



P/N: 15G065368000AK V1.0

Quick Installation Guide

GENOA2D24G-2L+ / TURIN2D24G-2L+

ASRock
Rack
www.asrockrack.com



GENOA2D24G-2L+



TURIN2D24G-2L+

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.

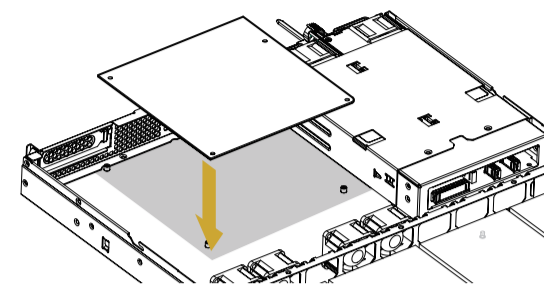
1. Unplug the power cord from the wall socket before touching any components.
2. To avoid damaging the server board's components due to static electricity, NEVER place the server board directly on the carpet or the like. Also remember to use a grounded wrist strap or touch a safety grounded object before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

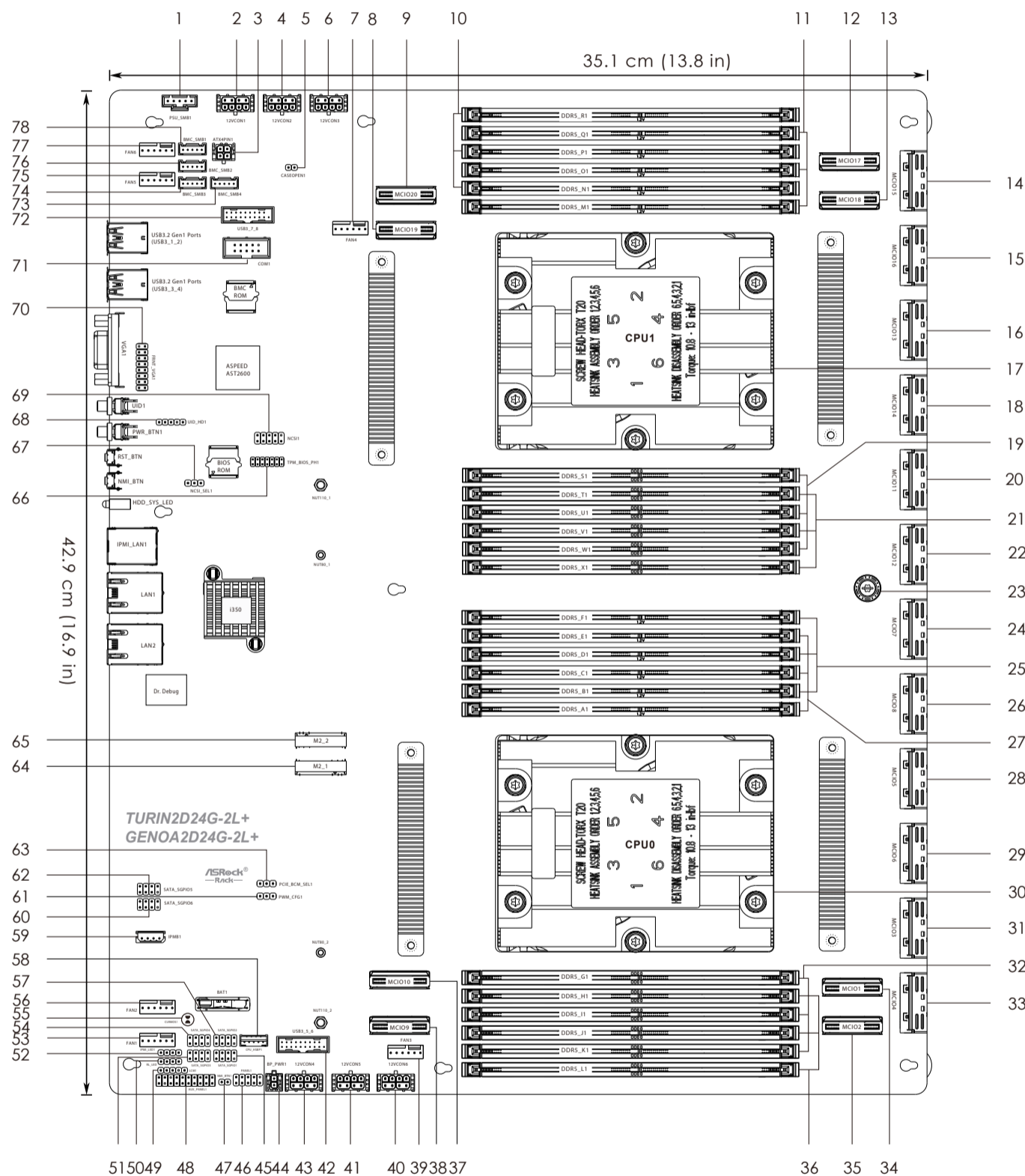
- 1 Insert the server board into the chassis.

- 2 Affix the screws clockwise into the mounting holes in all of the corners of the server board.

Do not over-tighten the screws

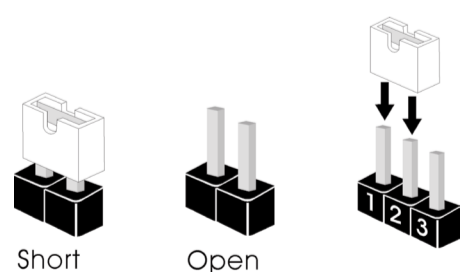


2 Motherboard Layout



No.	Description
1	PSU SMBus Header (PSU_SMB1)
2	ATX 12V Power Connector (12VCON1)
3	Micro-Fit Power Connector (ATX4PIN1)
4	ATX 12V Power Connector (12VCON2)
5	Chassis Intrusion Header (CASEOPEN1)
6	ATX 12V Power Connector (12VCON3)
7	System Fan Connector (FAN4)
8	Mini Cool Edge IO Connector (MCIO19)
9	Mini Cool Edge IO Connector (MCIO20)
10	3 x 288-pin DDR5 DIMM Slots (DDR5_N1, DDR5_P1, DDR5_R1)
11	3 x 288-pin DDR5 DIMM Slots (DDR5_M1, DDR5_O1, DDR5_Q1)
12	Mini Cool Edge IO Connector (MCIO17)
13	Mini Cool Edge IO Connector (MCIO18)
14	Mini Cool Edge IO Connector (MCIO15)
15	Mini Cool Edge IO Connector (MCIO16)
16	Mini Cool Edge IO Connector (MCIO13)
17	AMD Socket SP5 (SM-LGA-6096) (CPU1)
18	Mini Cool Edge IO Connector (MCIO14)
19	3 x 288-pin DDR5 DIMM Slots (DDR5_S1, DDR5_U1, DDR5_W1)
20	Mini Cool Edge IO Connector (MCIO11)
21	3 x 288-pin DDR5 DIMM Slots (DDR5_T1, DDR5_V1, DDR5_X1)
22	Mini Cool Edge IO Connector (MCIO12)
23	Thumbscrew
24	Mini Cool Edge IO Connector (MCIO7)
25	3 x 288-pin DDR5 DIMM Slots (DDR5_B1, DDR5_D1, DDR5_F1)
26	Mini Cool Edge IO Connector (MCIO8)
27	3 x 288-pin DDR5 DIMM Slots (DDR5_A1, DDR5_C1, DDR5_E1)
28	Mini Cool Edge IO Connector (MCIO5)
29	Mini Cool Edge IO Connector (MCIO6)
30	AMD Socket SP5 (SM-LGA-6096) (CPU0)
31	Mini Cool Edge IO Connector (MCIO3)
32	3 x 288-pin DDR5 DIMM Slots (DDR5_G1, DDR5_I1, DDR5_K1)
33	Mini Cool Edge IO Connector (MCIO4)
34	Mini Cool Edge IO Connector (MCIO1)
35	Mini Cool Edge IO Connector (MCIO2)
36	3 x 288-pin DDR5 DIMM Slots (DDR5_H1, DDR5_J1, DDR5_L1)
37	Mini Cool Edge IO Connector (MCIO10)
38	Mini Cool Edge IO Connector (MCIO9)
39	System Fan Connector (FAN3)
40	ATX 12V Power Connector (12VCON6)
41	ATX 12V Power Connector (12VCON5)
42	USB 3.2 Gen1 Header (USB3_5_6)
43	ATX 12V Power Connector (12VCON4)
44	System Power Connector (BP_PWR1)
45	SATA SGPIO Connector (SATA_SGPIO1)
46	System Panel Header (PANEL1)
47	Non Maskable Interrupt Button (NMI_BTN1)
48	Auxiliary Panel Header (AUX_PANEL1)
49	Liquid Crystal Module Header (LCM1)
50	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".

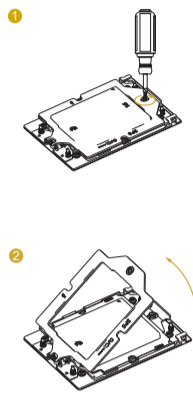
The illustration shows a 3-pin jumper whose pin1 and pin2 are "Short" when a jumper cap is placed on these 2 pins.

No.	Description	No.	Description
64	M.2 Socket (M2_1) (Type 2280/22110)	51	SATA SGPIO Connector (SATA_SGPIO3)
65	M.2 Socket (M2_2) (Type 2280/22110)	52	IPMI LAN LED Header (IPMI_LED1)
66	SPI TPM Header (TPM_BIOS_PH1)	53	System Fan Connector (FAN1)
67	NCSI Mode Jumper (NCSI_SEL1)	54	SATA SGPIO Connector (SATA_SGPIO4)
68	UID Button Header (UID_HD1)	55	Clear CMOS Pad (CLRMOS1)
69	NCSI Header (NCSI1)	56	System Fan Connector (FAN2)
70	Front VGA Header (FRNT_VGA1)	57	SATA SGPIO Connector (SATA_SGPIO2)
71	COM Port Header (COM1)	58	Backplane PCI Express Hot-Plug Connector (CPU_HSBP1)
72	USB 3.2 Gen1 Header (USB3_7_8)	59	Intelligent Platform Management Bus Header (IPMB1)
73	BMC SMBus Header (BMC_SMB4)	60	SATA SGPIO Connector (SATA_SGPIO6)
74	BMC SMBus Header (BMC_SMB3)	61	PWM Configuration Header (PWM_CFG1)
75	System Fan Connector (FAN5)	62	SATA SGPIO Connector (SATA_SGPIO5)
76	BMC SMBus Header (BMC_SMB2)	63	PCIE Signal Source Selection Jumper (PCIE_BCM_SEL1)
77	System Fan Connector (FAN6)		
78	BMC SMBus Header (BMC_SMB1)		

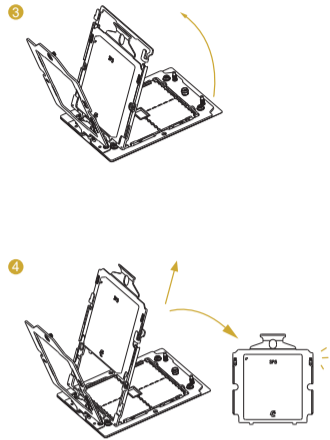


4 Install the Processor and Heatsink

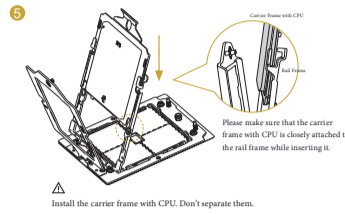
Locate the screw on the CPU socket and unscrew it. Open the first retention cover.



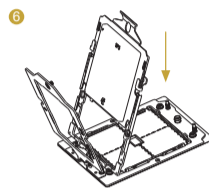
Open the second bracket. Take out the internal plastic cover.



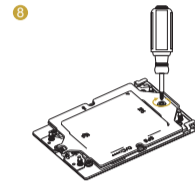
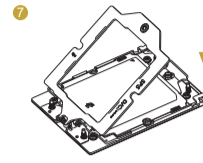
Install CPU along with the carrier frame, do not separate them. Please make sure the carrier frame with CPU is closely attached to the rail frame while inserting it.



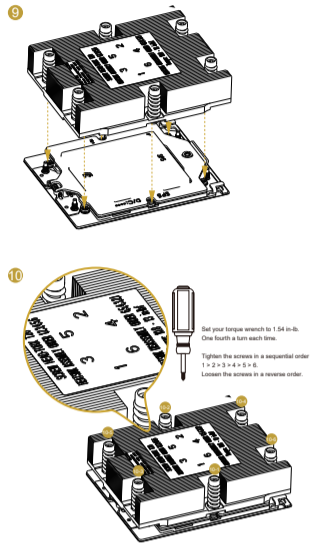
Install the carrier frame with CPU. Don't separate them.



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

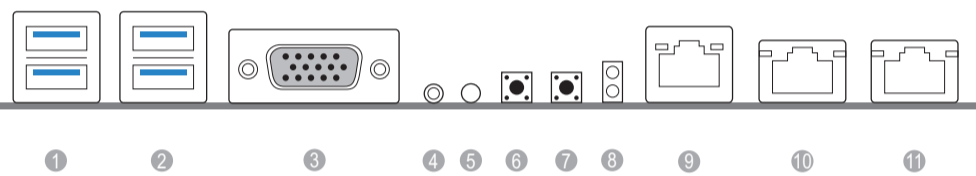


Install the heatsink to the CPU carrier. Secure the heatsink to the CPU carrier with a screwdriver.



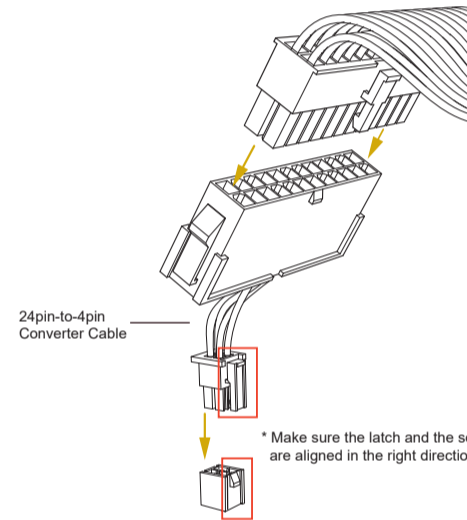
We recommend using the CPU Installation tool to avoid CPU pin-bent problem.

5 I/O Panel

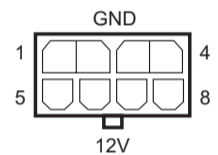


No.	Description	No.	Description
1	USB 3.2 Gen1 Ports (USB3_1_2)	7	NMI Button (NMI_BTN)
2	USB 3.2 Gen1 Ports (USB3_3_4)	8	HDD/System Fault LED (HDD_SYS_LED)
3	VGA Header (VGA1)	9	IPMI LAN Header (IPMI_LAN1)
4	UID Switch (UID1)	10	1G LAN RJ-45 Port (LAN1, shared NIC)
5	Power Switch/LED (PWR_BTN1)	11	1G LAN RJ-45 Port (LAN2)
6	Reset Button (RST_BTN)		

6 Install the Power Cables

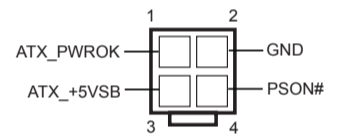


12VCON



ATX4PIN1

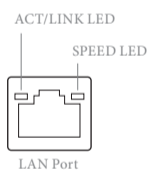
Micro-Fit Power Connector



* Make sure the latch and the socket are aligned in the right direction.

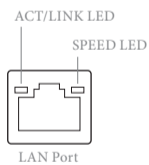
7 LAN Port LED Indications

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	Orange	100Mbps connection
On	Link	Green	1Gbps connection

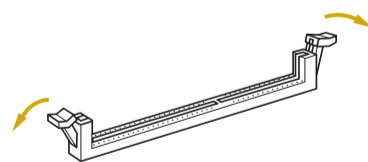
1G LAN Port



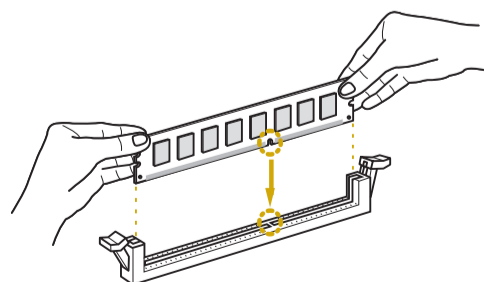
Activity / Link LED		Speed LED	
Status	Description	Status	Description
Off	No Link	Off	10Mbps connection or no link
Blinking Yellow	Data Activity	Orange	100Mbps connection
On	Link	Green	1Gbps connection

9 Install the Memory

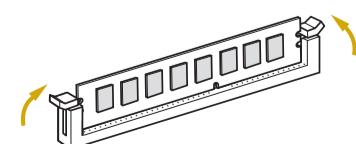
1 Unlock a DIMM slot by pressing the module clips outward.



2 Insert the memory module.



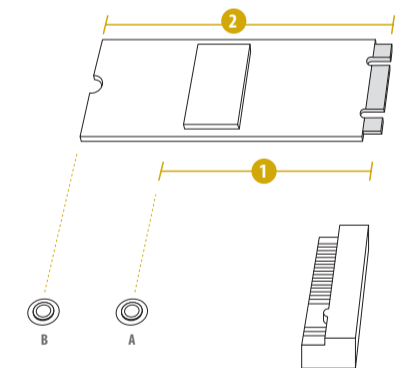
3 Lock the clips.



8 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



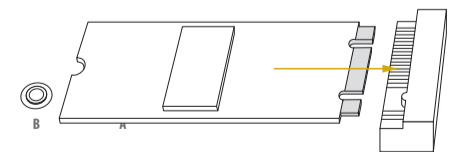
2 Move the standoff based on the module type and length.



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.

