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GREEN Less Heat, Less Power Consumption

STABLE Robust Design, Quality Parts

Stable and
Reliable Solution

Server/Workstation
Motherboard

1U12E-ICX2

User Manual

English



Version 1.01

Published Aug. 2025

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This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

CALIFORNIA, USA ONLY

The Lithium battery adopted on this server motherboard contains Perchlorate, a toxic substance controlled in Perchlorate Best Management Practices (BMP) regulations passed by the California Legislature. When you discard the Lithium battery in California, USA, please follow the related regulations in advance.

“Perchlorate Material-special handling may apply, see www.dtsc.ca.gov/hazardouswaste/perchlorate”

Setting up the Server in a Restricted Access Location/Restricted Access Area

- Access can only be gained by service persons or by users who have been instructed about the reasons for the restrictions applied to the location and about any precautions that shall be taken.
- Access is through the use of a tool or lock and key, or other means of security, and is controlled by the authority responsible for the location.
- Leave enough clearance (25 inches in the front and 30 inches in the back of the rack) to allow the front door to be opened completely and to allow for sufficient airflow.
- This product is for installation merely in a Restricted Access Location.
- This product is not suitable for use with visual display work place devices according to §2 of the the German Ordinance for Work with Visual Display Units.
- Only skilled person and Instructed person can remove the chassis covers to access the inside of the system.

ASRock Rack's Website: www.ASRockRack.com

Replaceable Batteries

CAUTION

**RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE.
DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS**

Warning

When removal of the chassis lid required for servicing:

- Turn off power and unplug any power cords/cables, and
- Reinstall the chassis lid before restoring power.



Important Safety Instructions

Pay close attention to the following safety instructions before performing any of the operation. Basic safety precautions should be followed to protect yourself from harm and the product from damage:

- Operation of the product should be carried out by suitably trained, qualified, and certified personnel only to avoid risk of injury from electrical shock or energy hazard.
- Disconnect the power cord from the wall outlet when installing or removing main system components, such as the server motherboard and power supply unit.
- Place the system on a stable and flat surface.
- Use extreme caution when working with high-voltage components.
- When handling parts, use a grounded wrist strap designed to prevent static discharge.
- Keep the area around the system clean and clutter-free.
- Keep all components and printed circuit boards (PCBs) in their antistatic bags when not in use.
- Handle a board by its edges only; do not touch its components, peripheral chips, memory modules or contacts.
- The power cord must be connected to a socket or outlet with a ground connection.

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Chapter 1 Introduction

Thank you for purchasing 1U12E-ICX2, a reliable barebone system produced under ASRock Rack's consistently stringent quality control. It delivers excellent performance with robust design conforming to ASRock Rack's commitment to quality and endurance.

This guide provides the instructions of insertion and extraction of chassis components, such as chassis covers, system fans, power supplies, hard drive trays, and other main components this system supports. If the system is pre-installed a server motherboard, refer to the server motherboard user manual for the information of the server motherboard components, specifications and BIOS settings.

System	ASRock Rack Server Motherboard
1U12E-ICX2	SP2C621D32TM3/1U



Because the hardware specifications might be updated, the content of this documentation will be subject to change without notice.



The illustrations shown in this manual are for reference purposes only and may not exactly match the model purchased.



If requiring technical support related to this system, please visit the website for specific information about the using model.
<http://www.asrockrack.com/support/>

1.1 Shipping Box Contents

Item	Quantity
Server Barebone: 1U12E-ICX2	1
CPU Heatsink	2
Rail Kit	1
Accessory Box	1
- 1 Quick Installation Guide	
- 2 CPU Carriers	
- 2 Power Cords	
- 2 Screws for M.2	



If any items are missing or appear damaged, contact the authorized dealer.

1.2 Specifications

1U12E-ICX2	
System	
Form Factor	1U Rackmount
Dimensions	770 x 438.5 x 43.0mm (30.3" x 17.26" x 1.7")
Support MB	SP2C621D32TM3/1U
Front Panel	
Button	Power button w/ LED, UID button w/ LED, Reset
LED	Hard drive activity, LAN 1/2, System status
I/O Port	1 Type-A (USB3.2 Gen1), 1 Type-A (USB2.0)
External Drive Bay / Storage	
Front Side Drive Bay	2 Hot-swap 2.5" NVMe (PCIe4.0 x4) drive bays 10 Hot-swap 2.5" NVMe (PCIe4.0 x4)/SATA drive bays
Front Side Backplane	12-port NVMe/SATA/SAS* passive backplane <i>*SAS drive is only supported with additional RAID/HBA cards.</i>
Internal Side	2 M-key (PCIe3.0 x4 or SATA 6Gb/s); support 22110/2280 form factor [PCH]
Power Supply	
Type	1+1 Hot-swap CRPS
Output Watts	1000W @ 100-127Vac input 1600W @ 200-240Vac input
Efficiency	80-PLUS Platinum
AC Input	Low-line: AC 100-127V/13.8A, 50-60Hz High-line: AC 200-240V/9.6A, 50-60Hz
System Fan	
Fan	8 PWM fixed 40x56mm fans
Processor System	
CPU	Supports 3rd Gen Intel® Xeon® Scalable processors
Socket	Dual Socket P+ (LGA 4189)
Chipset	Intel® C621A

System Memory	
Supported DIMM Quantity	16+16 DIMM slots (2DPC)
Supported Type	Supports DDR4 288-pin RDIMM, LRDIMM, RDIMM/LRDIMM-3DS, Intel® Optane™ Persistent Memory 200 series
Max. Capacity per DIMM	RDIMM: up to 64GB RDIMM-3DS: up to 256GB LRDIMM: up to 128GB LRDIMM-3DS: up to 256GB
Max. DIMM Frequency	max. 3200MHz
Voltage	1.2V
PCIe Expansion Slot	
PCIe x16	1 HHHL PCIe4.0 x16 via RB151-X16_G4 1 HHHL PCIe4.0 x16 via RB151-X16SL_G4_RT
PCIe x8	1 HHHL PCIe4.0 x8 via RB151-SL2P_G4
Ethernet	
OCPI Slot	1 OCPI NIC 3.0 (PCIe4.0 x16) [CPU1]
Server Management	
BMC Controller	ASPEED AST2500: iKVM, vMedia support
IPMI Dedicated GLAN	1 RJ45 dedicated IPMI LAN port by Realtek RTL8211E
Graphics	
Controller	ASPEED AST2500: 1 DB15 (VGA), 1 (15-pin header)
Rear I/O	
UID Button/LED	1 UID button w/ LED
Video Port	1 DB15 (VGA)
USB3.2 Gen1 Port	2 Type-A (USB3.2 Gen1)
RJ45	1 RJ45 (COM), 2 RJ45 (1GbE), 1 dedicated IPMI
System BIOS	
BIOS Type	256Mb SPI Flash ROM
BIOS Features	Plug and Play (PnP), ACPI 4.0 and above compliance wake up events, SMBIOS 3.3 and above, ASRock Rack Instant Flash

Hardware Monitor	
Temperature	CPU, PCH, MB, card side temperature sensing
Fan	Fan tachometer CPU quiet fan (allows chassis fan speed auto-adjust by CPU temperature) Fan multi-speed control
Voltage	CPU1_PVCCIN, CPU2_PVCCIN, PVDDQ_ABCD, PVDDQ_EFGH, PVDDQ_IJKL, PVDDQ_MNOP, 1.05V_PCH, 1.8V_PCH, +BAT, PVNN_PCH, 3.3V, 5V, 12V, 3.3VSB, 5VSB
Enviroment	
Temperature	Operation temperature: 10°C ~ 35°C Non operation temperature: -40°C ~ 70°C
Humidity	Non operation humidity: 20% ~ 90% (non condensing)

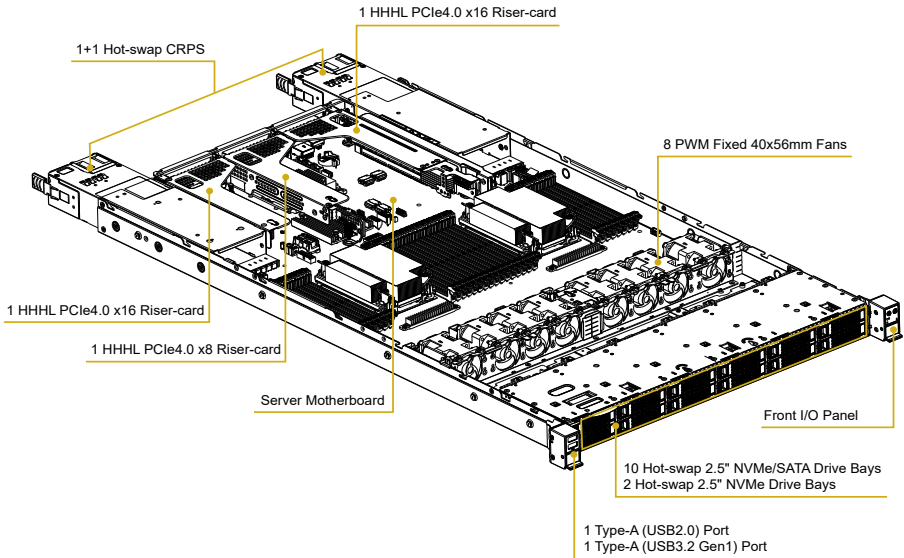


The functions are supported depending on the type of the server motherboard. Refer to the server motherboard user manual for more information.

Chapter 2 Server System Overview

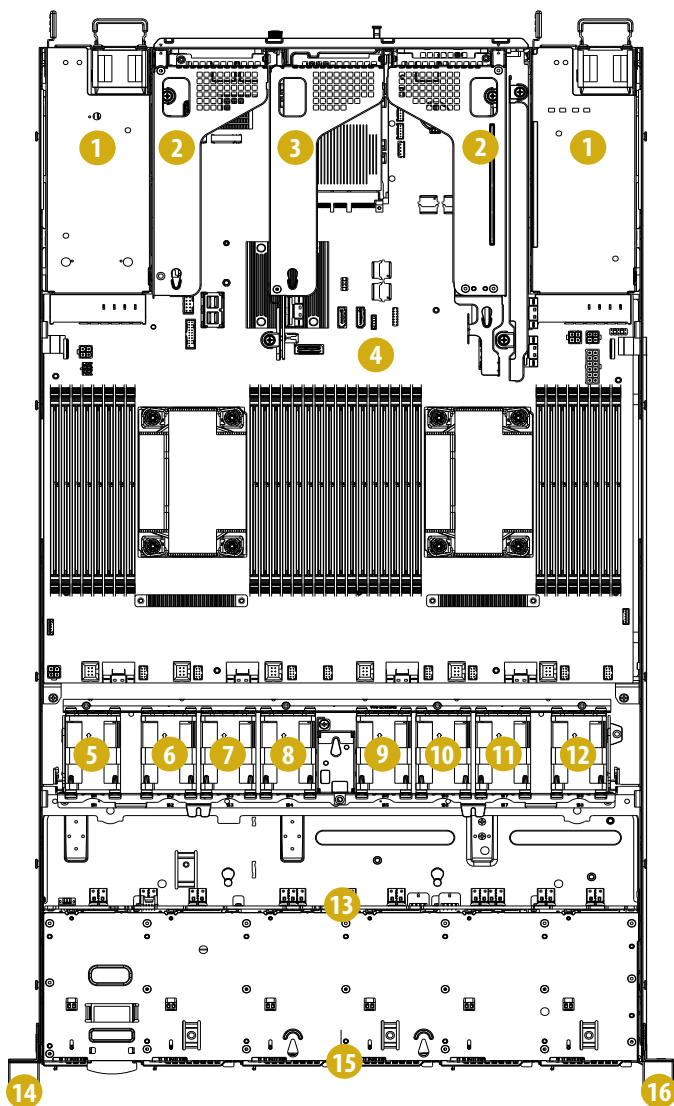
This chapter provides diagrams showing the location of important components of the server system.

2.1 System Components



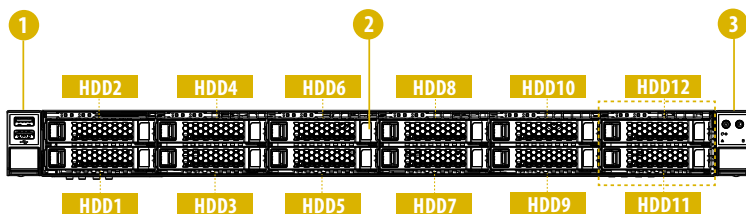
Note: The illustrations in this user manual are for references only. The actual product may be slightly different by SKU.

2.2 Internal Features



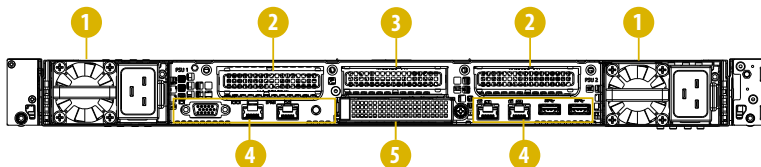
No.	Description
1	1+1 Hot-swap CRPS
2	2 HHHL PCIe4.0 x16 riser-cards
3	1 HHHL PCIe4.0 x8 riser-card
4	Server motherboard
5	PWM fixed 40x56 mm fan (FAN1)
6	PWM fixed 40x56 mm fan (FAN2)
7	PWM fixed 40x56 mm fan (FAN3)
8	PWM fixed 40x56 mm fan (FAN4)
9	PWM fixed 40x56 mm fan (FAN5)
10	PWM fixed 40x56 mm fan (FAN6)
11	PWM fixed 40x56 mm fan (FAN7)
12	PWM fixed 40x56 mm fan (FAN8)
13	Hard drive backplane board (BPB)
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

2.3 System Front Panel



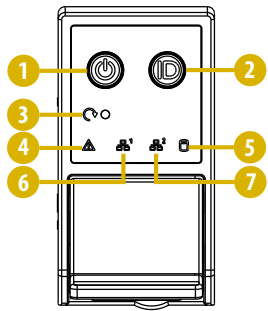
No.	Description
1	Upper: 1 Type-A (USB2.0) port Lower: 1 Type-A (USB3.2 Gen1) port
2	10 Hot-swap 2.5" NVMe (PCIe4.0 x4)/SATA drive bays 2 Hot-swap 2.5" NVMe (PCIe4.0 x4) drive bays
3	Front I/O panel

2.4 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]

2.5 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

Power Button

Press the power switch button to toggle the system power-on and power-off modes. To remove all power from the system completely, disconnect the power cord from the server.

UID Button

Press the UID button to toggle the front panel UID LED and the baseboard UID LED on and off. Use this button to locate the server working on behind a rack of servers.

Reset Button

When the system is completely unresponsive, press the system reset button to reboot the server without shutting it off and initialize the system.

Status LED Definitions

Power LED	
Status	Description
Off	Power off or abnormal
Green	Power on

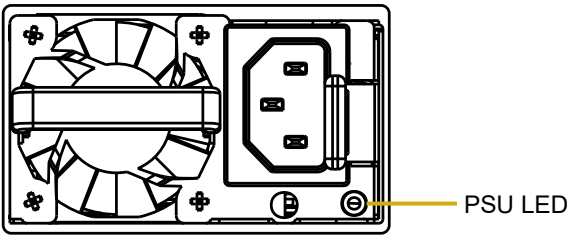
UID LED	
Status	Description
Off	System is not located.
Blue	System is located.

System Status LED	
Status	Description
Off	Running or normal operation, AC off or DC off
Red	System error

Hard Drive Activity LED	
Status	Description
Off	Hard drive not connected or power off
Blinking Amber	Hard drive access

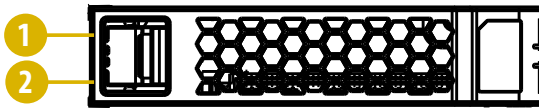
LAN1, LAN2 LEDs	
Status	Description
Amber	Link between system and network or no access
Blinking Amber	Network access

2.6 PSU LED



PSU Status LED	
Status	Description
Off	NO AC power to all power supplies
Green	Output on and ok
Blinking Green at 1Hz	- PSU standby state AC present/Only 12VSB on - Power supply is cold standby state or always standby state as defined in the Cold Redundancy section of the CRPS Common Requirements Specification
Blinking Green at 2Hz	FW updating for power supply
Amber	- AC cord unplugged, or AC power lost; with a second power supply in parallel still with AC input power. - Power supply critical event is causing a shutdown; failure, over current, short circuit, over voltage, fan failure, over temperature
Blinking Amber at 1Hz	Power supply warning events where the power supply continues to operate; high temp, high power, high current, slow fan

2.7 Hard Drive Tray LED



No.	Description
1	Hard drive activity LED (Green)
2	Hard drive status LED (Blue/Red)

LED Definitions

Hard Drive Activity LED	Hard Drive Status LED		Description
Green	Blue	Red	
Off	Off	Off	No hard drive present
Blinking for Hard Drive Activity (InFrame) Indicating	On	Off	Offline
	On	Off	Idle
	On	Off	Active
	On	On	Fail
	On	Blinking at 4Hz	Locate
	On	Blinking at 1Hz	Rebuild

Chapter 3 Hardware Installation and Maintenance

This chapter helps user to assemble the chassis and install components.

Before You Begin

Before working with the server, pay close attention to the “Important Safety Instructions” at the beginning of this manual.

1. Make sure the server is powered off.

Power down the server if it is still running.

- (1) Press the Power button to power off the server. The Power LED at the front turns from solid green to dark.

- (2) Disconnect the power cord first from the AC outlet and then from the server.

The power LED turns off.

2. Ensure having a clean and stable working environment. Avoid dust and dirt because contaminants may cause malfunctions.
3. Ground properly before touching any system component. A discharge of static electricity may damage components. Wear a grounded wrist strap if available.

Installing Procedures

The followings are prerequisite to be installed.

- 2.5" Hard Drives
- Riser-cards
- Power Supply Units (Pre-installed)
- System Fans (Pre-installed)
- Server Motherboard (Pre-installed)
- Hard Drive Backplane (Pre-installed)



1. Some components are already pre-installed. Simply properly connect the relevant cables before or after installation.
2. Refer to the server motherboard user manual for instructions on how to install server motherboard components.

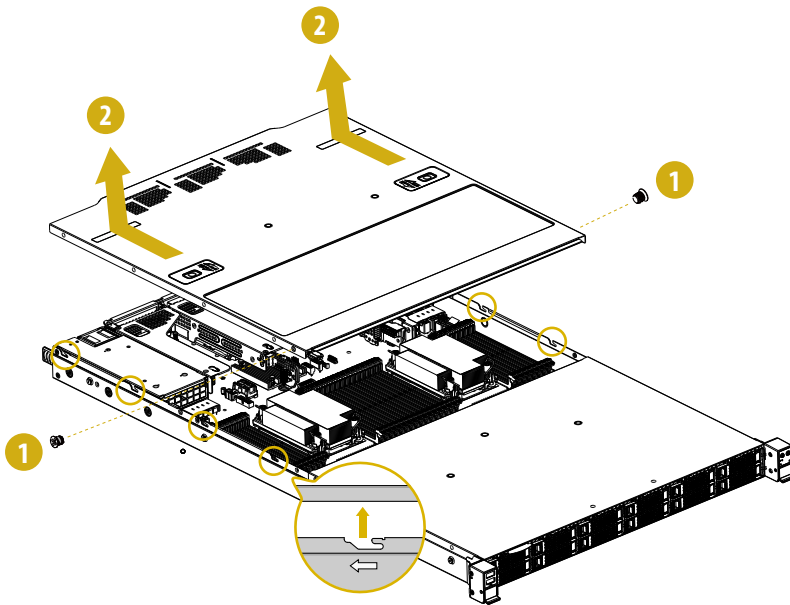
3.1 Server Top Cover

Removing the Top Cover

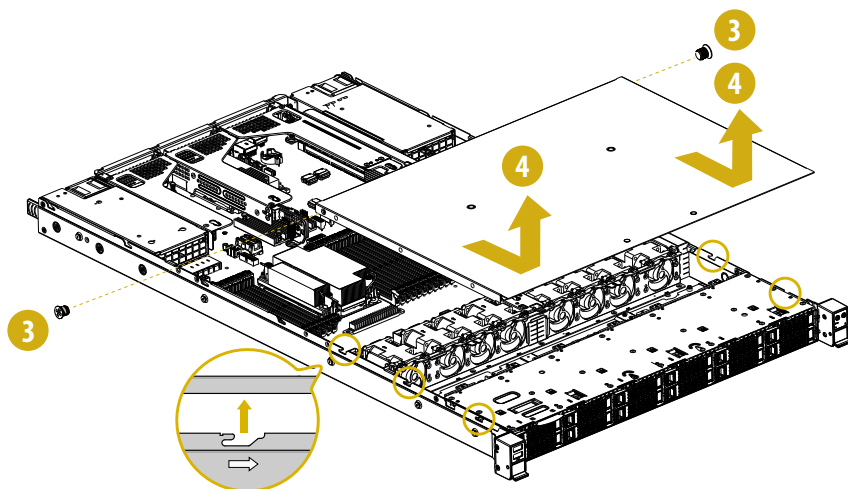


1. Before removing the top cover, power off the server and unplug the power cord.
2. The system must be operated with the chassis top cover installed to ensure proper cooling.
3. Front top cover and rear top cover can be removed and installed separately.

1. Remove the screws securing the top rear cover to the chassis.
2. Press the tabs and push the cover toward the REAR of the chassis to release the cover from the locked position. Lift up and remove the cover.

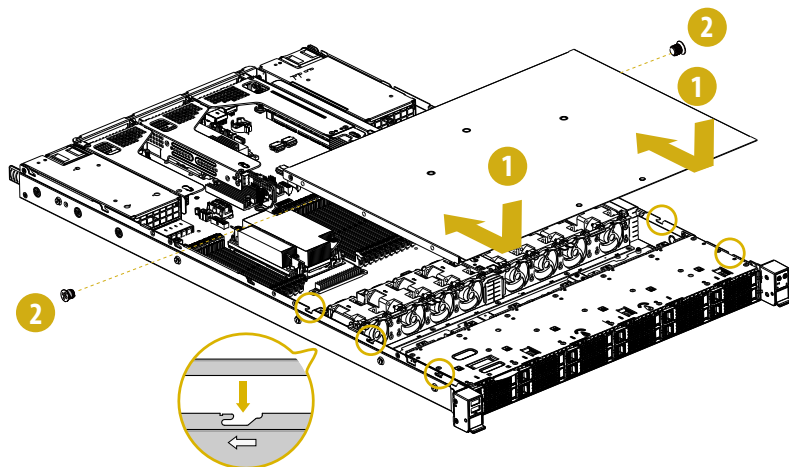


3. Remove the screws securing the top front cover to the chassis.
4. Push the cover toward the FRONT of the chassis to release the cover from the locked position. Lift up and remove the cover.

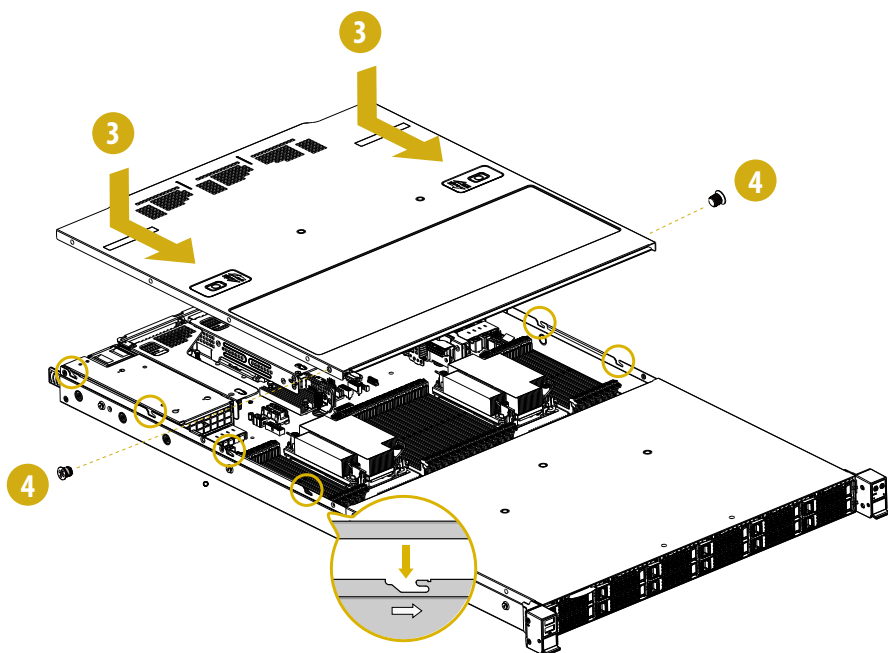


Installing the Top Cover

1. Lower the top front cover on the chassis, making sure the side latches align with the cutouts. Slide the cover toward the REAR of the chassis.
2. Secure the cover in place with the screws.



3. Lower the top rear cover on the chassis, making sure the side latches align with the cutouts. Slide the cover toward the FRONT of the chassis.
4. Secure the cover in place with the screws.

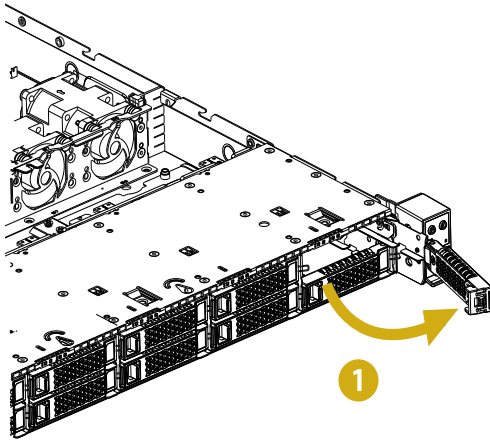


3.2 Hard Drive

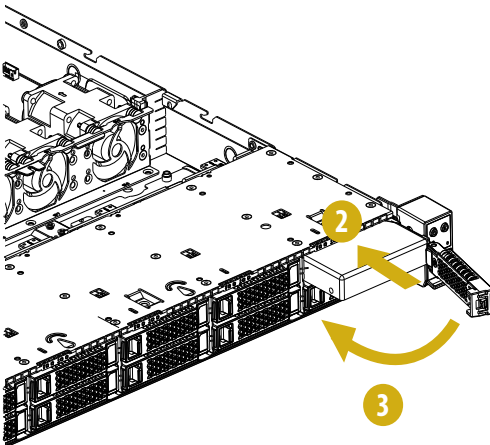
The system supports hot-swap 2.5" hard drives. The hard drive trays are located on the front of the chassis.

Installing the 2.5" Hard Drive to the Chassis

1. Press the locking lever latch on the hard drive bay to rotate the lever out.



2. Slide the 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.



3.3 Power Supply

The system can accommodate two power supply units (PSU) in the bay at the rear of the chassis. Each unit provides up to 1600W of power. One PSU is required for full load operation, with the other PSU purely as a redundant, load-sharing backup. One PSU can be removed without affecting system operation.

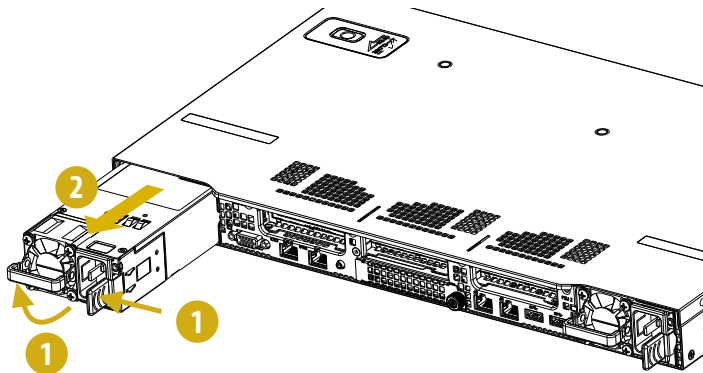


1. Before replacing the power supply, power off the server, unplug the power cord, and disconnect all wiring from the power supply.
2. In a redundant system, it does not need to power down the server.

Removing the Power Supply Unit

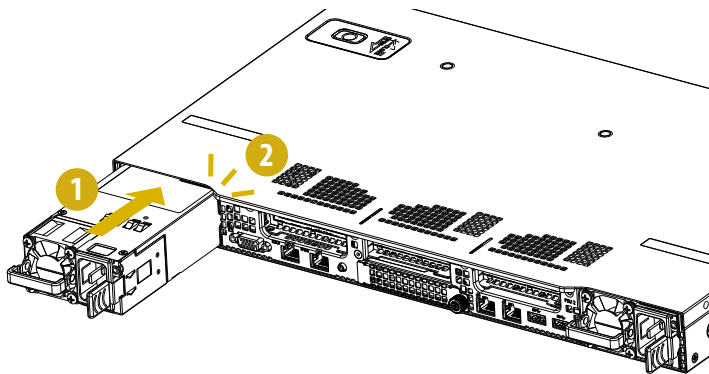
To remove a failed power supply unit, identify the failed PSU by checking the power supply LEDs on the PSUs.

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



Installing the Power Supply Unit

1. Align the power supply unit with the power supply bay. Ensure the LED appears on the lower right when installing the PSU.
2. Carefully slide the PSU all the way into the bay until the PSU clicks in place.

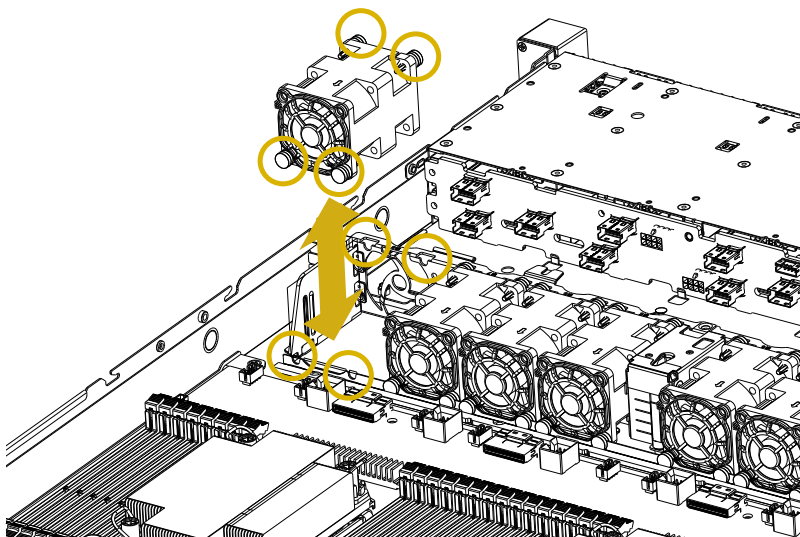


3.4 System Fan

The system supports 8 fixed 40x56mm fans.

Replacing the System 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.



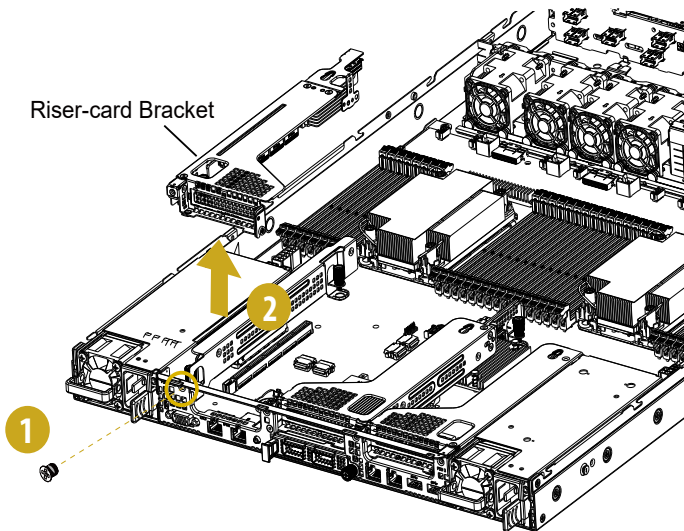
3.5 Add-in Card



1. When installing an add-in card to the chassis, make sure the riser-card assembly have been pre-installed on the server motherboard.
2. Before installing the add-in card, power off the server and unplug the power cord.

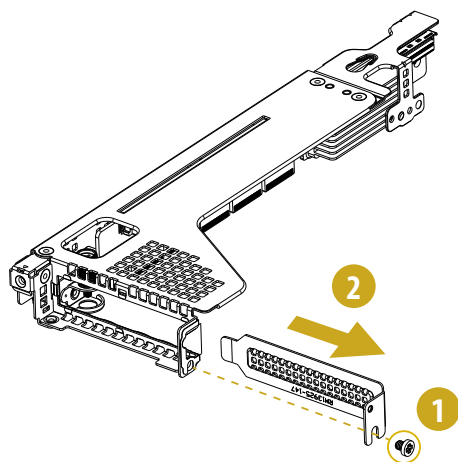
Removing the Riser-card Bracket from the Chassis

1. Remove the screw securing the riser-card bracket to the chassis.
2. Push upward to remove the bracket from the chassis.

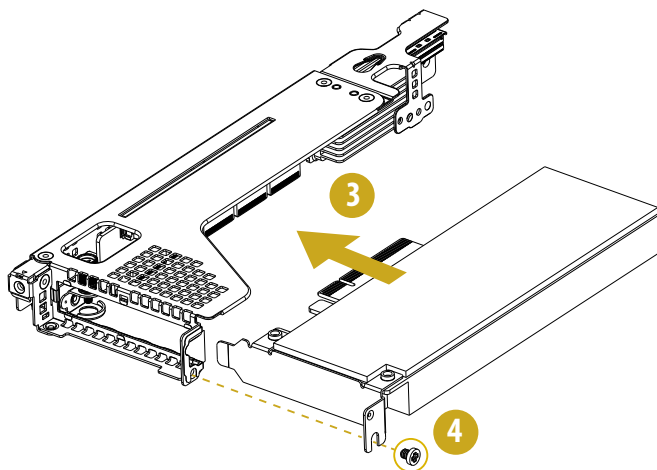


Installing the Add-in Card to the Riser-card Bracket

1. Remove the screw securing the blanking plate to the bracket.
2. Slide the blanking plate out sideways.

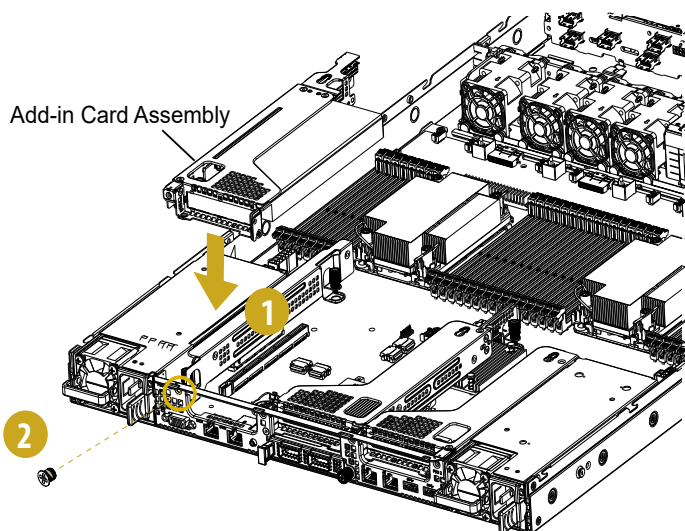


3. Install the add-in card into the riser-card bracket.
4. Secure the add-in card to the bracket with the screw.



Installing the Add-in Card Assembly to the Chassis

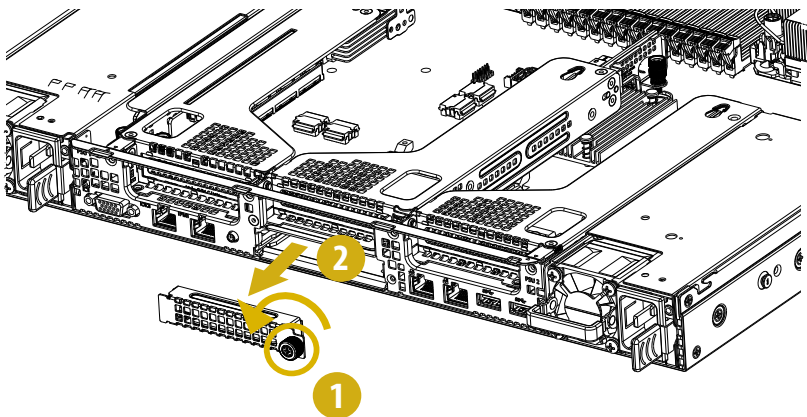
1. Align the add-in card assembly with the opening of the chassis to install it to the chassis.
2. Secure the assembly to the chassis with the screw.



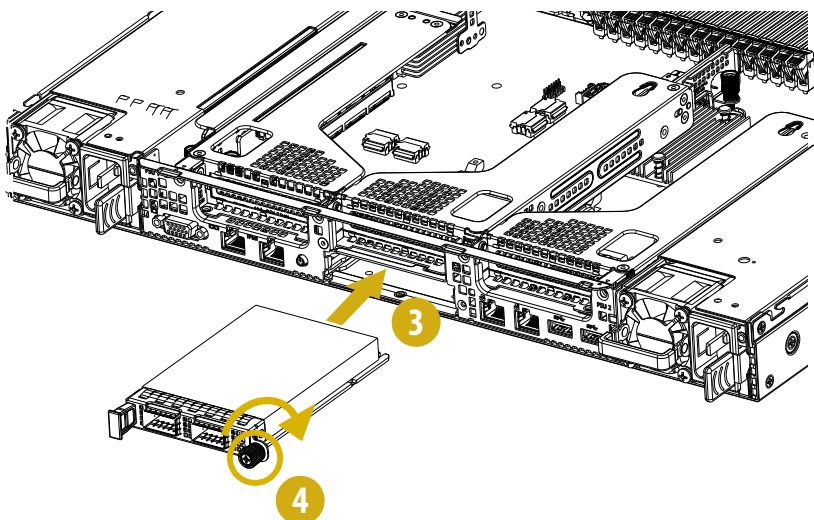
3.6 OCP Card

Installing the OCP Card

1. Hand-release the thumbscrew securing the slot cover to the chassis.
2. Remove the slot cover.

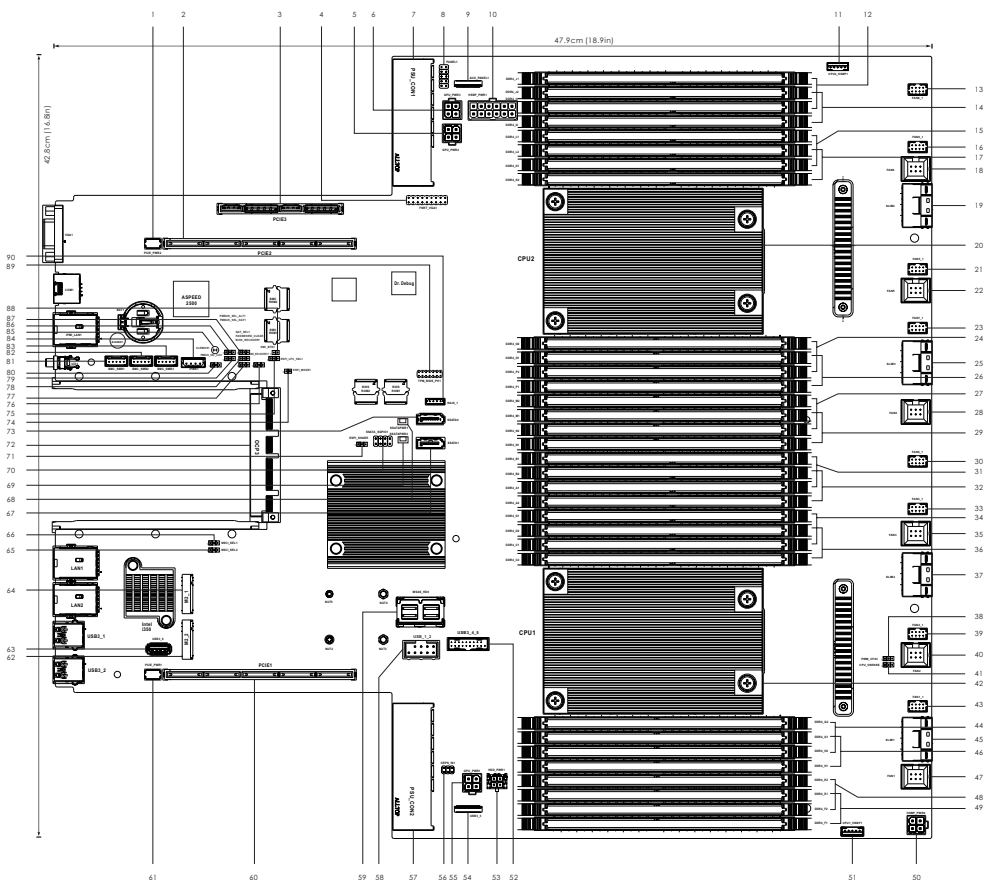


3. Install an OCP card into the slot.
4. Make sure the card is well seated and hand-tighten the thumbscrew on the face plate.



Chapter 4 Server Motherboard (SP2C621D32TM3/1U)

4.1 Layout



The illustration here is for references only. The actual layout may slightly vary depending on the model and the version used.

No.	Description
1	PCIE Power Connector (PCIE_PWR2)
2	PCIE 4.0 x32 Slot (PCIE2)
3	PCIE 4.0 x16 Slot (PCIE3)
4	Front VGA Header (FRONT_VGA1) (not Available)
5	GPU Power Connector (GPU_PWR2)
6	GPU Power Connector (GPU_PWR3)
7	Power Supply Unit Connector (PSU_CON1)
8	System Panel Header (PANEL1)
9	Auxiliary Panel Header (AUX_PANEL1)
10	HDD Backplane Power Connector (HSBP_PWR1)
11	Backplane PCI Express Hot-Plug Connector (CPU2_HSBP1)
12	2 x 288-pin DDR4 DIMM Slots (DDR4_I1, DDR4_J1)
13	System Fan Connector (FAN8_1) <i>(for 1U system)</i>
14	2 x 288-pin DDR4 DIMM Slots (DDR4_I2, DDR4_J2)
15	2 x 288-pin DDR4 DIMM Slots (DDR4_K1, DDR4_L1)
16	System Fan Connector (FAN6_1) <i>(for 1U system)</i>
17	2 x 288-pin DDR4 DIMM Slots (DDR4_K2, DDR4_L2)
18	System Fan Connector (FAN6) <i>(for 2U system)</i>
19	Slimline x8 Connector (SLIM4)
20	LGA 4189 CPU Socket (CPU2)
21	System Fan Connector (FAN5_1) <i>(for 1U system)</i>
22	System Fan Connector (FAN5) <i>(for 2U system)</i>
23	System Fan Connector (FAN7_1) <i>(for 1U system)</i>
24	2 x 288-pin DDR4 DIMM Slots (DDR4_O2, DDR4_P2)
25	Slimline x8 Connector (SLIM3)
26	2 x 288-pin DDR4 DIMM Slots (DDR4_O1, DDR4_P1)
27	2 x 288-pin DDR4 DIMM Slots (DDR4_M2, DDR4_N2)
28	System Fan Connector (FAN4) <i>(for 2U system)</i>
29	2 x 288-pin DDR4 DIMM Slots (DDR4_M1, DDR4_N1)
30	System Fan Connector (FAN4_1) <i>(for 1U system)</i>
31	2 x 288-pin DDR4 DIMM Slots (DDR4_A1, DDR4_B1)
32	2 x 288-pin DDR4 DIMM Slots (DDR4_A2, DDR4_B2)
33	System Fan Connector (FAN3_1) <i>(for 1U system)</i>
34	2 x 288-pin DDR4 DIMM Slots (DDR4_C1, DDR4_D1)
35	System Fan Connector (FAN3) <i>(for 2U system)</i>

No.	Description
36	2 x 288-pin DDR4 DIMM Slots (DDR4_E2, DDR4_F2)
37	Slimline x8 Connector (SLIM2)
38	PWM Configuration Header (PWM_CFG1)
39	System Fan Connector (FAN2_1) <i>(for 1U system)</i>
40	System Fan Connector (FAN2) <i>(for 2U system)</i>
41	CPU VSENSE Header (CPU_VSENSE)
42	LGA 4189 CPU Socket (CPU1)
43	System Fan Connector (FAN1_1) <i>(for 1U system)</i>
44	2 x 288-pin DDR4 DIMM Slots (DDR4_G2, DDR4_H2)
45	Slimline x8 Connector (SLIM1)
46	2 x 288-pin DDR4 DIMM Slots (DDR4_G1, DDR4_H1)
47	System Fan Connector (FAN1) <i>(for 2U system)</i>
48	2 x 288-pin DDR4 DIMM Slots (DDR4_E2, DDR4_F2)
49	2 x 288-pin DDR4 DIMM Slots (DDR4_E1, DDR4_F1)
50	HDD Backplane Power Connector (HSBP_PWR2)
51	Backplane PCI Express Hot-Plug Connector (CPU1_HSBP1)
52	USB 3.2 Gen1 Header (USB3_5_6)
53	HDD Power Connector (HDD_PWR1)
54	Front USB 3.2 Gen1 Header (USB3_3)
55	GPU Power Connector (GPU_PWR1)
56	PDB Power Connector (CRPS_IN1)
57	Power Supply Unit Connector (PSU_CON2)
58	USB 2.0 Header (USB_1_2)
59	MiniSAS HD Connector (MSAS_HD0)
60	PCIe 4.0 x32 Slot (PCIe1)
61	PCIe Power Connector (PCIe_PWR1)
62	M.2 Socket (M2_2) (Type 2280/22110)
63	Vertical Type A USB 3.2 Gen1 Connector (USB3_6) (not Available)
64	M.2 Socket (M2_1) (Type 2280/22110)
65	NCSI Mode Jumper (NCSI_SEL2)
66	NCSI Mode Jumper (NCSI_SEL1)
67	SATA DOM Connector (SSATA1)
68	SATA DOM Power Connector (SSATAPWR1)
69	SATA DOM Power Connector (SSATAPWR2)

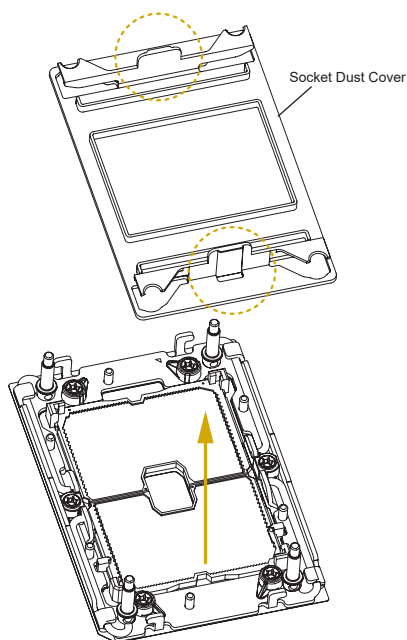
No.	Description
70	SATA SGPIO Connector (SSATA_SGPIO1)
71	ESPI Flash Sharing Jumper (ESPI_SHARE)
72	OC3 3.0 Gen4 x16 Mezzanine Card Slot (OC3)
73	SATA DOM Connector (SSATA0)
74	BIOS Swap Override Header (ESPI_MODE1)
75	ESPI/LPC Selection Jumper (ESPI_LPC_SEL1)
76	ME Recovery Jumper (ME_RECOVERY1)
77	BIOS Recovery Jumper (BIOS_RECOVERY1)
78	Password Reset Jumper (PASSWORD_CLEAR)
79	PMBUS Mode Jumper (PMBUS_SEL_DAT1)
80	PMBUS Mode Jumper (PMBUS_SEL_CLK1)
81	BMC SMBus Header (BMC_SMB1)
82	BMC SMBus Header (BMC_SMB2)
83	BMC SMBus Header (BMC_SMB3)
84	Intelligent Platform Management Bus Header (IPMB1)
85	Clear CMOS Pad (CLRMOS1)
86	PMBUS Mode Jumper (PMBUS_SEL_ALT1)
87	QAT Mode Jumper (QAT_SEL)
88	Non Maskable Interrupt Button (NMI_BTN1)
89	TPM-SPI Header (TPM_BIOS_PH1)
90	Virtual RAID On CPU Header (RAID_1)

4.3 Installing the CPU and Heatsink (LGA 4189 Socket)



1. Before inserting the CPU into the socket, check if the PnP cap is on the socket, if the CPU surface is unclean, or if there are any bent pins in the socket. Do not force to insert the CPU into the socket if above situation is found. Otherwise, the CPU will be seriously damaged.
2. Unplug all power cables before installing the CPU.

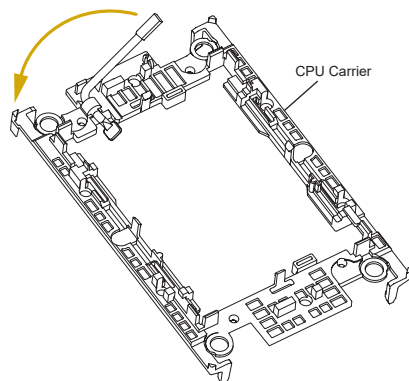
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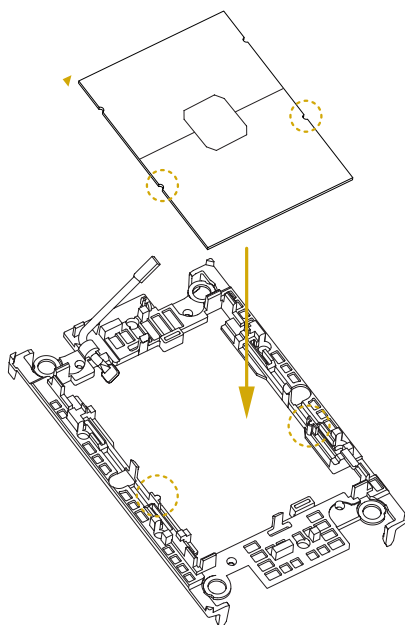


1. Before installing the heatsink, it needs to spray thermal interface material between the CPU and the heatsink to improve heat dissipation.
2. Illustration in this documentation are examples only. Heatsink or fan cooler type may differ.

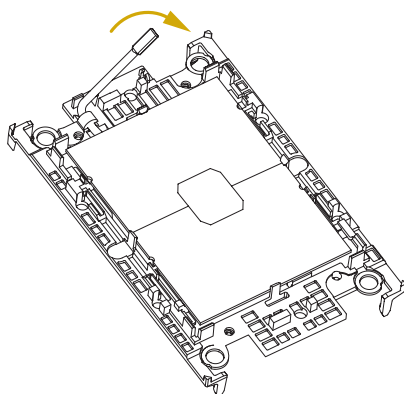
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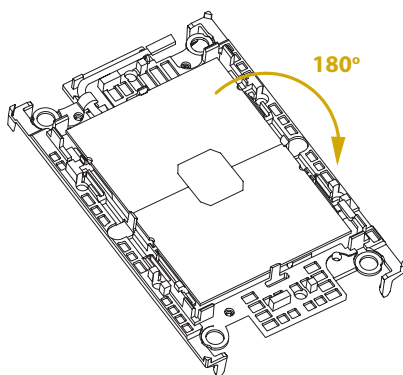
3



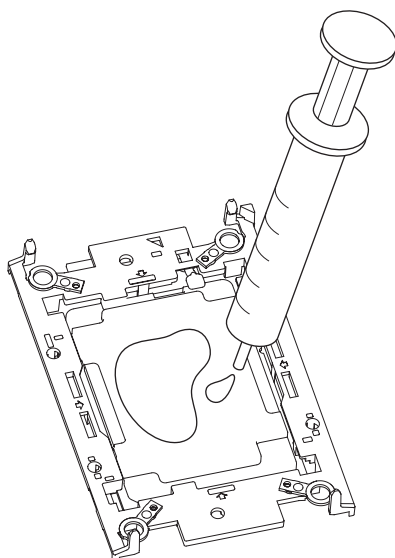
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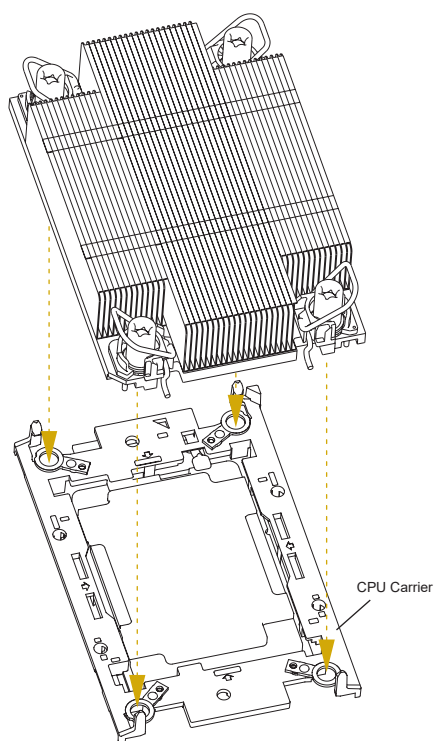
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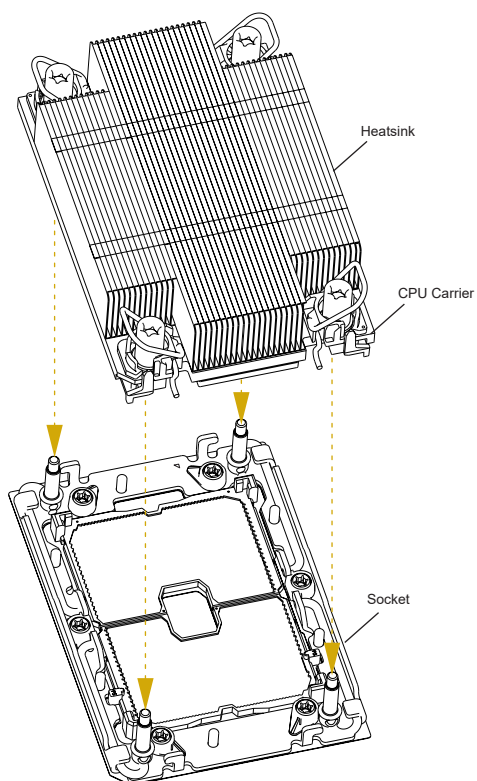


6

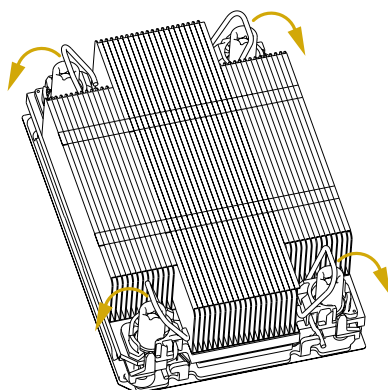


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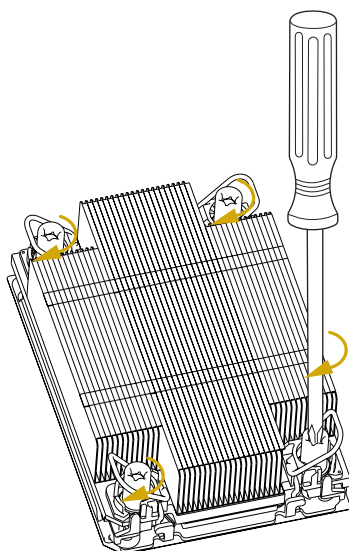




9



10

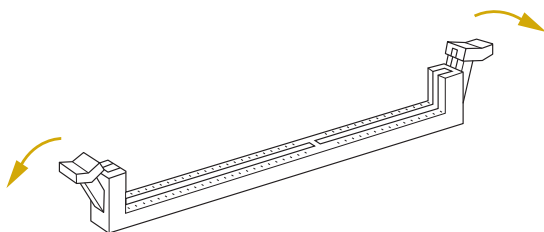


4.4 Installing the Memory Modules (DIMM)

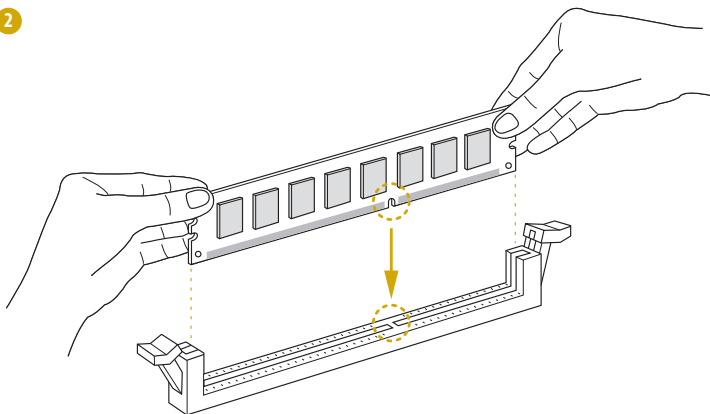


The DIMM only fits in one correct orientation. It will cause permanent damage to the server motherboard and the DIMM if forcing the DIMM into the slot at incorrect orientation. For more information about DIMM installation, refer to the server motherboard user manual.

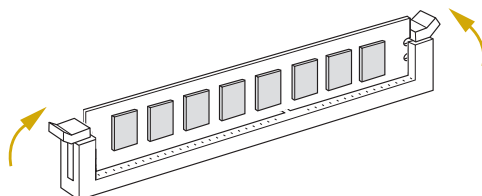
1



2



3



Appendix

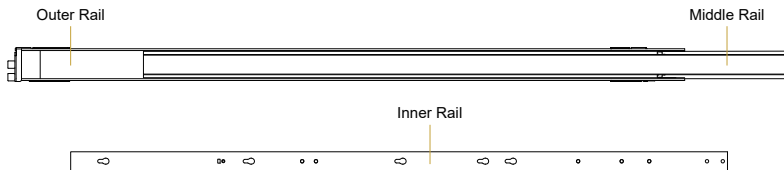
Installing the Server in a Rack

This section describes how to rackmount the 1U12E-ICX2 server with slide rail assembly.



The rails installation instructions in this manual are example only, the actual rail assembly procedure may differ slightly.

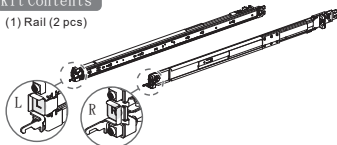
The rail assembly consists of outer, middle and inner rail.



Some slide rails are labeled with either L or R, please identify prior to rail installation. Install the rail labeled with L on the left side of rack, and the rail labeled with R on the right side of rack.

Kit Contents

(1) Rail (2 pcs)



(2) Screw Sack (optional but all required for rack shipping)

⊙ M4x4L screw (2 pcs)

⊙ M5x10L-P0.8 screw (2 pcs)

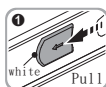
⊙ Washer (2 pcs)



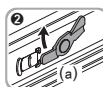
The maximum supported system weight for this rail kit is 31kg (68.3lbs). Exceeding the rail kit's specified maximum weight limit or misalignment of the server in the rack may result in failure of the rack rails, resulting in damage to the system or personal injury.

Server System Installation

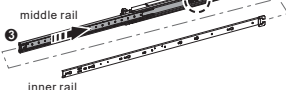
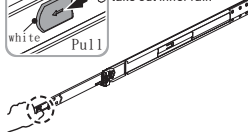
(1) Remove the inner rail member of both rail assemblies as shown in figure #1. Then slide each intermediate rail member back into the rail assembly.



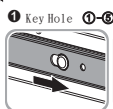
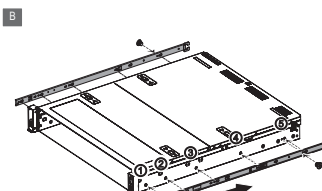
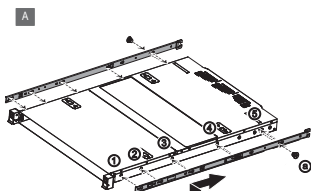
Pull tab forward and take out inner rail.



Push tab to slide the middle rail.



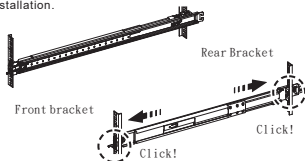
(2) Attach the inner rail members to the system.



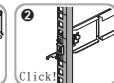
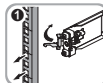
Please use 5kgf.cm torque force to fasten the screw.

Rail Installation

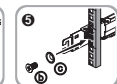
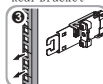
(3) Attach the rail assemblies to the rack frame
 <1> Ensure the each rail assembly is installed level, and that each rail assembly is at the same height as the other.
 <2> Ensure that each rail is locked to the rack frame before system installation.



Front bracket



Rear Bracket



for rack shipping only

Install System into Rack

- (4) Install the system into the rails.
- <1> Pull out the intermediate rail member until fully extended.
 - <2> Carefully align and insert the inner rail members on the system to the intermediate rail members, and horizontally push the system forward until locked.

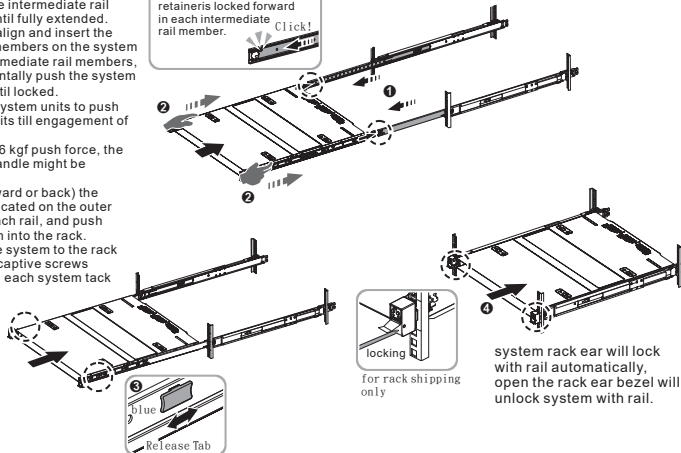
Note: Hold the system units to push system units till engagement of 1st travel.

With over 6 kgf push force, the chassis handle might be damaged!

- <3> Slide (forward or back) the blue tab located on the outer edge of each rail, and push the system into the rack.
- <4> Secure the system to the rack using the captive screws located on each system rack handle.

CAUTION!
Ensure the ball bearing retainers locked forward in each intermediate rail member.

Click!



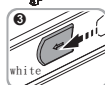
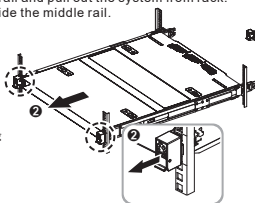
system rack ear will lock with rail automatically, open the rack ear bezel will unlock system with rail.

Removing System from Rails

- (1) If the system is secured in the rack, loosen the system handle screws and shipping screw (if present).
- (2) Fully extend the system from the rack.
- (3) Pull the White tab located on the outer edge of each rail and pull out the system from rack.
- (4) Push tab to slide the middle rail.



Release
for rack shipping only



Push tab to slide the middle rail.



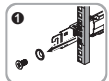
Rail Removal:

- (1) Remove server system from rails.
- (2) Push the latch on rear bracket outwards and pull out the bracket from rack pillar Space while holding rails.
- (3) Push the hook on front bracket outwards and pull out the bracket from rack pillar.

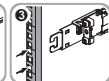
Inner Rail Removal:

- (1) Loosen the screw.
- (2) Slightly lift up keyhole spring plate, slide inner rail forward to remove inner rail.

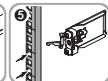
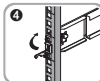
Rear Bracket



for rack shipping only



Front bracket



Contact Information

Contact ASRock Rack or want to know more about ASRock Rack, you're welcome to visit ASRock Rack's website at <http://www.asrockrack.com>; or contact the dealer for further information. For technical questions, please submit a support request form at <https://event.asrockrack.com/tsd.asp>

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