P/N: 15G065289000AK V1.0

Quick Installation Guide

GENOAD8QM3-2T/BCM | GENOAD8QM3-NL

www.asrockrack.com GENOAD8QM3-2T/BCM GENOAD8QM3-NL

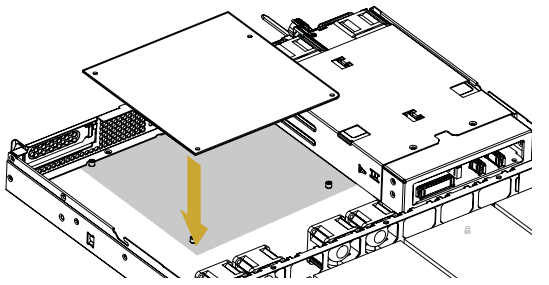
The server board User's Manual is available for download from the ASRock Rack's official website at http://www.asrockrack.com.

Take note of the following precautions before you install server board components or change any server board settings.

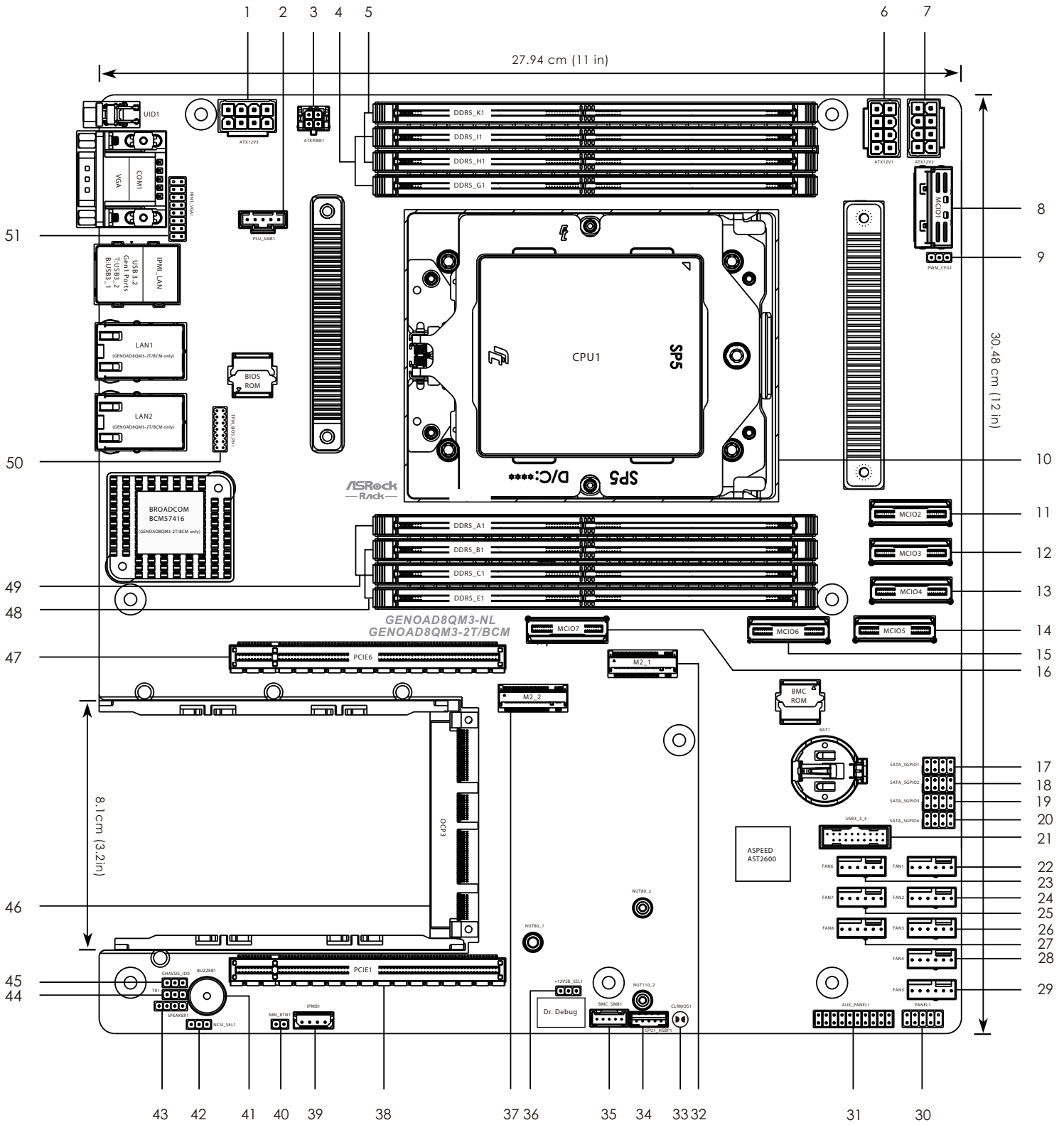
1. Unplug the power cord from the wall socket before touching any components.
2. To avoid damaging the server board's components due to static electricity, NEVER place your server board directly on the carpet or the like. Also remember to use a grounded wrist strap or touch a safety grounded object before you handle the components.
3. Hold components by the edges and do not touch the ICs.
4. Whenever you uninstall any component, place it on a grounded anti-static pad or in the bag that comes with the component.
5. When placing screws into the screw holes to secure the server board to the chassis, please do not over-tighten the screws! Doing so may damage the server board.

1 Install the Server Board

1. Insert the server board into the chassis.
2. Affix the screws clockwise into the mounting holes in all of the corners of the server board.
   Do not over-tighten the screws

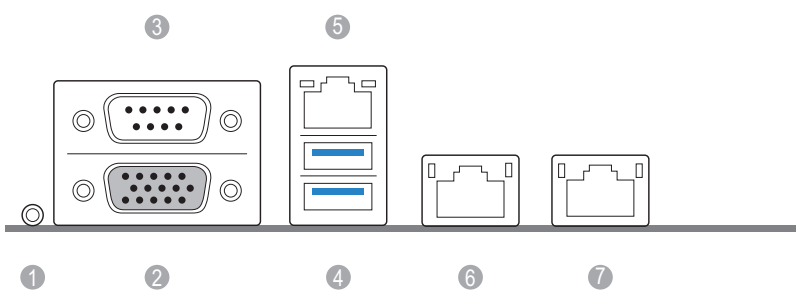


2 Motherboard Layout



No.	Description
1	ATX 12V Power Connector (ATX12V3)
2	PSU SMBus Header (PSU_SMB1)
3	ATX Power Connector (ATXPWR1)
4	2 x 288-pin DDR5 DIMM Slots (DDR5_G1, DDR5_I1)
5	2 x 288-pin DDR5 DIMM Slots (DDR5_H1, DDR5_K1)
6	ATX 12V Power Connector (ATX12V1)
7	ATX 12V Power Connector (ATX12V2)
8	Mini Cool Edge IO x8 Connector (MCIO1)
9	PWM Configuration Header (PWM_CFG1)
10	AMD Socket SP5 (SM-LGA-6096) (CPU1)
11	Mini Cool Edge IO x8 Connector (MCIO2)
12	Mini Cool Edge IO x8 Connector (MCIO3)
13	Mini Cool Edge IO x8 Connector (MCIO4)
14	Mini Cool Edge IO x8 Connector (MCIO5)
15	Mini Cool Edge IO x8 Connector (MCIO6)
16	Mini Cool Edge IO x8 Connector (MCIO7)
17	SATA SGPIO Connector (SATA_SGPIO1)
18	SATA SGPIO Connector (SATA_SGPIO2)
19	SATA SGPIO Connector (SATA_SGPIO3)
20	SATA SGPIO Connector (SATA_SGPIO4)
21	USB 3.2 Gen1 Header (USB3_3_4)
22	System Fan Connector (FAN1)
23	System Fan Connector (FAN6)
24	System Fan Connector (FAN2)
25	System Fan Connector (FAN7)
26	System Fan Connector (FAN3)
27	System Fan Connector (FAN8)
28	System Fan Connector (FAN4)
29	System Fan Connector (FAN5)
30	System Panel Header (PANEL1)
31	Auxiliary Panel Header (AUX_PANEL1)
32	M.2 Socket (M2_1) (Type 2280/22110)
33	Clear CMOS Pad (CLRMOS1)
34	Backplane PCI Express Hot-Plug Connector (CPU1_HSBP1)
35	BMC SMBus Header (BMC_SMB1)
36	OCP3 +12VSB Power Jumper (+12VSB_SEL1)
37	M.2 Socket (M2_2) (Type 2280)
38	PCI Express 4.0 x16 Slot (PCIE1)
39	Intelligent Platform Management Bus Header (IPMB1)
40	Non Maskable Interrupt Button (NMI_BTN1)
41	Buzzer (BUZZER1)
42	NCSI Mode Jumper (NCSI_SEL1)
43	Speaker Header (SPEAKER1)
44	Thermal Sensor Header (TR1)
45	Chassis ID Jumper (CHASSIS_ID0)
46	OCP NIC 3.0 Slot (PCIe5.0 x16) (OCP3)
47	PCI Express 5.0 x16 Slot (PCIE6)
48	2 x 288-pin DDR5 DIMM Slots (DDR5_B1, DDR5_E1)
49	2 x 288-pin DDR5 DIMM Slots (DDR5_A1, DDR5_C1)
50	SPI TPM Header (TPM_BIOS_PH1)
51	Front VGA Header (FRNT_VGA1)

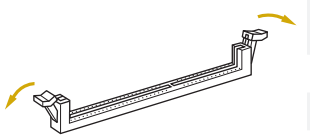
3 I/O Panel



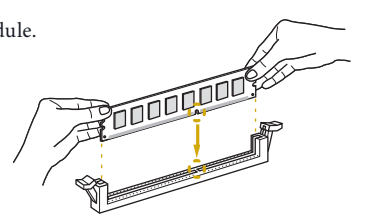
No.	Description	No.	Description
1	UID Switch (UID1)	5	IPMI LAN Header (IPMI_LAN)
2	VGA Port (VGA)	6	10G LAN RJ-45 Port (LAN1) *(GENOAD8QM3-2T/BCM only)*
3	Serial Port (COM1)	7	10G LAN RJ-45 Port (LAN2) *(GENOAD8QM3-2T/BCM only)*
4	USB 3.2 Gen1 Ports (USB3_1_2)		

4 Install the Memory

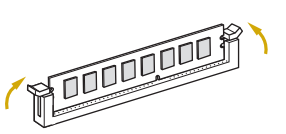
1. Unlock a DIMM slot by pressing the module clips outward.



2. Insert the memory module.

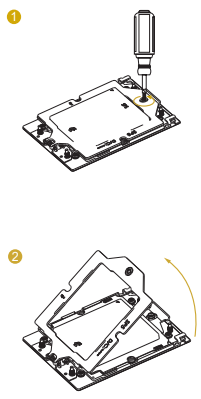


3. Lock the clips.

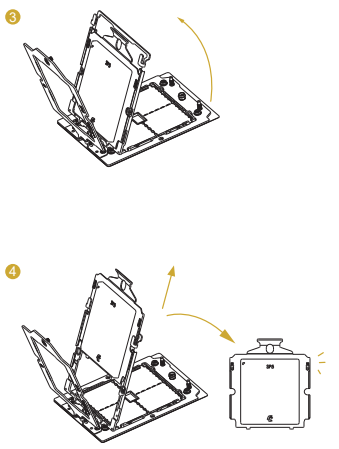


5 Install the Processor and Heatsink

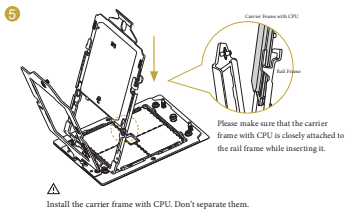
Locate the screw on the CPU socket and unscrew it. Open the first retention cover.



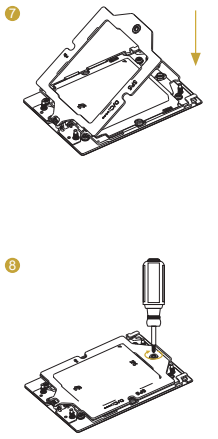
Open the second bracket. Take out the internal plastic cover.



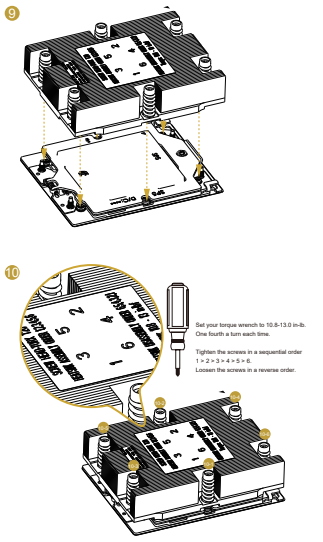
Install CPU along with the carrier frame, do not separate them. Please make sure the carrier frame with CPU is closely attached to the rail frame while inserting it.



Close the bracket that holds the CPU. Close the retention cover and fasten the screw .



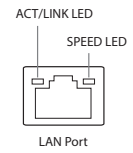
Install the heatsink to the CPU carrier. Secure the heastink to the CPU carrier with a screwdriver.



We recommend using the CPU Installation tool to avoid CPU pin-bent problem.

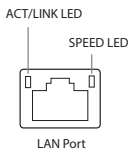
6 LAN Port LED Indications

IPMI LAN Port



Activity / Link LED		Speed LED	
Status	Description	Status	Description
Off	No Link	Off	10Mbps connection or no link
Blinking Yellow	Data Activity	Orange	100Mbps connection
On	Link	Green	1Gbps connection

10G LAN Port

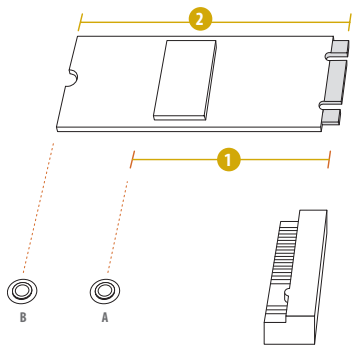


Activity / Link LED		Speed LED	
Status	Description	Status	Description
Off	No Link	Off	100Mbps connection or no link
Blinking Yellow	Data Activity	Orange	1Gbps connection
On	Link	Green	10Gbps connection

(GENOAD8QM3-2T/BCM only)

7 M.2 SSD Module Installation

1 Find the corresponding nut location to be used.



M2_1:

No.	1	2
Nut Location	A	B
PCB Length	8cm	11cm
Module Type	Type2280	Type 22110

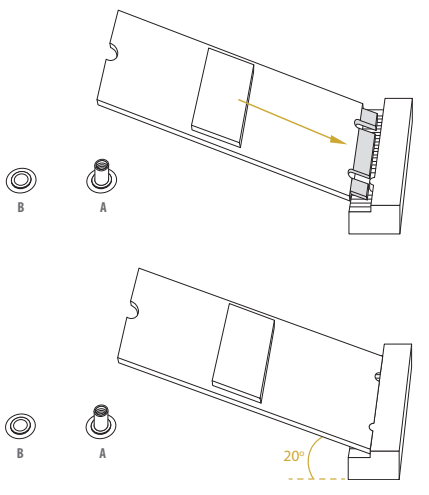
M2_2:

No.	1
Nut Location	A
PCB Length	8cm
Module Type	Type2280

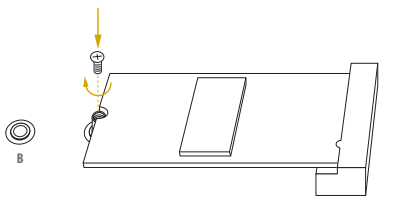
2 Move the standoff based on the module type and length.

3 Peel off the yellow protective film on the nut. Hand tighten the standoff into the desired location.

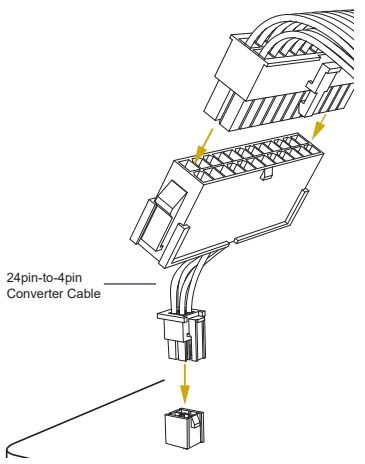
4 Align and gently insert the M.2 module into the slot.



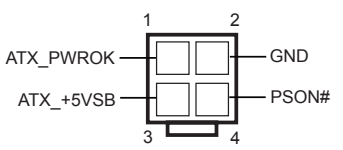
5 Tighten the screw with a screwdriver to secure the module into place. Please do not overtighten the screw.



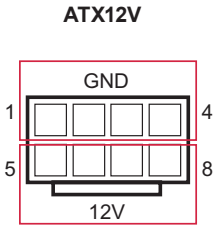
8 Install the Power Cables



ATXPWR1



ATX12V

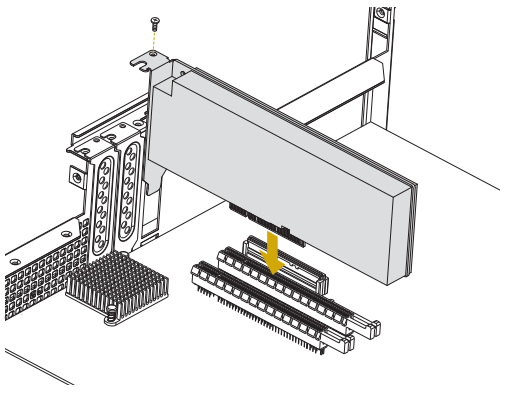


9 Install the PCIE Card

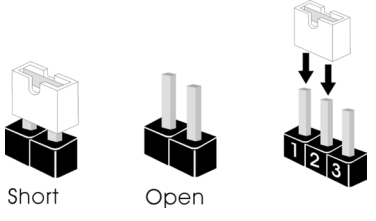
1 Remove the bracket facing the slot that you intend to use. Keep the screw for later use.

2 Align the card connector with the slot and press firmly until the card is completely seated on the slot.

3 Fasten the card to the chassis with the screw.



10 Jumper Settings



When the jumper cap is placed on the pins, the jumper is "Short". If no jumper cap is placed on the pins, the jumper is "Open".

The illustration shows a 3-pin jumper whose pin1 and pin2 are "Short" when a jumper cap is placed on these 2 pins.