



P/N: 15G065397000AR V1.0

Quick Installation Guide

TURIND8UD-2T/X550

ASRock
Rack
www.asrockrack.com



TURIND8UD-2T/X550

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

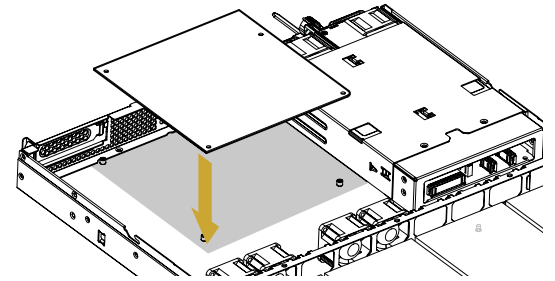
Take note of the following precautions before installing the server board components or change any server board settings.

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.

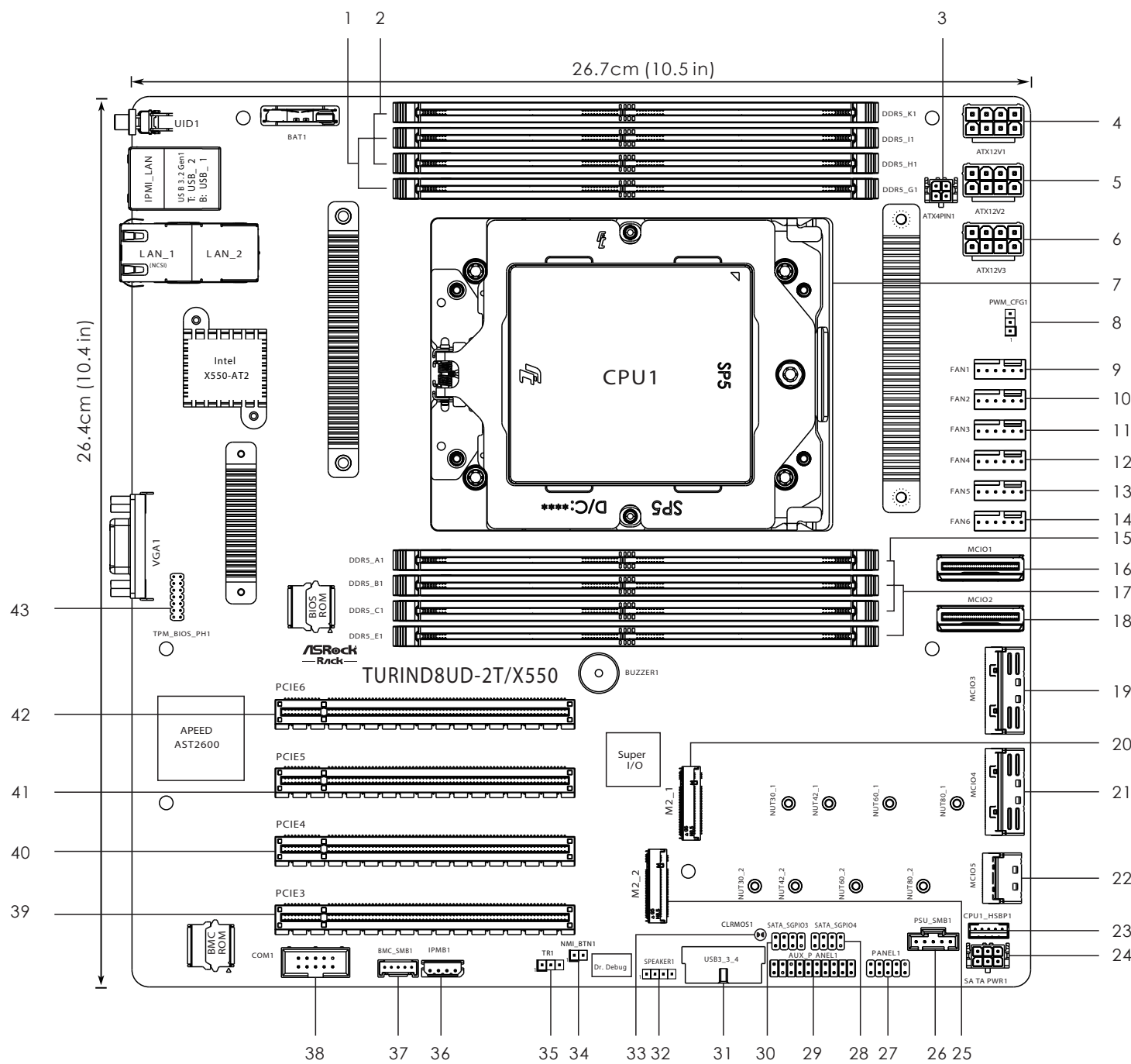
1 Install the Server Board

- 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

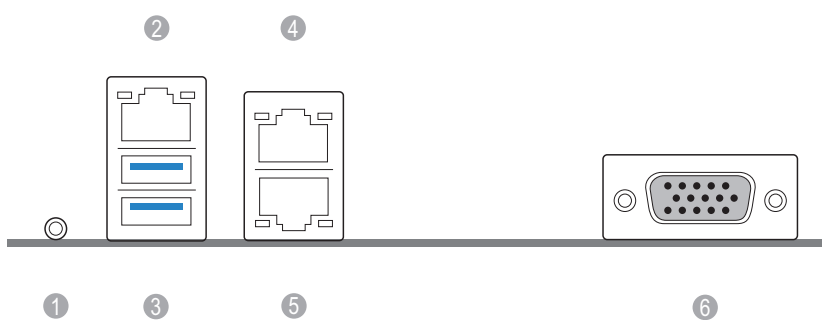


2 Motherboard Layout



No.	Description
1	2 x 288-pin DDR5 DIMM Slots (DDR5_G1, DDR5_I1)
2	2 x 288-pin DDR5 DIMM Slots (DDR5_H1, DDR5_K1)
3	ATX 4-PIN Power Connector (ATX4PIN1 (ATX 24pin-to-4pin))
4	ATX 12V Power Connector (ATX12V1)
5	ATX 12V Power Connector (ATX12V2)
6	ATX 12V Power Connector (ATX12V3)
7	AMD Socket SP5 (SM-LGA-6096) (CPU1)
8	PWM Configuration Header (PWM_CFG1)
9	System Fan Connector (FAN1)
10	System Fan Connector (FAN2)
11	System Fan Connector (FAN3)
12	System Fan Connector (FAN4)
13	System Fan Connector (FAN5)
14	System Fan Connector (FAN6)
15	2 x 288-pin DDR5 DIMM Slots (DDR5_A1, DDR5_C1)
16	Mini Cool Edge IO x8 Connector (MCIO1)
17	2 x 288-pin DDR5 DIMM Slots (DDR5_B1, DDR5_E1)
18	Mini Cool Edge IO x8 Connector (MCIO2)
19	Mini Cool Edge IO x8 Connector (MCIO3)
20	M.2 Socket (M2_1) (Type 2230/2242/2260/2280)
21	Mini Cool Edge IO x8 Connector (MCIO4)
22	Mini Cool Edge IO x4 Connector (MCIO5)
23	Backplane PCI Express Hot-Plug Connector (CPU1_HSBP1)
24	SATA Power Connector (SATAPWR1)
25	M.2 Socket (M2_2) (Type 2230/2242/2260/2280)
26	PSU SMBus Header (PSU_SMB1)
27	System Panel Header (PANEL1)
28	SATA SGPIO Connector (SATA_SGPIO4)
29	Auxiliary Panel Header (AUX_PANEL1)
30	SATA SGPIO Connector (SATA_SGPIO3)
31	USB 3.2 Gen1 Header (USB3_3_4)
32	Chassis Speaker Header (SPEAKER1)
33	Clear CMOS Pad (CLRMOS1)
34	Non Maskable Interrupt Button (NMI_BTN1)
35	Thermal Sensor Header (TR1)
36	Intelligent Platform Management Bus Header (IPMB1)
37	BMC SMBus Header (BMC_SMB1)
38	COM Port Header (COM1)
39	PCI Express 5.0 x16 Slot (PCIE3)
40	PCI Express 5.0 x16 Slot (PCIE4)
41	PCI Express 5.0 x16 Slot (PCIE5)
42	PCI Express 5.0 x16 Slot (PCIE6)
43	SPI TPM Header (TPM_BIOS_PH1)

3 I/O Panel



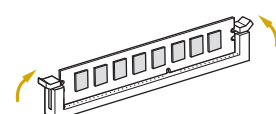
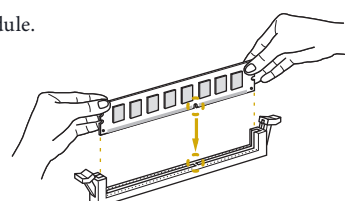
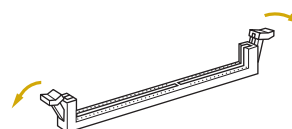
No.	Description	No.	Description
1	UID Switch (UID1)	4	10G LAN RJ-45 Port (LAN_1, shared NIC)
2	IPMI LAN Header (IPMI_LAN1)	5	10G LAN RJ-45 Port (LAN_2)
3	USB 3.2 Gen1 Ports (USB3_1_2)	6	VGA Port (VGA1)

4 Install the Memory

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

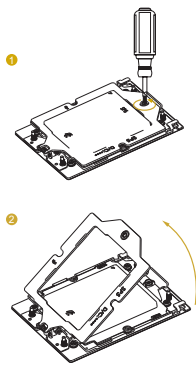
- 2 Insert the memory module.

- 3 Lock the clips.

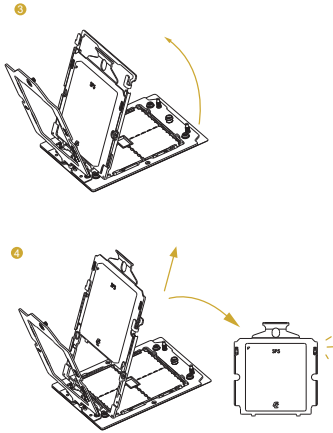


5 Install the Processor and Heatsink

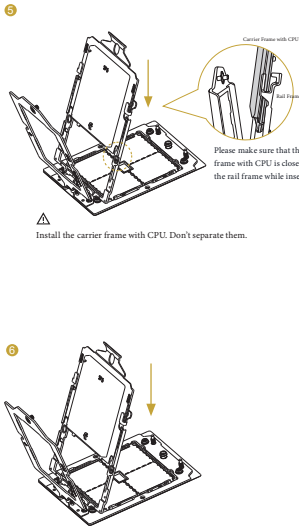
Locate the screw on the CPU socket and unscrew it. Open the first retention cover.



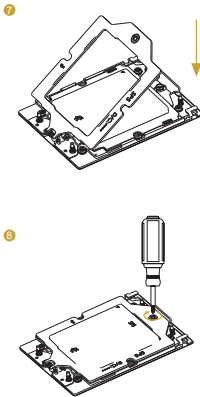
Open the second bracket. Take out the internal plastic cover.



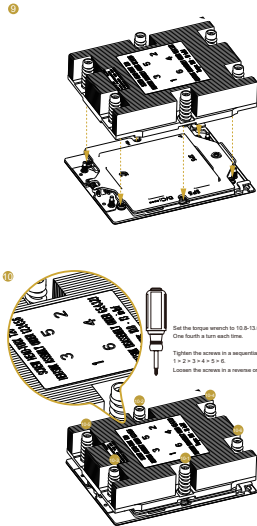
Install CPU along with the carrier frame, do not separate them. Please make sure the carrier frame with CPU is closely attached to the rail frame while inserting it.



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



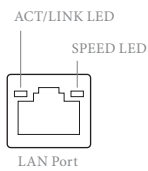
Install the heatsink to the CPU carrier. Secure the heastink to the CPU carrier with a screwdriver.



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

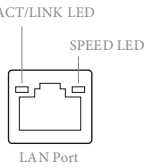
6 LAN Port LED Indications

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	Yellow	100Mbps connection
On	Link	Green	1Gbps connection

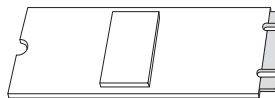
10G LAN Port



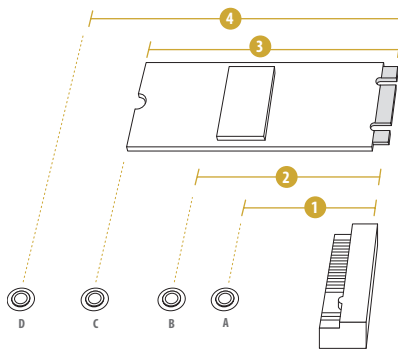
Activity / Link LED		Speed LED	
Status	Description	Status	Description
Off	No Link	Off	100Mbps connection or no link
Blinking Green	Data Activity	Yellow	1Gbps connection
On	Link	Green	10Gbps connection

7 M.2 SSD Module Installation

1 Prepare a M.2 SSD module and the screw.

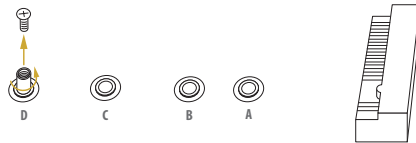


2 Depending on the PCB type and length of the M.2 SSD module, find the corresponding nut location to be used.

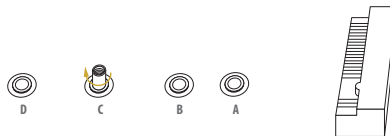


No.	1	2	3	4
Nut Location	A	B	C	D
PCB Length	3cm	4.2cm	6cm	8cm
Module Type	Type 2230	Type 2242	Type 2260	Type 2280

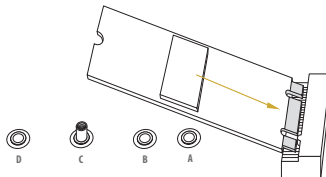
3 Move the standoff based on the module type and length. The standoff is placed at the nut location D by default. Skip Step 3 and 4 and go straight to Step 5 to use the default nut. Otherwise, release the standoff by hand.



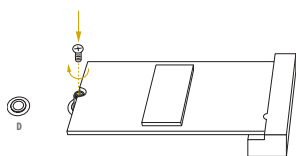
4 Peel off the yellow protective film on the nut to be used. Hand tighten the standoff into the desired nut location on the motherboard.



5 Align and gently insert the M.2 SSD module into the M.2 slot. Please be aware that the M.2 SSD module only fits in one orientation.



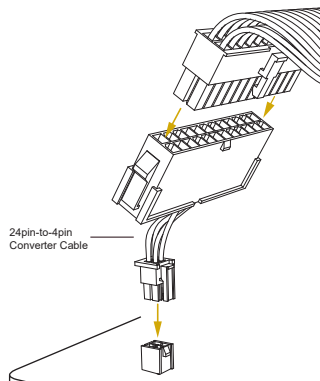
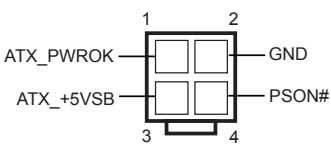
6 Tighten the screw with a screwdriver to secure the module into place. Please do not overtighten the screw as this might damage the module.



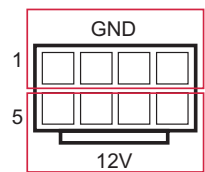
8 Install the Power Cables

ATX4PIN1

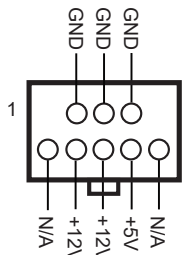
Micro-Fit Power Connector



ATX12V



SATAPWR1

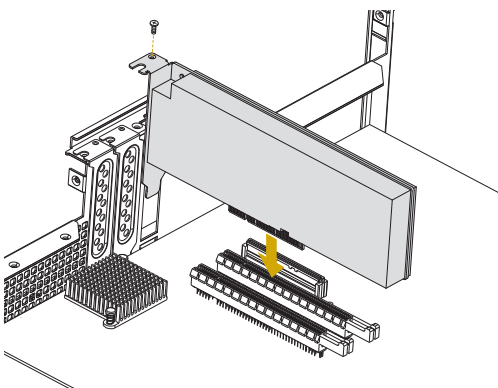


9 Install the PCIE Card

1 Remove the bracket facing the slot that intending 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.



6 Tighten the screw with a screwdriver to secure the module into place. Please do not overtighten the screw as this might damage the module.

