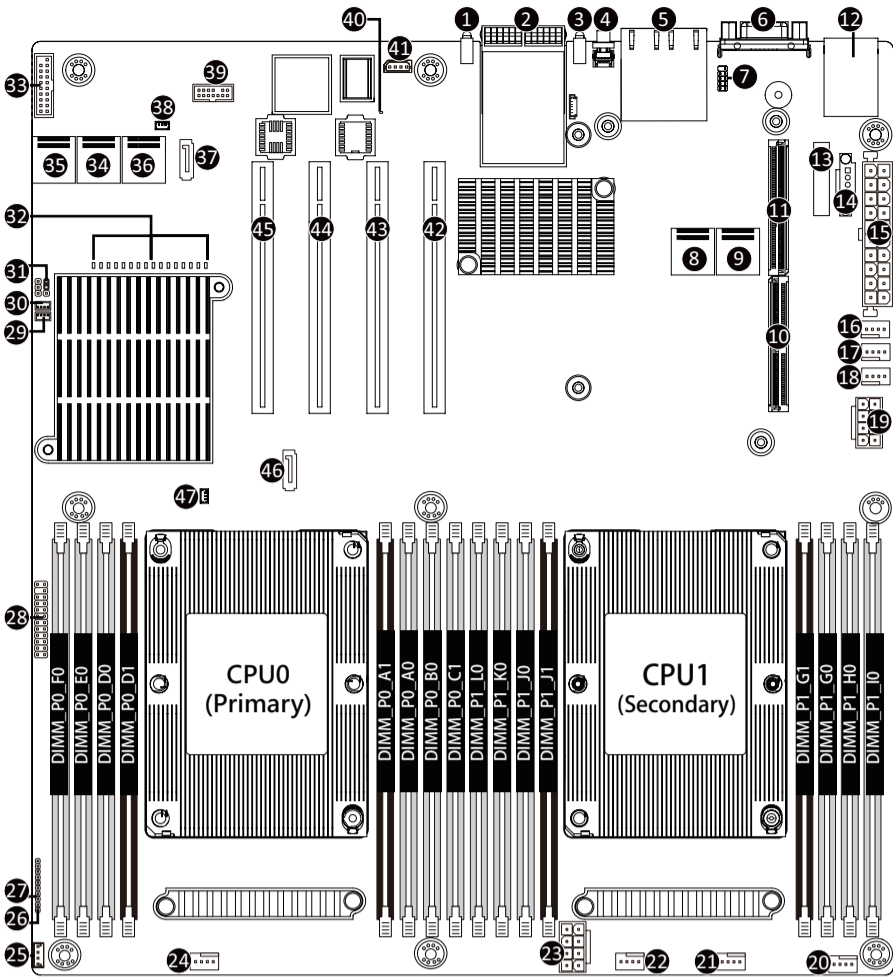


# MD61-SC2 Quick Reference Guide



No.	Code	Description
1	LED_LAN1	SFP+ LAN port#1 Active LED
2	SFP+_1_2	SFP+ LAN port #1 (Left)
3	LED_LAN2	SFP+ LAN port #2 (Right)
4	SW_ID	SFP+ LAN#2 link/Active LED
5	LAN1_2	ID button with LED
6	VGA	GbE LAN port #1 (Left)
7	COM1	GbE LAN port #2 (Right)
8	U2_0	VGA port
9	U2_1	Serial port cable connector
10	MEZZ_2	Slimline connector #1 (PCIe x4 signal)
11	MEZZ_1	Slimline connector #2(PCIe x4 signal)
12	USB3_MLAN	PCIe x8 slot (Proprietary/for mezzanine card)
13	BAT	PCIe x8 slot (Proprietary/for mezzanine card)
14	PMBUS	Sever management LAN port (top)/USB 3.0 ports (bottom)
15	ATX1	Battery socket
16	SYS_FAN5	PMBus connector
17	CPU1_FAN1	2x12 pin main power connector
18	CPU0_FAN1	System fan connector#5
19	P12V_AUX2	CPU fan connector (for secondary CPU)
20	SYS_FAN4	CPU fan connector (for primary CPU)
21	SYS_FAN3	2x4 pin 12V power connector (for secondary CPU)
22	SYS_FAN2	System fan connector#4
23	P12V_AUX1	System fan connector#3
24	SYS_FAN1	System fan connector#2
25	SW_RAID	2x4 pin 12V power connector (for primary CPU)
26	LAN4_AC1	System fan connector#1
27	LAN3_AC1	VROC key
28	FP_1	LAN#4 Active LED
29	J2	LAN#3 Active LED
30	J1	Front panel header
31	CLR_CMOS	Function jumper switch #2
32	F_USB3	Function jumper switch #1
33	SL_CN1	Clear CMOS jumper
34	SL_CN2	Error LED for DIMM slots
35	SL_CN3	USB 3.0 header
36	SL_CN3	Slimline connector #1 (SATA 6Gb/s signal/for SATA#0~#3)
		Slimline connector #2 (SATA 6Gb/s signal/for SATA#4~#7)
		Slimline connector #3 (SATA 6Gb/s signal/for sSATA#0~#3)

No.	Code	Description
37	SSATA5	SATA 6Gb/s connector #5
38	SATA_DOM1	SATA DOM support power connector for SSATA port #5
39	TPM	TPM connector
40	LED_BMC	BMC firmware readiness LED
41	IPMB	IPMB connector
42	PCIE_4	PCIe x16 slot #4 (Gen3 x16)
43	PCIE_3	PCIe x16 slot #3 (Gen3 x16)
44	PCIE_2	PCIe x16 slot #2 (Gen3 x16)
45	PCIE_1	PCIe x16 slot #1 (Gen3 x16)
46	SSATA4	SATA 6Gb/s connector #4
47	SATA_DOM0	SATA DOM support power connector for SSATA port #4

### Front Panel Header #1

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-

### BMC Firmware Readiness LED

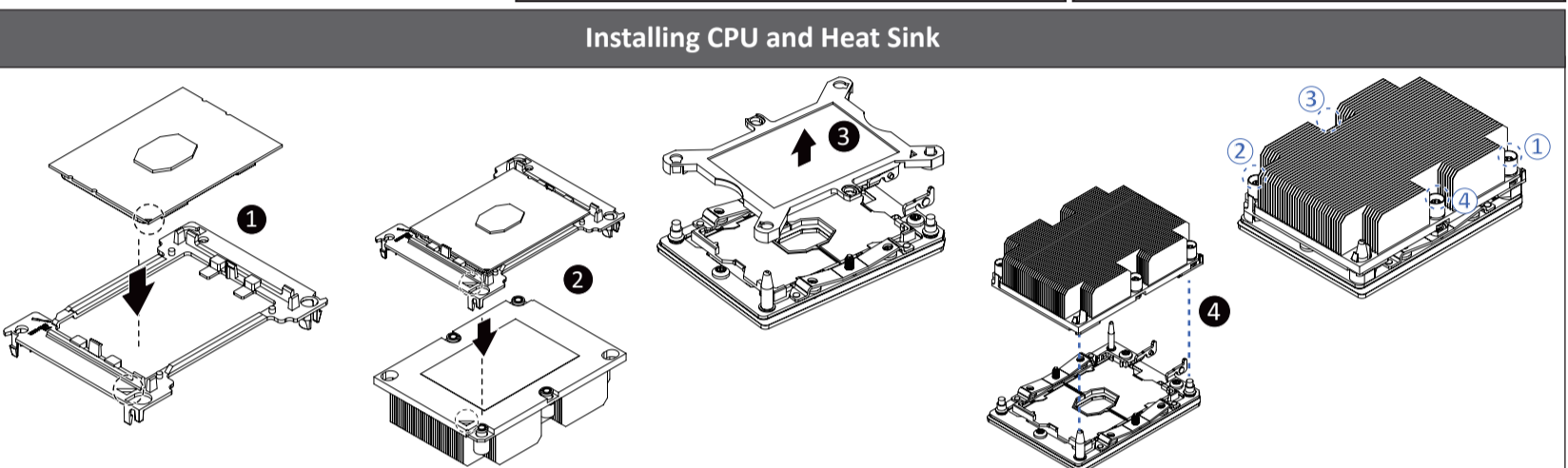
BMC Firmware Readiness LED (LED_BMC1):	
State	Description
On	BMC firmware is initial
Blink	BMC firmware is ready
Off	AC loss

### ATX Power

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

### CPU/System FAN

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

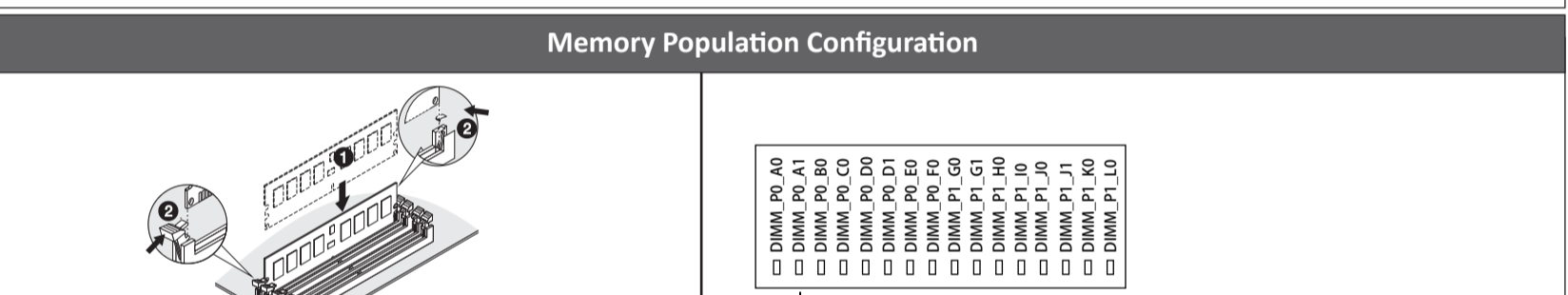


### SATA Connector/SATA DOM

No.	Pin Define	No.	Pin Define
1	GND	3	GND
2	TXP	1	TXP
3	TXN	2	TXN
4	GND	1	GND
5	RXN	2	RXN
6	RXP	3	RXP
7	GND	2	GND
8	5V	1	5V
9	GND	3	No Connect

### TPM Connector

No.	Pin Define	No.	Pin Define
1	Clock	8	No Connect
2	P_3V3_AUX	9	No Connect
3	SPI_RST	10	No Pin
4	P3V3	11	No Connect
5	SPI_MISO	12	GND
6	IRQ_SERIAL	13	SPI_CS
7	SPI_MOSI	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

### COM2 Connector

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

### IPMB

No.	Pin Define
1	Clock
2	GND
3	Data
4	VCC

### Intel Optane DCPMM DIMM Population Rule

Type	Ranks Per DIMM and Data Width	DIMM Capacity (GB)			Speed (MT/s); Voltage (V) Slot Per Channel (SPC) DIMM Per Channel (DPC)		
		4Gb	8Gb	16Gb	1 Slot per Channel	2 Slot per Channel	2 Slot per Channel
RDIMM	SRx4	4GB	8GB	16GB	2933	2933	2666
RDIMM	SRx8	8GB	16GB	32GB			
RDIMM	DRx8	8GB	16GB	32GB			
RDIMM	DRx4	16GB	32GB	64GB			
RDIMM 3DS	QRx 4	N/A	2H-64GB	2H-128GB			
LRDIMM	QRx4	32GB	64GB	128GB			
LRDIMM 3DS	QRx4	N/A	2H-64GB	2H-128GB			
LRDIMM 3DS	8Rx4	N/A	4H-128GB	4H-256GB			

**NOTE!**

- 2933MHz for 2nd Generation Intel® Xeon® Scalable Processors only
- Intel® Optane™ DC Persistent Memory for 2nd Generation Intel® Xeon® Scalable Processors only

### Jumper Settings

No.	Description	Setting	Default
1	Clear CMOS Jumper	1-2 Close: Normal operation (Default setting)	Normal [Default]
1	Clear CMOS Jumper	2-3 Close: Clear CMOS data.	Normal [Default]

J1	Setting	Default
1	HOST_SMBUS_SEL	BIOS defined
2	PMBUS_SEL	BIOS defined
3	S3_MASK	BIOS defined
4	DB_PLD	CPLD debug mode Normal [Default]

J2	Setting	Default
1	ME_UPDATE	Force ME update Normal [Default]
2	BIOS_PWD	Clear supervisor password Normal [Default]
3	BIOS_RCVR	BIOS recovery mode Normal [Default]
4	ME_RCVR	ME recovery mode Normal [Default]

### Rear I/O Connector

No.	Description
1	Server Management LAN port
2	USB 3.0 ports
3	VGA port
4	GbE Ethernet LAN port #2
5	GbE Ethernet LAN port #1
6	ID button with LED
7	SFP+ LAN#2 link/Active LED
8	SFP+ LAN port #2
9	SFP+ LAN port #1
10	SFP+ LAN#1 link/Active LED

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

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

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

### DDR4 Type and Capacity

DDR4 Type	Capacity
DRAM1	RDIMM
DRAM2	RDIMM
DRAM3	RDIMM

Capacity	
DCPMM	Any Capacity (uniformly for all channels for a given configuration)

- No DDR4 single rank x8 for either DCPMM Memory Mode or APP-Direct Mode
- No mixing of DCPMM and NVDIMMs within the platform.
- DDR channel and DIMM slot nomenclature may vary depending on platform implementation.
- Matrix targets configs for optimized Intel Optane DCPMM to DRAM cache ratio in MM and MM + AD modes.

## 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

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## California Proposition 65 Warning



### 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](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, 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)	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

×: 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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