P/N: 15G065046100AK V1.0

Quick Installation Guide

EPC612D4I

www.asrockrack.com

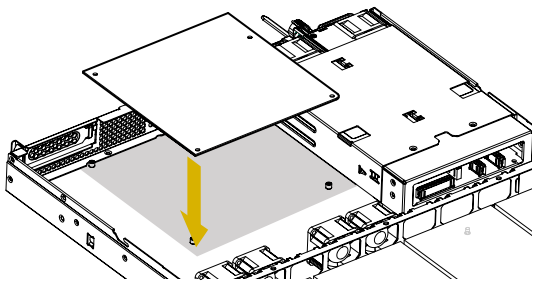
The server board User's Manual is available for download from the ASRock Rack's official website at http://www.asrockrack.com.

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

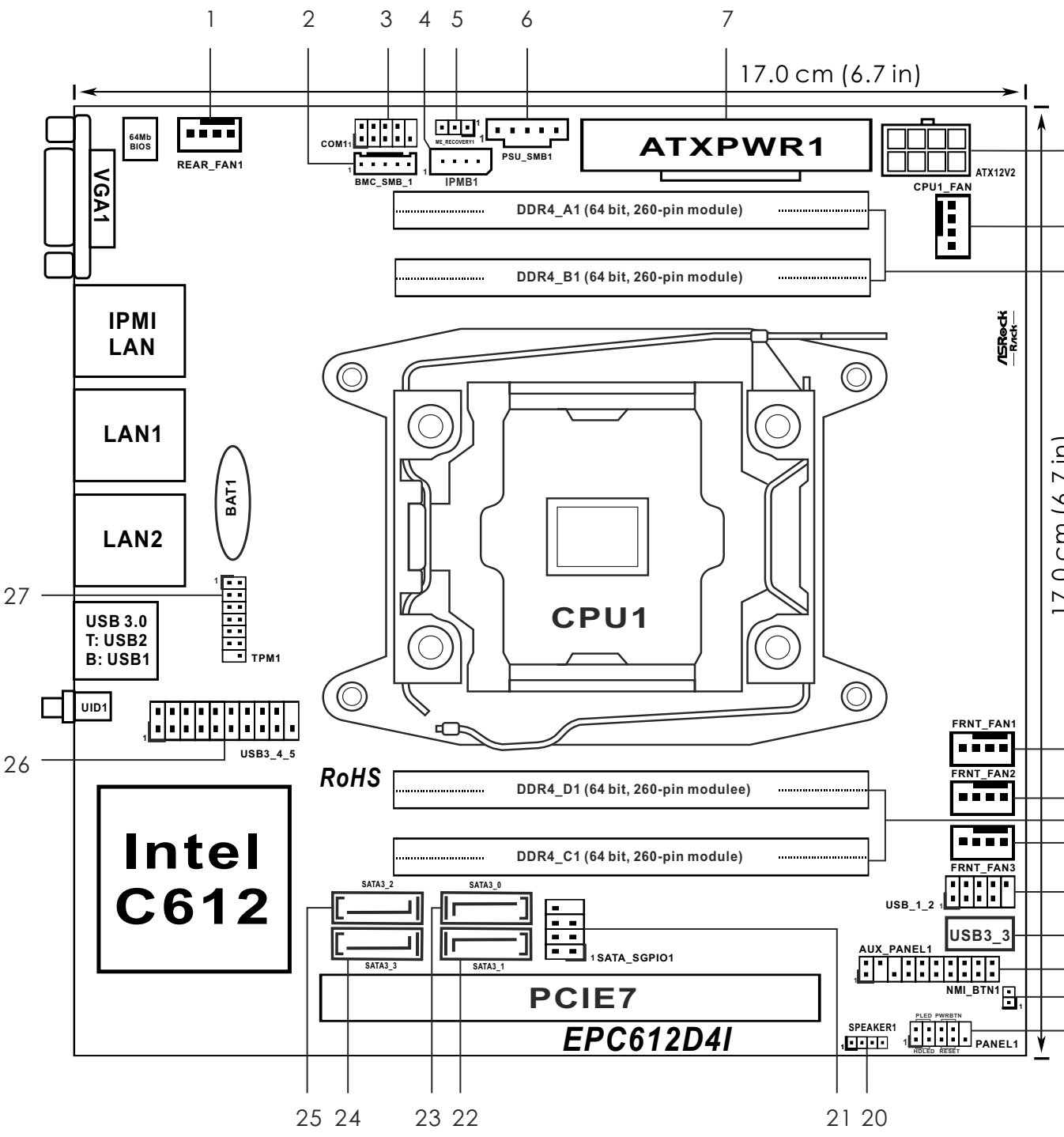
1. Unplug the power cord from the wall socket before touching any components.
2. To avoid damaging the server board's components due to static electricity, NEVER place your server board directly on the carpet or the like. Also remember to use a grounded wrist strap or touch a safety grounded object before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

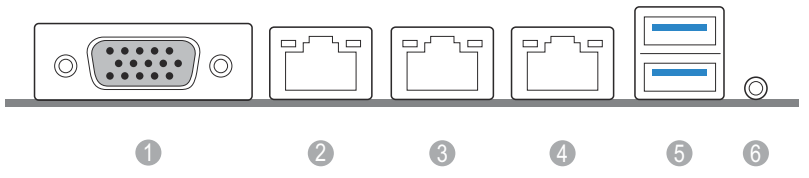


2 Motherboard Layout



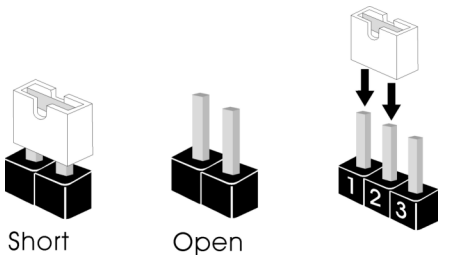
No.	Description
1	Rear Fan Connector (REAR_FAN1)
2	BMC SMBus Header (BMC_SMB_1)
3	COM Port Header (COM1)
4	Intelligent Platform Management Bus header (IPMB1)
5	ME Recovery Jumper (ME_RECOVERY1)
6	PSU SMBus (PSU_SMB1)
7	ATX Power Connector (ATXPWR1)
8	PSU SMBus (PSU_SMB1)ATX 12V Power Connector (ATX12V2)
9	CPU 1 Fan Connector (CPU1_FAN1)
10	2 x 260-pin DDR4 SODIMM Slots (DDR4_A1, DDR4_B1)
11	Front Fan Connector (FRNT_FAN1)
12	Front Fan Connector (FRNT_FAN2)
13	2 x 260-pin DDR4 SODIMM Slots (DDR4_C1, DDR4_D1)
14	Front Fan Connector (FRNT_FAN3)
15	USB 2.0 Header (USB_1_2)
16	Vertical Type A USB 3.0 (USB3_3)
17	Auxiliary Panel Header (AUX_PANEL1)
18	Non Maskable Interrupt Button (NMI_BTN1)
19	System Panel Header (PANEL1)
20	Speaker Header (SPEAKER1)
21	SATA SGPIO Connector (SATA_SGPIO1) (SATA3 0-3)
22	SATA3 Connector (SATA_1)
23	SATA3 Connector (SATA_0)
24	SATA3 Connector (SATA_3)
25	SATA3 Connector (SATA_2)
26	USB 3.0 Header (USB3_4_5)
27	TPM Header (TPM1)

3 I/O Panel



No.	Description	No.	Description
1	VGA Port (VGA1)	4	LAN RJ-45 Port (LAN2)
2	LAN RJ-45 Port (IPMI_LAN)	5	USB 3.0 Ports (USB3_1_2)
3	LAN RJ-45 Port (LAN1)	6	UID Switch (UID1)

4 Jumper Cap On/Off

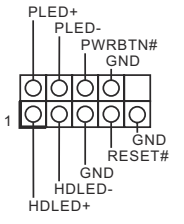


When the jumper cap is placed on the pins, the jumper is "Short". If no jumper cap is placed on the pins, the jumper is "Open".

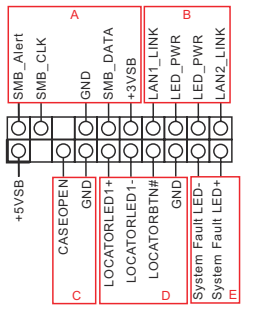
The illustration shows a 3-pin jumper whose pin1 and pin2 are "Short" when a jumper cap is placed on these 2 pins.

5 Headers

System Panel Header



Auxiliary Panel Header



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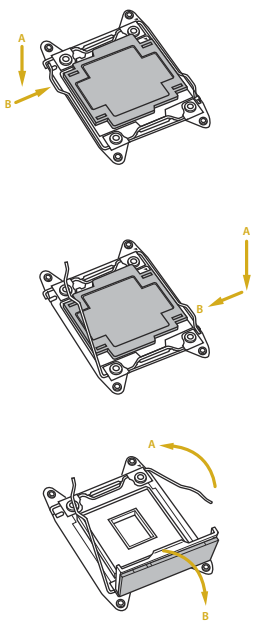
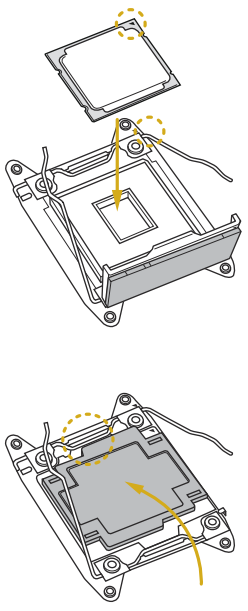
6 Install the Processor

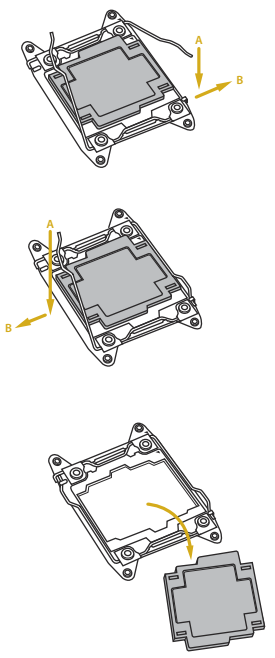
1 Open the socket levers and the CPU socket cover.



2 Install the processor and close the socket cover.



3 Close the socket levers. Remove the CPU protection cap.

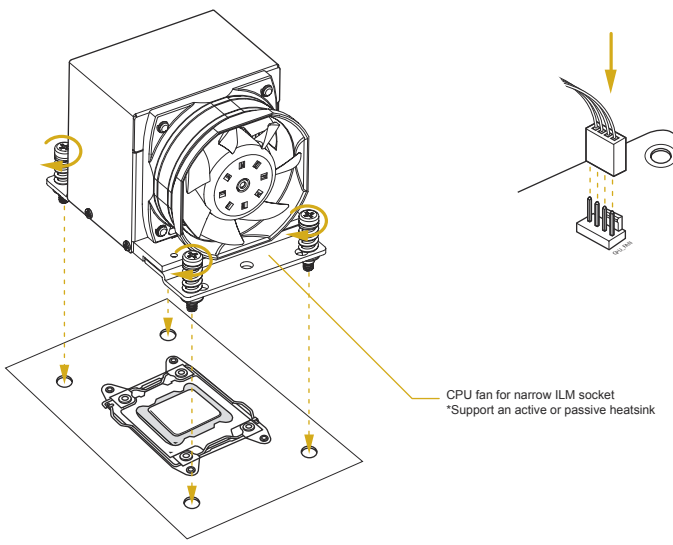


We recommend using the CPU Installation tool to avoid CPU pin-bent problem.

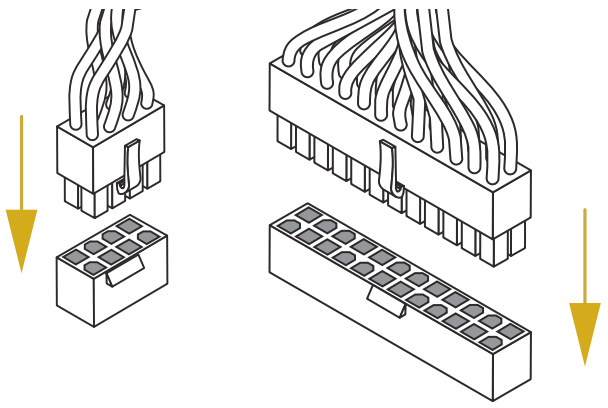
7 Install the CPU Fan and Heatsink

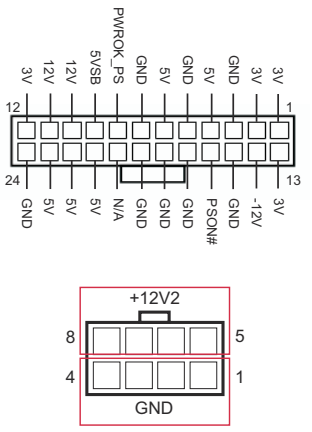
1 Apply the thermal grease. Install the CPU fan and heatsink and secure the screws.

2 Connect the CPU fan to the CPU FAN connector.



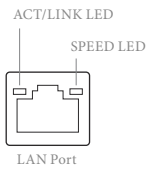
8 Install the Power Cables





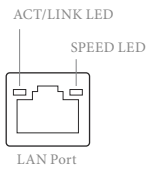
9 LAN Port LED Indications

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

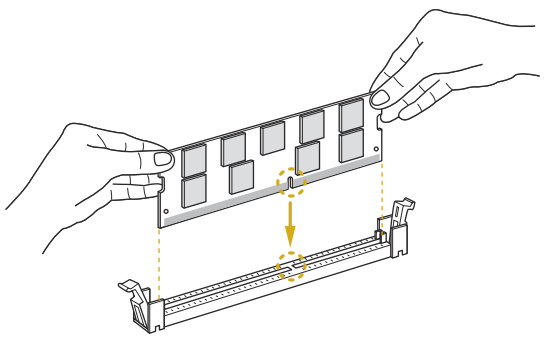


Activity / Link LED		Speed LED	
Status	**Description**	**Status**	**Description**
Off	No Link	Off	10Mbps connection or no link
Blinking Green	Data Activity	Yellow	100Mbps connection
On	Link	Green	1Gbps connection

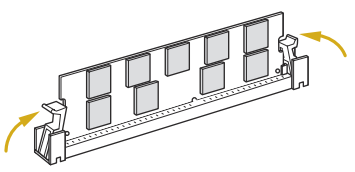
10 Install the Memory

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

2 Insert the memory module.



3 Lock the clips.



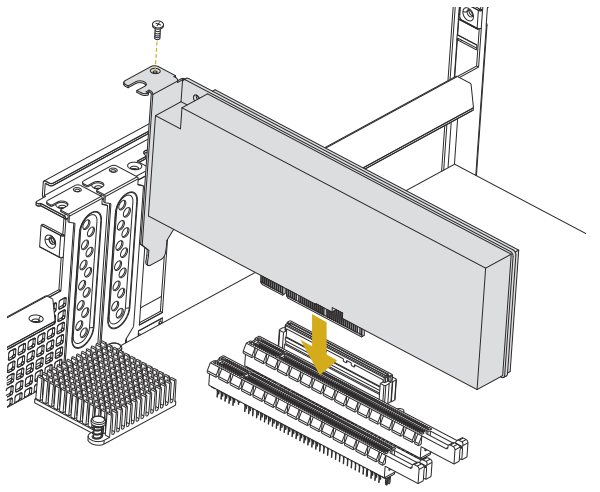
Dual Channel Memory Configuration

Priority	DDR4_A1	DDR4_B1	DDR4_C1	DDR4_D1
1	Populated		Populated	
2	Populated	Populated	Populated	Populated

Quad Channel Memory Configuration

Priority	DDR4_A1	DDR4_B1	DDR4_C1	DDR4_D1
1	Populated	Populated	Populated	Populated

11 Install the PCIE Card



Slot	Generation	Mechanical	Electrical	Source
PCIE 7	3.0	x16	x16	CPU 1

1 Before installing an expansion card, please make sure that the power supply is switched off or the power cord is unplugged. Please read the documentation of the expansion card and make necessary hardware settings for the card before you start the installation.

2 Remove the system unit cover (if your motherboard is already installed in a chassis).

3 Remove the bracket facing the slot that you intend to use. Keep the screws for later use.

4 Align the card connector with the slot and press firmly until the card is completely seated on the slot.

5 Fasten the card to the chassis with screws.

6 Replace the system cover.