



P/N: 15G065207001AK V1.0

Quick Installation Guide
ROMED16QM3



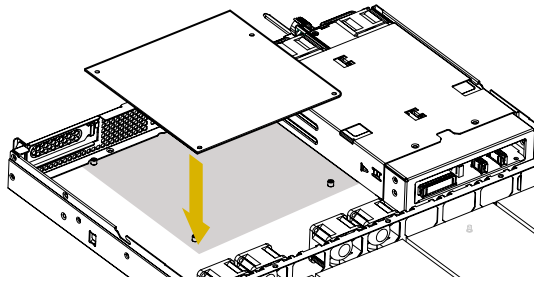
The server board User's Manual is available for download from the ASRock Rack's official website at <http://www.asrockrack.com>.

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

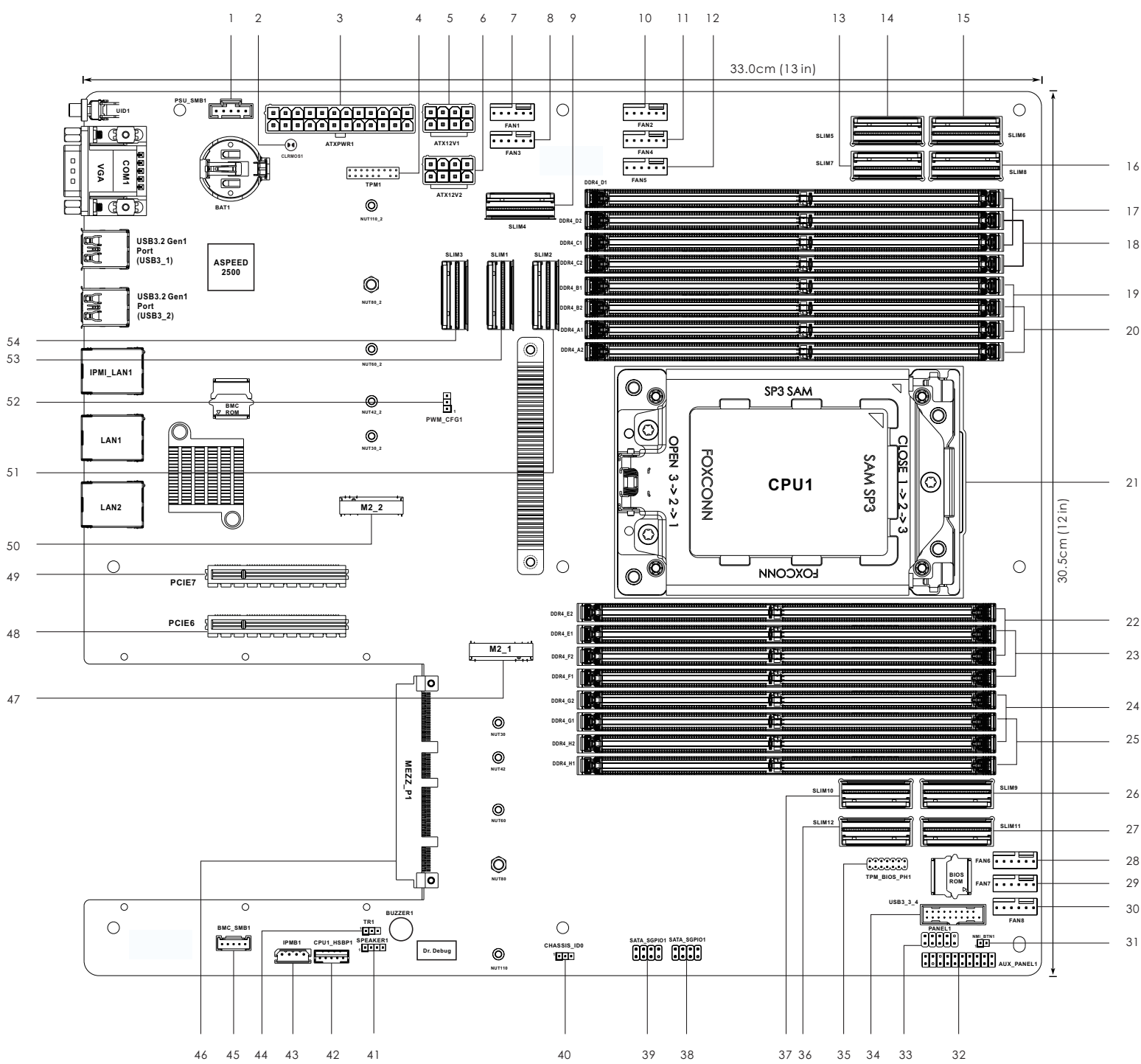
1. Unplug the power cord from the wall socket before touching any components.
2. To avoid damaging the server board's components due to static electricity, NEVER place your server board directly on the carpet or the like. Also remember to use a grounded wrist strap or touch a safety grounded object before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



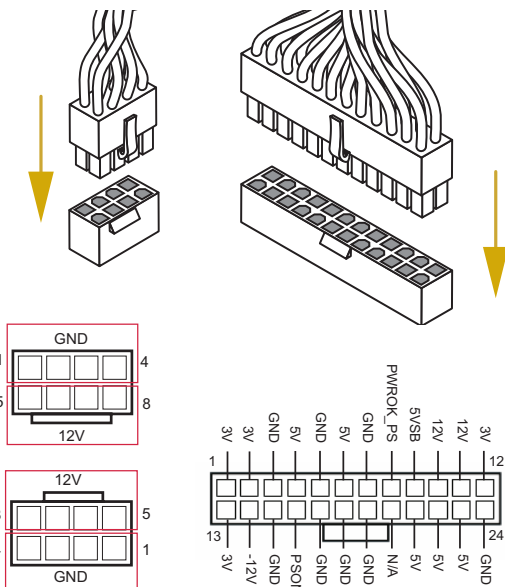
2 Motherboard Layout



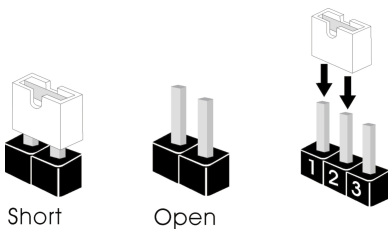
No. Description

1	PSU SMBus Header (PSU_SMB1)
2	Clear CMOS Pad (CLRMOS1)
3	ATX Power Connector (ATXPWR1)
4	TPM Header (TPM1)
5	ATX 12V Power Connector (ATX12V1)
6	ATX 12V Power Connector (ATX12V2)
7	System Fan Connector (FAN1)
8	System Fan Connector (FAN3)
9	Slimline Connector (SLIM4)
10	System Fan Connector (FAN2)
11	System Fan Connector (FAN4)
12	System Fan Connector (FAN5)
13	Slimline Connector (SLIM7)
14	Slimline Connector (SLIM5)
15	Slimline Connector (SLIM6)
16	Slimline Connector (SLIM8)
17	2 x 288-pin DDR4 DIMM Slots (DDR4_C1, DDR4_D1)
18	2 x 288-pin DDR4 DIMM Slots (DDR4_C2, DDR4_D2)
19	2 x 288-pin DDR4 DIMM Slots (DDR4_A1, DDR4_B1)
20	2 x 288-pin DDR4 DIMM Slots (DDR4_A2, DDR4_B2)
21	AMD Socket SP3 (CPU1)
22	2 x 288-pin DDR4 DIMM Slots (DDR4_E2, DDR4_F2)
23	2 x 288-pin DDR4 DIMM Slots (DDR4_E1, DDR4_F1)
24	2 x 288-pin DDR4 DIMM Slots (DDR4_G2, DDR4_H2)
25	2 x 288-pin DDR4 DIMM Slots (DDR4_G1, DDR4_H1)
26	Slimline Connector (SLIM9)
27	Slimline Connector (SLIM11)
28	System Fan Connector (FAN6)
29	System Fan Connector (FAN7)
30	System Fan Connector (FAN8)
31	Non Maskable Interrupt Button (NMI_BTN1)
32	Auxiliary Panel Header (AUX_PANEL1)
33	System Panel Header (PANEL1)
34	USB 3.2 Gen1 Header (USB3_3_4)
35	TPM-SPI Header (TPM_BIOS_PH1)
36	Slimline Connector (SLIM12)
37	Slimline Connector (SLIM10)
38	SATA SGPIO Connector (SATA_SGPIO1)
39	SATA SGPIO Connector (SATA_SGPIO2)
40	Chassis ID Jumper (CHASSIS_ID0)
41	Speaker Header (SPEAKER1)
42	Backplane PCI Express Hot-Plug Connector (CPU1_HSBP1)

3 Install the Power Cables



4 Jumper Cap On/Off



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".

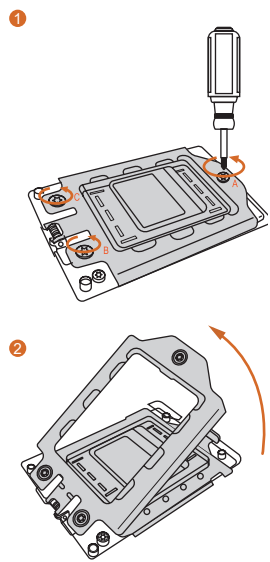
The illustration shows a 3-pin jumper whose pin1 and pin2 are "Short" when a jumper cap is placed on these 2 pins.

No. Description

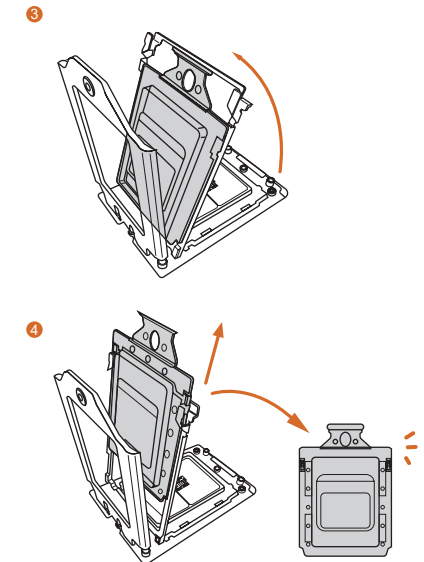
43	Intelligent Platform Management Bus Header (IPMB1)
44	Thermal Sensor Header (TR1)
45	BMC SMBus Header (BMC_SMB1)
46	Mezzanine Card Slot (MEZZ_P1)
47	M.2 Socket (M2_1) (Type 2230/2242/2260/2280/22110)
48	PCI Express 4.0 x8 Slot (PCIE6)
49	PCI Express 4.0 x8 Slot (PCIE7)
50	M.2 Socket (M2_2) (Type 2230/2242/2260/2280/22110)
51	Slimline Connector (SLIM2)
52	PWM Configuration Header (PWM_CFG1)
53	Slimline Connector (SLIM1)
54	Slimline Connector (SLIM3)

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.

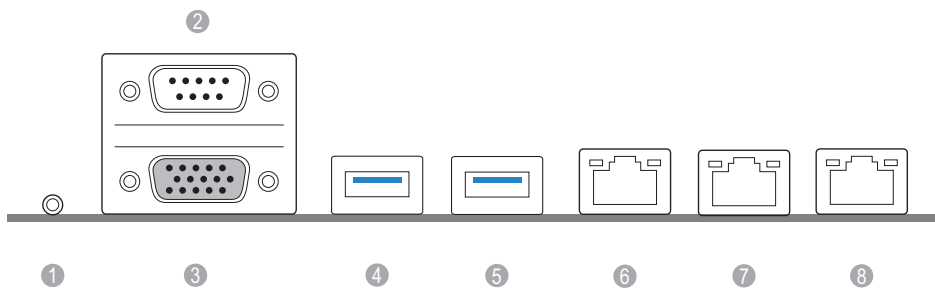


Open the second bracket. Take out the internal plastic cover.



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

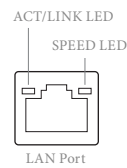
6 I/O Panel



No.	Description	No.	Description
1	UID Switch (UID)	5	USB 3.2 Gen1 Port (USB3_2)
2	Serial Port (COM1)	6	IPMI LAN Header (IPMI_LAN1)
3	VGA Port (VGA)	7	1G LAN RJ-45 Port (LAN1)
4	USB 3.2 Gen1 Port (USB3_1)	8	1G LAN RJ-45 Port (LAN2)

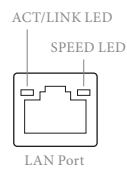
8 LAN Port LED Indications

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	Yellow	100Mbps connection
On	Link	Green	1Gbps connection

LAN Port



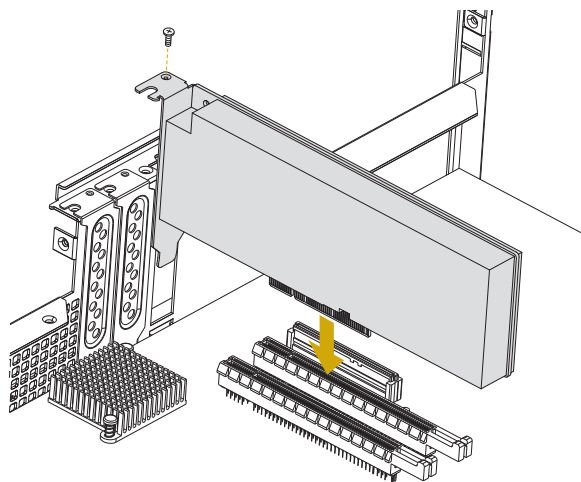
Activity / Link LED		Speed LED	
Status	Description	Status	Description
Off	No Link	Off	10Mbps connection or no link
Blinking Yellow	Data Activity	Yellow	100Mbps connection
On	Link	Green	1Gbps connection

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.

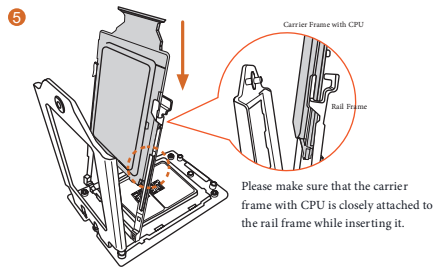
3 Fasten the card to the chassis with the screw.



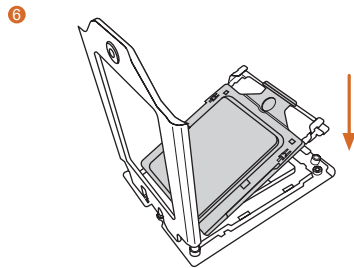
*Images shown are for illustrative purposes only and may differ depending on model.

Slot	Generation	Mechanical	Electrical	Source
PCIE6	4.0	x8	x8	CPU1
PCIE7	4.0	x8	x8	CPU1

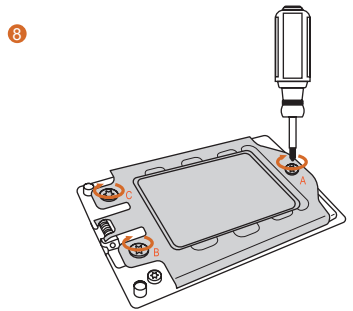
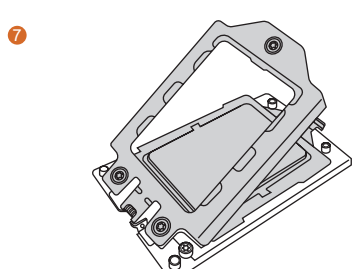
Install CPU along with the carrier frame, do not separate them. Please make sure the carrier frame with CPU is closely attached to the rail frame while inserting it.



Install the carrier frame with CPU. Don't separate them.

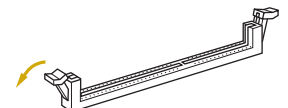


Close the bracket that holds the CPU. Close the retention cover. Fasten the torx screw according to the order A→B→C.

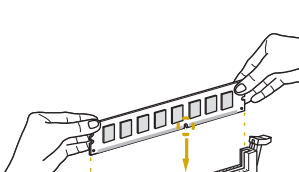


7 Install the Memory

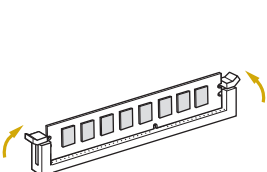
1 Unlock a DIMM slot by pressing the module clips outward.



2 Insert the memory module.



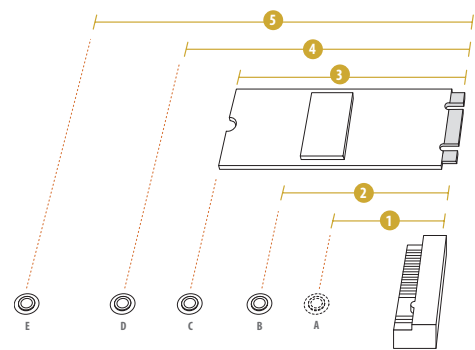
3 Lock the clips.



10 M.2 SSD Module Installation

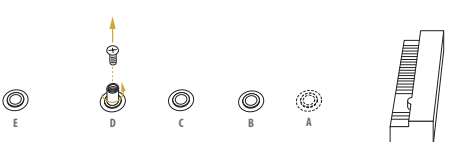
1 Find the corresponding nut location to be used.

The diagrams in this documentation are for reference only.
The actual supported M.2 type varies per motherboard.

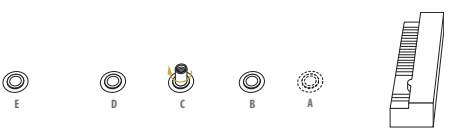


No.	1	2	3	4	5
Nut Location	A	B	C	D	E
PCB Length	3cm	4.2cm	6cm	8cm	11cm
Module Type	Type 2230	Type 2242	Type 2260	Type 2280	Type 22110

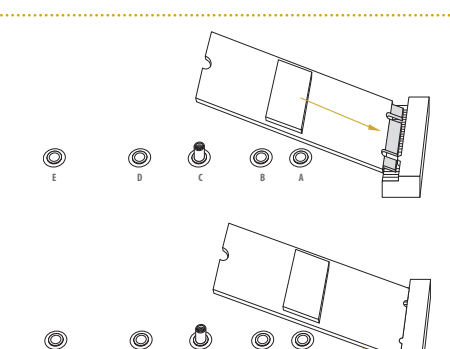
2 Move the standoff based on the module type and length.



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.

