Quick Installation Guide

ROMED6U-2L2T

ASRock Rack
www.asrockrack.com

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

TOP VIEW

24.4cm (9.6 in)

24.4Cm (9.6 in)

LGA4094
Socket SP3
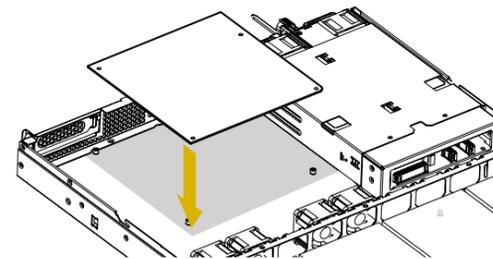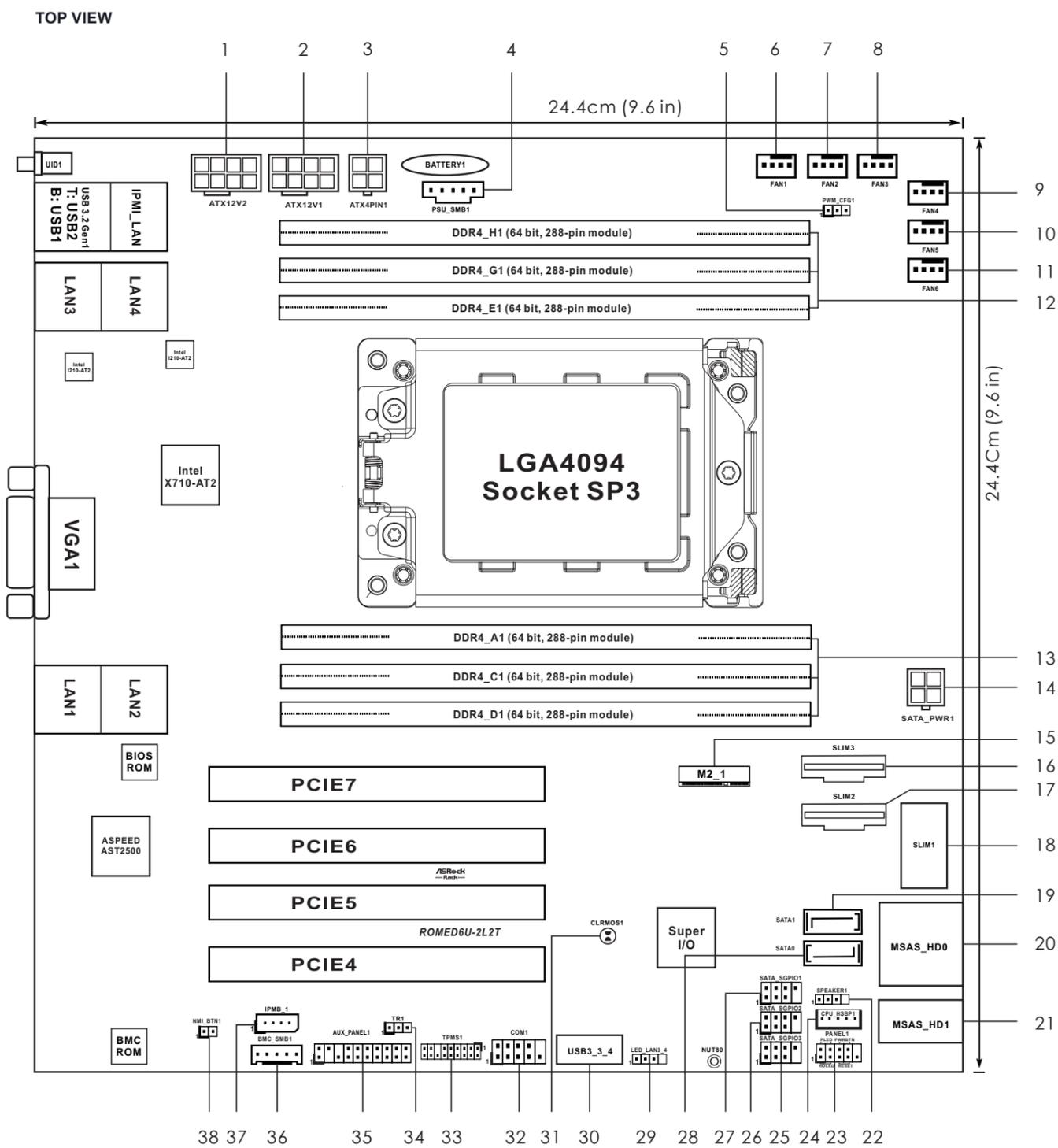
BOTTOM VIEW
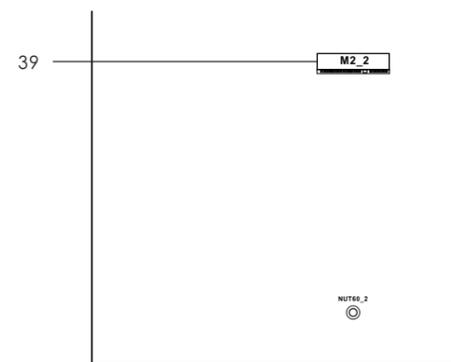
No.	Description
1	ATX 12V Power Connector (ATX12V2)
2	ATX 12V Power Connector (ATX12V1)
3	ATX 4-PIN Power Connector (ATX4PIN1)
4	PSU SMBus Header (PSU_SMB1)
5	PWM Configuration Header (PWM_CFG1)
6	System Fan Connector (FAN1)
7	System Fan Connector (FAN2)
8	System Fan Connector (FAN3)
9	System Fan Connector (FAN4)
10	System Fan Connector (FAN5)
11	System Fan Connector (FAN6)
12	3 x 288-pin DDR4 DIMM Slots (DDR4_E1, DDR4_G1, DDR4_H1)
13	3 x 288-pin DDR4 DIMM Slots (DDR4_A1, DDR4_C1, DDR4_D1)
14	SATA Power Connector (DC-IN Mode) (SATA-PWR1)
15	M.2 Socket (M2_1) (Type 2280)
16	Slimline NVMe Connector (SLIM3)
17	Slimline NVMe Connector (SLIM2)
18	Slimline NVMe Connector (SLIM1) *(Right-Angled)*
19	SATA3 Connector (SATA1)
20	Mini-SAS HD Connector (MSAS_HD0) *(Right-Angled)*
21	Mini-SAS HD Connector (MSAS_HD1) *(Right-Angled)*
22	Speaker Header (SPEAKER1)
23	System Panel Header (PANEL1)
24	Backplane PCI Express Hot-Plug Connector (CPU1_HSBP1)
25	SATA SGPIO Connector (SATA_SGPIO3)
26	SATA SGPIO Connector (SATA_SGPIO2)
27	SATA SGPIO Connector (SATA_SGPIO1)
28	SATA3 Connector (SATA0)
29	Front LAN LED Connector (LED_LAN3_4)
30	USB 3.2 Gen1 Header (USB3_3_4) *(Right-Angled)*
31	Clear CMOS Pad (CLRMOS1)
32	COM Port Header (COM1)
33	TPMS Header (TPMS1)
34	Thermal Sensor Header (TR1)
35	Auxiliary Panel Header (AUX_PANEL1)
36	BMC SMBus Header (BMC_SMB1)
37	Intelligent Platform Management Bus Header (IPMB_1)
38	Non Maskable Interrupt Button (NMI_BTN1)
39	M.2 Socket (M2_2) (Type 2260)

3 I/O Panel
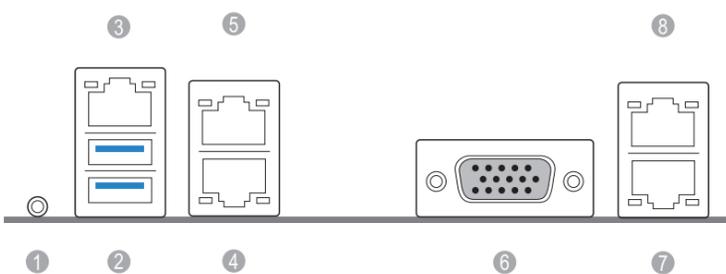
No.	Description	No.	Description
1	UID Switch (UID1)	5	1G LAN RJ-45 Port (LAN4)
2	USB 3.2 Gen1 Ports (USB3_1_2)	6	VGA Port (VGA1)
3	LAN RJ-45 Port (IPMI_LAN1)	7	10G LAN RJ-45 Port (LAN1)
4	1G LAN RJ-45 Port (LAN3)	8	10G LAN RJ-45 Port (LAN2)

4 Power Connectors

ATX 12V Power (ATX12V1/ATX12V2)

GND

12V

ATX 4-Pin Power (ATX4PIN1)

ATX_PWROK
ATX_+5VSB
GND
PSON#
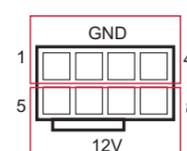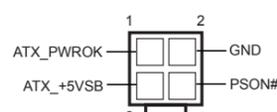
5 Install the Processor and Heatsink

Locate the three torx screws on the CPU socket and unscrew them according to the order A→B→C. Open the first retention cover.
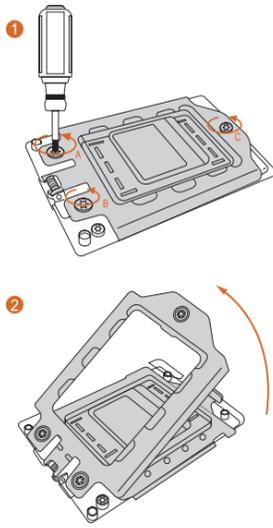
Open the second bracket. Take out the internal plastic cover.
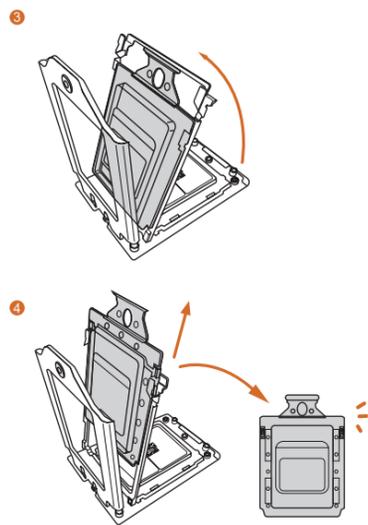
Install CPU along with the carrier frame, do not separate them. Please make sure the carrier frame with CPU is closely attached to the rail frame while inserting it.

Please make sure that the carrier frame with CPU is closely attached to the rail frame while inserting it.
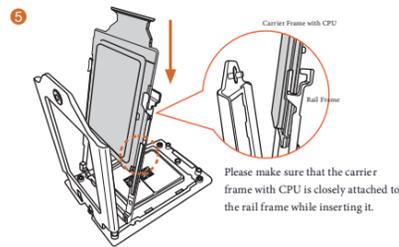
⚠ Install the carrier frame with CPU. Don't separate them.
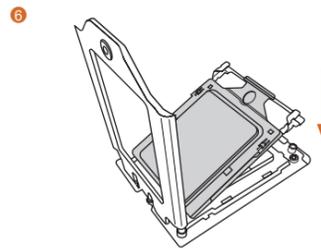
Close the bracket that holds the CPU. Close the retention cover. Fasten the torx screw according to the order A→B→C.
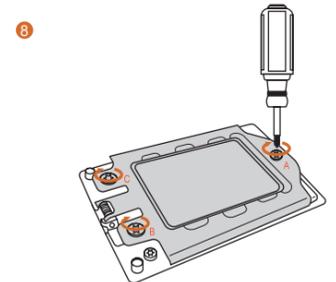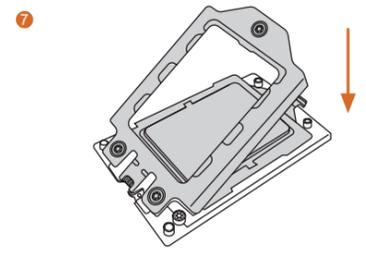
We recommend using the CPU Installation tool to avoid CPU pin-bent problem.

## 6 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.
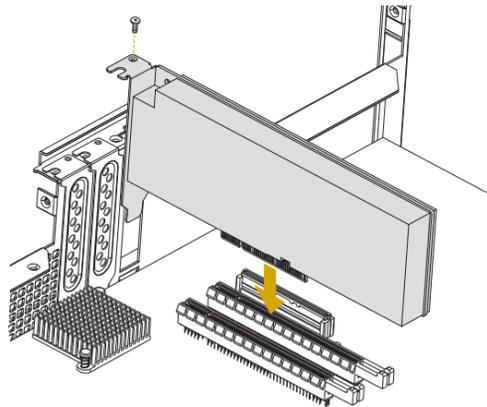
7 Install the Memory

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

2 Insert the memory module.

3 Lock the clips.
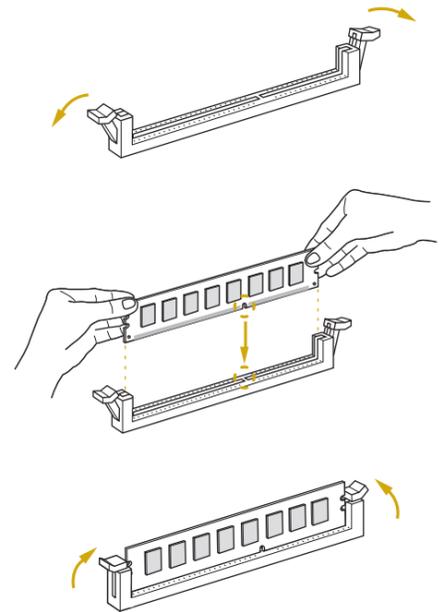
	A1	C1	D1	E1	G1	H1
1 DIMM		#				
2 DIMMS		#	#			
4 DIMMS		#	#		#	#
6 DIMMS	#	#	#	#	#	#

8 LAN Port LED Indications

IPMI LAN Port
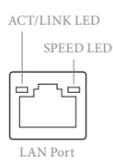
ACT/LINK LED
SPEED LED
LAN Port

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

LAN Port

ACT/LINK LED
SPEED LED
LAN Port

1G LAN Port (LAN3, LAN4) LED Indications
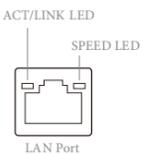
| Activity / Link LED		Speed LED	
Status	Description	Status	Description
Off	No Link	Off	10Mbps connection or no link
Blinking Green	Data Activity	Yellow	100Mbps connection
On	Link	Green	1Gbps connection

10G LAN Port (LAN1, LAN2) LED Indications

ACT/LINK LED
SPEED LED

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

9 M.2_SSD (NGFF) Module Installation

1 Prepare a M.2_SSD (NGFF) module and the screw.

2 Gently insert the M.2 (NGFF) SSD module into the M.2 slot. Please be aware that the M.2 (NGFF) 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.
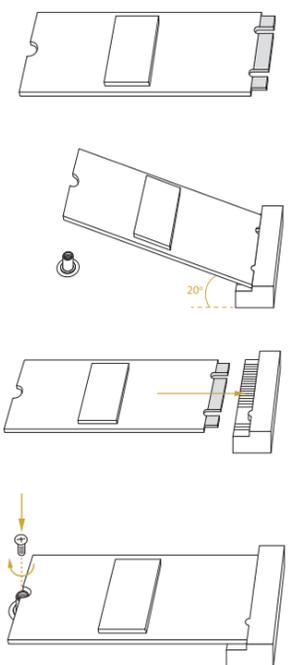
10 Panel Headers

System Panel

PLED+
PLED-
PWRBTN#
GND
GND
RESET#
GND
HDLED-
HDLED+

Auxiliary Panel

A: SMB_Alert, SMB_CLK, GND, SMB_DATA, +3VSB
B: LAN1_LINK, LED_PWR, LED_PWR, LAN2_LINK
C: +5VSB, CASEOPEN, GND, LOCATORLED1+, LOCATORLED1-
D: LOCATORBTN#, GND, LOCATORLED2-, LOCATORLED2+