



P/N: 15G065409000AK V1.0

Quick Installation Guide

TURIND8HM3

ASRock
Rack
www.asrockrack.com



TURIND8HM3

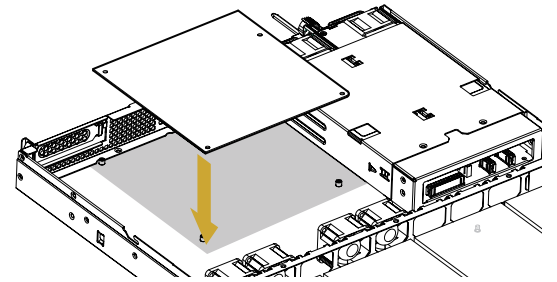
The server board User's Manual is available for download from the ASRock Rack's official website at <http://www.asrockrack.com>.

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

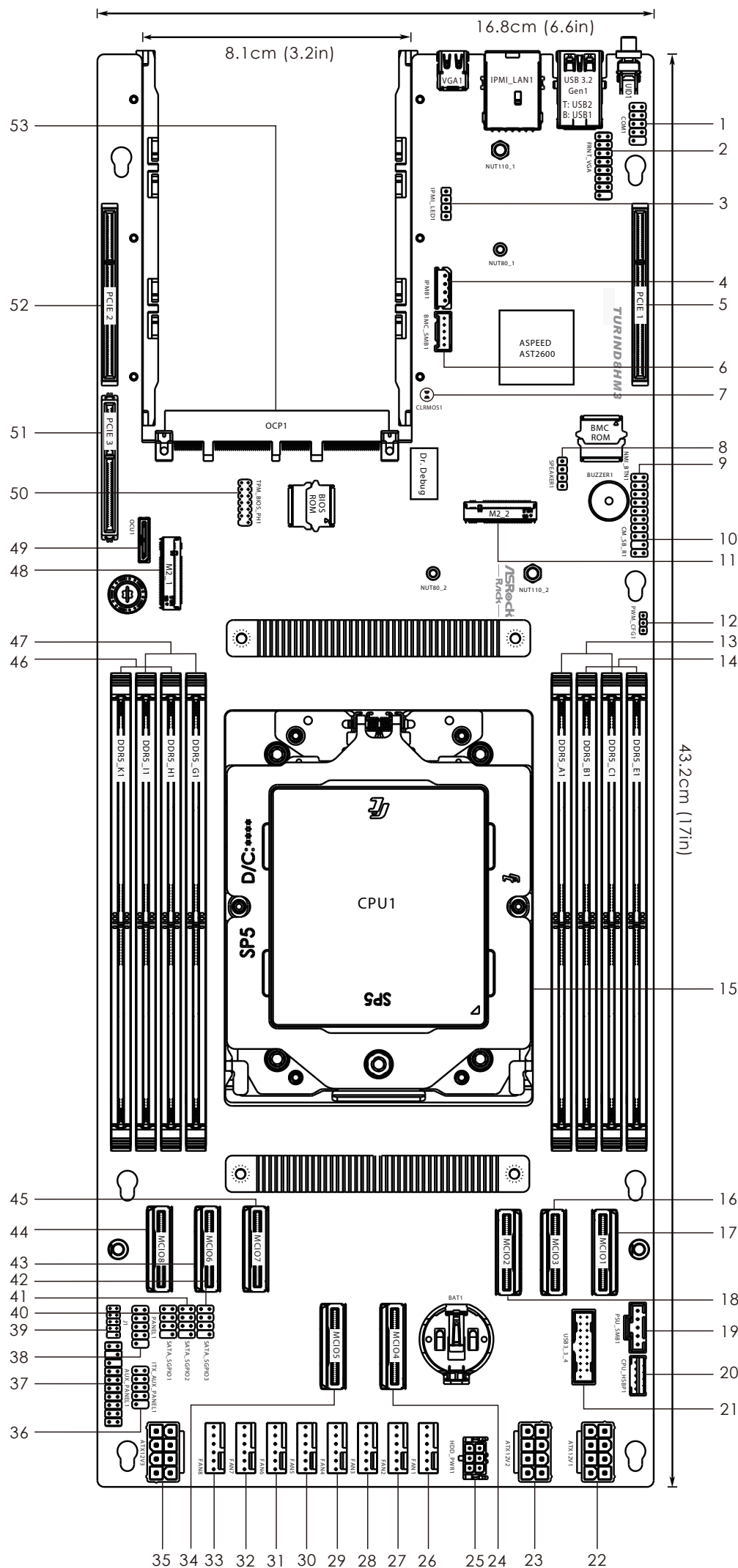
1. Unplug the power cord from the wall socket before touching any components.
2. To avoid damaging the server board's components due to static electricity, NEVER place the server board directly on the carpet or the like. Also remember to use a grounded wrist strap or touch a safety grounded object before handling the components.
3. Hold components by the edges and do not touch the ICs.
4. Whenever 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



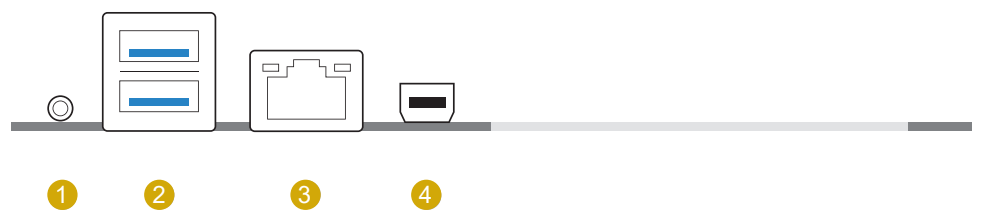
2 Motherboard Layout



No.	Description
1	Serial Port Header (COM1)
2	Front VGA Header (FRNT_VGA)
3	IPMI LAN LED Header (IPMI_LED1)
4	Intelligent Platform Management Bus Header (IPMB1)
5	PCI Express 5.0 x16 Slot (PCIE1)
6	BMC SMBus Header (BMC_SMB1)
7	Clear CMOS Pad (CLRMOS1)
8	Speaker Header (SPEAKER1)
9	Non Maskable Interrupt Button (NMI_BTN1)
10	CM Board Standby Power Header (CM_SB_R1)
11	M.2 Socket (M2_2) (Type 2280/22110)
12	PWM Configuration Header (PWM_CFG1)
13	2 x 288-pin DDR5 DIMM Slots (DDR5_A1, DDR5_C1)
14	2 x 288-pin DDR5 DIMM Slots (DDR5_B1, DDR5_E1)
15	LGA-6096 CPU Socket (CPU1)
16	Mini Cool Edge IO Connector (MCIO3)
17	Mini Cool Edge IO Connector (MCIO1)
18	Mini Cool Edge IO Connector (MCIO2)
19	PSU SMBus Header (PSU_SMB1)
20	Backplane PCI Express Hot-Plug Connector (CPU1_HSBP1)
21	USB 3.2 Gen1 Header (USB3_3_4)
22	ATX 12V Power Connector (ATX12V1)
23	ATX 12V Power Connector (ATX12V2)
24	Mini Cool Edge IO Connector (MCIO4)
25	HDD Power Connector (HDD_PWR1)
26	System Fan Connector (FAN1)
27	System Fan Connector (FAN2)

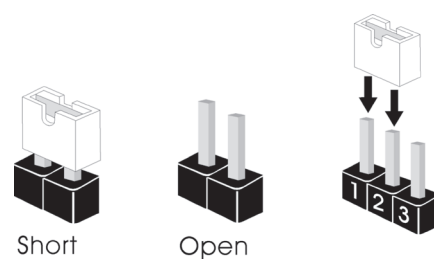
No.	Description
28	System Fan Connector (FAN3)
29	System Fan Connector (FAN4)
30	System Fan Connector (FAN5)
31	System Fan Connector (FAN6)
32	System Fan Connector (FAN7)
33	System Fan Connector (FAN8)
34	Mini Cool Edge IO Connector (MCIO5)
35	ATX 12V Power Connector (ATX12V3)
36	ITX Auxiliary Panel Header (ITX_AUX_PANEL1)
37	Auxiliary Panel Header (AUX_PANEL1)
38	System Panel Header (PANEL1)
39	Front Panel Board Header (J1)
40	SATA SGPIO Connector (SATA_SGPIO1)
41	SATA SGPIO Connector (SATA_SGPIO2)
42	SATA SGPIO Connector (SATA_SGPIO3)
43	Mini Cool Edge IO Connector (MCIO6)
44	Mini Cool Edge IO Connector (MCIO8)
45	Mini Cool Edge IO Connector (MCIO7)
46	2 x 288-pin DDR5 DIMM Slots (DDR5_K1, DDR5_H1)
47	2 x 288-pin DDR5 DIMM Slots (DDR5_I1, DDR5_G1)
48	M.2 Socket (M2_1) (Type 2280/22110)
49	OCuLink Connector (2 SATA 6Gb/s) (OCU1)
50	SPI TPM Header (TPM_BIOS_PH1)
51	PCI Express 5.0 x8 Slot (PCIE3)
52	PCI Express 5.0 x16 Slot (PCIE2)
53	OCPI 3.0 Gen4 x16 Mezzanine Card Slot (OCP1)

3 I/O Panel



No.	Description	No.	Description
1	UID Switch (UID1)	3	LAN RJ-45 Port (IPMI_LAN1)
2	USB 3.2 Gen1 Ports (USB3_1_2)	4	Mini DisplayPort (VGA1)

4 Jumper Settings



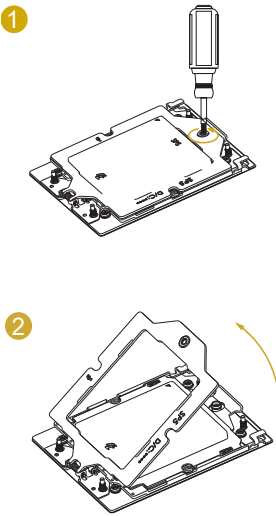
When the jumper cap is placed on the pins, the jumper is "Short". If no jumper cap is placed on the pins, the jumper is "Open".

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

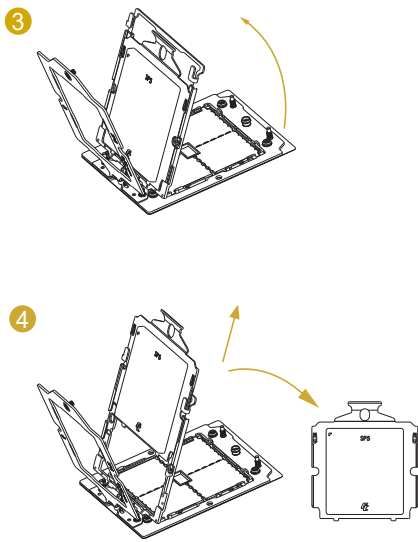


5 Install the Processor and Heatsink

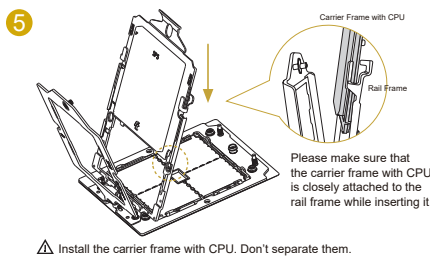
Locate the screw on the CPU socket and unscrew it.
Open the first retention cover.



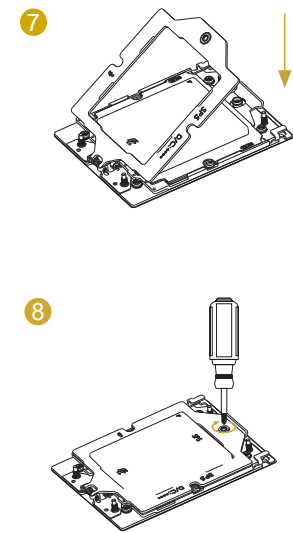
Open the second bracket.
Take out the internal plastic cover.



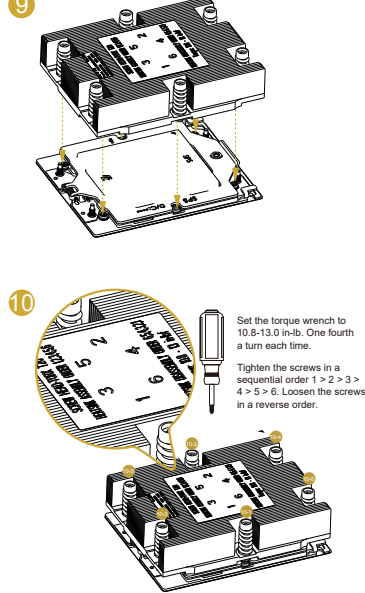
Install CPU along with the carrier frame, do not separate them. Please make sure the carrier frame with CPU is closely attached to the rail frame while inserting it.



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



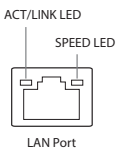
Install the heatsink to the CPU carrier. Secure the heatsink to the CPU carrier with a screwdriver.



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	Yellow	100Mbps connection
On	Link	Green	1Gbps connection

8 Install the PCIE Card

1 Remove the bracket facing the slot that intending to use on the chassis. Keep the screw for later use.

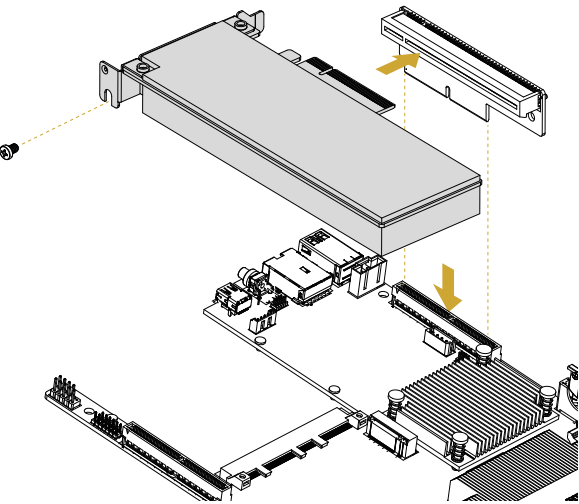
2 Install the PCIE card to the riser card.

If having any queries related to the riser card, please contact the local sales representative or technical support team.

3 Align the riser-card assembly connector with the slot on the system board. Press firmly until the riser-card assembly is completely seated on the slot.

4 Fasten the card to the chassis with the screw.

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



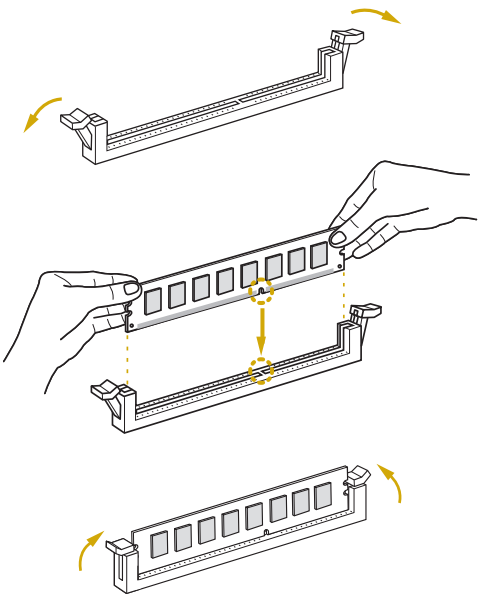
Slot	Generation	Mechanical	Electrical	Source
PCIE1	5.0	x16	x16	CPU1
PCIE2	5.0	x16	x16	CPU1
PCIE3	5.0	x8	x8	CPU1

9 Install the Memory

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

2 Insert the memory module.

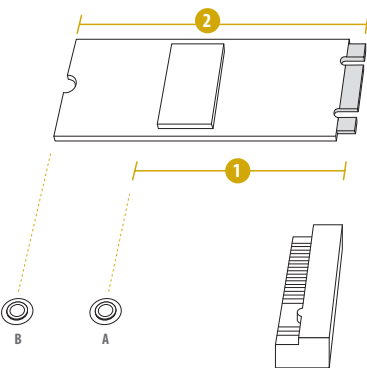
3 Lock the clips.



7 M.2 SSD Module Installation

1 Find the corresponding nut location to be used.

No.	1	2
Nut Location	A (NUT80_1/2)	B (NUT110_1/2)
PCB Length	8cm	11cm
Module Type	Type2280	Type 22110



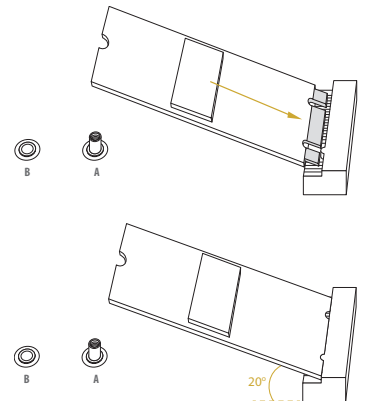
2 Move the standoff based on the module type and length.



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.

