P/N: 15G065273000AK V1.0

Quick Installation Guide

SPC741D8-2L2T/BCM | SPC741D-2T/BCM

ASRock Rack
www.asrockrack.com

SPC741D8-2L2T/BCM SPC741D8-2T/BCM

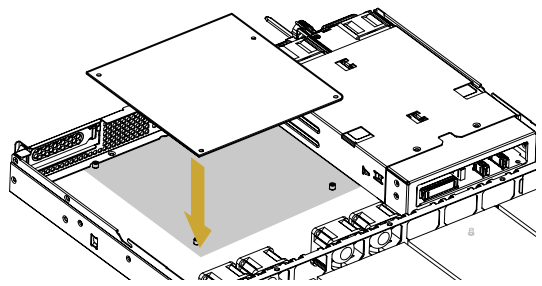
The server board User's Manual is available for download from the ASRock Rack's official website at http://www.asrockrack.com.

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

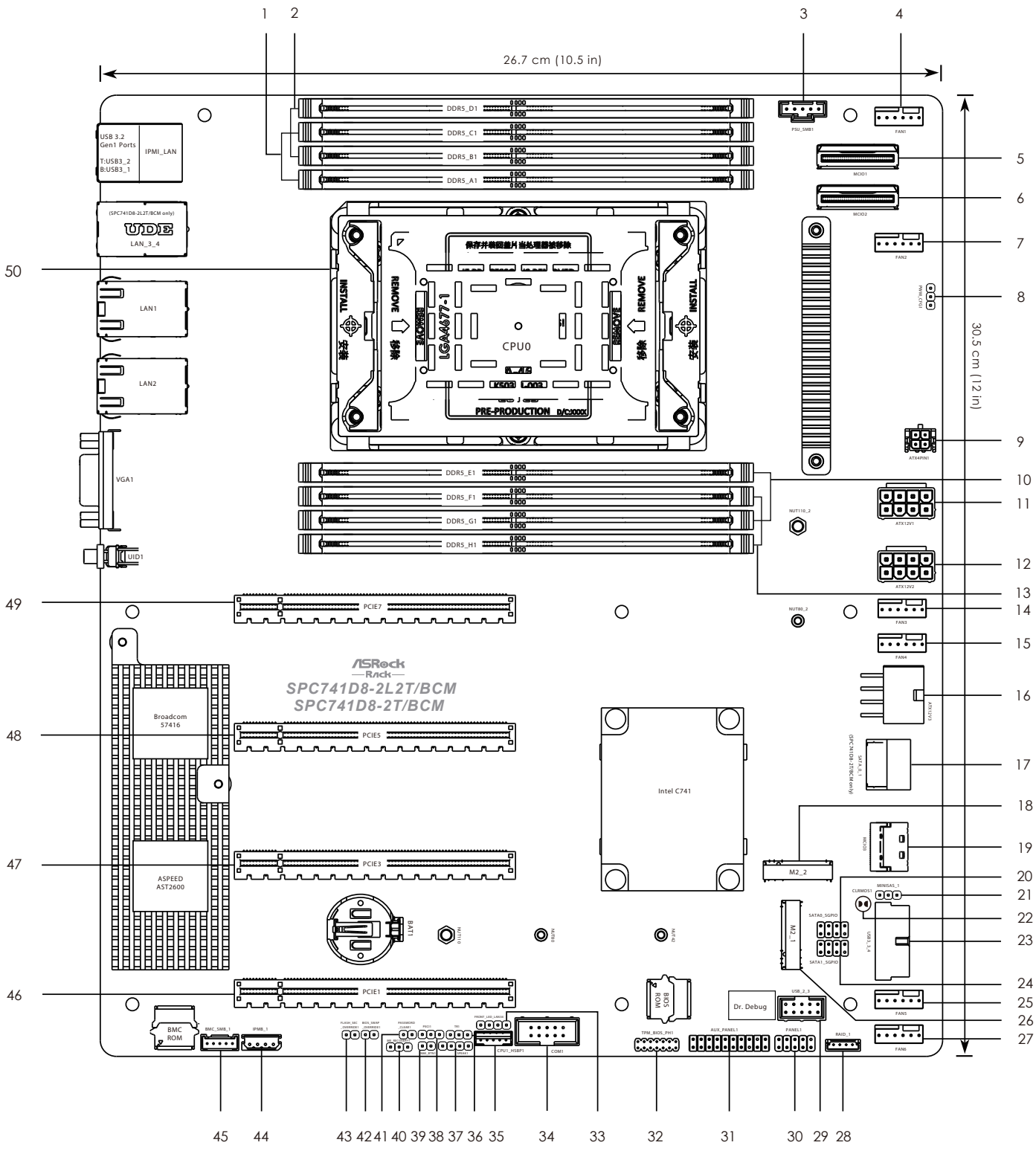
1. Unplug the power cord from the wall socket before touching any components.
2. To avoid damaging the server board's components due to static electricity, NEVER place your server board directly on the carpet or the like. Also remember to use a grounded wrist strap or touch a safety grounded object before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

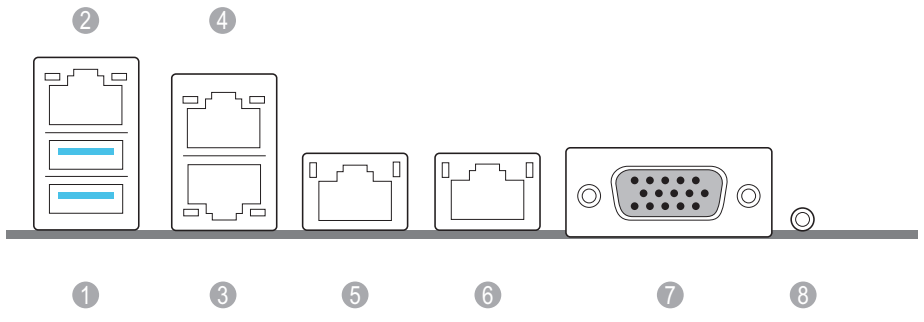


2 Motherboard Layout



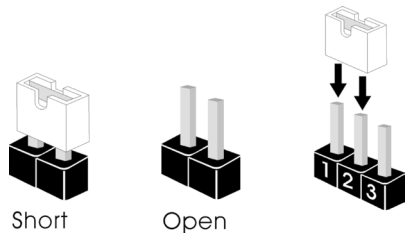
No.	Description
1	2 x 288-pin DDR5 DIMM Slots (DDR5_A1, DDR5_C1)
2	2 x 288-pin DDR5 DIMM Slots (DDR5_B1, DDR5_D1)
3	PSU SMBus Header (PSU_SMB1)
4	System Fan Connector (FAN1)
5	Mini Cool Edge IO x8 Connector (MCIO1)
6	Mini Cool Edge IO x8 Connector (MCIO2)
7	System Fan Connector (FAN2)
8	PWM Configuration Header (PWM_CFG1)
9	Micro-Fit ATX 4Pin Power Connector (ATX4PIN1)
10	2 x 288-pin DDR5 DIMM Slots (DDR5_E1, DDR5_G1)
11	ATX 12V Power Connector (ATX12V1)
12	ATX 12V Power Connector (ATX12V2)
13	2 x 288-pin DDR5 DIMM Slots (DDR5_F1, DDR5_H1)
14	System Fan Connector (FAN3)
15	System Fan Connector (FAN4)
16	ATX 12V Power Connector (ATX12V3)
17	SATA3 Connectors *(SPC741D8-2T/BCM only)* (SATA3_1)(Upper), (SATA3_0)(Lower)
18	M-key M.2 Socket (M2_2) (Type 22110/2280)
19	Mini Cool Edge IO x4 Connector (MCIO3)
20	SATA SGPIO Connector (SATA0_SGPIO)
21	MiniSAS HD SATA/PCIE Selection Jumper (MINISAS_1)
22	Clear CMOS Pad (CLRMOS1)
23	USB 3.2 Gen1 Header (USB3_3_4)
24	SATA SGPIO Connector (SATA1_SGPIO)
25	System Fan Connector (FAN5)
26	M-key M.2 Socket (M2_1) (Type 22110/2280/2242)
27	System Fan Connector (FAN6)
28	Virtual RAID On CPU Header (RAID_1)
29	USB 2.0 Header (USB_2_3)
30	System Panel Header (PANEL1)
31	Auxiliary Panel Header (AUX_PANEL1)
32	SPI TPM Header (TPM_BIOS_PH1)
33	Front LAN LED Connector (FRONT_LED_LAN34)
34	Serial Port Header (COM1)
35	Backplane PCI Express Hot-Plug Connector (CPU1_HSBP1)
36	Thermal Sensor Header (TR1)
37	Speaker Header (SPEAK1)
38	CPU PECI Mode Jumper (PECI1)
39	Non Maskable Interrupt Button (NMI_BTN1)
40	ME Recovery Jumper (ME_RECOVERY1)
41	Password Reset Jumper (PASSWORD_CLEAR1)
42	BIOS Swap Override Jumper (BIOS_SWAP_OVERRIDE1)
43	Flash Override Jumper (FLASH_SEC_OVERRIDE1)
44	Intelligent Platform Management Bus Header (IPMB_1)
45	BMC SMBus Header (BMC_SMB_1)
46	PCI Express 5.0 x16 Slot (PCIE1)
47	PCI Express 5.0 x16 Slot (PCIE3)
48	PCI Express 5.0 x16 Slot (PCIE5)
49	PCI Express 5.0 x16 Slot (PCIE7)
50	LGA 4677 CPU Socket (CPU0)

3 I/O Panel



No.	Description	No.	Description
1	USB 3.2 Gen1 Ports (USB3_1_2)	5	10G LAN RJ-45 Port (LAN1)
2	LAN RJ-45 Port (IPMI_LAN)	6	10G LAN RJ-45 Port (LAN2)
3	1G LAN RJ-45 Port (LAN3) *(SPC741D8-2L2T/BCM only)*	7	VGA Port (VGA1)
4	1G LAN RJ-45 Port (LAN4) *(SPC741D8-2L2T/BCM only)*	8	UID Switch (UID1)

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.

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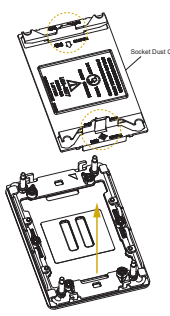
5 Install the Processor and Heatsink

Remove the CPU socket cover and open the socket lever.

1



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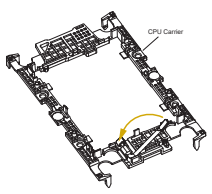
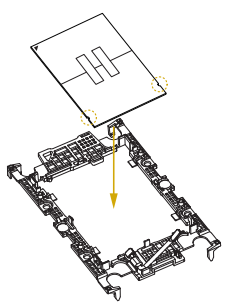
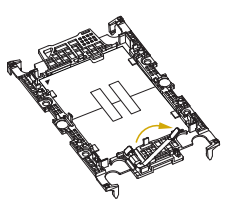


Align and install the processor on the carrier and make sure the arrow is located in the correct direction. Close the socket lever.

3

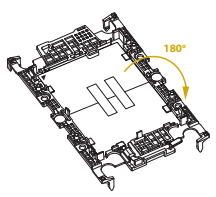


4



Carefully flip the carrier assembly. Apply a thermal paste.

5



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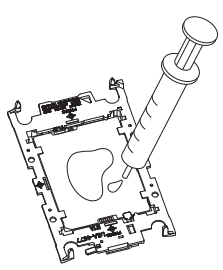
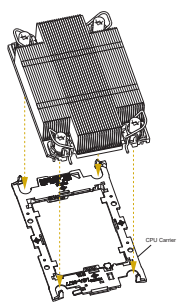


Install the heatsink to the CPU carrier. Then install the heatsink and CPU carrier to the socket.

7



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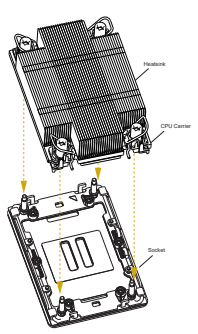
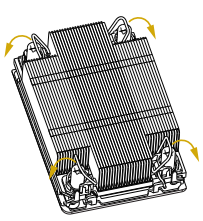


Tighten the corner fasteners. Secure the heastink to the motherboard with a screwdriver.

9



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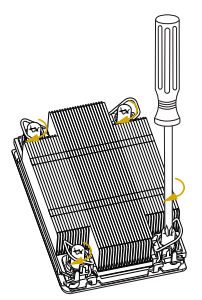
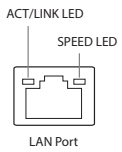


We recommend using the CPU Installation tool to avoid CPU pin-bent problem.

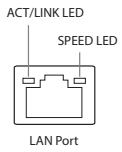
6 LAN Port LED Indications

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	Orange	100Mbps connection
On	Link	Green	1Gbps connection

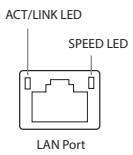
1G LAN Port



(SPC741D8-2L2T/BCM only)

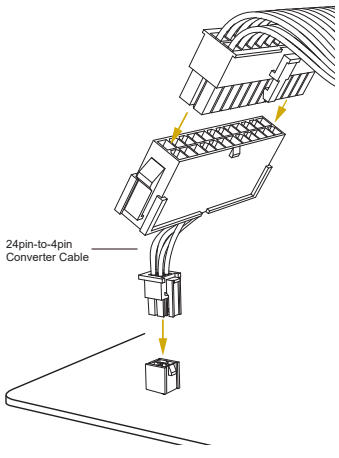
Activity / Link LED		Speed LED	
Status	Description	Status	Description
Off	No Link	Off	10Mbps connection or no link
Blinking Yellow	Data Activity	Yellow	100M connection
On	Link	Green	1Gbps connection

10G LAN Port

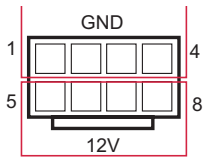


Activity / Link LED		Speed LED	
Status	Description	Status	Description
Off	No Link	Off	100Mbps connection or no link
Blinking Green	Data Activity	Orange	1Gbps connection
On	Link	Green	10Gbps connection

10 Install the Power Cables

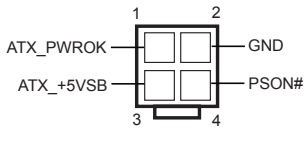


ATX12V



ATX4PIN1

Micro-Fit Power Connector

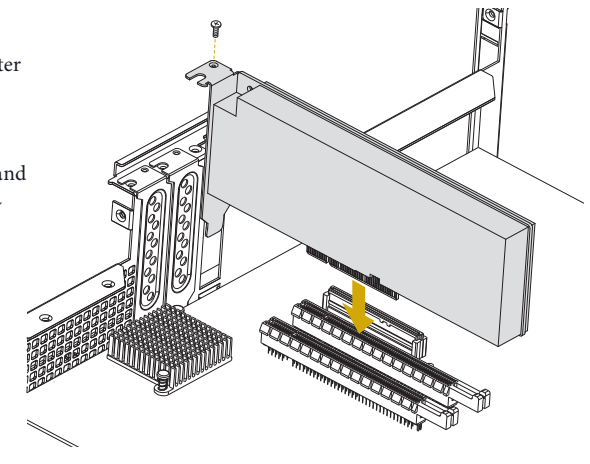


7 Install the PCIE Card

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

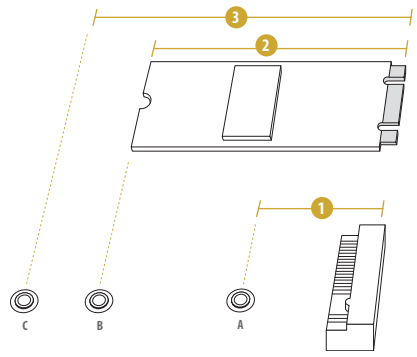
1 Find the corresponding nut location to be used.

M2_1:

1	2	3
A	B	C
4.2cm	8cm	11cm
Type 2242	Type 2280	Type 22110

M2_2:

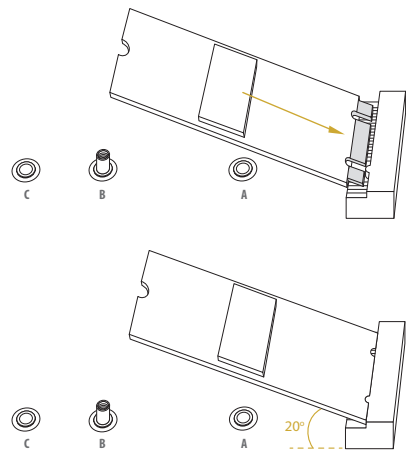
1	2
B	C
8cm	11cm
Type 2280	Type 22110



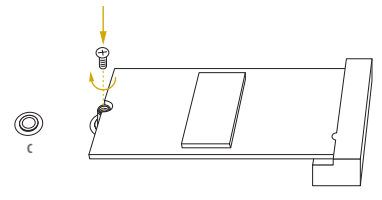
2 Move the standoff based on the module type and length.

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.

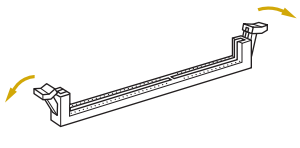


5 Tighten the screw with a screwdriver to secure the module into place. Please do not overtighten the screw.

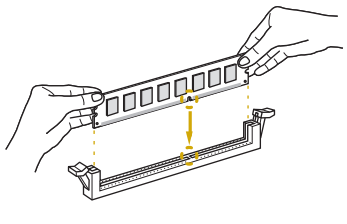
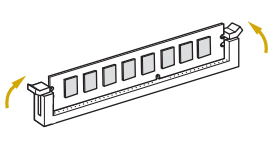


9 Install the Memory

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



2 Insert the memory module.



3 Lock the clips.