



P/N: 15G065431000AR V1.0

Quick Installation Guide

4U8G-GNR2/RF+



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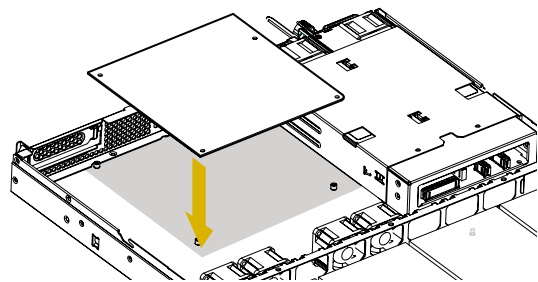
The User Manual is available for download from the ASRock Rack's official website at <https://www.asrockrack.com>.

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

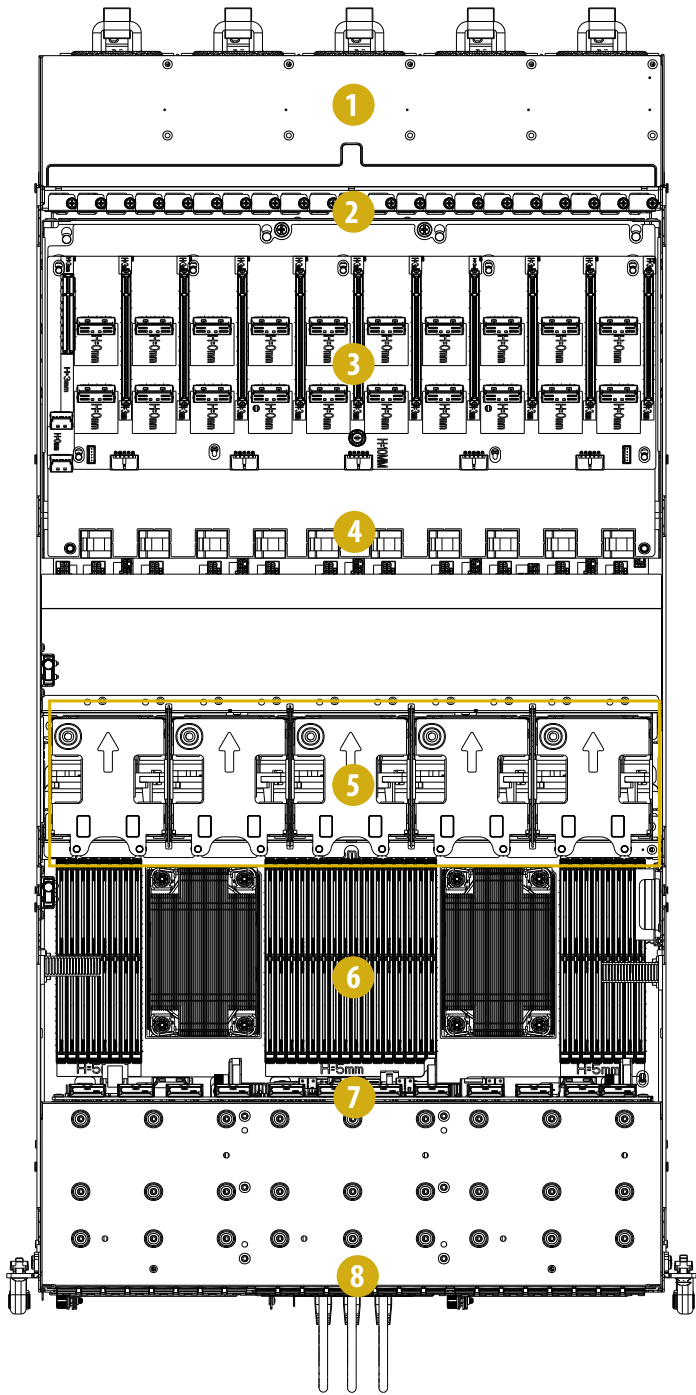
1. Unplug the power cord from the wall socket before touching any components.
2. To avoid damaging the components due to static electricity, NEVER place the components directly on the carpet or the like. Also remember to use a grounded wrist strap or touch a safety grounded object before installation.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

1 Replace Server Motherboard

- 1 Carefully unplug all cables and release thumbscrews 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.

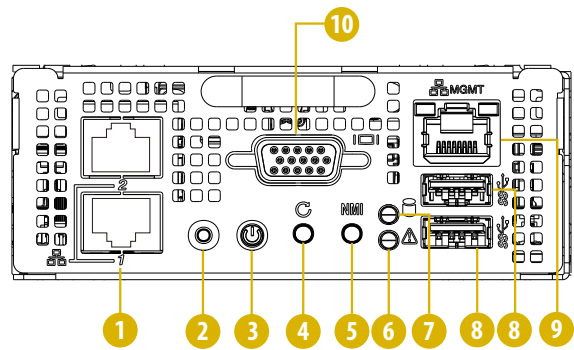


2 Internal Features



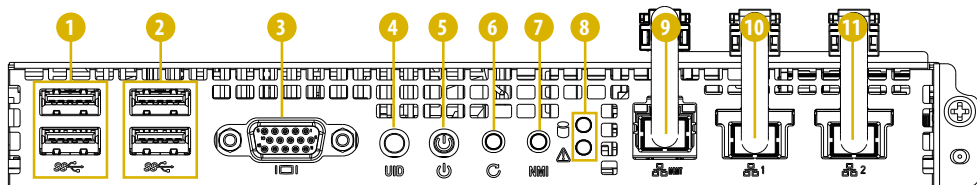
No.	Description
1	5 Rear hot-swap 80x80mm fans (20400/18000 RPM)
2	Top: 8 FHFL dual-slot PCIe5.0 x16 slots
	Bottom: 3+1 CRPS Rear I/O panel
3	Switch board (SWB)
4	Power distribution board (PDB)
5	5 Middle hot-swap 80x80mm fans (20400/18000 RPM)
6	Server motherboard (MB)
7	Hard drive backplane board (BPB)
8	Top: 24 Hot-swap 2.5" drive bays
	Middle: 1 FHHL PCIe5.0 x8 slot 1 Reserved OCP NIC 3.0 slot 1 FHHL PCIe5.0 x16 slot
	Bottom: Front I/O panel

3 Rear I/O Panel



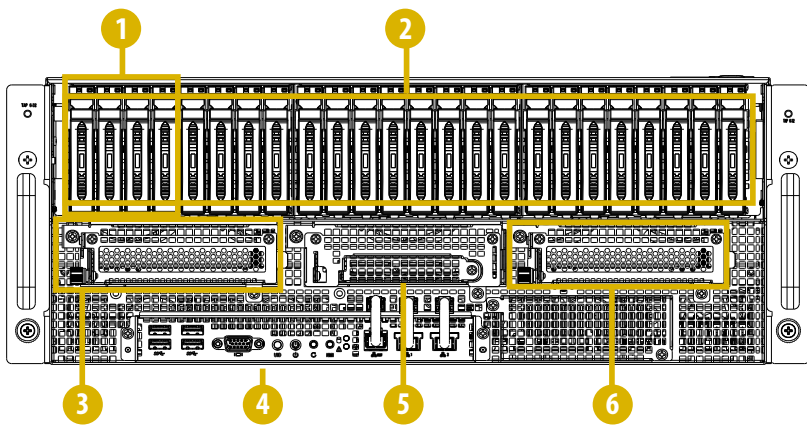
No.	Description
1	2 RJ45 (1GbE) LAN ports (LAN1, LAN2)
2	1 UID button w/ LED
3	1 Power button w/ LED
4	1 Reset button
5	1 NMI button
6	1 System fault LED
7	1 Hard drive activity LED
8	2 Type-A (USB3.2 Gen1) ports
9	1 Dedicated IPMI LAN port
10	1 DB15 (VGA) port

4 Front I/O Panel



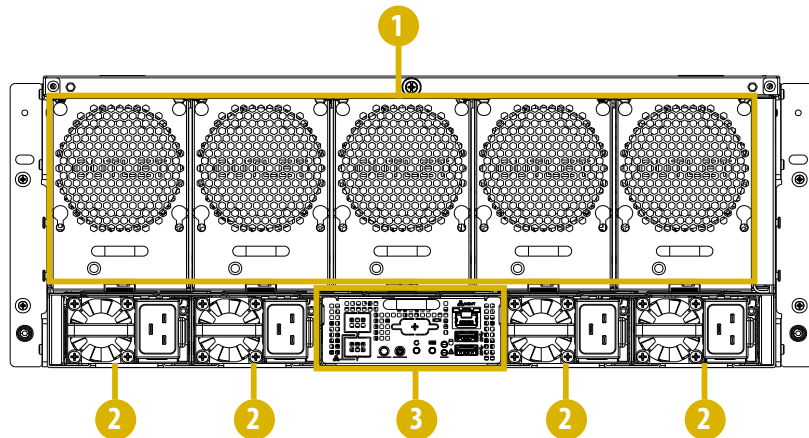
No.	Description	No.	Description
1	2 Type-A (USB3.2 Gen1) ports	7	1 NMI button
2	2 Type-A (USB3.2 Gen1) ports	8	Top: 1 Hard drive activity LED Bottom: 1 System fault LED
3	1 DB15 (VGA) port	9	1 Dedicated IPMI LAN port
4	1 UID button w/ LED	10	1 RJ45 (1GbE) LAN port (LAN1)
5	1 Power button w/ LED	11	1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

5 System Front Panel



No.	Description
1, 2	4 Hot-swap 2.5" NVMe (PCIe5.0 x4) drive bays OR 24 Hot-swap 2.5" SATA/SAS* drive bays *Additional RAID/HBA card required to support the 24 2.5" SATA/SAS drive bays
3	1 FHHL PCIe5.0 x8 slot
4	Front I/O panel (depends on the specification of the server motherboard)
5	1 Reserved OCP NIC 3.0 slot
6	1 FHHL PCIe5.0 x16 slot

6 System Rear Panel (External)



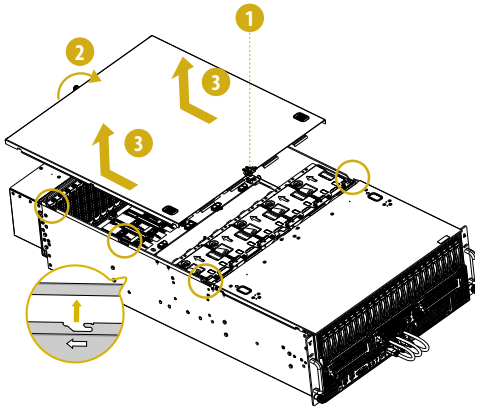
No.	Description
1	5 Rear hot-swap 80x80mm fans (20400/18000 RPM)
2	3+1 CRPS
3	Rear I/O panel



7 Remove Top Cover

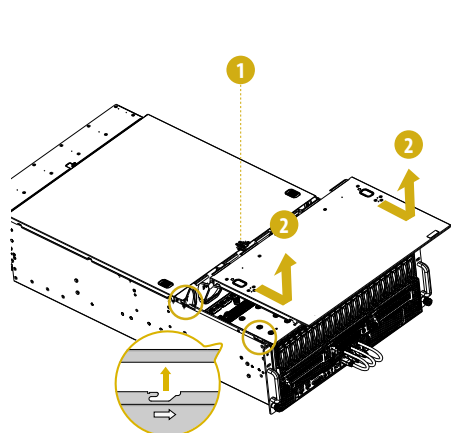
Removing the Server Top Rear Cover

1. Remove the screw securing the top rear cover to the chassis.
2. Hand-release the thumbscrew on the rear side of the chassis.
3. Press the tabs and push straight REAR to release the cover from the locked position. Lift up and remove the cover.



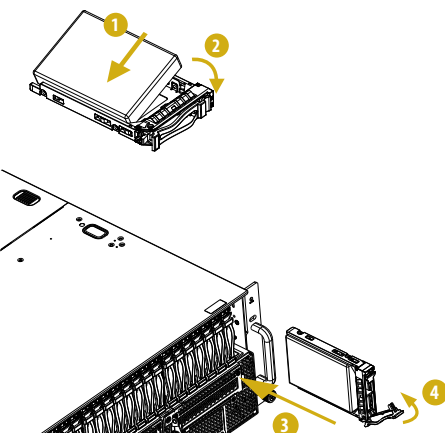
Removing the Server Top Front Cover

1. Remove the screw securing the top front cover to the chassis.
2. Push straight FRONT to release the cover from the locked position. Lift up and remove the cover.



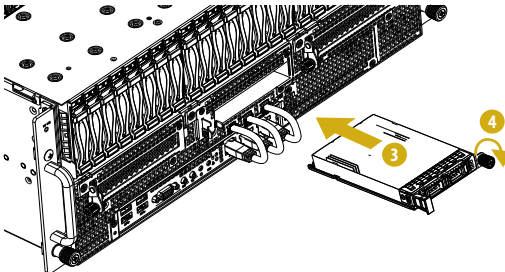
8 Install Hard Drive

1. Engage two embossed pins into the side dimples on the tray.
2. Carefully push down the other side of hard drive until the other two embossed pins and side dimples lock into place.
3. Slide the tray into the bay until the drive is fully seated.
4. Push in the locking lever to lock the tray in place.



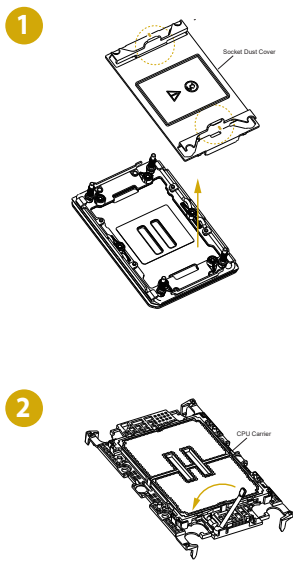
9 Install OCP Card

1. Remove the screw securing the slot cover.
2. Remove the slot cover.
3. Install the OCP card into the slot.
4. Make sure the card is well seated and hand-tighten the thumbscrew on the face plate.

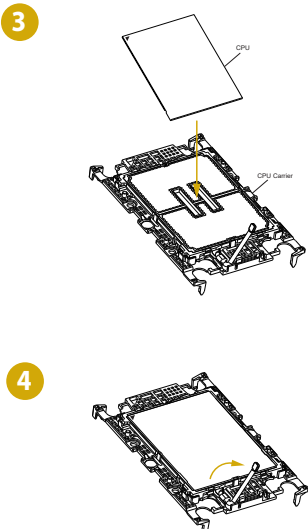


10 Install CPU and Heatsink (LGA 4710 Socket)

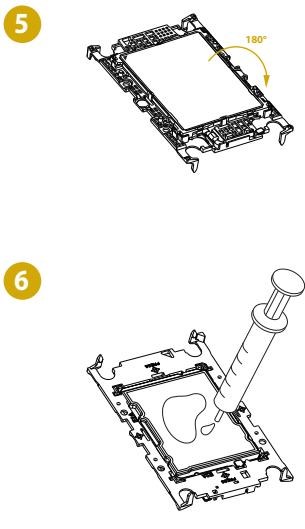
Remove the CPU socket cover and open the socket lever.



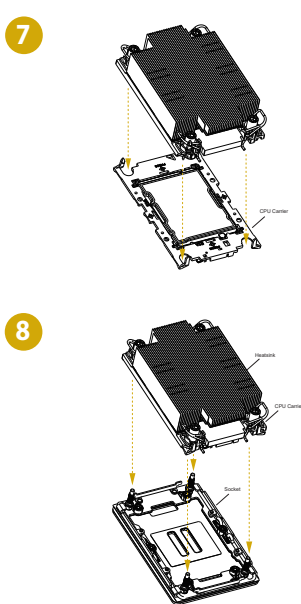
Align and install the processor on the carrier and make sure the arrow is located in the correct direction. Close the socket lever.



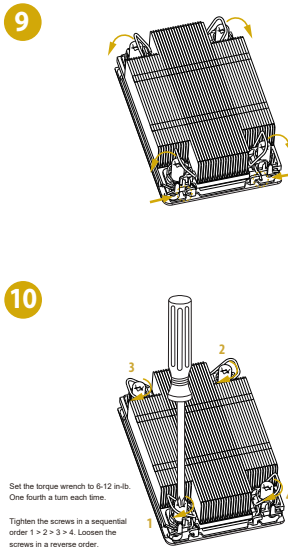
Carefully flip the carrier assembly. Apply a thermal paste.



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



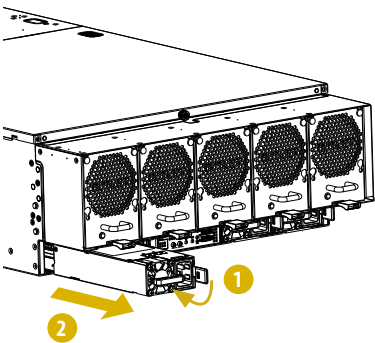
Tighten the corner fasteners. Secure the heatsink to the motherboard with a screwdriver.



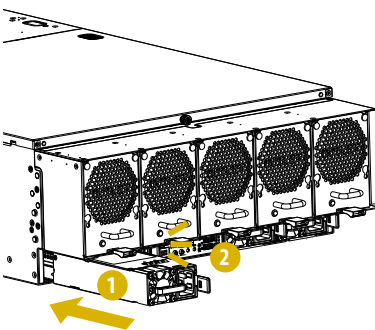
Note: We recommend using the CPU installation tool to avoid CPU pin-bent problem.

11 Power Supply Unit

1. Hold onto the power supply handle while pressing the locking lever towards the power supply handle.
2. Pull to remove the power supply unit from the chassis.

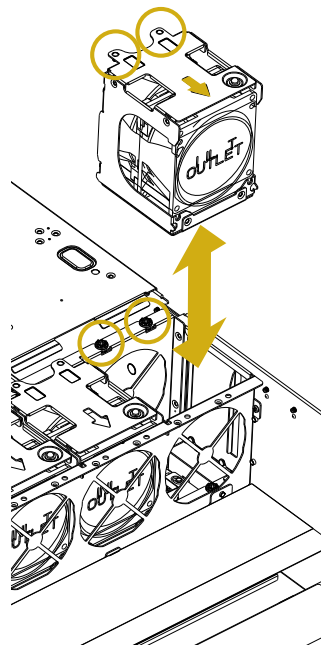


1. Carefully slide the PSU all the way into the power supply bay.
2. Make sure the PSU clicks into place and is well installed.



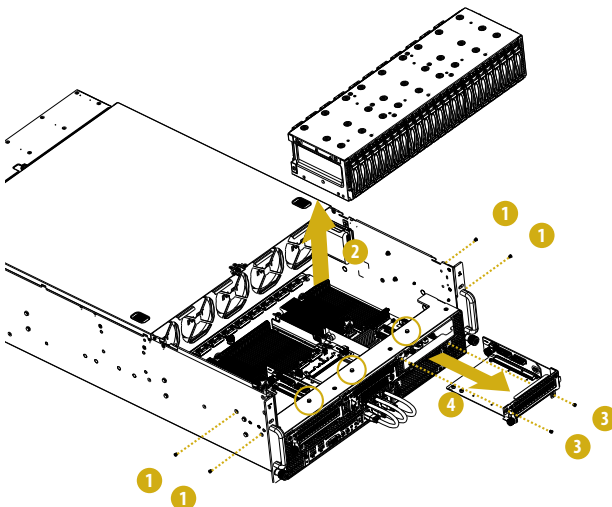
12 Middle Fan

1. Lift to remove the failed fan.
2. Align the mounting holes on the replacement fan corners with the fan mounts on the fan bracket.
3. Make sure the arrow on the fan pointed to the REAR of the chassis.
4. Gently place the fan onto the mounts.
5. Make sure the fan is well seated.

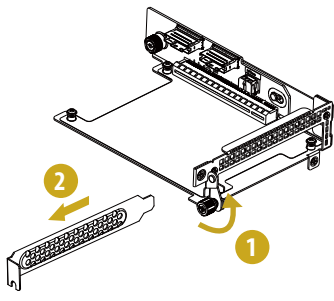


13 Install Add-In Card

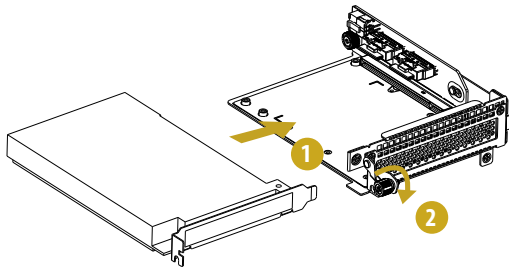
1. Remove the screws securing the hard drive frame to the chassis.
2. Lift up and remove the frame.
3. Remove the screws on the riser-card tray.
4. Pull to remove the tray from the chassis.



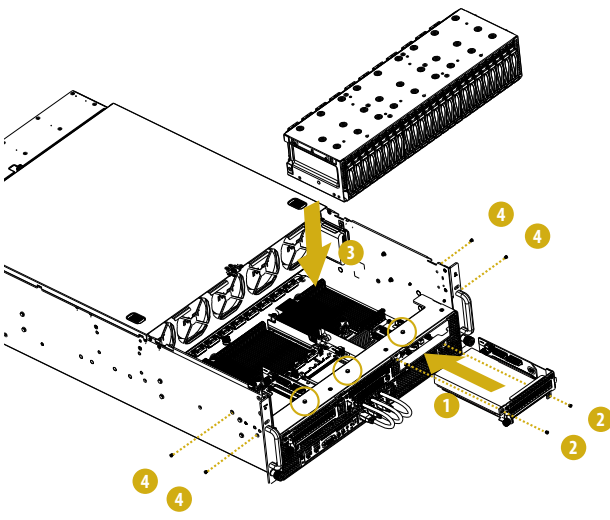
1. Hand-release the thumbscrew. Pull up the latch.
2. Slide the blanking plate out sideways.



1. Place a PCIe add-in card in the tray.
2. Pull down the latch. Hand-tighten the thumbscrew.



1. Insert the add-in card assembly into the bay.
2. Tighten the screws to secure the assembly to the chassis.
3. Align the fixed position and place the hard drive frame.
4. Tighten the screws on both sides to secure the frame to the chassis.



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