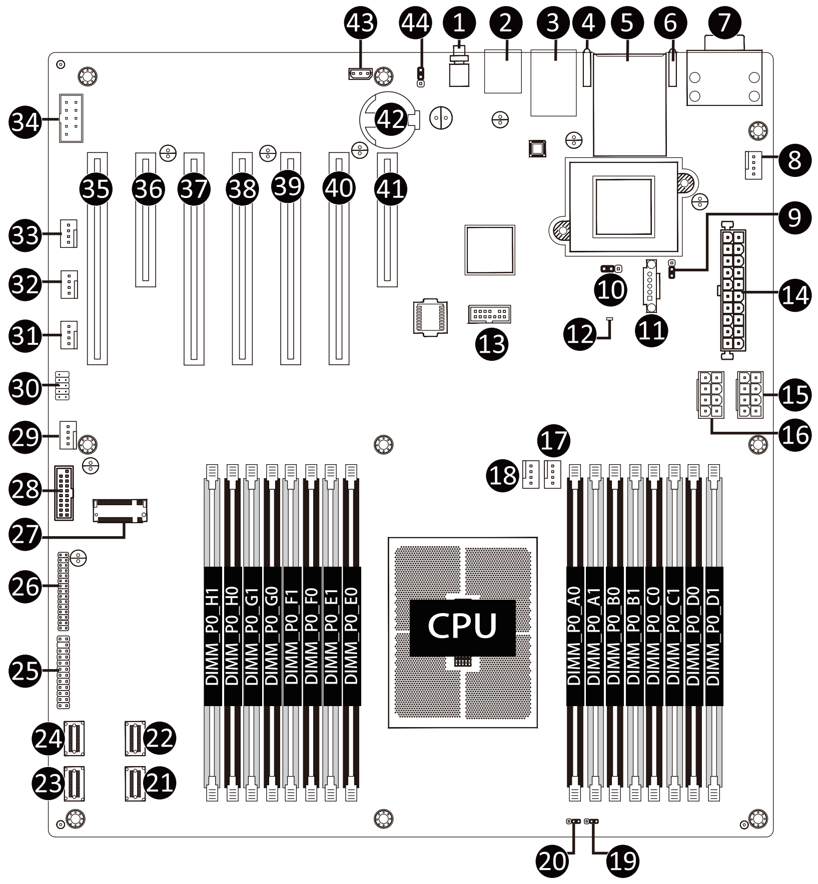
MZ31-AR0 Quick Reference Guide/ 快速测试参考指南



No.	Code	Description
1	SW_ID	ID button with LED
2	R_USB1	USB 2.0 ports
3	USB3_LAN	Server managemnt LAN port (top)/USB 3.0 port (bottom)
4	LED_LAN1	SFP+ LAN port #1 active/link LEDs
5	SFP+_1/SFP+_2	SFP+ LAN port #1/SFP+ LAN port#2
6	LED_LAN2	SFP+ LAN port #2 active/link LEDs
7	COM1_VGA	Serial port (top) / VGA port (bottom)
8	SYS_FAN3	System fan connector #3
9	PMBUS_SEL	PMBus select jumper
10	S3_MASK	S3 power on select jumper
11	PMBUS	PMBus connector
12	LED_BMC1	BMC firmware readiness LED
13	TPM_LPC	TPM connector
14	P2	2 x 12 pin main power connector
15	P4	2 x 4 pin power connector (for memory)
16	P3	2 x 4 pin power connector (for CPU)
17	CPU1_FAN	CPU fan connector #1
18	CPU0_FAN	CPU fan connector #0
19	BIOS_PWD	Clearing Supervisor Password jumper
20	BIOS_RCVR	BIOS recovery jumper
21	SLSAS_0	Slimline connector #0 (SATA 6Gb/s signal)
22	SLSAS_1	Slimline connector #1 (SATA 6Gb/s signal)
23	SLSAS_2	Slimline connector #2 (SATA 6Gb/s signal)
24	SLSAS_3	Slimline connector #3 (SATA 6Gb/s signal)
25	FP_1	Front panel header
26	BP_1	HDD back plane board header
27	M2_SK1	M.2 slot (Gen3/x4)
28	F_USB1	USB 3.0 header
29	SYS_FAN1	System fan connector #1
30	F_USB2	USB 2.0 header
31	SYS_FAN4	System fan connector #4
32	SYS_FAN5	System fan connector #5
33	SYS_FAN2	System fan connector #2
34	COM2	Serial port cable connector
35	PCIE_1	PCIe x16 slot (Gen3/x16)
36	PCIE_2	PCIe x8 slot (Gen3/x8)
37	PCIE_3	PCIe x16 slot (Gen3/x16)
38	PCIE_4	PCIe x16 slot (Gen3/x16)
39	PCIE_5	PCIe x16 slot (Gen3/x8)
40	PCIE_6	PCIe x16 slot (Gen3/x16)
41	PCIE_7	PCIe x8 slot (Gen3/x8)
42	BAT	Battery socket
43	IPMB	IPMB connector
44	CLR_CMOS	Clear CMOS jumper

Front Panel Header / 前面板

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

HDD Back Plane Board Header/ 硬盤背板排針

No.	Pin Define	No.	Pin Define
1	HP_ALERT	2	BPMI_DIN/OUT
3	GND	4	BPMI_DIN/IN
5	BPMI_LOAD	6	GND
7	BPMI_CLK	8	PLD_Program_ENABLE
9	GLED_AMB_N	10	GLED_GRN_N
11	FAN_IRQ_N	12	No Connect
13	BP_SCL	14	GND
15	BP_SDA	16	BP_RST_N
17	SMB_U2_TMP_SCL	18	GND
19	SMB_U2_TMP_SDA	20	I2C_DEV_RST
21	PH_HP_SCL0	22	GND
23	PH_HP_SDA0	24	GND
25	No Connect	26	GND
27	No Connect	28	GND
29	P_3V3_AUX	30	P_3V3_AUX

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

No.	Pin Define
1	GND
2	GND
3	GND
4	GND
5	+12V
6	+12V
7	+12V
8	+12V

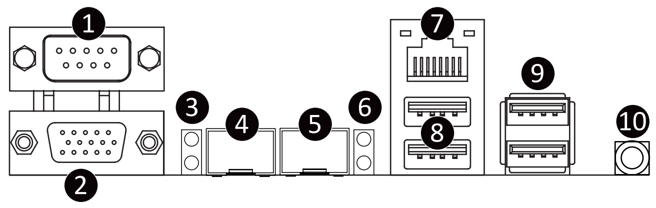
CPU/System FAN/ 风扇

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

PMBUS

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

Rear I/O Connector/ 后面板接口



No.	Desription
1	Serial port
2	VGA port
3	SFP+ LAN port #2 active/link LEDs
4	SFP+ LAN port #2
5	SFP+ LAN port #1
6	SFP+ LAN port #1 active/link LEDs
7	10/100/1000 Server Management LAN port
8	USB 3.0 ports
9	USB 2.0 ports
10	ID button with LED

Green/Yellow Link LED
Green Active LED

SFP+ LAN Link and Speed LED:

State	
Yellow On	1 Gbps data rate
Green On	10 Gbps data rate

SFP+ LAN Active LED:

State	Description
Green On	Link between system and network or no access.
Green Blink	Data transmission or receiving.
Off	No data transmission or receiving.

Speed LED Link/Activity LED

10/100/1000 LAN LED:

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

ID button/LED:

State	Description
Blue On	System identifcation is active.
Off	System identifcation is disabled.

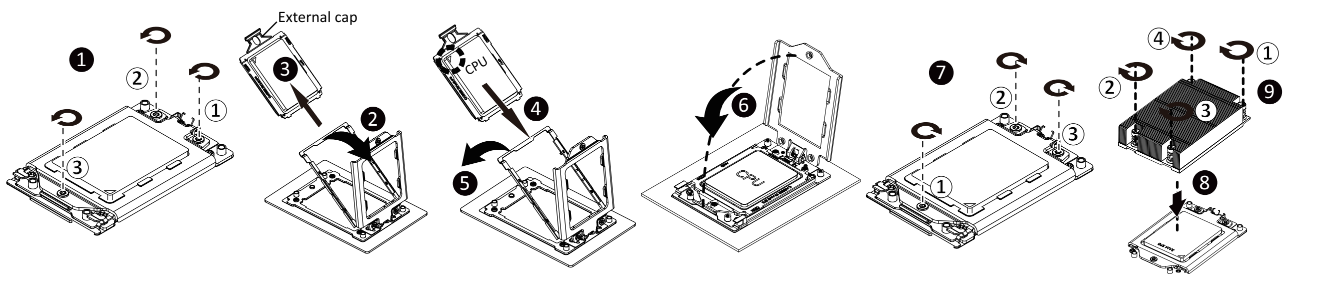
COM2 Connector

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

USB 2.0 Header

No.	Pin Define	No.	Pin Define
1	Power (5V)	6	USB DY+
2	Power (5V)	7	GND
3	USB DX-	8	GND
4	USB DY-	9	No Pin
5	USB DX+	10	No Connect

Installing CPU/Heatsink



NOTE!

- When installing the heatsink to CPU, use T20-Lobe driver to tighten 4 captive nuts in sequence as 1-4.
- The screw tightening torque: 16.1 ± 1.2 kgf-cm (14.0± 1.0 lbf-in)

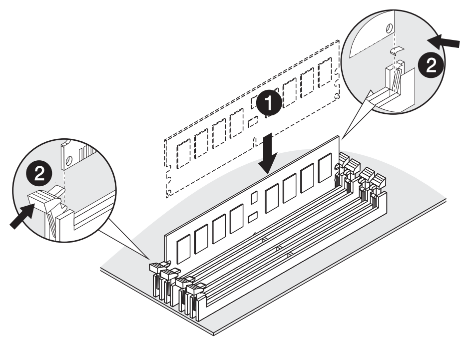
TPM Connector/ 可信平台模块

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

USB 3.0 Header

No.	Pin Define	No.	Pin Define
1	Power	11	IntA_P2_D+
2	IntA_P1_SSRX-	12	IntA_P2_D-
3	IntA_P1_SSRX+	13	GND
4	GND	14	IntA_P2_SSTX+
5	IntA_P1_SSTX-	15	IntA_P2_SSTX-
6	IntA_P1_SSTX+	16	GND
7	GND	17	IntA_P2_SSRX+
8	IntA_P1_D-	18	IntA_P2_SSRX-
9	IntA_P1_D+	19	Power
10	NC	20	No Pin

Memory Population Configuration/ 安装内存



RDIMM Maximum Frequency Supported Table

DIMMs Populated	DIMM			Frequency (MT/s)
	1R	2R 2DR 2S2R 2S4R	4DR	1.2V
1	1	--	--	2666
	--	1	--	2400
	--	--	1	Not Supported
2	2	--	--	2133
	1	1	--	2133
	--	2	--	2133
	--	--	2	Not Supported
	1	--	1	Not Supported
	--	1	1	Not Supported

LRDIMM Maximum Frequency Supported Table

DIMMs Populated	DIMM			Frequency (MT/s)
	1R	2S4R	4DR	1.2V
1	1	--	--	Not Supported
	--	1	--	2666
	--	--	1	2666
2	2	--	--	Not Supported
	1	1	--	Not Supported
	--	2	--	2133
	--	--	2	2133
	1	--	1	Not Supported
	--	1	1	2133

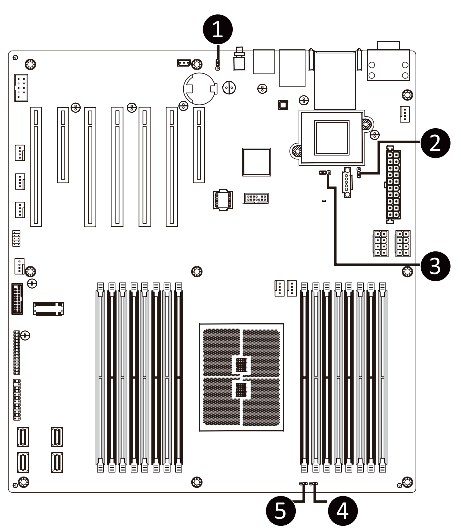
DDR Population Table

DIMMs Populated	DIMM0	DIMM1
1	--	1
2	1	1

NOTE!

- 1R: 1 package rank of SDP DRAMs
- 2R: 2 package rank of SDP DRAMs
- 2DR: 2 package rank of DDP DRAMs
- 4DR: 4 package rank of DDP DRAMs
- 1S2R/1S4R/1S8R: 1 package rank of 2/4/8 high 3DS DRAMs
- 2S2R/2S4R/2S8R: 2 package rank of 2/4/8 high 3DS DRAMs
- DIMM must be populated in sequential alphabetic order, starting with bank A.
- When only one DIMM is used, it must be populated in memory slot A1.

Jumper Settings/ 跳线设置



No.	Desription
1	Clear CMOS Jumper 1-2 Closed: Normal operation (Default setting) 2-3 Closed: Clear CMOS data.
2	PMBus Address Selection Jumper 1-2 Closed: From core chipset. 2-3 Closed: From BMC. (Default setting)
3	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)
4	Clearing Supervisor Password Jumper 1-2 Close: Normal operation. (Default setting) 2-3 Close: Skip supervisor password.
5	BIOS Recovery Jumper 1-2 Close: Normal operation. (Default setting) 2-3 Close: BIOS recovery mode.

IPMB

No.	Pin Define
1	Clock
2	GND
3	Data

BMC Firmware Readiness LED

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

PN:25ME0-MZ3101-Q0H

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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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.

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WARNING:

This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer, and Bisphenol A (BPA), which is known to the State of California to cause birth defects or other reproductive harm. For more information go to 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, punchture 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

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Management Methods on Control of Pollution from Electronic Information Products
(China RoHS Declaration)

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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 (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

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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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