Gooxi Eagle Stream 6U 8-GPU AI Server SY6108G-G4 User Manual

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Shenzhen Gooxi Digital Intelligence Technology Co., Ltd.

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Foreword

This manual is the product technical manual for the SY6108G-G4 rackmount server, mainly introducing and explaining the appearance, structure, hardware installation, and basic configuration of this product.

This manual is intended for reference by professional technical personnel. Installation and maintenance of this product should only be carried out by experienced technical personnel.

Modification Record

Manual version	Release date	Modification instructions
V1.0	2024-09-25	First release
V1.1	2024-11-07	Update motherboard logic block diagram

Gooxi

Contents

1. Product Introduction

1.1 Product Overview

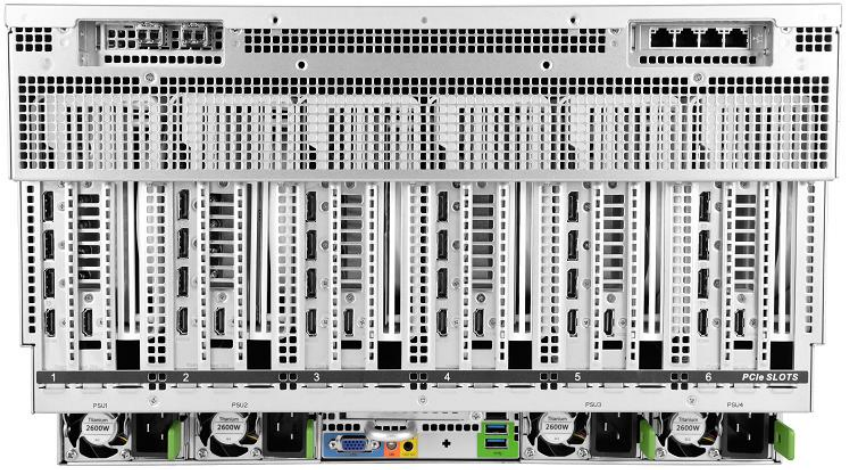
SY6108G-G4 is an AI computing server built on Intel's latest Eagle Stream platform, offering exceptional computational power and highly flexible expansion capabilities. It supports direct CPU-GPU connections, delivering high performance for parallel computing, excellent scalability, reliability, energy efficiency, intelligent maintenance, modular design, and an open ecosystem. This server is ideal for a wide range of AI-driven applications, including cloud gaming, artificial intelligence, cloud computing, virtualization, big data analytics, and digital twins.

Main Configuration:

- Supports 1 or 2 Intel® Xeon® Scalable processors from the 4th/5th generation (Sapphire Rapids/Emerald Rapids), with LGA4677 socket, TDP of 350W.
- Each CPU supports 8 DDR5 memory channels, with 2 DIMMs per channel, providing a total of 32 memory slots. Supports DIMM capacities of 16GB, 32GB, and 64GB.
- Front panel supports 12*3.5" hot-swappable drives, each drive can be individually serviced.
- Supports 13 PCIe expansion slots, which can be used for expanding GPU cards, network cards, RAID cards, etc.
- The BMC chip in this board uses ASPEED's AST2600 control chip for IPMI remote management.

The physical image of the server is shown below:

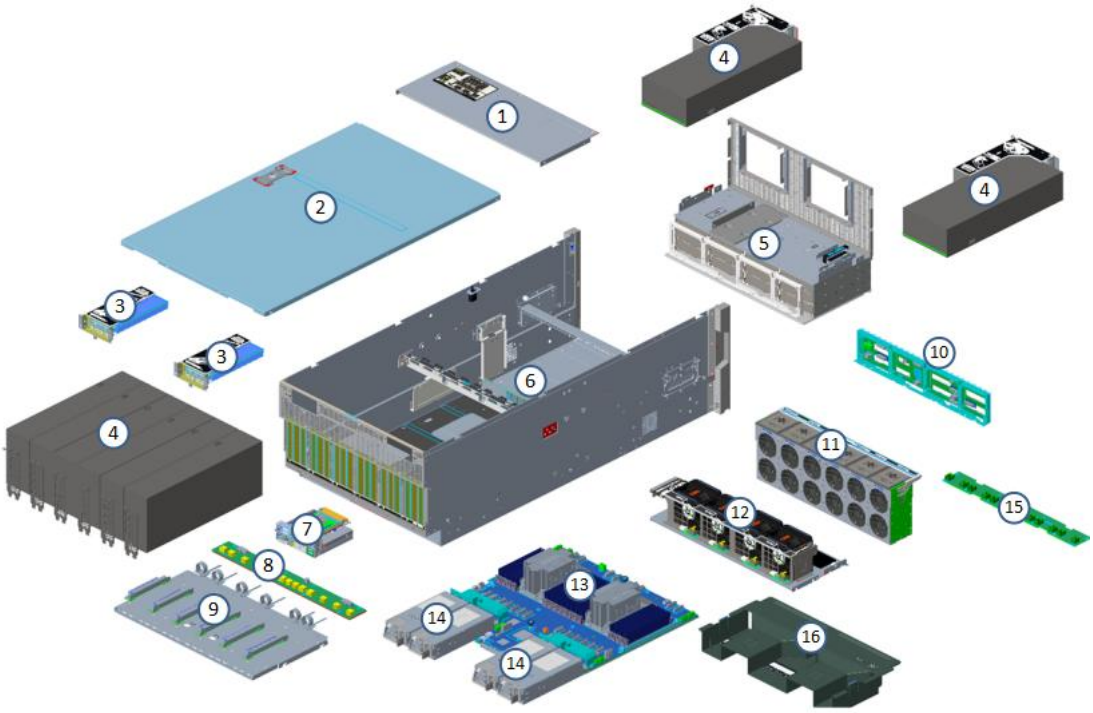
Front view 1-1



Rear view 1-2

1.2 Product Structure

The components of the SY6108G-G4 server are as shown in the following diagram:



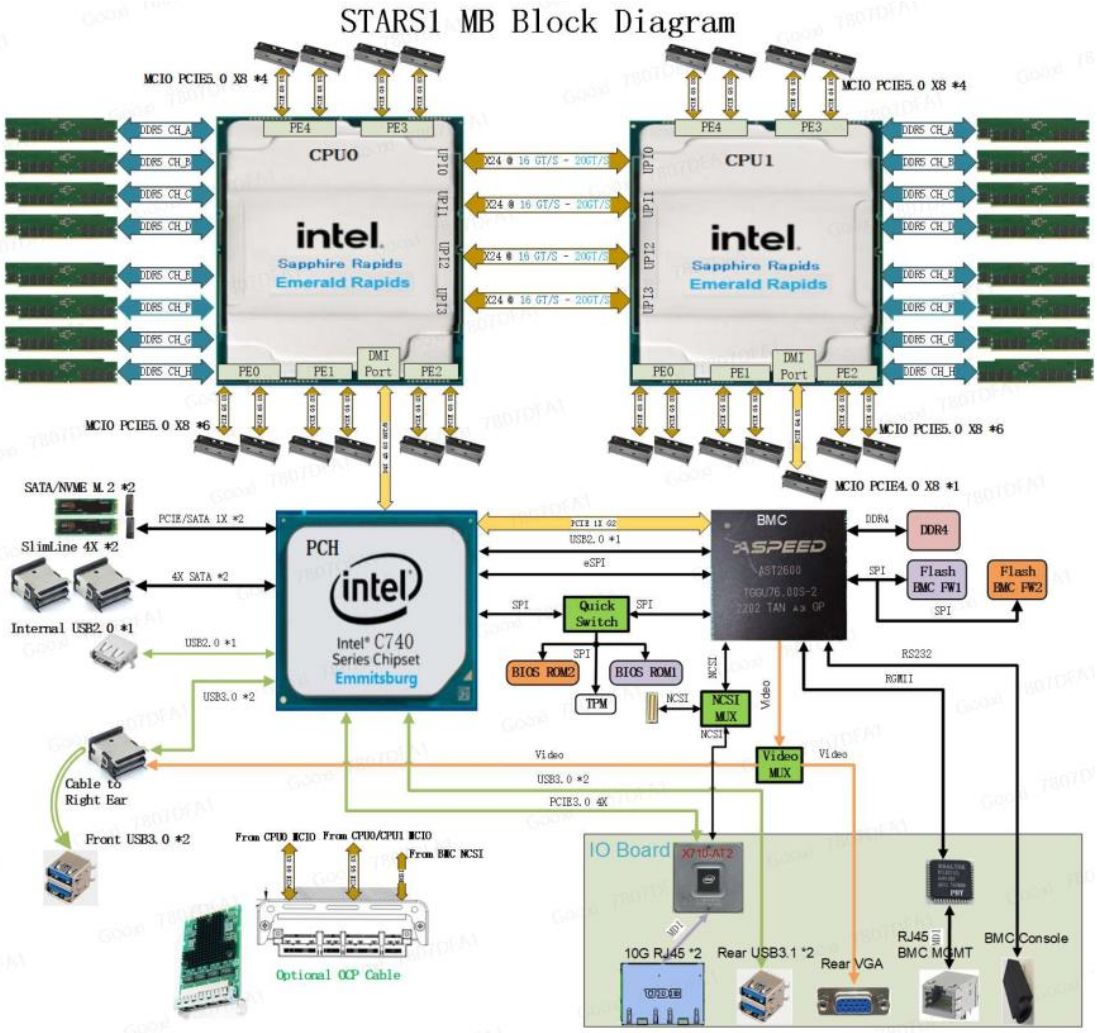
Structure diagram 1-3

No.	Name	No.	Name
1	Front Top Cover	9	Expansion Board
2	Top Cover	10	Backplane
3	Network Card	11	6056 Fan Module
4	GPU	12	8038 Fan Module
5	Front Hard Drive Module	13	Motherboard
6	Chassis	14	Power Supply
7	Rear IO Module	15	Fan Board
8	GPU Power Board	16	Air Duct

Table 1-1

1.3 Logical Structure

The logic of the SY6108G-G4 server is as shown in the following diagram:



Motherboard logic block diagram 1-4

- Supports 1 or 2 Intel® Xeon® Scalable Processors from 4th/5th generation (Sapphire Rapids/Emerald Rapids), LGA4677 socket, with a TDP of up to 350W.。
- Each CPU supports 8 DDR5 channels, with 2 DIMMs per channel, for a total of 32 slots across two CPUs. It supports memory capacities of 16GB, 32GB, and 64GB, with frequencies up to 4400/4800/5600 MHz.
- Supports 13 PCIe expansion slots for GPU cards, network cards, RAID cards, etc.
- 8 SATA 3.0 ports (2* Slimline 4X Connector).
- 12 hot-swappable 3.5"/2.5" SAS/SATA/NVMe drives.
- Supports 2 M.2 (compatible with SATA & PCIe 3.0 1X).
- Optional rear I/O board with two 10G RJ45 ports (X710 chipset), with an option

for an OCP 3.0 network card.

- Intel Lewisburg C741 series chipset for PCH.
- BMC uses the ASPEED AST2600 chip, supporting IPMI remote management.

1.4 Product Specifications

Product Series	SY6108G-G4
Form Factor	6U 12-bay
Dimension	265mm (H) x 447mm (W) x 910mm (D)
Processor	Supports 1 or 2 fourth/fifth-generation Intel® Xeon® Scalable processors, up to 350W TDP
Memory	32 DDR5 slots, supporting DDR5 RDIMM 4400/4800/5600MHz; single module capacities of 16GB, 32GB, and 64GB
Internal Storage Interface	2 Slimline 4x ports (SATA), 2 M.2 slots (2280/22110) (SATA/PCIe 3.0 x1)
Front Hard Drive	12 hot-swappable 3.5"/2.5" SAS/SATA/NVMe bays
External Ports	Front: 2 USB 3.0, 1 VGA
	1 serial port, 2 USB 3.0, 1 VGA, 1 RJ45 management port, optional 2x 10G RJ45
PCIe Expansion	Up to 13 PCIe slots
Power Supply	3+1 redundancy (2000W/2200W/2600W/3200W)
Fan	12 hot-swappable 6056 fans, 4*8038 N+1 redundant fans as standard configuration
Security	Supports TPM 2.0 module, chassis intrusion alarm, BMC/BIOS redundancy
Certification	CE, FCC, CQC
RoHS	Compliant with RoHS 2.0
Working Temperature& Humidity	Temperature: 5℃ to 35℃ / Humidity: 30% to 80%
Storage Temperature& Humidity	Temperature: -40℃ to +70℃ / Humidity: 20% to 90% (including packaging)

Table 1-2

2. Hardware Description

2.1 Front Panel

2.1.1 Appearance

- 12x3.5-inch hard drive configuration

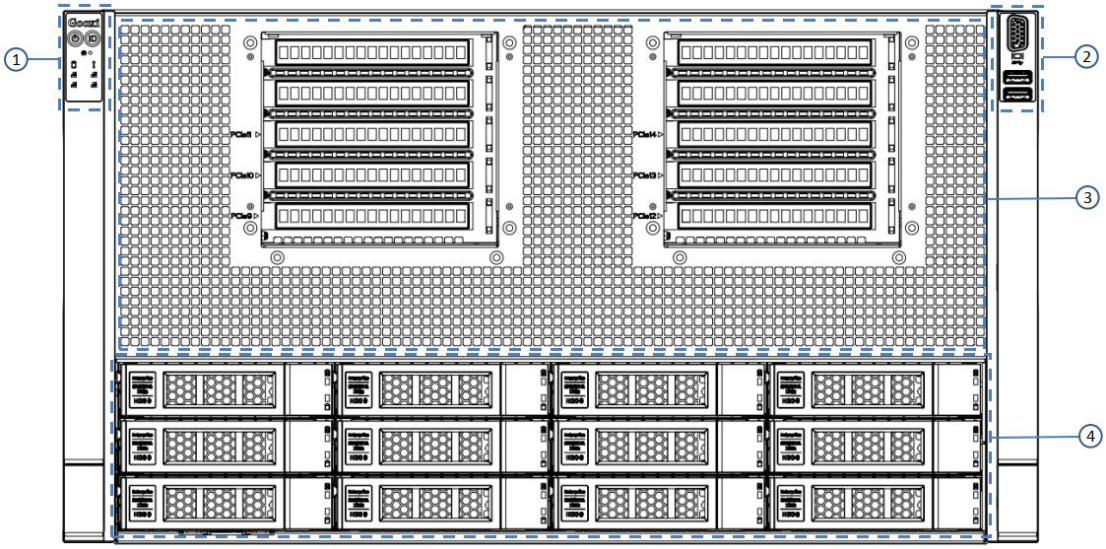


Figure 2-1

No.	Name	No.	Name
1	Left Ear Integrated Assembly	2	Right Ear Integrated Assembly
3	Front PCIe Panel	4	Hard Drive Module

Table 2-1

2.1.2 Indicator lights and buttons

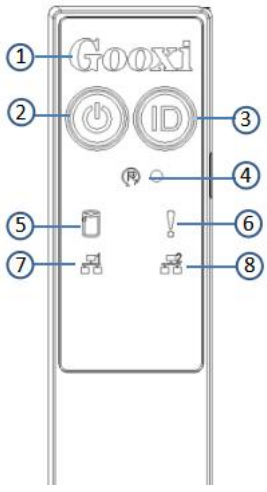


Figure 2-2

No.	Indicator light/button	No.	Indicator light/button
1	GOOXI Logo	5	M.2 Hard Drive Activity Indicator
2	Power On/Off Button/Indicator	6	System Alarm Indicator
3	UID Button/Indicator	7	Network port 1 connection status indicator light
4	Reset Server Button	8	Network port 2 connection status indicator light

LED status description		
Logo	Indicator light/button	Status description
Gooxi		Gooxi logo
	Power Indicator	Description of the power indicator light: Green (steady on): Indicates that the device has been powered on normally. Green (blinking): Indicates that the device is in standby. Green off: Indicates that the device is not powered on. Power button description: Press the button shortly in the power-on state, and the OS will shut down normally. Press and hold the button for 6 seconds in the power-on state to force the server to power off. Press the button shortly in the power-on state to start the machine.
	UID button/indicator	The UID button/indicator is used to conveniently locate the server to be operated, and the indicator can be turned off or on by manually pressing the UID button or remotely controlling the BMC command. Description of UID indicator light: Blue (steady on/blinking): Indicates that the server is located. Off: Indicates that the server is not located. UID button description: Short press this button to turn on/off the positioning light.
	Reset server button	Press to restart the server
	Hard drive indicator	If there is data read or write activity on the PCH, the hard drive indicator will blink.
	System Alarm Indicator	System warning indicator. Including system alarms, fan alarms, power supply alarms, etc., which can be viewed through the IPMI management software
	Network port 1 connection status indicator light	Indicator lights for Ethernet Port 1: Green (steady on): Indicates normal network port connection. Off: Indicates the network port is not in use or is faulty. Explanation: Corresponds to the two network ports on the motherboard.

	Network port 2 connection status indicator light	Indicator lights for Ethernet Port 2: Green (steady on): Indicates normal network port connection. Off: Indicates the network port is not in use or is faulty. Explanation: Corresponds to the two network ports on the motherboard.

Table 2-2

2.1.3 Interface

- Interface location

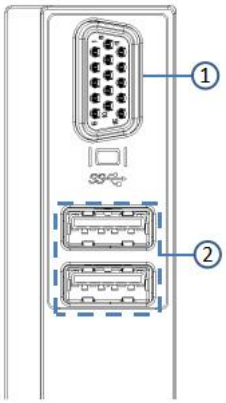


Figure 2-3

No.	Name	No.	Name
1	VGA interface	2	USB 3.0 interface

Table 2-3

- Interface description

Name	Type	Qty	Description
VGA interface	DB15	1	Used for connecting display terminals, such as monitors or KVM
USB interface	USB3.0	2	For accessing USB devices

Table 2-4

2.2 Rear Panel

2.2.1 Appearance

- Appearance of the rear panel

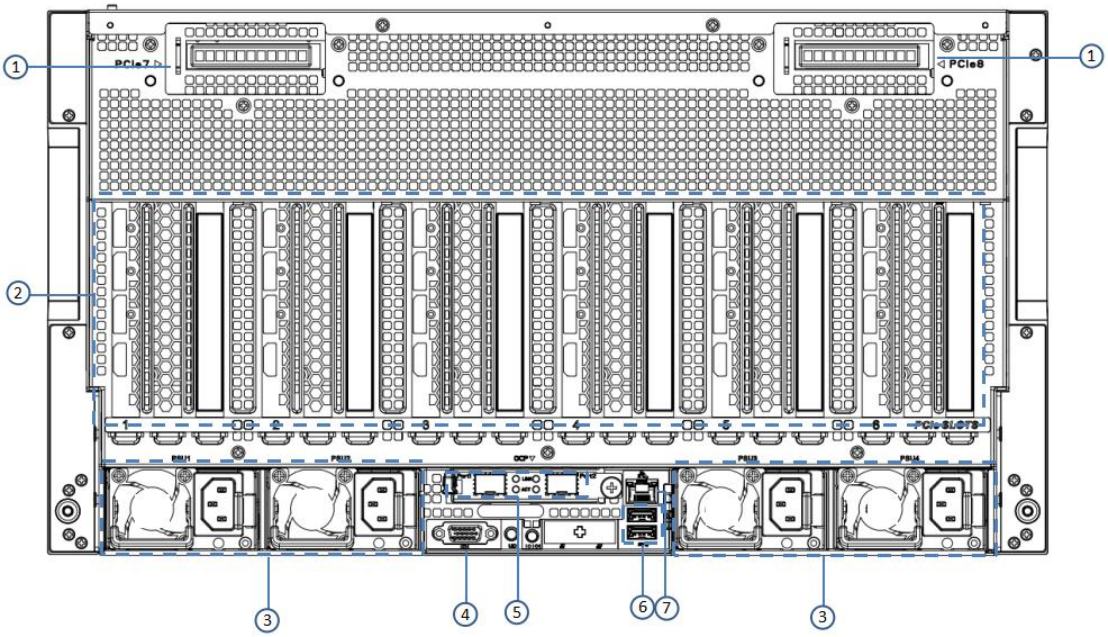


Figure 2-4

No.	Name	No.	Name
1	PCIe Module	5	IO Module
2	PCIe Rear Window	6	USB 3.0 Port
3	Power Module	7	Management Network Port
4	VGA	8	

Table 2-5

Note:

- The rear window of this product can be customized according to requirements. The image above is for reference only, and the actual configuration may vary.
- Rear panel interface description

Name	Type	Qty	Description
VGA Interface	DB15	1	Used to connect display terminals, such as monitors or KVM.
Management Network Port	GE BASE-T	1	Provides an external 1000Mbit/s Ethernet port. This interface allows for server management.
USB Interface	USB 3.0	2	Provides external USB ports for connecting USB devices. Note: When using external USB devices, please ensure that the USB device is in good condition to prevent server malfunctions.

Table 2-6

2.2.2 Indicator lights and buttons

- Rear Panel Indicators

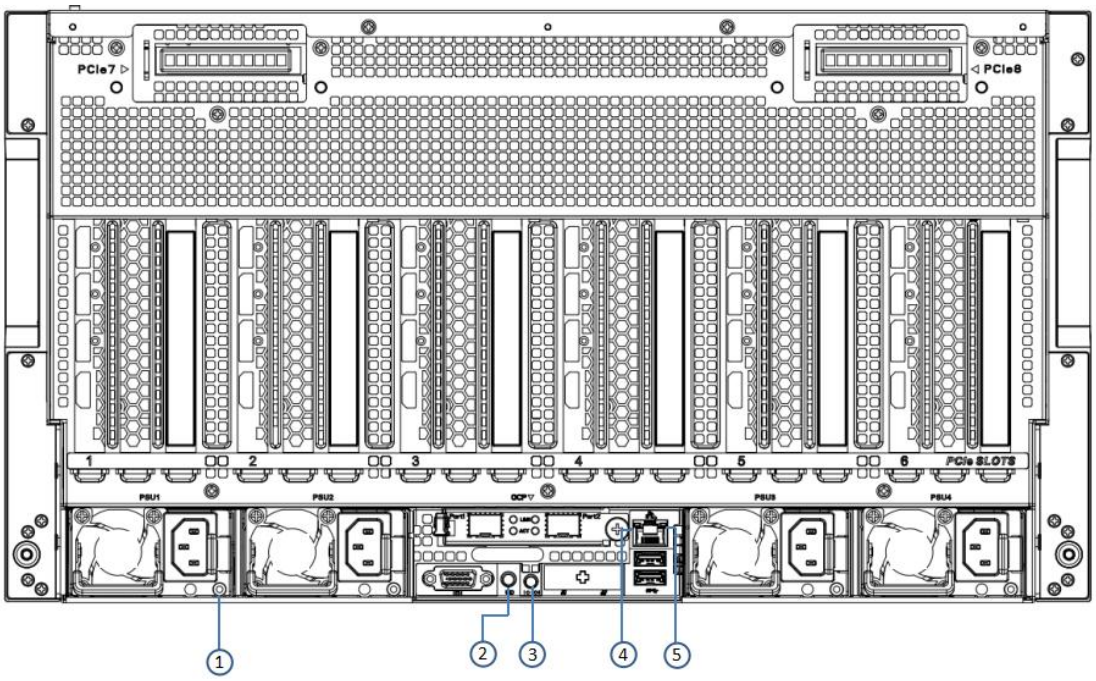


Figure 2-5

No.	Name	No.	Name
1	Power Module Indicator Light	4	Management Network Port Connection Status Indicator
2	UID Button	5	Management Network Port Data Transmission Status Indicator
3	COM Port	6	

Table 2-7

- Description of Power Module Indicators

Indicator light/button	Status description
Power module indicator	Green (steady on): Indicates that the input and output are normal. Orange (steady on): Indicates that the AC power cord is unplugged or the power module is missing, and only one parallel-connected power module has AC input; the power module failure causes the output to be turned off, such as OVP, OCP, fan failure, etc. Green (1Hz/blinking): Indicates that the input is normal, the voltage is too low (less than 12V) or the power supply is in the intelligent standby mode. Green (2Hz/blinking): Indicates the firmware is undergoing online upgrade. Orange (1Hz/blinking): Indicates continuous power warning events during power operation, such as high temperature, high power, or large current. Off: Indicates no AC power input.

Connection status indicator light	Solid green: Indicates a gigabit link. Solid orange: Indicates a hundred-megabit link. Off: Indicates a ten-megabit link.
Data transmission status indicator light	Yellow(blinking): Indicates data transmission. Off: Indicates no data transmission.
UID button	UID button controls on the server.
COM port	Serial communication port.

Table 2-8

2.3 Processor

- Supports 1 or 2 Intel Xeon Scalable CPUs.
- When configuring with 1 processor, it must be installed in the CPU 0 position.
- Processors installed in the same server must have the same model.
- For specific optional system components, please consult Gooxi sales.
- Processor positions are as shown in the diagram below:

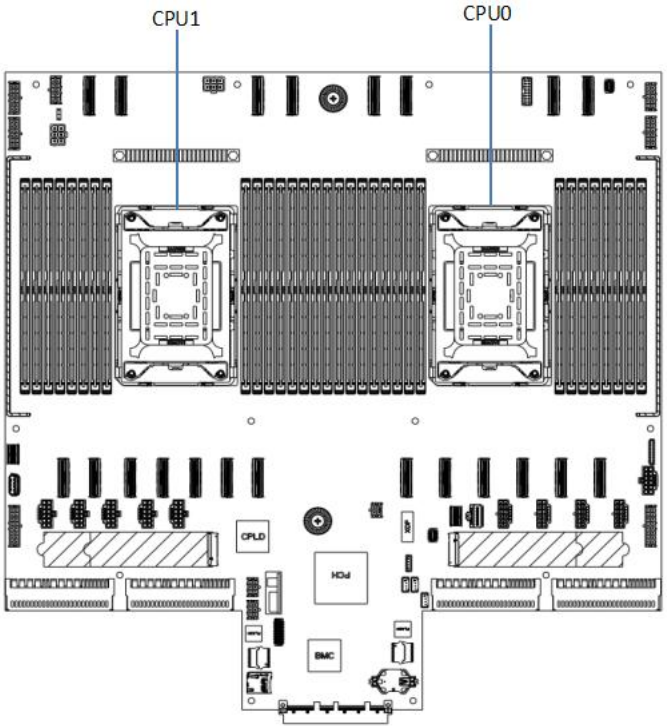


Figure 2-6

2.4 Memory

2.4.1 Memory slot location

This motherboard adopts Eagle Stream platform and is equipped with Intel® Xeon® Sapphire Rapids/Emerald Rapids CPU. Each CPU supports 8 DDR5 channels, each channel supports 2 DIMMs, two CPUs support 32 slots in total, and the memory frequency supports 4400/4800/5600MHz; the location is shown in the figure below:

- memory slot location

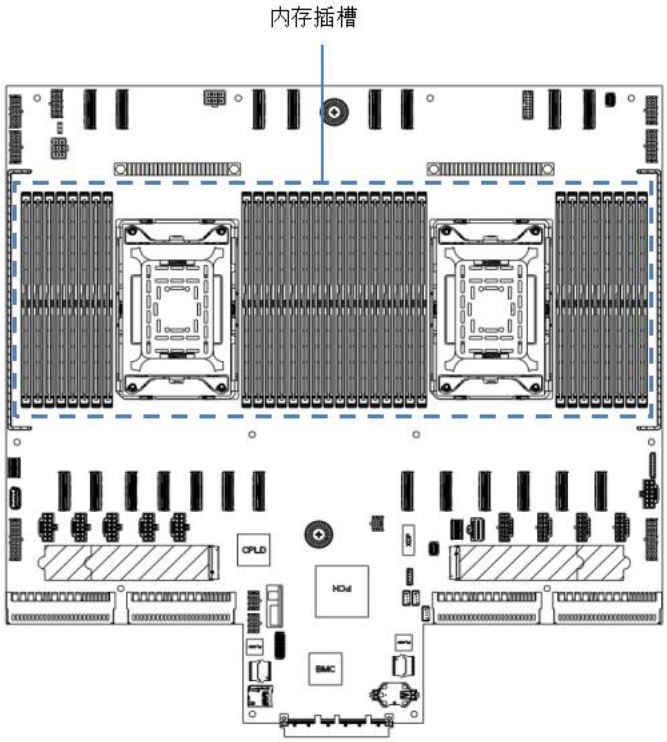


Figure 2-7

2.4.2 Memory Compatibility Information

Note:

- The same server must use the same model of DDR5 memory, and all memory modules must operate at the same speed. The speed value is the minimum of the following:
- The memory speed supported by the specific CPU.
- The maximum operating speed of the specific memory configuration.
- DDR5 memory of different types (RDIMM, LRDIMM) and specifications (capacity, width, rank, height, etc.) cannot be mixed.
- Different models of Intel® Xeon® Scalable processors support different maximum memory capacities.

2.4.3 Memory installation guidelines

The server can accommodate up to 32 DDR5 memory modules. Memory configuration must adhere to the principles of memory installation.

DDR5 QTY	内存槽位																	
	DIMMH0	DIMMH1	DIMMG0	DIMMG1	DIMMF0	DIMMF1	DIMME0	DIMME1		DIMMA1	DIMMA0	DIMMB1	DIMMB0	DIMMC1	DIMMC0	DIMMD1	DIMMD0
1											DDR5						
							DDR5										
													DDR5				
					DDR5												
2			DDR5								DDR5						
							DDR5								DDR5		
4			DDR5				DDR5				DDR5				DDR5		
6			DDR5		DDR5		DDR5				DDR5				DDR5		DDR5
	DDR5		DDR5				DDR5		CPU0/1		DDR5		DDR5		DDR5		
	DDR5				DDR5		DDR5						DDR5		DDR5		DDR5
	DDR5		DDR5		DDR5						DDR5		DDR5				DDR5
8	DDR5		DDR5		DDR5		DDR5				DDR5		DDR5		DDR5		DDR5
12	DDR5		DDR5	DDR5	DDR5		DDR5	DDR5		DDR5	DDR5		DDR5	DDR5	DDR5		DDR5
	DDR5	DDR5	DDR5		DDR5	DDR5	DDR5				DDR5	DDR5	DDR5		DDR5	DDR5	DDR5
16	DDR5	DDR5	DDR5	DDR5	DDR5	DDR5	DDR5	DDR5		DDR5	DDR5	DDR5	DDR5	DDR5	DDR5	DDR5	DDR5

Figure 2-8

2.5 Storage

2.5.1 Hard drive configuration

Configuration	4U 12-bay	Description
Maximum Front Hard Drive Quantity	12 hot-swappable 3.5/2.5-inch SAS/SATA/NVMe hard drives	SAS hard drives require an optional SAS passthrough card or RAID card for support

Table 2-9

2.5.2 Hard drive serial number

- 12x3.5-inch hard drive configuration

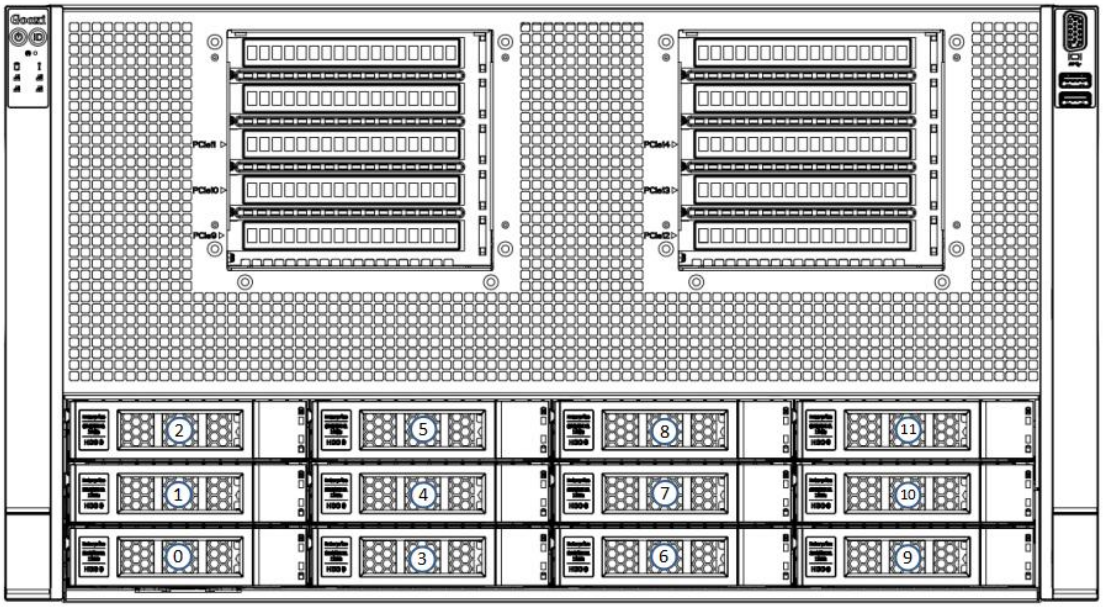


Figure 2-9

2.5.3 Hard drive status indicator

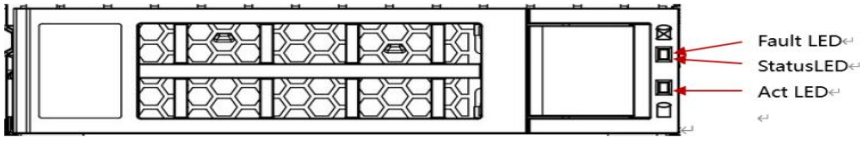


Figure 2-10

- Hard drive status indicator description

Function	Act LED	Status LED	Fault LED
Hard drive in place	Steady on	OFF	OFF
Hard drive activity	Blinking at 4Hz/second	OFF	OFF
Hard drive positioning	Steady on	Blinking 4Hz/second	OFF
Hard drive error	Steady on	OFF	Steady on
RAID rebuild	Steady on	OFF	Blinking 1Hz/second

Table 2-10

2.6 Power Supply

- Supports 4 power modules.
- Supports AC or DC power modules.
- Supports hot-swap.
- When configuring 4 power modules, supports 3+1 or 2+2 redundant backup.
- Power modules in the same server must have the same model.
- For specific optional system accessories, please consult Gooxi sales.
- The power module locations are as shown in the following diagram:

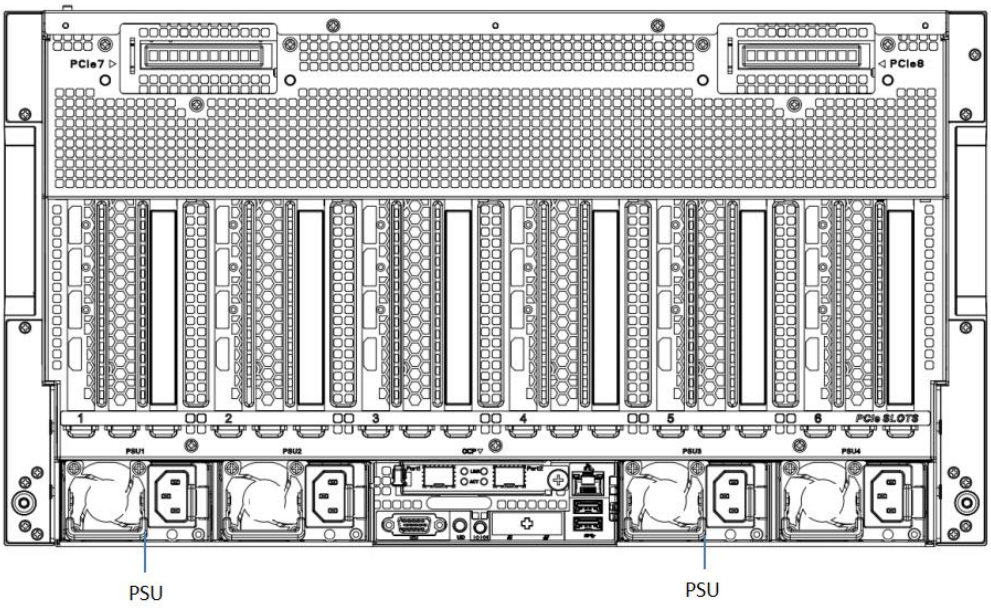


Figure 2-11

⚠ The device is equipped with two identical specification hot-swappable power modules, both of which must be powered simultaneously for the product to function properly.

2.7 Fans

- The chassis supports 20 fan modules internally.
- Supports hot swapping.
- Supports operation with a single fan failure.
- Supports variable fan speeds.
- Fan modules in the same server must have the same model.
- The fan positions are as shown in the following diagram:

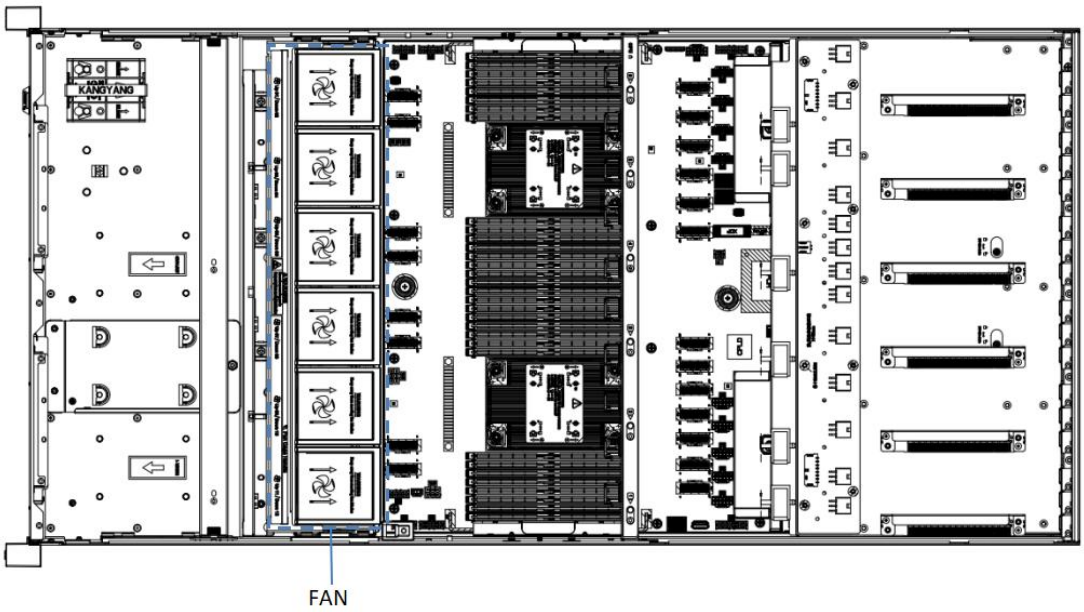
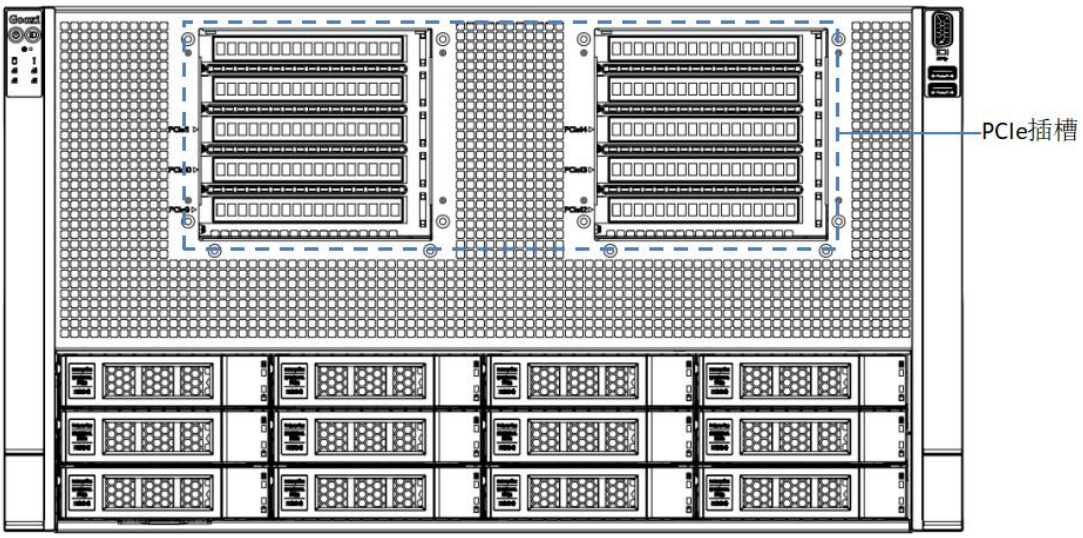


Figure 2-12

2.8 I/O Expansion

2.8.1 PCIe slot location



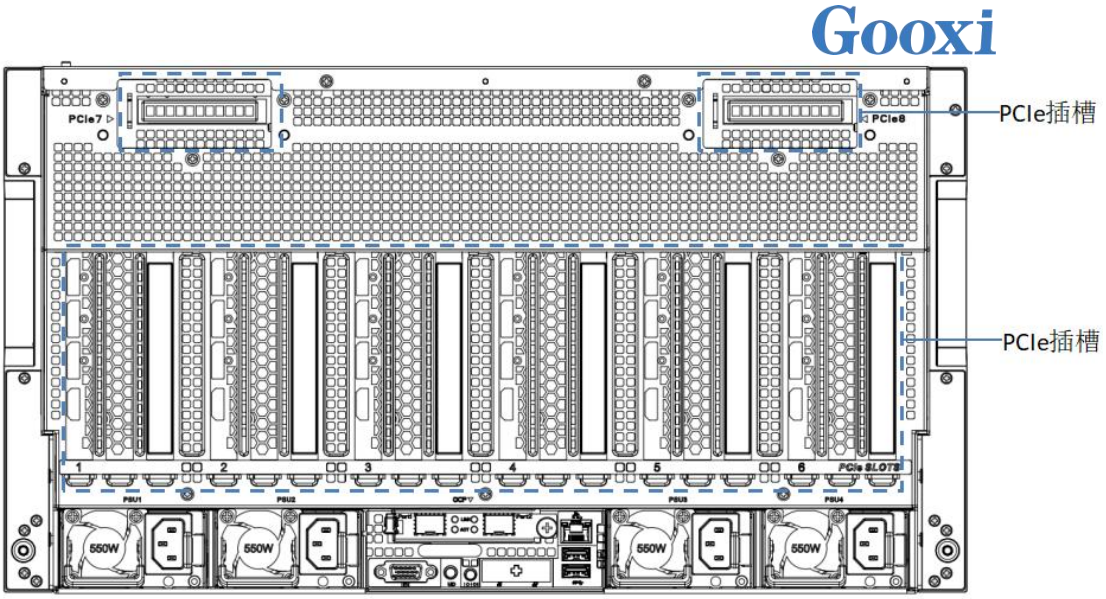


Figure 2-13

- Supports up to 13 PCIe slots at both the front and rear (with PCIe signal limitations). PCIe1~PCIe6, PCIe10, and PCIe13 support 3.5-width GPUs, and are backward compatible with triple-width, dual-width, and single-width GPUs. PCIe7, PCIe8, PCIe9, and PCIe12 slots support single-width PCIe cards.

2.8.2 PCIe slot description

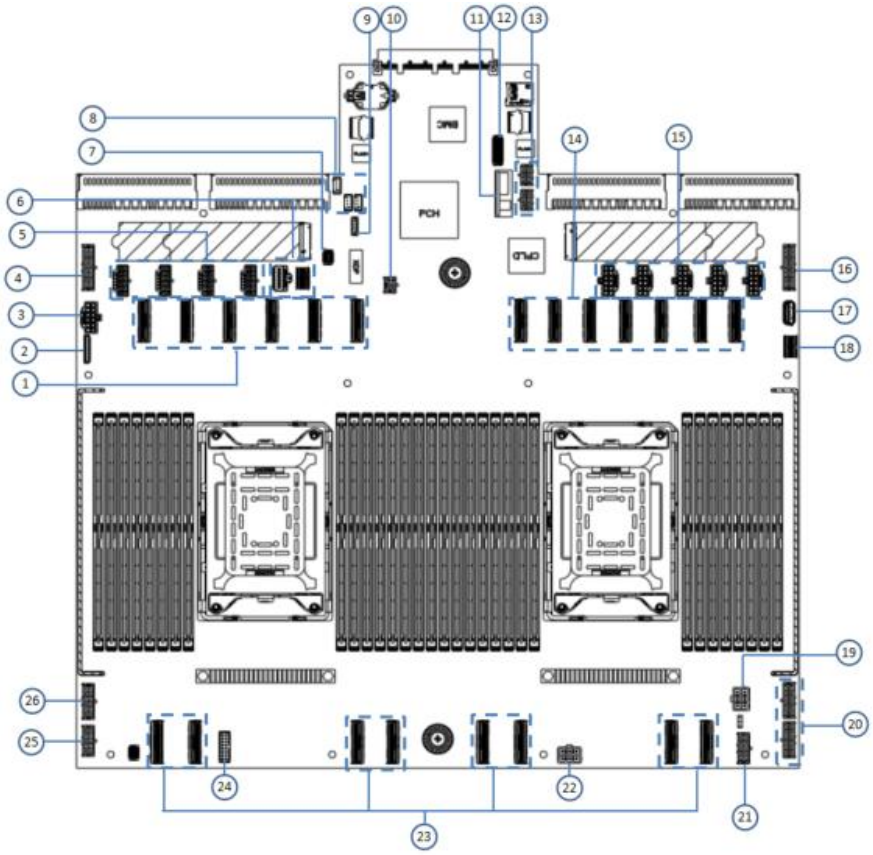
PCIe slot	Subordinate CPU	PCIe standard	Bus bandwidth	Slot size
PCIe 1	CPU1	PCIe 5.0	X16	FHFL
PCIe 2	CPU1	PCIe 5.0	X16	FHFL
PCIe 3	CPU1	PCIe 5.0	X16	FHFL
PCIe 4	CPU0	PCIe 5.0	X16	FHFL
PCIe 5	CPU0	PCIe 5.0	X16	FHFL
PCIe 6	CPU0	PCIe 5.0	X16	FHFL
PCIe 7	CPU1	PCIe 5.0	X8	FHFL
PCIe 8	CPU0	PCIe 5.0	X8	FHFL
PCIe 9	CPU0	PCIe 5.0	X8	FHFL
PCIe 10	CPU0	PCIe 5.0	X16	FHFL
PCIe 12	CPU1	PCIe 5.0	X8	FHFL
PCIe 13	CPU1	PCIe 5.0	X16	FHFL
Note: ◆PCIe x16 slots have backward compatibility with PCIe x8, PCIe x4, PCIe x1 PCIe cards. However, they are not compatible in the upward direction. This means the bandwidth of the PCIe slot cannot be smaller than the bandwidth of the inserted PCIe card. ◆Half-height, half-length PCIe slots are backward compatible with half-height,				

half-length PCIe cards. ◆The power supply capability of all slots can support PCIe cards with a maximum power of 75W. The power of PCIe cards depends on the model of the PCIe card.

Table 2-11

2.9 PCBA

2.9.1 Motherboard



Motherboard Figure 2-14

No.	Name
1、14、23	PCIE 5.0 MCIO connector
2	Left ear board connector
3、5、15	GPU power connector
4、16	Switch board P12V power connector
6	SLIM X4 SATA3.0 connector
7	GPIO RSV
8	I2C connector
9	RAID KEY
10	Switch board P12V_AUX power connector
11	TPM connector
12	NCSI connector
13	AUX power connector

17	USB3.0 connector
18	Right ear board connector
19、22	PCIE Riser card power connector
20、26	Front hard drive backplane power connector
21、25	Fan board power connector
24	Fan board data connector

Table 2-12

2.9.2 Hard drive backplane

- 12×3.5-inch Front Hard Drive Backplane

TOP surface

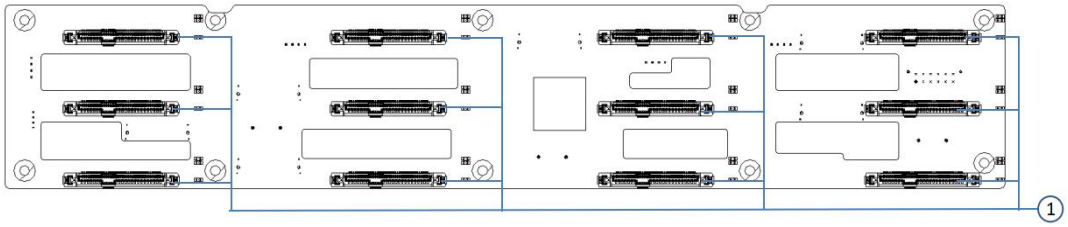


Figure 2-15

No.	Description	Function
1	SFF-8639 U.2 hard drive connector	Supports PCIe×4 and SAS/SATA U.2 interface, used to connect HDD/SSD/NVME

Table 2-13

Bottom surface

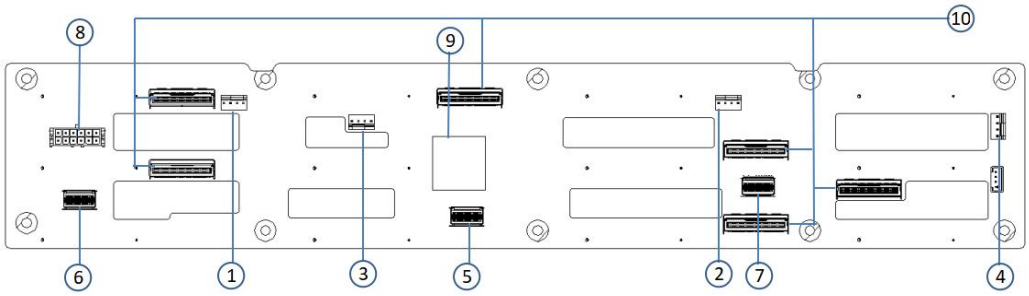


Figure 2-16

No.	Description	Function
1、2、3、4	Temperature-controlled fan socket	used for 4-pin fan interface
5、6、7	SFF-8654 Slimline connector	providing SAS/SATA×4 interfaces for connecting to PCH or HBA/RAID Card
8	Power connector	backplane power transmission connector used for transferring 12V power

9	CPLD chip	mainly used for indicator control of NVME SSD and SAS/SATA HDD
10	MCIO connector	providing PCIe×8 interface for connecting to CPU and NVME SSD

Table 2-14

3. Installation Instructions

3.1 Chassis Top Cover Installation

- Step 1: Lift the slot at the opening position, push and lift it in the direction indicated by the diagram.

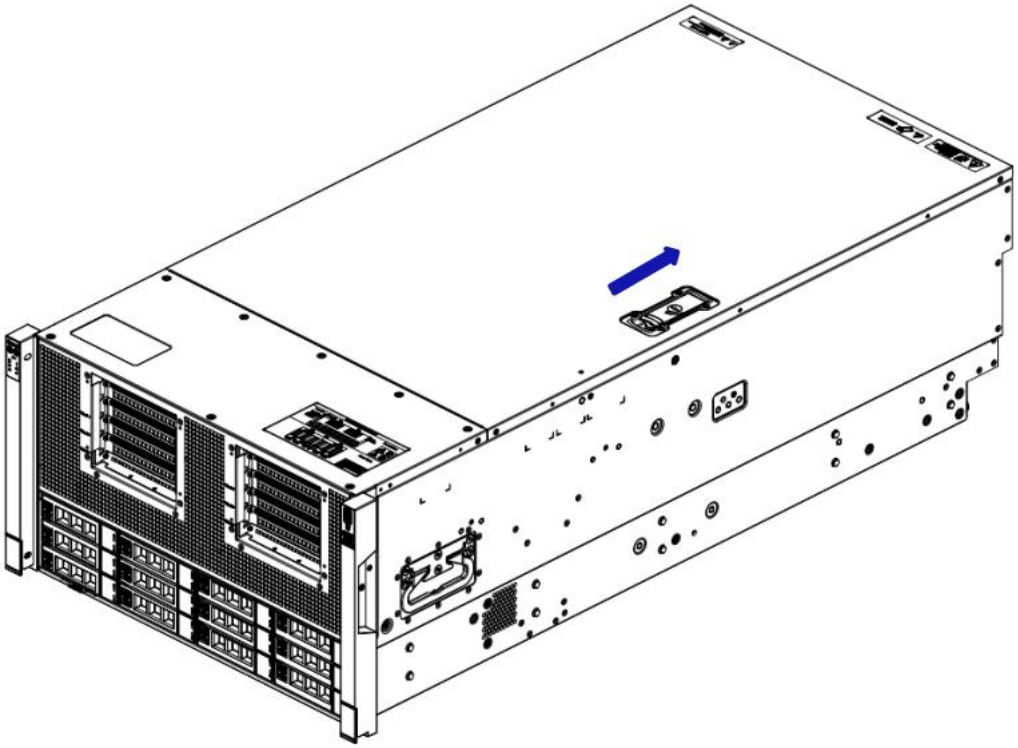


Figure 3-1

3.2 Installation of Accessories

3.2.1 CPU installation

- Step 1: Install the retention clip, tilt the CPU at the angle shown in the diagram, align corner A1 (triangular mark), secure it on one end of the retention clip, and press down on the other end to secure the CPU onto the retention clip.

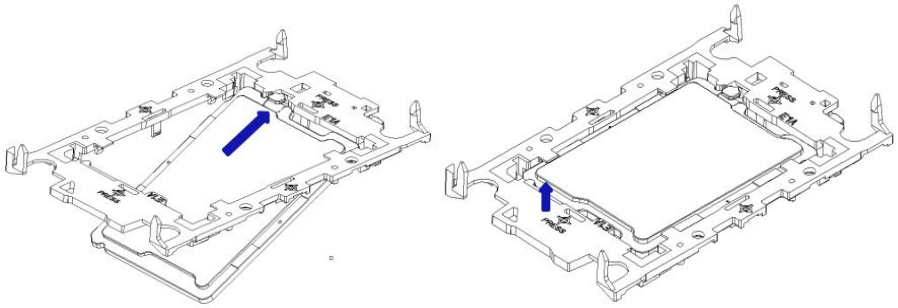


Figure 3-2

- Step 2: Install the CPU onto the heatsink, ensuring that both the CPU and heatsink surfaces are clean and free from oil or debris. Apply approximately 0.4ml of thermal grease evenly across the CPU surface.
- Step 3: Align corner A1 (triangular mark) and secure the CPU onto the heatsink. (As shown in the diagram below)

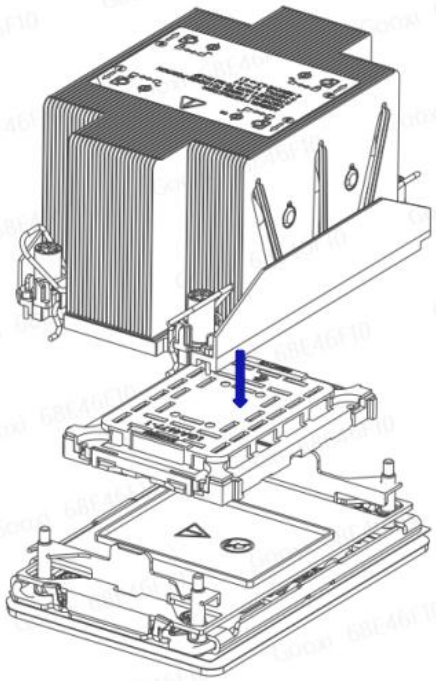


Figure 3-3

3.2.2 Heatsink installation

- Step 1: Remove the motherboard processor socket cover plate.

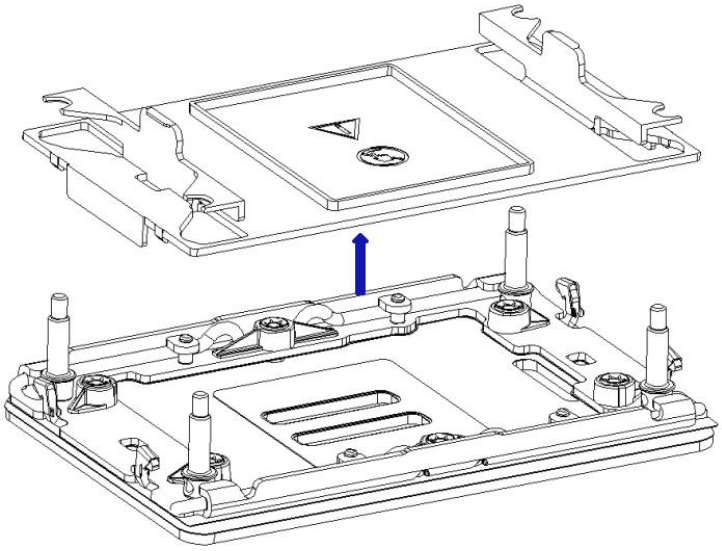


Figure 3-4

- Step 2: Install the CPU and heatsink onto the motherboard.
- Align the heatsink mounting screws on the heatsink base with the fixed screws on the CPU socket, and tighten the heatsink mounting screws in the indicated sequence. (As shown in the diagram below)

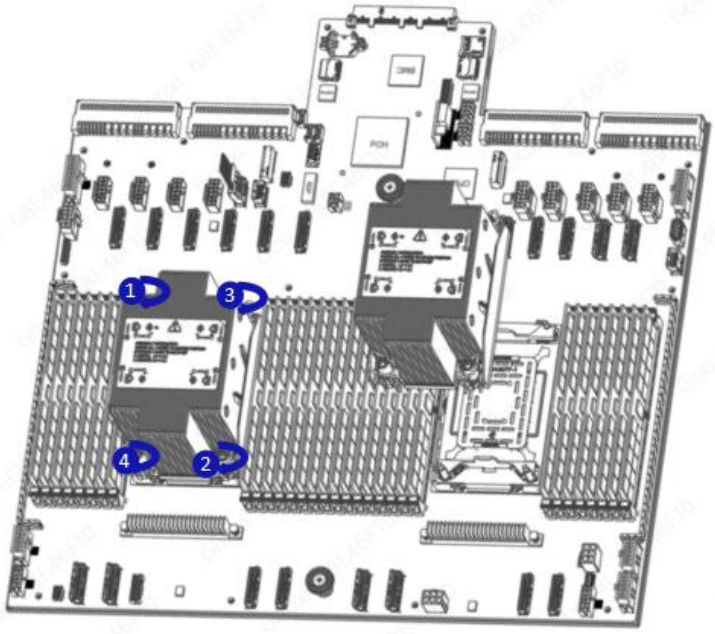


Figure 3-5

⚠ Note: The pins on the motherboard are very fragile and can easily be damaged. To prevent damage to the motherboard, do not touch the processor or the processor socket contacts.

3.2.3 Memory installation

The 16 memory slots controlled by CPU0 on the motherboard are:DIMM_A0、DIMM_A1、

DIMM_B0、DIMM_B1、DIMM_C0、DIMM_C1、DIMM_D0、DIMM_D1、DIMM_E0、DIMM_E1、DIMM_F0、DIMM_F1、DIMM_G0、DIMM_G1、DIMM_H0、DIMM_H1;

The 16 memory slots controlled by CPU1 on the motherboard are:DIMM_A0、DIMM_A1、DIMM_B0、DIMM_B1、DIMM_C0、DIMM_C1、DIMM_D0、DIMM_D1、DIMM_E0、DIMM_E1、DIMM_F0、DIMM_F1、DIMM_G0、DIMM_G1、DIMM_H0、DIMM_H1。

Please note that the memory notch should align with the notch on the DIMM slot. Insert each DIMM module vertically into place to prevent improper installation.

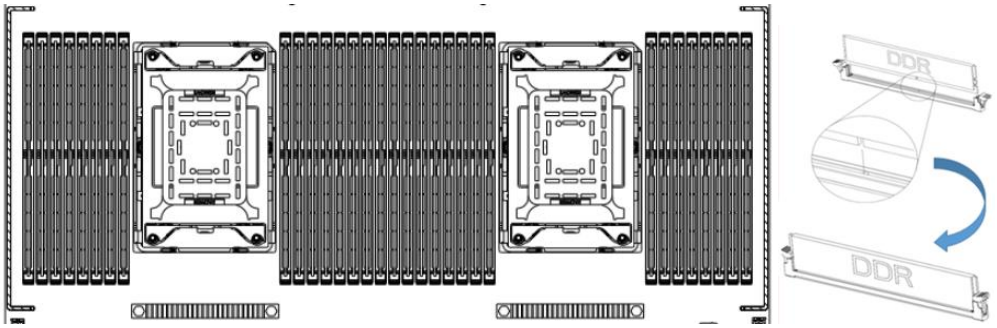


Figure 3-6

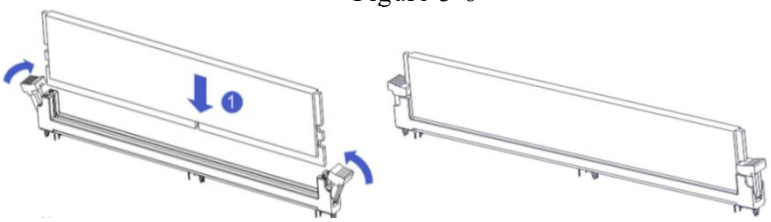


Figure 3-7

Note: Please use memory modules with the same CAS latency value on this motherboard. We recommend using memory modules of the same capacity, frequency, and manufacturer for optimal compatibility.

It is important to note that: In the same channel, memory modules with larger capacities must be installed in the first slot.

3.2.4 M.2 card installation

- Step 1: Install locating screw A according to the length of the M.2 card to be installed.
- Step 2: Install the M.2 card

Insert the connector end of the M.2 card into the motherboard connector, as shown in the diagram below:

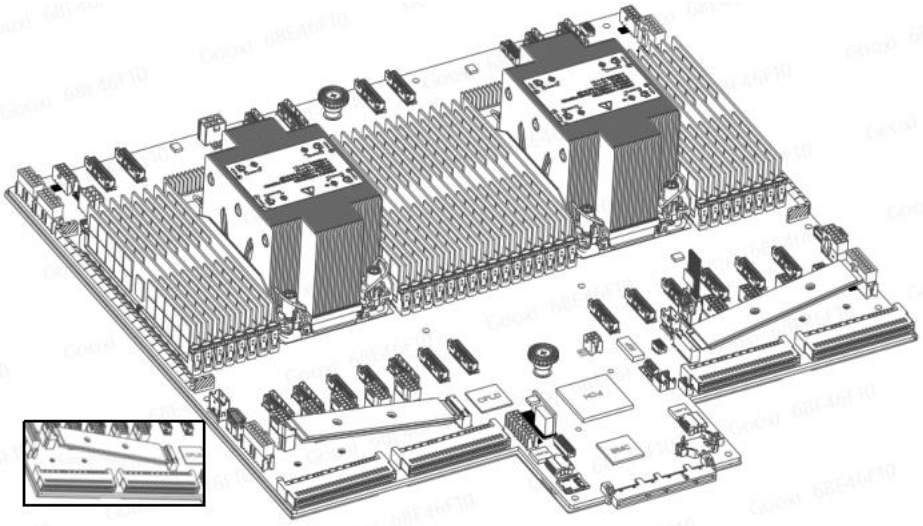


Figure 3-8

3.2.5 GPU card installation

- Step 1: Install according to the length of the GPU card to be installed.
- Step 2: Install the GPU card.

Insert the connector end of the GPU card into the motherboard connector, secure it with screws, as shown in the diagram below:

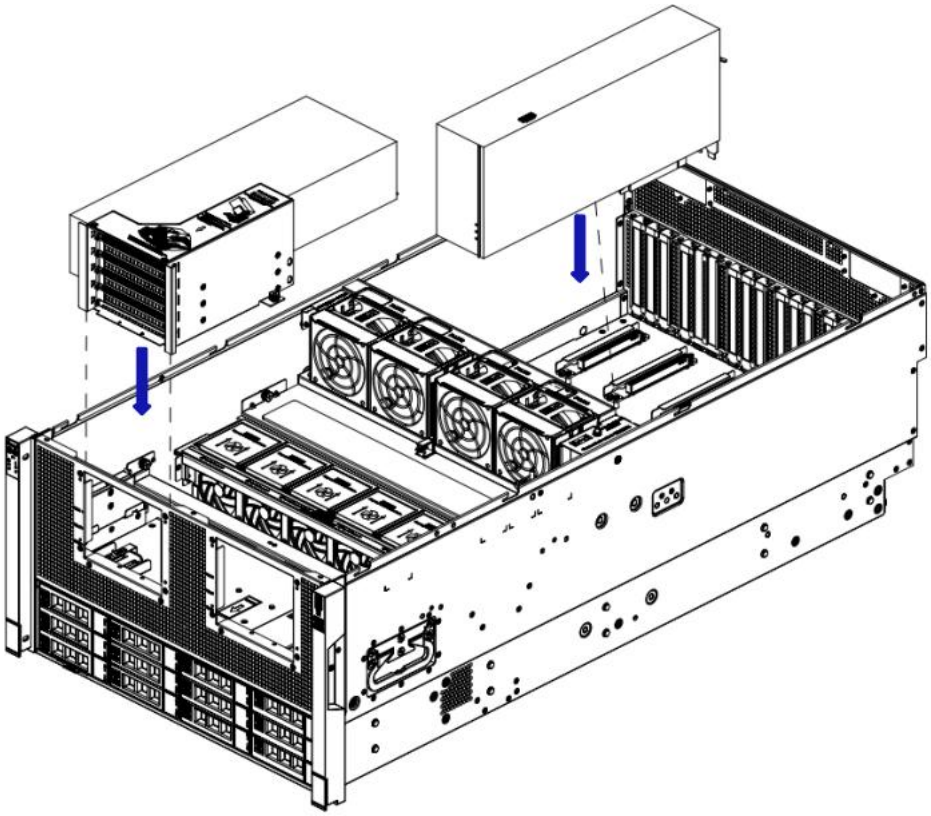


Figure 3-9

3.2.6 Server slide rail installation

- Step 1: Prepare two slide rails and pull out the inner rail.

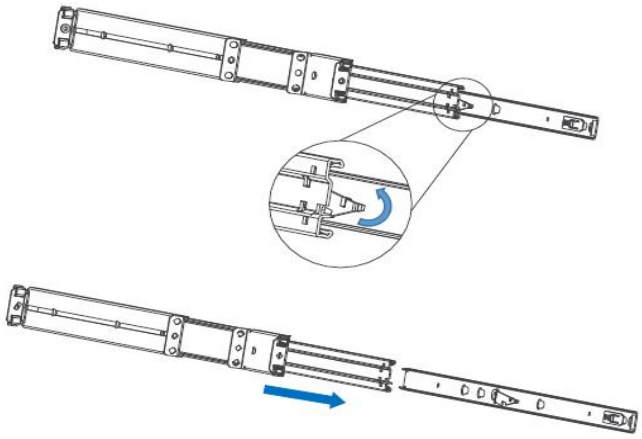


Figure 3-10

- Step 2: Fasten the inner rails to the sides of the chassis.

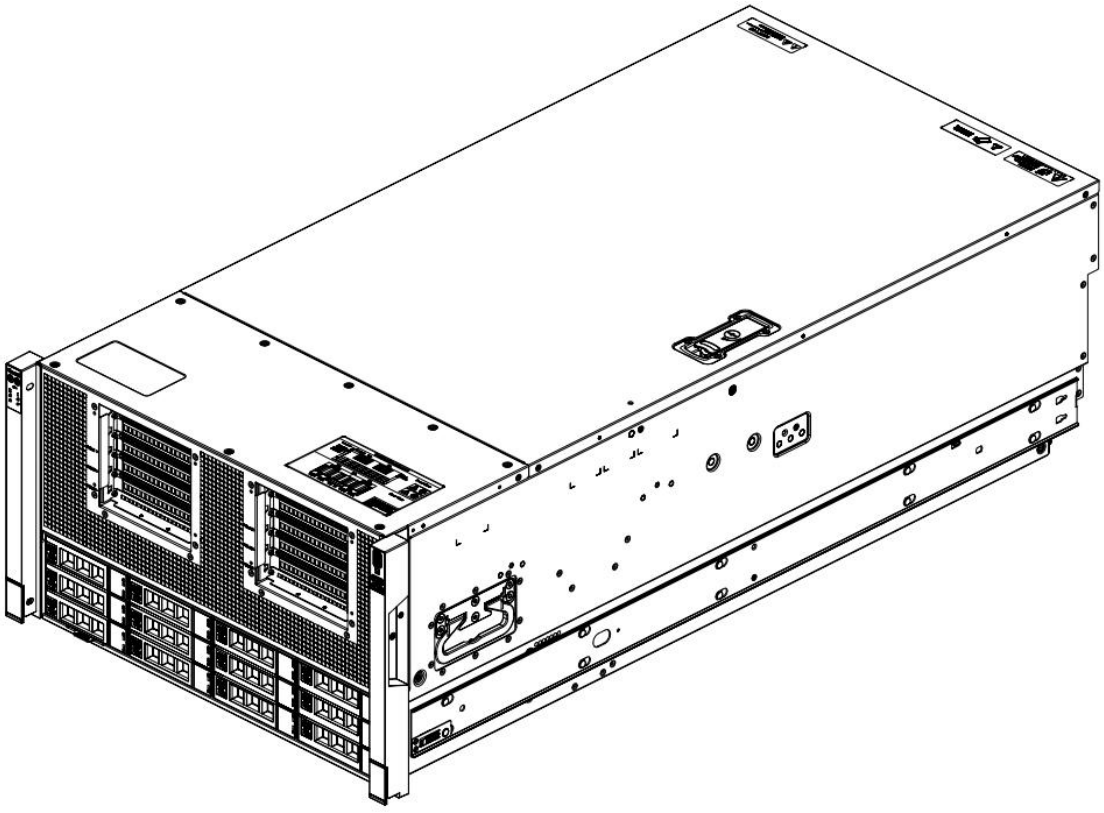


Figure 3-11

- Step 3: Install the outer rails on the cabinet brackets and secure the screws.

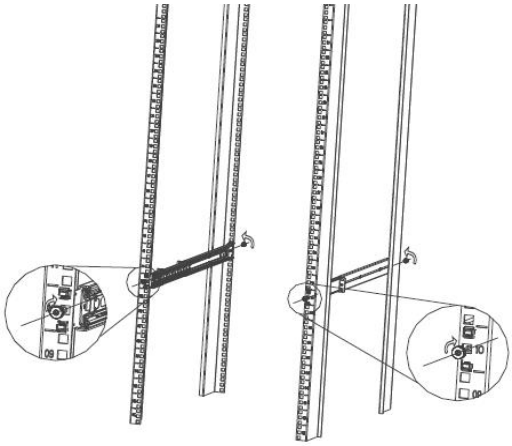


Figure 3-12

Note: When installing the guide rail, align it with the U-mark, and push it into place until you hear a click sound. Secure it firmly using M5 screws.

- Step 4: Align the chassis with the inner rails installed with the outer rails for installation.

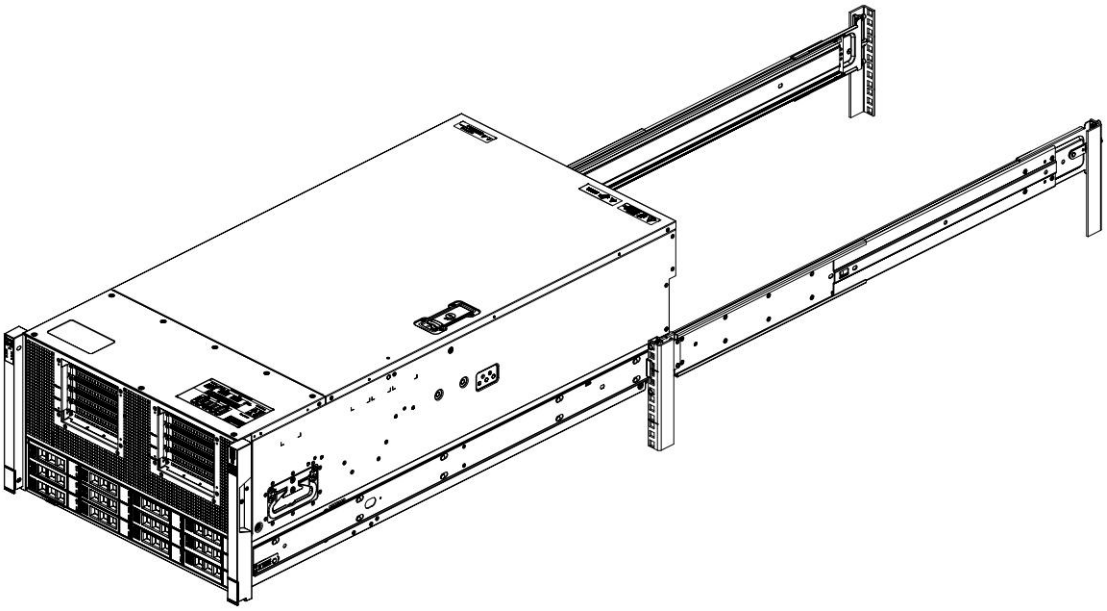


Figure 3-13

Note: When you push the chassis forward, you will hear a snapping sound. If you can't push it, you need to pull down the buckle of the inner rail to continue to push the chassis gently.

- Step 5: Push the chassis forward until it cannot slide and make sure that the screws are securely installed to complete the installation.

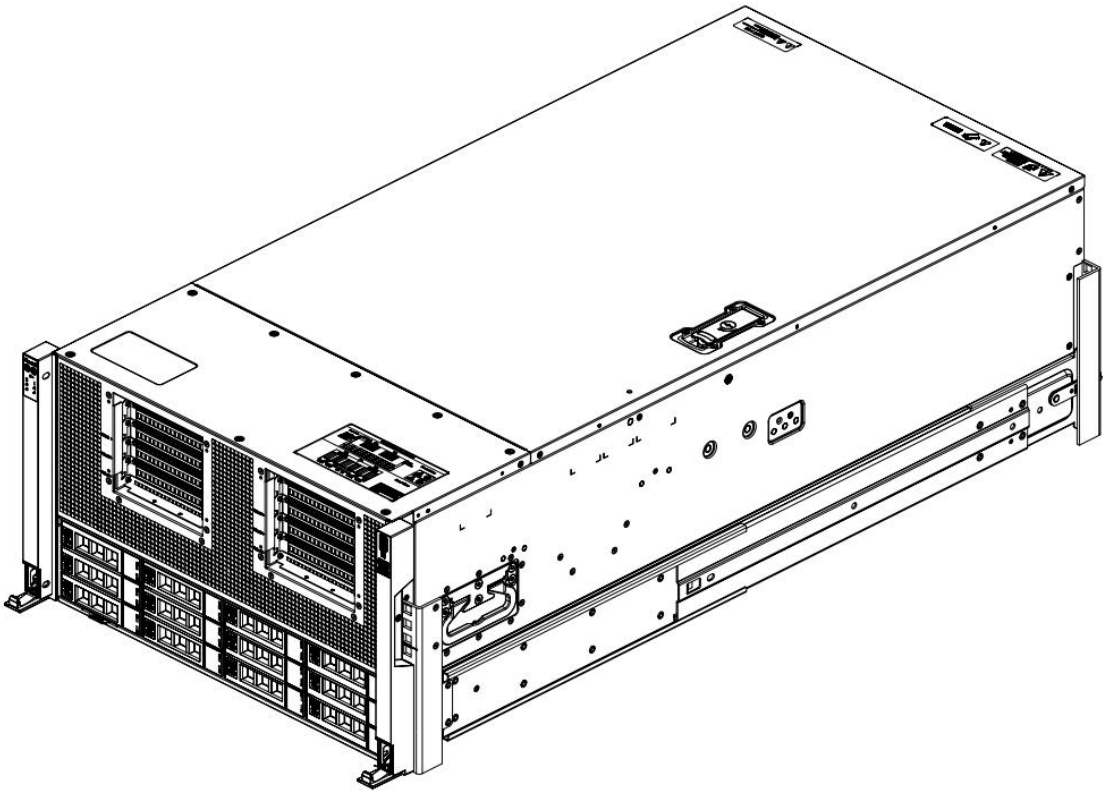


Figure 3-14

Note: During equipment maintenance, it is necessary to loosen the panel screws and pull the chassis lightly. Do not push or pull the chassis at random speed to avoid damage to the equipment.

4. Configuration Instructions

4.1 Initial Configuration

4.1.1 Power on and start

- Before powering on, it is necessary to ensure that all configurations of the server are installed in accordance with the corresponding specifications and standards, and keep the server turned off but not unplugged from the power supply. And all cables are connected properly, and the power supply voltage is consistent with that of the device.

- During the power-on process, please do not plug in hard drives, power modules, network cables or other external devices and cables.

- If the server has just been unplugged from the power supply, please wait for 1 minute before turning on the power.

- Server power-on power status:
  The power is on, but the server is not booting up. The power indicator light is yellow.
  Power on, the server starts up, and the power indicator light is green.

- How to power on the server:
  The server's default power-on policy is "Power-On Boot," which means the server will automatically power on when it receives power. Users can modify this setting in the BIOS Setup interface.

- Press the <DEL> or <ESC> key on the keyboard during the boot process to enter the BIOS Setup interface, and find the following interface:

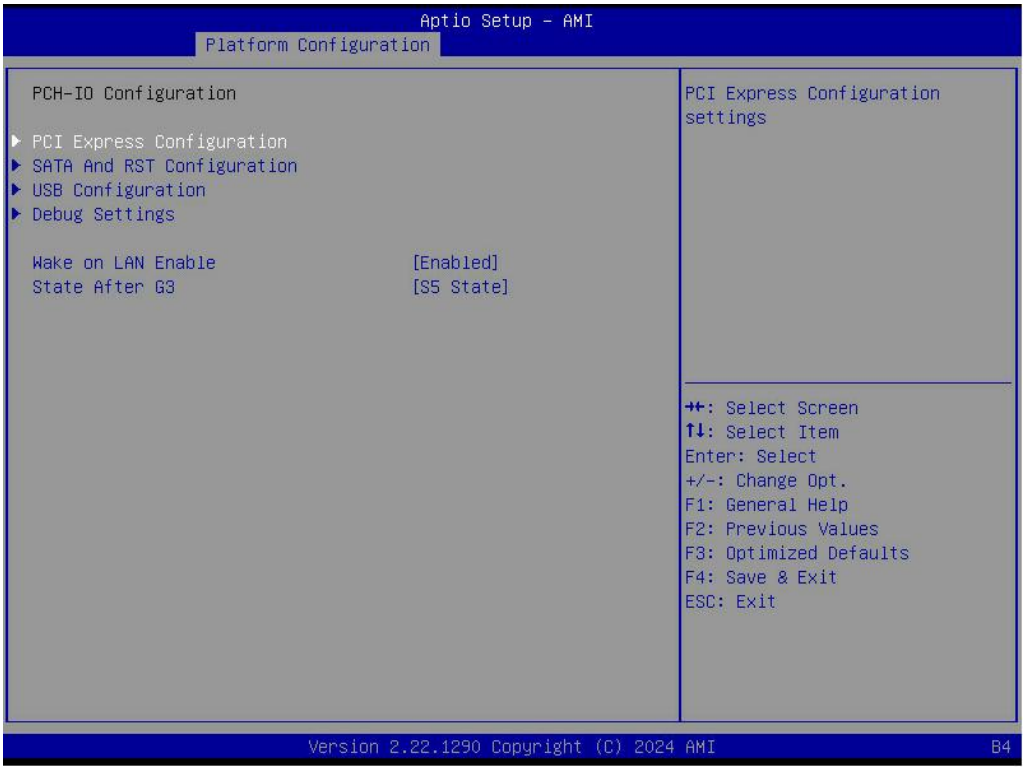


Figure 4-1

- State After G3

  The menu options for setting the state after entering G3 status are:

  S0 State：Power on and start up directly

  S5 State：You need to press the Power button to turn on the power

  Default: S5 State

- Log in to the iBMC management interface to perform remote power-on and power-off control.
- Enter the BMC IP address -> enter the BMC account&password -> find the remote control interface -> power controller -> It can be executed according to requirements.

Figure 4-2

For detailed usage of BMC and BIOS, please refer to the corresponding user manual.

4.1.2 Initial data

- BMC default account: admin
- BMC default password: Gooxi@123.
- BMC default address: 192.168.100.1
- BIOS Default Password: N/A

4.1.3 Configure BIOS

Press the <DEL> or <ESC> key on the keyboard during power-on and start-up to enter the BIOS Setup interface, as shown below:

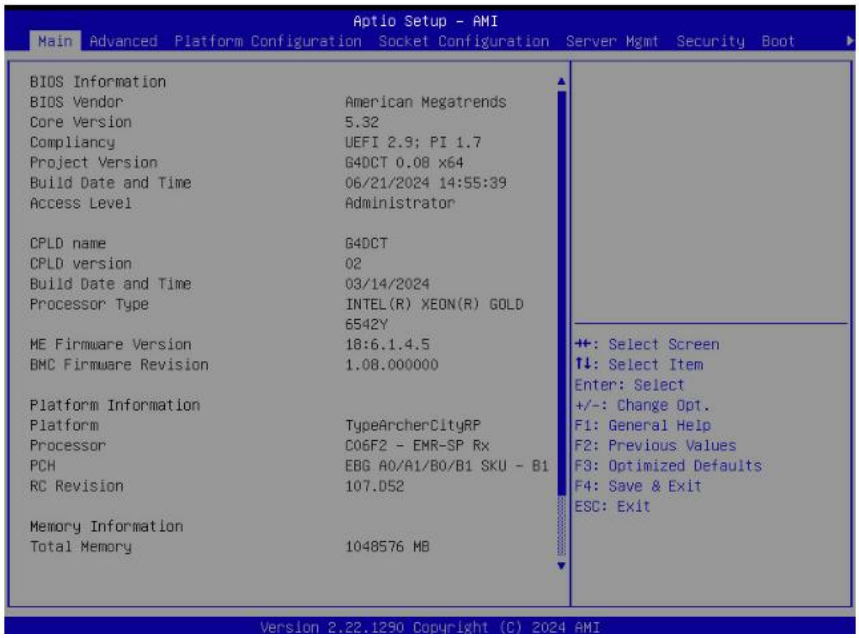


Figure 4-3

The Main interface contains the basic information of the BIOS system, such as the BIOS version number, CPU model, memory capacity, and the system time can be set. For detailed instructions, please refer to the "BIOS User Manual".

- Navigation key description:

→←: Select Screen

↑↓: Select Item

Enter: Select

+/-: Change Opt.

F1: General Help

F2: Previous Values

F3: Optimized Defaults

F4: Save & Reset

ESC: Exit

4.1.4 Configure BMC

When the server is powered on, make sure that the BMC dedicated management network port cable is properly connected.

Use another device, make sure it is in the same LAN as the BMC management network, and enter the BMC IP address on the web page.

Check the BMC IP address as follows:

- After the server is powered on, turn it on. Pay attention to the POST process when starting the server. In the lower left corner of the logo screen, the IP

address is displayed.

- After the server powers on, pay attention to the POST process. Press the <DEL> or <ESC> key on the keyboard to enter the BIOS Setup interface. Switch to the following screen:

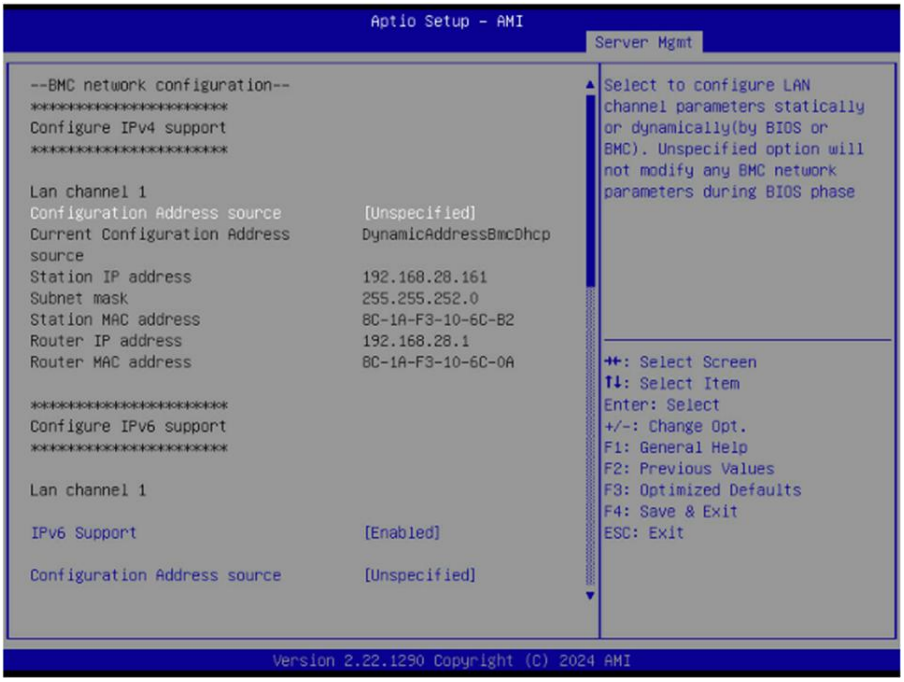


Figure 4-4

Configure IPV4 support：

- Configuration Address source
- Configure the BMC IP address allocation mode, the menu options are:

  Unspecified: Do not change BMC parameters

  Static: BIOS static IP setting

  DynamicBmcDhcp: BMC runs DHCP to dynamically assign IP

  DynamicBmcNonDhcp: BMC runs the Non-DHCP protocol to dynamically assign IP

  Default: Unspecified

When changing from "Unspecified" to other parameters, saving and rebooting will result in the options reverting to the "Unspecified" value. There is no need to configure the BMC IP during every startup process.

- When the "Configuration Address Source" option is set to "Unspecified," it will display the network parameters (IPv4) for the system's shared Ethernet port. The displayed information includes the current IP configuration method, BMC IP, subnet mask, MAC address, router IP, and router MAC.

- BMC Dedicated Management Channel

- Configuration Address source
- Configure the BMC IP address allocation mode, the menu options are:

  Unspecified: No change to BMC parameters

  Static: BIOS static IP setting

  DynamicBmcDhcp: BMC runs DHCP to dynamically assign IP

  DynamicBmcNonDhcp: BMC runs the Non-DHCP protocol to dynamically assign IP

  Default: Unspecified
- When changing from "Unspecified" to other parameters, saving and rebooting will result in the options reverting to the "Unspecified" value. There is no need to configure the BMC IP during every startup process.

- When the "Configuration Address Source" option is set to "Unspecified," it will display the network parameters (IPv4) for the system's dedicated Ethernet port. The displayed information includes the current IP configuration method, BMC IP, subnet mask, MAC address, router IP, and router MAC.
- Configure IPV6 support
- IPV6 Support
- Choose whether to support IPV6, the menu options are:

  Enabeld: support IPV6

  Disabled: does not support IPV6

  Default: Enabeld
- When changing from "Unspecified" to other parameters, saving and rebooting will result in the options reverting to the "Unspecified" value. There is no need to configure the BMC IP during every startup process.

- When the "Configuration Address Source" option is set to "Unspecified," it will display the network parameters (IPv6) for the system's shared Ethernet port.
- IPV6 Support
- Choose whether to support IPV6, the menu options are:

  Enabeld: support IPV6

  Disabled: does not support IPV6

  Default: Enabeld
- When changing from "Unspecified" to other parameters, saving and rebooting will result in the options reverting to the "Unspecified" value. There is no need to configure the BMC IP during every startup process.

- When the "Configuration Address Source" option is set to "Unspecified," it

will display the network parameters (IPv6) for the system's dedicated Ethernet port.

Log in to the BMC management interface

Enter the IP address on the web page, as shown in the figure:

Figure 4-5

Enter the account password to enter the home page, and you can set the BMC IP address on the management interface.

On the left side of the interface, switch to "Settings Page" -> "Network Settings" -> "Network IP Settings". As shown below:

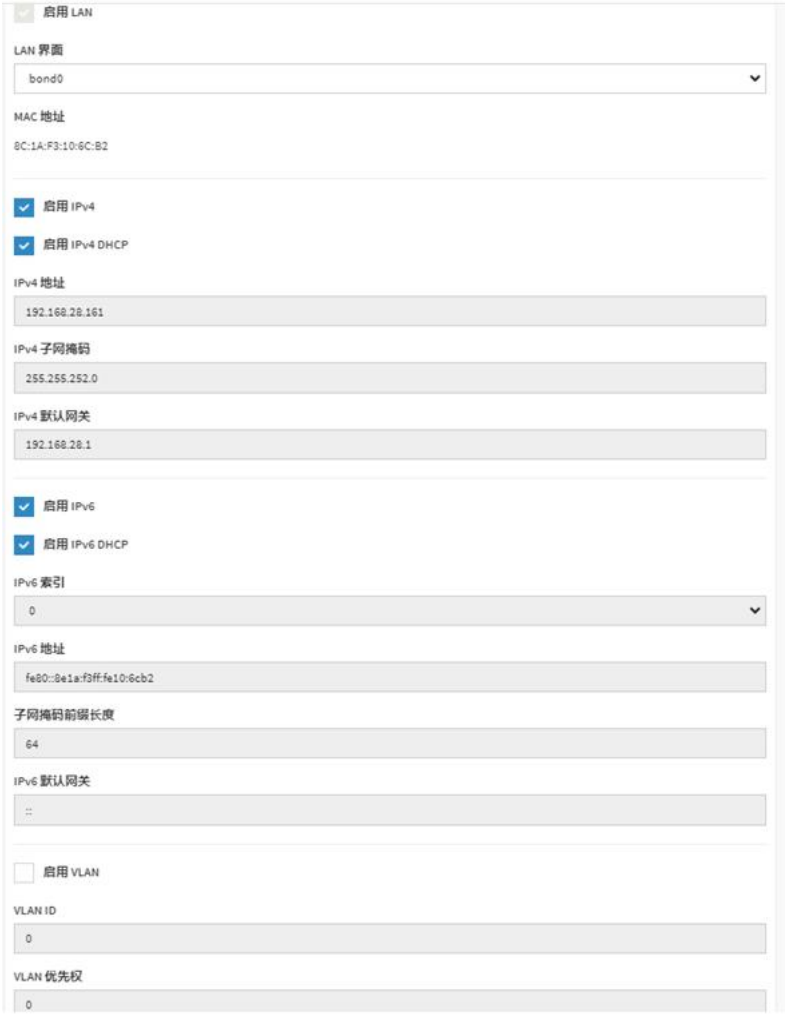


Figure 4-6

This page sets the IP address of the BMC management network port.

5. Appendix

(Common fault diagnosis)

No display after power on

- Make sure the monitor cable is properly connected and the power indicator on the monitor lights up when the monitor is powered on.
- Ensure the monitor is connected to the server.
- If the above steps do not resolve the issue, try replacing the monitor with a known working one to confirm if the original monitor is faulty.
- If the issue persists, please contact Gooxi's customer service department for resolution.

Front Panel Indicator Lights Alarm

- Refer to the instructions in the manual to determine the specific alarm information indicated by the front panel lights and buttons.
- For power failure indicator lights alarm, check if the power module indicator lights on the rear window of the server are abnormal.

  If the power module indicator lights are normal, please log in to the BMC web interface to check the BMC logs for any alarms. If there are alarms, please record the specific alarm information and contact Gooxi’s customer service department for resolution.

  If the power module indicator lights are not normal, please ensure that the server, power module, and power cords are functioning correctly.
- For system alarm indicator lights, first check the external environment.
- For other indicator light alarms, please contact Gooxi’s customer service department for resolution.

Abnormal Hard Drive Indicator Lights

- Ensure the hard drives are properly installed.
- Refer to the instructions in the manual to determine the specific alarm information indicated by the rear panel lights and buttons.
- Confirm if the RAID card is configured correctly.
- Check for any drive dropouts during OS installation. If this occurs, please contact Gooxi’s customer service department for resolution.

Unable to Use RAID Card

- Ensure the RAID card is properly installed.

- Try reseating the RAID card and PCIe adapter to confirm if they are functioning correctly.
- If replacing the known working RAID card doesn't resolve the issue, please restore to factory settings and update the BIOS version. If the problem persists contact Gooxi's customer service department for further assistance and resolution.

IPMI Connection Failure

- Confirm if the BMC function is correctly enabled in the BIOS.
- Check if the switch and network cables are functioning properly. If the regular IPMI connection is not effective, check the network environment.
- Set static or dynamic IP and ensure ping connectivity. If the web interface does not open, try using a newer version of Internet Explorer.
- If the problem is not resolved, please contact Gooxi's customer service department for further assistance and resolution.

6. Scrap Recycling

- For environmental protection and resource reuse, we earnestly ask you to properly handle discarded server products.
- Before discarding the server, we recommend that you completely demagnetize the storage media, clear data, and physically destroy them to ensure that your personal data is not leaked.
- In order to recycle and reuse, please hand over the discarded server to local recycling companies for processing. This will ensure that electronic waste is properly handled and can be put back into use after environmental treatment.