P/N: 15G065443000AK V1.0

Quick Installation Guide

TURIN2D24XGM/500W

ASRock Rack
www.asrockrack.com TURIN2D24XGM/500W

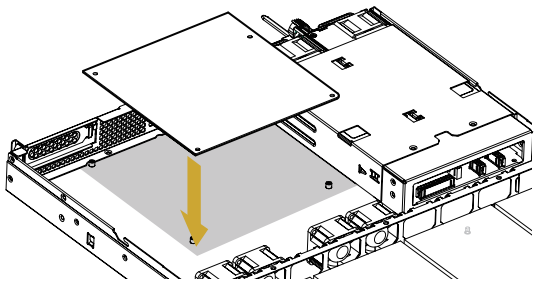
The server board User's Manual is available for download from the ASRock Rack's official website at http://www.asrockrack.com.

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

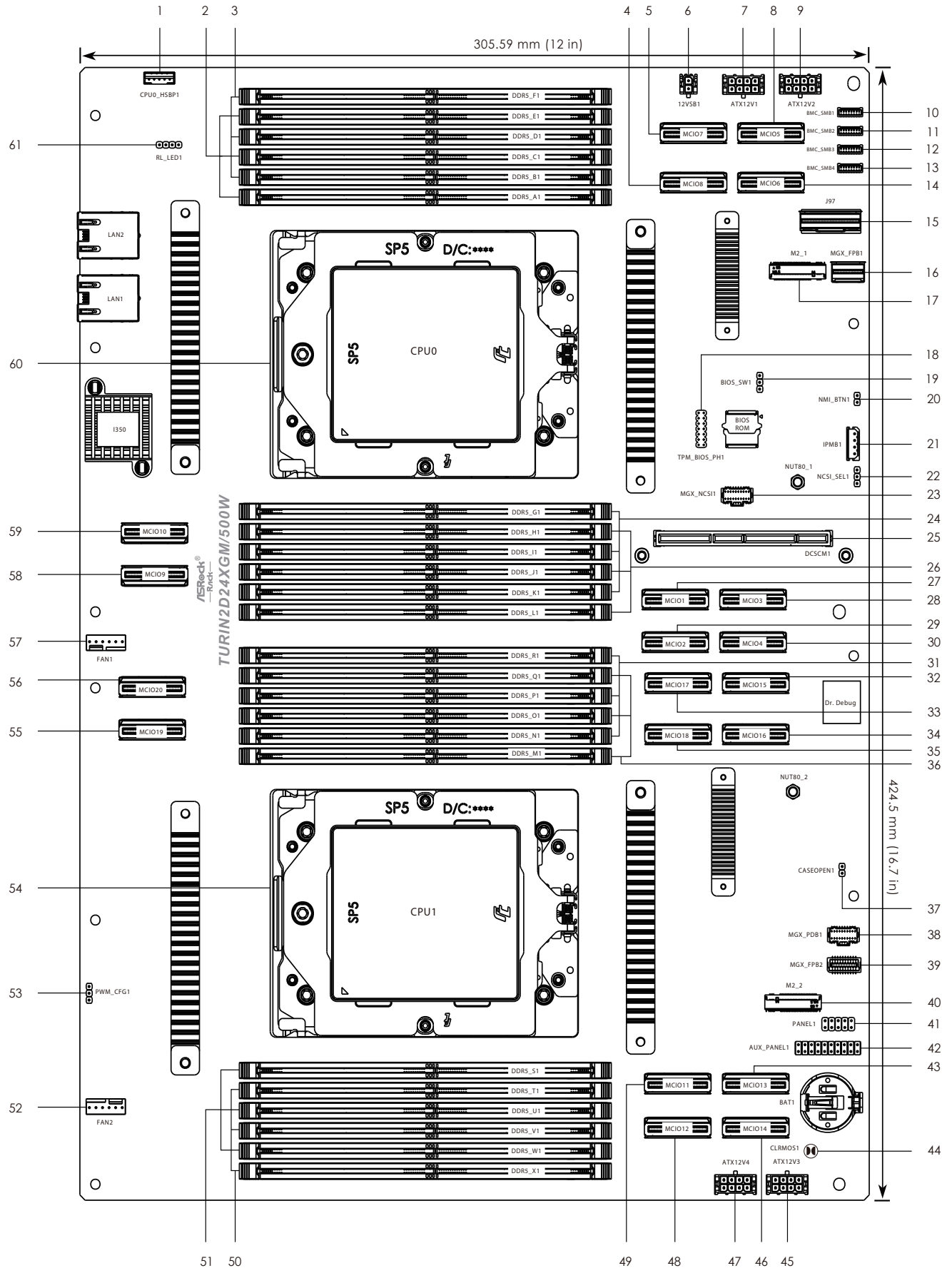
1. Unplug the power cord from the wall socket before touching any components.
2. To avoid damaging the server board's components due to static electricity, NEVER place the server board directly on the carpet or the like. Also remember to use a grounded wrist strap or touch a safety grounded object before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

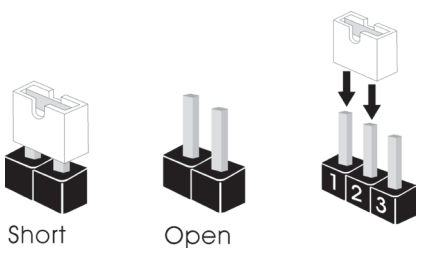


2 Motherboard Layout



No.	Description
1	Backplane PCI Express Hot-Plug Connector (CPU0_HSBP1)
2	3 DDR5 DIMM Slots (DDR5_A1, DDR5_C1, DDR5_E1)
3	3 DDR5 DIMM Slots (DDR5_B1, DDR5_D1, DDR5_F1)
4	Mini Cool Edge IO Connector (MCIO8)
5	Mini Cool Edge IO Connector (MCIO7)
6	12V Micro-fit Power Connector (12VSB1)
7	ATX 12V Power Connector (ATX12V1)
8	Mini Cool Edge IO Connector (MCIO5)
9	ATX 12V Power Connector (ATX12V2)
10	BMC SMBus Header (BMC_SMB1)
11	BMC SMBus Header (BMC_SMB2)
12	BMC SMBus Header (BMC_SMB3)
13	BMC SMBus Header (BMC_SMB4)
14	Mini Cool Edge IO Connector (MCIO6)
15	I/O Card Connector (J97)
16	Front Panel Board Connector (MGX_FPB1)
17	M.2 Socket (M2_1) (Type 2280)
18	SPI TPM Header (TPM_BIOS_PH1)
19	BIOS Selection Jumper (BIOS_SW1)
20	Non Maskable Interrupt Button (NMI_BTN1)
21	Intelligent Platform Management Bus Header (IPMB1)
22	NCSI Mode Jumper (NCSI_SEL1)
23	Network Controller Sideband Interface Header (MGX_NCSI1)
24	3 DDR5 DIMM Slots (DDR5_G1, DDR5_I1, DDR5_K1)
25	Datacenter-ready Secure Control Module Slot (DCSCM1)
26	3 DDR5 DIMM Slots (DDR5_H1, DDR5_J1, DDR5_L1)
27	Mini Cool Edge IO Connector (MCIO1)
28	Mini Cool Edge IO Connector (MCIO3)
29	Mini Cool Edge IO Connector (MCIO2)
30	Mini Cool Edge IO Connector (MCIO4)
31	3 DDR5 DIMM Slots (DDR5_N1, DDR5_P1, DDR5_R1)
32	Mini Cool Edge IO Connector (MCIO15)
33	Mini Cool Edge IO Connector (MCIO17)
34	Mini Cool Edge IO Connector (MCIO16)
35	Mini Cool Edge IO Connector (MCIO18)
36	3 DDR5 DIMM Slots (DDR5_M1, DDR5_O1, DDR5_Q1)
37	Chassis Intrusion Header (CASEOPEN_1)
38	Power Distribution Board Header (MGX_PDB1)
39	Front Panel Board Connector (MGX_FPB2)
40	M.2 Socket (M2_2) (Type 2280)
41	System Panel Header (PANEL1)
42	Auxiliary Panel Header (AUX_PANEL1)
43	Mini Cool Edge IO Connector (MCIO13)
44	Clear CMOS Pad (CLRMOS1)
45	ATX 12V Power Connector (ATX12V3)
46	Mini Cool Edge IO Connector (MCIO14)
47	ATX 12V Power Connector (ATX12V4)
48	Mini Cool Edge IO Connector (MCIO12)
49	Mini Cool Edge IO Connector (MCIO11)
50	3 DDR5 DIMM Slots (DDR5_T1, DDR5_V1, DDR5_X1)
51	3 DDR5 DIMM Slots (DDR5_S1, DDR5_U1, DDR5_W1)
52	System Fan Header (FAN2)
53	PWM Configuration Header (PWM_CFG1)
54	Socket SP5 (LGA 6096) (CPU1)
55	Mini Cool Edge IO Connector (MCIO19)
56	Mini Cool Edge IO Connector (MCIO20)
57	System Fan Header (FAN1)
58	Mini Cool Edge IO Connector (MCIO9)
59	Mini Cool Edge IO Connector (MCIO10)
60	Socket SP5 (LGA 6096) (CPU0)
61	Rear Panel LAN LED (RL_LED)

3 Jumper Settings

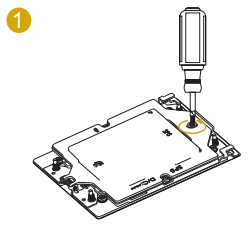


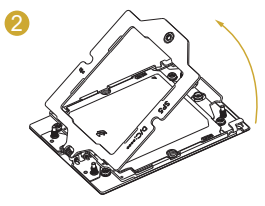
When the jumper cap is placed on the pins, the jumper is "Short". If no jumper cap is placed on the pins, the jumper is "Open".

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

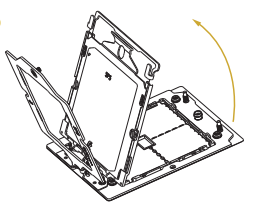
4 Install the Processor and Heatsink

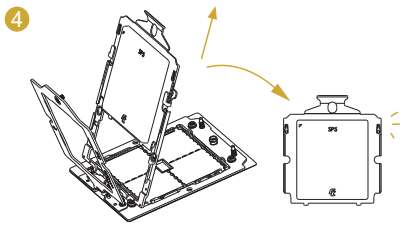
Locate the screw on the CPU socket and unscrew it. Open the first retention cover.



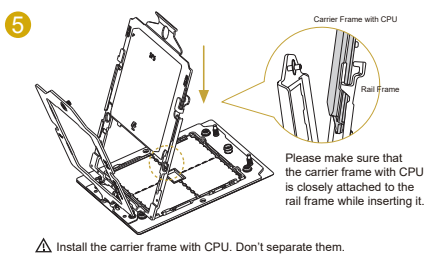


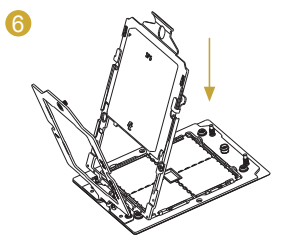
Open the second bracket. Take out the internal plastic cover.



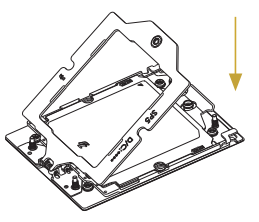


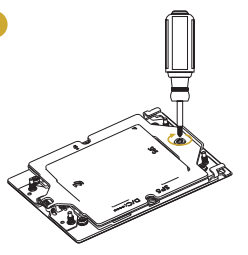
Install CPU along with the carrier frame, do not separate them. Please make sure the carrier frame with CPU is closely attached to the rail frame while inserting it.



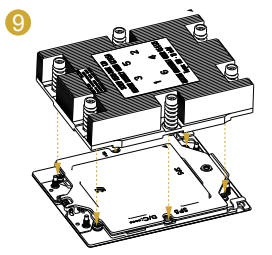


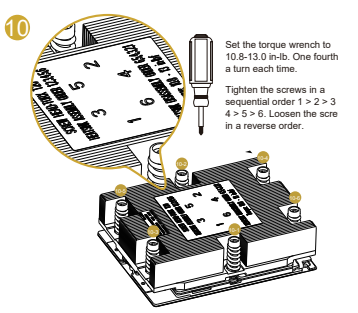
Close the bracket that holds the CPU. Close the retention cover and fasten the screw .





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





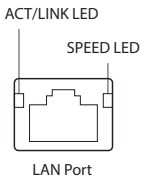
We recommend using the CPU Installation tool to avoid CPU pin-bent problem.

5 I/O Panel

No.	Description
1	1G LAN RJ-45 Port (LAN2)
2	1G LAN RJ-45 Port (LAN1, shared NIC)

6 LAN Port LED Indications

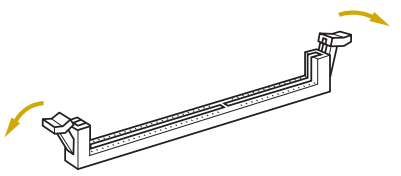
1G LAN Port



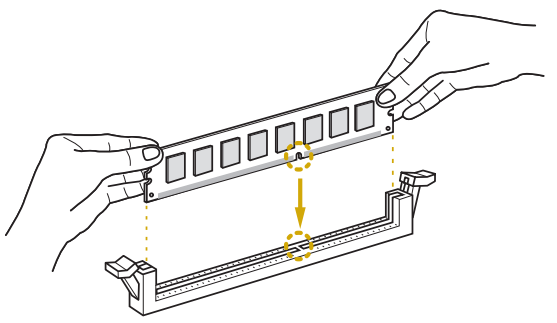
Activity / Link LED		Speed LED	
Status	**Description**	**Status**	**Description**
Off	No link	Off	10 Mbps connection or no link
Blinking Orange	Data activity	Orange	100 Mbps connection
On	Link	Green	1 Gbps connection

7 Install Memory

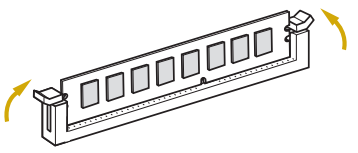
1 Unlock a DIMM slot by pressing the module clips outward.



2 Insert the memory module.

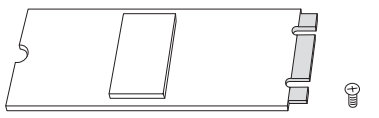


3 Lock the clips.

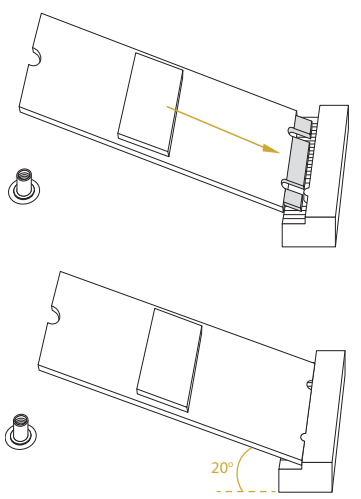


8 Install M.2 SSD Module

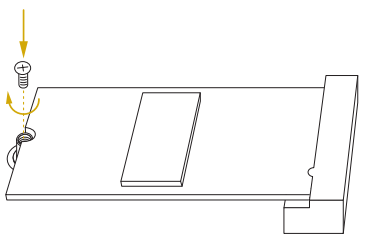
1 Prepare a M.2 SSD module and the screw.



2 Align and 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.

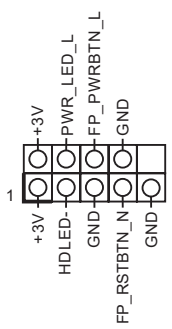


3 Tighten the screw with a screwdriver to secure the module into place. Please do not overtighten the screw as this might damage the module.

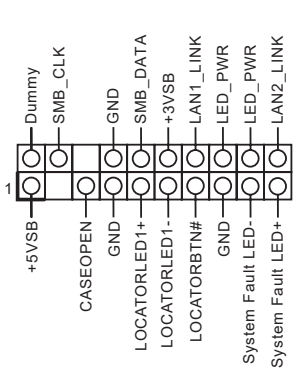


9 Headers

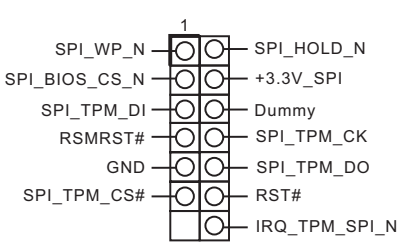
System Panel



Auxiliary Panel

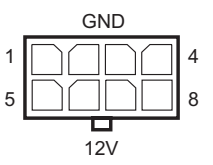


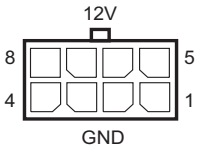
SPI TPM Header



10 Power Connectors

ATX12V1~4





12VSB1