



P/N: 15G065263000AK V1.0

Quick Installation Guide

SPC741D8UD-2T | SPC741D8UD-2T/X550



SPC741D8UD-2T



SPC741D8UD-2T/X550

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

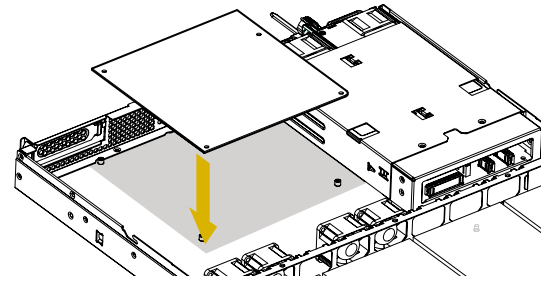
Take note of the following precautions before you install server board components or change any server board settings.

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.

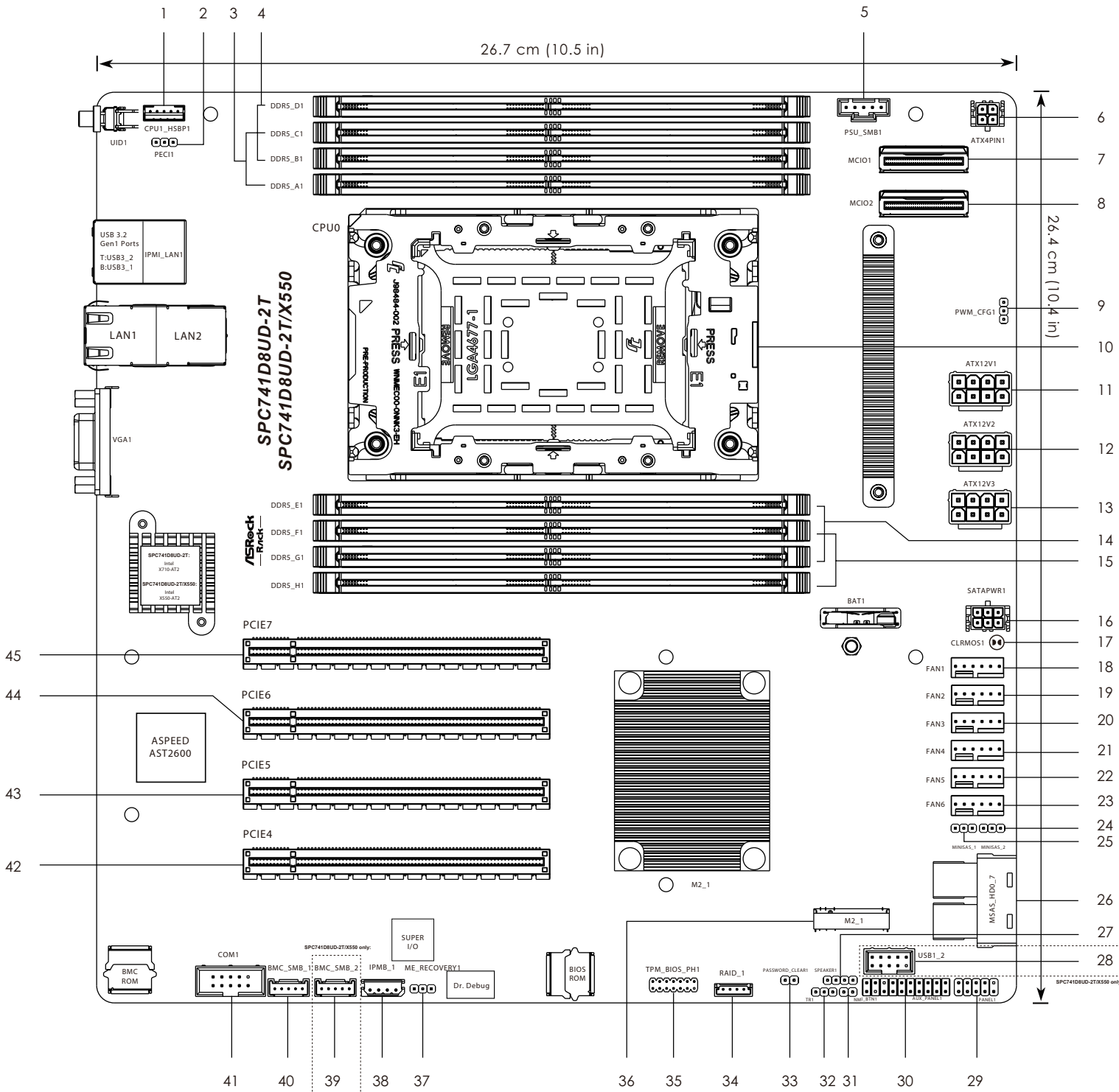
1 Install the Server Board

- 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

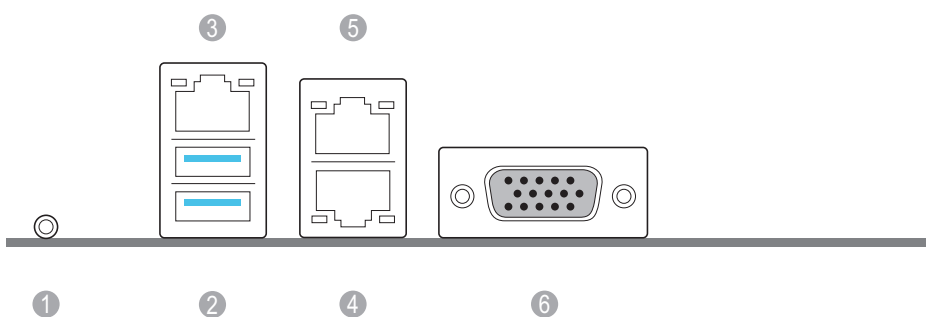


2 Motherboard Layout



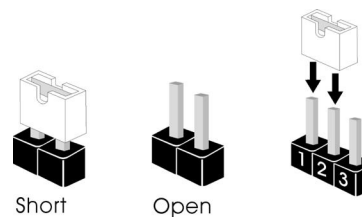
No.	Description
1	Backplane PCI Express Hot-Plug Connector (CPU1_HSBP1)
2	CPU PECI Mode Jumper (PECI1)
3	2 x 288-pin DDR5 DIMM Slots (DDR5_A1, DDR5_C1)
4	2 x 288-pin DDR5 DIMM Slots (DDR5_B1, DDR5_D1)
5	PSU SMBus Header (PSU_SMB1)
6	Micro-Fit ATX 4Pin Power Connector (ATX4PIN1)
7	Mini Cool Edge IO x8 Connector (MCIO1)
8	Mini Cool Edge IO x8 Connector (MCIO2)
9	PWM Configuration Header (PWM_CFG1)
10	LGA 4677 CPU Socket (CPU0)
11	ATX 12V Power Connector (ATX12V1)
12	ATX 12V Power Connector (ATX12V2)
13	ATX 12V Power Connector (ATX12V3)
14	2 x 288-pin DDR5 DIMM Slots (DDR5_E1, DDR5_G1)
15	2 x 288-pin DDR5 DIMM Slots (DDR5_F1, DDR5_H1)
16	Micro-Fit SATA Power Connector (SATAPWR1)
17	Clear CMOS Pad (CLRMO1)
18	System Fan Connector (FAN1)
19	System Fan Connector (FAN2)
20	System Fan Connector (FAN3)
21	System Fan Connector (FAN4)
22	System Fan Connector (FAN5)
23	System Fan Connector (FAN6)
24	MiniSAS HD SATA/PCIE Selection Jumper (MINISAS_2)
25	MiniSAS HD SATA/PCIE Selection Jumper (MINISAS_1)
26	MiniSAS HD Connector (MSAS_HD0_7)
27	Speaker Header (SPEAKER1)
28	USB 2.0 Header (USB1_2) (SPC741D8UD-2T/X550 only)
29	System Panel Header (PANEL1)
30	Auxiliary Panel Header (AUX_PANEL1)
31	Non Maskable Interrupt Button (NMI_BTN1)
32	Thermal Sensor Header (TR1)
33	Password Reset Jumper (PASSWORD_CLEAR1)
34	Virtual RAID On CPU Header (RAID_1)
35	SPI TPM Header (TPM_BIOS_PH1)
36	M-key M.2 Socket (M2_1) (Type 2280)
37	ME Recovery Jumper (ME_RECOVERY1)
38	Intelligent Platform Management Bus Header (IPMB_1)
39	BMC SMBus Header (BMC_SMB_2) (SPC741D8UD-2T/X550 only)
40	BMC SMBus Header (BMC_SMB_1)
41	Serial Port Header (COM1)
42	PCI Express 5.0 x16 Slot (PCIE4)
43	PCI Express 5.0 x16 Slot (PCIE5)
44	PCI Express 5.0 x16 Slot (PCIE6)
45	PCI Express 5.0 x16 Slot (PCIE7)

3 I/O Panel



No.	Description	No.	Description
1	UID Switch (UID1)	4	10G LAN RJ-45 Port (LAN1)
2	USB 3.2 Gen1 Ports (USB3_1_2)	5	10G LAN RJ-45 Port (LAN2)
3	LAN RJ-45 Port (IPMI_LAN1)	6	VGA Port (VGA1)

4 Jumper Settings

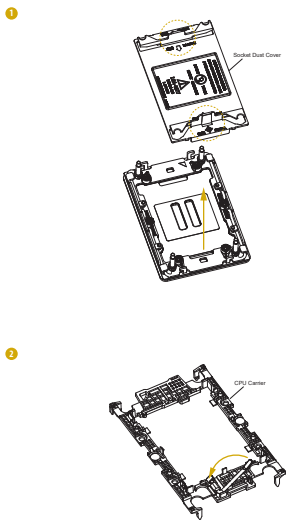


When the jumper cap is placed on the pins, the jumper is "Short". If no jumper cap is placed on the pins, the jumper is "Open".

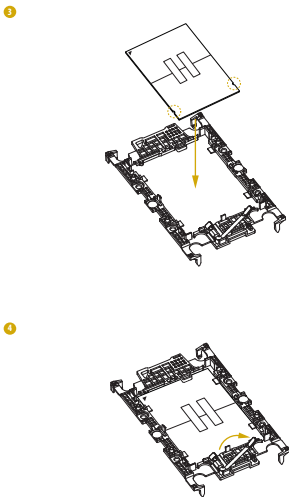
The illustration shows a 3-pin jumper whose pin1 and pin2 are "Short" when a jumper cap is placed on these 2 pins.

5 Install the Processor and Heatsink

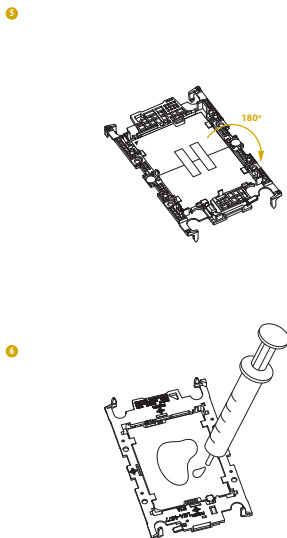
Remove the CPU socket cover and open the socket lever.



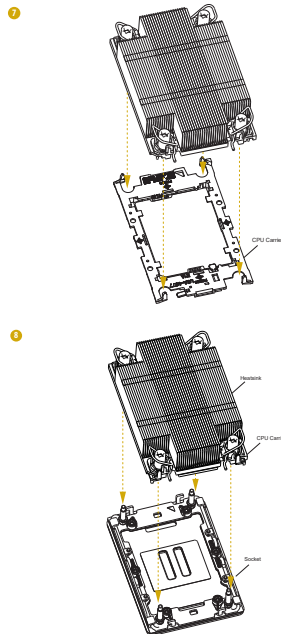
Align and install the processor on the carrier and make sure the arrow is located in the correct direction. Close the socket lever.



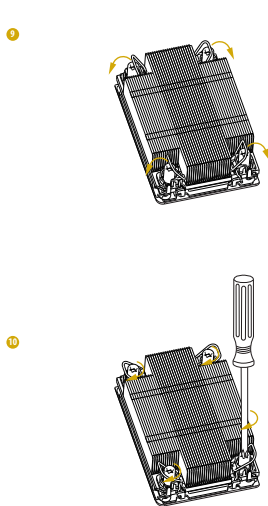
Carefully flip the carrier assembly. Apply a thermal paste.



Install the heatsink to the CPU carrier. Then install the heatsink and CPU carrier to the socket.



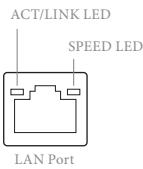
Tighten the corner fasteners. Secure the heatsink to the motherboard with a screwdriver.



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

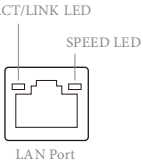
6 LAN Port LED Indications

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

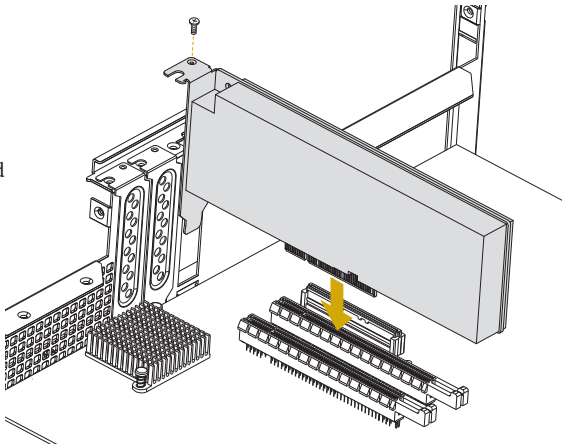
10G LAN Port



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

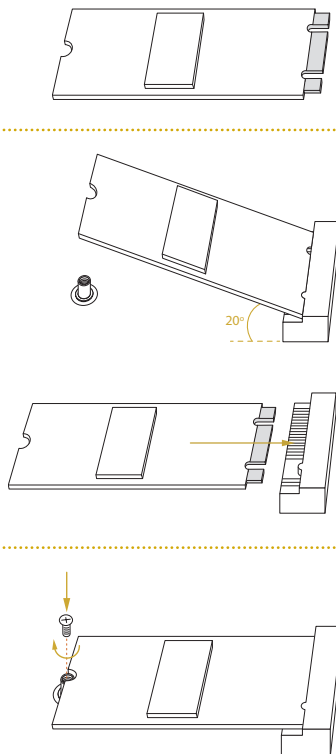
7 Install the PCIE Card

- 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.

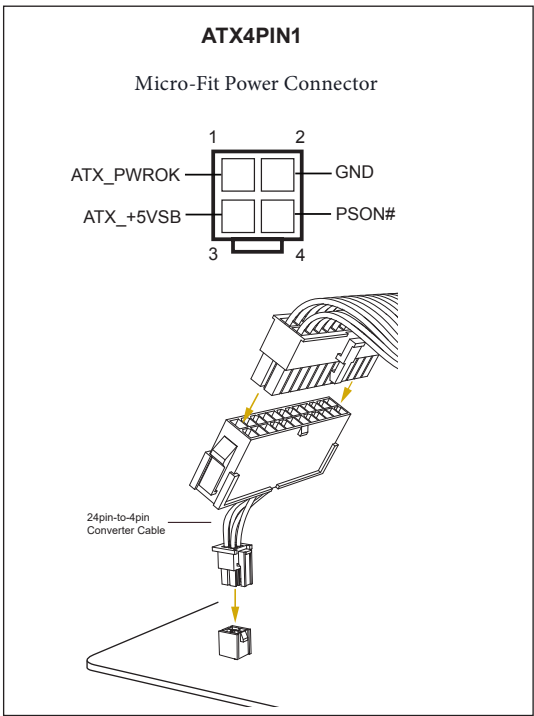


8 M.2 SSD Module Installation

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

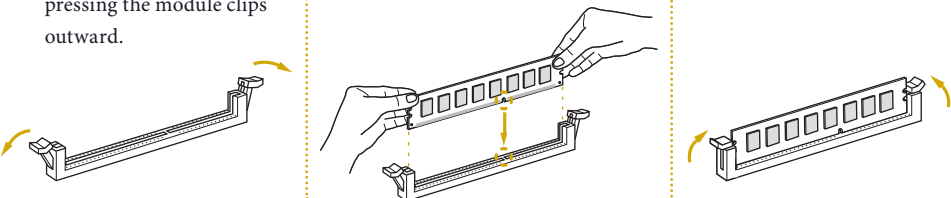


10 Install the Power Cables



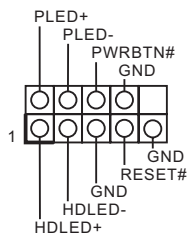
9 Install the Memory

- 1 Unlock a DIMM slot by pressing the module clips outward.
- 2 Insert the memory module.
- 3 Lock the clips.

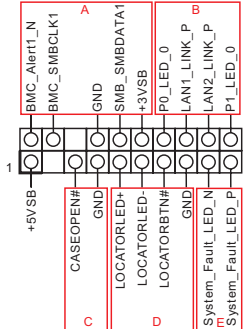


11 Headers

System Panel



Auxiliary Panel



SPI TPM Header

