



P/N: 15G065219000AK V1.0

Quick Installation Guide

ROMED8QM-2T / ROMED8QM-NL



ROMED8QM-2T



ROMED8QM-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.

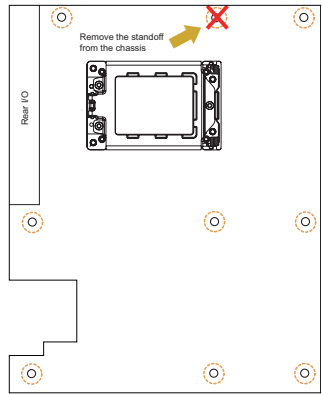
1. Unplug the power cord from the wall socket before touching any components.
2. To avoid damaging the server board's components due to static electricity, NEVER place your server board directly on the carpet or the like. Also remember to use a grounded wrist strap or touch a safety grounded object before 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

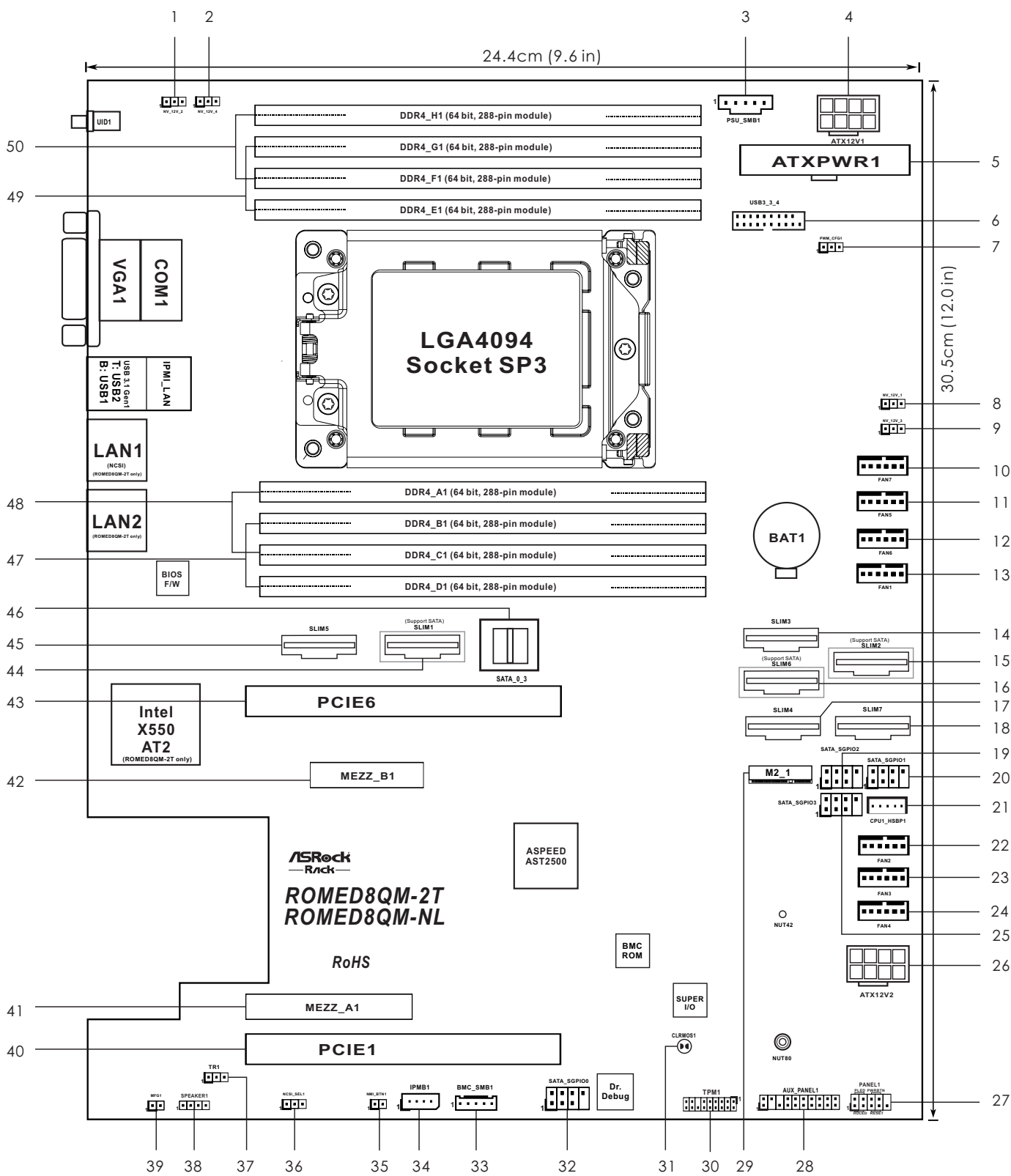
- 1 Insert the server board into the chassis.
- 2 Affix the screws clockwise into the mounting holes in all of the corners of the server board.
Do not over-tighten the screws



Attention! Before installing this motherboard, be sure to unscrew and remove the standoffs at the marked location, under the motherboard, from the chassis, in order to avoid electrical short circuit and damage to your motherboard.

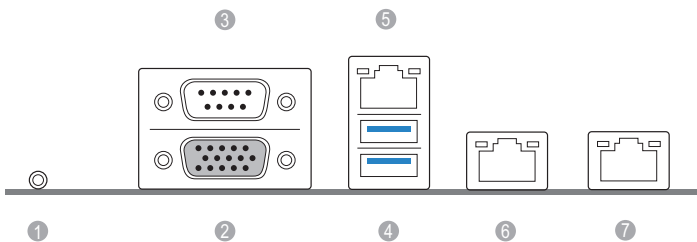


2 Motherboard Layout



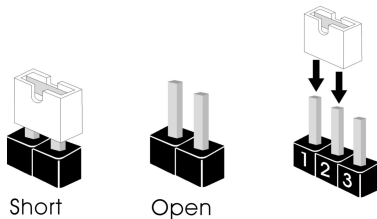
No.	Description
1	NVDIMM Power Mode Jumper (NV_12V_2)
2	NVDIMM Power Mode Jumper (NV_12V_4)
3	PSU SMBus Header (PSU_SMB1)
4	ATX 12V Power Connector (ATX12V1)
5	ATX Power Connector (ATXPWR1)
6	USB 3.1 Gen1 Header (USB3_3_4)
7	PWM Configuration Header (PWM_CFG1)
8	NVDIMM Power Mode Jumper (NV_12V_1)
9	NVDIMM Power Mode Jumper (NV_12V_3)
10	System Fan Connector (FAN7)
11	System Fan Connector (FAN5)
12	System Fan Connector (FAN6)
13	System Fan Connector (FAN1)
14	Slimline NVMe x8 Connector (SLIM3)
15	Slimline NVMe x8 Connector (SLIM2)
16	Slimline NVMe x8 Connector (SLIM6)
17	Slimline NVMe x8 Connector (SLIM4)
18	Slimline NVMe x8 Connector (SLIM7)
19	SATA SGPIO Connector (SATA_SGPIO2)
20	SATA SGPIO Connector (SATA_SGPIO1)
21	Backplane PCI Express Hot-Plug Connector (CPU1_HSBP1)
22	System Fan Connector (FAN2)
23	System Fan Connector (FAN3)
24	System Fan Connector (FAN4)
25	SATA SGPIO Connector (SATA_SGPIO3)
26	ATX 12V Power Connector (ATX12V2)
27	System Panel Header (PANEL1)
28	Auxiliary Panel Header (AUX_PANEL1)
29	M.2 Socket (M2_1) (Type 2242 / 2280)
30	TPM Header (TPM1)
31	Clear CMOS Pad (CLRMO51)
32	SATA SGPIO Connector (SATA_SGPIO0)
33	BMC SMBus Header (BMC_SMB1)
34	Intelligent Platform Management Bus Header (IPMB1)
35	Non Maskable Interrupt Button (NMI_BTN1)
36	NCSI Mode Jumper (NCSI_SEL1)
37	Thermal Sensor Header (TR1)
38	Speaker Header (SPEAKER1)
39	Manufacturing Mode Jumper (MFG1)
40	PCI Express 4.0 Card Slot (PCIE1)
41	Mezzanine Card Slot (MEZZ_A1)
42	Mezzanine Card Slot (MEZZ_B1)
43	PCI Express 4.0 Card Slot (PCIE6)
44	Slimline NVMe x8 Connector (SLIM1)
45	Slimline NVMe x8 Connector (SLIM5)
46	Mini-SAS HD Connector (SATA_0_3)
47	2 x 288-pin DDR4 DIMM Slots (DDR4_B1, DDR4_D1)
48	2 x 288-pin DDR4 DIMM Slots (DDR4_A1, DDR4_C1)
49	2 x 288-pin DDR4 DIMM Slots (DDR4_E1, DDR4_G1)
50	2 x 288-pin DDR4 DIMM Slots (DDR4_F1, DDR4_H1)

3 I/O Panel



No.	Description	No.	Description
1	UID Switch (UID1)	5	LAN RJ-45 Port (IPMI_LAN1)
2	VGA Port (VGA1)	6	10G LAN RJ-45 Port (LAN1) (ROMED8QM-2T only)
3	Serial Port (COM1)	7	10G LAN RJ-45 Port (LAN2) (ROMED8QM-2T only)
4	USB 3.1 Gen1 Ports (USB3_1_2)		

4 Jumper Settings

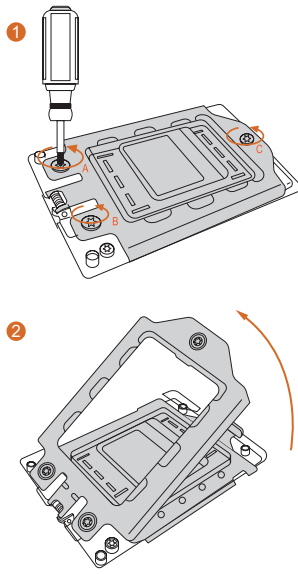


When the jumper cap is placed on the pins, the jumper is "Short". If no jumper cap is placed on the pins, the jumper is "Open".

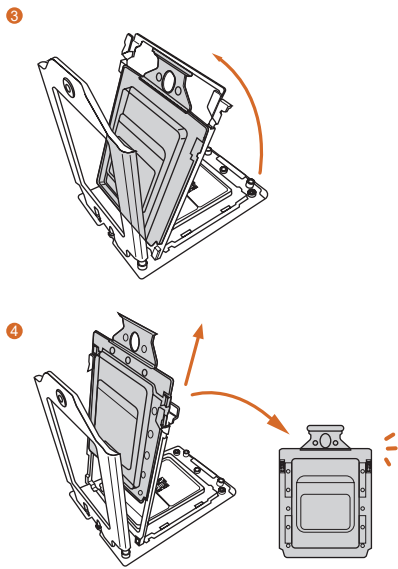
The illustration shows a 3-pin jumper whose pin1 and pin2 are "Short" when a jumper cap is placed on these 2 pins.

5 Install the Processor and Heatsink

Locate the three torx screws on the CPU socket and unscrew them according to the order A→B→C. Open the first retention cover.

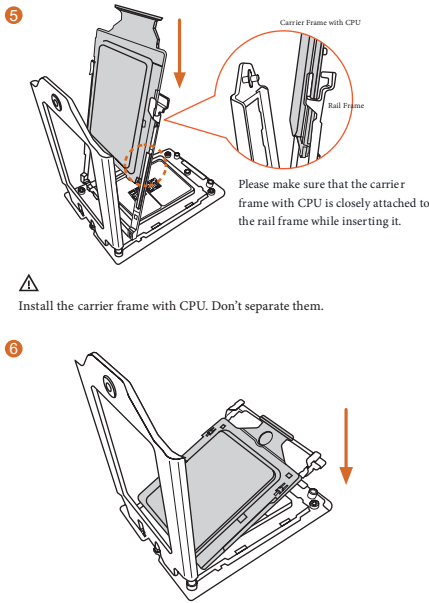


Open the second bracket. Take out the internal plastic cover.

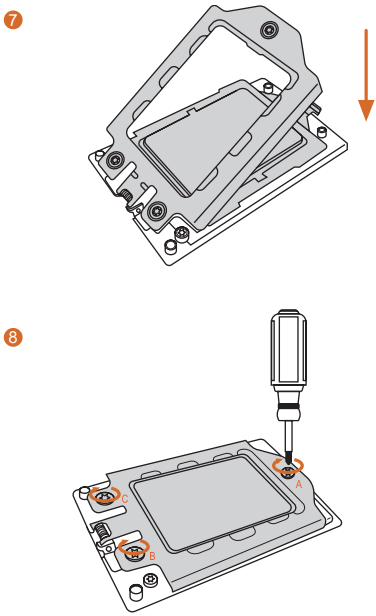


We recommend using the CPU Installation tool to avoid CPU pin-bent problem.

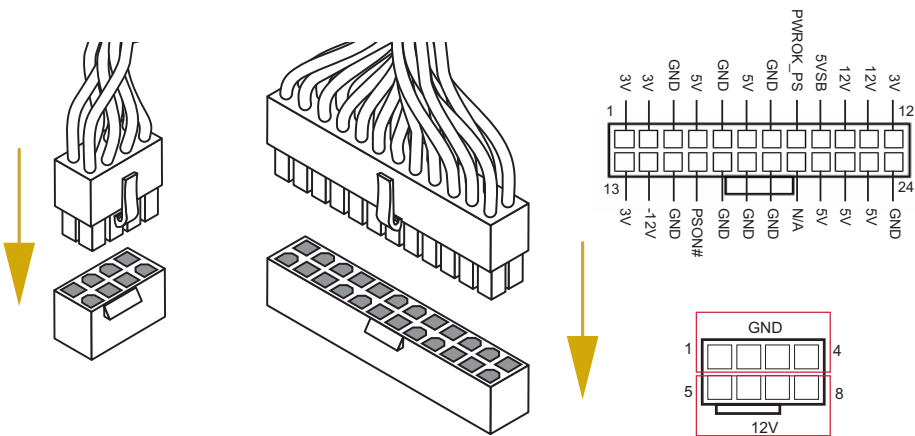
Install CPU along with the carrier frame, do not separate them. Please make sure the carrier frame with CPU is closely attached to the rail frame while inserting it.



Close the bracket that holds the CPU. Close the retention cover. Fasten the torx screw according to the order A→B→C.



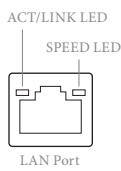
6 Install the Power Cables



PWRCON	
1	3V
2	GND
3	5V
4	GND
5	5V
6	GND
7	5V
8	GND
9	5V
10	GND
11	5V
12	GND
13	3V
14	GND
15	5V
16	GND
17	5V
18	GND
19	5V
20	GND
21	5V
22	GND
23	5V
24	GND

8 LAN Port LED Indications

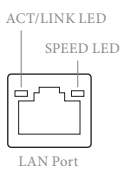
IPMI LAN Port



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

(ROMED8QM-2T only)

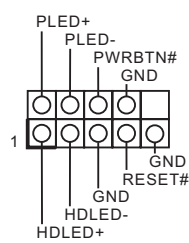
LAN Port



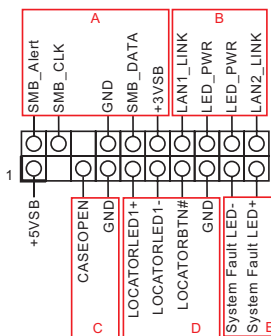
Activity / Link LED		Speed LED	
Status	Description	Status	Description
Off	No Link	Off	100Mbps connection or no link
Blinking Amber	Data Activity	Orange	1Gbps connection
On	Link	Green	10Gbps connection

9 Headers

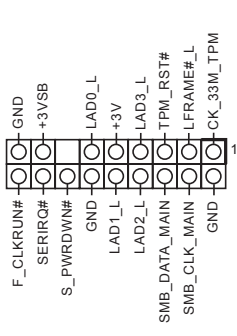
System Panel



Auxiliary Panel

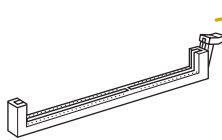


TPM1

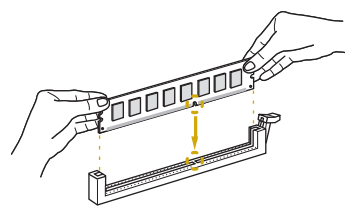


7 Install the Memory

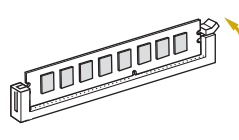
1 Unlock a DIMM slot by pressing the module clip outward.



2 Insert the memory module.



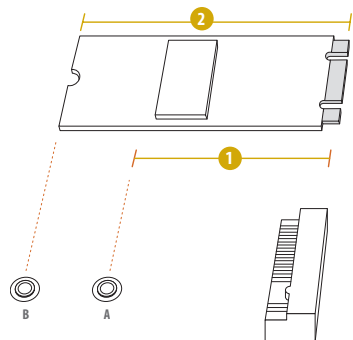
3 Lock the clip.



10 M.2 SSD Module Installation

1 Find the corresponding nut location to be used.

No.	1	2
Nut Location	A	B
PCB Length	4.2cm	8cm
Module Type	Type2242	Type2280



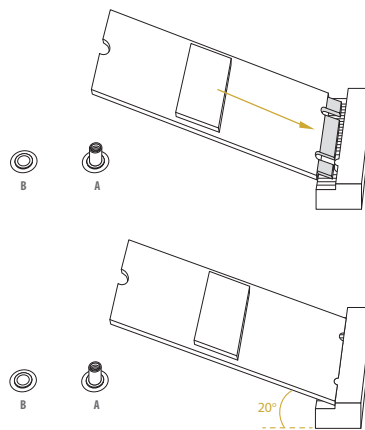
2 Move the standoff based on the module type and length.



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



4 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.

