



P/N: 15G065416000AR V1.0

Quick Installation Guide

8U16X-GNR2 B300

ASRock
Rack
www.asrockrack.com



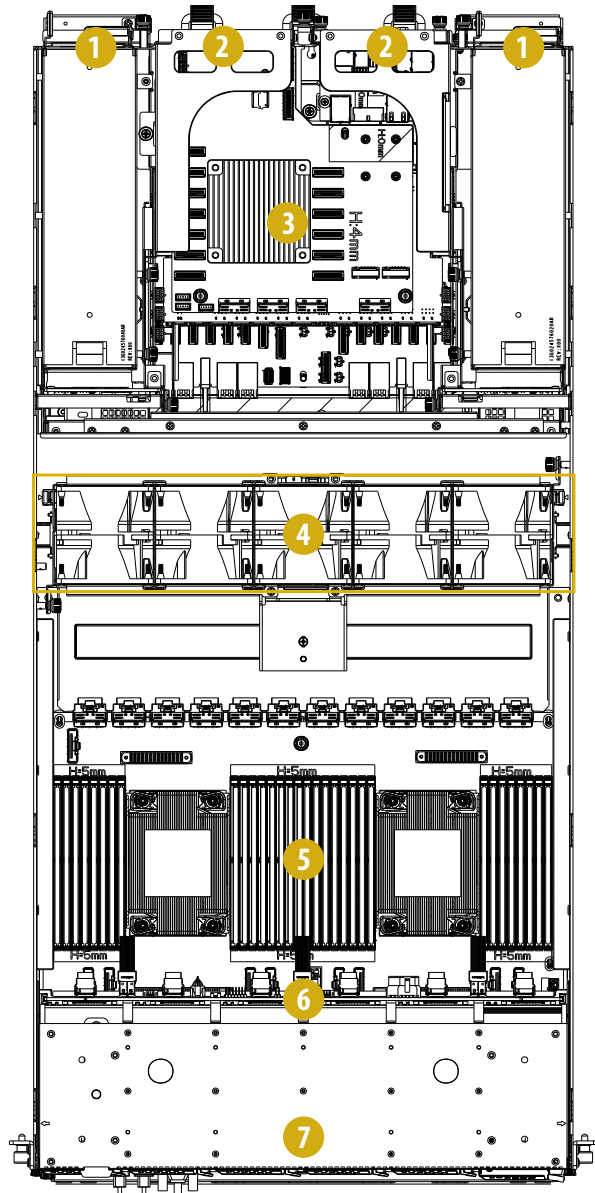
8U16X-GNR2 B300

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

Take note of the following precautions before installing the components or change any settings.

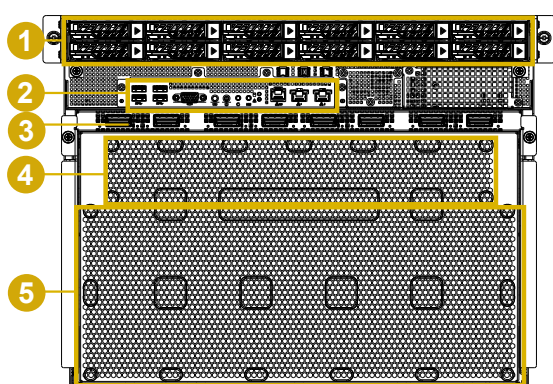
1. Unplug the power cord from the wall socket before touching any components.
2. To avoid damaging the components due to static electricity, NEVER place the components directly on the carpet or the like. Also remember to use a grounded wrist strap or touch a safety grounded object before installation.
3. Hold components by the edges and do not touch the ICs.
4. Whenever uninstalling any components, place them on a grounded anti-static pad or in the bag that comes with the components.
5. When placing screws into the screw holes to secure any components to the barebone, please do not over-tighten the screws! Doing so may damage both components and barebone.

2 Internal Features



No.	Description	No.	Description
1	6+6 CRPS	5	Server motherboard
2	2 PWM 80x80mm rear fans	6	Hard drive backplane board (BPB)
4	4 FHHL PCIe5.0 x16 slots [PCIe switch]	7	12 Hot-swap 2.5" NVMe (PCIe5.0 x4) drive bays [PCIe switch]
2	Rear I/O panel	7	Front I/O panel (depends on the spec. of the server motherboard)
9	9 PWM 80x80mm rear fans	8	8 OSFP (800Gb/s) via NVIDIA® ConnectX-8 SuperNIC
3	Switch board	6	6 PWM 60x56mm front fans
4	5 PWM 80x80mm top fans	10	10 PWM 80x80mm front fans

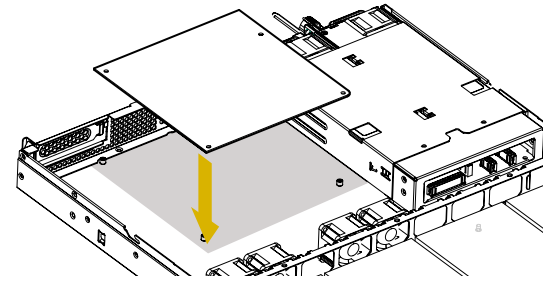
5 System Front Panel



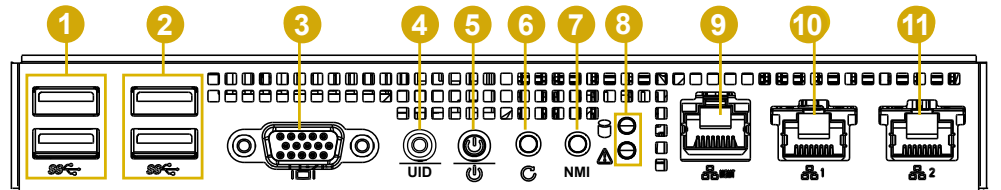
No.	Description	No.	Description
1	12 Hot-swap 2.5" NVMe (PCIe5.0 x4) drive bays [PCIe switch]	4	6 PWM 60x56mm front fans
2	Front I/O panel (depends on the specification of the server motherboard)	5	10 PWM 80x80mm front fans
3	8 OSFP (800Gb/s) via NVIDIA® ConnectX-8 SuperNIC		

1 Replace Server Motherboard

- 1 Carefully unplug all cables and release screws on the server motherboard to remove them from the barebone.
- 2 Align the replaced server motherboard with the mounting holes.
- 3 Affix the screws clockwise into the mounting holes in all of the corners of the server motherboard. Do not over-tighten the screws.

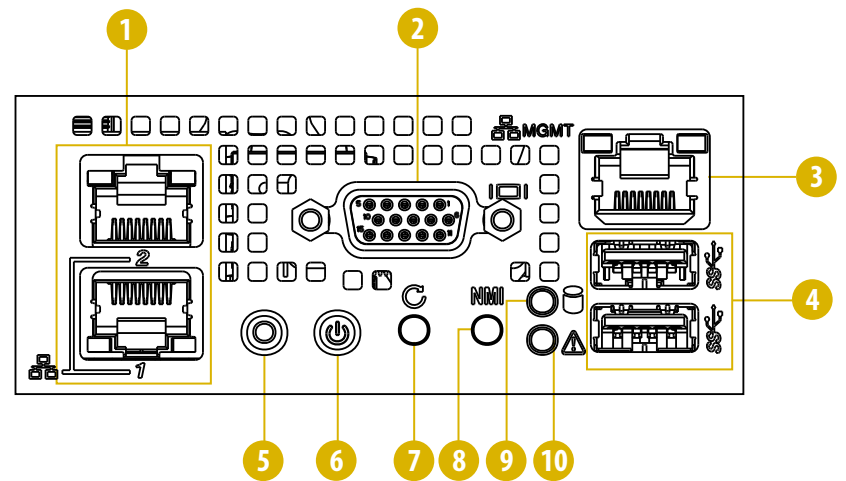


3 Front I/O Panel



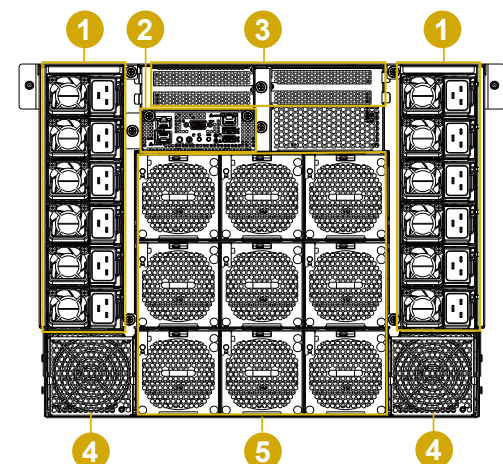
No.	Description	No.	Description
1	2 Type-A (USB3.2 Gen1) ports (USB3_1_2)	7	1 NMI button
2	2 Type-A (USB3.2 Gen1) ports (USB3_3_4)	8	Upper: 1 Hard drive activity LED Lower: 1 System fault LED
3	1 DB15 (VGA) port	9	1 Dedicated IPMI LAN port
4	1 UID button w/ LED	10	1 RJ45 (1GbE) LAN port (LAN1)
5	1 Power button w/ LED	11	1 RJ45 (1GbE) LAN port (LAN2)
6	1 Reset button		

4 Rear I/O Panel



No.	Description	No.	Description
1	2 RJ45 (1GbE) LAN ports (LAN1, LAN2)	6	1 Power button w/ LED
2	1 DB15 (VGA) port	7	1 Reset button
3	1 Dedicated IPMI LAN port	8	1 NMI button
4	2 Type-A (USB3.2 Gen1) ports	9	1 Hard drive activity LED
5	1 UID button w/ LED	10	1 System fault LED

6 System Rear Panel



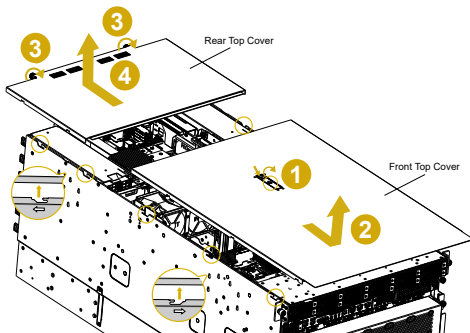
No.	Description	No.	Description
1	6 + 6 CRPS	4	2 PWM 80x80mm internal fans
2	Rear I/O panel	5	9 PWM 80x80mm rear fans
3	4 FHHL PCIe5.0 x16 slots [PCIe switch]		



7 Remove Top Cover

Removing Top Cover

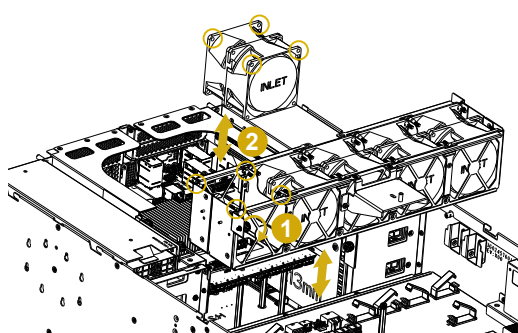
1. Loosen the screw on the locking tab and press the button to unlock the front top cover.
2. Push the front top cover to remove it.
3. Hand-release the thumbscrews on the rear side.
4. Push the rear top cover to remove it.



8 Replace System Fan

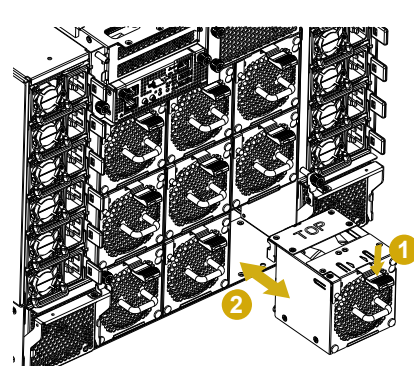
Replacing FAN17 ~ FAN21

1. Hand-release the thumbscrew and lift up the fan bar.
2. Remove the failed fan. Align the mounting holes with the mounts on the fan bar and install a new one.
3. Place the fan bar into the chassis and hand-tighten the thumbscrew.



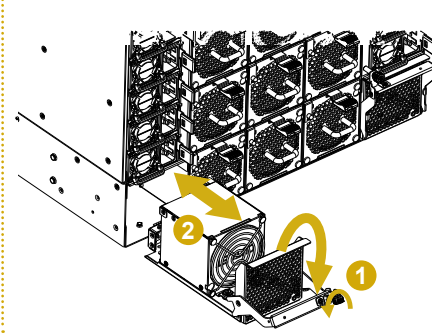
Replacing FAN22 ~ FAN30

1. Press the locking lever to pull failed fan out.
2. Align the connector on the bottom of the replacement fan with the connector in the bay to install a new one.



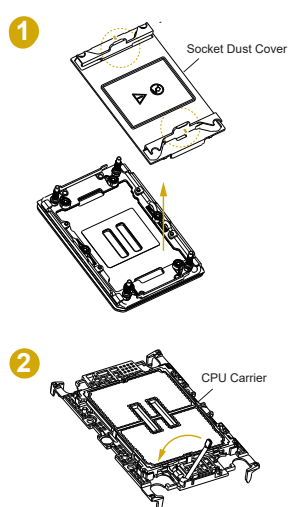
Replacing FAN31, FAN32

1. Hand-release the thumbscrew and pull the latch down.
2. Pull to remove the failed fan.
3. Align and slide the new fan into the bay.
4. Lift the latch up. Hand-tighten the thumbscrew.

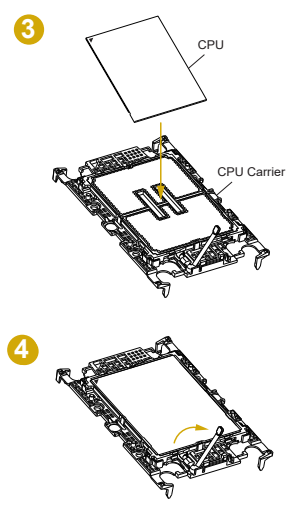


9 Install CPU and Heatsink (LGA 4710 Socket)

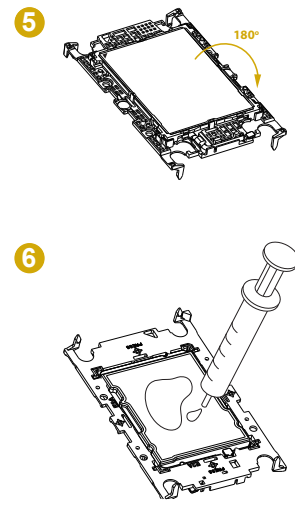
Remove the CPU socket cover and open the socket lever.



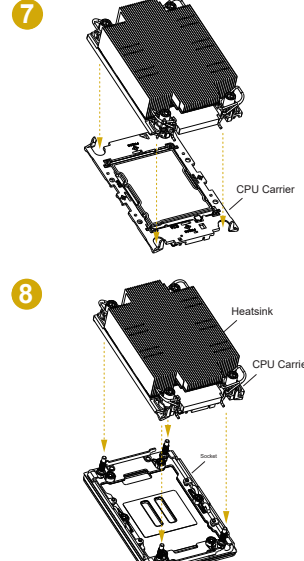
Install the processor to the carrier and close the socket lever.



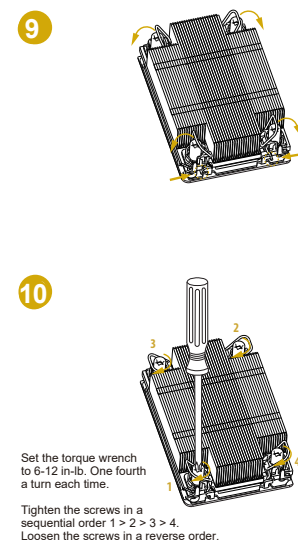
Carefully flip the carrier assembly. Apply a thermal paste.



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



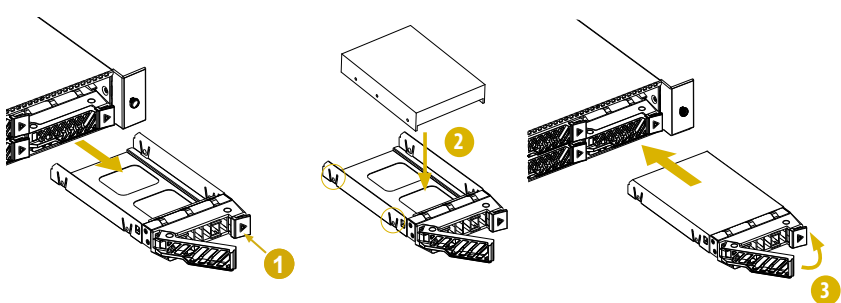
Tighten the corner fasteners. Secure the heatsink to the motherboard with a screwdriver.



Note: We recommend using the CPU installation tool to avoid CPU pin-bent problem.

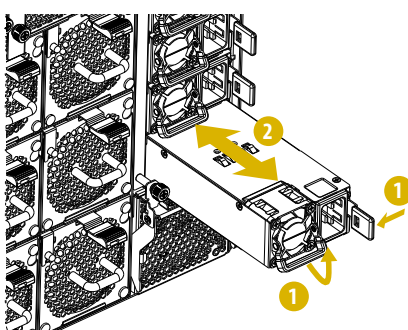
10 Install Hard Drive

1. Press the locking lever latch to pull drive tray out.
2. Place the hard drive into the tray and use the bumps on both sides of tray to secure the hard drive.
3. Slide the tray into the drive bay and push in the locking lever.



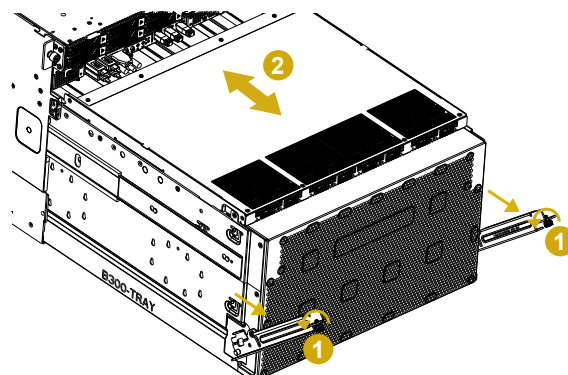
11 Replace Power Supply Unit

1. Press the locking lever to pull out the PSU.
2. Slide a new PSU into the power supply bay until it clicks in place.



12 Open GPU Tray

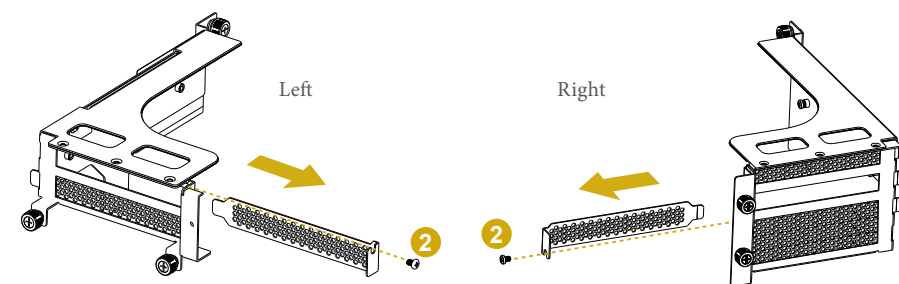
1. Hand-release the thumbscrews to unlock the GPU tray.
2. Pull to remove the tray from the chassis.



13 Install Add-in Card

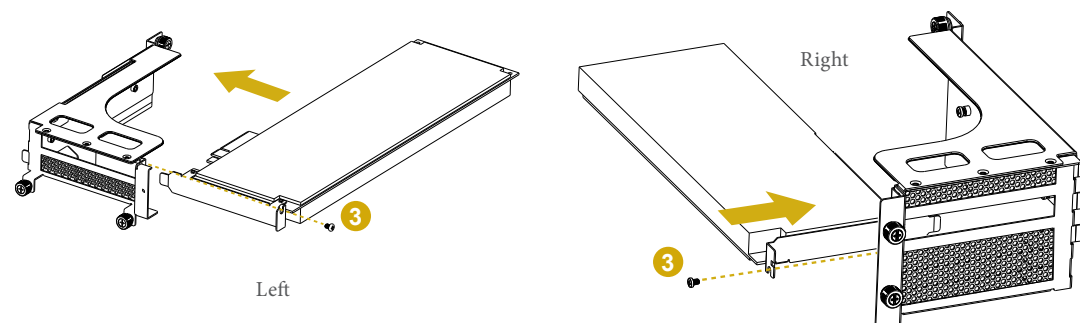
1. Hand-release the thumbscrews (3 for left and 4 for right) and lift the brackets up.

2. Remove the screws and detach the blanking plates from the brackets.



3. Install the add-in cards to the brackets with the screws.

4. Install the add-in card assemblies to the chassis and secure them with thumbscrews.



Note: The illustration is for references only. The actual location may be slightly different by models.

