ASR4105G-D12R
4U Rackmount Server
User Manual

Statement

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Foreword

This manual is the product technical manual for the AS401 Whitley platform 4U model servers. It primarily provides an introduction and explanation of the product's appearance, structure, hardware installation, and basic configuration.

Please note that this manual is intended for reference and research purposes for professional technical personnel. The installation and maintenance of this product should only be performed by experienced technical personnel.

Modification Record

Manual version	Release date	Modification instructions
V 0.1	2023-05-18	First release

Contents

1. Product Description

1.1 Product Overview

The ASR4105G-D12R dual-socket server is a new-generation 4U rack-mounted server offered by Gooxi to meet the demands of various applications, including the internet, IDC (Internet Data Center), cloud computing, enterprise markets, and telecom services. It is suitable for IT core operations, cloud computing virtualization, high-performance computing, distributed storage, big data processing, enterprise or telecom service applications, and other complex workloads. This server features advantages such as low power consumption, strong scalability, high reliability, easy management, and straightforward deployment.

Product main features:

- Supports 2 AMD For EPYC 7003/7002/7001 series CPUs, the maximum TDP is 240W.
- Supports 10 PCIe high-speed expansion slots, providing rich expansion performance.
- Supports 5 full-height and double-width high-performance GPU cards to meet the needs of high computing power.
- Supports 16 DDR4 memory slots.

Server Physical Image

Front View (Figure 1-1)

1.2 Product Structure

ASR4105G-D12R server components, as shown in the following image:
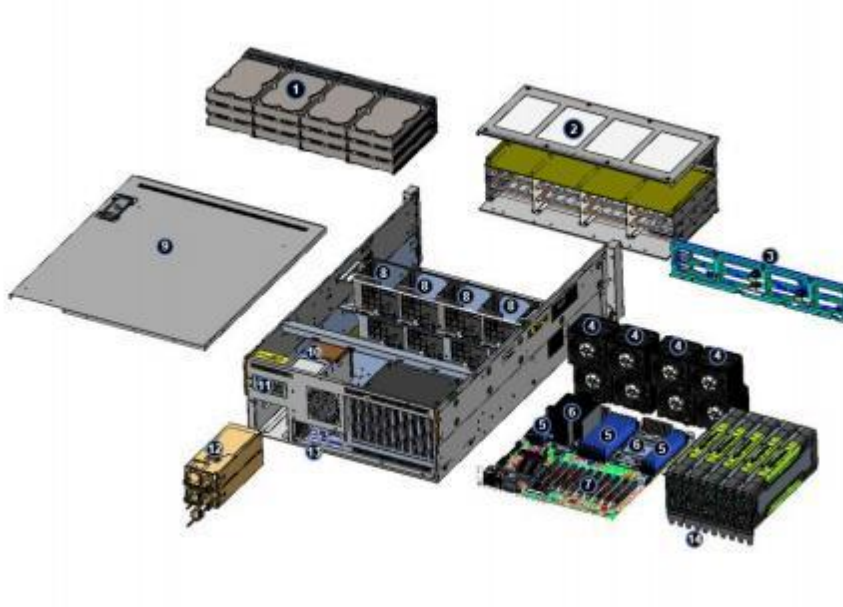
Structure diagram 1-3

No.	Name	No.	Name
1	Front hard drive (optional)	8	Fan bracket
2	Front hard drive module	9	Cover
3	Front panel	10	Power supply enclosure
4	Fan module	11	Rear 2.5-inch hard drive module
5	Memory stick	12	Power supply
6	CPU & Heat sink	13	Rear window
7	PCIE expansion slot	14	GPU card (optional)

Table 1-1

1.3 Logical Structure

The motherboard logic is as shown in the following diagram:
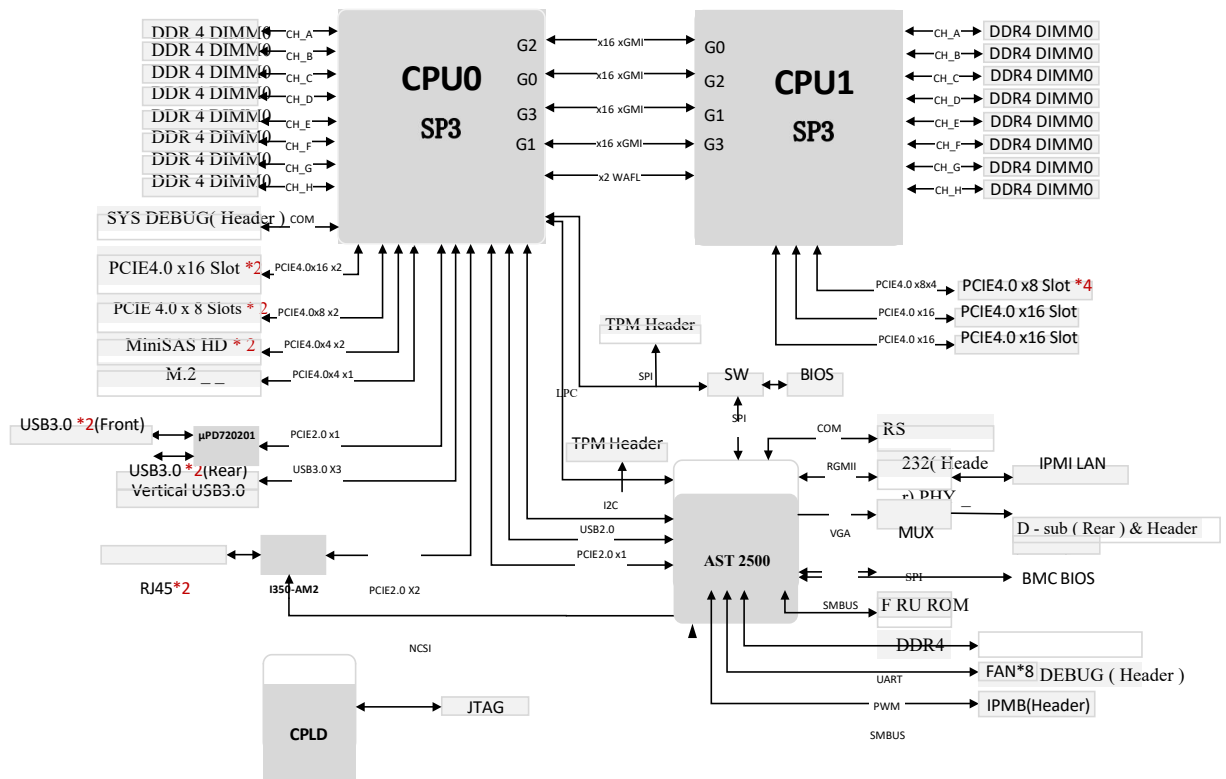
Motherboard logic block diagram 1-4

- 2 SP3 Sockets, supporting 2 AMD EPYC 7003/7002/7001 series processors.

- Supports 8 DDR4 channels, each channel supports 1 DIMM, and supports a total of 16DIMM DDR4 memory.

- The motherboard features 10 PCIe slots, including: 6 PCIe x8 (x16 slot) and 4 PCIe x16.

- The motherboard provides 1 M.2 Key M SSD slot, supporting only 2280 size and PCIe X4 signal (not compatible with SATA).

- The motherboard integrates 2 Gigabit Ethernet ports, using I350-AM2 chip.

- The BMC chip in the motherboard adopts the AST2500 control chip of ASPEED Company, which is used for IPMI remote management, VGA Output port, dedicated Gigabit RJ45 management network port.

Note: 1. There are PCIe3.0 and PCIe4.0 versions for the motherboard.

   2. Various firmware support is needed to accommodate AMD EPYC 7003/7002/7001 series processors.

1.4 Product Specifications

System		
System Model	ASR4105G-D12R	ASR4105G-D12RE
Chassis	4 U rack-mount chassis (695*433*176.5mm)	
Motherboard	G2DERO-B	
CPU	Supports 2 AMD EPYC 7003/7002/7001 series processors	
Memory *	16 DDR4 slots, supports 2133/2400/2666/2933MHz DDR4 RDIMM / LRDIM memory, compatible with a single capacity of 16GB, 32GB, 64GB, 128GB, the whole machine supports a maximum of 4TB memory capacity.	
Hard Drive	The front supports 12*3.5 or 2.5-inch hard drives (directly connected to the backplane)	The front supports 12*3.5 or 2.5-inch hard drives (expansion backplane)
	The rear supports expansion of 2*2.5-inch hard drives	
Network Function	Supports 2 RJ45 Gigabit network ports	
Management Interface	1 RJ45 IPM I management network port	
Display Function	Expanded with 1 standard VGA interface using Aspeed AST2500.	
M.2	Supports 1 M.2 interface (only support 2280 size NVMe SSD)	
USB _	2 front USB3.0 ports, 1built-in USB3.0, USB3.0 port at the rear	
Expansion Slot	Supports up to 10 PCIE expansion slots	
Power Supply	The system supports 550W, 800W, 1200W, 1300W, 1600W hot -swappable redundant power supplies	
System Fan	The system supports four 8038 temperature-controlled fans	
System Size	695*433. 4*87.6mm (L*W*H)	
Operating System Support		
Supported OS	RedHat RHEL 6.4 and above CentOS 6.4 or above SUSE SLES 12 SP 5, SLES 15SP2 and later versions Ubuntu Server / Desktop 14.04 or above Microsoft Windows server 2016/2019 etc.	
System Environment Parameters		
Operating Temperature & Humidity	Temperature 5°C~35°C; Humidity: 35%~80% non- condensing	
Storage Temperature & Humidity	Short time (≤72 H): temperature -40°C~70°C/humidity 20%~90% non-condensing (including packaging) Long time (>72 H): temperature 20 °C~28°C/humidity 30%~70% non-condensing (including packaging)	
Certification		
Certificates	CCC、 ROHS	

Table 1-2

2 Hardware Description

2.1 Front Panel

2.1.1 Appearance

- Front view
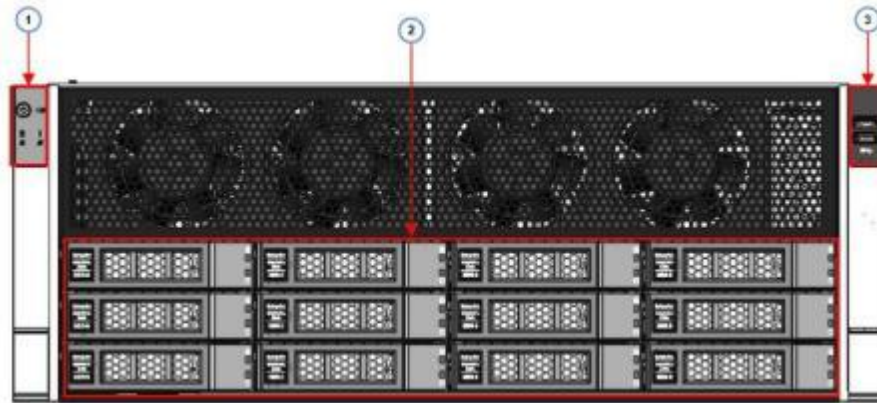
Figure 2-1

No.	Name	No.	Name
1	Front switch panel	2	3. 5-inch hard drive
3	USB 3.0 interface		

table 2-1

2.1.2 Indicator lights and buttons
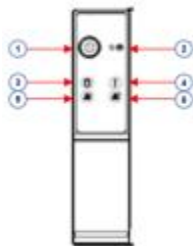
Figure 2-2

No.	Indicator light /button	No.	Indicator light /button
1	Power switch button/indicator	4	System alarm Indicator
2	Reset server button	5	Network port 1 connection status indicator
3	Hard drive indicator	6	Network port 2 connection status indicator
LED status description			
logo	Indicator light /button	status description	

⏻	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: Short press this button 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.
Ⓡ	Reset server button	Press to restart the server
⬡	Hard drive indicator	Blinking green light: The hard drive is operating normally
①	System alarm indicator	System warning indicator. Including system alarm, fan alarm, power Source alarm, etc., you can view it through the IPMI management software
🖧1	Network port connection status indicator	Corresponds to the Ethernet port indicator of the network card. Green (steady on): Indicates that the network port is connected normally. Off: Indicates that the network port is not in use or faulty. Note: Corresponds to the two 1 GE network ports on the motherboard.
🖧2	Network port connection status indicator	Corresponds to the Ethernet port indicator of the network card. Green (steady on): Indicates that the network port is connected normally. Off: Indicates that the network port is not in use or faulty. Note: Corresponds to the two 1 GE network ports on the motherboard.

Table 2-2

2.1.3 Interface

● Interface location

Figure 2-3

● Interface Description

Name	Type	Quantity	Description
USB interface	USB 3.0	2	For accessing USB devices

Table 2-3

2.2 Rear Panel

2.2.1 Appearance

● Rear panel appearance interface
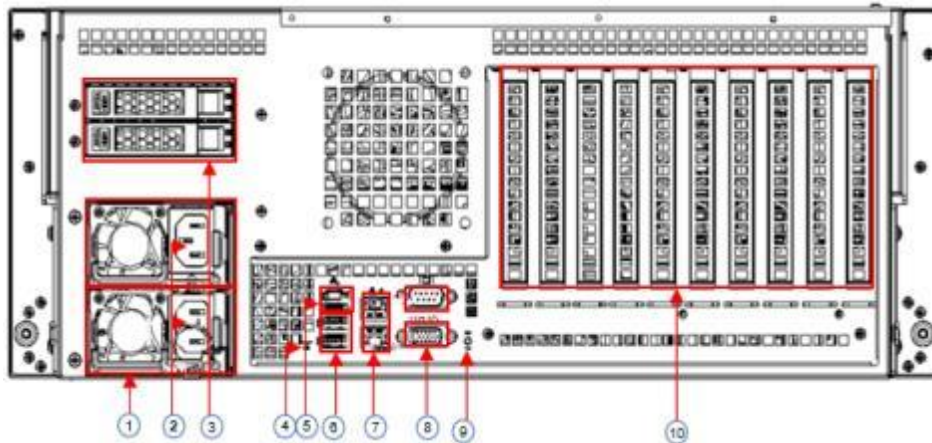
Figure 2-4

No.	Name	No.	Name
1	power module	6	USB 3.0 interface _
2	Power module AC port	7	RJ45 Gigabit network port
3	2.5-inch hard drive module (optional)	8	COM port, VGA port
4	BMC Reset button	9	UID button
5	Management network port	1 0	PCIe expansion slot

Table 2-4

● Rear panel interface description

Name	Type	Quantity	Description
VGA interface	DB15 _	1	Used to connect a display terminal, such as a monitor or KVM.
Management network port	GE BASE-T	1	Provides an external 1000Mbit/s Ethernet port. This interface allows for the management of this server.
USB interface	USB 3.0	2	Provides an external USB interface for connecting USB devices. Note: When using external USB devices, please ensure that the USB device is in good condition, as it may otherwise lead to server malfunctions.
RJ45 Gigabit network port	GE BASE-T	2	Server business network port.

Power module AC port	/	1 or 2	You can choose the number of power supplies according to your actual needs, but make sure that the rated power of the power supply is greater than the rated power of the whole machine rate.
COM port	DB9	1	serial communication port

Table 2-5

2.2.2 Indicator lights and buttons

● Rear panel indicators
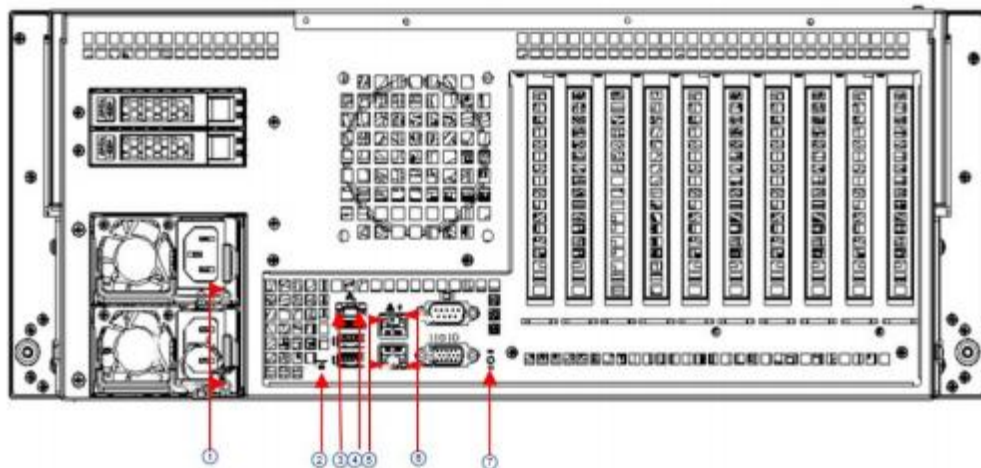
Figure 2-5

No.	Name	No.	Name
1	Power module indicator	2	BMC reset button
3	Connection status indicator	4	Data transmission status indicator
5	Connection status indicator	6	Data transmission status indicator
7	UID button		

Table 2-6

● 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 AC power cable unplugged or power module missing, and only one parallel power module has AC input. Power module failure results in output shutdown, such as OVP, OCP, fan failure, etc. Green (1Hz/blink): Indicates normal input. Voltage is low (less than 12V), or the power supply is in intelligent power-on state. Green (2Hz/blink): Indicates Firmware is in the process of online upgrade. Orange (1Hz/blink): Indicates continuous operation power supply warning events, high temperature, high power, high current. Off: Indicates no AC power input.

Connection Status Indicator	Steady green: indicates Gigabit Link. Steady orange: indicates 100M link . Off: 10M Link .
Data transmission status indicator	Yellow (blinking): Indicates that data is being transmitted. Off: Indicates no data transmission.
UID button	UID button control on server
BMC reset button	BMC button control on the server

<div align="center">Table 2-7</div>

2.3 Processor

- Supports 2 AMD EPYC 7003/7002//7001 series CPUs.
- When configuring 1 processor, it needs to be installed in CPU 0 position.
- The processors configured in the same server must have the same model.
- For specific optional system options, please consult Gooxi sales.

- The position of the processor is as shown in the figure below:
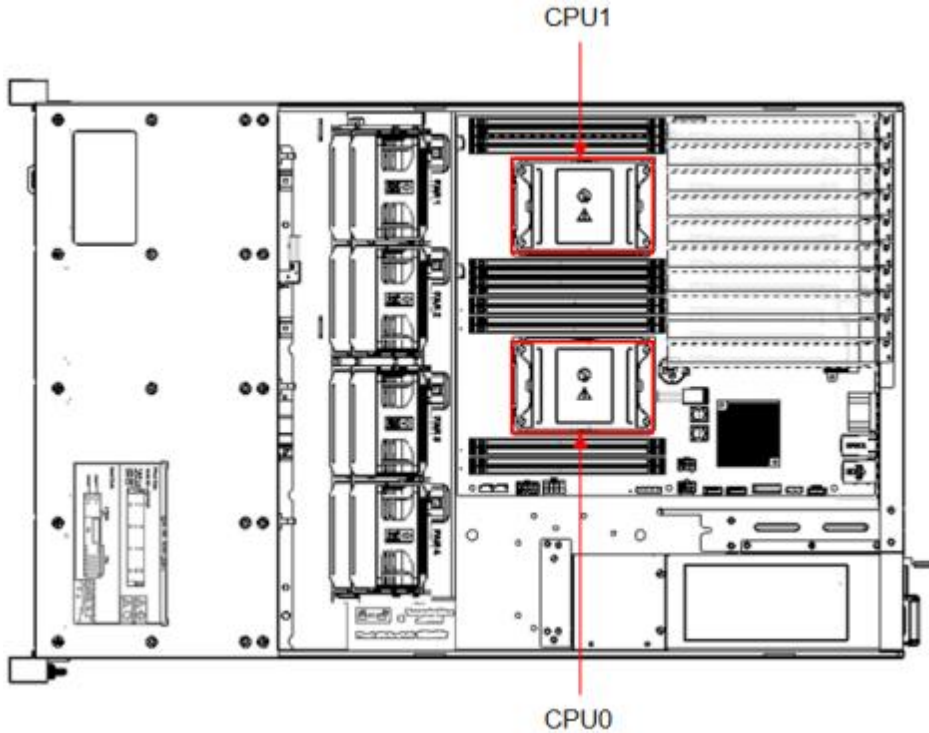
<div align="center">Figure 2-6</div>

2.4 Memory _

2.4.1 Memory slot location

The motherboard supports 8 DDR4 channels, each channel supports 1 DIMM, and supports a total of 16 DDR4 slots (When using a single memory module, it is recommended to insert it into the slot indicated by the red box in the diagram below).
- memory slot location
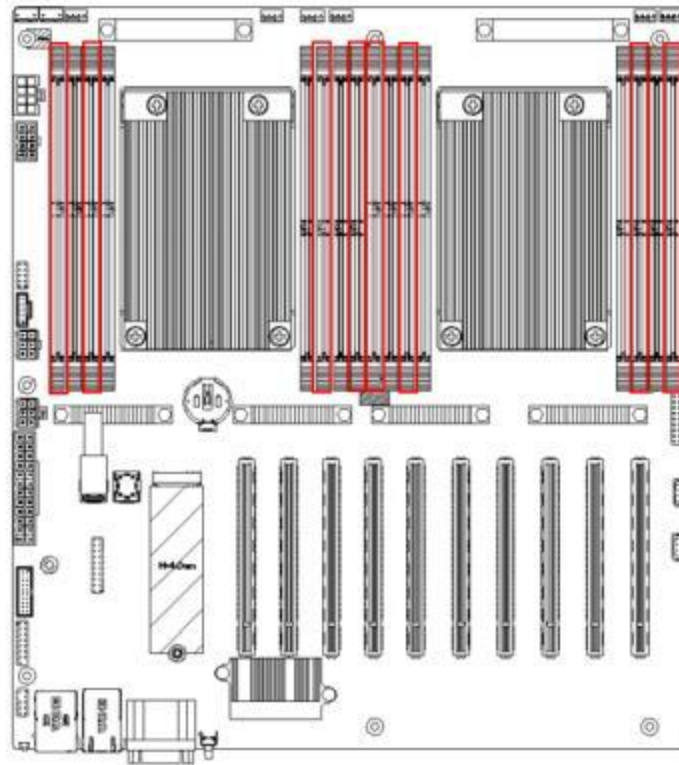
Figure 2-7

2.4.2 Memory compatibility information

The motherboard supports DDR4 RDIMM / LRDIMM server memory, and the memory frequency supports 2133/2400/2666/2933MHz.

Note:
- The same server must use the same type of DDR4 memory, and all memory must run at the same speed, The velocity value is the lowest of the following:
- Memory speed supported by specific CPU. The maximum operating speed for specific memory configurations.
- DDR4 memory of different types (RDIMM, LRDIMM) and different specifications (capacity, bit width, rank, height, etc.) does not support mixed usage.
- Different models of CPUs support different maximum memory capacities. (See AMD's Memory Population Guidelines)

2.5 Storage _

2.5.1 Hard drive configuration

Configuration	Maximum Number of Front Hard Drives (pcs)	Maximum Number of Rear Hard Drives (pcs)	Description
1 2x3.5-inch hard drives. Direct configuration	Supports twelve 3.5" or 2.5 " SAS/SATA HDD – Onboard direct connection only supports 8 SATA hard drive	2 *2.5-inch SAS/SATA hard drive	Support requires the optional SAS pass-through card or RAID card.
1 2x3.5-inch hard drives. EXP configuration	Supports twelve 3.5" or 2.5-inch SAS/SATA hard drive	2 *2.5-inch SAS/SATA hard drive	Support requires the optional SAS pass-through card or RAID card.
Note: The 3.5-inch hard drive cage is compatible with 2.5-inch hard drives			

Table 2-8

2.5.2 Hard drive serial number

● 12 x3.5/2.5-inch hard drive configuration
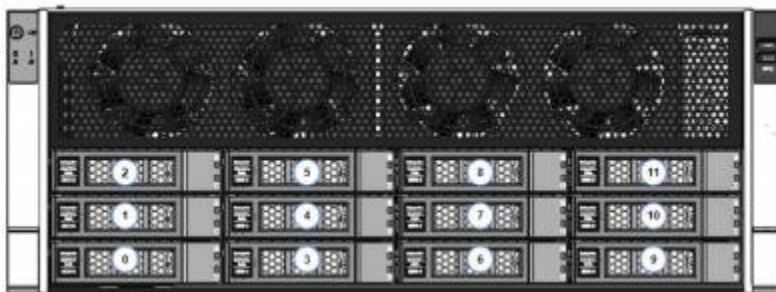
Figure 2-8

2.5.3 hard drive status indicator
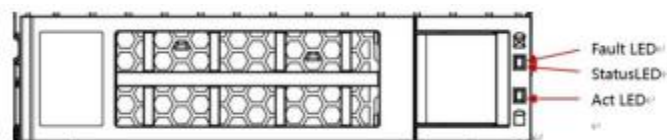
Figure 2-9

● Hard drive status indicator description

Function	Act LED	Fault LED	Status LED
Hard drive in place	always on	OFF	OFF
hard drive activity	Blinking 4Hz/sec	OFF	OFF
Hard drive positioning	always on	Blinking 4Hz/sec	OFF

| Hard drive error | always on | OFF | always on |
| RAID rebuild | always on | OFF | Blinking 1Hz/second |

Table 2-9

2.6 Power Supply

- Supports 1 or 2 power modules.
- Supports AC or DC power modules.
- Supports hot swap.
- When configuring 2 power modules, it supports 1+1 redundant backup.
- For power modules configured on the same server, the power module models must be the same.
- For specific optional system options, please consult Gooxi sales.

- The location of the power supply is shown in the figure below:
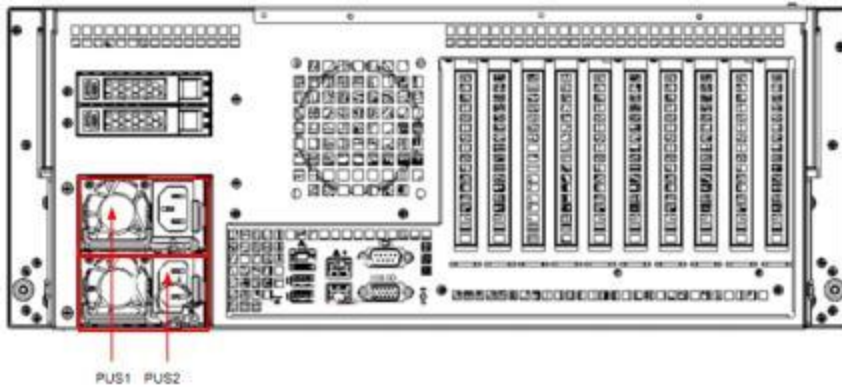
Figure 2-10

2.7 Fans _

- Supports 8 fan modules.
- Supports hot swap.
- Supports single fan failure.
- Supports variable fan speed.
- Fan modules configured on the same server must have the same model.
- The location of the fan is shown in the figure below:
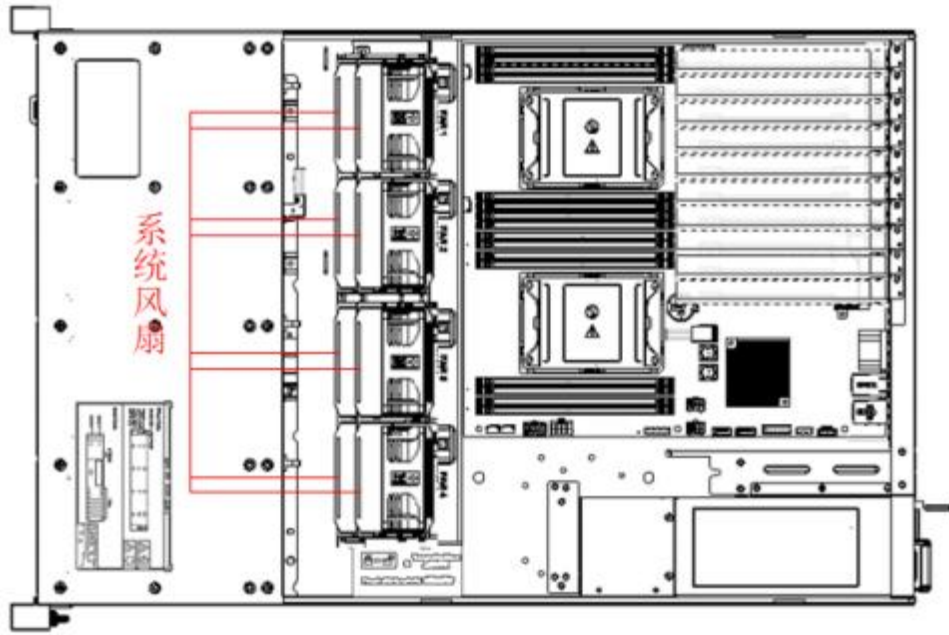
Figure 2-11

2.8 I/O Expansion

2.8.1 PCIe slot location
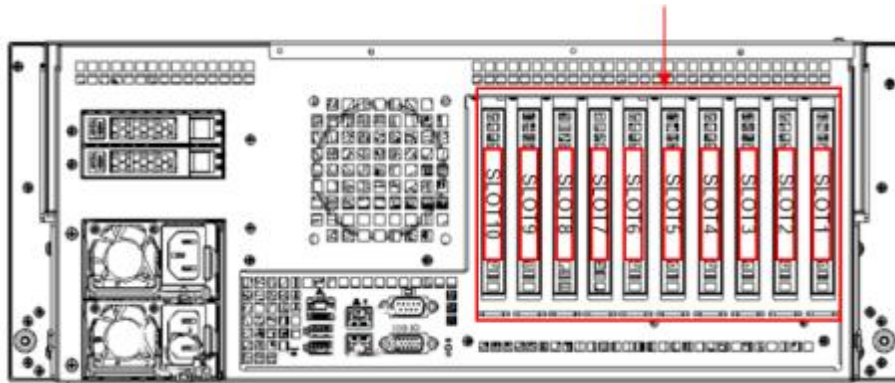
Figure 2-12

● The PCIe expansion slots are Slot 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10.

2.8.2 PCIe slot description

When CPU1 is not in place, its corresponding PCIe slots are not available.

PCIe Slot	Subordinate CPU	PCIe Standard	Bus Bandwidth	Slot Size
Slot 1	CPU 1	PCIe 3.0 or 4.0	X8	x16 slots
Slot 2	CPU 1	PCIe 3.0 or 4.0	X16	x16 slot
Slot 3	CPU 1	PCIe 3.0 or 4.0	X8 or null	x16 slots
Slot 4	CPU 1	PCIe 3.0 or 4.0	X8 or X16	x16 slots
Slot 5	CPU 1	PCIe 3.0 or 4.0	X8	x16 slots

Slot 6	CPU 0	PCIe 3.0 or 4.0	X16	x16 slots
Slot 7	CPU 1	PCIe 3.0 or 4.0	X16	x16 slots
Slot 8	CPU 0	PCIe 3.0 or 4.0	X8	x16 slots
Slot 9	CPU 0	PCIe 3.0 or 4.0	X8	x16 slots
Slot 10	CPU 0	PCIe 3.0 or 4.0	X16	x16 slots

Note:
◆The bus bandwidth for PCIe x16 slots is backward compatible with PCIe x8, PCIe x4, and PCIe x1 cards. However, it is not upward compatible, meaning that the bandwidth of the PCIe slot cannot be less than that of the inserted PCIe card.
◆ When Slot 4 is set to X16 bandwidth, Slot 3 has no signal.
◆ All slots have the power capability to support PCIe cards with a maximum of 75W power draw. The actual power requirements for PCIe cards depend on the specific card model.

Table 2-10

2.8.3 PCIE expansion module

● 2.5-inch hard drive module
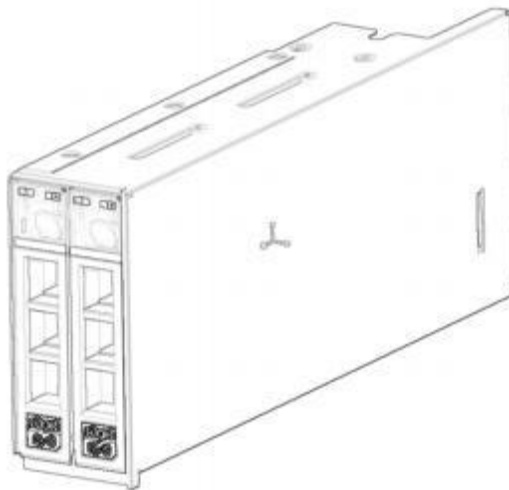
Figure 2-12

2.9 PCBA _

2.9.1 Motherboard
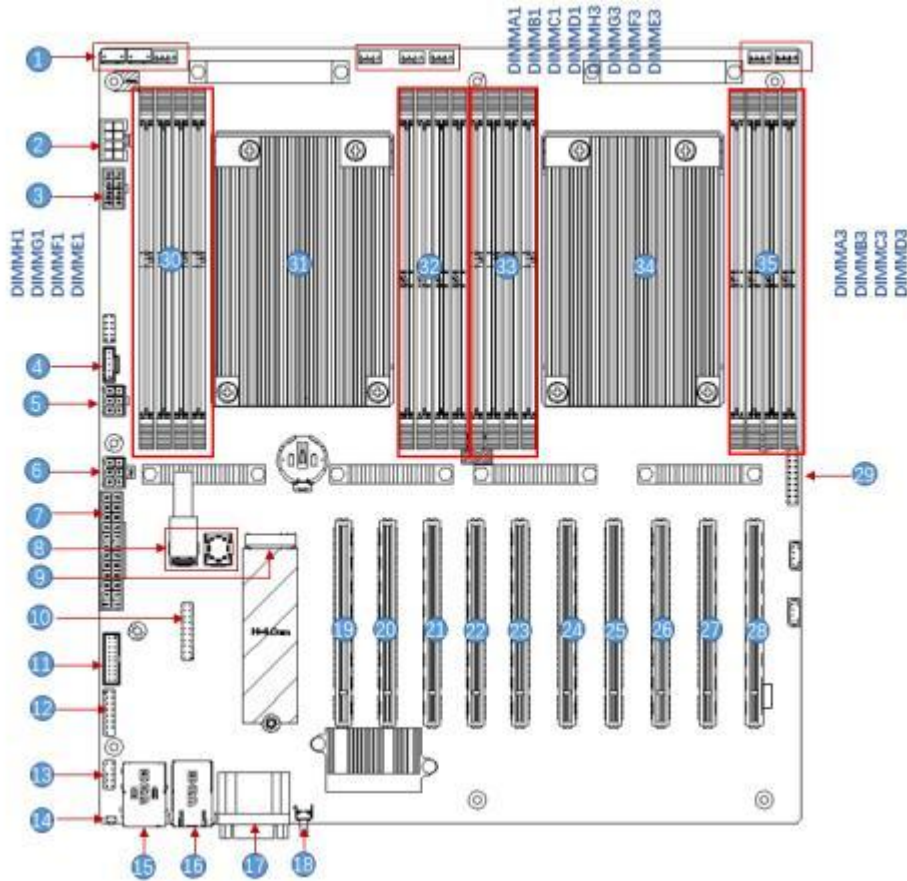
Motherboard Figure 2-13

No.	Name
1	Chassis fan control 4pin interface (8)
2	ATX 8PIN power connector
3	ATX 8PIN power connector
4	PMBUS
5	ATX 6PIN power connector
6	ATX 6PIN power connector
7	ATX 24PIN power connector
8	Mini SAS HD1/HD2 8643 connector
9	M.2 slot
10	LPC TPM/80 Port 2x10PIN Header
11	FP USB 3.0 *2 Header
12	FP VGA Header
13	SPI TPM Header
14	BMC button
15	USB 3.0 *2+IPMI LAN
16	RJ45 Gigabit Ethernet port
17	COM port and VGA
18	UID button
19	SLOT10 PCIE X16
20	SLOT9 PCIE X8
21	SLOT8 PCIE X8

22	SLOT7 PCIE X16
23	SLOT6 PCIE X16
24	SLOT5 PCIE X8
25	SLOT4 PCIE X8 or X16
26	SLOT3 PCIE X8 or null
27	SLOT2 PCIE X16
28	SLOT 1 PCIE X8
29	Front panel pins
30	DDR4 memory slot
31	SP3 Socket
32	DDR4 memory slot
33	DDR4 memory slot
34	DDR4 memory slot
35	SP3 Socket
36	DDR4 memory slot

Table 2-11

2.9.2 Hard drive backplane

- 12 × 3.5-inch expansion backplane

TOP surface
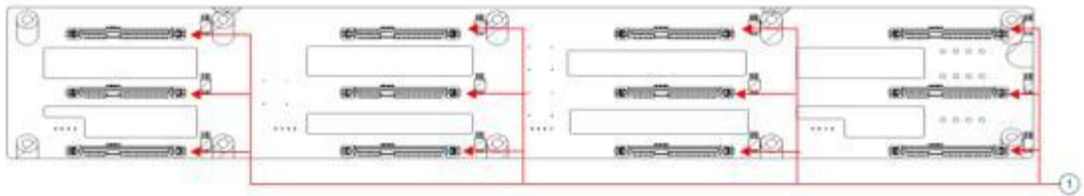
Figure 2-14

No.	Description	Function
1	SAS / SATA HDD Connector	1. Supports 12Gb/s SAS hard drive. 2. Supports 6Gb/s SATA hard drive. 3. Supports SAS/SATA hard drive hot swap.

Table 2-12

Bottom surface
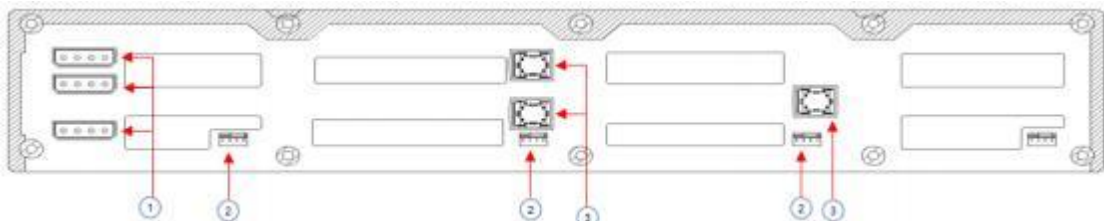
Figure 2-15

No.	Description	Function
1	Backplane power interface	Backplane power transmission connector,

		used for transmitting 12V and 5V power
2	Temperature-controlled fan socket	For 4pin fan interface
3	MiniSAS HD High Speed Connector	Used for transmitting 12Gb/s SAS or 6Gb/s SATA signals

Table 2-13

- 2×2.5 rear hard drive backplane
  TOP surface

Figure 2-16

No.	Description	Function
1	SAS / SATA HDD Connector	1. Supports 12Gb / s SAS hard drive. 2. Supports 6Gb/s SATA hard drive.

Table 2-14

Bottom surface

Figure 2-17

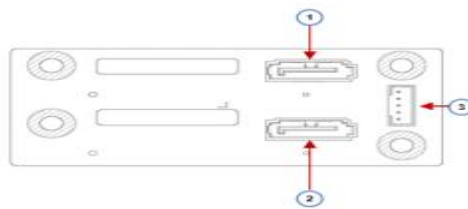| No.	Description	Function
1, 2	7 pins SATA interface	SATA Disk signal line interface
3	5pin interface	Backplane Power Transmission Connector, used for transmitting 12V power

Table 2-15

3 Installation Instructions

3.1 Installation of the Chassis Top Cover

- Step 1: Lift the card slot at the indicated opening, then push it upwards in the direction shown in the diagram.
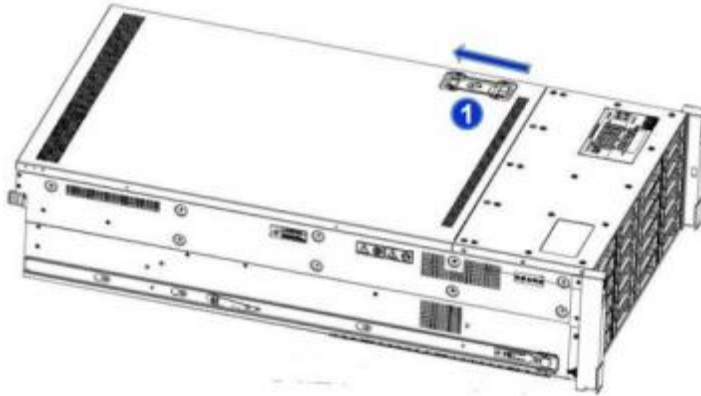

Figure 3-1

3.2 Accessories Installation

3. 2.1 CPU installation

Before starting to install the CPU, please read the following guidelines:

- Make sure the motherboard supports the CPU.
- Before installing the CPU, be sure to turn off the computer and unplug the power cord from the power outlet to prevent hardware damage.
- Unplug all cables from the power outlet.
- Disconnect all communication cables from their ports.
- Place the system unit on a flat and stable surface.
- Follow the instructions to turn on the system.

Warning!

If the server is not properly shut down before beginning the component installation, it may result in severe damage. Unless you are a qualified service technician, do not attempt the steps described in the following sections.

Follow the instructions below to install the CPU:

1. Loosen the three fixing screws securing the CPU cover in sequence (3→ 2→ 1).

2. Flip open the CPU cover.

3. Use the handle on the CPU carrier to remove the CPU carrier from the CPU rack.

4. Using the handle on the CPU carrier, insert the new CPU carrier with the installed CPU into the CPU rack.

Note: Ensure that the CPU is installed correctly in the CPU carrier, aligning the triangle on the CPU with the top left corner of the CPU carrier.

5. Flip the CPU rack with the installed CPU into the appropriate position in the CPU slot.

6. Flip the CPU cover into the correct position above the CPU socket.

7. Tighten the CPU cover screws in sequence (1→2→3) to secure the CPU cover in place. Torque: 16.1 kgf-cm (14.0 lbf-in).

8. Repeat steps 1-7 for the second CPU.

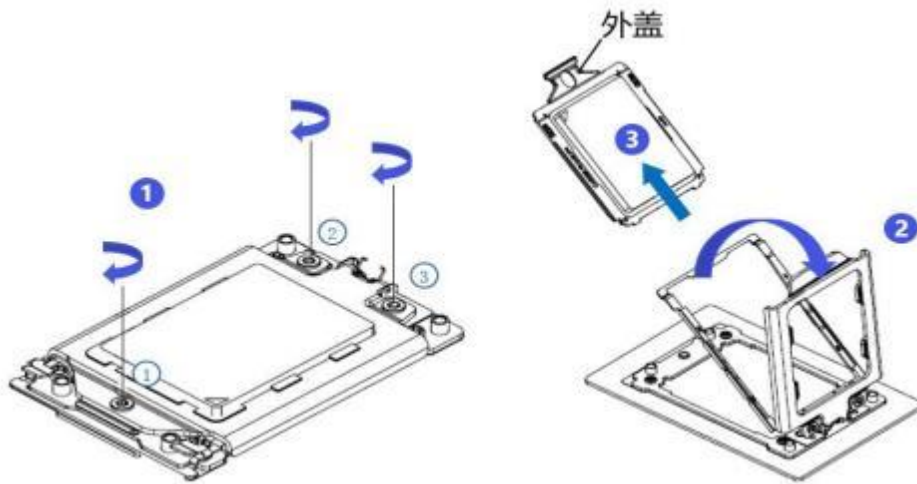9. To remove the CPU, perform steps 1-7 in reverse order.
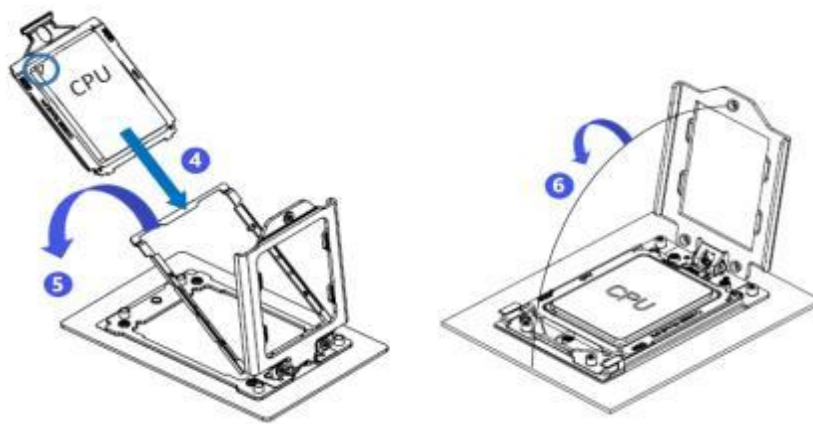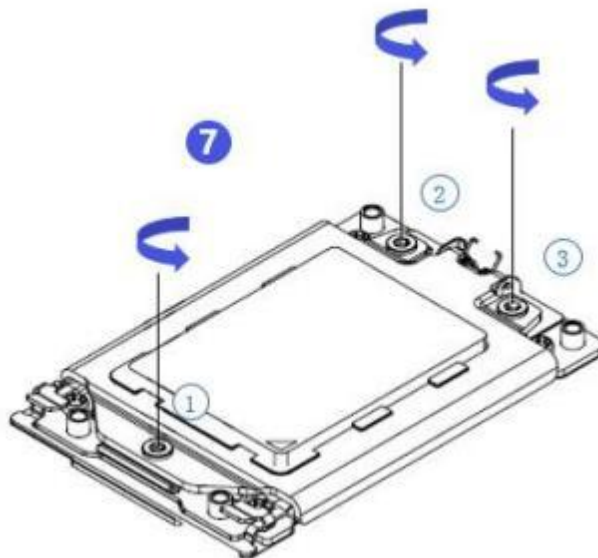
外盖

Figure (3-2)

CPU

Figure (3-3)

Figure (3-4)

3.2.2 Heatsink installation.

Before starting to install the heatsink, please read the following guidelines:

- Before installing the heatsink, please be sure to turn off the computer and unplug the power cord from the power outlet to prevent damage to the hardware.
- Unplug all cables from the power outlet.
- Disconnect all communication cables from their ports.
- Place the system unit on a flat and stable surface.
- Follow the instructions to turn on the system.

⚠️Warning!

Failure to shut down the server before beginning component installation could result in serious damage. Unless you are qualified service technician, do not attempt the steps described in the following sections.

⚠️NOTE: When installing the heatsink to the CPU, use a Phillips screwdriver to tighten the

4 securing nuts in the sequence of 1-4.

Follow the instructions below to disassemble and install the heatsink:

1. Loosen the screws holding the heatsink in place in reverse order (4→3→2→1).

2. Lift the heat sink and remove it from the system.

3. To install the heatsink, please reverse steps 1-2, and ensure to tighten the securing screws in the sequence (1→2→3→4) as shown in the diagram below.
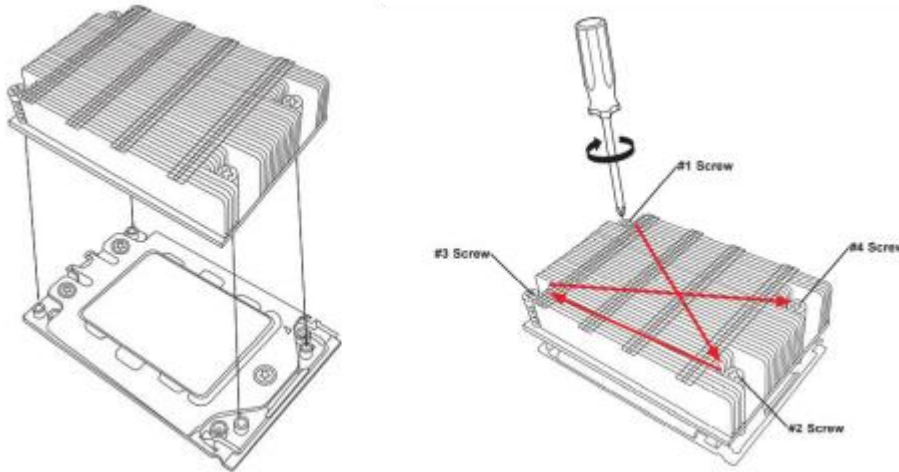
Figure (3-5)

3.2.3 Memory installation

16 memory slots controlled by the motherboard CPU are: CPU0 DIMM
A1/B1/C1/D1/E1/F1/G1/H1; CPU1 DIMM A 1/ B 1/ C 1/ D 1/ E 1/ F 1 /G1/H1.
Please note that the notch on the memory module should align with the notch on the DIMM slot.
Insert each DIMM module vertically to ensure proper installation.
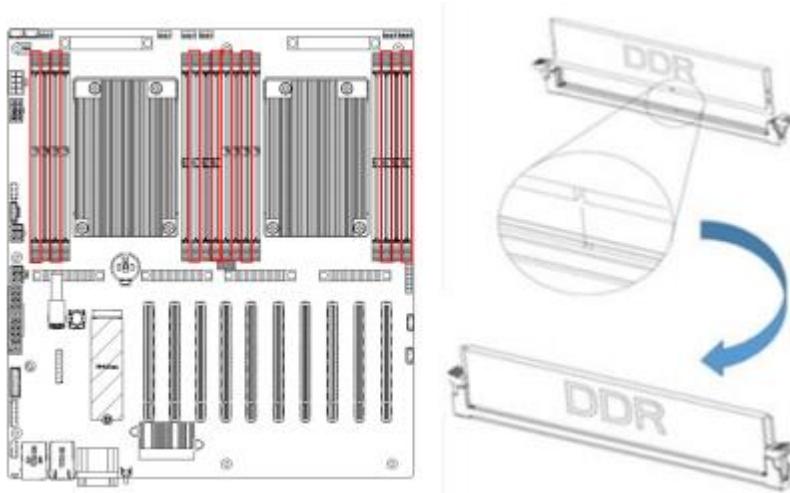
Figure 3-6
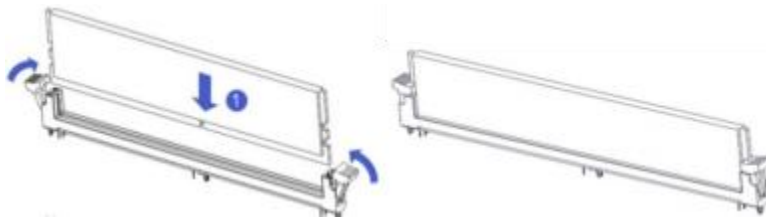
Figure 3-7

3.2.4 Server slide rail installation

- Step 1: Prepare two slide rails and pull out the inner rail
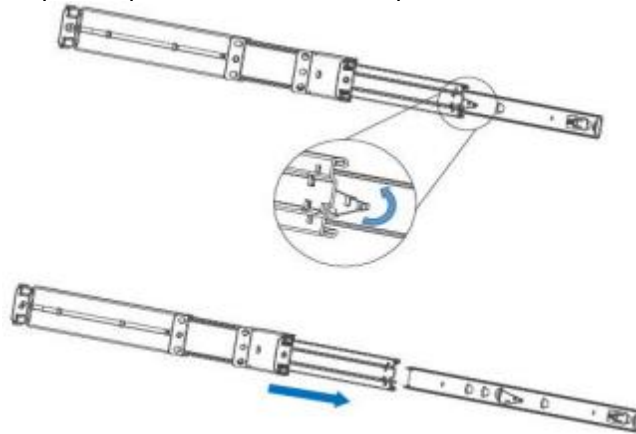
Figure 3-8

- Step 2: Fix the inner rails on both sides of the chassis
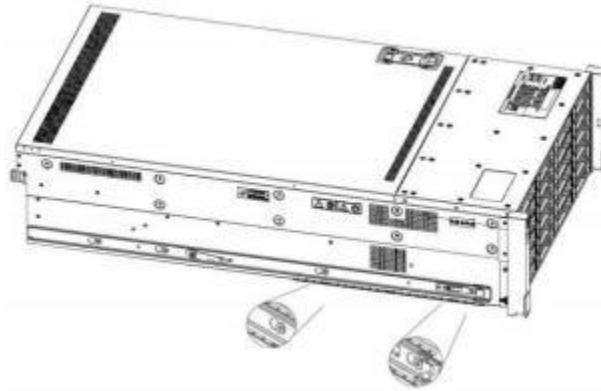
Figure 3-9

- Step 3: Securely fasten the outer rails to the rack brackets using the screws
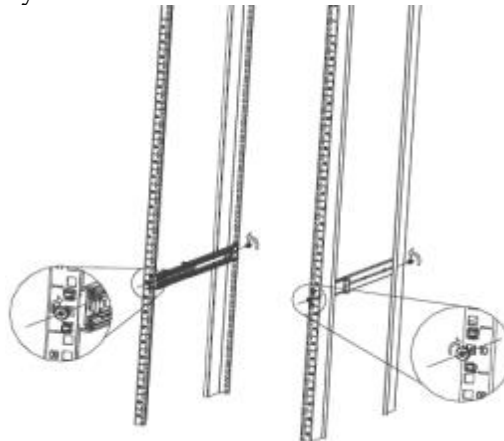
Figure 3-10

⚠ Note: Align the rails with the 'U' mark during rail installation. Once you hear a click sound, it's in place; then, secure it using M5 screws.

- Step 4: Align the chassis with the installed inner rails and mount it onto the outer rails.
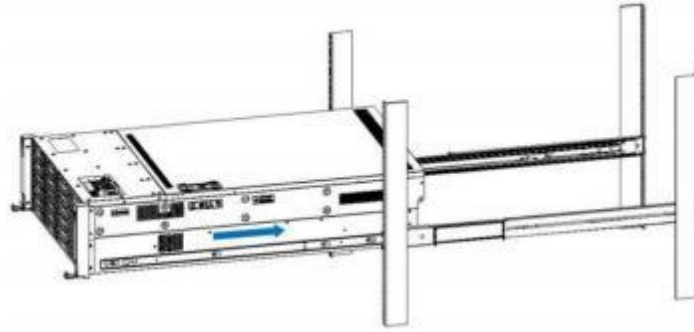
Figure 3-11

⚠ Note: When you push the chassis forward, you will hear a snap. Only then can you continue to nudge the chassis.
● Step 5: Secure the screws to complete the installation when the chassis cannot slide forward.
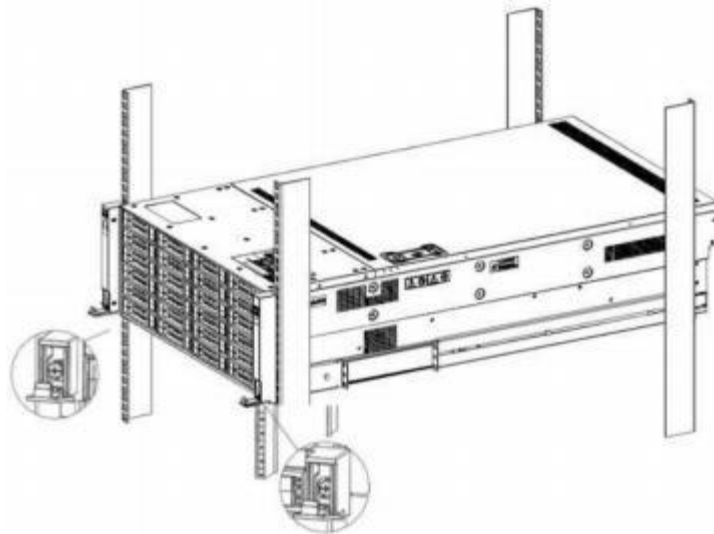
Figure 3-12

⚠ Note: When performing equipment maintenance, loosen the panel screws, gently pull the chassis, and avoid forcefully pushing or pulling the chassis to prevent equipment damage.

4 Configuration Instructions

4.1 Initial Configuration

4.1.1 Power on and start

- Before powering on, ensure that all server configurations are correctly installed according to specifications and standards. The server should be powered off but not disconnected from the power source. Additionally, verify that all cables are properly connected, and the power supply voltage matches the equipment requirements.
- Do not plug or unplug hard drives, power modules, network cables, or any other external devices and cables during the power-on process.
- If the server has just been disconnected from the power source, please wait for 1 minute before powering it on.
- Power Status when Server is Powered On:
  The power supply is powered on, but the server is not turned on, and the power indicator is amber.
  Power on, the server starts up, and the power indicator light is green.
- Server power-on method:

The server's default system setting is 'Power-On Boot Policy,' meaning the server will automatically power on when electricity is restored. Users can modify this setting in the BIOS under 'Boot Features -> AC Loss Control' option.



```
Aptio Setup Utility - Copyright (C) 2020 American Megatrends, Inc.
Advanced

Quiet Boot                    [Enabled]          Enables or disables Quiet Boot
Option ROM Messages           [Force BIOS]       option
Bootup NumLock State          [On]
INT19 Trap Response           [Immediate]
Ac Loss Control               [Always On]




                                                 ++: Select Screen
                                                 ↑↓: Select Item
                                                 Enter: Select
                                                 +/-: Change Opt.
                                                 F1: General Help
                                                 F2: Previous Values
                                                 F3: Optimized Defaults
                                                 F4: Save & Exit
                                                 ESC: Exit

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```

Figure 4-1

4.1.2 Initial data

- BMC default account: admin

- BMC default password: Gooxi @123.
- BMC default address: 192.168.100.1
- BIOS default password: None

⚠️ Attention to password management: Remember to change your login password!!!

4.1.3 BIOS Configuration

During the power-on process, press the <DEL> or <ESC> key on the keyboard to access the BIOS Setup interface, which will be displayed as follows:
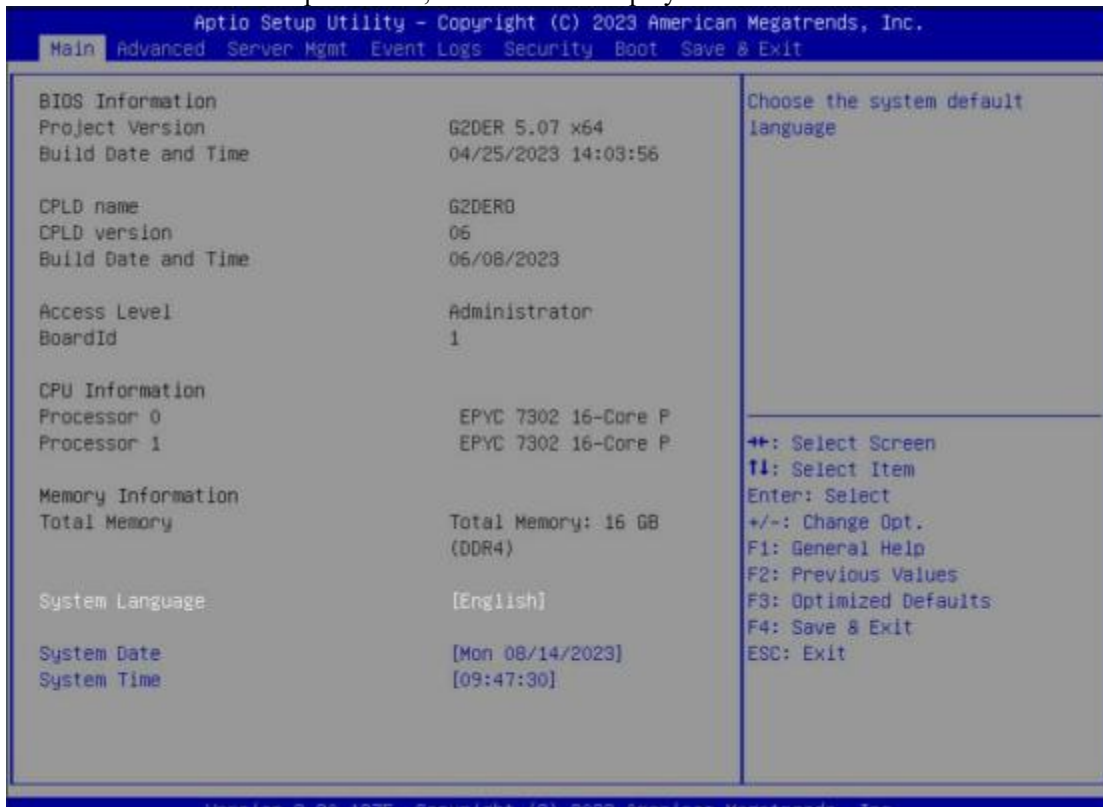

Figure 4-3

The Main interface contains basic information about the BIOS system, including the BIOS version number, CPU model, memory capacity, and allows for system time settings. For detailed usage instructions, please refer to the 'BIOS User Manual.
- Navigation key description:
→ ←: Menu switching (Select Screen)
 ↑↓: Project switching (Select Item)
Enter: OK (Select)
+/-: Change option (Change Opt.)
F 1: General help information (General Help)
F 2: Last saved value (Previous Values)
F 3: default optimized value (Optimized Defaults)
F 4: Save changes and restart the system (Save & Reset)
ESC: Exit (Exit)

4.1.4 BMC Configuration

In the powered-on state of the server, ensure that the dedicated BMC management network cable is properly connected.
Using another device within the same local network, enter the BMC IP address in a web browser.

To find the BMC IP address, follow these steps:
- After powering on the server and during the startup POST process, pay attention to the logo screen. In the lower-left corner of the logo screen, the IP address should be displayed.
- After powering on the server, during the startup POST process, press the <DEL> or <ESC> key on the keyboard to access the BIOS Setup interface, and switch to the following screen:
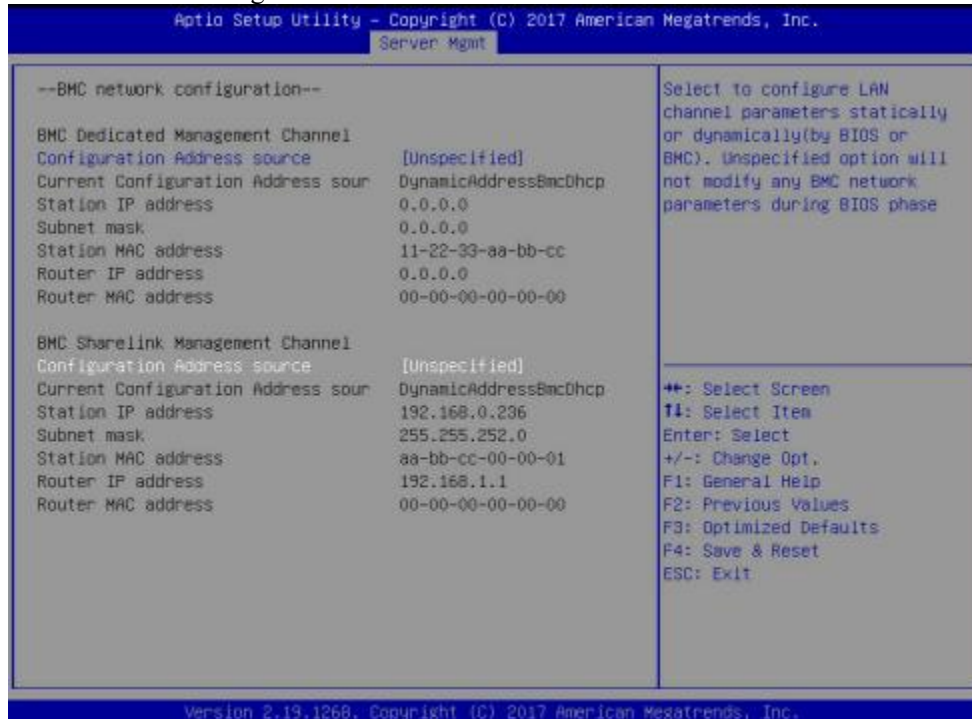

Figure 4-4

Configure IPV4 support: _
- BMC sharelink Management Channel
- Configuration address source
- Configure BMC IP address allocation mode.
   The menu options are:
   Unspecified: Do not change the BMC parameters
   Static: BIOS static IP setting
   DynamicBmcDhcp: BMC is set to run DHCP for dynamic IP allocation.
   DynamicBmcNonDhcp: BMC is set to run Non-DHCP protocol for dynamic IP allocation.
   Default value: Unspecified
- When changed from 'Unspecified' to another parameter and saved before restarting, the option will revert to the 'Unspecified' value.
   There is no need to configure the BMC IP during each startup process.
- When the 'Configuration Address Source' option is set to 'Unspecified,' it will display the network parameter information (IPv4) for the system's shared network port. This 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 BMC IP address allocation mode.
   The menu options are:
   Unspecified: Do not change the BMC parameters
   Static: BIOS static IP setting

DynamicBmcDhcp: BMC is set to run DHCP for dynamic IP allocation.

DynamicBmcNonDhcp: BMC is set to run Non-DHCP protocol for dynamic IP allocation.

Default value: Unspecified

- When changed from 'Unspecified' to another parameter and saved before restarting, the option will revert to the 'Unspecified' value. There is no need to configure the BMC IP during each startup process.
- When the 'Configuration Address Source' option is set to 'Unspecified,' it will display the network parameter information (IPv4) for the system's shared network port. This includes the current IP configuration method, BMC IP, subnet mask, MAC address, router IP, and router MAC.

Configure IPV6 support

- BMC Sharelink Management Channel
- IPV6 Support
- Choose whether to support IPV 6, the menu options are:
  Enabled: support IPV 6
  Disabled: does not support IPV6
  Default value: Enabled
- When changed from 'Unspecified' to another parameter and saved before restarting, the option will revert to the 'Unspecified' value. There is no need to configure the BMC IP during each startup process.
- When the 'Configuration Address Source' option is set to 'Unspecified,' it will display the network parameter information (IPV 6) for the system's shared network port.
- BMC Dedicated Management Channel
- IPV6 Support
- Choose whether to support IPV6, the menu options are:
  Enabled: support IPV6
  Disabled: does not support IPV6
  Default: Enabled
- When changed from 'Unspecified' to another parameter and saved before restarting, the option will revert to the 'Unspecified' value. There is no need to configure the BMC IP during each startup process.
- When the 'Configuration Address Source' option is set to 'Unspecified,' it will display the network parameter information (IPV 6) for the system's shared network port.

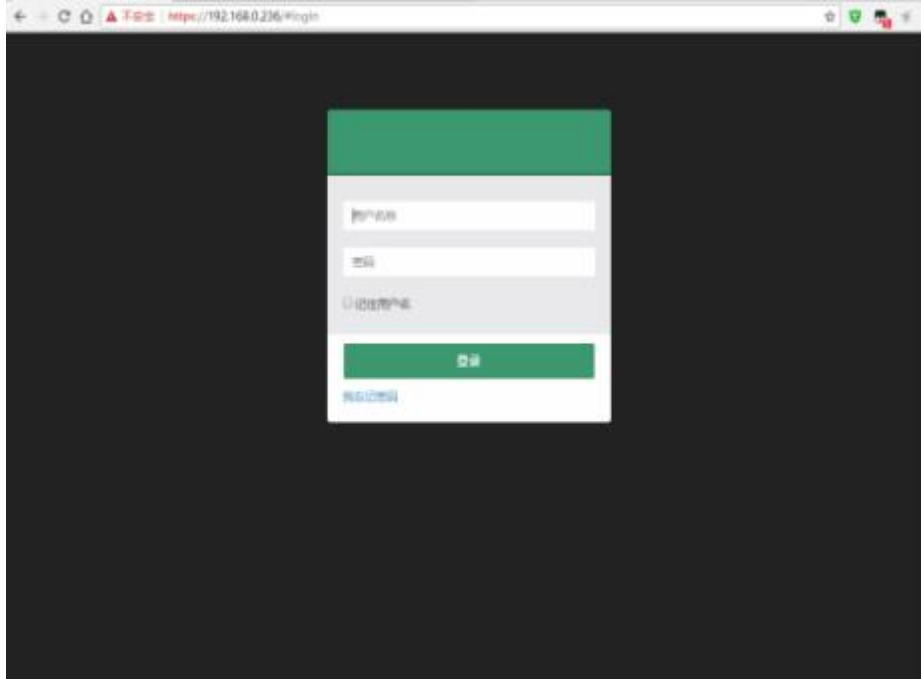Log in to the BMC management interface webpage and enter the IP address, as shown in the figure:

Figure 4-5

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 technical support for further assistance.

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 contact Gooxi technical support for further assistance. 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 technical support for further assistance.

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 technical support for further assistance.

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 the issue persists even after replacing the RAID card with a known working one, restore to factory settings and update the BIOS version. Contact Gooxi technical support for further assistance.

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 technical support for further assistance.