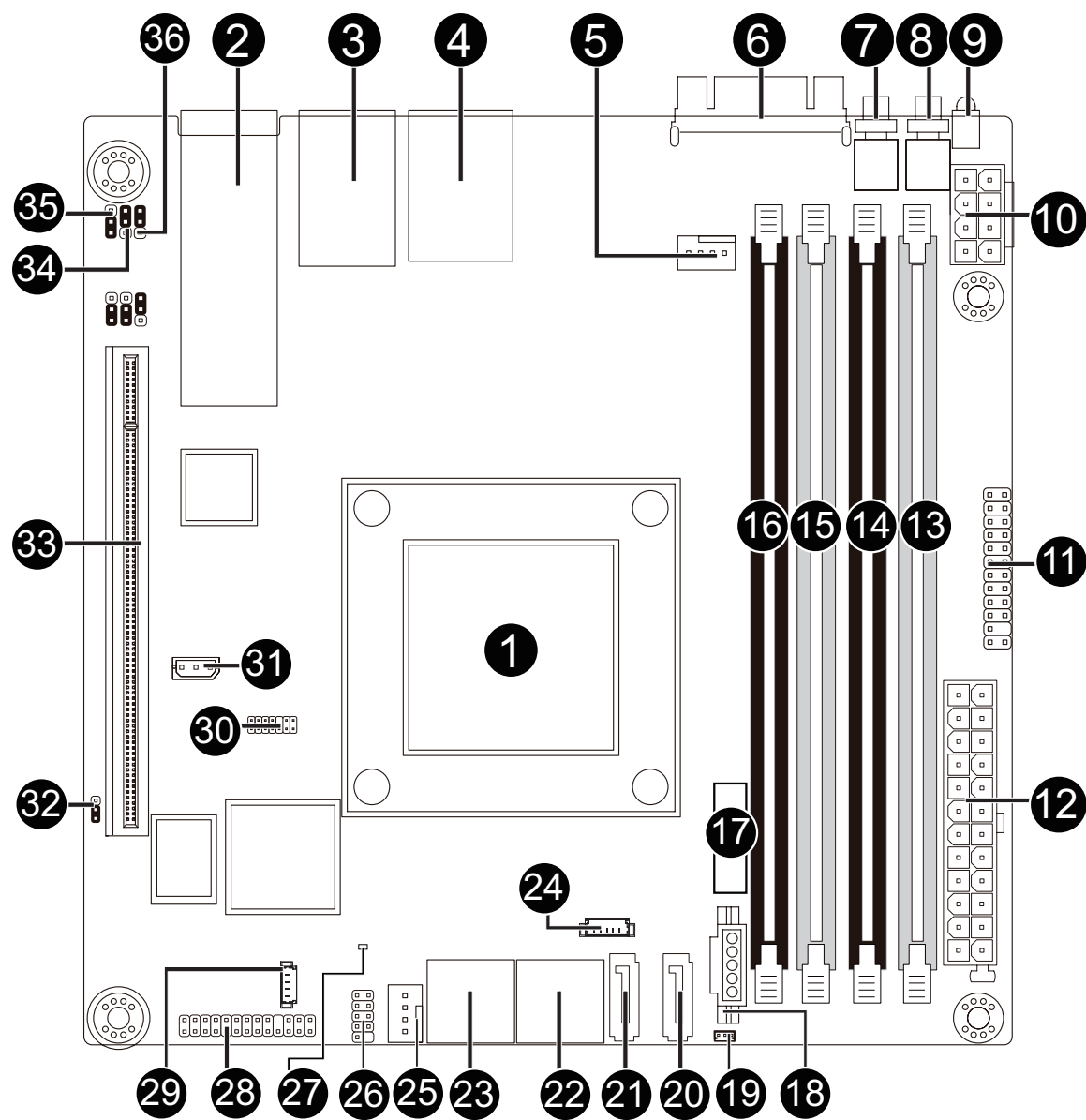


MB10-DS Series Quick Reference Guide/ 快速测试参考指南



| No. | Code | Description |
|-----|------------|--|
| 1 | CPU | Intel Xeon® processor D-1541, FCBGA1667 SoC (MB10-DS0/3) Intel Xeon® processor D-1521, FCBGA1667 SoC (MB10-DS1/4) Intel Xeon® processor D-1581, FCBGA1667 SoC (MB10-DS2/5) |
| 2 | SFP+1_2 | SFP+ LAN connectors#1/#2 |
| 3 | LAN1_2 | LAN ports |
| 4 | USB3_MLAN | BMC Management LAN port (top) / USB 3.0 ports (bottom) |
| 5 | CPU0_FAN | CPU fan connector |
| 6 | VGA | VGA port |
| 7 | SW_ID | ID switch button w/LED |
| 8 | SW_PWR | Power button w/LED |
| 9 | LED_STA | System Status LED |
| 10 | P12V_AUX2 | 8 pin power connector |
| 11 | FP_1 | Front panel header |
| 12 | ATX1 | 24 pin main power connector |
| 13 | DIMM_PO_A0 | Channel 1 slot 0 |
| 14 | DIMM_PO_A1 | Channel 2 slot 1 |
| 15 | DIMM_PO_B0 | Channel 3 slot 0 |
| 16 | DIMM_PO_B1 | Channel 4 slot 1 |
| 17 | BAT1 | Battery |
| 18 | PMBUS | PMBus connector |
| 19 | SATA_DOM0 | SATA DOM power cable connector |

| No. | Code | Description |
|-----|------------|-----------------------------|
| 20 | SATA0 | SATA 3 6Gb/s connector |
| 21 | SATA1 | SATA 3 6Gb/s connector |
| 22 | SATA_2_3 | SATA 3 6Gb/s connectors |
| 23 | SATA_4_5 | SATA 3 6Gb/s connectors |
| 24 | SATA_SGPIO | SATA SGPIO header |
| 25 | SYS_FAN 2 | System fan connector#2 |
| 26 | COM1 | Serial port cable connector |
| 27 | LED_BMC1 | BMC firmware readiness LED |
| 28 | BP_1 | HDD back plane board header |
| 29 | NVME_PH | NVME connector |
| 30 | TPM | TPM module connector |
| 31 | IPMB | IPMB connector |
| 32 | CLR_CMOS | Clear CMOS jumper |
| 33 | PCIE_1 | PCI Express x16 slot |
| 34 | ME_UPDATE | ME update jumper |
| 35 | ME_RCVR | ME recovery jumper |
| 36 | S3_MASK | S3 Power On Select jumper |

Rear I/O Connector/ 后面板接口

| No. | Description |
|-----|---|
| 1 | System Status LED |
| 2 | Power button w/LED |
| 3 | ID switch button w/LED |
| 4 | VGA port |
| 5 | USB 3.0 ports |
| 6 | KVM Server Management 10/100/1000 LAN Port (Dedicated LAN Port) |
| 7 | LAN ports |
| 8 | SFP+ LAN ports (MB10-DS3/MB10-DS4/MB10-DS5) |

10/100/1000 LAN LED:

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

System Status LED:

| State | Description |
|----------|---------------------|
| Green On | Normal operation |
| Amber On | Critical alert. |
| Off | System is not ready |

Power button/LED:

| State | Description |
|----------|-----------------------|
| Green On | System is powered on |
| Off | System is powered off |

ID switch button w/LED:

| State | Description |
|---------|----------------------------------|
| Blue On | Unit selected for identification |
| Off | No identification |

ATX Power/ 电源

| No. | Pin Define | No. | Pin Define |
|-----|------------|-----|------------|
| 1 | 3.3V | 13 | 3.3V |
| 2 | 3.3V | 14 | -12V |
| 3 | GND | 15 | GND |
| 4 | +5V | 16 | PS_ON |
| 5 | GND | 17 | GND |
| 6 | +5V | 18 | GND |
| 7 | GND | 19 | GND |
| 8 | Power Good | 20 | -5V |
| 9 | 5VSB | 21 | +5V |
| 10 | +12V | 22 | +5V |
| 11 | +12V | 23 | +5V |
| 12 | 3.3V | 24 | GND |

PMBUS

| No. | Pin Define |
|-----|-------------|
| 1 | PMBus Clock |
| 2 | PMBus Data |
| 3 | PMBus Alert |
| 4 | GND |
| 5 | 3.3V Sense |

IPMB

| No. | Pin Define |
|-----|------------|
| 1 | Clock |
| 2 | GND |
| 3 | Data |

TPM Connector/ 可信平台模块

| No. | Pin Define |
|-----|-------------|
| 1 | CLK |
| 2 | P_3V3_AUX |
| 3 | LPC_RST |
| 4 | P3V3 |
| 5 | LPC_LAD0 |
| 6 | IRQ_SERIAL |
| 7 | LPC_LAD1 |
| 8 | No Connect |
| 9 | LPC_LAD2 |
| 10 | No Connect |
| 11 | LPC_LAD3 |
| 12 | GND |
| 13 | LPC_FRAME_N |
| 14 | GND |

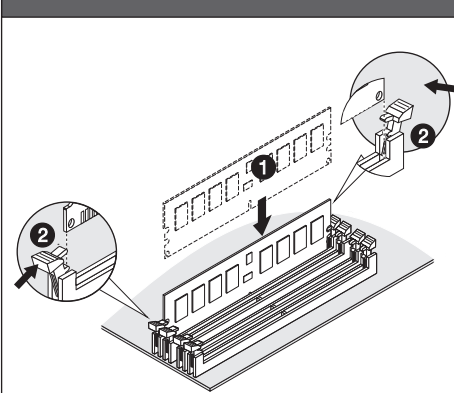
CPU/System FAN/ 风扇

| No. | Pin Define |
|-----|---------------|
| 1 | GND |
| 2 | +12V |
| 3 | Sense |
| 4 | Speed Control |

NVME Connector

| No. | Pin Define |
|-----|-------------|
| 1 | GND |
| 2 | SMBUS Data |
| 3 | SMBUS Clock |
| 4 | GND |

Memory Population Configuration/ 安装内存



| Type | Ranks PerDIMM 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 ECC | 1600, 1866, 2133, 2400* | 1600, 1866, 2133, 2400* | 1600, 1866, 2133, 2400* |
| RDIMM | SRx8 ECC | 1600, 1866, 2133, 2400* | 1600, 1866, 2133, 2400* | 1600, 1866, 2133, 2400* |
| RDIMM | DRx8 ECC | 1600, 1866, 2133, 2400* | 1600, 1866, 2133, 2400* | 1600, 1866, 2133, 2400* |
| RDIMM | DRx4 ECC | 1600, 1866, 2133, 2400* | 1600, 1866, 2133, 2400* | 1600, 1866, 2133, 2400* |

- Note: DDR4 2400MHz is only available on Intel Xeon® D-1541 processor.
- When only one DIMM is used, it must be populated in memory slot0 first.
- System will not boot normally with incorrect populated sequence.
- 仅Intel Xeon® D-1541处理器支持DDR4-2400MHz内存。
- 只使用一个DIMM时，必须安装到内存插槽0。
- 若安装顺序有误，系统将不能正常引导。

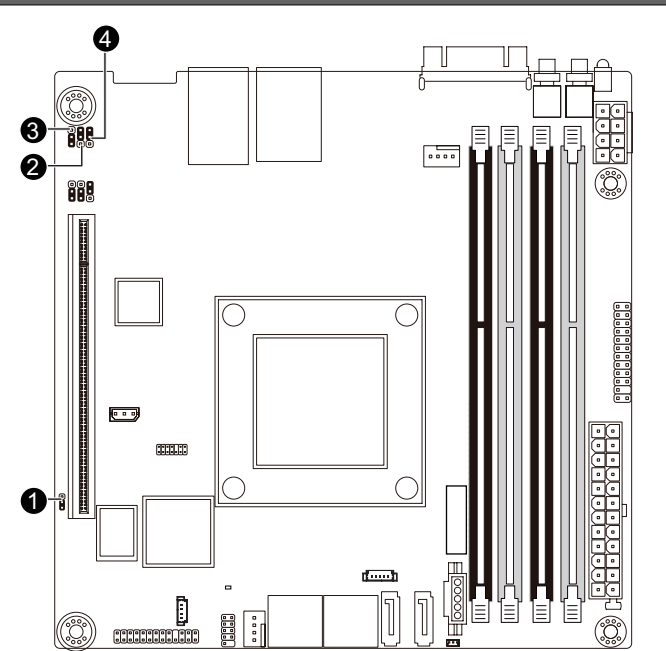
Front Panel Header/ 前面板

| No. | Pin Define | No. | Pin Define |
|-----|---------------|-----|--------------------|
| 1 | Power LED+ | 2 | 5V Standby |
| 2 | No Pin | 4 | ID LED+ |
| 3 | No Pin | 6 | ID LED- |
| 5 | Power LED- | 8 | System Status LED+ |
| 7 | HDD LED+ | 10 | System Status LED- |
| 9 | HDD LED- | 12 | LAN1 Active LED+ |
| 11 | Power Button | 14 | LAN1 Link LED- |
| 13 | GND | 16 | SMBus Data |
| 15 | Reset Button+ | 18 | SMBus Clock |
| 17 | GND | 20 | Case Open |
| 19 | ID Switch+ | 22 | LAN2 Active LED |
| 21 | ID Switch- | 24 | LAN2 Link LED- |
| 23 | NMI Switch- | | |

HDD Back Plane Board Header/ 硬盘背板排针

| No. | Pin Define | No. | Pin Define |
|-----|-------------|-----|-------------|
| 1 | BP_SGP_CLK | 2 | No Connect |
| 3 | BP_SGP_GLD | 4 | FAN_SGP_GLD |
| 5 | BP_SGP_DOUT | 6 | GND |
| 7 | Key Pin | 8 | Reset |
| 9 | GND | 10 | BP_LED_A_N |
| 11 | BP_LED_G_N | 12 | GND |
| 13 | BP_SGP_DIN | 14 | No Connect |
| 15 | GND | 16 | SMB_BP_DATA |
| 17 | GND | 18 | SMB_BP_CLK |
| 19 | P_3V3_AUX | 20 | BMC_ACK |
| 21 | P_3V3_AUX | 22 | BMC_REQ |
| 23 | GND | 24 | Key Pin |
| 25 | BP_PRESENSE | 26 | GND |

Jumper Settings/ 跳线设置



- | No. | Description |
|-----|--|
| 1 | Clear CMOS Jumper 1-2 Close: Normal operation (Default setting) 2-3 Close: Clear CMOS data. |
| 2 | ME Update Jumper 1-2 Close: ME update. 2-3 Close: Normal operation (Default setting) |
| 3 | ME Recovery Jumper 1-2 Close: Normal operation. (Default setting) 2-3 Close: ME recovery mode. |
| 4 | 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) |

SATA Connector/SATA 接口

| No. | Pin Define | No. | Pin Define |
|-----|------------|-----|------------|
| 1 | GND | 5 | RXN |
| 2 | TXP | 6 | RXP |
| 3 | TXN | 7 | GND |
| 4 | GND | | |

BMC F/W Readiness LED

| State | Description |
|-------|-------------------------|
| On | BMC firmware is initial |
| Blink | BMC firmware is ready |
| Off | AC loss |

Serial Port Cable Connector/ 串行端口

| No. | Pin Define |
|-----|------------|
| 1 | NDCC- |
| 2 | NSIN |
| 3 | NSOUT |
| 4 | NDTR- |
| 5 | GND |
| 6 | NDSR- |
| 7 | NRTS- |
| 8 | NCTS- |
| 9 | NRI- |
| 10 | No Pin |

SATA SGPIO Header/ 串行 GPIO

| No. | Pin Define | No. | Pin Define |
|-----|------------|-----|------------|
| 1 | SDIN | 4 | SLOAD |
| 2 | GND | 5 | SCLK |
| 3 | SDOUT | | |

SATA DOM Power Cable Connector

| No. | Pin Define |
|-----|------------|
| 1 | P5V |
| 2 | GND |
| 3 | NC |



Regulatory Notices

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.

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WARNING:

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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。

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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

| 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 (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

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