# CiB-9224 V12

## Tech Manual    Version   Jun. 2015

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**Warning!**

Before opening the chassis cover, remove all power cords to completely disconnect power from the system.

# Contents

# About This Manual

# About This Manual

## Conventions

To make sure that you perform certain tasks properly, take note of the following symbols used throughout this manual.

| | | |
|---|---|---|
| | **Warning:** | Information to prevent injury to yourself when trying to complete a task. |
| | **Caution:** | Information to prevent damage to the components when trying to complete a task. |
| | **Important:** | Information that you must follow to complete a task. |
| | **Note:** | Tips and information to aid in completing a task. |

## Safety Symbols

Before troubleshooting, you must be familiar with the safety information listed below. In order to avoid any potential hazards, the following symbols may be placed on some components of the server.

The shape and the color of symbols shown below are mainly for your reference. Please take the actual shipment as standard.

| | |
|---|---|
|  | Indicates the potential hazard of energy circuits or electric shock. To reduce the risk of injury from electric hazards, do not open this enclosure. **Warning:** Any surface or area of the equipment marked with this symbol indicates the presence of electric shock hazards. The enclosed area contains no operator serviceable parts. |
|  | Indicates the potential hazard of electric shock. The enclosed area contains no user of field serviceable parts. Do not open for any reason. **Warning:** To reduce the risk of injury from electric shock hazards, do not open this enclosure. |
|  | Indicates the presence of a hot surface or hot component. **Warning:** To reduce the risk of injury from a hot component, allow the surface to cool before touching it. |
|  | Any RJ45 receptacle marked with this symbol indicates a network interface connection. **Warning:** To reduce the risk of electric shock, fire, or damage to the equipment, do not plug telephone or telecommunications connectors into this receptacle. |
|  | This symbol, on power supplies or systems, indicates that the equipment is supplied by multiple sources of power. **Warning:** To reduce the risk of injury from electric shock, remove all power cords to completely disconnect power from the system. |
|  Weight in kg. Weight in lb. | This symbol indicates that the component exceeds the recommended weight for one individual to handle safely. **Warning:** To reduce the risk of personal injury or damage to the equipment, observe local occupational health and safety requirements and guidelines for manual material handling. |

## Safety Precautions

Observe the following safety precautions when you are connecting or disconnecting any device.



- This is a non-consumer product. Professional know-how is recommended.

### Operation Safety



- Any operation on this server must be conducted by certified or experienced personnel.
- Before operating, carefully read all included manuals.
- Before using the server, take time to inspect all cables integrity and are properly connected. When in doubt, please contact your dealer as soon as possible.
- To avoid short circuits, keep all metal object (i.e.- Paper clips, screws, staples, etc) away from area which might carry electrical current.
- Before opening chassis panels, make sure all power cords are unplugged.
- Avoid dust, humidity, and extreme temperatures; place server on a stable surface.
- Any defected components, do not try to fix it by yourself. Contact an authorized dealer.
- Gloves are recommended when handling server to protect from cuts and scrapes.
- When server is powered on, components maybe hot. Proceed with caution. Check whether fans are functioning properly.

## Electrical Safety

- Before installing or removing any components or cables, ensure all power cords for system  and attached devices are unplugged.
- Antistatic wrist strap is recommended to prevent static discharge.

- This product is equipped with three prong power cord and plug for user safety. Make sure your electrical outlet is a properly grounded to avoid electric shock.

Nodes, adapters, and disk drives are sensitive to static electricity discharge. These devices are wrapped in antistatic bags to prevent discharge that can cost damage. Take the following precautions:

- If you have an antistatic wrist strap available, use it while handling the device.
- Do not remove the device from the antistatic bag until you are ready to install the device
- With the device still in its antistatic bag, touch it to a metal frame of the system.
- Hold drives by the frame. Avoid touching the solder  joints or pins.
- If you need to lay the device down while it is out of the antistatic bag, lay it on the antistatic bag. Before picking it up again, touch the antistatic bag and the metal frame of the system unit at the same time.
- Handle the devices carefully to prevent permanent damage.

## Battery Replacement Safety

This server is provided with an internal Lithium battery or battery pack. There is a danger of explosion and risk of personal injury if the battery is incorrectly replaced or mistreated.
For more information about battery replacement or proper disposal, contact an authorized reseller or your authorized service provider.

This server contains an internal Lithium Manganese Dioxide, or a Vanadium Pentoxide, or an alkaline battery pack. There is risk of fire and burns if the battery pack is not handled properly. To reduce the risk of personal injury:

- Do not attempt to recharge the battery.
- Do not expose to temperatures higher than 70°C.
- Do not disassemble, crush, puncture, shorten external contacts, or dispose in fire or water.
- Replace only with the spare parts designated for this product.

Batteries should not be littered along with the general household waste. Please use the public collection system or return them to the supplier.

## Laser Peripherals or Devices Safety

To avoid risk of radiation exposure and/or personal injury:

- Do not open the enclosure of any laser peripheral or device.
- Laser peripherals or devices are not user serviceable.
- Return to manufacturer for servicing.

## Intended Application Uses

This product was evaluated as Information Technology Equipment (ITE), which may be installed in offices, schools, computer rooms, and similar commercial type locations. The suitability of this product for other product categories and environments (such as medical, industrial, residential, alarm systems, and test equipment), other than an ITE application, may require further evaluation.

## Site Selection



System is designed to operate in a typical office environment. Such as:

- Clean, dry, and free of airborne particles (other than normal room dust).
- Well-ventilated and away from sources of heat including direct sunlight and radiators.
- Vibration or physical shock free environment.
- Provided with a properly grounded wall outlet.

# Regulatory and Integration Information

## Regulatory Compliance Identification Numbers

For the purpose of regulatory compliance certifications and identification, this server is assigned a serial number. This server serial number can be found on the product label, along with the required approval markings and information. When requesting certification information for this product, always refer to this serial number. This serial number should not be confused with the marketing name or model number.

## Product Regulatory Compliance

Worldwide Safety approvals can be supplied according to the requirements from Marketing or Customer.

## Product Safety Compliance

This server complies with the following safety requirements:

Table i   Product Safety Requirements

| | |
|---|---|
| IEC 60950-1 | Safety of Information Technology Equipment |
| EN 60950-1 | Safety of Information Technology Equipment Including Electrical Business Equipment, European Committee for Electrotechnical Standardization (CENELEC) |
| UL 60950-1 | Safety of Information Technology Equipment |
| UL 94 | Tests for Flammability of Plastic Materials for Parts in Devices & Appliances |
| GB4943 | Safety of Information Technology Equipment |

## Product EMC Compliance

This product has been tested and verified to comply with the following electromagnetic compatibility (EMC) regulations.

## Communications Commission Notice

Part 15 of the Federal Communications Commission (FCC) Rules and Regulations has established Radio Frequency (RF) emission limits to provide an interference-free radio frequency spectrum. Many electronic devices, including computers, generate RF energy incidental to their intended function and are, therefore, covered by these rules. These rules place computers and related peripheral devices into two classes, A and B, depending upon

their intended installation. Class A devices are those that may reasonably be expected to be installed in a business or commercial environment. Class B devices are those that may reasonably be expected to be installed in a residential environment (for example, personal computers). The FCC requires devices in both classes to bear a label indicating the interference potential of the device, as well as additional operating instructions for the user.

The rating label on the device shows which class (A or B) the equipment falls into. Class A devices do not have an FCC logo or FCC ID on the label. Class B devices have an FCC logo or FCC ID on the label. Once the class of the device is determined, refer to the following corresponding statement.

## Class A Equipment

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at personal expense.

## Declaration of Conformity for Products Marked with the FCC Logo—United States Only

This device complies with Part 15 of the FCC Rules Operation and 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.

For questions regarding your product, please contact the supplier.

To identify this product, refer to the Part, Series, or Model number found on the product.

## European Union Notice

Products with the CE Marking comply with both the EMC Directive (89/336/EEC) and the Low-Voltage Directive (73/23/EEC) issued by the Commission of the European Community. Compliance with these directives implies conformity to the following European Norms (in brackets are the equivalent international standards):

Table ii    European Union EMC Requirements

| | |
|---|---|
| EN55022 (CISPR 22) | Electromagnetic Interference |
| EN55024 (IEC61000-4-2,3,4,5,6,8,11) | Electromagnetic Immunity |
| EN61000-3-2 (IEC61000-3-2) | Power Line Harmonics |
| EN61000-3-3 (IEC61000-3-3) | Power Line Flicker |

## Canadian Notice (Avis Canadien)

### Class A Equipment

This Class A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la classe A respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

### Power Cords

The power cord set included in the server meets the requirements for use in the country where the server was purchased. If this server is to be used in another country, purchase a power cord that is approved for use in that country.

The power cord must be rated for the product and for the voltage and current marked on the product's electrical ratings label. The voltage and current rating of the cord should be greater than the voltage and current rating marked on the product. In addition, the cross-sectional area of the wires must be a minimum of 1.00mm² or 18AWG, and the length of the cords must be between 1.8m (6 feet) and 3.6m (12 feet). If you have questions about the type of power cord to use, contact an authorized service provider.

Route power cords so that they will not be walked on or pinched by items placed upon or against them. Pay particular attention to the plug, electrical outlet, and the point where the cords exit from the product.

## Rack Mount Instructions

The following or similar rack-mount instructions are included with the installation instructions:

- Elevated Operating Ambient - If installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment may be greater than room ambient. Therefore, consideration should be given to installing the equipment in an environment compatible with the maximum ambient temperature (Tma) specified by the manufacturer.
- Reduced Air Flow - Installation of the equipment in a rack should be such that the amount of air flow required for safe operation of the equipment is not compromised.
- System placement – System must be place on a leveled surface.
- Circuit Overloading – To avoid power supply overload, make sure main power source is adequate to accommodate all system.

# Chapter 1
## Introduction

Audience Assumptions

Manual Organization

Specifications

Product Features

System Overview

# 1   Introduction

## 1.1 Audience Assumptions

This document is for the person who installs, administers, and troubleshoot storage systems. DataON Storage assumes you are qualified in the servicing of this equipment and trained in recognizing hazards in products with hazardous energy levels.

## 1.2 Manual Content

For your informations, chassis and hardware specification is provided. Along with cable connection and details RoHS infomations. Content is as follow:

Table 1-1   Manual Introduction

| | |
|---|---|
| **Introduction** | General server introduction. |
| **Hardware Operations** | Components feature and functions within the system. |
| **Jumpers and Connectors** | Reference on system jumpers and connectors |
| **Cable Connections** | Correct cable management and installation. |
| **Appendix** | China RoHS Regulations information. |

## 1.3 Specifications

The table below is the technical specification for the server.

Table 1-3   Specifications

| | |
|---|---|
| **Dimensions** | ➢ Height: 8.73 cm \| 3.44 inch<br>➢ Width: 44.8 cm \| 17.64 inch<br>➢ Length: 80.0 cm \| 31.5 inch |
| **Weight** | ➢ Maxi-weight: 33.3 KG \| 73.4 lb |
| **Temperature** | ➢ Operating System: +5°C ~ +35°C<br>➢ Non-operating System (with package): -40°C ~ +70°C |
| **Humidity** | ➢ Operating System: +20% ~ +80%<br>➢ Non-operating System (with package): +10% ~ +90% |
| **Voltage** | ➢ 100~240VAC input, 50/60Hz |
| **Current** | ➢ 12A~8A |

## 1.4 Product Features
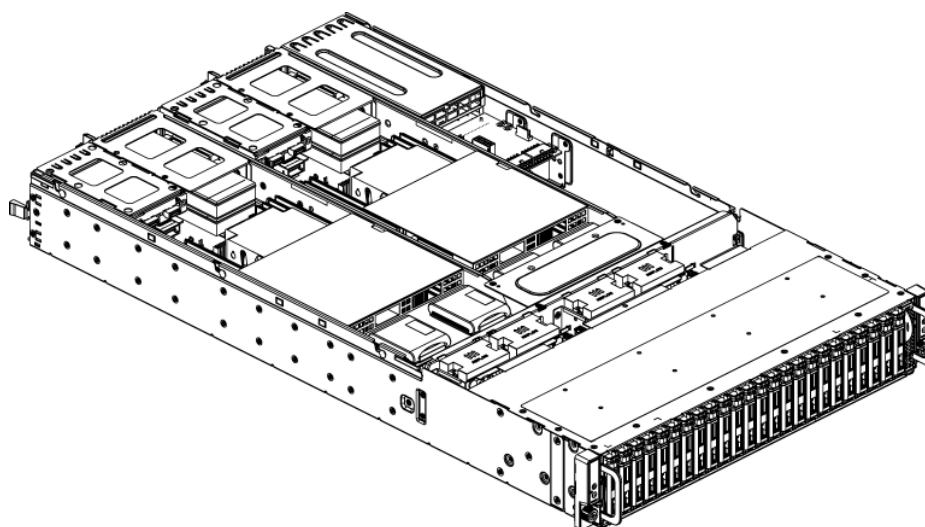


Figure 1-1    24 x 2.5" HDD Product Introduction

Table 1-4    Product Features

| | |
|---|---|
| **Chassis** | ➢ 2U rack-mounted chassis |
| **Power** | ➢ 2 x 1200W redundant power supplies |
| **Node** | ➢ Supports 2 nodes |
| **Storage** | ➢ 24 x 2.5" hot-pluggable HDDs (Front) <br> ➢ 2 x 2.5" SSDs (Rear) |
| **Backplane** | ➢ One 2.5" HDD Backplane <br> ➢ Two Boot SSD backplanes |
| **System Fan** | ➢ Number of fan cage: 4 <br> ➢ Single Fan Size: 60mm x 60mm x 38mm |

## 1.5 System Overview

### 1.5.1 Server Chassis Layout
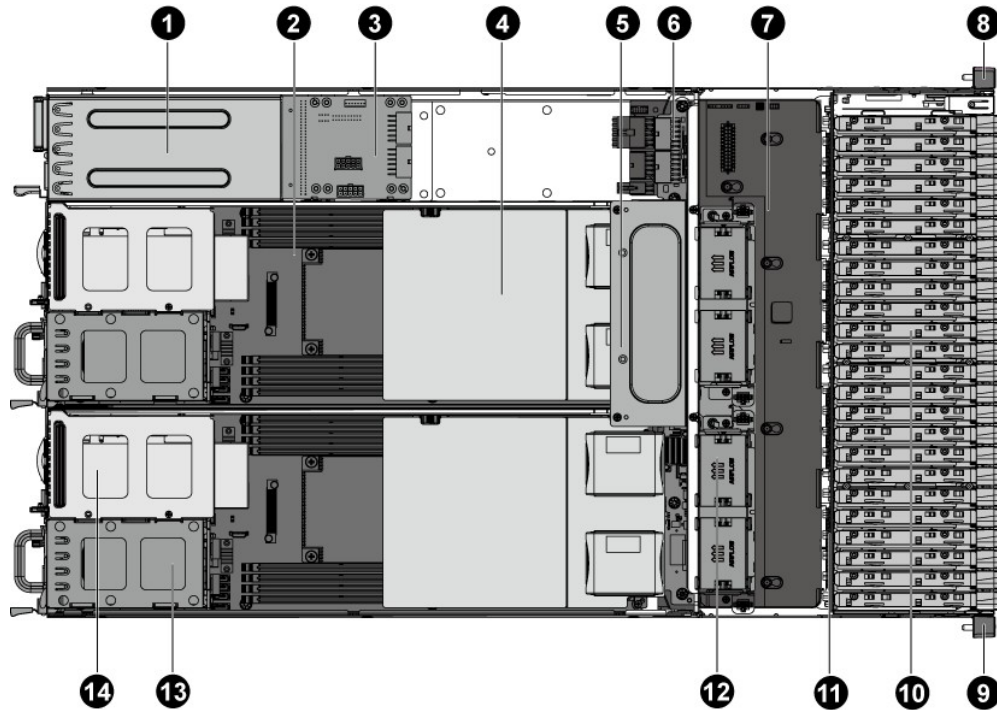


Figure 1-2    System Overview

| | |
|---|---|
| 1 | Power Supply |
| 2 | Nodes |
| 3 | Power Distribution Boards |
| 4 | BBU Assembly (BBU + Fan Duct) |
| 5 | Strong Plate |
| 6 | Middle Plane |
| 7 | Bridge Board |
| 8 | Front Panel 2 |
| 9 | Front Panel 1 |
| 10 | HDD Bays |
| 11 | 2.5" HDD Backplane |
| 12 | System Fans |
| 13 | Boot SSD Assembly |
| 14 | Expansion Card Assembly (Low Profile) |

## 1.5.2 Front View

CiB-9224 V12 supports up to 24 x 2.5" HDD configurations. The 2U server allow front access to the HDD. In addition, systems LEDs indicators is also located on the front for easy notification.
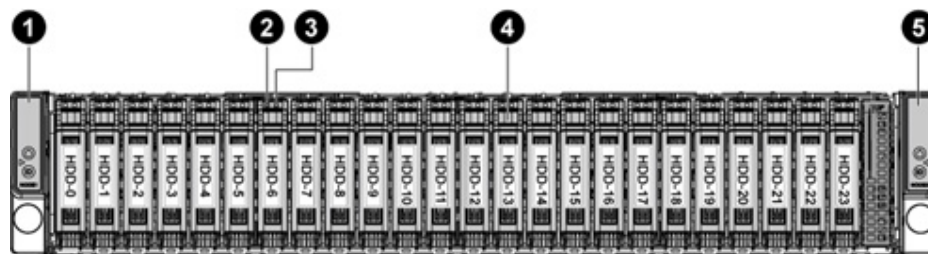


Figure 1-3    Front View of 24 x 2.5" HDDs

| | |
|---|---|
| 1 | Front Panel 1 |
| 2 | HDD Activity LED |
| 3 | HDD Status LED |
| 4 | HDDs |
| 5 | Front Panel 2 |

## 1.5.3  Back View

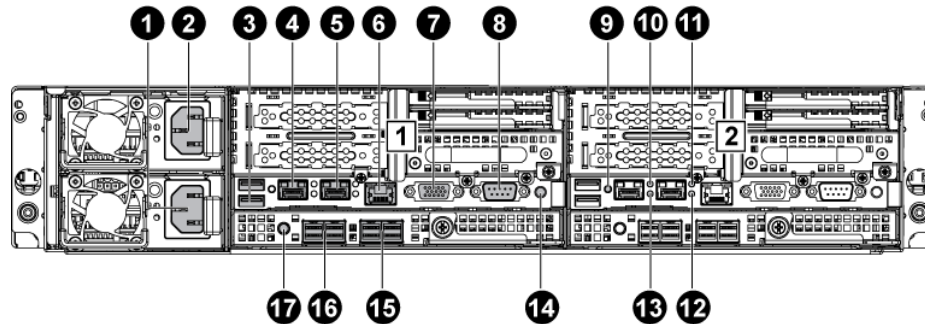For your convenient, the modular component is design for ease of maintenances and replacement.



Figure 1-4    Back View with Four Nodes

| | |
|---|---|
| 1 | Power Supply 1 |
| 2 | Power Supply 0 |
| 3 | Rear Dual USB Port |
| 4 | 10G NIC 0 Port |
| 5 | 10G NIC 1 Port |
| 6 | Management Port |
| 7 | VGA Connector |
| 8 | Serial Port |
| 9 | ID LED |
| 10 | 10G NIC 0 Link / Activity LED |
| 11 | 10G NIC 1 Link / Activity LED |
| 12 | 10G NIC 1 Speed LED |
| 13 | 10G NIC 0 Speed LED |
| 14 | Power Button |
| 15 | JBOD HDMini-SAS Connector 3-4 |
| 16 | JBOD HDMini-SAS Connector 1-2 |
| 17 | JBOD Power LED |

## 1.5.4    Buttons and System LED Information

LED indicator and buttons is located on the front panels of each side. The LED indicator provides current system activities and serve as status of system power and ID of each node.
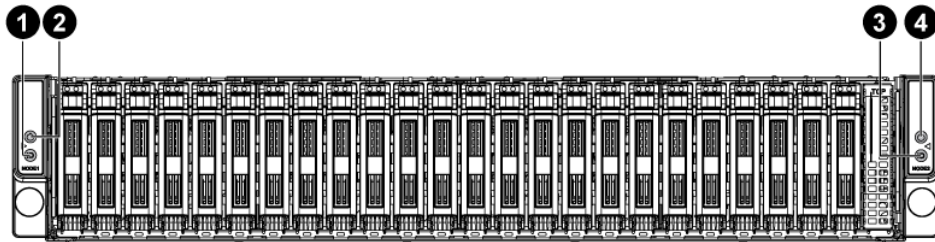


Figure 1-5    Front Panel Buttons and LEDs

| | |
|---|---|
| 1 | ID Button for Node 1 |
| 2 | Power Button for Node 1 |
| 3 | ID Button for Node 2 |
| 4 | Power Button for Node 2 |

Detailed LED status information is shown below:

Table 1-5  LED Information

| HDD LED | | | |
|---|---|---|---|
| **Name** | **Color** | **Condition** | **Function / Status** |
| Activity LED | Green | On | HDD ready for access |
| | | Blink | During spin up or accessing HDDs |
| | | Off | HDD not ready |
| Status LED | Blue | On | Ready for remove (SES) |
| | | Blink | HDD identifier (SES) |
| | | Off | Normal |
| | Red | On | Hard drive fail or port disable (SES) |
| | | Off | Normal |
| | Purple | Blink | Rebuild/remap (SES) |
| | Blue->Purple->Blue->Purple | Blink | Consistency check (SES) |

| Front Panel LED | | | |
|---|---|---|---|
| **Name** | **Color** | **Condition** | **Function / Status** |
| Power LED | Green | On | Power on (S0 / S1) |
| | None | Off | Power off (S4 / S5) |
| | Amber | Blink | Warning / Attention |
| ID LED | Blue | On | (IPMI) Via chassis identify command on or ID button press ID on |
| | | Off | (IPMI) Via chassis identify command off or ID button press ID off |
| | | Blink | Only (IPMI) Via chassis identify command blink on |

## 1.5.5 Motherboard Connectors
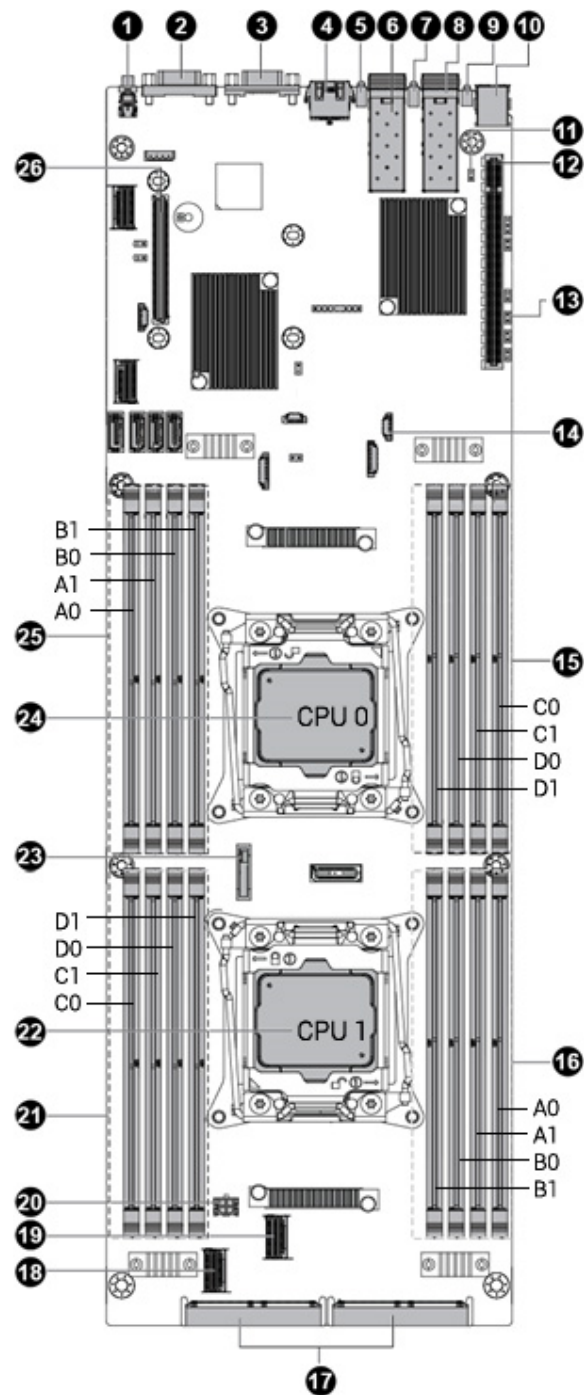


Figure 1.6    Motherboard Overview

| | |
|---|---|
| 1 | Power Button (SW1) |
| 2 | Serial Port (J40) |
| 3 | VGA Port (J39) |
| 4 | Management NIC Port (J50) |
| 5 | 10G NIC 1 LED (CR10) |
| 6 | 10G NIC 1 Port (J56) |
| 7 | 10G NIC 0 LED (CR11) |
| 8 | 10G NIC 0 Port (J55) |
| 9 | ID LED (CR26) |
| 10 | Dual USB Port (J48) |
| 11 | BIOS Recovery Jumper (J27) |
| 12 | PCI-E x16 Slot (J37) |
| 13 | Password Clear Jumper (J51) |
| 14 | Card SGPIO Connector (J71) |
| 15 | DIMM Slots for Processor 0 (C0, C1, D0, D1) |
| 16 | DIMM Slots for Processor 1 (A0, A1, B0, B1) |
| 17 | Backplane Connectors (J76, J77) |
| 18 | Backplane Mini-SAS Connector 0 (J24) |
| 19 | Backplane Mini-SAS Connector 1 (J23) |
| 20 | Power Connector (J64) |
| 21 | DIMM Slots for Processor 1 (C0, C1, D0, D1) |
| 22 | Processor 1 (CPU1) |
| 23 | System Battery (BH1) |
| 24 | Processor 0 (CPU0) |
| 25 | DIMM Slots for Processor 0 (A0, A1, B0, B1) |
| 26 | PCI-e x8 Slot for LSI SAS 3008 |

# Chapter 2
## Hardware Operations

# 2 Hardware Operations

This chapter provides hardware setup and replacement procedures.

> The components shown in this chapter are mainly for your reference. Please take the actual shipment as standard.

## 2.1 Before You Start

Take note of the following procedures before you install or remove any internal components.

> To reduce the risk of injury from electric shock, unplug all power from the systems.

> Turning off the systems does not means is fully power off. Internal circuity may remain Active. Disconnect all power cords from the server to completely power off the system.

## 2.2 Chassis Cover

The server is a 2U form factor. Designed for components maintenance ease.

### Reminder

*Before you remove or install the chassis cover, please follow the step below:*
**Step 1:** *Make sure the server is off and disconnected from a power source.*

### 2.2.1 To remove the chassis cover

❶ Release the screw on the chassis cover.
❷ Press the button along the direction of the arrow.
❸ Simultaneously slide the cover horizontally to the back and remove it.
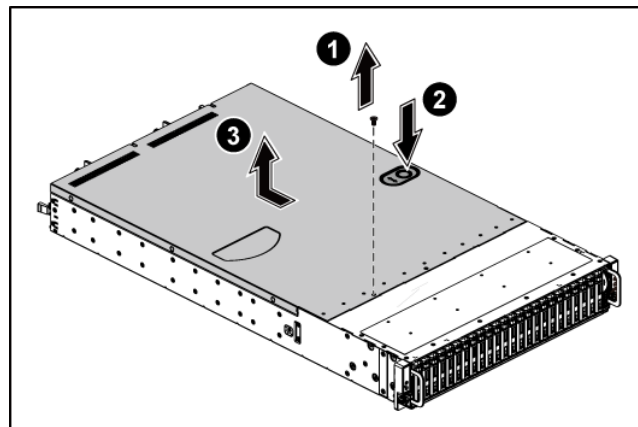


Figure 2-1    Removing the Chassis Cover

## 2.2.2    To install the chassis cover

❶ Locate the chassis cover to the right position on the chassis as shown below and then slide it to the front until it is closed.
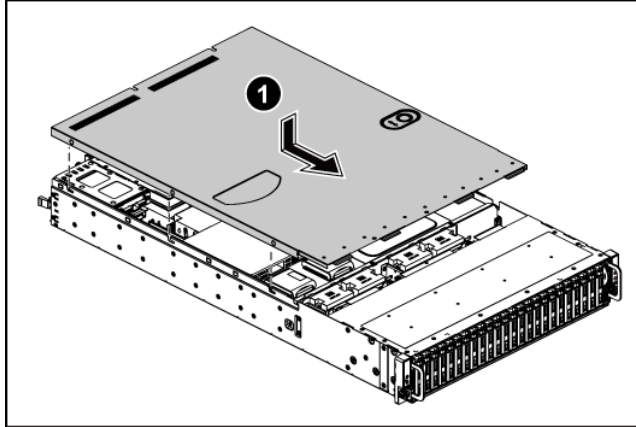


Figure 2-2    Sliding the Chassis Cover to the Front ❷
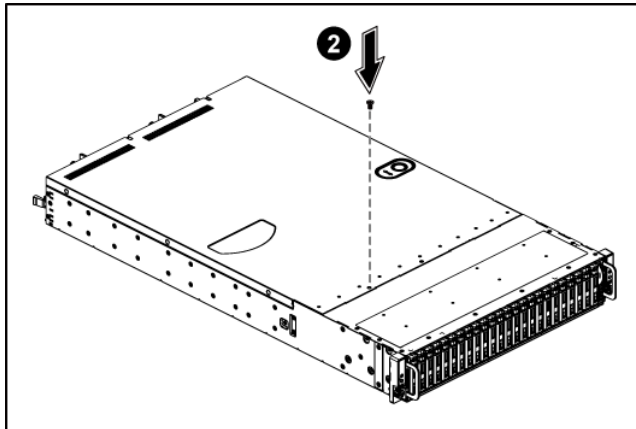
Secure the chassis cover with one screw.



Figure 2-3    Tightening the Screw

To ensure proper cooling. Chassis cover must be install before turning on the system.

## 2.3 Power Supplies

CiB-9224 V12 offer two 1200w hot-swappable redundant power supplies. If one power supply fail, simply replace the power supply module without powering off the system.

The location of power supplies on the server is shown below:
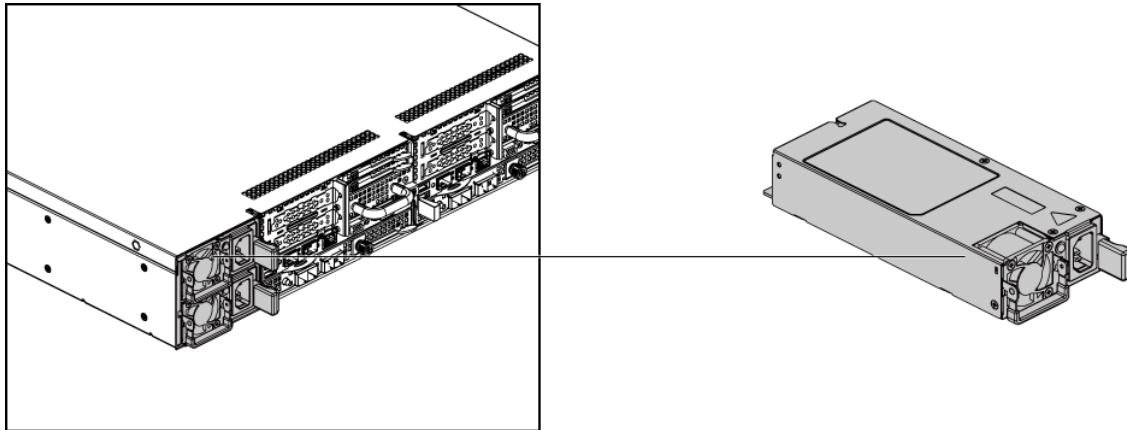


Figure 2-4    Power Supply Locations

### 🔆 Reminder

*Please follow the steps below before removing or installing the power supply modules.*

**Step 1:**    *Disconnect all necessary cables.*

### 2.3.1   To remove the power supply

❶  Pull up the handle.
❷  Press the retaining clip on the right side of the power supply along the direction of the arrow.
❸  At the same time, pull out the power supply. (The power supply takes considerable force to remove.)
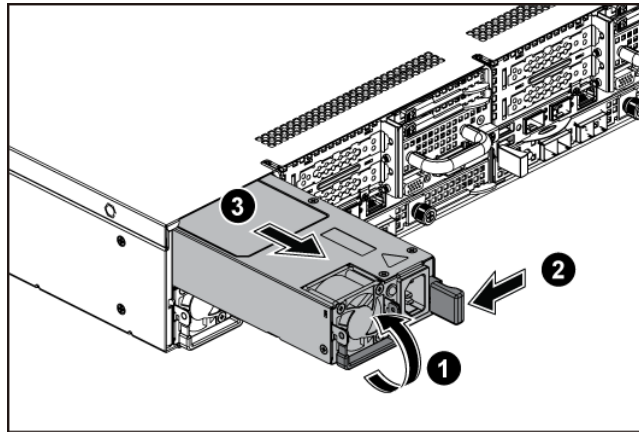
Figure 2-5    Removing the Power Supply

### 2.3.2    To install the power supply

Insert the replacement power supply firmly into the bay. The retaining clip should snap. Connect the AC power cord to the replacement power supply.
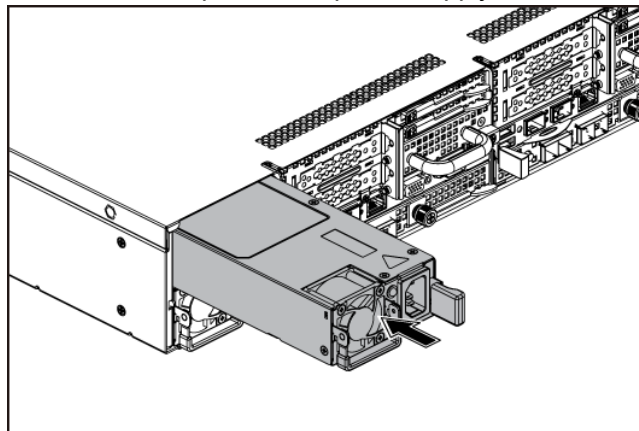


Figure 2-6    Installing the Power Supply

## 2.4 2.5″ SAS HDDs

The CiB-9224 V12 support up to 24 x 2.5" hot-pluggable SAS HDD / SSD. You don't need to power-off the system when removing or installing a HDD / SSD.

The location of 2.5" SAS HDD / SSD assemblies on the server is shown below:
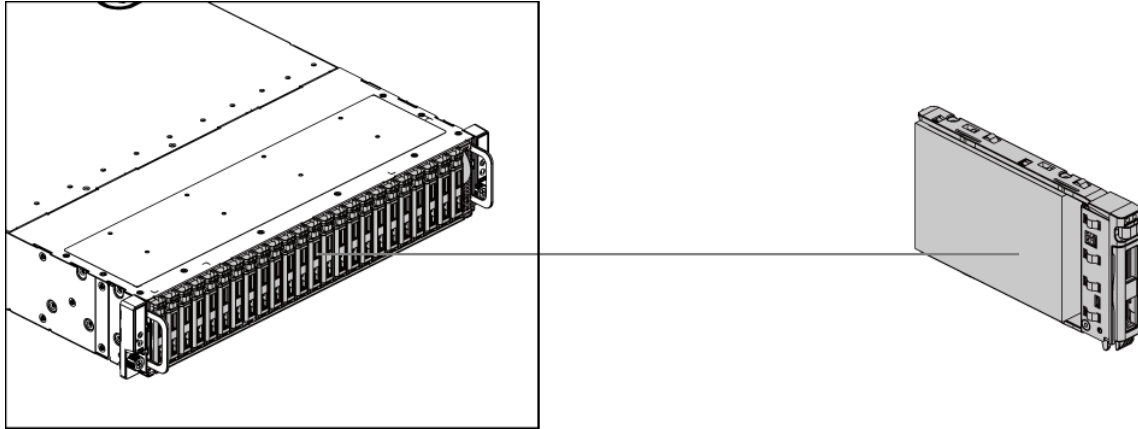
Figure 2-7    2.5" SAS HDD / SSD Locations

> • Take note of the drive tray orientation before sliding it out.
> • Tray will not fit back into the bay if inserted incorrectly.

### 2.4.1   To remove a HDD / SSD

❶  Push the release button.

❷  Pull the lever open.

❸  Slide the HDD / SSD assembly out of the Drive bay.
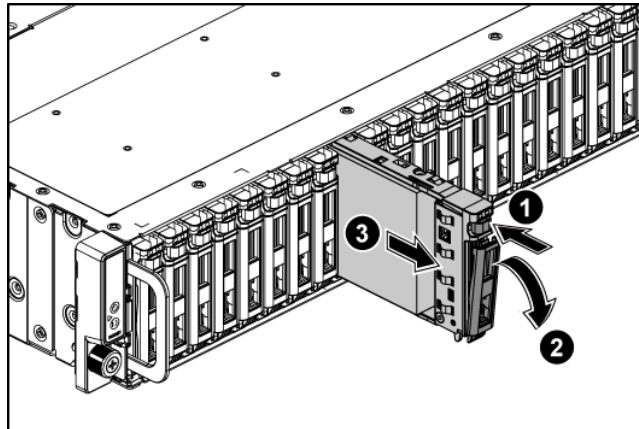


Figure 2-8    Sliding out the HDD Assembly

❹  Loosen the four screws that secure the HDD / SSD.
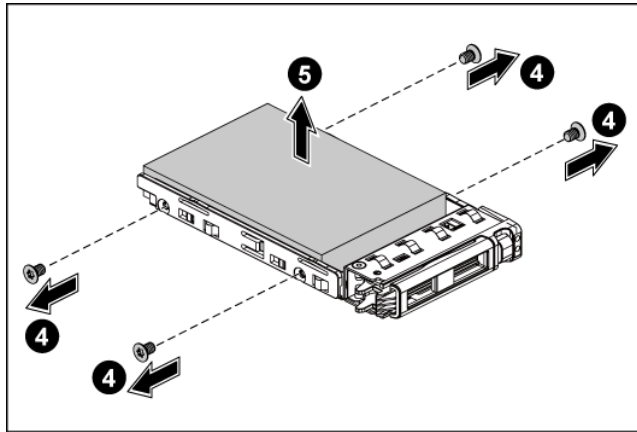
❺  Lift the HDD / SSD out of the Drive tray.

Figure 2-9    Removing the HDD / SSD

## 2.4.2    To install a HDD / SSD

❶ Place the HDD / SSD to the Drive tray.
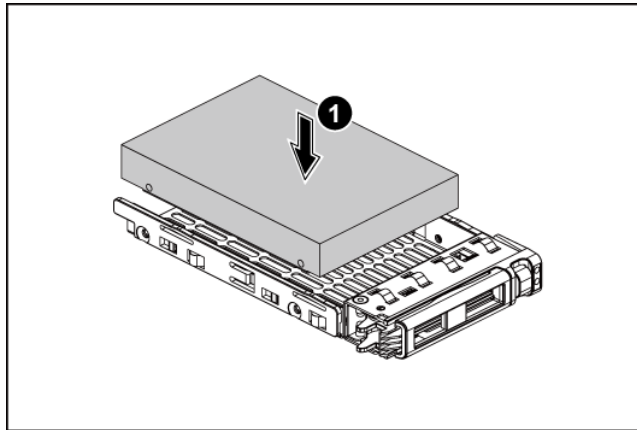


Figure 2-10  Placing the HDD / SSD to the Drive Tray

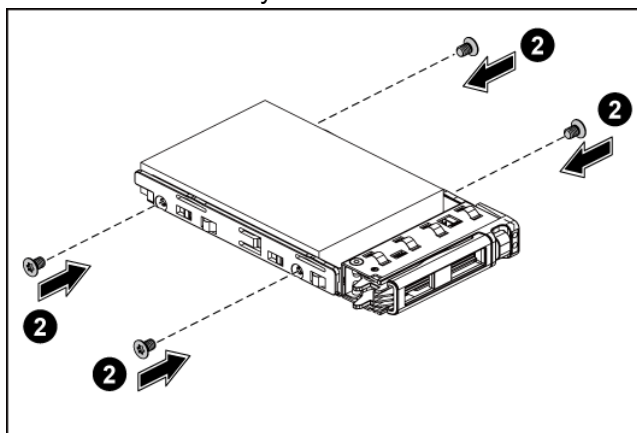❷ Secure the HDD / SSD to the Drive tray with four screws.



Figure 2-11    Fastening the Screws

❸ Carefully insert the HDD / SSD assembly into the Drive bay with the lever lifted until it completely enters the Drive bay.
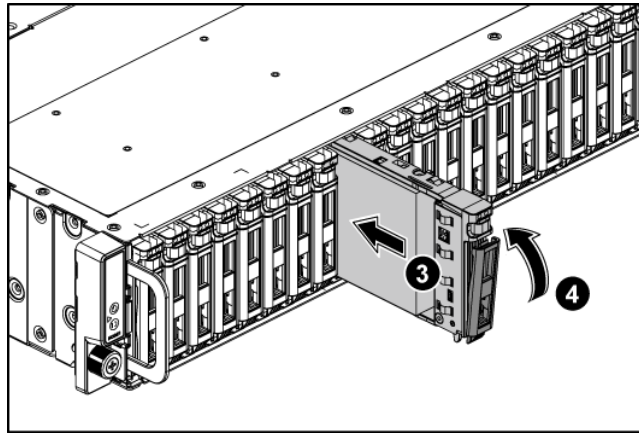
❹ Push the lever back in place.



Figure 2-12    Installing the HDD Assembly

Make sure that the HDD / SSD is connected to the Drive connector on the backplane.

## 2.5 Nodes

CiB-9224 V12 system supports two nodes.

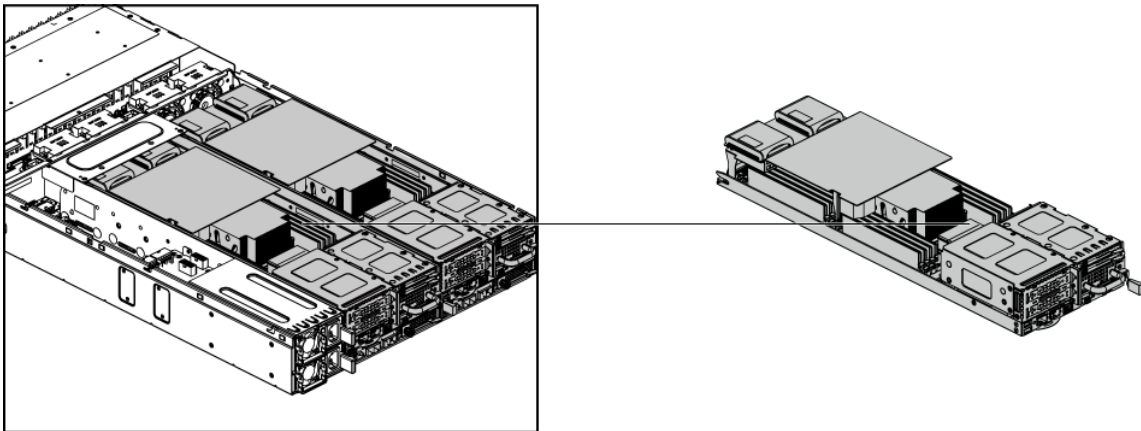The location of node on the system is shown below:



Figure 2-13    Node Locations

### 💡 Reminder

*Before you remove or install the node, please follow the steps below:*

***Step 1***：    *Make sure the Node is turned off.*

***Step 2***：    *Disconnect all necessary cables.*

### 2.5.1    To remove the node

❶ Loosen the screw.
❷ Press the retaining latch.
❸ Slide the node out of the chassis by using the handle.
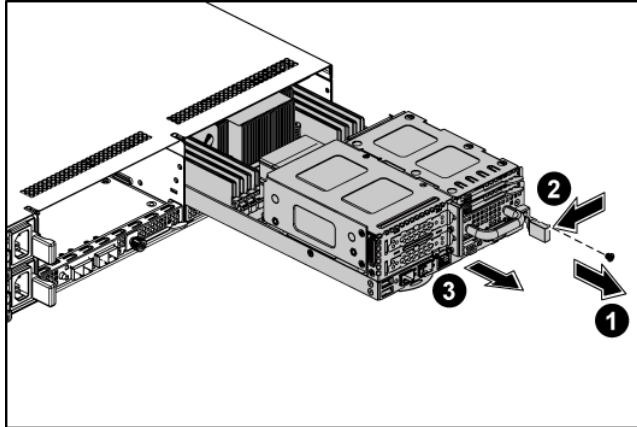


Figure 2-14    Removing the Node

### 2.5.2    To install the node

❶ Push the node into the chassis until it's completely seated in place.
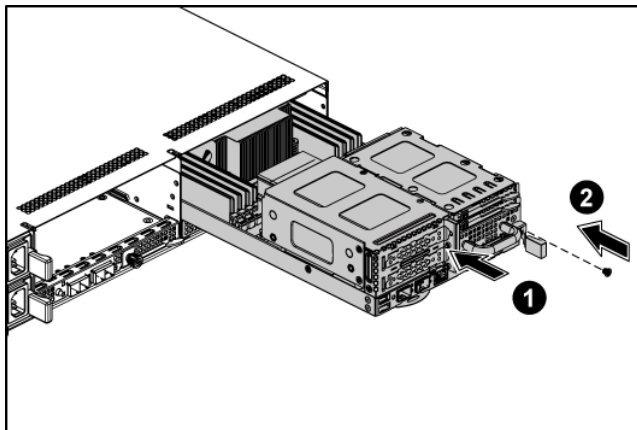❷ Secure the screw.



Figure 2-15    Installing the Node

## 2.6  SAS I/O Module

The CiB-9224 V12 supports two JBOD modules.

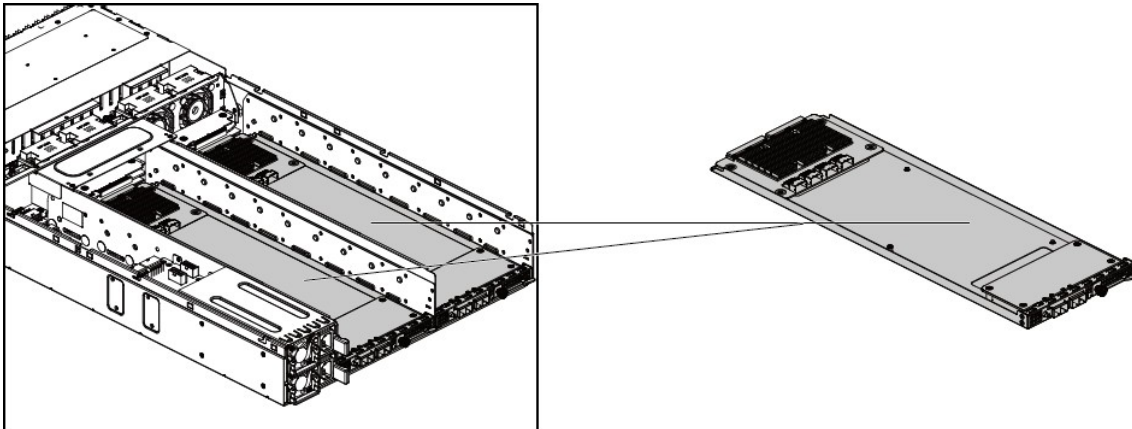The location of JBOD module on the system is shown below:

Figure 2-16    SAS I/O Module Locations

---

🔧 **Reminder**

*Before you remove or install the SAS I/O board, please follow the steps below:*

*Step 1*：    *Only replace one SAS I/O module at a time.*

*Step 2*：    *Disconnect all necessary cables. Make sure at least on SAS I/O module to provide I/O path to HDD/SSD*

---

## 2.6.1   To remove the JBOD Module

❶ Pull the lever open.

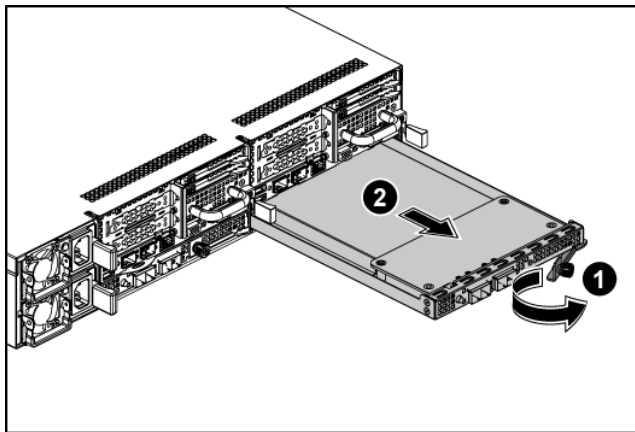❷ Slide the JBOD assembly out of the chassis by using the lever.



Figure 2-17    Removing the JBOD Assembly

---

When install the JBOD assembly:

Please mind fingers between the lock hinge and tray as it may cost injuries

---

## 2.6.2   To install the JBOD Module

Reverse the steps above to install the expander board.

## 2.7 Boot SSD

### 💡 Reminder

*Before you remove or install the Boot SSD please follow the steps below:*
**Step 1：**   *Make sure the server is turned off and disconnected to any AC power source.*

❼ Pull the SSD assembly out of SSD cage.
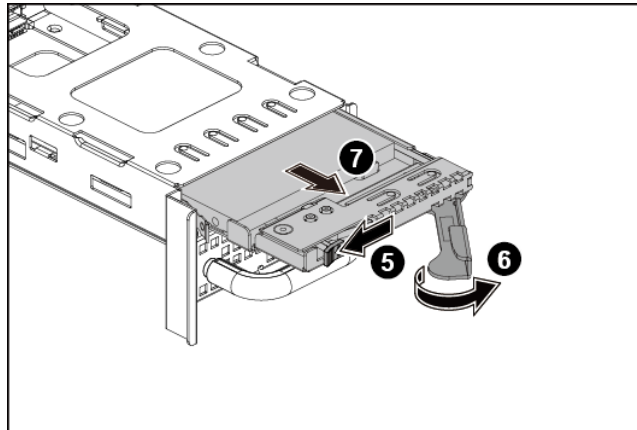


Figure 2-18    Removing the SSD Assembly

❽ Remove the SSD out of the SSD tray along the direction of the arrow.
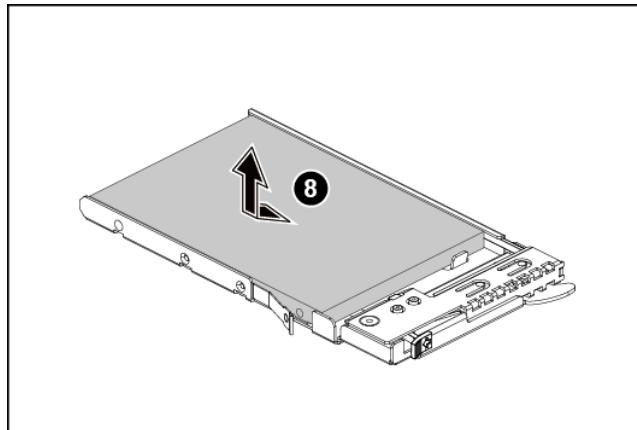


Figure 2-19    Removing the HDD

## 2.8 X16 Riser PCI-e Card

### 2.8.1  To remove the expansion card Assembly

❶  Loosen the screws that secure the expansion card assembly.
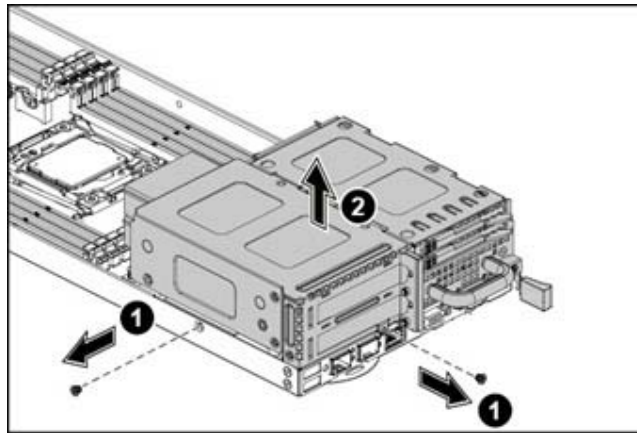❷  Lift the expansion card assembly out of the node.



Figure 2-20  Removing the Expansion-Card Assembly

### 2.8.2  To remove the expansion Card

❶  Loosen the screws that secure the expansion card.
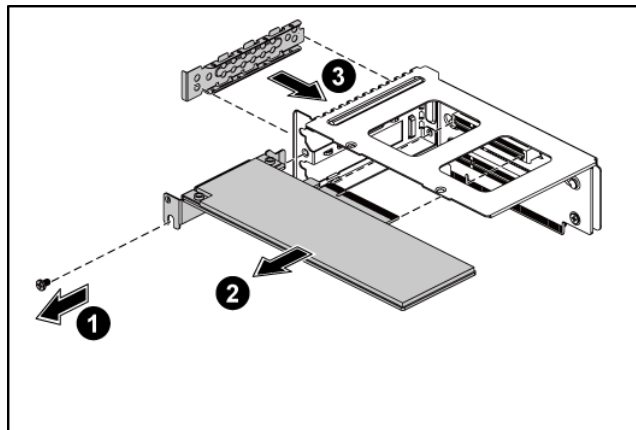❷  Remove the expansion card.
❸  Install the expansion-card slot cover.



Figure 2-21    Removing the Expansion Card

### 2.8.3  To install the expansion card
Reverse the steps above to install the expansion card.

## 2.9 BBU Assembly for RAID Controller (Optional)

This server is equipped with two BBU assemblies; each node contains up to two BBUs air duct.

---

### 🔆 **Reminder**

*Before you remove or install a BBU, please follow the steps below:*

***Step 1:*** *Make sure the node is turned off*

***Step 2:*** *Remove the node. To remove the air duct, see "2.5.1 To remove the node".*

***Step 3:*** *Disconnect all necessary cables.*

---

### 2.9.1 To remove a BBU

Remove a BBU out of the BBU assembly along the direction of the arrow.
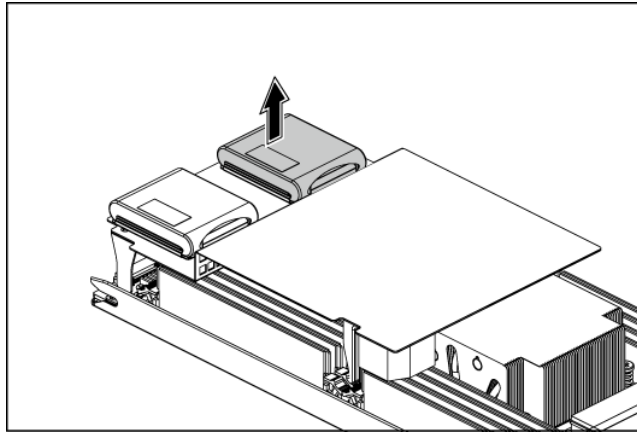


Figure 2-22    Removing the BBU

### 2.9.2 To install a BBU

Reverse the steps above to install a BBU.

## 2.10   Air Duct

### 2.10.1  To remove the air duct

❶ Loosen the screws that secure the fan duct.
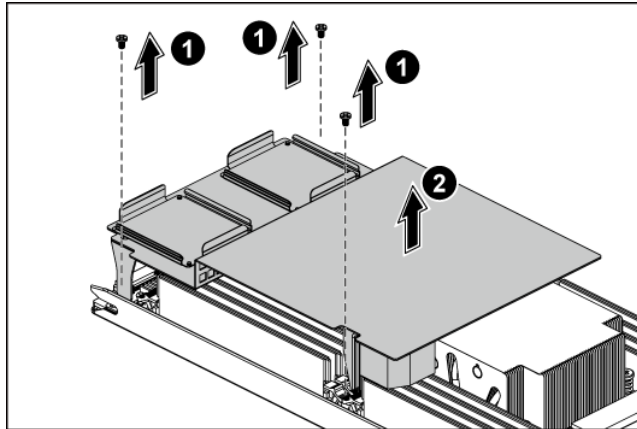❷ Remove the air duct.



Figure 2-23    Removing the Air Duct

### 2.10.2  To install the air duct

Reverse the steps above to install the air duct.

## 2.11   System Fans

Subdividing the node area and the backplane area is a metal cage that holds the system fans. This CiB-9224 V12 contains four system fans which are located inside the chassis. These system fans maintain the ideal temperature for the node, backplane and disk drives.

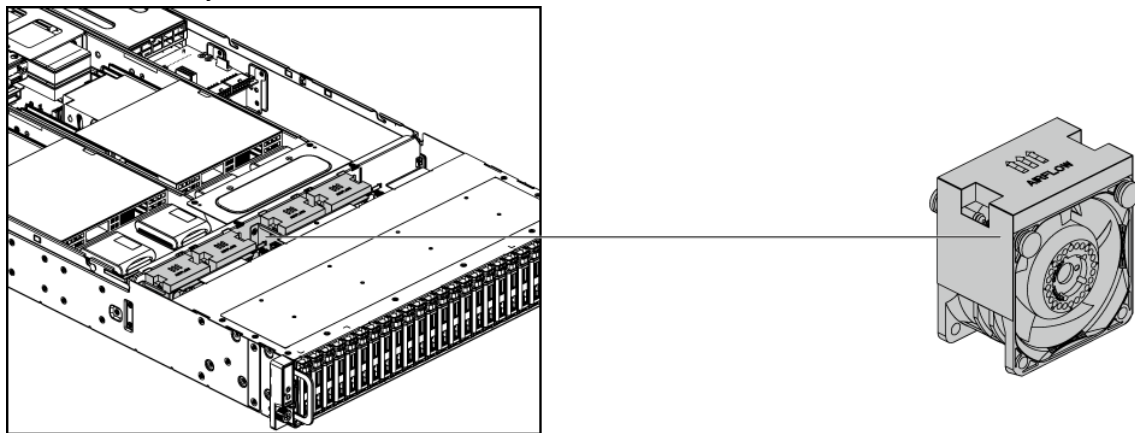The location of system fans is shown below:



Figure 2-24 System Fan Locations

### 🔦 Reminder

*Before you remove or install a system fan, please follow the steps below:*

**Step 1**：   *Make sure the System is not turned on or connected to the AC power.*

**Step 2**：   *Remove the chassis cover strong plate. To remove the chassis cover, see "2.2 Chassis*

**Step 3**：   *Disconnect all the necessary cables.*

## 2.11.1 To remove a system fan

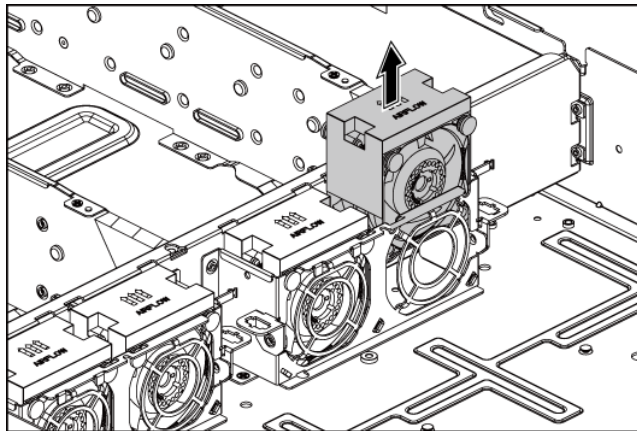Lift a system fan out of the chassis directly.



Figure 2-25    Removing a System Fan

## 2.11.2 To install a system fan

Reverse the step above to install a system fan.

# Appendix

China RoHS Regulations

# Appendix    China RoHS Regulations

## 产品中有毒有害物质或元素的名称及含量标识表

| 零 部 件 名 称 | 有     毒     有     害     物     质     或     元     素 | | | | | |
|---|---|---|---|---|---|---|
| | 铅<br>(Pb) | 汞<br>(Hg) | 镉<br>(Cd) | 六价铬<br>($Cr^{6+}$) | 多溴联苯<br>(PBB) | 多溴二苯醚<br>(PBDE) |
| 金属机构件 | X | O | O | O | O | O |
| 塑料机构件 | O | O | O | O | O | O |
| 芯片 | X | O | O | O | O | O |
| 内存模组 | X | O | O | O | O | O |
| 电路板组件* | X | O | O | O | O | O |
| LCD显示模组 | X | O | O | O | O | O |
| 钮扣电池 | O | O | O | O | O | O |
| 充电电池组件 | O | O | O | O | O | O |
| 电源供应器 | X | O | O | O | O | O |
| 电源线 | O | O | O | O | O | O |
| 信号连接线 | O | O | O | O | O | O |
| 风扇 | X | O | O | O | O | O |
| 散热模块 | X | O | O | O | O | O |
| 光驱 | X | O | O | O | O | O |
| 硬盘 | X | O | O | O | O | O |
| 软驱 | X | O | O | O | O | O |
| 带式磁盘驱动器 | X | O | O | O | O | O |

＊：电路板组件包括印刷电路板及其构成的零部件，如电阻、电容、集成电路、连接器等。

O：表示该有毒有害物质在该部件所有均质材料中的含量均在《电子信息产品中有毒有害物质的限量要求标准》规定的限量要求以下。

X：表示该有毒有害物质至少在该部件的某一均质材料中的含量超出《电子信息产品中有毒有害物质的限量要求标准》规定的限量要求；但是上表中打"×"的部件，其含量超出是因为目前业界还没有成熟的可替代的技术。

除非另有标明，此电子信息产品污染控制标记适用存储和服务器产品。

Figure I    China RoHS Regulations