



SuperServer®
SSG-229J-5BU24JBF

USER'S MANUAL

Revision 1.0 MNL-2841

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Preface

About This Manual

This manual is written for professional system integrators and PC technicians. It provides information for the installation and use of the SSG-229J-5BU24JBF server. Installation and maintenance should be performed by certified service technicians only.

Notes

For your system to work properly, follow the links below to download all necessary drivers/utilities and the user's manual for your server.

- Supermicro product manuals: <https://www.supermicro.com/support/manuals>
- Product drivers and utilities: <https://www.supermicro.com/wdl>
- Product safety info: https://www.supermicro.com/about/policies/safety_information.cfm
- A secure data deletion tool designed to fully erase all data from storage devices can be found on our website:
https://www.supermicro.com/about/policies/disclaimer.cfm?url=/wdl/utility/Lot9_Secure_Data_Deletion_Utility
- Frequently Asked Questions: <https://www.supermicro.com/FAQ/index.php>
- If you still have questions after referring to our FAQs, contact our support team. Region-specific Technical Support email addresses can be found at: "[Contacting Supermicro](#)" on page 8
- If you have any feedback on Supermicro product manuals, contact our writing team at: Techwriterteam@supermicro.com

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Conventions Used in the Manual

Special attention should be given to the following symbols for proper installation and to prevent damage done to the components or injury to yourself.



Warning! Indicates important information given to prevent equipment/property damage or personal injury.



Warning! Indicates high voltage may be encountered while performing a procedure.

Important: Important information given to ensure proper server installation or to relay safety precautions.

Note: Additional information given to differentiate various models or to provide information for proper server setup.

Contents

Contacting Supermicro	8
Chapter 1: Introduction	9
1.1 Overview	10
1.2 System Features	11
Front View	11
Control Panel	12
Rear View	14
1.3 System Architecture	15
Main Components	15
Chapter 2: Server Installation	16
2.1 Unpacking the System	17
2.2 Preparing for Setup	18
Choosing a Setup Location	18
Rack Precautions	18
System Precautions	18
Rack Mounting Considerations	19
Ambient Operating Temperature	20
Airflow	20
Mechanical Loading	20
Circuit Overloading	20
Reliable Ground	20
2.3 Installing the Rails	21
Identifying the Rails	21
Releasing the Inner Rail	22
Installing the Inner Rails onto the Chassis	22
Installing the Outer Rails onto the Rack	23
Outer Rail Installation	23
2.4 Installing the Chassis into a Rack	24
Removing the Chassis from the Rack	25
Chapter 3: Maintenance and Component Installation	26
3.1 Removing Power	27

Removing Power from a Node	27
Removing Power from the System	27
3.2 Accessing the System	28
Removing the Top Cover	28
Removing the Nodes	29
Removing a Node	29
Installing a Node	29
3.3 Static-Sensitive Devices	30
Precautions	30
3.4 Storage Drives	31
Drive Carrier Indicators	31
Removing a Drive Carrier	32
2.5" NVMe Carrier	32
Installing Drives	33
2.5" NVMe Drives	33
Performing a Manual Hot-Plug	34
3.5 System Cooling	35
Fans	35
Changing a System Fan	35
3.6 Expansion Cards	36
PCIe Cards	36
Removing an Expansion Module	36
3.7 Power Supply	38
Replacing the Power Supply	38
Chapter 4: Software	40
4.1 BMC	41
BMC ADMIN User Password	41
Accessing BlueField-3 CPU MGMT Port IP Addresses	42
About the BlueField-3 MGMT Password	43
Obtaining Node BMC IP Address	44
Connecting Network Ports	45
Chapter 5: Troubleshooting and Support	46
5.1 Online Resources	47
Direct Links for the SSG-229J-5BU24JBF System	47

Direct Links for General Support and Information	47
5.2 Baseboard Management Controller (BMC)	48
5.3 Troubleshooting Procedures	49
Before Power On	49
No Power	49
No Video	49
System Boot Failure	49
Memory Errors	50
Losing the System's Setup Configuration	50
If the System Becomes Unstable	50
5.4 Where to Get Replacement Components	52
5.5 Technical Support Procedures	53
Returning Merchandise for Service	53
5.6 Feedback	54
Appendix A: Standardized Warning Statements for AC Systems	55
Warning Definition	55
Installation Instructions	57
Circuit Breaker	59
Power Disconnection Warning	60
Equipment Installation	62
Rack Stability Hazard	63
Restricted Area	65
Battery Handling	67
Redundant Power Supplies	68
Backplane Voltage	70
Comply with Local and National Electrical Codes	71
Product Disposal	72
Fan Warning	74
Power Cable and AC Adapter	76
Appendix B: System Specifications	79
Appendix C: General Data Center Environmental Specifications	81

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Chapter 1:

Introduction

This chapter provides a brief outline of the functions and features of the SSG-229J-5BU24JBF system. It is based on the BPN-NVME5-229PL-J PCIe switch board and the CSE-229TS chassis.

1.1 Overview	10
1.2 System Features	11
Front View	11
Rear View	14
1.3 System Architecture	15
Main Components	15

1.1 Overview

This chapter provides a brief outline of the functions and features of the SuperServer SSG-229J-5BU24JBF. The following provides an overview of the system specifications and capabilities.

System Overview	
PCIe Switch Board	BPN-NVME5-229PL-J
Chassis	CSE-229TS
Drive Support	24 front hot-swap 2.5" NVMe drive bays Two M.2 PCIe 5.0 x4 NVMe slots (M-key 2280/22110)
Expansion Slots	Three PCIe Gen5 x16 slots, which can accommodate full-height, full-length (FHFL) devices
System Cooling	Six heavy-duty hot-swap 60-mm fans
Power	Two 1600 W redundant Titanium Level (96%) power supplies
Form Factor	2U rackmount: (HxWxD) 3.47" x 17.7" x 30" (88 x 449.4 x 762 mm)

Notes:

- The following safety models associated with the SSG-229J-5BU24JBF have been certified as compliant with UL or CSA: 229JBF-U24

1.2 System Features

The following views of the system display the main features. Refer to the System Specifications appendix of this manual for additional specifications.

Front View

The following features are located on the front of the SSG-229J-5BU24JBF server.



Figure 1-1. SSG-229J-5BU24JBF Front View

System Features: Front	
Feature	Description
Control Panel	Two control panels, one for each node. See " Control Panel " on the next page for more information.

Expansion Slot Locations	
Slot	Description
0–23	2.5" hot-swap NVMe drive bays

Control Panel

The following buttons and LEDs are located on the SSG-229J-5BU24JBF server control panel.

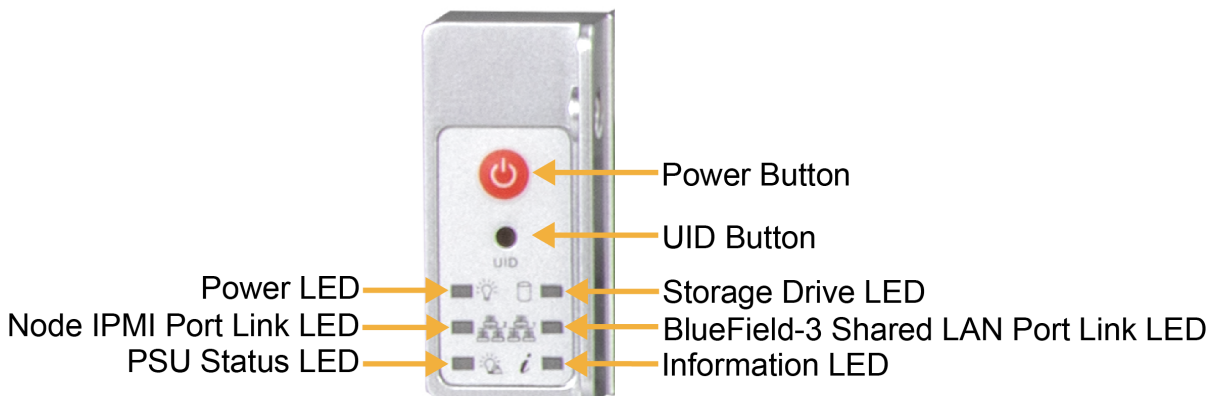


Figure 1-2. SSG-229J-5BU24JBF Control Panel

Control Panel Features	
Feature	Description
Power Button	Applies or removes primary power from the power supply to the server but maintains standby power
Unit Identification (UID) Button	The unit identification (UID) button turns on/off the blue light function of the Information LED and a blue LED on the rear of the chassis. These are used to locate the server in large racks and server banks.
Power LED	Indicates whether the system is powered on
Storage Drive LED	Indicates activity on the M.2 devices when flashing
Node IPMI Port Link LED	Indicates network activity on the JBOF node IMPI port when flashing
Information LED	Alerts the operator to several states. See the Information LED table below for details.
BlueField-3 Shared LAN Port LED	Indicates network activity on the BlueField-3 shared LAN port when flashing
Power Supply Unit (PSU) Status LED	Indicates a power failure in the power supply when flashing

Information LED	
Color, Status	Description
Red, solid	An overheat condition has occurred.
Red, blinking at 1 Hz	Fan failure; check for an inoperative fan.
Red, blinking at 0.25 Hz	Power failure; check for an inoperative power supply.
Red, solid with Power LED blinking green	Fault detected.
Blue and red, blinking at 10 Hz	Recovery mode.
Blue, solid	UID has been activated locally to locate the server in a rack environment.
Blue, blinking at 1 Hz	UID has been activated via BMC to locate the server in a rack environment.
Blue, blinking at 2 Hz	BMC is resetting.
Blue, blinking at 4 Hz	BMC is setting factory defaults.
Blue, blinking at 10 Hz with Power LED blinking green	BMC/BIOS firmware is updating.

Rear View

The following features are located on the rear of the SSG-229J-5BU24JBF server.

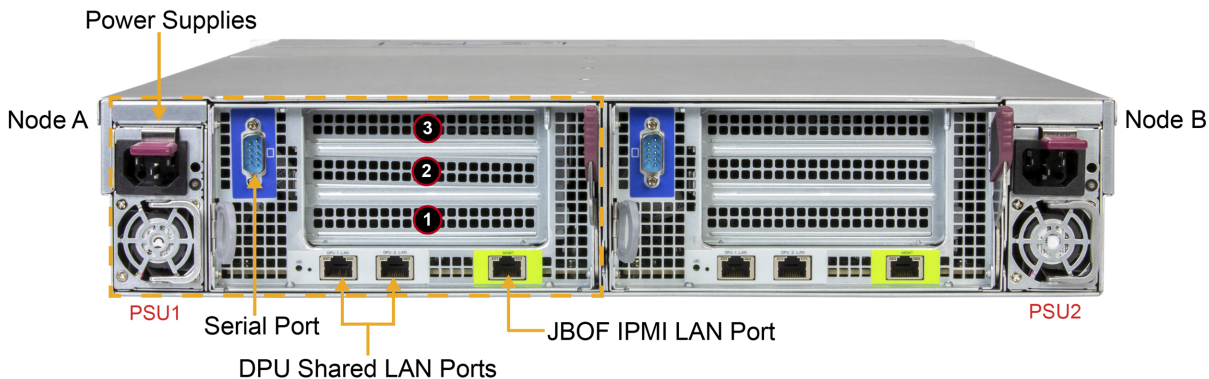


Figure 1-3. SSG-229J-5BU24JBF Rear View

System Features: Rear	
Feature	Description
Power Supplies	Two redundant 1600 W Titanium Level power supplies Note: PSU1 is located in node A, PSU2 is located in node B.
Serial Port	Two serial ports
DPU Shared LAN Ports	Four RJ45 LAN ports connected to DPU only
JBOF IMPI LAN Port	Two dedicated IPMI LAN ports

Expansion Slot Locations	
Slot	Description
3, 1	PCIe 5.0 x16 FHHL for DPU
2	PCIe 5.0 x16 FHFL for GPU

1.3 System Architecture

This section covers the locations of the system's main components and provides a system block diagram.

Main Components



Figure 1-4. SSG-229J-5BU24JBF Main Component Locations

System Features: Top	
Feature	Description
M.2 NVMe Slots	Two M.2 PCIe 5.0 x4 NVMe slots (M-key 2280/22110)
Internal Fans	Six internal heavy-duty 60-mm fans

Chapter 2:

Server Installation

This chapter provides advice and instructions for mounting your server in a server rack. If your server is not already fully integrated with processors, system memory, etc., refer to ["Maintenance and Component Installation" on page 26](#) for details on installing those specific components.

Important: Electrostatic Discharge (ESD) can damage electronic components. To prevent such damage to printed circuit boards (PCBs), it is important to use a grounded wrist strap, handle all PCBs by their edges, and keep PCBs in anti-static bags when not in use.

2.1 Unpacking the System	17
2.2 Preparing for Setup	18
Choosing a Setup Location	18
Rack Precautions	18
System Precautions	18
Rack Mounting Considerations	19
2.3 Installing the Rails	21
Identifying the Rails	21
Releasing the Inner Rail	22
Installing the Inner Rails onto the Chassis	22
Installing the Outer Rails onto the Rack	23
2.4 Installing the Chassis into a Rack	24
Removing the Chassis from the Rack	25

2.1 Unpacking the System

Inspect the box the server was shipped in and note if it was damaged in any way. If any equipment appears damaged, file a damage claim with the carrier who delivered it.

Decide on a suitable location for the rack unit that will hold the server. It should be situated in a clean, dust-free area that is well ventilated. Avoid areas where heat, electrical noise and electromagnetic fields are generated. It will also require a grounded AC power outlet nearby. Be sure to read the precautions and considerations noted in ["Standardized Warning Statements for AC Systems"](#) on page 55.



Warning! Stability hazard. The rack stabilizing mechanism must be in place, or the rack must be bolted to the floor before you slide the unit out for servicing. Failure to stabilize the rack can cause the rack to tip over.

2.2 Preparing for Setup

The box in which the SSG-229J-5BU24JBF server was shipped should include the rackmount hardware needed to install it into the rack. Read this section in its entirety before you begin the installation.

Choosing a Setup Location

- The server should be situated in a clean, dust-free area that is well ventilated. Avoid areas where heat, electrical noise and electromagnetic fields are generated.
- Leave enough clearance in front of the rack so that you can open the front door completely (~25 inches) and approximately 30 inches of clearance in the back of the rack to allow sufficient space for airflow and access when servicing.
- This product should be installed only in a Restricted Access Location (dedicated equipment rooms, service closets, etc.).
- This product is not suitable for use with visual display workplace devices according to §2 of the German Ordinance for Work with Visual Display Units.

Rack Precautions

- Ensure that the leveling jacks on the bottom of the rack are extended to the floor so that the full weight of the rack rests on them.
- In single rack installations, stabilizers should be attached to the rack. In multiple rack installations, the racks should be coupled together.
- Always make sure the rack is stable before extending a server or other component from the rack.
- You should extend only one server or component at a time. Extending two or more simultaneously may cause the rack to become unstable.

System Precautions

- Review the electrical and general safety precautions in "[Standardized Warning Statements for AC Systems](#)" on page 55.
- Determine the placement of each component in the rack before you install the rails.
- Install the heaviest server components at the bottom of the rack first and then work your way up.

- Use a regulating uninterruptible power supply (UPS) to protect the server from power surges and voltage spikes and to keep your system operating in case of a power failure.
- Allow any drives and power supply modules to cool before touching them.
- When not servicing, always keep the front door of the rack and all covers/panels on the servers closed to maintain proper cooling.

Rack Mounting Considerations



Warning! Stability hazard. The rack may tip over causing serious personal injury. Before extending the rack to the installation position, read the installation instructions. Do not put any load on the slide-rail mounted equipment in the installation position. Do not leave the slide-rail mounted equipment in the installation position.



Avertissement!

Danger d'instabilité. Le rack peut basculer et provoquer des blessures corporelles graves.

Avant d'étendre le rack en position d'installation, lire les instructions d'installation. Ne pas charger l'équipement monté sur rail de glissière en position d'installation. Ne pas laisser l'équipement monté sur rail de glissière en position d'installation.

Important: To prevent bodily injury when mounting or servicing this unit in a rack, you must take special precautions to ensure that the system remains stable. The following guidelines are provided to ensure your safety:

- If this unit is the only unit in the rack, it should be mounted at the bottom of the rack.
- When mounting this unit in a partially filled rack, load the rack from the bottom to the top, placing the heaviest component at the bottom of the rack.
- If the rack is provided with stabilizing devices, install the stabilizers before mounting or servicing the unit in the rack.
- Slide rail mounted equipment is not to be used as a shelf or a workspace.
- Do not pick up the server with the front handles. They are designed to pull the system from a rack only.

Ambient Operating Temperature

If installed in a closed or multi-unit rack assembly, the ambient operating temperature of the rack environment may be greater than the room's ambient temperature. Therefore, consideration should be given to installing the equipment in an environment compatible with the manufacturer's maximum rated ambient temperature (TMRA).

Airflow

Equipment should be mounted into a rack so that the amount of airflow required for safe operation is not compromised.

Mechanical Loading

Equipment should be mounted into a rack so that a hazardous condition does not arise due to uneven mechanical loading.

Circuit Overloading

Consideration should be given to the connection of the equipment to the power supply circuitry and the effect that any possible overloading of circuits might have on overcurrent protection and power supply wiring. Appropriate consideration of equipment nameplate ratings should be used when addressing this concern.

Reliable Ground

A reliable ground must be maintained at all times. To ensure this, the rack itself should be grounded. Particular attention should be given to power supply connections other than the direct connections to the branch circuit (i.e. the use of power strips, etc.).

2.3 Installing the Rails

This section provides information on installing the CSE-229TS chassis into a rack unit with the rails provided. There are a variety of rack units on the market, which may mean that the assembly procedure will differ slightly from the instructions provided. You should also refer to the installation instructions that came with the rack unit you are using.

Note: This rail will fit a rack between 26.5" and 36.4" deep.

Identifying the Rails

The CSE-229TS chassis package includes two rail assemblies. Each assembly consists of three sections: an inner rail that secures directly to the chassis, an outer rail that secures to the rack, and a middle rail which extends from the outer rail. These assemblies are specifically designed for the left and right side of the chassis and labeled.

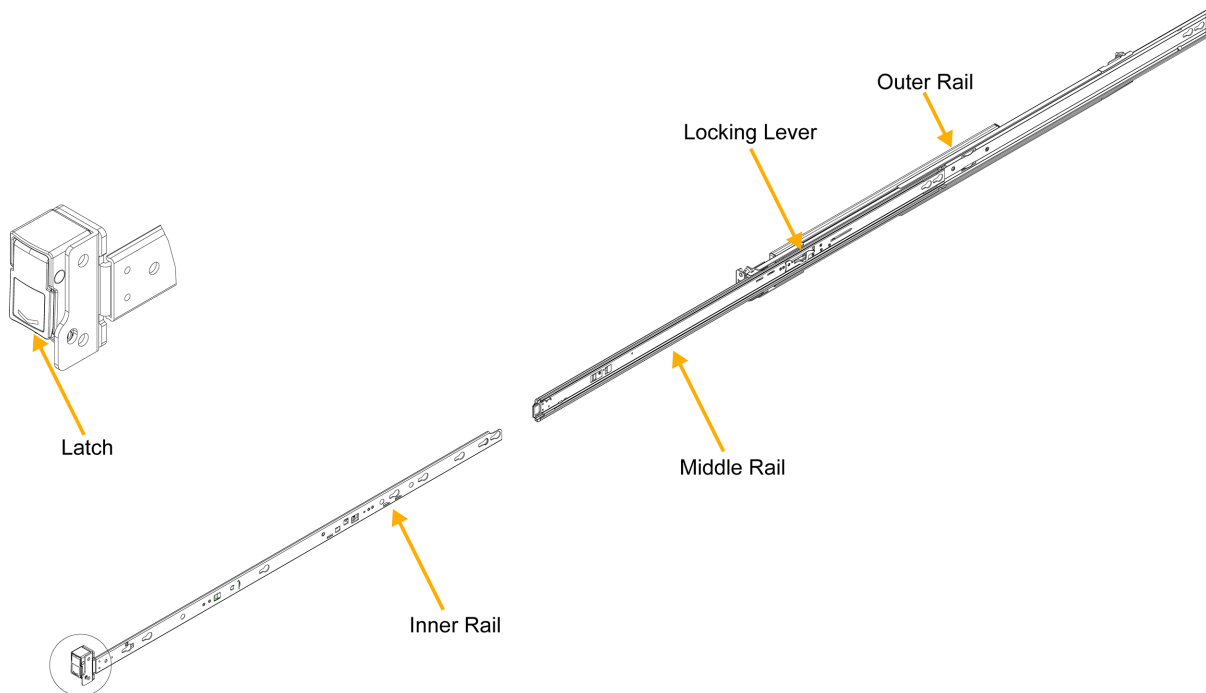


Figure 2-1. Identifying the Inner, Middle, and Outer Rail Sections

Releasing the Inner Rail

Release the inner rail from both the middle and outer rails.

1. Lift the latch on the inner rail and pull the inner rail out of the middle rail and pull the middle rail out of the outer rail until the rails are fully extended.
2. Press the locking lever on the middle rail to release the inner rail. Continue to pull the inner rail out of the middle rail.

Installing the Inner Rails onto the Chassis

Important: Do not pick up the server with the front handles. They are designed to pull the system from a rack only.

Begin the rack mounting procedure by installing the inner rails to the CSE-229TS chassis.

1. Confirm that the left and right inner rails have been correctly identified.
2. Place the inner rail firmly against the side of the chassis, aligning the hooks on the side of the chassis with the holes in the inner rail.
3. Slide the inner rail forward toward the front of the chassis and under the hooks until the quick release bracket snaps into place, securing the rail to the chassis.
4. Optionally, you can further secure the inner rail to the chassis with a screw.
5. Repeat for the other inner rail.

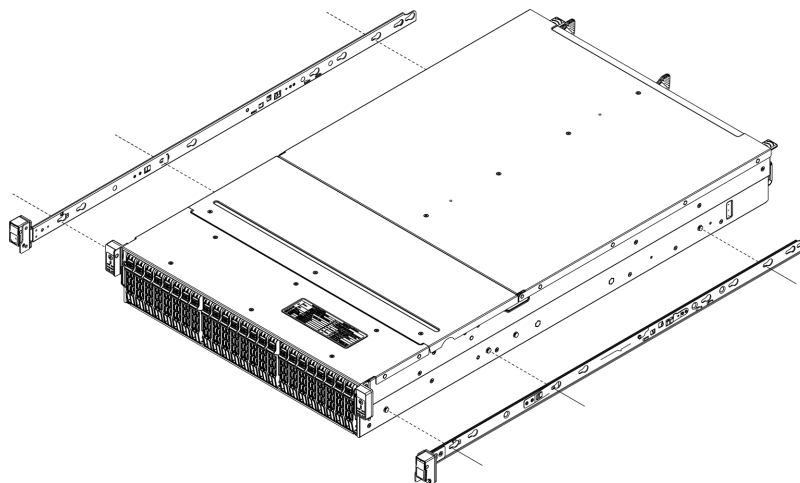


Figure 2-2. Installing the Inner Rails

Installing the Outer Rails onto the Rack

Each end of the assembled outer rail includes a bracket with square pegs to fit into your rack holes. If you have an older rack with round holes, these brackets must be removed, and you must use screws to secure the rail to the rack.

Outer Rail Installation

1. Align the square pegs on the back end of the rail with the square holes on the front of the rack until it clicks. Lift the latch upward and push the middle rail to the rear.
2. Adjust the rail to reach just past the full depth of your rack. Align the square pegs on the front end of the rail to the holes on the rack. Turn the latch to open position and push the pegs into the front for the rack holes.
3. Lock the latch.

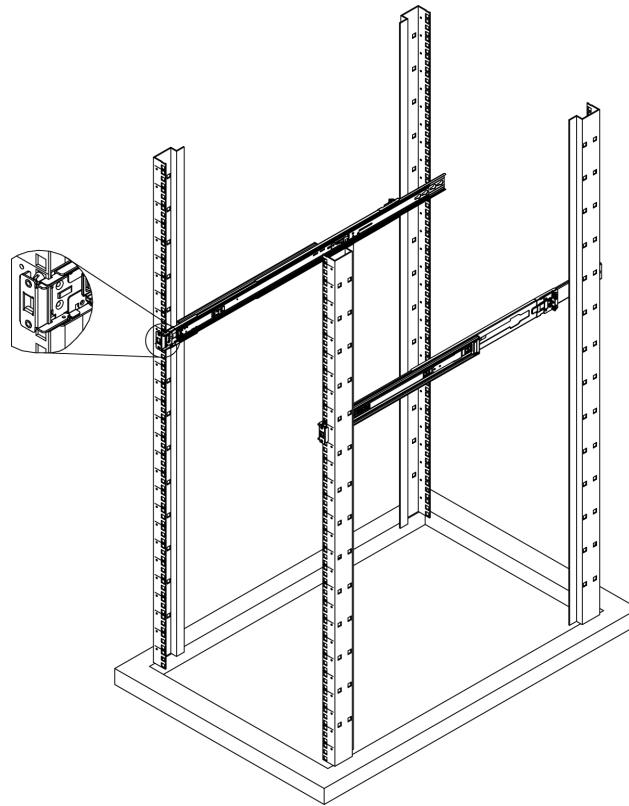


Figure 2-3. Installing the Outer Rails

Important: This figure is for illustrative purposes only. Always install servers to the bottom of a rack first.

2.4 Installing the Chassis into a Rack

After the rails have been installed on the chassis and the rack, the system can be installed in the rack.

Important: Use caution when mounting or removing the system from the rack. For large systems, at least one other person must assist during installation or removal. Follow the safety recommendations printed on the rails. Depending on the size of the system, you might need to use a lift.

1. Pull both middle rails out the front of the outer rail until each clicks to a stop.
2. Align the inner rails on the chassis with the front of the middle rails.
3. Slide the inner rails on the chassis into the middle rails, keeping the pressure even on both sides. When partially in, the locking levers will stop further progress.
4. Press down the locking levers on the inside of the inner rails and push the chassis all the way into the rear of the rack. The front latches will click in place.

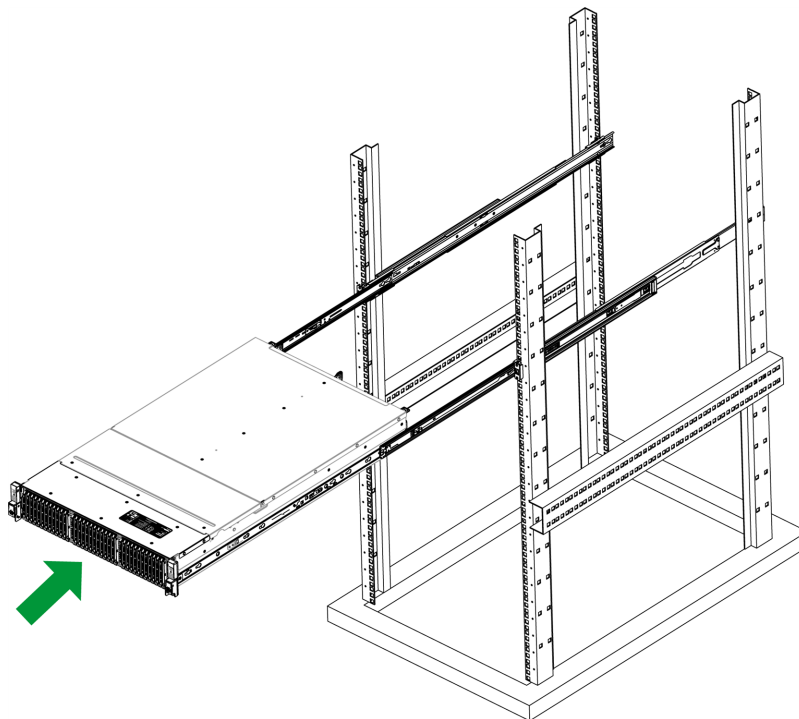


Figure 2-4. Sliding the SSG-229J-5BU24JBF into the Rack

Important: This figure is for illustrative purposes only. Always install servers to the bottom of a rack first.

Removing the Chassis from the Rack

Important: Use caution when mounting or removing the system from the rack. For large systems, at least one other person must assist during installation or removal. Follow the safety recommendations printed on the rails. Depending on the size of the system, you might need to use a lift.

1. Lift the right and left front latches just below the control panels.
2. Pull the chassis forward until it clicks to a stop.
3. Press down the locking lever on the inside of the inner rail to release the server. Continue to pull the server out of the middle rails.

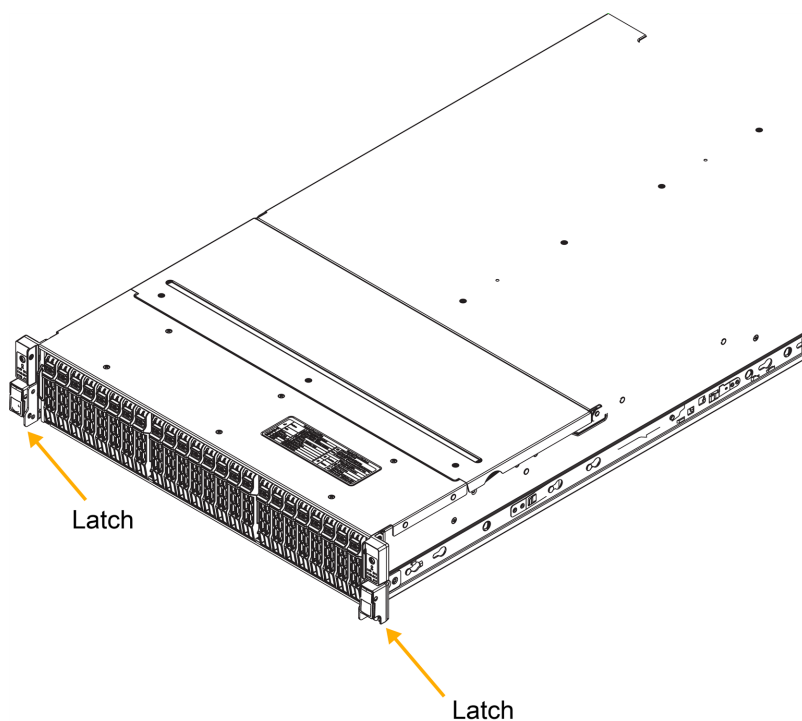


Figure 2-5. Removing the SSG-229J-5BU24JBF from the Rack

Chapter 3:

Maintenance and Component Installation

This chapter provides instructions on installing and replacing main system components for the SSG-229J-5BU24JBF server. To prevent compatibility issues, only use components that match the specifications and/or part numbers given.

Installation or replacement of most components require that power first be removed from the system. Follow the procedures given in each section.

3.1 Removing Power	27
Removing Power from a Node	27
Removing Power from the System	27
3.2 Accessing the System	28
Removing the Top Cover	28
Removing the Nodes	29
3.3 Static-Sensitive Devices	30
Precautions	30
3.4 Storage Drives	31
Drive Carrier Indicators	31
Removing a Drive Carrier	32
Installing Drives	33
Performing a Manual Hot-Plug	34
3.5 System Cooling	35
Fans	35
3.6 Expansion Cards	36
PCIe Cards	36
3.7 Power Supply	38
Replacing the Power Supply	38

3.1 Removing Power

Before performing some setup or maintenance tasks, use the following procedure to ensure that power has been removed from one or more nodes of the SSG-229J-5BU24JBF server.

Removing Power from a Node

Use the operating system to power down the node.

Removing Power from the System

1. Use the operating system to power down all nodes.
2. Grasp the head of each power cord and gently pull it out of the back of the power supply.
3. Disconnect the cords from the power strip or wall outlet.

3.2 Accessing the System

The SSG-229J-5BU24JBF server features a removable top cover, which allows easy access to the fans inside the server. To access components such as the expansion cards and the motherboard, first remove the node from the server.

Removing the Top Cover

1. Remove the server from the rack and place it on a workbench.
2. Remove three screws from the front edge of the top cover.
3. Lift the cover edge.

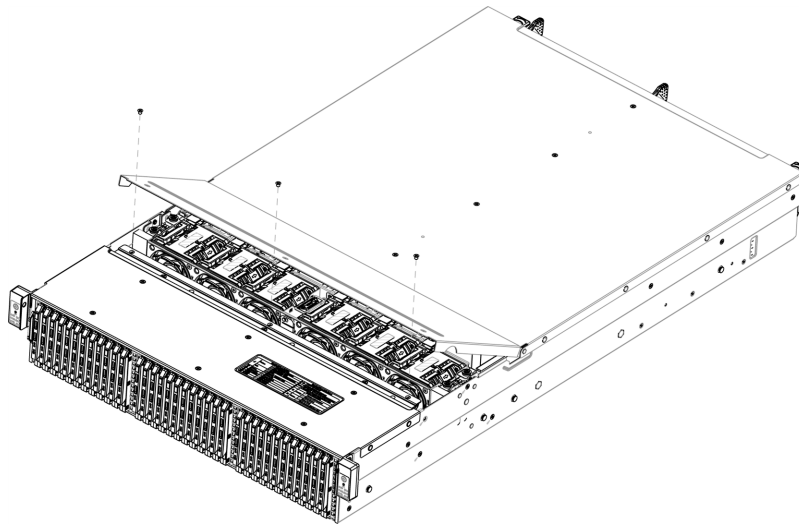


Figure 3-1. Removing the Top Cover

Removing the Nodes

The CSE-229TS features two nodes that can be easily removed to gain access to the motherboard and other components. These are hot-swap nodes that can be removed one at a time without powering down the system.

Removing a Node

1. Power down the node and remove its power cord.
2. Push down on the release latch located at the bottom right of the node.
3. Grasp the latch and the ring on the left side of the node and pull the node from the chassis.
4. Place the node on a workbench.

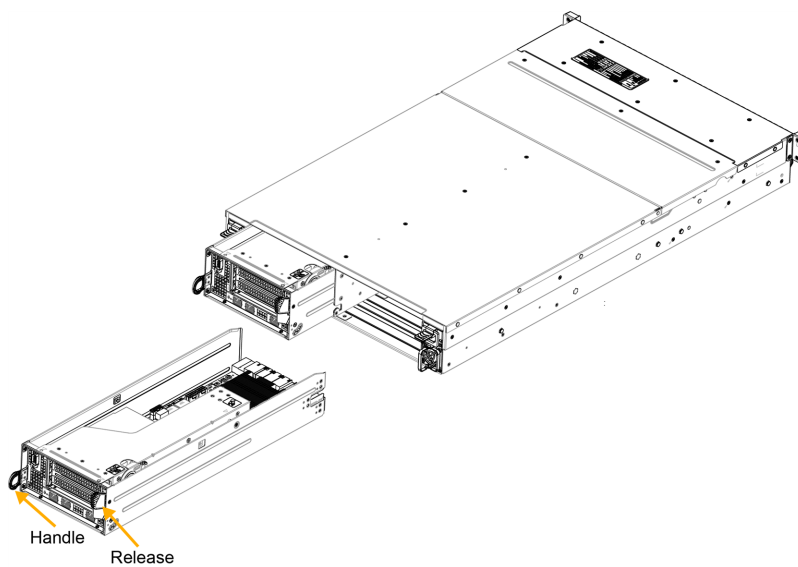


Figure 3-2. Removing a Node

Installing a Node

1. Return the node to the bay in the chassis that it was removed from.
2. Push the node into the open bay until it stops.
3. Push the release latch up to lock the node back into place within the chassis.
4. Plug the power cord into the rear of the power supplies and power up the node.

3.3 Static-Sensitive Devices

Electrostatic Discharge (ESD) can damage electronic components. To avoid damaging your motherboard, it is important to handle it very carefully. The following measures are generally sufficient to protect your equipment from ESD.

Precautions

- Use a grounded wrist strap designed to prevent static discharge.
- Touch a grounded metal object before removing the board from the antistatic bag.
- Handle the motherboard only by its edges. Do not touch its components, peripheral chips, memory modules, or gold contacts.
- When handling chips or modules, avoid touching their pins.
- Put the motherboard and peripherals back into their antistatic bags when not in use.
- For grounding purposes, make sure that your computer chassis provides excellent conductivity between the power supply, the case, the mounting fasteners, and the motherboard.
- Use only the correct type of onboard CMOS battery. To avoid possible explosion, do not install the onboard battery upside down.

3.4 Storage Drives

The SSG-229J-5BU24JBF supports 24 hot-swap 2.5" NVMe drive carriers. These carriers also help promote proper airflow.

Note: Enterprise-level storage modules are recommended for use in Supermicro servers.

Drive Carrier Indicators

Each drive carrier has two LED indicators: an activity indicator and a status indicator. For RAID configurations using a controller, the meaning of the status indicator is described in the table below.

Drive Carrier LED Indicators			
LED	Color	Pattern	Device Behavior
Activity LED	Blue	Solid	Idle SAS/NVMe drive installed
	Blue	Blinking	I/O activity
	Off	N/A	Idle SATA or no drive
Status LED	Red	Solid	Failure of drive with RSTe support
	Red	Blinking at 1 Hz	Rebuild drive with RSTe support
	Red	Blinking with two blinks and one stop at 1 Hz	Hot spare for drive with RSTe support
	Red	On for five seconds, then off	Power on for drive with RSTe support
	Red	Blinking at 4 Hz	Identify drive with RSTe support
	Off	N/A	Idle SATA or no drive

Removing a Drive Carrier

2.5" NVMe Carrier

1. Push the release button on the drive carrier. This releases and extends the drive carrier handle. If the release button does not release it, the handle may be locked: using a flat-headed screwdriver, rotate the screw counterclockwise 45 degrees to unlock the handle.
2. Use the handle to pull the drive carrier out of the chassis.

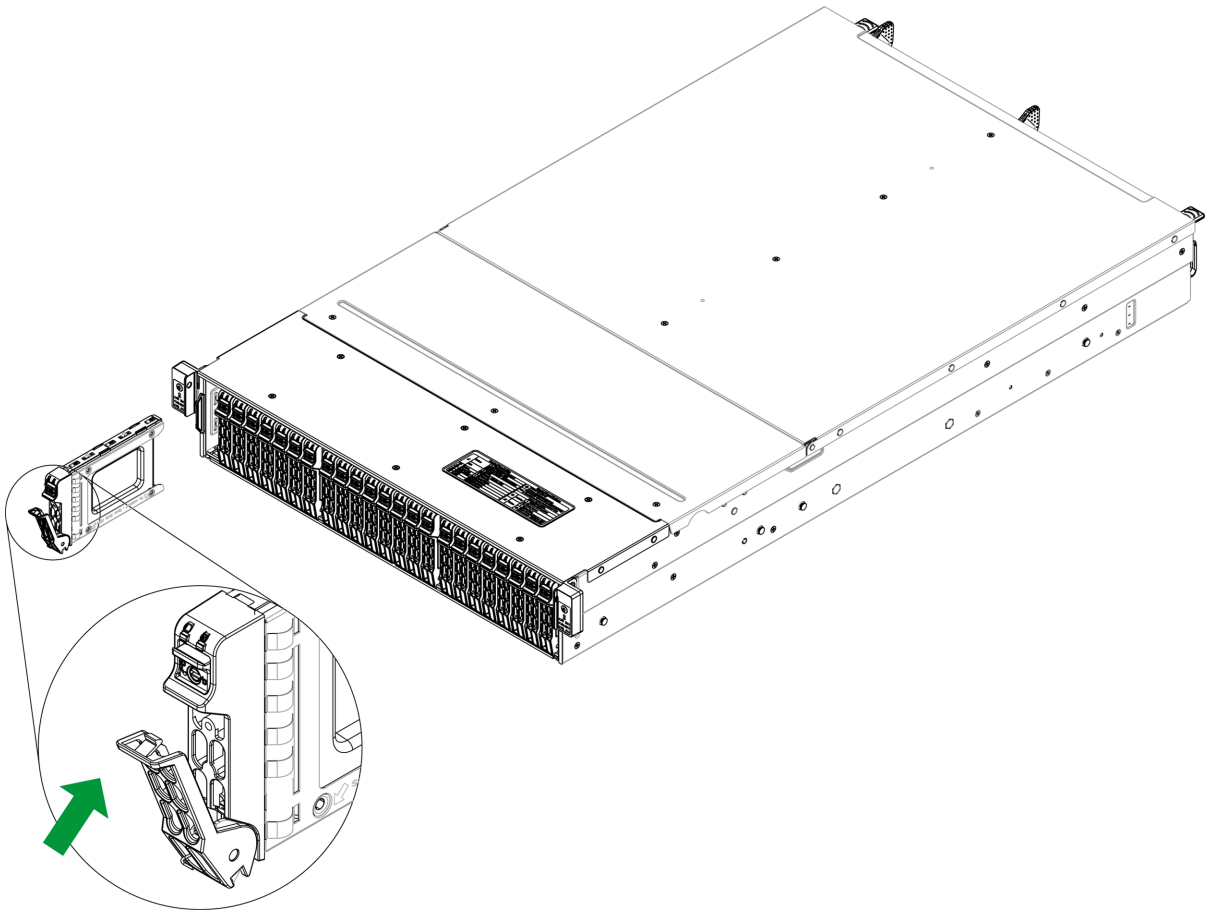


Figure 3-3. Removing a Drive Carrier

Installing Drives

2.5" NVMe Drives

1. Remove the screws securing the dummy drive to the carrier. These screws are not used to mount the actual drive. Remove the dummy drive.

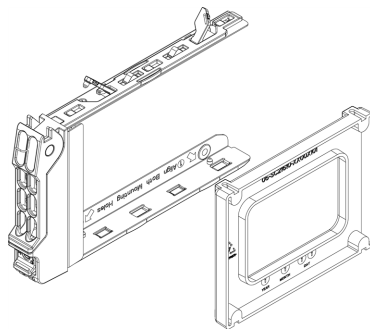


Figure 3-4. Removing the Dummy Drive from the Drive Carrier

2. Insert a drive into the carrier with the PCB side facing down and the connector end toward the rear of the carrier. Align the drive in the carrier so that the screw holes line up.
3. Secure the drive to the carrier with four M3 screws. These screws are included in the chassis accessory box.
4. Insert the drive carrier with the storage drive into its bay. When the carrier reaches the rear of the bay, the release handle will retract.
5. Push the handle in until it clicks into its locked position.

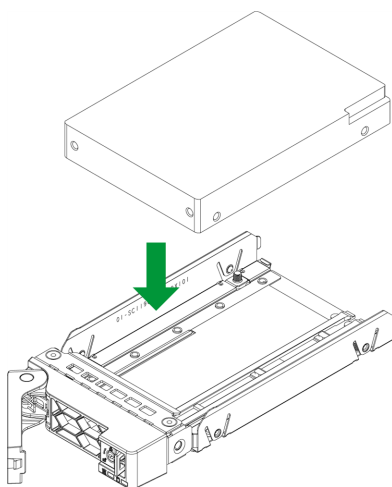


Figure 3-5. Installing the Drive into the Carrier

Performing a Manual Hot-Plug

This procedure describes the process for manual hot removal and insertion of an NVMe drive in a Supermicro JBOF system, with a BlueField-3 (GPU-NVDPU-B3220SH-H) DPU smart NIC as the target.

Note: Underlined fields represent user settings.

1. Hot-remove the NVMe drive from the drive slot.
2. Access the BlueField-3 OOB (OS) and issue the following Linux command:

```
# echo 0 >
/sys/kernel/config/nvmet/subsystems/testsubsystem0/namespaces/1
/enable
```

Note: BlueField-3 will perform a clean removal of the NVMe configuration and will issue notification to the Initiator to run an NVMe auto re-scan.

3. Insert the NVMe drive back into the same drive slot in the JBOF system.
4. From the BlueField-3 OOB(OS), check the NVMe device path:

```
# cat
/sys/kernel/config/nvmet/subsystems/testsubsystem0/namespaces/1
/device_path
```

5. Check if the device path is the preferred path to point to. If not, re-assign it. Below is an example:

```
# echo
/sys/kernel/config/nvmet/subsystems/testsubsystem0/namespaces/1
/device_path
```

6. Re-enable the namespace and issue notification to the Initiator to run NVMe auto re-scan again:

```
# echo 1 >
/sys/kernel/config/nvmet/subsystems/testsubsystem0/namespaces/1
/enable
```

This concludes the manual NVMe hot-plug process.

3.5 System Cooling

Refer to the following sections for information about the cooling capabilities of the SSG-229J-5BU24JBF server.

Fans

The SSG-229J-5BU24JBF server contains six 6-cm fans that provide cooling for the system. All fans are hot-swappable, so there is no need to power down the system when replacing a fan.

Changing a System Fan

1. Determine which fan is failing. If possible, use BMC. If not, extend the system from the chassis rack and remove the chassis cover while the power is on. Examine the fans to determine which one has failed.
2. Squeeze the fan tabs of the failed fan and lift the fan housing up and out of the chassis.
3. To install a fan, push it into the proper location until it clicks.
4. Finish by fully closing the cover and pushing the system back into the rack.

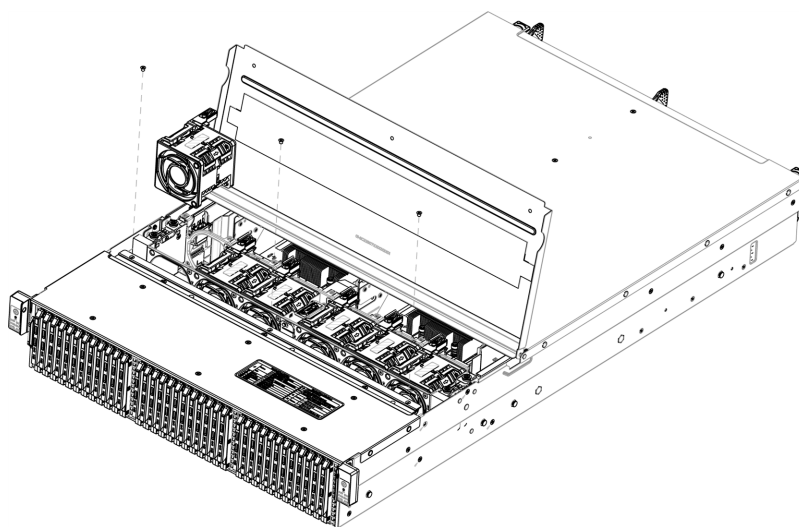


Figure 3-6. Changing a System Fan

3.6 Expansion Cards

Refer to the following sections for information on the expansion cards supported by the SSG-229J-5BU24JBF server.

PCIe Cards

The SSG-229J-5BU24JBF server supports three PCIe 5.0 x16 FHFL slots.



Figure 3-7. Rear PCIe slots

Expansion Slot Locations	
Slot	Description
1, 3	PCIe 5.0 x16 FHHL for DPU
2	PCIe 5.0 x16 FHFL for GPU

Removing an Expansion Module

1. Remove power from the node.
2. Remove the node from the chassis.
3. Remove one screw on the side of the node.
4. Press the release tab and lift the expansion module out of the node.

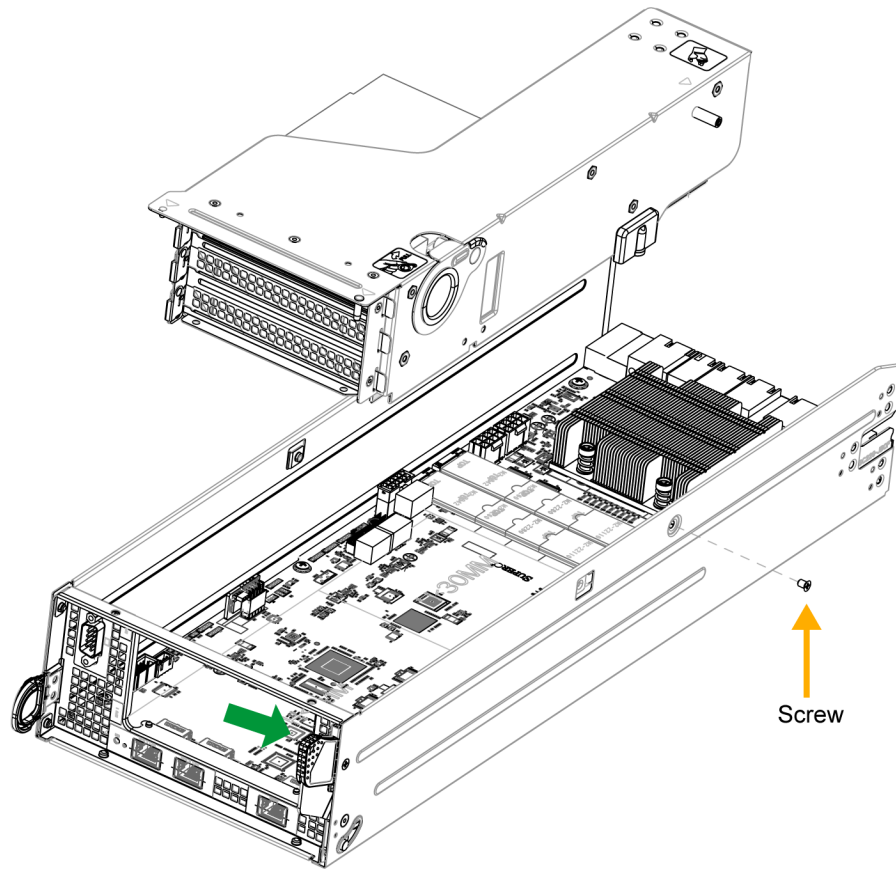


Figure 3-8. Removing an Expansion Module from a Node

3.7 Power Supply

The system includes two redundant hot-plug power supply modules. The power supply will automatically sense and operate at an input voltage between 100–240 V. Note that different input voltages will result in different maximum power output levels.

In the event of a power module failure, the other power module will continue to power the system on its own. Failed power supply modules can be replaced without powering down the system. Replacement modules can be ordered directly from Supermicro.

Power Supply Indicators		
Power Supply Condition	Green LED	Amber LED
No AC power to power supply	Off	Off
Power supply critical events causing a shutdown/failure/OCP/OVP/Fan Fail/OTP/UVP	Off	On
Power supply warning events where the power supply continues to operate; high temperature; over voltage; under voltage, etc.	Off	1 Hz Blinking
AC present only 12 VSB ON (PS OFF)	1 Hz Blinking	Off
Output ON and OK	On	Off
AC cord unplugged and in redundant mode	Off	On

Replacing the Power Supply

1. Unplug the AC power cord from the failed power supply module.
2. Push and hold the release tab on the back of the power supply.
3. Grasp the handle of the power supply and pull it out of its bay.
4. Push the new power supply module into the power bay until it clicks into the locked position.
5. Plug the AC power cord back into the power supply module.

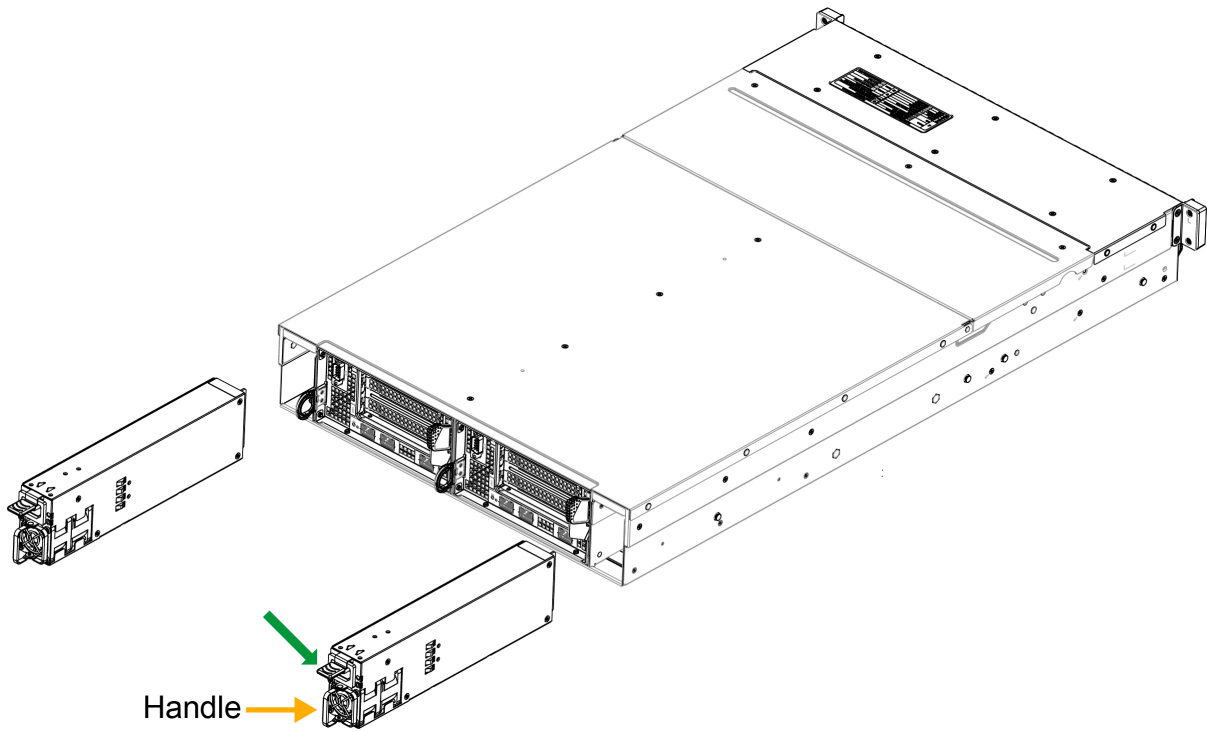


Figure 3-9. Replacing the Power Supply

Chapter 4:

Software

After the SSG-229J-5BU24JBF server has been installed, you can access the BMC.

4.1 BMC	41
BMC ADMIN User Password	41
Accessing BlueField-3 CPU MGMT Port IP Addresses	42
About the BlueField-3 MGMT Password	43
Obtaining Node BMC IP Address	44
Connecting Network Ports	45

4.1 BMC

The BPN-NVME5-229PL-J provides remote access, monitoring, and management through the baseboard management controller (BMC) and other management controllers distributed among different system modules. There are several BIOS settings that are related to BMC. For general documentation and information on BMC, visit our website at the following page:

<https://www.supermicro.com/en/solutions/management-software/bmc-resources>

BMC ADMIN User Password

For security, each system is assigned a unique default BMC password for the ADMIN user. The password can be found on a sticker on the motherboard and a sticker on the chassis, for Supermicro chassis. The sticker also displays the BMC MAC address. If necessary, the password can be reset using the Supermicro IPMICFG tool.



Figure 4-1. BMC Password Label

Accessing BlueField-3 CPU MGMT Port IP Addresses

To access the BlueField-3 MGMT port IP addresses:

1. Log into the BMC.
2. Navigate to System > Network AOC.
3. You will find the address in the Model column.

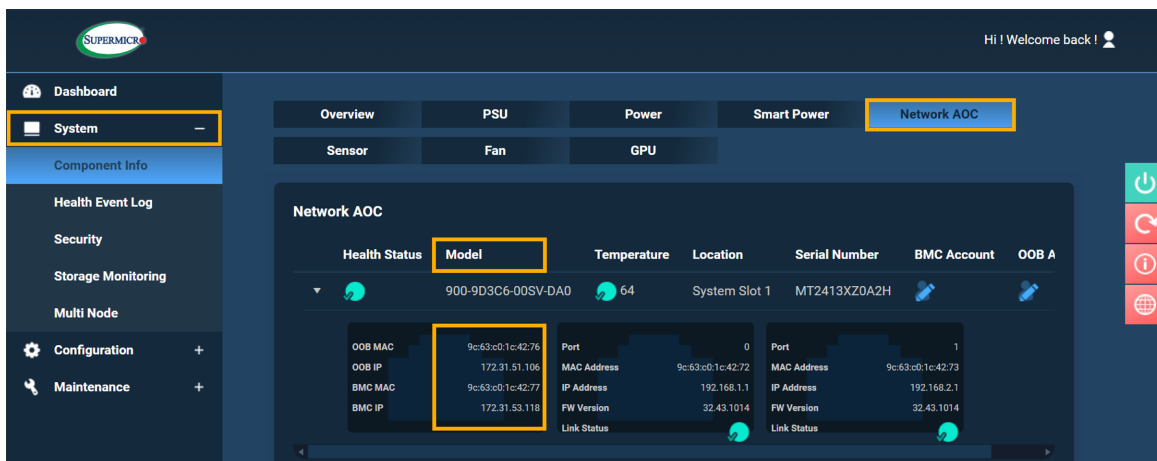


Figure 4-2. Accessing the Port IP Address

About the BlueField-3 MGMT Password

The JBOF BMC will set the BlueField-3 DPU MGMT port username and password to the following defaults:

- BMC: root/Smc.Jbof.2025
- OOB: ubuntu/Smc.Jbof.2025

To change the password of a BMC DPU MGMT port:

1. Open the JBOF BMC GUI.
2. Navigate to System > Network AOC.
3. Click the pencil icons below BMC Account and OOB Account to change each value.

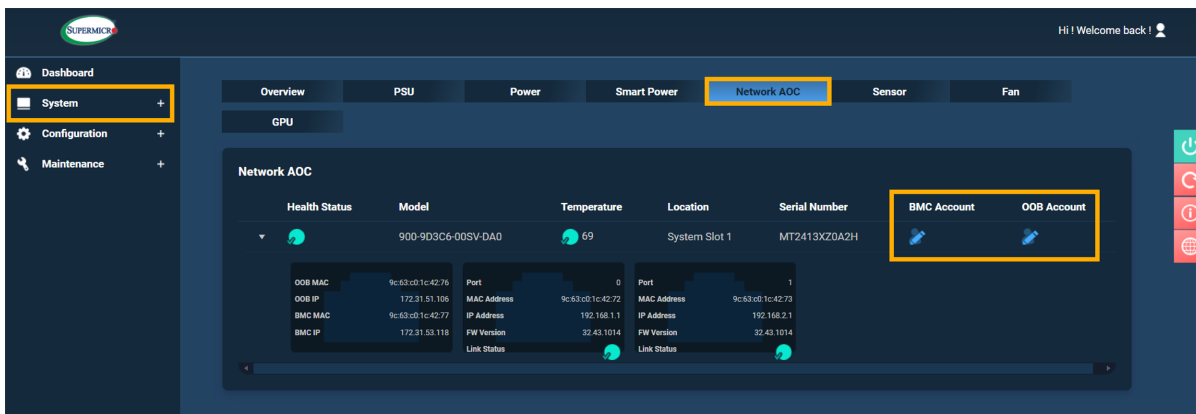


Figure 4-3. Changing the DPU MGMT Port Password

Note: To avoid interrupting communication with the BlueField-3, change the BlueField-3 DPU MGMT port through the JBOF BMC UI.

Obtaining Node BMC IP Address

1. Power on the system. After the power cable is connected to the SSG-229J-5BU24JBF, wait about two minutes for the serial port to be ready.
2. Connect to the serial port located in the SSG-229J-5BU24JBF rear.
3. Configure the serial port console with the following parameters:
 - Speed: 115200
 - Data: 8 bit
 - Parity: none
 - Stop bits: 1 bit
 - Flow control: none

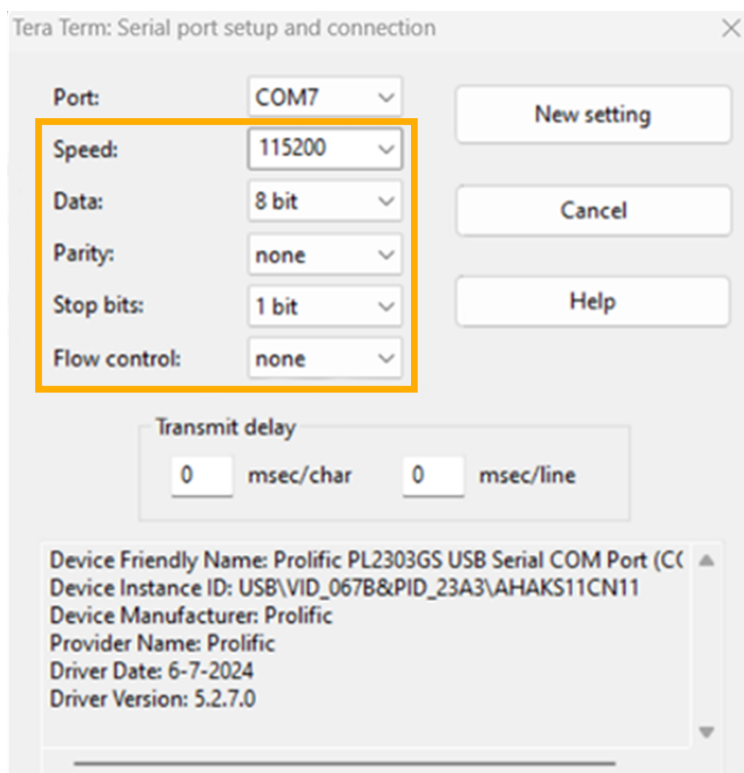


Figure 4-4. Serial Port Setup

4. In the serial console, use the "show" command to get the IP address for your SSG-229J-5BU24JBF BMC.

Connecting Network Ports

1. Connect the node's IPMI MGMT LAN port to the switch.
2. Connect the BlueField-3 (BF3) LAN port to the DPU slot using option 1 or Option 2, listed below:

Option 1: Connect the desired BF3 LAN port directly to the switch.

Option 2: Connect the BF3 LAN port 1 to the node's DPU 1 slot. If the BF3 LAN port 1 is already connected to the DPU 1 slot, connect the BF3 LAN port 2 to the node's DPU 2 slot.

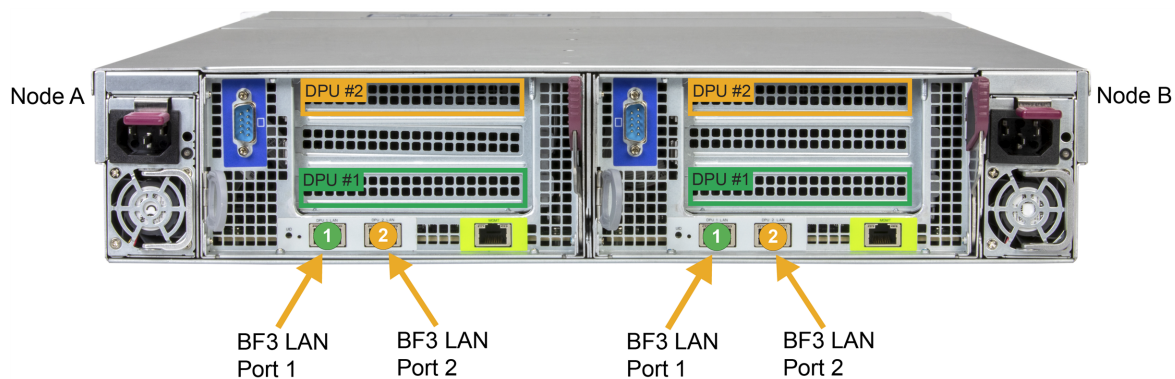


Figure 4-5. Connecting BF3 LAN Ports to DPU Slots

Chapter 5:

Troubleshooting and Support

The following content contains information on common issues and how to resolve them.

5.1 Online Resources	47
Direct Links for the SSG-229J-5BU24JBF System	47
Direct Links for General Support and Information	47
5.2 Baseboard Management Controller (BMC)	48
5.3 Troubleshooting Procedures	49
Before Power On	49
No Power	49
No Video	49
System Boot Failure	49
Memory Errors	50
Losing the System's Setup Configuration	50
If the System Becomes Unstable	50
5.4 Where to Get Replacement Components	52
5.5 Technical Support Procedures	53
Returning Merchandise for Service	53
5.6 Feedback	54

5.1 Online Resources

A great deal of information is available on the Supermicro website. From the top menu of the Supermicro home page at <https://www.supermicro.com>:

- Specifications for servers and other hardware are available by clicking **Products**.
- The **Support** option offers downloads (manuals, BIOS/BMC, drivers, etc.), FAQs, RMA, warranty, and other service extensions.

Direct Links for the SSG-229J-5BU24JBF System

- SSG-229J-5BU24JBF system specifications page:
<https://www.supermicro.com/en/products/system/storage/2u/ssg-229j-5bu24jbf>

Direct Links for General Support and Information

- Asked Questions: <https://www.supermicro.com/FAQ/index.php>
- Product Resources page for validated memory details:
<https://www.supermicro.com/support/resources/mem.cfm>
- Product Matrices page for links to tables summarizing specs for systems, motherboards, power supplies, riser cards, add-on cards, and more:
<https://www.supermicro.com/en/support/product-matrices>
- Security Center for recent security notices:
https://www.supermicro.com/en/support/security_center
- Supermicro Phone and Addresses: <https://www.supermicro.com/en/about/contact>

5.2 Baseboard Management Controller (BMC)

The SSG-229J-5BU24JBF server supports the Baseboard Management Controller (BMC). BMC is used to provide remote access, monitoring, and management.

For general documentation and information on BMC, visit our website at the following page:

<https://www.supermicro.com/en/solutions/management-software/bmc-resources>

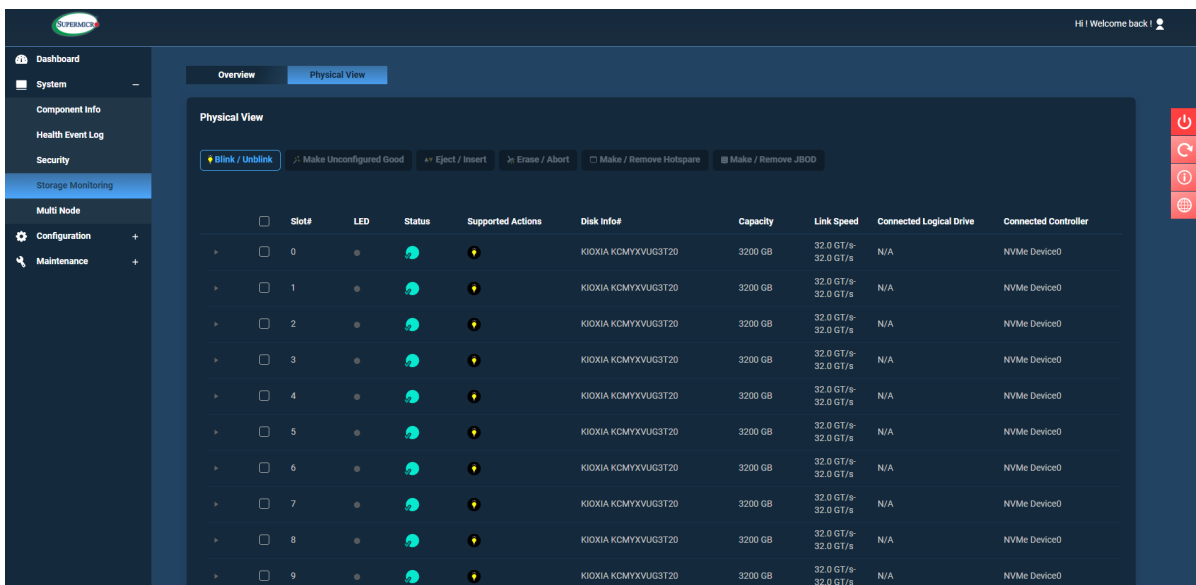


Figure 5-1. BMC Dashboard

5.3 Troubleshooting Procedures

Use the following procedures to troubleshoot your system. If you have followed all of the procedures below and still need assistance, refer to the [Technical Support Procedures](#) section in this chapter. Always disconnect the AC power cord before adding, changing or installing any non hot-swap hardware components. If the below steps do not fix the setup configuration problem, contact your vendor for repairs.

Before Power On

1. Make sure that there are no short circuits between the motherboard and chassis.
2. Disconnect all ribbon/wire cables from the motherboard, including those for the keyboard and mouse.
3. Remove all add-on cards.
4. Install the processor (making sure it is fully seated) and connect the front panel connectors to the motherboard.

No Power

1. Make sure that there are no short circuits between the motherboard and the chassis.
2. The battery on your motherboard may be old. Check to verify that it still supplies approximately 3 VDC. If it does not, replace it with a new one.

No Video

1. If the power is on, but you do not have video, remove all add-on cards and cables.
2. Remove all memory modules and turn on the system (if the alarm is on, check the specs of memory modules, reset the memory, or try a different one).

System Boot Failure

If the system does not display Power-On-Self-Test (POST) or does not respond after the power is turned on, do the following:

1. Remove all components from the motherboard, especially the DIMMs. Power on the system and check if the power-on LED and the BMC Heartbeat LED are on, and system fans are spinning.

2. Turn on the system with only one DIMM installed. If the system boots, check for bad DIMMs or slots by following the Memory Errors Troubleshooting procedure in this chapter.

Memory Errors

When suspecting faulty memory is causing the system issue, check the following:

1. Make sure that the memory modules are compatible with the system and are properly installed. See "[Maintenance and Component Installation](#)" on page 26 for installation instructions. (For memory compatibility, refer to the "Tested Memory List" link on the motherboard's product page to see a list of supported memory.)
2. Check if different speeds of DIMMs have been installed. It is strongly recommended that you use the same RAM type and speed for all DIMMs in the system.
3. Make sure that you are using the correct type of DIMMs recommended by the manufacturer.
4. Check for bad DIMMs or slots by swapping a single module among all memory slots and check the results.

Losing the System's Setup Configuration

1. Make sure that you are using a high-quality power supply. A poor-quality power supply may cause the system to lose the CMOS setup information. Refer to [Introduction](#) for details on recommended power supplies.
2. The battery on your motherboard may be old. Check to verify that it still supplies approximately 3 VDC. If it does not, replace it with a new one.

If the System Becomes Unstable

If the system becomes unstable during or after OS installation, check the following:

1. Processor/BIOS support: Make sure that your processor is supported and that you have the latest BIOS installed in your system.
2. Memory support: Make sure that the memory modules are supported. Refer to the product page on our website at <https://www.supermicro.com>. Test the modules using memtest86 or a similar utility.

Note: Click on the "Tested Memory List" link on the motherboard's product page to see a list of supported memory.

3. Storage Drive support: Make sure that all storage drives work properly. Replace the failed storage drives with good ones.
4. System cooling: Check the system cooling to make sure that all heatsink fans and processor/system fans, etc., work properly. Check the hardware monitoring settings in the BMC to make sure that the processor and system temperatures are within the normal range. Also, check the front panel Overheat LED and make sure that it is not on.
5. Adequate power supply: Make sure that the power supply provides adequate power to the system. Make sure that all power connectors are connected. Refer to our website for more information on the minimum power requirements.
6. Proper software support: Make sure that the correct drivers are used.

If the system becomes unstable before or during OS installation, check the following:

1. Source of installation: Make sure that the devices used for installation are working properly, including boot devices such as a CD/Media drive.
2. Cable connection: Check to make sure that all cables are connected and working properly.
3. Use the minimum configuration for troubleshooting: Remove all unnecessary components (starting with add-on cards first), and use the minimum configuration (but with the processor and a memory module installed) to identify the trouble areas. Refer to the steps listed above in this section for proper troubleshooting procedures.
4. Identify bad components by isolating them: If necessary, remove a component in question from the chassis, and test it in isolation to make sure that it works properly. Replace a bad component with a good one.
5. Check and change one component at a time instead of changing several items at the same time. This will help isolate and identify the problem.
6. To find out if a component is good, swap this component with a new one to see if the system will work properly. If so, then the old component is bad. You can also install the component in question in another system. If the new system works, the component is good and the old system has problems.

5.4 Where to Get Replacement Components

If you need replacement parts for your SSG-229J-5BU24JBF server, to ensure the highest level of professional service and technical support, purchase exclusively from our Supermicro Authorized Distributors/System Integrators/Resellers. A list can be found on the Supermicro website:

<https://www.supermicro.com>

Under the "Buy" menu, click the "Where to Buy" link.

5.5 Technical Support Procedures

Before contacting Technical Support, take the following steps.

1. Refer to "Troubleshooting Procedures" on page 49 or see the FAQs on our website (<https://www.supermicro.com/FAQ/index.php>) before contacting Technical Support.
2. BIOS upgrades can be downloaded from our website (https://www.supermicro.com/support/resources/bios_ipmi.php).
3. If you still cannot resolve the problem, include the following information when contacting Supermicro for technical support:
 - System configuration
4. An example of a Technical Support form is on our website at <https://webpr3.supermicro.com/SupportPortal>.
5. Distributors: For immediate assistance, have your account number ready when placing a call to our Technical Support department. For Supermicro contact information, refer to "Contacting Supermicro" on page 8.

Returning Merchandise for Service

A receipt or copy of your invoice marked with the date of purchase is required before any warranty service will be rendered. You can obtain service by calling your vendor for a Returned Merchandise Authorization (RMA) number. When returning the server to the manufacturer, the RMA number should be prominently displayed on the outside of the shipping carton, and the shipping package is mailed prepaid or hand-carried. Shipping and handling charges will be applied for all orders that must be mailed when service is complete.

For faster service, RMA authorizations can be requested online at the following page:

<https://www.supermicro.com/RmaForm>

Whenever possible, repack the server in the original Supermicro carton, using the original packaging material. If these are no longer available, be sure to pack the server securely, using packaging material to surround the server so that it does not shift within the carton and become damaged during shipping.

This warranty only covers normal consumer use and does not cover damages incurred in shipping or from failure due to the alternation, misuse, abuse or improper maintenance of products.

During the warranty period, contact your distributor first for any product problems.

5.6 Feedback

Supermicro values your feedback as we strive to improve our customer experience in all facets of our business. Email us at Techwriterteam@supermicro.com to provide feedback on our manuals.

Appendix A:

Standardized Warning Statements for AC Systems

The following statements are industry standard warnings, provided to warn the user of situations which have the potential for bodily injury. Should you have questions or experience difficulty, contact Supermicro's Technical Support department for assistance. Only certified technicians should attempt to install or configure components.

Read this section in its entirety before installing or configuring components in the Supermicro SSG-229J-5BU24JBF server.

These warnings may also be found on our website at the following page:

https://www.supermicro.com/about/policies/safety_information.cfm

Warning Definition



Warning! This warning symbol means danger. You are in a situation that could cause bodily injury. Before you work on any equipment, be aware of the hazards involved with electrical circuitry and be familiar with standard practices for preventing accidents.

この警告サインは危険を意味します。

人身事故につながる可能性がありますので、いずれの機器でも動作させる前に、電気回路に含まれる危険性に注意して、標準的な事故防止策に精通して下さい。

此警告符号代表危险。

您正处于可能受到严重伤害的工作环境中。在您使用设备开始工作之前、必须充分意识到触电的危险、并熟练掌握防止事故发生的标准工作程序。请根据每项警告结尾的声明号码找到此设备的安全性警告说明的翻译文本。

此警告符號代表危險。

您正處於可能身體可能會受損傷的工作環境中。在您使用任何設備之前、請注意觸電的危險、並且要熟悉預防事故發生的標準工作程序。請依照每一注意事項後的號碼找到相關的翻譯說明內容。

WICHTIGE SICHERHEITSHINWEISE

Dieses Warnsymbol bedeutet Gefahr. Sie befinden sich in einer Situation, die zu Verletzungen führen kann. Machen Sie sich vor der Arbeit mit Geräten mit den Gefahren elektrischer Schaltungen und den üblichen Verfahren zur Vorbeugung vor Unfällen vertraut. Suchen Sie mit der am Ende jeder Warnung angegebenen Anweisungsnummer nach der jeweiligen Übersetzung in den übersetzten Sicherheitshinweisen, die zusammen mit diesem Gerät ausgeliefert wurden.

BEWAHREN SIE DIESE HINWEISE GUT AUF.

INSTRUCCIONES IMPORTANTES DE SEGURIDAD

Este símbolo de aviso indica peligro. Existe riesgo para su integridad física. Antes de manipular cualquier equipo, considere los riesgos de la corriente eléctrica y familiarícese con los procedimientos estándar de prevención de accidentes. Al final de cada advertencia encontrará el número que le ayudará a encontrar el texto traducido en el apartado de traducciones que acompaña a este dispositivo.

GUARDE ESTAS INSTRUCCIONES.

IMPORTANTES INFORMATIONS DE SÉCURITÉ

Ce symbole d'avertissement indique un danger. Vous vous trouvez dans une situation pouvant entraîner des blessures ou des dommages corporels. Avant de travailler sur un équipement, soyez conscient des dangers liés aux circuits électriques et familiarisez-vous avec les procédures couramment utilisées pour éviter les accidents. Pour prendre connaissance des traductions des avertissements figurant dans les consignes de sécurité traduites qui accompagnent cet appareil, référez-vous au numéro de l'instruction situé à la fin de chaque avertissement.

CONSERVEZ CES INFORMATIONS.

תקנון הצהרות אזהרה

הצהרות הבאות הן אזהרות על פי תקני התעשייה, על מנת להזהיר את המשתמש מפני חבלה פיזית אפשרית. במידה ויש שאלות או היתקלות בבעיה כלשהי, יש ליצור קשר עם מחלקת תמיכה טכנית של סופרמיקרו. טכנאים מוסמכים בלבד רשאים להתקין או להגדיר את הרכיבים. יש לקרוא את הנספח במלואו לפני התקנת או הגדרת הרכיבים במארזי סופרמיקרו.

الكافة حالة وكي أي تتسبب ف اصابة جسده هذا الزهز ع خطر! تحذرن.
قبل أي تعول على أي هعدات، كي على علن بالوخاطر ال اجوة عي النوانز
الكهربائ ة

وكي على درا ة بالووارسات النقاء ة لو ع وقع أي حداثث
استخدم رقن الب إى الو صنص ف ها ة كل تحذرن للعنثر تزجوتها

안전을 위한 주의사항

이 경고 기호는 위험이 있음을 알려 줍니다. 작업자의 신체에 부상을 야기 할 수 있는 상태에 있게 됩니다. 모든 장비에 대한 작업을 수행하기 전에 전기회로와 관련된 위험요소들을 확인하시고 사전에 사고를 방지할 수 있도록 표준 작업절차를 준수해 주시기 바랍니다.

해당 번역문을 찾기 위해 각 경고의 마지막 부분에 제공된 경고문 번호를 참조하십시오

BELANGRIJKE VEILIGHEIDSINSTRUCTIES

Dit waarschuwings symbool betekent gevaar. U verkeert in een situatie die lichamelijk letsel kan veroorzaken. Voordat u aan enige apparatuur gaat werken, dient u zich bewust te zijn van de bij een elektrische installatie betrokken risico's en dient u op de hoogte te zijn van de standaard procedures om ongelukken te voorkomen. Gebruik de nummers aan het eind van elke waarschuwing om deze te herleiden naar de desbetreffende locatie.

BEWAAR DEZE INSTRUCTIES

Installation Instructions



Warning! Read the installation instructions before connecting the system to the power source.

警告!

システムを電源に接続する前に、設置手順書をお読み下さい。

警告!

将此系统连接电源前、请先阅读安装说明。

警告!

將系統與電源連接前、請先閱讀安裝說明。

Warnung!

Vor dem Anschließen des Systems an die Stromquelle die Installationsanweisungen lesen.

¡Advertencia!

Lea las instrucciones de instalación antes de conectar el sistema a la red de alimentación.

Attention!

Avant de brancher le système sur la source d'alimentation, consulter les directives d'installation.

אזהרה!

יש לקרוא את הוראות התקנה לפני חיבור המערכת למקור מתח.

تحذير!

اقر إرشادات التركيب قبل توصيل النظام إلى مصدر للطاقة

경고!

시스템을 전원에 연결하기 전에 설치 안내를 읽어주십시오.

Waarschuwing!

Raadpleeg de installatie-instructies voordat u het systeem op de voedingsbron aansluit.

Circuit Breaker



Warning! This product relies on the building's installation for short-circuit (overcurrent) protection. Ensure that the protective device is rated not greater than: 250 V, 20 A.

警告!

この製品は、短絡(過電流)保護装置がある建物での設置を前提としています。

保護装置の定格が250 V、20 Aを超えないことを確認下さい。

警告!

此产品的短路(过载电流)保护由建筑物的供电系统提供, 确保短路保护设备的额定电流不大于 250 V、20 A。

警告!

此產品的短路(過載電流)保護由建築物的供電系統提供, 確保短路保護設備的額定電流不大於 250 V、20 A。

Warnung!

Dieses Produkt ist darauf angewiesen, dass im Gebäude ein Kurzschluss bzw. Überstromschutz installiert ist. Stellen Sie sicher, dass der Nennwert der Schutzvorrichtung nicht mehr als: 250 V, 20 A beträgt.

¡Advertencia!

Este equipo utiliza el sistema de protección contra cortocircuitos (o sobrecorrientes) del edificio. Asegúrese de que el dispositivo de protección no sea superior a: 250 V, 20 A.

Attention!

Pour ce qui est de la protection contre les courts-circuits (surtension), ce produit dépend de l'installation électrique du local. Vérifiez que le courant nominal du dispositif de protection n'est pas supérieur à :250 V, 20 A.

אזהרה!

מוצר זה מסתמך על הגנה המותקנת במבנים למניעת קצר חשמלי. יש לוודא כי

המכשיר המגן מפני הקצר החשמלי הוא לא יותר מ-20 A, 250 V

!تحذير

هذا المنتج يعتمد على معدات الحماية من الدوائر القصيرة التي تم تثبيتها في

المبنى

تأكد من أن تقييم الجهاز الوقائي ليس أكثر من : 20 A, 250 V

경고!

이 제품은 전원의 단락(과전류)방지에 대해서 전적으로 건물의 관련 설비에 의존합니다. 보호장치의 정격이 반드시 250 V(볼트), 20 A(암페어)를 초과하지 않도록 해야 합니다.

Waarschuwing!

Dit product is afhankelijk van de kortsluitbeveiliging (overspanning) van uw elektrische installatie. Controleer of het beveiligde apparaat niet groter gedimensioneerd is dan 250 V, 20 A.

Power Disconnection Warning



Warning! The system must be disconnected from all sources of power and the power cord removed from the power supply module(s) before accessing the chassis interior to install or remove system components (except for hot-swap components).

警告!

システムコンポーネントの取り付けまたは取り外しのために、シャーシ内部にアクセスするには、システムの電源はすべてのソースから切断され、電源コードは電源モジュールから取り外す必要があります。

警告!

在你打开机箱并安装或移除内部器件前、必须将系统完全断电、并移除电源线。

警告!

在您打開機殼安裝或移除內部元件前、必須將系統完全斷電、並移除電源線。

Warnung!

Das System muss von allen Quellen der Energie und vom Netzanschlusskabel getrennt sein, das von den Spg.Versorgungsteilmodulen entfernt wird, bevor es auf den Chassisinnenraum zurückgreift, um Systemsbestandteile anzubringen oder zu entfernen.

¡Advertencia!

El sistema debe ser disconnected de todas las fuentes de energía y del cable eléctrico quitado de los módulos de fuente de alimentación antes de tener acceso el interior del chasis para instalar o para quitar componentes de sistema.

Attention!

Le système doit être débranché de toutes les sources de puissance ainsi que de son cordon d'alimentation secteur avant d'accéder à l'intérieur du chasis pour installer ou enlever des composants de système.

אזהרה!

יש לנתק את המערכת מכל מקורות החשמל ויש להסיר את כבל החשמלי מהספק לפני גישה לחלק הפנימי של המארז לצורך התקנת או הסרת רכיבים.

تحذير!

يجب فصل المنظمو من جميع مصادر انطاقت وإزانت سهك انكهرباء من وحدة امداد انطاقت قيم

اننصل إلى انمناطق انداخهيت نههيكم ننتبيج أو إزانت مكننات الجهاز

경고!

시스템에 부품들을 장착하거나 제거하기 위해서는 새시 내부에 접근하기 전에 반드시 전원 공급장치로부터 연결되어있는 모든 전원과 전기코드를 분리해주어야 합니다.

Waarschuwing!

Voordat u toegang neemt tot het binnenwerk van de behuizing voor het installeren of verwijderen van systeem onderdelen, dient u alle spanningsbronnen en alle stroomkabels aangesloten op de voeding(en) van de behuizing te verwijderen

Equipment Installation



Warning! Only authorized personnel and qualified service persons should be allowed to install, replace, or service this equipment.

警告!

トレーニングを受け認定された人だけがこの装置の設置、交換、またはサービスを許可されていません。

警告!

只有经过培训且具有资格的人员才能进行此设备的安装、更换和维修。

警告!

只有經過受訓且具資格人員才可安裝、更換與維修此設備。

Warnung!

Nur autorisiertes Personal und qualifizierte Servicetechniker dürfen dieses Gerät installieren, austauschen oder warten.

¡Advertencia!

Sólo el personal autorizado y el personal de servicio calificado deben poder instalar, reemplazar o dar servicio a este equipo.

Attention!

Seul le personnel autorisé et le personnel de maintenance qualifié doivent être autorisés à installer, remplacer ou entretenir cet équipement.

אזהרה!

יש לאפשר רק צוות מורשה ואנשי שירות מוסמכים להתקין, להחליף או לטפל בציוד זה.

تحذير

ينبغي السماح فقط للموظفين المعتمدين وأفراد الخدمة المؤهلين بتركيب هذا الجهاز أو استبداله أو صيانته.

경고!

승인된 직원과 자격을 갖춘 서비스 담당자만이 이 장비를 설치, 교체 또는 서비스할 수 있습니다.

Waarschuwing!

Alleen geautoriseerd personeel en gekwalificeerd onderhoudspersoneel mag deze apparatuur installeren, vervangen of onderhouden.

Rack Stability Hazard



Warning! Stability hazard. The rack may tip over causing serious personal injury. Before extending the rack to the installation position, read the installation instructions. Do not put any load on the slide-rail mounted equipment in the installation position. Do not leave the slide-rail mounted equipment in the installation position.

警告!

安定性に危険があります。ラックが転倒して、重大な人身事故を引き起こす可能性があります。ラックを設置位置まで伸ばす前に、設置手順をお読みください。設置位置にあるスライドレールに取り付けられた機器に負荷をかけないでください。スライドレールに取り付けられた機器を設置位置に放置しないでください。

警告!

稳定性危险。机架可能会翻倒、造成严重的人身伤害。在将机架延伸到安装位置之前、请阅读安装说明。请勿在安装位置对滑轨安装的设备施加任何负载。请勿将滑轨安装的设备留在安装位置。

警告!

穩定性危險。機架可能會翻倒、造成嚴重的人身傷害。將機架延伸至安裝位置前、請先閱讀安裝說明。請勿在安裝位置的滑軌安裝設備上放置任何負載。請勿將滑軌安裝設備留在安裝位置。

Warnung!

Gefahr der Instabilität. Das Rack kann umkippen und schwere Verletzungen verursachen. Lesen Sie die Installationsanweisungen, bevor Sie das Rack in die Einbauposition ausfahren. Belasten Sie die auf den Gleitschienen montierten Geräte nicht in der Einbauposition. Lassen Sie die auf den Gleitschienen montierten Geräte nicht in der Einbauposition.

¡Advertencia!

Peligro de inestabilidad. El rack podría volcarse y causar lesiones personales graves. Antes de extender el rack a la posición de instalación, lea las instrucciones de instalación. No coloque ninguna carga sobre el equipo montado sobre rieles deslizantes en la posición de instalación. No deje el equipo montado sobre rieles deslizantes en la posición de instalación.

Attention!

Danger d'instabilité. Le rack peut basculer et provoquer des blessures corporelles graves. Avant d'étendre le rack en position d'installation, lire les instructions d'installation. Ne pas charger l'équipement monté sur rail de glissière en position d'installation. Ne pas laisser l'équipement monté sur rail de glissière en position d'installation.

אזהרה!

סכנת חוסר יציבות

המתלה עלול להתהפך ולגרום לפציעה חמורה

לפני הארכת המתלה למצב ההתקנה, קרא את הוראות ההתקנה

אין להעמיס כל עומס על הציוד המותקן על מסילת ההחלקה במצב ההתקנה

אל תשאיר את הציוד המותקן על מסילת ההחלקה במצב ההתקנה

تحذير

خطر عدم الاستقرار.

قد ينقلب الرف مسبباً إصابات جسدية خطيرة.

قبل تمديد الرف إلى موضع التركيب، اقرأ تعليمات التركيب.

لا تضع أي حمولة على الجهاز المثبت على سكة الانزلاق في موضع التركيب.

لا تترك الجهاز المثبت على سكة الانزلاق في موضع التركيب.

경고!

안정성 위험. 랙이 넘어져 심각한 개인 부상을 입을 수 있습니다. 랙을 설치 위치까지 확장하기 전에 설치 지침을 읽으십시오. 설치 위치에서 슬라이드 레일 장착 장비에 하중을 가하지 마십시오. 슬라이드 레일 장착 장비를 설치 위치에 두지 마십시오.

Waarschuwing!

Gevaar voor instabiliteit. Het rek kan kantelen en ernstig persoonlijk letsel veroorzaken. Lees de installatie-instructies voordat u het rek uitschuift naar de installatiepositie. Plaats geen last op de op de glijrail gemonteerde apparatuur in de installatiepositie. Laat de op de glijrail gemonteerde apparatuur niet in de installatiepositie staan.

Restricted Area



Warning! This unit is intended for installation in restricted access areas. A restricted access area can be accessed only through the use of a special tool, lock and key, or other means of security. (This warning does not apply to workstations).

警告!

このユニットは、アクセス制限区域に設置されることを想定しています。

アクセス制限区域は、特別なツール、鍵と錠前、その他のセキュリティの手段を用いてのみ出入りが可能です。

警告!

此部件应安装在限制进出的场所、限制进出的场所指只能通过使用特殊工具、锁和钥匙或其它安全手段进出的场所。

警告!

此裝置僅限安裝於進出管制區域、進出管制區域係指僅能以特殊工具、鎖頭及鑰匙或其他安全方式才能進入的區域。

Warnung!

Diese Einheit ist zur Installation in Bereichen mit beschränktem Zutritt vorgesehen. Der Zutritt zu derartigen Bereichen ist nur mit einem Spezialwerkzeug, Schloss und Schlüssel oder einer sonstigen Sicherheitsvorkehrung möglich.

¡Advertencia!

Esta unidad ha sido diseñada para instalación en áreas de acceso restringido. Sólo puede obtenerse acceso a una de estas áreas mediante la utilización de una herramienta especial, cerradura con llave u otro medio de seguridad.

Attention!

Cet appareil doit être installée dans des zones d'accès réservés. L'accès à une zone d'accès réservé n'est possible qu'en utilisant un outil spécial, un mécanisme de verrouillage et une clé, ou tout autre moyen de sécurité.

אזהרה!

יש להתקין את היחידה באזורים שיש בהם הגבלת גישה. הגישה ניתנת בעזרת כלי אבטחה בלבד (מפתח, מנעול וכד.).

تحذير!

اتخصيص هذه الوحدة نترك بها ف مناطق محظورة تم .
مكن انصل إن منطقت محظورة فقط من خلال استخدام أداة خاصت،
أو أوس هت أخري نلالأ مما قفم ومفتاح

경고!

이 장치는 접근이 제한된 구역에 설치하도록 되어있습니다. 특수도구, 잠금 장치 및 키, 또는 기타 보안 수단을 통해서만 접근 제한 구역에 들어갈 수 있습니다.

Waarschuwing!

Dit apparaat is bedoeld voor installatie in gebieden met een beperkte toegang. Toegang tot dergelijke gebieden kunnen alleen verkregen worden door gebruik te maken van speciaal gereedschap, slot en sleutel of andere veiligheidsmaatregelen.

Battery Handling



CAUTION There is risk of explosion if the battery is replaced by an incorrect type. Replace the battery only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.

警告!

バッテリーを間違ったタイプに交換すると爆発の危険があります。交換する電池はメーカーが推奨する型、または同等のものを使用下さい。使用済電池は製造元の指示に従って処分して下さい。

警告!

如果更换的电池类型不正确。请只使用同类电池或制造商推荐的功能相当的电池更换原有电池。请按制造商的说明处理废旧电池。

警告!

如果更換的電池類型不正確。請使用製造商建議之相同或功能相當的電池更換原有電池。請按照製造商的說明指示處理廢棄舊電池。

WARNUNG!

Es besteht Explosionsgefahr, wenn die Batterie durch einen falschen Typ ersetzt wird. Ersetzen Sie die Batterie nur durch den gleichen oder vom Hersteller empfohlenen Batterietyp. Entsorgen Sie die benutzten Batterien nach den Anweisungen des Herstellers.

¡ADVERTENCIA!

Existe riesgo de explosión si la batería se reemplaza por un tipo incorrecto. Reemplazar la batería exclusivamente con el mismo tipo o el equivalente recomendado por el fabricante. Desechar las baterías gastadas según las instrucciones del fabricante.

ATTENTION!

Il existe un risque d'explosion si la batterie est remplacée par un type incorrect. Ne la remplacer que par une pile de type semblable ou équivalent, recommandée par le fabricant. Jeter les piles usagées conformément aux instructions du fabricant.

אזהרה!

קיימת סכנת פיצוץ אם הסוללה תוחלף בסוג שגוי. יש להחליף את הסוללה בסוג התואם מחברת יצרן מומלצת. סילוק הסוללות המשומשות יש לבצע לפי הוראות היצרן.

!تحذير

هناك خطر الانفجار إذا تم استبدال البطارية بنوع غير صحيح. استبدال البطارية فقط بنفس النوع أو ما يعادلها مما أوصت به الشركة المصنعة. جُلِّص من البطاريات المسحمة وفقاً لتعليمات الشركة الصانعة.

경고!

배터리를 잘못된 종류로 교체하면 폭발의 위험이 있습니다. 기존 배터리와 동일하거나 제조사에서 권장하는 동등한 종류의 배터리로만 교체해야 합니다. 제조사의 안내에 따라 사용된 배터리를 처리하여 주십시오.

WAARSCHUWING!

Er bestaat explosiegevaar als de batterij wordt vervangen door een verkeerd type. Vervang de batterij slechts met hetzelfde of een equivalent type die door de fabrikant aanbevolen wordt. Gebruikte batterijen dienen overeenkomstig fabrieksvoorschriften afgevoerd te worden.

Redundant Power Supplies

Warning! This unit might have more than one power supply connection. All connections must be removed to de-energize the unit.

警告!

このユニットは複数の電源装置が接続されている場合があります。
ユニットの電源を切るためには、すべての接続を取り外さなければなりません。

警告!

此部件连接的电源可能不止一个、必须将所有电源断开才能停止给该部件供电。

警告!

此装置连接的电源可能不只一个、必须切断所有电源才能停止对该装置的供电。

Warnung!

Dieses Gerät kann mehr als eine Stromzufuhr haben. Um sicherzustellen, dass der Einheit kein Strom zugeführt wird, müssen alle Verbindungen entfernt werden.

¡Advertencia!

Puede que esta unidad tenga más de una conexión para fuentes de alimentación. Para cortar por completo el suministro de energía, deben desconectarse todas las conexiones.

Attention!

Cette unité peut avoir plus d'une connexion d'alimentation. Pour supprimer toute tension et tout courant électrique de l'unité, toutes les connexions d'alimentation doivent être débranchées.

אזהרה!

ליחידה יש יותר מחיבור אחד של ספק. יש להסיר את כל החיבורים על מנת לרוקן את היחידה.

تحذير!

قد يكون لهذا الجهاز عدة اتصالات بوحدات امداد الطاقة .
يجب إزالة كافة الاتصالات لعزل الوحدة عن الكهرباء

경고!

이 장치에는 한 개 이상의 전원 공급 단자가 연결되어 있을 수 있습니다. 이 장치에 전원을 차단하기 위해서는 모든 연결 단자를 제거해야만 합니다.

Waarschuwing!

Deze eenheid kan meer dan één stroomtoevoeraansluiting bevatten. Alle aansluitingen dienen verwijderd te worden om het apparaat stroomloos te maken.

Backplane Voltage



Warning! Hazardous voltage or energy is present on the backplane when the system is operating. Use caution when servicing.

警告!

システムの稼働中は危険な電圧または電力が、バックプレーン上にかかっています。
修理するには注意ください。

警告!

当系统正在进行时、背板上有很危险的电压或能量、进行维修时务必小心。

警告!

當系統正在進行時、背板上有很危險的電壓或能量、進行維修時務必小心。

Warnung!

Wenn das System in Betrieb ist, treten auf der Rückwandplatine gefährliche Spannungen oder Energien auf. Vorsicht bei der Wartung.

¡Advertencia!

Cuando el sistema está en funcionamiento, el voltaje del plano trasero es peligroso. Tenga cuidado cuando lo revise.

Attention!

Lorsque le système est en fonctionnement, des tensions électriques circulent sur le fond de panier. Prendre des précautions lors de la maintenance.

אזהרה!

קיימת סכנת מתח בפנל האחורי בזמן תפעול המערכת. יש להיזהר במהלך העבודה.

تحذير!

هناك خطر من التيار الكهربائي أو الطاقة المخزنة على اللوحة عندما يكون النظام يعمل كه حذرا عند خدمة هذا الجهاز

경고!

시스템이 동작 중일 때 후면판 (Backplane)에는 위험한 전압이나 에너지가 발생 합니다. 서비스 작업 시 주의하십시오.

Waarschuwing!

Een gevaarlijke spanning of energie is aanwezig op de backplane wanneer het systeem in gebruik is. Voorzichtigheid is geboden tijdens het onderhoud.

Comply with Local and National Electrical Codes



Warning! Installation of the equipment must comply with local and national electrical codes.

警告!

機器の取り付けはその地方および国の電気規格に準拠する必要があります。

警告!

设备安装必须符合本地与本国电气法规。

警告!

設備安裝必須符合本地與本國電氣法規。

Warnung!

Die Installation der Geräte muss den Sicherheitsstandards entsprechen.

¡Advertencia!

La instalacion del equipo debe cumplir con las normas de electricidad locales y nacionales.

Attention!

L'équipement doit être installé conformément aux normes électriques nationales et locales.

אזהרה!

התקנת הציוד חייבת להיות תואמת לחוקי החשמל המקומיים והארציים.

تحذير!

تركيب المعدات الكهربائية يجب أن يمتثل للقوانين المحلية والنظمية المتعلقة

بالكهرباء

경고!

현 지역 및 국가의 전기 규정에 따라 장비를 설치해야 합니다.

Waarschuwing!

Bij installatie van de apparatuur moet worden voldaan aan de lokale en nationale elektriciteitsvoorschriften.

Product Disposal



Warning! Ultimate disposal of this product should be handled according to all national laws and regulations.

警告!

この製品を廃棄処分する場合、国の関係する全ての法律・条例に従い処理する必要があります。

警告!

本产品的废弃处理应根据所有国家的法律和规章进行。

警告!

本產品的廢棄處理應根據所有國家的法律和規章進行。

Warnung!

Die Entsorgung dieses Produkts sollte gemäß allen Bestimmungen und Gesetzen des Landes erfolgen.

¡Advertencia!

Al deshacerse por completo de este producto debe seguir todas las leyes y reglamentos nacionales.

Attention!

La mise au rebut ou le recyclage de ce produit sont généralement soumis à des lois et/ou directives de respect de l'environnement. Renseignez-vous auprès de l'organisme compétent.

אזהרה!

סילוק סופי של מוצר זה חייב להיות בהתאם להנחיות וחוקי המדינה.

تحذير!

عند التخلص النهائي من هذا المنتج ينبغي التعامل معه وفقا لجميع القوانين واللوائح الوطنية

경고!

이 제품은 해당 국가의 관련 법규 및 규정에 따라 폐기되어야 합니다.

Waarschuwing!

De uiteindelijke verwijdering van dit product dient te geschieden in overeenstemming met alle nationale wetten en reglementen.

Fan Warning



Warning! Hazardous moving parts. Keep away from moving fan blades. The fans might still be turning when you remove the fan assembly from the chassis. Keep fingers, screwdrivers, and other objects away from the openings in the fan assembly's housing



警告!

警告! 回転部品に注意。運転中は回転部(羽根)に触れないでください。シャーシから冷却ファン装置を取り外した際、ファンがまだ回転している可能性があります。ファンの開口部に、指、ドライバー、およびその他のものを近づけないで下さい。

警告!

警告! 危险的可移动性零件。请务必与转动的风扇叶片保持距离。当您从机架移除风扇装置, 风扇可能仍在转动。小心不要将手指、螺丝起子和其他物品太靠近风扇

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Warnung!

Gefährlich Bewegende Teile. Von den bewegenden Lüfterblätter fern halten. Die Lüfter drehen sich u. U. noch, wenn die Lüfterbaugruppe aus dem Chassis genommen wird. Halten Sie Finger, Schraubendreher und andere Gegenstände von den Öffnungen des Lüftergehäuses entfernt.

¡Advertencia!

Riesgo de piezas móviles. Mantener alejado de las aspas del ventilador. Los ventiladores podran dar vuelta cuando usted quite el montaje del ventilador del chasis. Mantenga los dedos, los destornilladores y todos los objetos lejos de las aberturas del ventilador.

Attention!

Pieces mobiles dangereuses. Se tenir a l'écart des lames du ventilateur Il est possible que les ventilateurs soient toujours en rotation lorsque vous retirerez le bloc ventilateur du châssis. Prenez garde à ce que doigts, tournevis et autres objets soient éloignés du logement du bloc ventilateur.

אזהרה!

חלקים נעים מסוכנים. התרחק מלהבי המאוורר בפעולהכאשר מסירים את חלקי המאוורר מהמארז, יתכן והמאווררים עדיין עובדים. יש להרחיק למרחק בטוח את האצבעות וכלי עבודה שונים מהפתחים בתוך המאוורר

!تحذير

تحذير! أجزاء متحركة خطيرة. ابتعد عن شفرات المروحة المتحركة. من الممكن أن المراوح لا تزال تدور عند إزالة كتلة المروحة من الهيكل يجب إبقاء الأصابع ومفكات البراغي وغيرها من الأشياء بعيدا عن الفتحات في كتلة المروحة.

경고!

움직이는 위험한 부품. 회전하는 송풍 날개에 접근하지 마세요. 새시로부터 팬 조립품을 제거할 때 팬은 여전히 회전하고 있을 수 있습니다. 팬 조립품 외관의 열려있는 부분들로부터 손가락 및 스크류드라이버, 다른 물체들이 가까이 하지 않도록 배치해 주십시오.

Waarschuwing!

Gevaarlijk bewegende onderdelen. Houd voldoende afstand tot de bewegende ventilatorbladen. Het is mogelijk dat de ventilator nog draait tijdens het verwijderen van het ventilatorsamenstel uit het chassis. Houd uw vingers, schroevendraaiers en eventuele andere voorwerpen uit de buurt van de openingen in de ventilatorbehuizing.

Power Cable and AC Adapter



Warning! When installing the product, use the provided or designated connection cables, power cables and AC adapters. Using any other cables and adapters could cause a malfunction or a fire. Electrical Appliance and Material Safety Law prohibits the use of UL or CSA -certified cables (that have UL/CSA shown on the cord) for any other electrical devices than products designated by Supermicro only.

警告!

製品を設置する場合、提供または指定および購入された接続ケーブル、電源コードとACアダプターを該当する地域の条例や安全基準に適合するコードサイズやプラグと共に使用下さい。他のケーブルやアダプターを使用すると故障や火災の原因になることがあります。電気用品安全法は、ULまたはCSA認定のケーブル(UL/CSAマークがコードに表記)をSupermicroが指定する製品以外に使用することを禁止しています。

警告!

安装此产品时、请使用本身提供的或指定的或采购的连接线、电源线和电源适配器、包含遵照当地法规和安全要求的合规的电源线尺寸和插头。使用其它线材或适配器可能会引起故障或火灾。除了Supermicro所指定的产品、电气用品和材料安全法律规定禁止使用未经UL或CSA认证的线材。(线材上会显示UL/CSA符号)。

警告!

安装此产品时、请使用本身提供的或指定的或采购的连接线、电源线 and 电源适配器、包含遵照当地法规和安全要求的合规的电源线尺寸和插头。使用其它线材或适配器可能会引起故障或火灾。除了Supermicro所指定的产品、电气用品和材料安全法律规定禁止使用未经UL或CSA认证的线材。(线材上会显示UL/CSA符号)。

Warnung!

Nutzen Sie beim Installieren des Produkts ausschließlich die von uns zur Verfügung gestellten Verbindungskabeln, Stromkabeln und/oder Adapter, die Ihre örtlichen Sicherheitsstandards einhalten. Der Gebrauch von anderen Kabeln und Adapter können Fehlfunktionen oder Feuer verursachen. Die Richtlinien untersagen das Nutzen von UL oder CAS zertifizierten Kabeln (mit UL/CSA gekennzeichnet), an Geräten oder Produkten die nicht mit Supermicro gekennzeichnet sind.

¡Advertencia!

Cuando instale el producto, utilice la conexión provista o designada o procure cables, Cables de alimentación y adaptadores de CA que cumplan con los códigos locales y los requisitos de seguridad, incluyendo el tamaño adecuado del cable y el enchufe. El uso de otros cables y adaptadores podría causar un mal funcionamiento o un incendio. La Ley de Seguridad de Aparatos Eléctricos y de Materiales prohíbe El uso de cables certificados por UL o CSA (que tienen el certificado UL / CSA en el código) para cualquier otros dispositivos eléctricos que los productos designados únicamente por Supermicro.

Attention!

Lors de l'installation du produit, utilisez les câbles de connection fournis ou désigné ou achetez des câbles, câbles de puissance et adaptateurs respectant les normes locales et les conditions de securite y compris les tailles de câbles et les prises electriques appropries. L'utilisation d'autres câbles et adaptateurs peut provoquer un dysfonctionnement ou un incendie. Appareils électroménagers et la Loi sur la Sécurité Matériel interdit l'utilisation de câbles certifiés- UL ou CSA (qui ont UL ou CSA indiqué sur le code) pour tous les autres appareils électriques sauf les produits désignés par Supermicro seulement.

אזהרה!

ררוצל ומאתוה וא ושכרנ רשא AC סימאתמו סיקפס, סילבכב שמתשהל שי, רצומה תא סיניקתמ רשאכ לכב שומיש . עקתהו לבכה לש הנוכנ הדימ ללוכ, תוימוקמה תוחיטבה תושירדל ומאתוה רשאו, הנקתהה למשחה ירישכמב שומישה יקוחל סאתהב . ילמשח רצק וא הלקתל סורגל לולע, רחא גוסמ סאתמ וא לבכ לש דוק סהילע עיפומ רשאכ) -CSA - ב וא UL - ב סיכסוסמה סילבכב שמתשהל רוסיא סייק, תוחיטבה יקוחו דבלב Supermicro י"ע סאתוה רשא רצומב קר אלא, רחא ילמשח רצומ לכ רובע (UL/CSA).

تحذير!

تالباكلا ءارشب مق وأ ءدحمللا وأ ءرفوتمللا تاليصوتلا مادختساب مق ،جتتملا بيكرت دنع كلذ يف امب ءيلحملا ءمالسلا تابلطتمو نيناوقب ماز تلالا عم ددرتملا رايتلا تالوحمو ءيناير هكلا قيرح وأ لظع يف ببستي دق برخأ تالوحمو تالباك يا مادختسا . ميلسلا سباقلاو لصوملا مجج .
CSA وأ UL لبق نم ءدمتعملا تالباكلا مادختسا تاد عملاو ءيناير هكلا ءز هجالل ءمالسلا نوناق رظحي Supermicro لبق نم ءدحمللاو ءينعملا تاجتتملا ريغ برخأ تادعم يا عم (UL/CSA) ءمالع لمحت يتلاو.

경고!

제품을 설치할 때 현지 코드 및 적절한 굵기의 코드와 플러그를 포함한 안전 요구 사항을 준수하여 제공되거나 지정된 연결 혹은 구매 케이블, 전원 케이블 및 AC 어댑터를 사용하십시오.

다른 케이블이나 어댑터를 사용하면 오작동이나 화재가 발생할 수 있습니다. 전기 용품 안전법은 UL 또는 CSA 인증 케이블 (코드에 UL / CSA가 표시된 케이블)을 Supermicro 가 지정한 제품 이외의 전기 장치에 사용하는 것을 금지합니다.

Waarschuwing!

Bij het aansluiten van het Product uitsluitend gebruik maken van de geleverde Kabels of een andere geschikte aan te schaffen Aansluitmethode, deze moet altijd voldoen aan de lokale voorschriften en veiligheidsnormen, inclusief de juiste kabeldikte en stekker. Het gebruik van niet geschikte Kabels en/of Adapters kan een storing of brand veroorzaken. Wetgeving voor Elektrische apparatuur en Materiaalveiligheid verbied het gebruik van UL of CSA - gecertificeerde Kabels (met UL/CSA in de code) voor elke andere toepassing dan de door Supermicro hiervoor beoogde Producten.

Appendix B:

System Specifications

Storage Drives

24 front hot-swap 2.5" NVMe drive bays

Two M.2 PCIe 5.0 x4 NVMe slots (M-key 2280/22110)

PCI Expansion Slots

Three PCIe 5.0 x16 FHFL slots

PCIe Switch Board

BPN-NVME5-229PL-J

Chassis

CSE-229TS: (HxWxD) 3.47" x 17.7" x 30" (88 x 449.4 x 762 mm)

System Cooling

Six heavy-duty hot-swap 60-mm fans

Power Supply

Two 1600 W redundant Titanium Level (96%) power supplies

Operating Environment

Operating Temperature: 10°C to 35°C (50°F to 95°F)

Non-operating Temperature: -40°C to 60°C (-40°F to 140°F)

Operating Relative Humidity: 8% to 90% (Non-condensing)

Non-operating Relative Humidity: 5% to 95% (Non-condensing)

Regulatory Compliance

FCC, ICES, CE, UKCA, VCCI, RCM, NRTL, CB

Certified Safety Models

229JBF-U24

Perchlorate Warning

California Best Management Practices Regulations for Perchlorate Materials: This Perchlorate warning applies only to products containing CR (Manganese Dioxide) Lithium coin cells. Perchlorate Material-special handling may apply. See

<https://www.dtsc.ca.gov/hazardouswaste/perchlorate>

Applied Directives, Standards**Directives:**

EMC/EMI: 2014/30/EU (EMC Directive)

Electromagnetic Compatibility Regulations 2016

FCC Part 15 Subpart B

ICES-003

VCCI-CISPR 32

AS/NZS CISPR 32

CISPR 32

CISPR 35

BS/EN 55032

BS/EN 55035

BS/EN 61000-3-2

BS/EN 61000-3-3

BS/EN 61000-4-2

BS/EN 61000-4-3

BS/EN 61000-4-4

BS/EN 61000-4-5

BS/EN 61000-4-6

BS/EN 61000-4-8

BS/EN 61000-4-11

Environment:

Delegated Directive (EU) 2015/863

Directive 2011/65/EU (RoHS)

REACH Regulation EC 1907/2006

WEEE Directive 2012/19/EU

California Proposition 65

Product Safety:

2014/35/EU (LVD Directive)

UL/CSA 62368-1 (USA and Canada)

Electrical Equipment (Safety) Regulations 2016

IEC/BS/EN 62368-1

この装置は、クラスA機器です。この装置を住宅環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。

VCCI - A

Appendix C:

General Data Center Environmental Specifications

Particulate Contamination Specifications

Air filtration: Data centers must be kept clean to Class 8 of ISO 14644-1 (ISO 2015). The air entering the data center should be filtered with a MERV 11 filter or better. The air within the data center should be continuously filtered with a MERV 8 filter or better.

Conductive dust: Air should be free of conductive dust, zinc whiskers, or other conductive particles.

Corrosive dust: Air should be free of corrosive dust.

Gaseous Contamination Specifications

Copper coupon corrosion rate: <300 Å/month per class G1 as defined by ANSI.ISA71.04-2013, reference by ASHRAE TC 9.9

Silver coupon corrosion rate: <200 Å/month per class G1 as defined by ANSI.ISA71.04-2013, reference by ASHRAE TC 9.9

Note: If testing with silver or copper coupons results in values less than 200 Å/month or 300 Å/month, respectively, then operating up to 70% relative humidity (RH) is acceptable. If the testing shows corrosion levels exceed these limits, then catalyst type pollutants are probably present and RH should be driven to 50% or lower.