



P/N: 15G065153000AK V1.0

Quick Installation Guide

ROMED8-2T



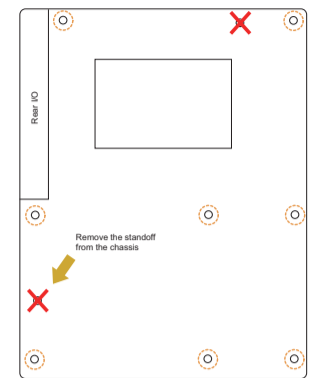
The server board User's Manual is available for download from the ASRock Rack's official website at <http://www.asrockrack.com>.

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.

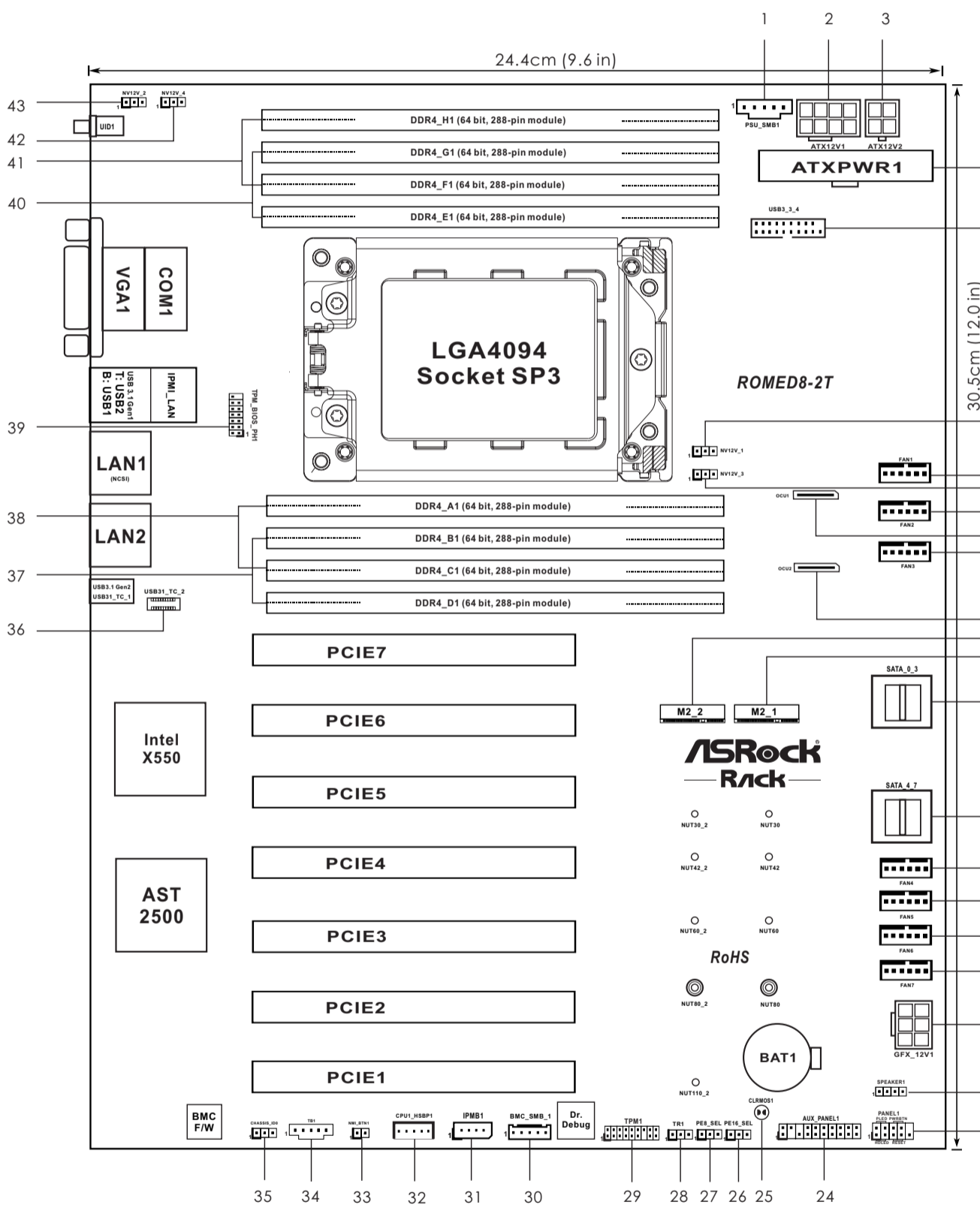
1 Install the Server Board

- 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



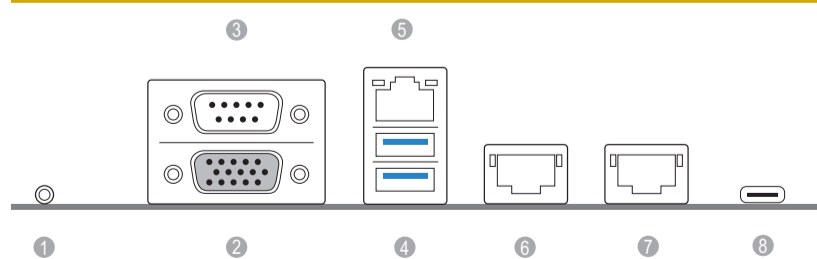
Attention! Before installing this motherboard, be sure to unscrew and remove the standoffs at the marked location, under the motherboard, from the chassis, in order to avoid electrical short circuit and damage to your motherboard.

2 Motherboard Layout



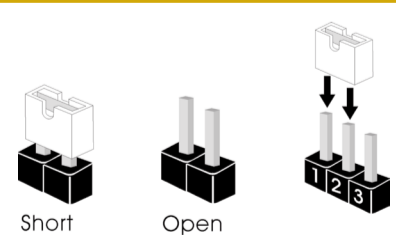
- 1 PSU SMBus Header (PSU_SMB1)
- 2 ATX 12V Power Connector (ATX12V1)
- 3 ATX 12V Power Connector (ATX12V2)
- 4 ATX Power Connector (ATXPWR1)
- 5 USB 3.1 Gen1 Header (USB3_3_4)
- 6 NVDIMM Power Support Jumper (NV12V_1)
- 7 NVDIMM Power Support Jumper (NV12V_3)
- 8 System Fan Connector (FAN1)
- 9 System Fan Connector (FAN2)
- 10 OCuLink x4 Connector (OCU1)
- 11 System Fan Connector (FAN3)
- 12 OCuLink x4 Connector (OCU2)
- 13 M.2 Socket (M2_2) (Type 2230 / 2242 / 2260 / 2280 / 22110)
- 14 M.2 Socket (M2_1) (Type 2230 / 2242 / 2260 / 2280)
- 15 Mini-SAS HD Connector (SATA_0_3)
- 16 Mini-SAS HD Connector (SATA_4_7)
- 17 System Fan Connector (FAN4)
- 18 System Fan Connector (FAN5)
- 19 System Fan Connector (FAN6)
- 20 System Fan Connector (FAN7)
- 21 Graphics 12V Power Connector (GFX_12V1)
- 22 Speaker Header (SPEAKER1)
- 23 System Panel Header (PANEL1)
- 24 Auxiliary Panel Header (AUX_PANEL1)
- 25 Clear CMOS Pad (CLRMOSE1)
- 26 PCIe2 x16 Selection Jumper (PE16_SEL)
- 27 PCIe2 x8 Selection Jumper (PE8_SEL)
- 28 Thermal Sensor Header (TR1)
- 29 TPM Header (TPM1)
- 30 BMC SMBus Header (BMC_SMB1)
- 31 Intelligent Platform Management Bus Header (IPMB1)
- 32 CPU HP-SMBus Connector (CPU1_HSBP1)
- 33 Non Maskable Interrupt Button (NMI_BTN1)
- 34 Thunderbolt AIC Connector (TB1)*
- 35 Chassis ID Jumper (CHASSIS_ID0)
- 36 Front Panel Type C USB 3.1 Gen2 Header (USB31_TC_2)
- 37 2 x 288-pin DDR4 DIMM Slots (DDR4_B1, DDR4_D1)**
- 38 2 x 288-pin DDR4 DIMM Slots (DDR4_A1, DDR4_C1)**
- 39 TPM-SPI Header (TPM_BIOS_PH1)
- 40 2 x 288-pin DDR4 DIMM Slots (DDR4_E1, DDR4_G1)**
- 41 2 x 288-pin DDR4 DIMM Slots (DDR4_F1, DDR4_H1)**
- 42 NVDIMM Power Support Jumper (NV12V_4)
- 43 NVDIMM Power Support Jumper (NV12V_2)

3 I/O Panel



| No. | Description | No. | Description |
|-----|-------------------------------|-----|--------------------------------|
| 1 | UID Switch (UID1) | 5 | LAN RJ-45 Port (IPMI_LAN1) |
| 2 | VGA Port (VGA1) | 6 | 10G LAN RJ-45 Port (LAN1) |
| 3 | Serial Port (COM1) | 7 | 10G LAN RJ-45 Port (LAN2) |
| 4 | USB 3.1 Gen1 Ports (USB3_1_2) | 8 | USB 3.1 Gen2 Port (USB31_TC_1) |

4 Jumper Settings (PE8_SEL / PE16_SEL)



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".

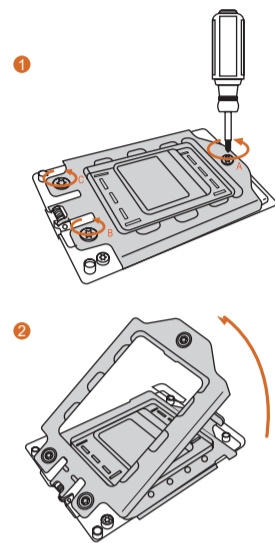
The illustration shows a 3-pin jumper whose pin1 and pin2 are "Short" when a jumper cap is placed on these 2 pins.

| PE8_SEL | PE16_SEL | PCIE2 | M2_1 | SATA_4_7 | OCU1 & OCU2 |
|---------|----------|---------|------|----------|-------------|
| 1_2 | 1_2 | O (x16) | X | X | X |
| 1_2 | 2_3 | O (x8) | O | O | X |
| 2_3 | 2_3 | X | O | O | O |
| 2_3 | 1_2 | X | X | X | O |

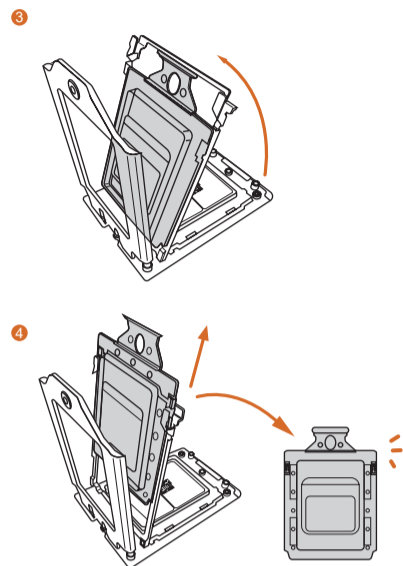


5 Install the Processor and Heatsink

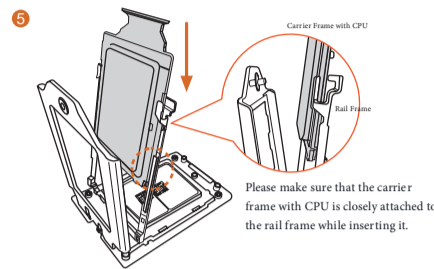
Locate the three torx screws on the CPU socket and unscrew them according to the order A→B→C. Open the first retention cover.



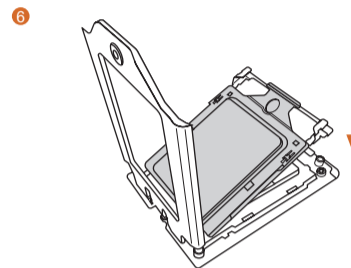
Open the second bracket. Take out the internal plastic cover.



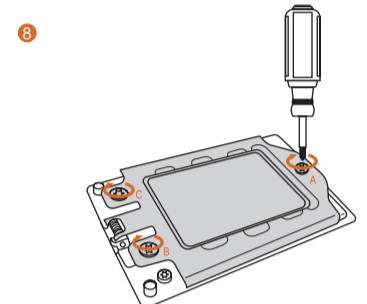
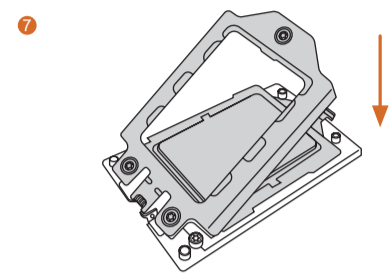
Install CPU along with the carrier frame, do not separate them. Please make sure the carrier frame with CPU is closely attached to the rail frame while inserting it.



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

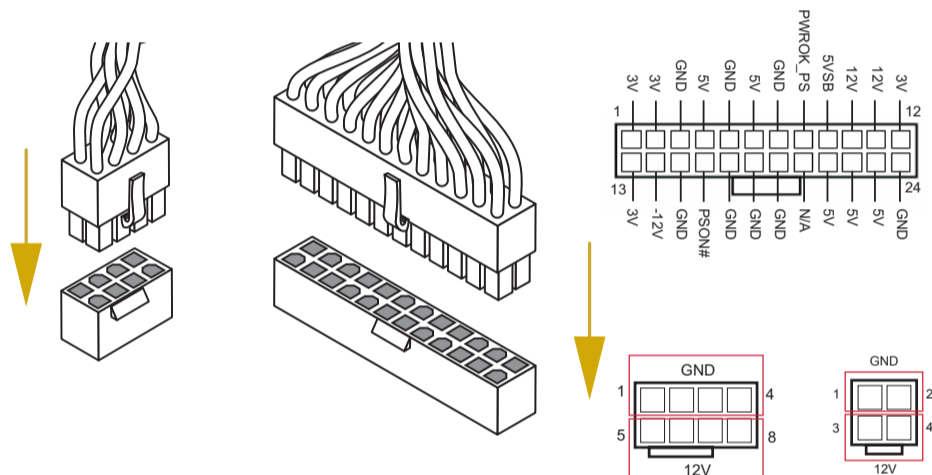


Close the bracket that holds the CPU. Close the retention cover. Fasten the torx screw according to the order A→B→C.



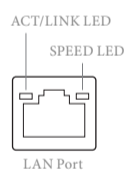
We recommend using the CPU Installation tool to avoid CPU pin-bent problem.

6 Install the Power Cables



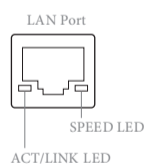
8 LAN Port LED Indications

IPMI 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 |

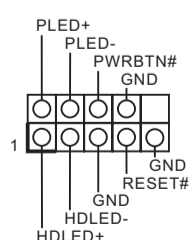
LAN Port



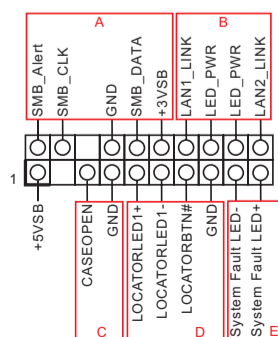
| Activity / Link LED | | Speed LED | |
|---------------------|---------------|-----------|-------------------------------|
| Status | Description | Status | Description |
| Off | No Link | Off | 100Mbps connection or no link |
| Blinking Yellow | Data Activity | Off | 1Gbps connection |
| On | Link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

9 Headers

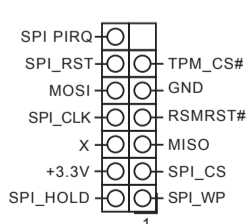
System Panel



Auxiliary Panel

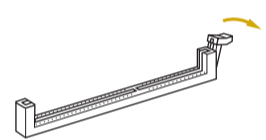


TPM-SPI

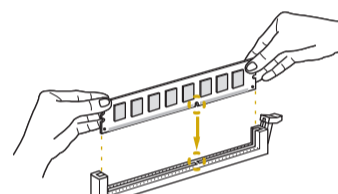


7 Install the Memory

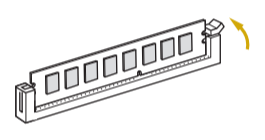
1 Unlock a DIMM slot by pressing the module clip outward.



2 Insert the memory module.



3 Lock the clip.



10 M.2_SSD (NGFF) Module Installation

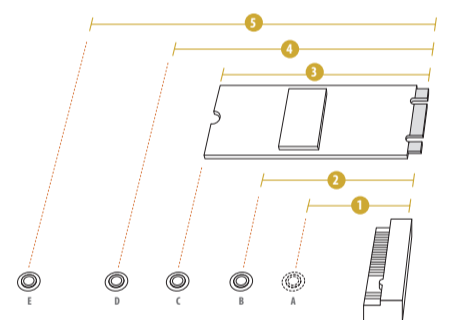
1 Find the corresponding nut location to be used.

M2_1 :

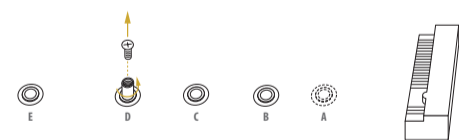
| 1 | 2 | 3 | 4 |
|----------|-----------|----------|-----------|
| A | B | C | D |
| 3cm | 4.2cm | 6cm | 8cm |
| Type2230 | Type 2242 | Type2260 | Type 2280 |

M2_2 :

| 1 | 2 | 3 | 4 | 5 |
|----------|-----------|----------|-----------|------------|
| A | B | C | D | E |
| 3cm | 4.2cm | 6cm | 8cm | 11cm |
| Type2230 | Type 2242 | Type2260 | Type 2280 | Type 22110 |



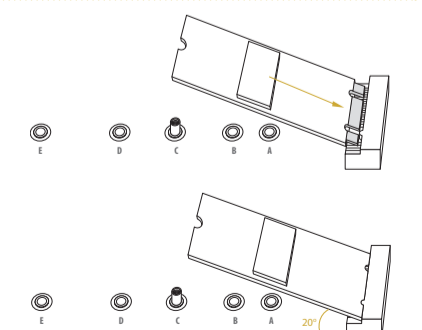
2 Move the standoff based on the module type and length.



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.

