



P/N: 15G065356000AR V1.0

Quick Installation Guide

1U12E-ICX2



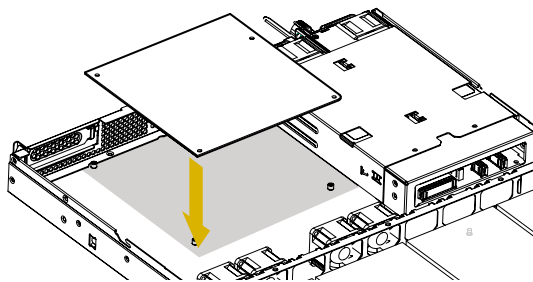
The User Manual is available for download from the ASRock Rack's official website at <http://www.asrockrack.com>.

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

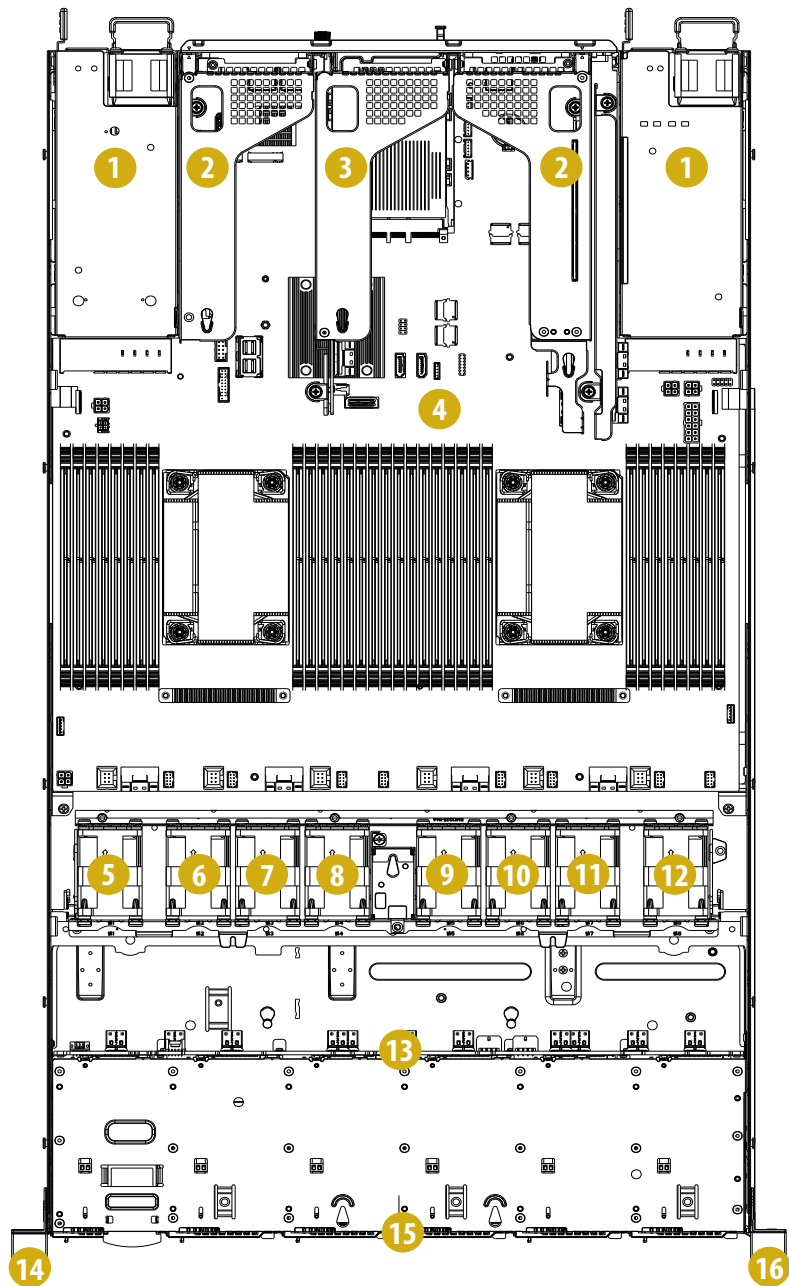
1. Unplug the power cord from the wall socket before touching any components.
2. To avoid damaging the components due to static electricity, NEVER place the components directly on the carpet or the like. Also remember to use a grounded wrist strap or touch a safety grounded object before installation.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

1 Replace Server Motherboard

- 1 Carefully unplug all cables and release the 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.

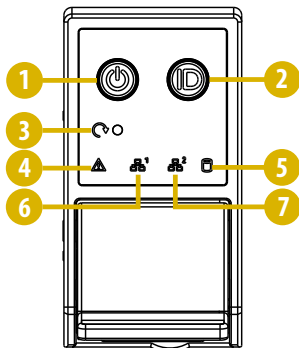


2 Internal Features



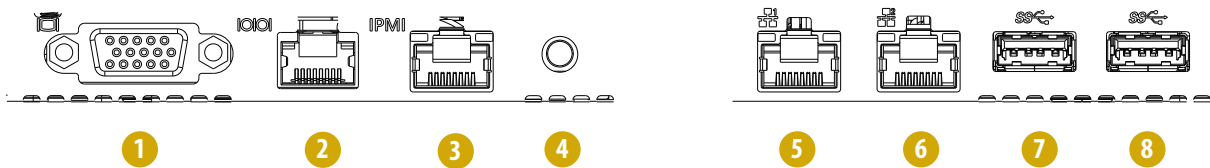
No.	Description
1	1+1 Hot-swap CRPS
2	2 HHHL PCIe4.0 x16 riser-cards
3	1 HHHL PCIe4.0 x8 riser-card
4	Server motherboard
5	PWM fixed 40x56 mm fan (FAN1)
6	PWM fixed 40x56 mm fan (FAN2)
7	PWM fixed 40x56 mm fan (FAN3)
8	PWM fixed 40x56 mm fan (FAN4)
9	PWM fixed 40x56 mm fan (FAN5)
10	PWM fixed 40x56 mm fan (FAN6)
11	PWM fixed 40x56 mm fan (FAN7)
12	PWM fixed 40x56 mm fan (FAN8)
13	Hard drive backplane board (BPPB)
14	1 Type-A (USB2.0) port 1 Type-A (USB3.2 Gen1) port
15	10 Hot-swap 2.5" NVMe (PCIe4.0 x4)/SATA drive bays 2 Hot-swap 2.5" NVMe (PCIe4.0 x4) drive bays
16	Front I/O panel

3 Front I/O Panel



No.	Description
1	Power button w/ LED
2	UID button w/ LED
3	Reset button
4	System status LED
5	Hard drive activity LED
6	LAN1 LED
7	LAN2 LED

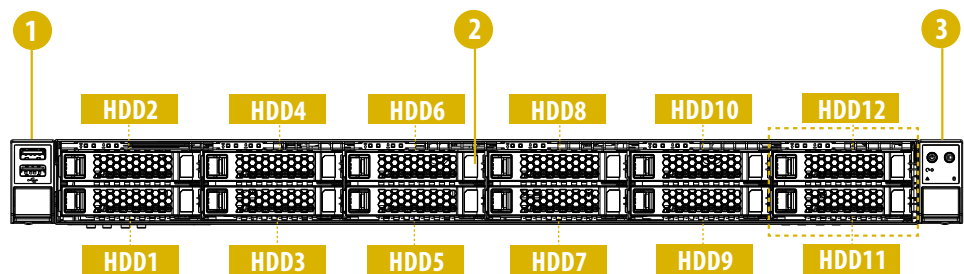
4 Rear I/O Panel



No.	Description
1	1 DB15 (VGA)
2	1 RJ45 (COM) port
3	1 Dedicated IPMI LAN port
4	1 UID button w/ LED

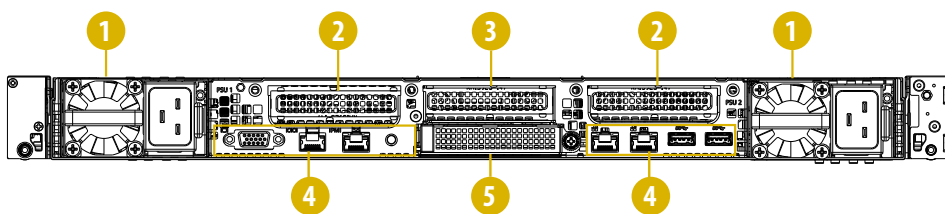
No.	Description
5	1 RJ45 (1GbE) LAN port
6	1 RJ45 (1GbE) LAN port
7	1 Type-A (USB3.2 Gen1) port
8	1 Type-A (USB3.2 Gen1) port

5 System Front Panel



No.	Description
1	Upper: 1 Type-A (USB2.0) port Lower: 1 Type-A (USB3.2 Gen1) port
2	10 Hot-swap 2.5" NVMe (PCIe4.0 x4)/SATA drive bays 2 Hot-swap 2.5" NVMe (PCIe4.0 x4) drive bays
3	Front I/O panel

6 System Rear Panel

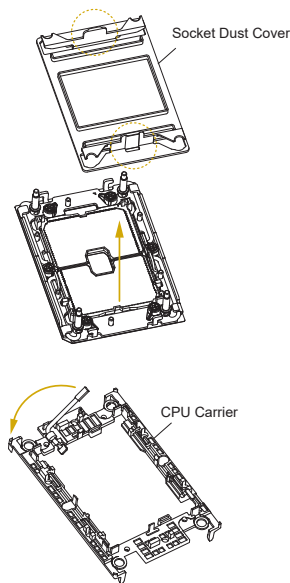


No.	Description
1	1+1 Hot-swap CRPS
2	2 HHHL PCIe4.0 x16 riser-cards
3	1 HHHL PCIe4.0 x8 riser-card
4	Rear I/O panel (depends on the specification of the server motherboard)
5	1 OCP NIC 3.0 (PCIe4.0 x16) slot [CPU1]

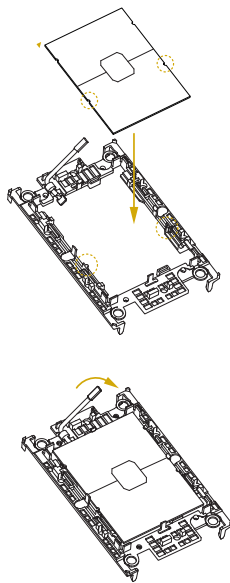


7 Install CPU and Heatsink (LGA 4189 Socket)

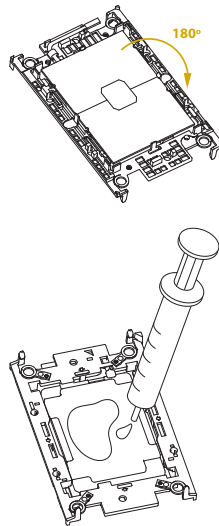
Remove the CPU socket cover and open the socket lever.



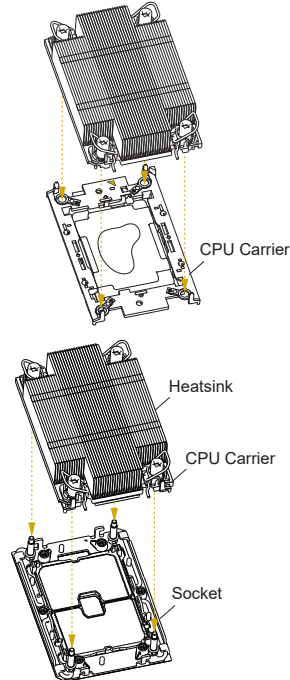
Align and install the processor on the carrier and make sure the arrow is located in the correct direction. Close the socket lever.



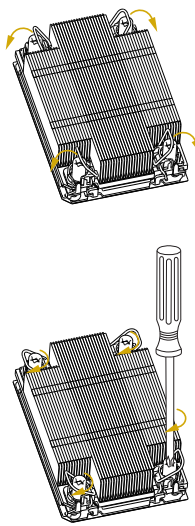
Carefully flip the carrier assembly. Apply a thermal paste.



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



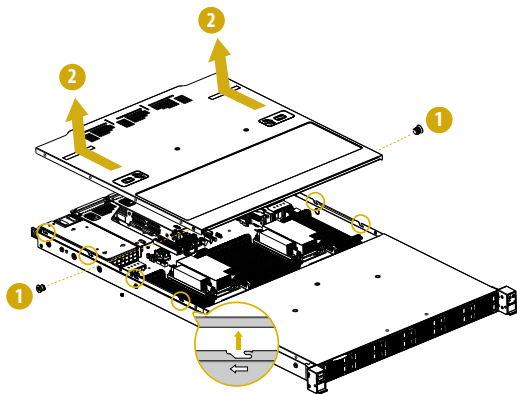
Tighten the corner fasteners. Secure the heatsink to the server motherboard with a screwdriver.



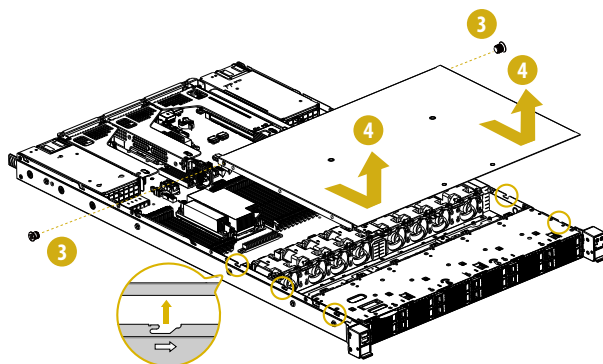
Note: We recommend using the CPU installation tool to avoid CPU pin-bent problem.

8 Remove Top Cover

1. Remove the top rear cover screws.
2. Press the tabs and push back to remove the cover.

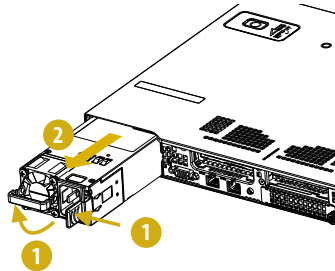


3. Remove the top front cover screws.
4. Push the cover forward to remove it.

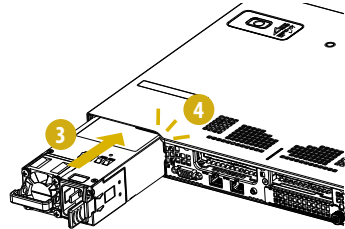


9 Replace Power Supply

1. Hold onto the handle while pressing the lever towards the handle.
2. Pull to remove the failed PSU out.

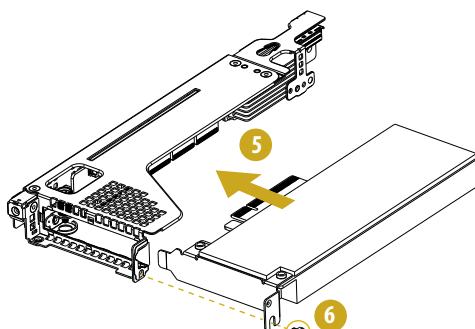
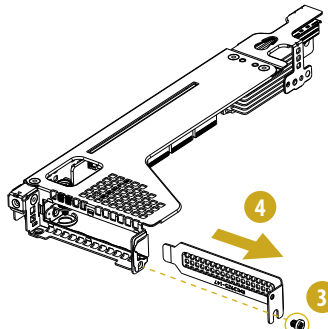
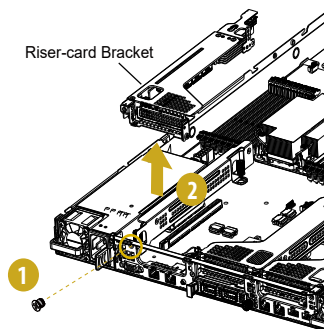


3. Slide a new PSU into the bay.
4. Make sure the PSU clicks in place and is well installed.

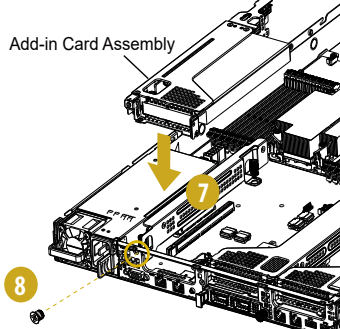


10 Install Add-in Card

1. Remove the screw.
2. Push upward to remove the riser-card bracket.
3. Remove the screw on the blanking plate.
4. Slide the plate out.
5. Install an add-in card into bracket.
6. Tighten the screw.

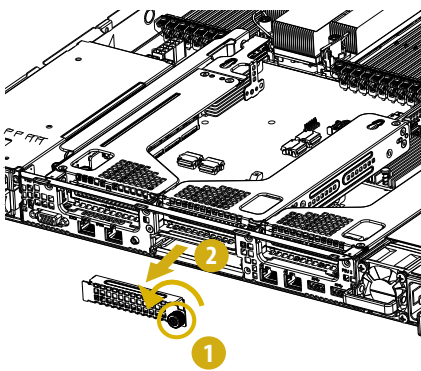


7. Install the add-in card assembly.
8. Secure the assembly with the screw.



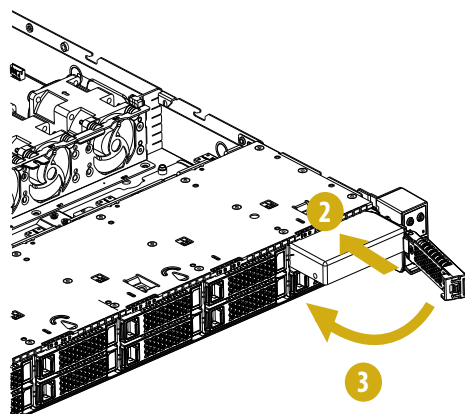
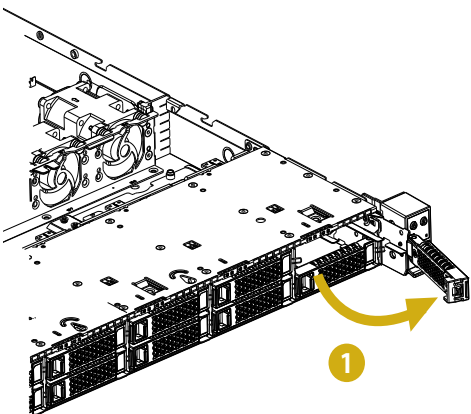
11 Install OCP Card

1. Remove the screw.
2. Remove the slot cover.



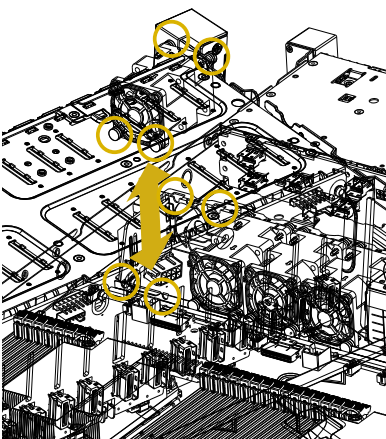
12 Install Hard Drive

1. Press the locking lever latch on the hard drive bay to rotate the lever out.
2. Slide a 2.5" hard drive into the bay until the drive is fully seated.
3. Push in the locking lever to lock the drive in place.

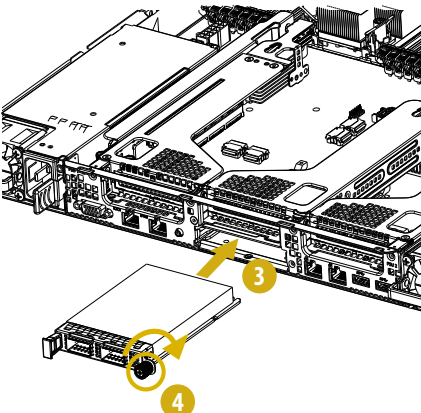


13 Replace Fan

1. Lift to remove the failed fan.
2. Align the mounting holes on fan bracket to place the fan.
3. Make sure the fan is well seated.



3. Install an OCP card into the slot.
4. Hand-tighten the thumbscrew.



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