# RSC-2AT3

## Rackmount Chassis
## User's Manual

UM_RSC-2AT3_v1.2_061723

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**Document Release History**

| Release Date | Version | Update Content |
|---|---|---|
| November 2022 | 1 | User's Manual release to public. |
| March 2023 | 1.1 | Update fan specification. |
| June 2023 | 1.2 | Update Dimensions. |

# Preface

### Copyright



### Trademarks

All products and trade names used in this document are trademarks or registered trademarks of their respective holders.

### Changes

The material in this document is for information purposes only and is subject to change without notice.

### Warning

1. A shielded-type power cord is required in order to meet FCC emission limits and also to prevent interference to the nearby radio and television reception. It is essential that only the supplied power cord be used.
2. Use only shielded cables to connect I/O devices to this equipment.
3. You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

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### Instruction Symbols

Special attention should be given to the instruction symbols below.

| | |
|---|---|
| **NOTE** | This symbol indicates that there is an explanatory or supplementary instruction. |
| **CAUTION** | This symbol denotes possible hardware impairment. Upmost precaution must be taken to prevent serious hardware damage. |
| **WARNING** | This symbol serves as a warning alert for potential body injury. The user may suffer possible injury from disregard or lack of attention. |

# Safety Instructions

*Before you commence, please attentively read the following important discretions below. All cautions and warnings on the equipment or in the manuals should be circumspectly noted and reviewed.*

**Always ground yourself to prevent static electricity.**
**請全程接地，以防止靜電。**
**请全程接地，以防止静电。**
**Всегда заземляйте себя, чтобы избежать статического электричества.**
**Aard jezelf altijd om statische elektriciteit te voorkomen.**

- Firmly ground yourself at all times when installing or assembling the internal components of the server. Most of electronic components in the server are highly sensitive to electrical static discharge.
- Use a solid grounding wrist strap and distinctively place all electronic components in static-shielded devices to prevent static. Grounding wrist straps can be purchased in any electronic supply store.
- Confirm that the power source is turned off and then disconnect the power cords from your system before performing any type of installation or manual servicing. A sudden surge of power could severely damage the sensitive electronic components.
- Do not precipitously open the system's top cover. If you must open the cover for maintenance purposes, only a trained technician should be allowed to proceed this action. Integrated circuits on computer boards are highly sensitive to static electricity. Before operating a board or integrated circuit, touch an unpainted portion of the system unit chassis for a couple of seconds to discharge any static electricity on your body.

**Place the server in a stable environment.**
**請將伺服器放置在穩定的環境中。**
**请将伺服器放置在稳定的环境中。**
**Поместите сервер в стабильную среду.**
**Plaats de server in een stabiele omgeving.**

- Place this equipment on a stable surface when installing. A small mild drop or fall could cause fatal injury to both the equipment and the person handling the equipment.
- Please keep this equipment away from humidity to prevent vast rust and disintegration.
- Carefully and accurately mount the equipment into the rack. Uneven mechanical loading may lead to hazardous consequences.
- This equipment is to be installed for operation in an environment with maximum ambient temperature below 35°C.
- Review the environment before performing any installation or servicing. Keep the equipment away from hazardous and uneven grounds.
- This server must be installed only in Restricted Access Locations.

**Handle equipment with care.**
**請謹慎操作設備。**
**请谨慎操作设备。**
**Обращайтесь с оборудованием осторожно.**
**Behandel de apparatuur voorzichtig.**

- Do not cover the openings of the system. The openings on the system are for air convection, which intentionally protect the equipment from overheating.
- Never pour any liquid into ventilation openings of the system. This could cause catastrophic fire or electrical shock.

- Ensure that the voltage of the power source is within the specification on the label when connecting the equipment to the power outlet. The current load and output power of loads must be within the specification.
- This equipment must be firmly connected to reliable grounding before usage. Pay special attention to power supplied other than direct connections, e.g. using of power strips.
- Place the power cord out of the way of foot traffic. Do not place anything over the power cord. The power cord must be rated for the product, 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.

**Pay attention to hardware maintenance.**
**注意硬體維護。**
**注意硬体维护。**
**Обратите внимание на обслуживание оборудования.**
**Besteed aandacht aan hardware-onderhoud.**

- If the equipment is not used for a long time, disconnect the equipment from mains to avoid being damaged by transient over-voltage.
- Module and drive bays must not be empty. They must have a dummy cover.
- Never open the equipment without professional assistance. For safety reasons, only qualified service personnel should open the equipment.
- If one of the following situations arise, the equipment should be checked and tested by service personnel:
  1. The power cord or plug is damaged.
  2. Liquid has penetrated the equipment.
  3. The equipment has been exposed to moisture.
  4. The equipment does not work well or will not work according to its user manual.
  5. The equipment has been dropped and/or damaged.
  6. The equipment has obvious signs of breakage.
  7. Please disconnect this equipment from the AC outlet before cleaning. Do not use liquid or detergent for cleaning. The use of a moisture sheet or cloth is recommended for cleaning.

**CAUTION**
The equipment intended for installation should be placed in Restricted Access Location.

**CAUTION**
There will be a risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the instructions. After performing any installation or servicing, make sure the enclosure is correct in position before turning on the power.

**CAUTION**
This unit may have more than one power supply. Disconnect all power sources before maintenance to avoid electric shock.

# About This Manual

Thank you for selecting and purchasing RSC-2AT3

This user's manual is provided for professional technicians to perform easy hardware setup, basic system configurations, and quick software startup. This document pellucidly presents a brief overview of the product design, device installation, and firmware settings for RSC-2AT3 Rackmount Chassis. For the latest version of this user's manual, please refer to the AIC® website: RSC-2AT3 is a flexible rackmount storage chassis with tool-less design. This product supports hot swappable HDDs and easy swap fans. For more information about our product, please visit our website at https://www.aicipc.com/en/productdetail/51406.

**Chapter 1 Product Features**

This chapter delivers the overall layout of the product, including the fundamental components of the rackmount chassis, design specifications, and noteworthy features.

**Chapter 2 Hardware Setup**

This chapter displays an easy installation guide for assembling the chassis. Utmost caution for proceeding to set up the hardware is highly advised.

**Chapter 3 Hardware Specifications**

This chapter elaborates the overall layout of the hardware design, including multifarious connectors, jumpers, and LED descriptions.

**Chapter 4 Technical Support**

For more information or suggestion, please contact the nearest AIC® corporation representative in your district or visit the AIC® website: http://www.aicipc.com/en/index. It is our greatest honor to provide the best service for our customers.

# Chapter 1. Product Features

RSC-2AT3 is a flexible rackmount storage chassis with tool-less design. This product supports hot swappable disk drives, and six easy swap fans. For more information about our product, please visit our website at http://www.aicipc.com/en/index.

Before removing the subsystem from the shipping carton, visually inspect the physical condition of the shipping carton. Exterior damage to the shipping carton may indicate that the contents of the carton are damaged. If any damage is found, do not remove the components; contact the dealer where the subsystem was purchased for further instructions. Before continuing, first unpack the subsystem and verify that the number of components in the shipping carton is accurate and in good condition.

## 1.1 Components

This product contains the components listed below. Please confirm the number and the condition of the components before installation.

- System barebone (includes power supply, fan & hard disk drive tray)
- Power cord (vary per region)
- Slide rail x 1 set

| Pre-installed into the system | | Number |
|---|---|---|
| ✓ | 1200W 1+1 redundant PSU PMBus 1.2 80+ Platinum | 1+1 |
| ✓ | 2.5-inch internal hot swap drive bays (front, SATA/SAS3/NVMe) | 24 |
| ✓ | 2.5-inch external hot swap drive bays (rear) | 2 |
| ✓ | 3 x 80x38mm hotswap fans + 1 x 80x38mm easy swap fan (option) | 3+1 (option) |
| **Accessory Item** | | **Number** |
| ✓ | 24 x 2.5-inch HDD bottom screw : F(+),M3X4L,NI | 96 |
| ✓ | Motherboard screw: RW(+),M3X4L,NI | 20 |
| ✓ | EPE TOP: 815*625*97H | 1 |
| ✓ | EPE BOTTOM: 815*625*97H | 1 |
| ✓ | EPE PAD: 325*145*30T | 1 |
| ✓ | 28-inch tool-less slide rail assembly | 1 |
| ✓ | Power cord | vary per region |

**Product specifications and features are subject to change without prior notice.**

## 1.2 Specifications

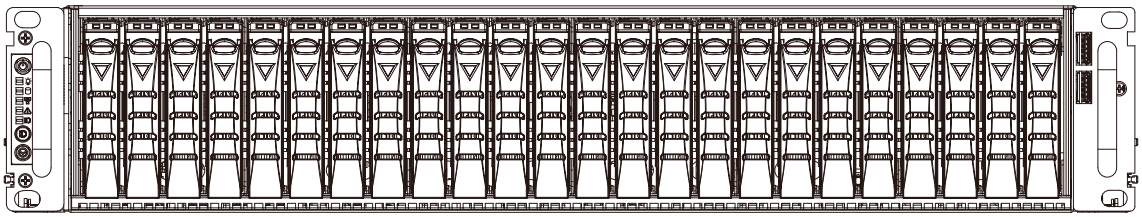
| | | | |
|---|---|---|---|
| **Dimensions** (W x D x H) | mm : 430 x 645 x 8 8 | | |
| | inches : 17 x 25.4 x 3. 5 | | |
| **Industry Standard** | EIA-RS310D | | |
| **Material** | Heavy-duty preplated SGCC cold-rolled steel | | |
| **Color** | Front Panel : Black | | |
| **Cooling** | 3 x 80x38mm hotswap fans + 1 x 80x38mm easy swap fan (option) | | |
| **Power Supply** | 1200W 1+1 redundant PSU PMBus 1.2 80+ Platinu m | | |
| **Expansion Slots** | 7 low profile | | |
| **Front Panel** | System power on/off, system reset and 2 x USB 3.0 ports | | |
| **LED Indicators** | Power, LAN, Drive and Alert | | |
| **System Board** | 12”(W) x 13”(D) E-ATX/SSI EEB 3.6 compliant MB | | |
| **Drive Bays** | External | 2.5” hot swap | 24 x SATA/SAS3/SAS4/NVMe (15mm, front) |
| | | | 2 x 2.5” hot swap (7mm, rear) |

| | | |
|---|---|---|
| **Backplane** | • SKU1: 1 x 24-port SAS3 expander backplane,<br>• SKU2: 3 x 8-port SAS3 backplane,<br>• SKU3: 1 x 8-port SAS3/PCIe Gen4 NVMe tri-mode backplane, 2 x 8-port SAS3 backplane<br>• SKU4: 2 x 8-port SAS3/PCIe Gen4 NVMe tri-mode backplane, 1 x 8-port SAS3 backplane<br>• SKU5: 3 x 8-port SAS3/PCIe Gen4 NVMe tri-mode backplane<br>• SKU6: 1 x 24-port SAS4 expander backplane | |
| **Storage Temperature** | 0ºC(32ºF) ~ 50ºC(122ºF) | |
| **Humidity** | 5%~95% non-condensing | |
| **Gross Weight** | (w/ PSU & Rail ) | kgs : 24.5 |
| | | lbs : 54 |
| **Packaging Dimensions** | (W x D x H ) | mm : 645 x 835 x 230 |
| | | inches : 25.4 x 32.9 x 9.06 |
| **Cubic Feet** | 4.37 | |
| **Container Load Quantity** | 20’ | 200 |
| | 40’ | 430 |
| | 40’ H | 480 |
| **Mounting** | Standard | 28” tool-less slide rail |

## 1.3 Features

- Tool-less design supports quick installation and easy maintenance:
  - Tool-less 2.5” drive trays
  - Tool-less top covers
  - Tool-less backplane
  - Tool-less slide rails
- 12Gb/s SAS 3 expander chip / NVMe tri-mode on backplane
- Specially designed hot swap and low power consumption fans minimize rotational vibration and provide superior cooling
- Comes with a redundant PSU 80+ Platinum

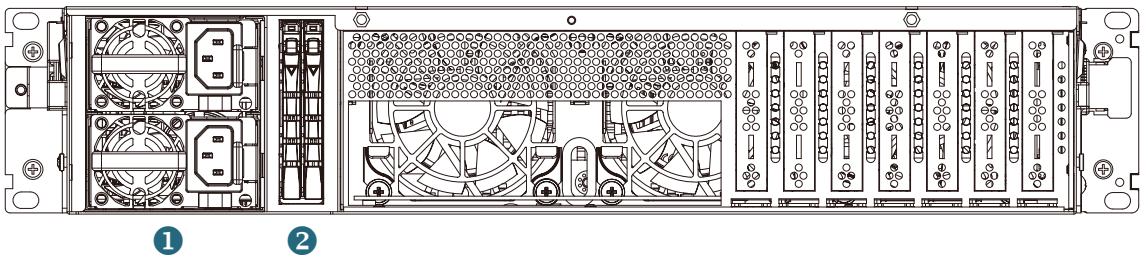
## Front Panel



System Button and LED Indicator

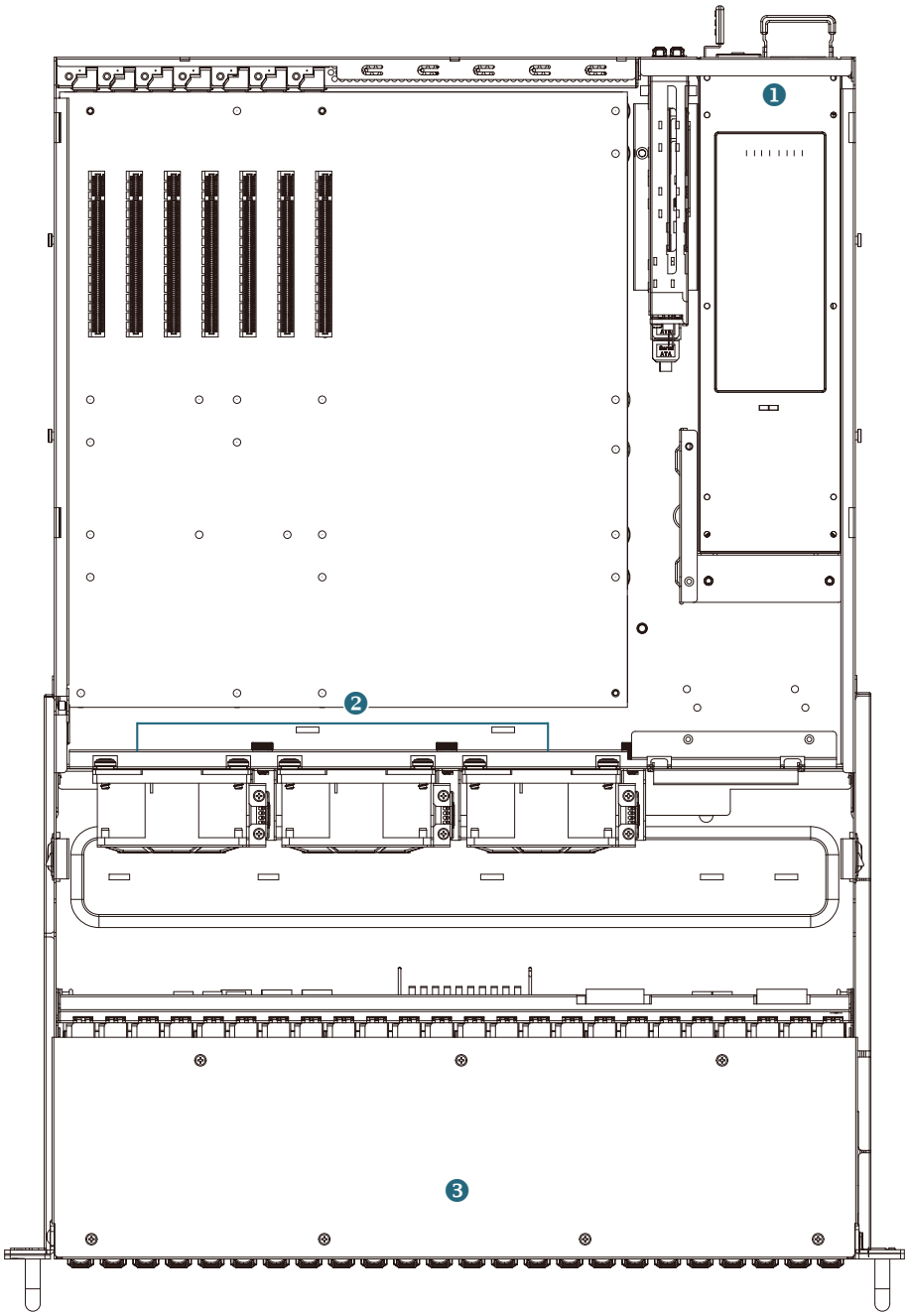
| Item | Description | Item | Description |
|---|---|---|---|
| | Power Button | | LAN LED |
| | Power Status LED | | System Reset Button |
| | Drive Activity LED | | System Alert LED |
| | System ID LED | | ID Button |

## Rear Panel




| Item | Content | Description |
|---|---|---|
| 1 | PSU socket | 1200W 1+1 redundant PSU PMBus 80+ Platinum |
| 2 | Disk drive tray | 2x 2.5” hot swap disk drive bay |

## Top View



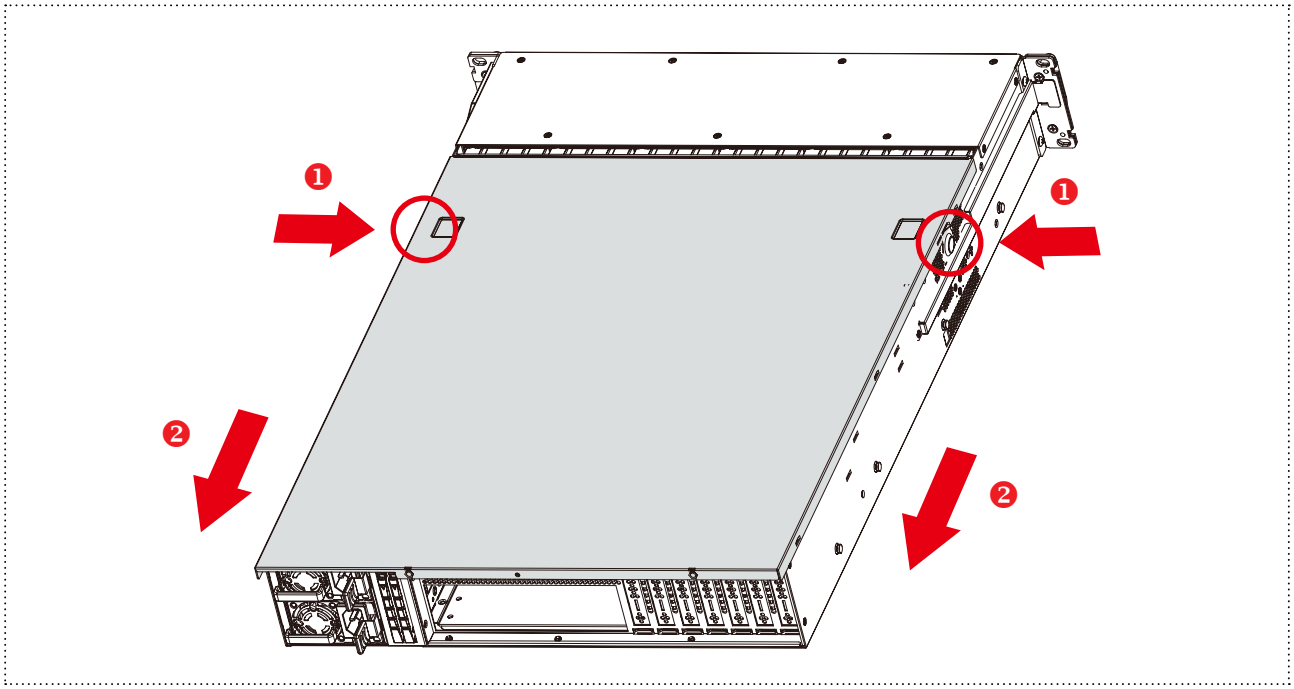

| Item | Description |
|---|---|
| ❶ | 1200W 1+1 redundant power supply 80+Platinum |
| ❷ | 3 x 80x38mm hotswap fans + 1 x 80x38mm easyswap fan (option) |
| ❸ | 24 x 2.5-inch hot swap disk drive |

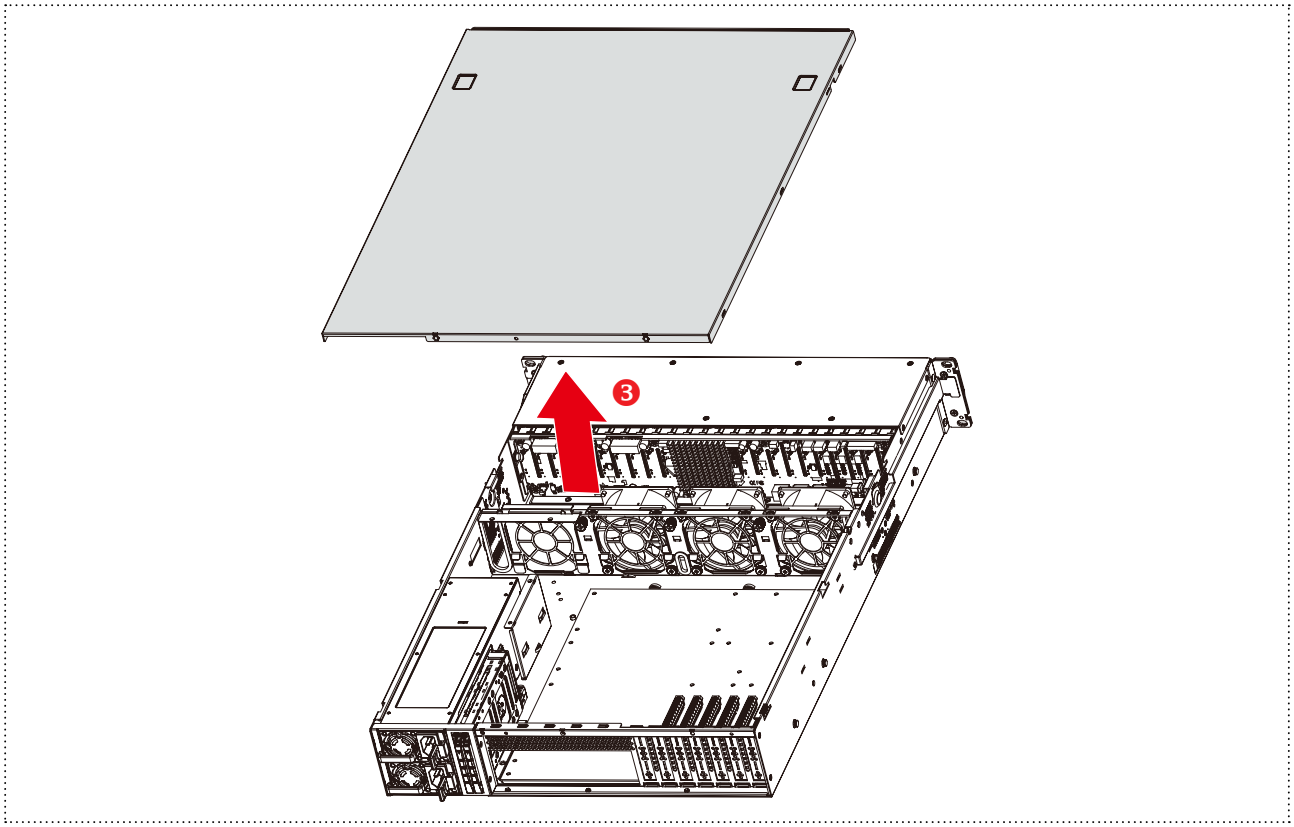
**NOTE**
Motherboard is not included in this product.

# Chapter 2. Hardware Setup

## 2.1 Top Cover

① Press the button on the both side of the chassis.
② Slide the top cover towards the rear of the system barebone.
③ Lift the top cover upward to remove.

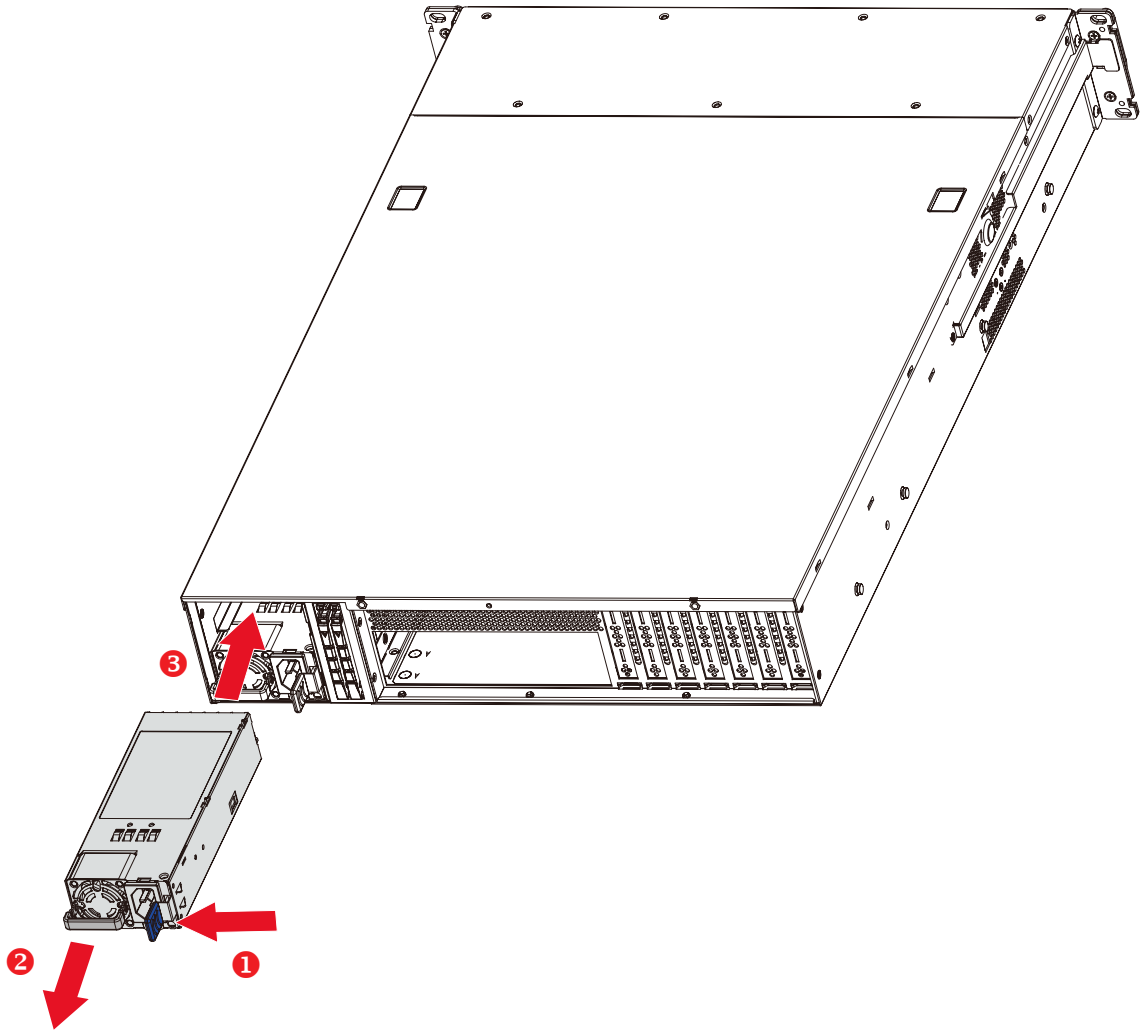



This information is provided for professional technicians only.

## 2.2 Power Supply Unit Module

① Press the ejector to release the module.
② Pull the handle to remove the module out of the chassis.
③ Push the replaced power supply unit into the chassis. Ensure that the module is hooked into the cage.



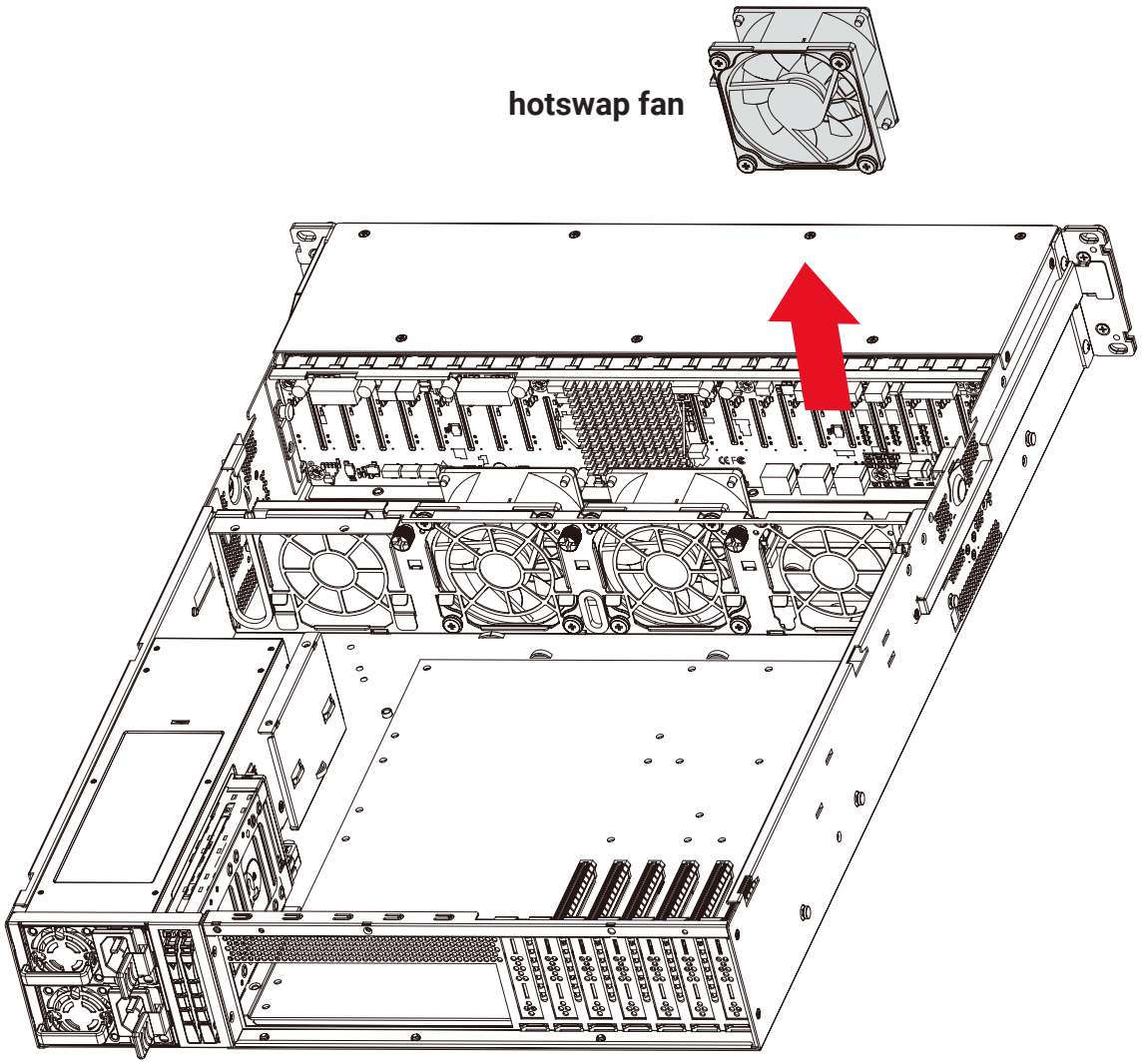

### 2.2.1 LED Indicator

| Color | Behavior | Description |
|---|---|---|
| Green | Solid | Output on and working normally. |
| | Blinking, 1Hz | Only 12Vsb (PS off) or PSU is in cold redundant state. |
| Amber | Solid | Power supply critical event causing a shutdown; AC cord unplugged or AC power lost, failure, OCP, OVP, fan fail. |
| | Blinking, 1Hz | Power supply warning events where the power supply continues to operate high temp, high power, high current, slow fan. |

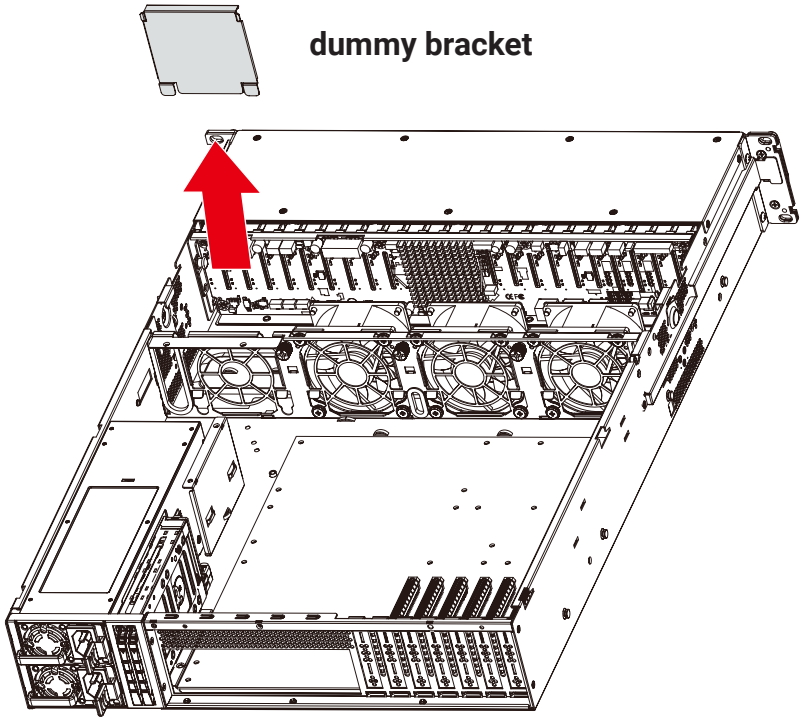
## 2.3 Fan Module

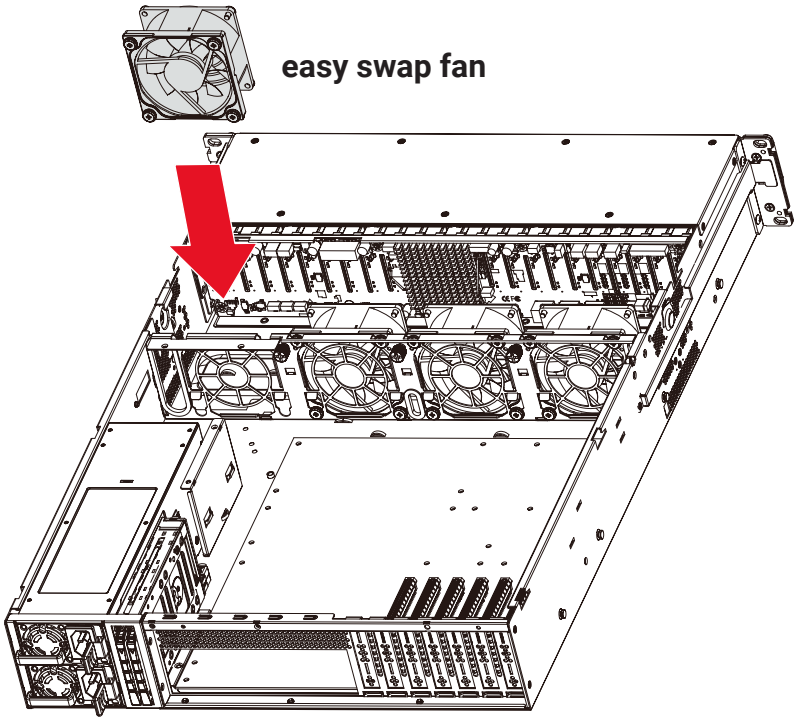
**3 x 80x38mm hotswap fans**

① Remove the top cover of the chassis. Please refer to Section 2.1 Top Cover.
② Unplug the fan cables and connectors from the server board.
③ Pull the top fan out of the chassis.



**( Option: 1 x 80x38mm easy swap fan )**
① Pull the dummy bracket out of the fan bracket.
② Insert the easy swap fan onto the fan bracket.
③ Plug the fan cables and connectors to the motherboard.



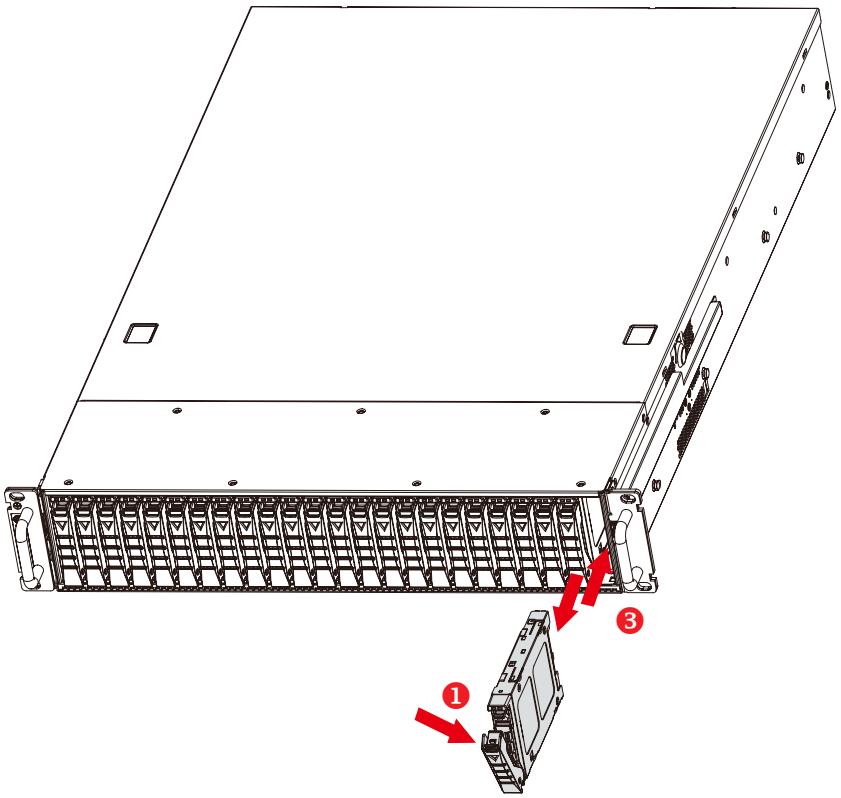

This information is provided for professional technicians only.

## 2.4 Hard Disk Drive

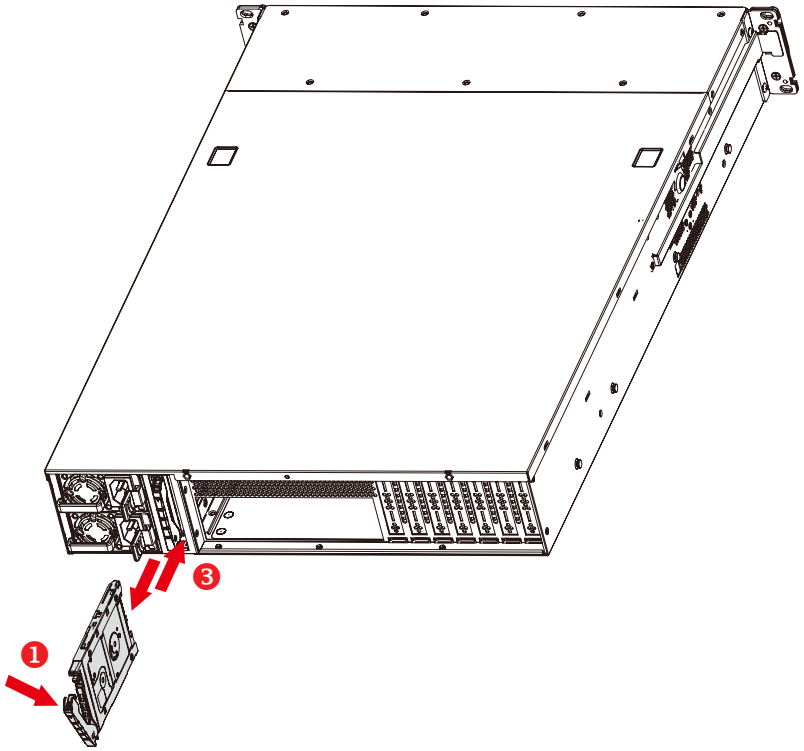
### 2.4.1 Disk Drive: 2.5-inch

① Press the ejector on the tray to release the handle.
② Pull the tray handle completely outward.
③ Pull the drive tray out of the chassis.

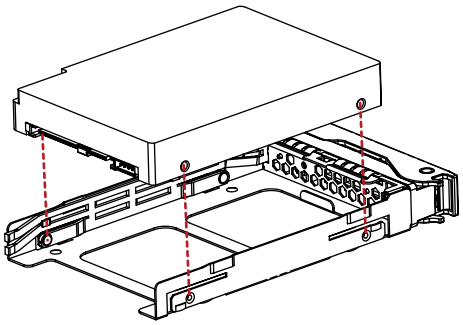
**Front**



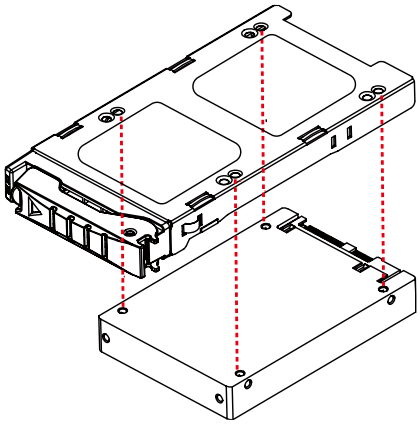

**Rear**



④ Insert the disk drive into the tray. Ensure that the dimples on the tray match the disk drive. For additional assurance, fasten the screws * 4 on the tray to secure the disk drive.



dimple placement



screw placement

⑤ Push the tray with the installed disk drive into the end of the drive slot in the chassis.
⑥ Close the tray handle.

This information is provided for professional technicians only.

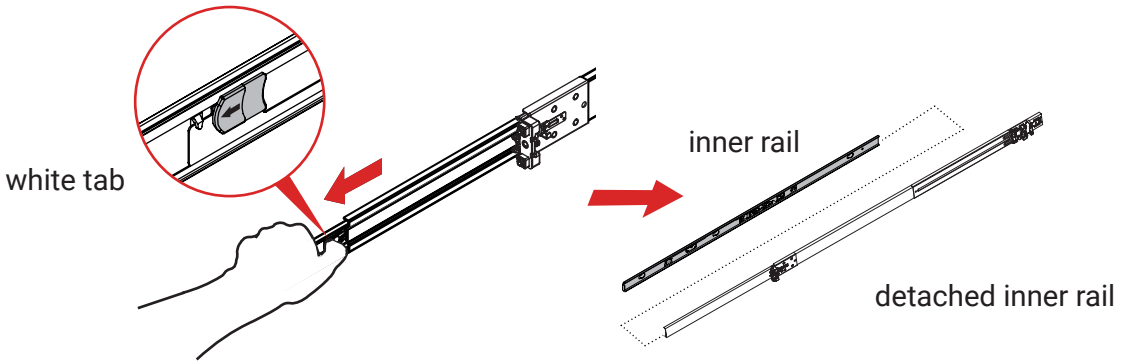
## 2.5 Slide Rail

**NOTE**
Tool-less rails vary per order. The rail in this manual may not exactly match the rail for your system. Please refer to the specifications or quick installation guide that came with your purchased product.

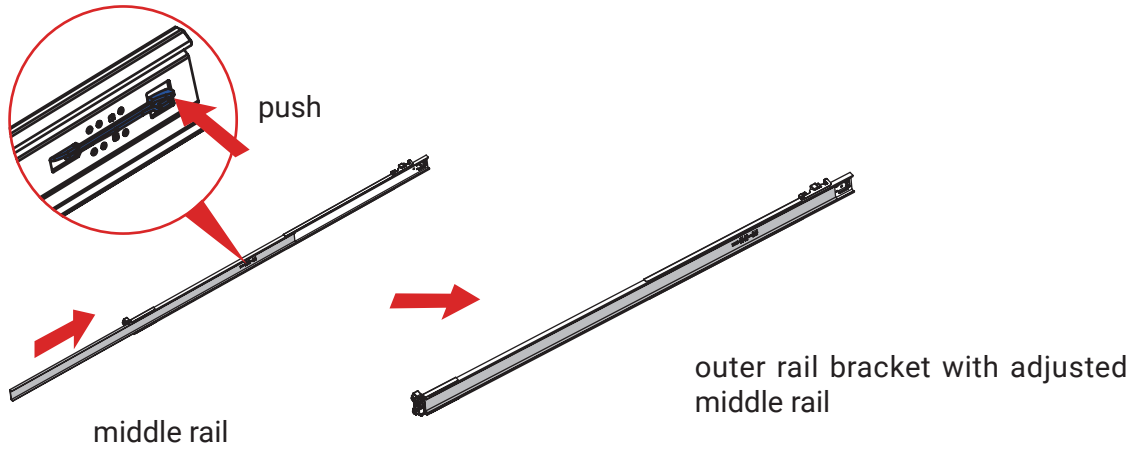
**CAUTION**
The rack may tilt and fall due to incorrect installation or placed on uneven grounds. The rack must be placed in a flat surface before you begin to slide the system barebone in for servicing.

**NOTE**
The product installation position is less than 1 meter in height from the supporting surface.

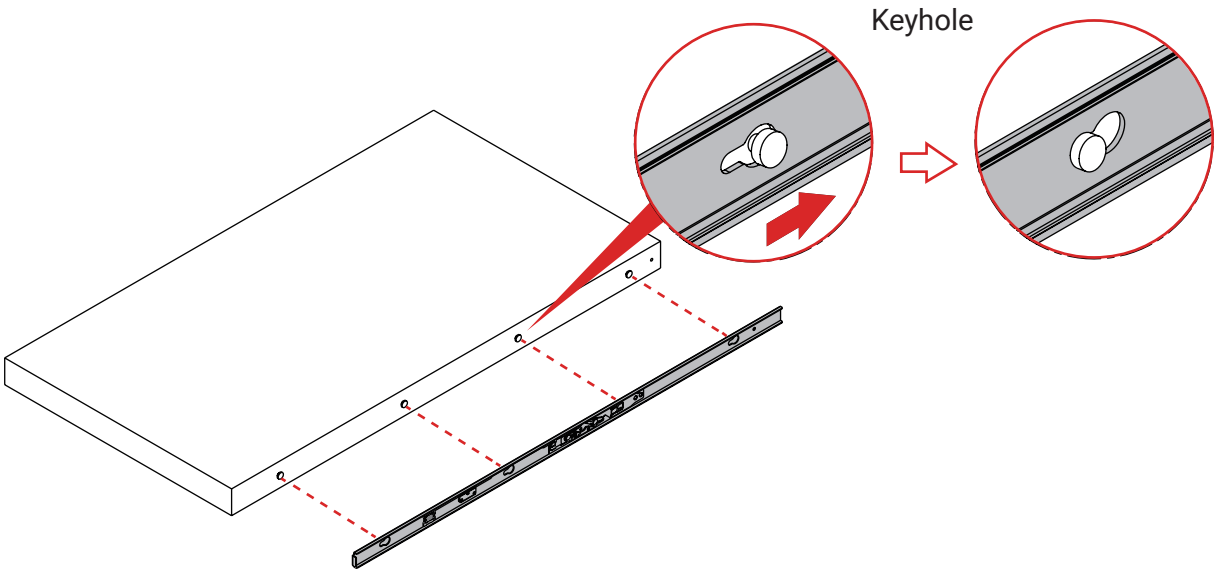
1. Pull the inner rail out of the slide rail until it clicks.
2. Detach the inner rail completely from the slide rail by pulling the white tab forward.



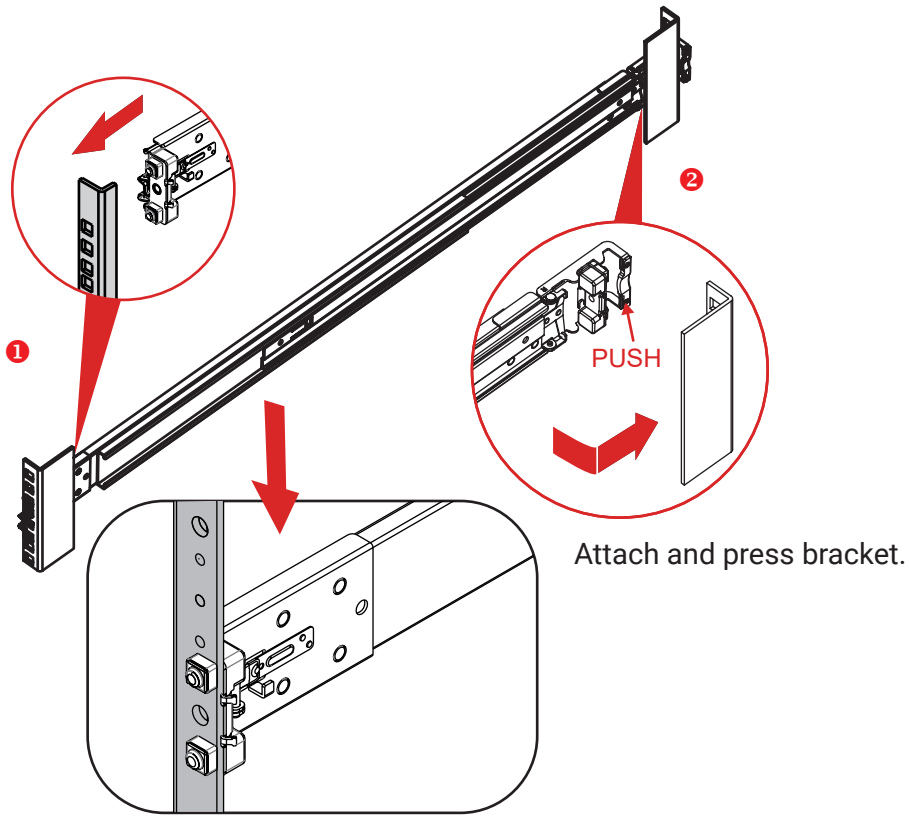

3. After the inner rail is dislodged, adjust the middle rail back to its original position by pushing the tab on the middle rail.



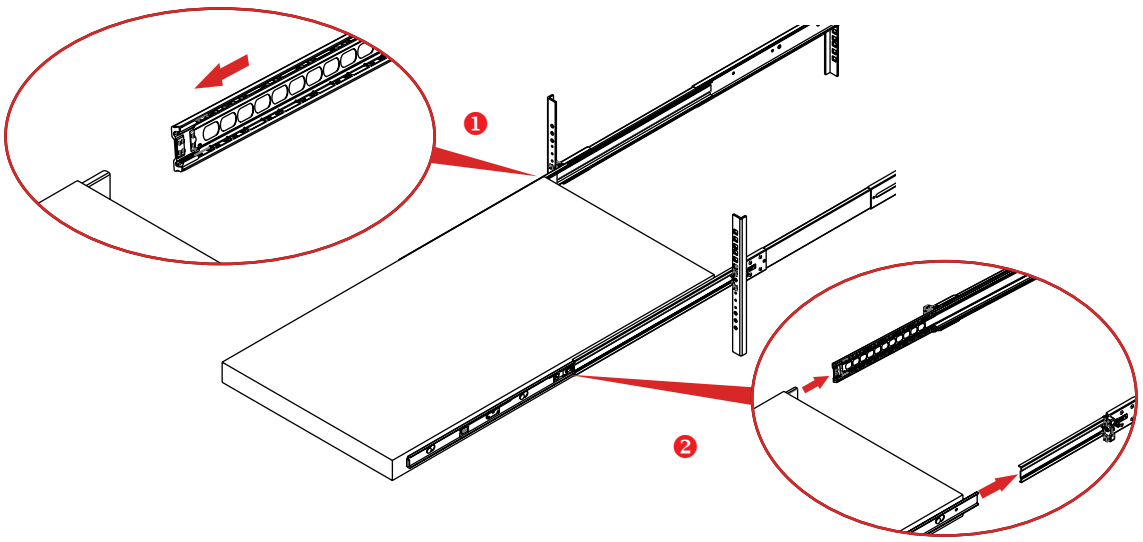
4. Lock the keyholes and install the inner rail onto the system barebone.




5. Continue installing the outer rail bracket to the mounting frame. Attach the outer rail assembling to the frame and press the bracket to form a rack on both ends. Repeat to fully mount the bracket assembly on the other side.

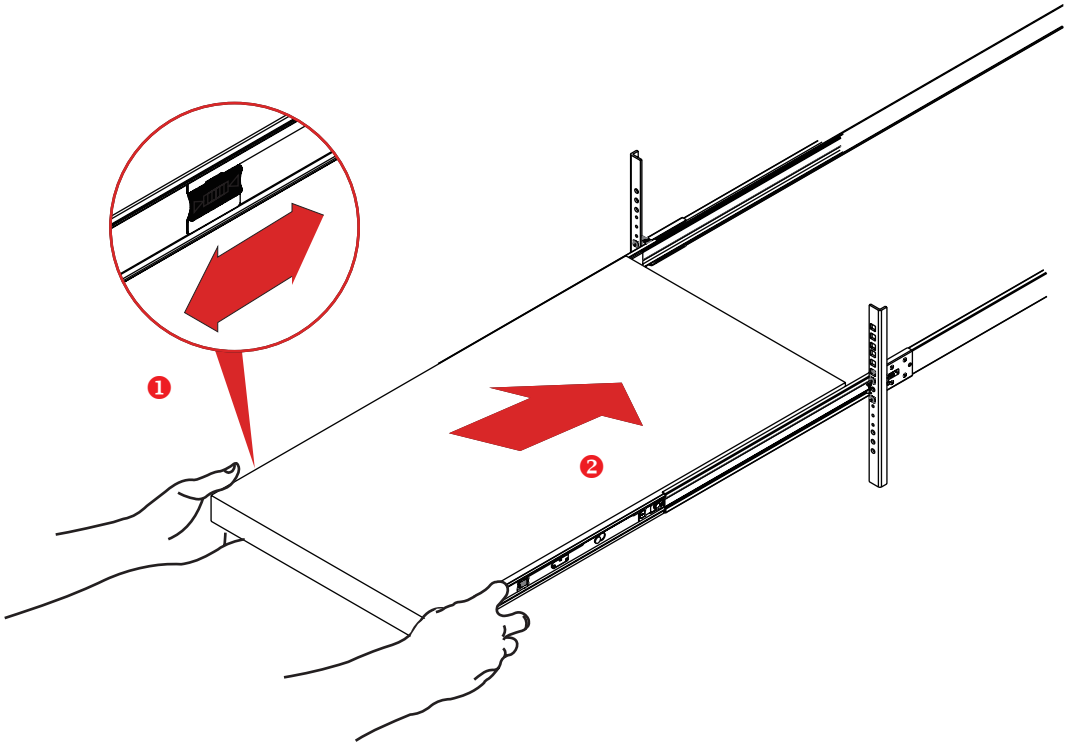


6. Pull out the middle channel until the ball bearing retainer is locked forward.




**NOTE**
Verify ball bearing retainer is locked forward.

7. Slide the release tab and push barebone into rack. Make sure the barebone is completely installed onto the rack.




This information is provided for professional technicians only.

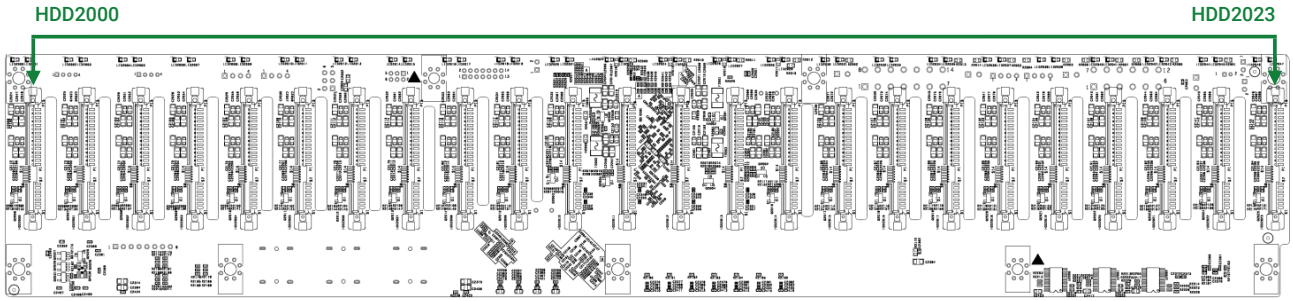
# Chapter 3. Hardware Specifications

This chapter illustrates a detailed instruction guide on hardware specifications.

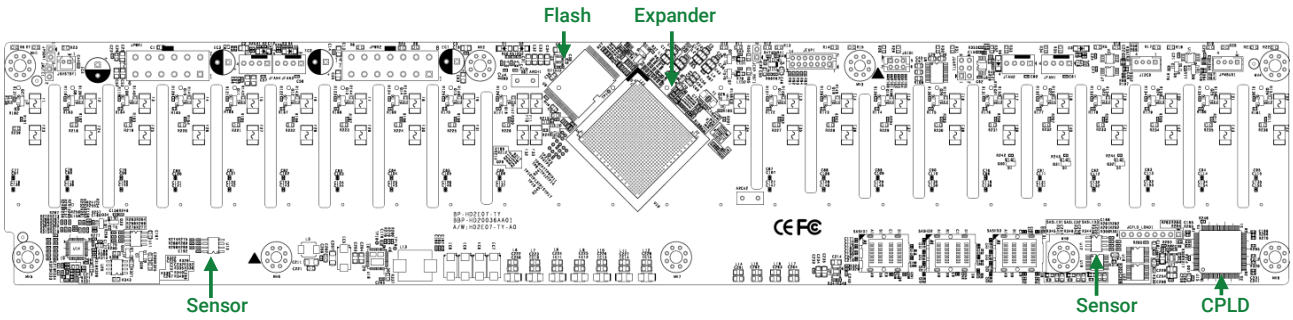
## 3.1 Disk Drive Backplane: 24 Bay (SKU1)

### 3.1.1 Placement

Top view

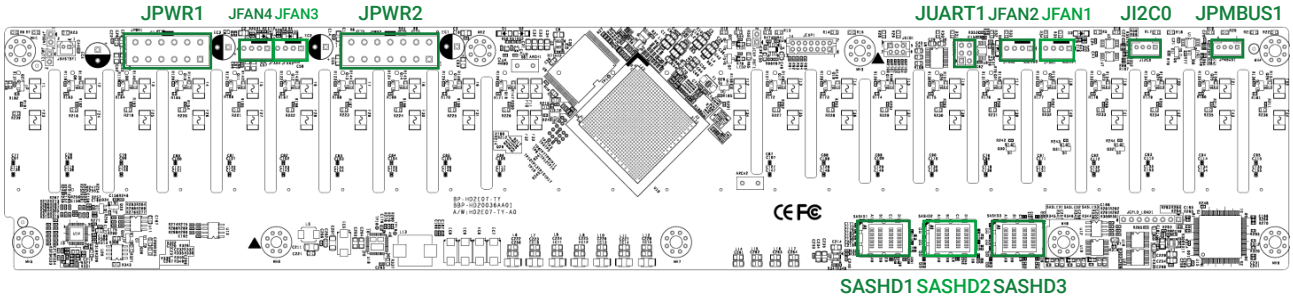



Bottom view

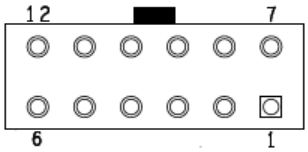



| Connector | Description | Comments |
|---|---|---|
| HDD2000~HDD2023 | SFF-8680 SAS Receptacle | HDD Connector |

### 3.1.2 Connector

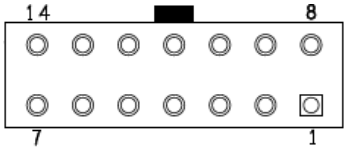



Power Connector (JPWR1)



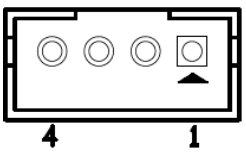

| | | | |
|---|---|---|---|
| +12V | 7 | 1 | GND |
| +12V | 8 | 2 | GND |
| +3V3 | 9 | 3 | GND |
| +5V | 10 | 4 | MUTE_L |
| +5VSTBY | 11 | 5 | PSU_N1 |
| PS_ON_L | 12 | 6 | +3V3_PWM_EN# |

Power Connector (JPWR2)



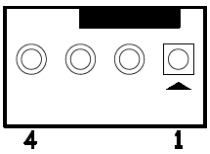

| | | | |
|---|---|---|---|
| +12V | 8 | 1 | GND |
| +12V | 9 | 2 | GND |
| +12V | 10 | 3 | GND |
| +12V | 11 | 4 | GND |
| +5V | 12 | 5 | GND |
| +5V | 13 | 6 | GND |
| +5V | 14 | 7 | GND |

PMBUS Connector (JPMBUS1)



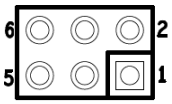

| | |
|---|---|
| GND | 1 |
| EXP_CTL_SCL4 | 2 |
| EXP_CTL_SDA4 | 3 |
| N/A | 4 |

## FAN Connector (JFAN1~JAN4)



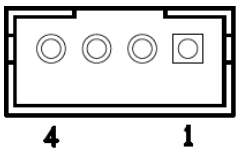

| | |
|---|---|
| GND | 1 |
| +12V | 2 |
| TACH | 3 |
| PWM | 4 |

## Control for Expander (JUART1)




| | | | |
|---|---|---|---|
| DBG_SIRXD | 2 | 1 | SM_SIRXD |
| GND | 4 | 3 | GND |
| DBG_SITXD | 6 | 5 | SM_SITXD |

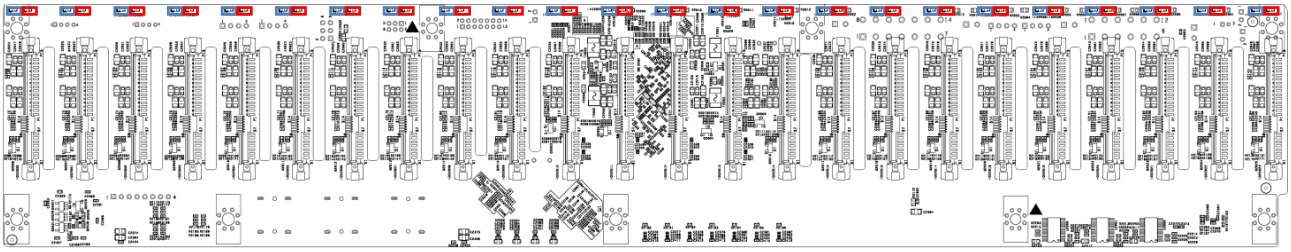
## I2C Connector (JI2C0)



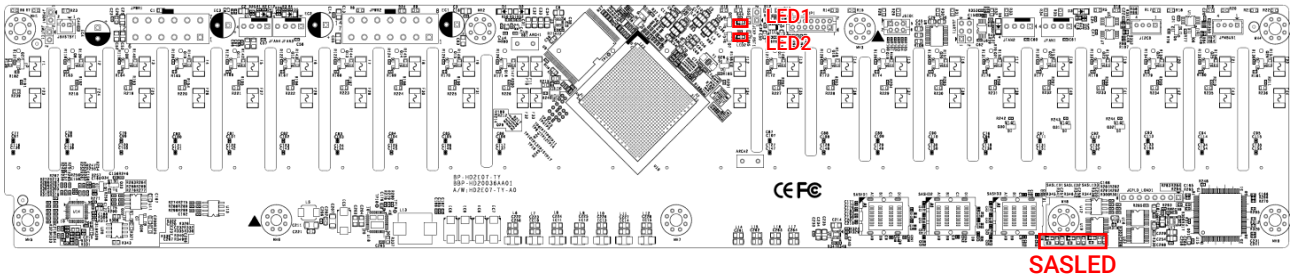

| | |
|---|---|
| GND | 1 |
| EXP_CTL_SCL0 | 2 |
| EXP_CTL_SDA0 | 3 |
| N/A | 4 |

### 3.1.3 LED Indicator

Top view



Bottom view




| Indicator | Color | Behavior |
|---|---|---|
| HDD Activity LEDs | Blue (On) | HDD present |
| | Blue (Blinking) | HDD activity detected or Locate HDD(slow) |
| | Off | HDD no connect or power off |
| HDD Fault/Status LEDs | Off | No control bit is set or set by any of the following bits:<br>1. RQST OK<br>2. RQST RSVD DEVICE<br>3. RQST HOT SPARE<br>4. RQST ACTIVE<br>5. DO NOT REMOVE<br>6. RQST IDENT<br>7. DEVICE OFF |
| | Red (Blinking) | Set by any of the following bits:<br>1. RQST CONS CHECK<br>2. RQST IN CRIT ARRAY<br>3. RQST IN FAILED ARRAY<br>4. RQST REBUILD/REMAP<br>5. RQST R/R ABORT<br>6. RQST INSERT<br>7. RQST REMOVE<br>8. PRDFAIL |
| | Red (On) | Set by any of the following bits:<br>1. RQST MISSING<br>2. RQST FAULT |

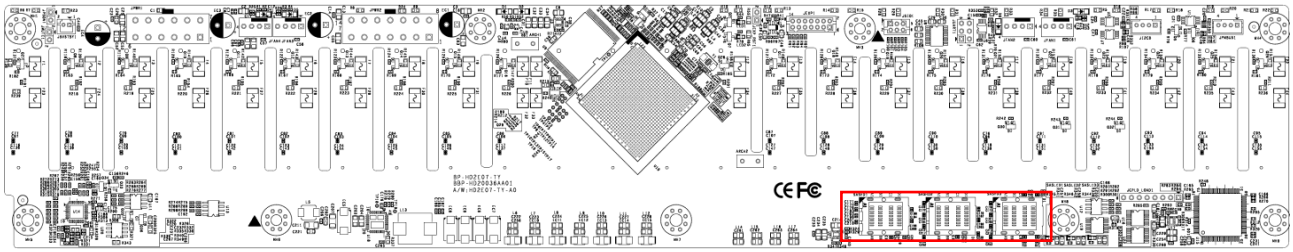
| Indicator | Color | Behavior |
|---|---|---|
| MINISASHD Link Status (SASLED1-3) | Blue (On) | Link up |
| | Blue (Blinking) | Activity detected |
| | Off | Link down |
| Expander Blink (LED1) | Blue (Blinking) | Expander alive, 0.0833Hz (12 seconds per cycle) |
| Expander Heart Bit (LED2) | Blue (Blinking) | Expander FW running |

### 3.1.4 PHY Mapping

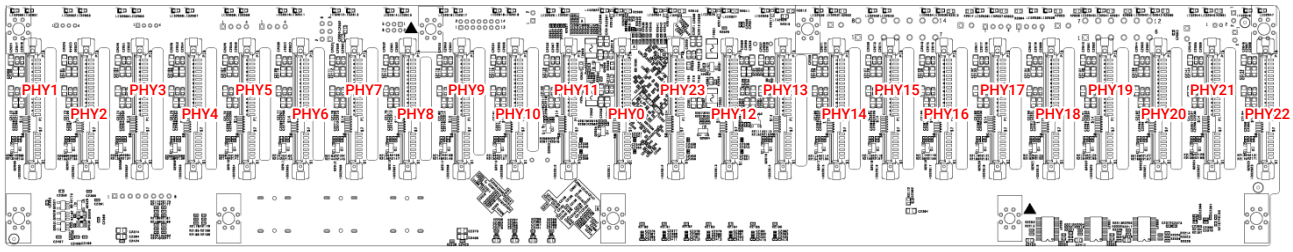
MINISASHD PHY Definition

| Connector | Phys | Comments |
|---|---|---|
| SASHD1 | 28.29.30.31 | SFF-8643 |
| SASHD2 | 32.33.34.35 | SFF-8643 |
| SASHD3 | 24.25.26.27 | SFF-8643 |

SAS PHY - MINISASHD



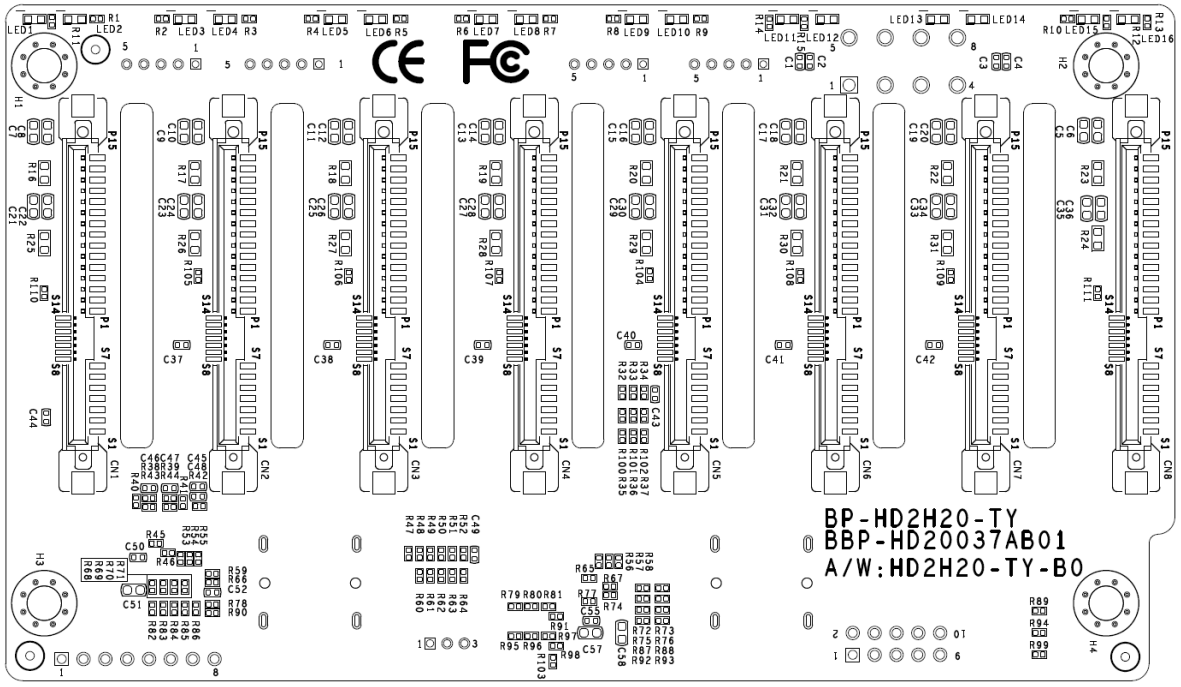

SAS PHY - HDD Receptacle



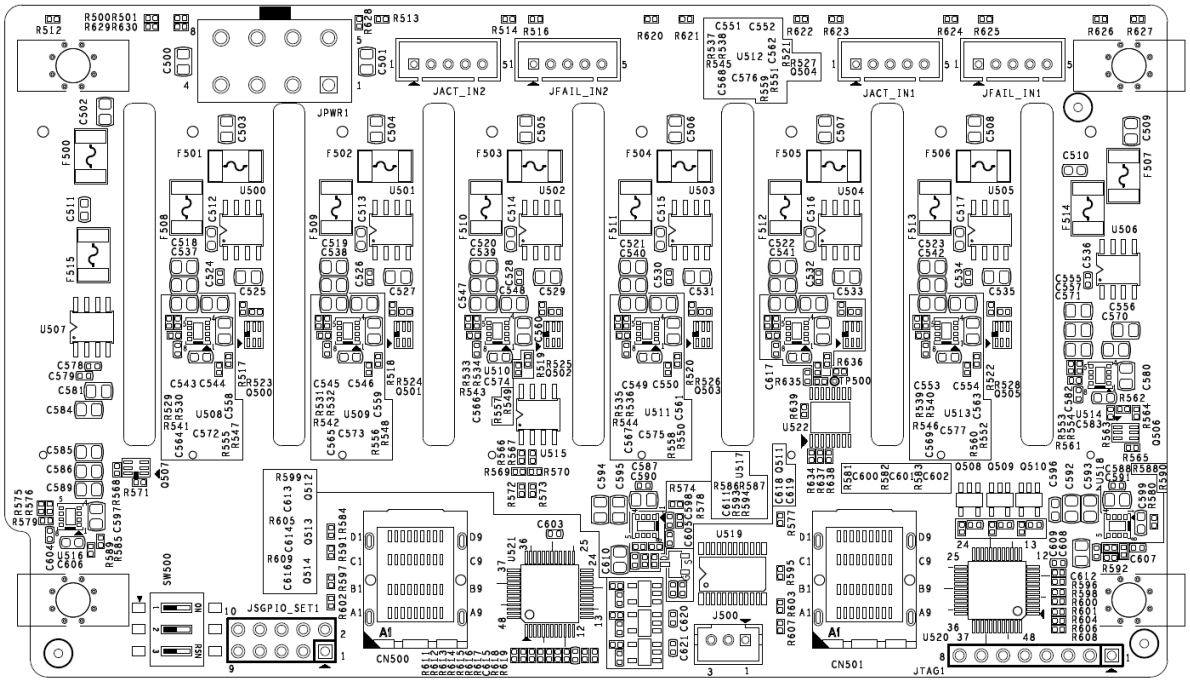
# 3.2 Disk Drive Backplane: 8 Bay (SKU2/3/4)

## 3.2.1 Placement

Top view

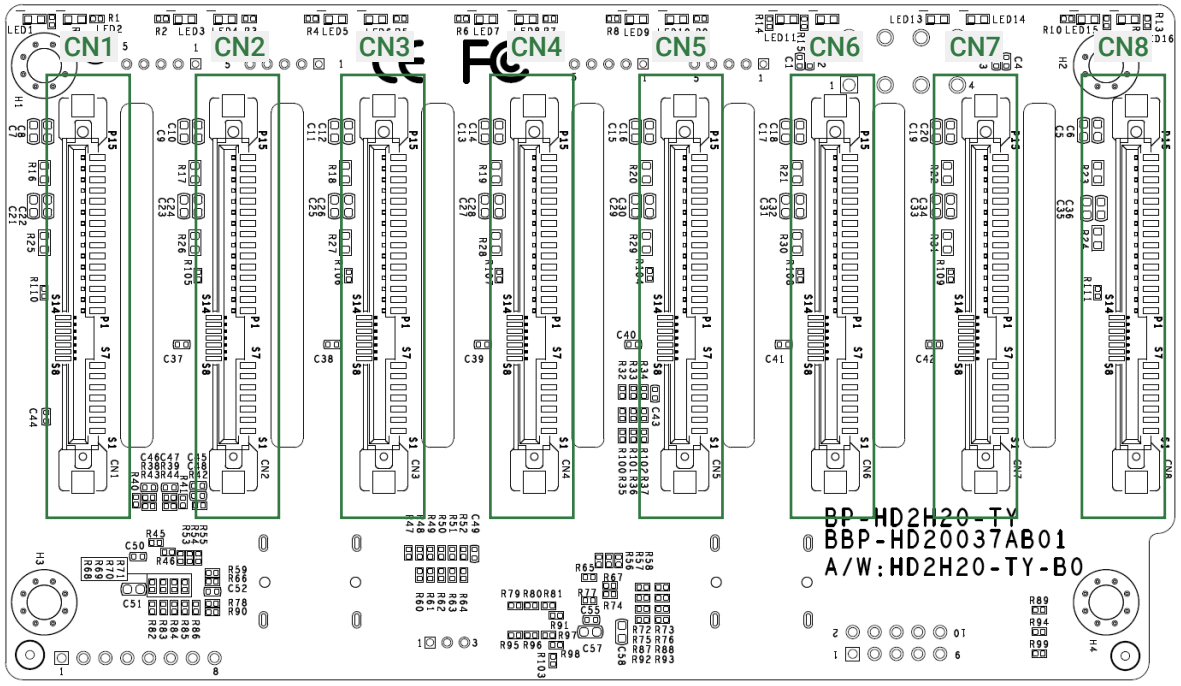



Bottom view

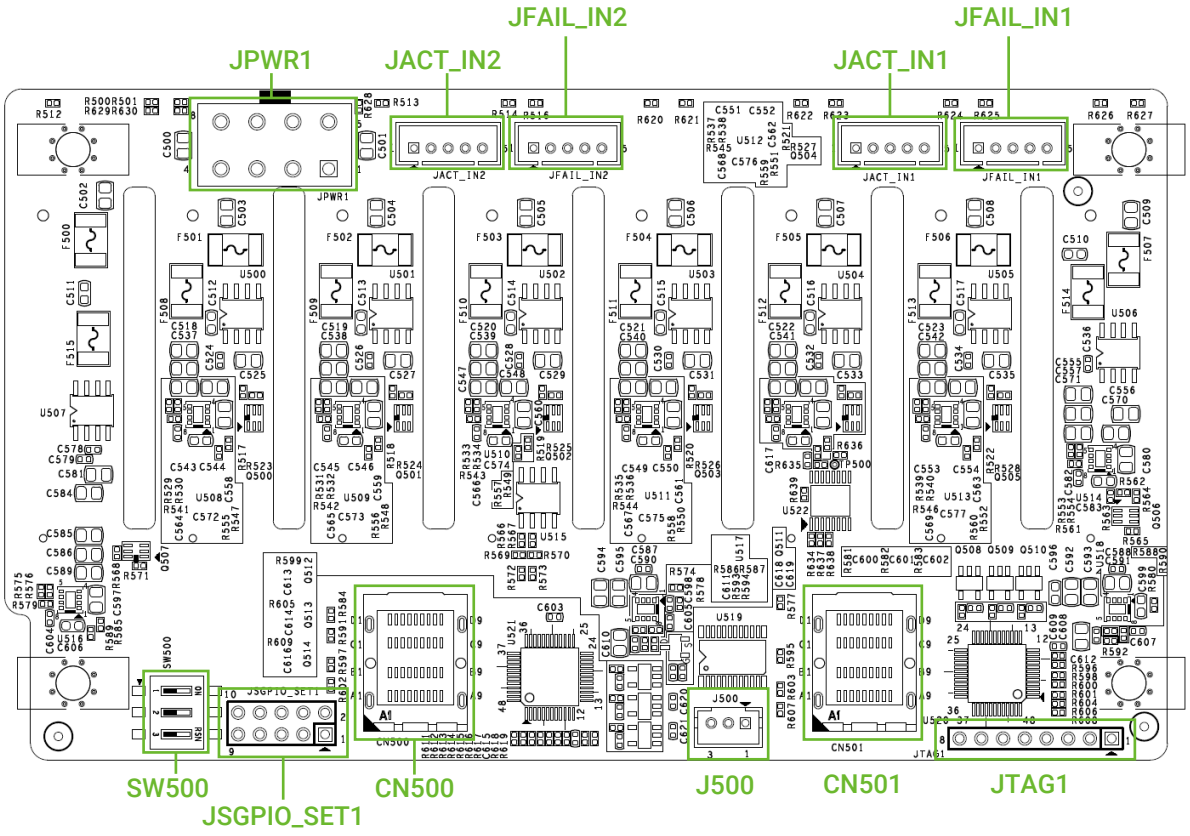


### 3.2.2 Connector

Top view




Bottom view



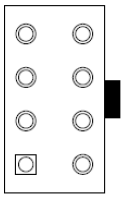
## External connectors Summary

| Connector Function | Physical Description | Comments |
|---|---|---|
| CN1 ~ CN8 | SAS Receptacle | HDD connector |
| CN500, CN501 | SFF-8643 connector vertical | Mini SASHD connector |

## Internal connectors Summary

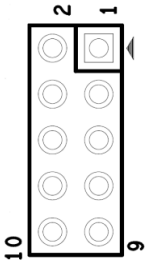
| Connector Function | Physical Description | Comments |
|---|---|---|
| Power supply (JPWR1) | 4 x 2 pin power connector | 12V input |
| Activity LED input (JACT_IN1、2) | 1 x 5 pin box header | External HDD activity LED input |
| Fail LED input (JFAIL_IN1、2) | 1 x 5 pin box header | External HDD fail LED input |
| Lattice_ISP (JTAG1) | 1 x 8 pin header | CPLD update FW interface |
| CPLD set (JSGPIO_SET1) | 2 x 5 pin header | SFF-8685(SGPIO) decode function jumper setting |
| I2C (J500) | 1 x 3 pin box header | I2C interface |

JPWR1



| | | | |
|---|---|---|---|
| GND | 4 | 8 | P12V |
| GND | 3 | 7 | P12V |
| GND | 2 | 6 | P12V |
| GND | 1 | 5 | P12V |

JSGPIO_SET1

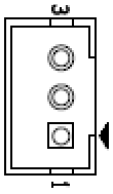



| | | | |
|---|---|---|---|
| SGPIO_SEL | 9 | 10 | GND |
| SGPIO_EN_N | 7 | 8 | GND |
| EB_SEL | 5 | 6 | GND |
| GND | 3 | 4 | FROMHDD |
| GND | 1 | 2 | /E_ACT_SEL |

JSGPIO_SET1 Function Select Description:

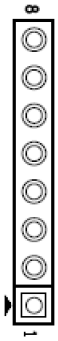
| Pin | Status | Description |
|---|---|---|
| 1,2 | Open | Disable External Access LED input. |
| | Close | Enable External Access LED input. |
| 3,4 | Open | Access LED from HDD Pin P11. |
| | Close | Access LED from SGPIO. |
| 5,6 | Open | SGPIO Bit2 is HDD Fail, Bit3 is HDD ID. |
| | Close | SGPIO Bit2 is HDD ID, Bit3 is HDD Fail. |
| 7,8 | Open | Disable SGPIO. |
| | Close | Enable SGPIO and CPLD Core Power(P1V8). |
| 9,10 | Open | Two SGPIO signals from CN501 and CN502, each SGPIO control 4 LEDs. |
| | Close | One SGPIO signal from CN501 and control 8 LEDs. |

J500



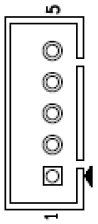

| | |
|---|---|
| 3 | SEN_DAT_R |
| 2 | SEN_CLK_R |
| 1 | GND |

JTAG1



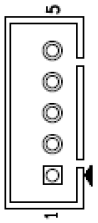

| | |
|---|---|
| 8 | TCK1 |
| 7 | GND |
| 6 | TMS1 |
| 5 | NC |
| 4 | NC |
| 3 | TDI1 |
| 2 | TDO2 |
| 1 | P1V8 |

JACT_IN1



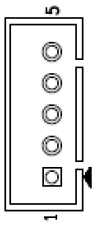

| | |
|---|---|
| 5 | /E_ACT_IN3 |
| 4 | /E_ACT_IN2 |
| 3 | /E_ACT_IN1 |
| 2 | /E_ACT_IN0 |
| 1 | GND |

JFAIL_IN1



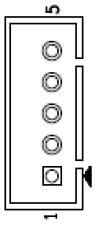

| | |
|---|---|
| 5 | /E_FAIL3 |
| 4 | /E_FAIL2 |
| 3 | /E_FAIL1 |
| 2 | /E_FAIL0 |
| 1 | GND |

JACT_IN2



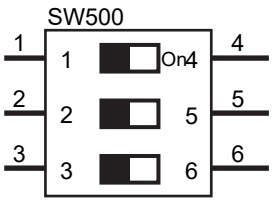

| | |
|---|---|
| 5 | /E_ACT_IN7 |
| 4 | /E_ACT_IN6 |
| 3 | /E_ACT_IN5 |
| 2 | /E_ACT_IN4 |
| 1 | GND |

JFAIL_IN2




| | |
|---|---|
| 5 | /E_FAIL7 |
| 4 | /E_FAIL6 |
| 3 | /E_FAIL5 |
| 2 | /E_FAIL4 |
| 1 | GND |

SW500

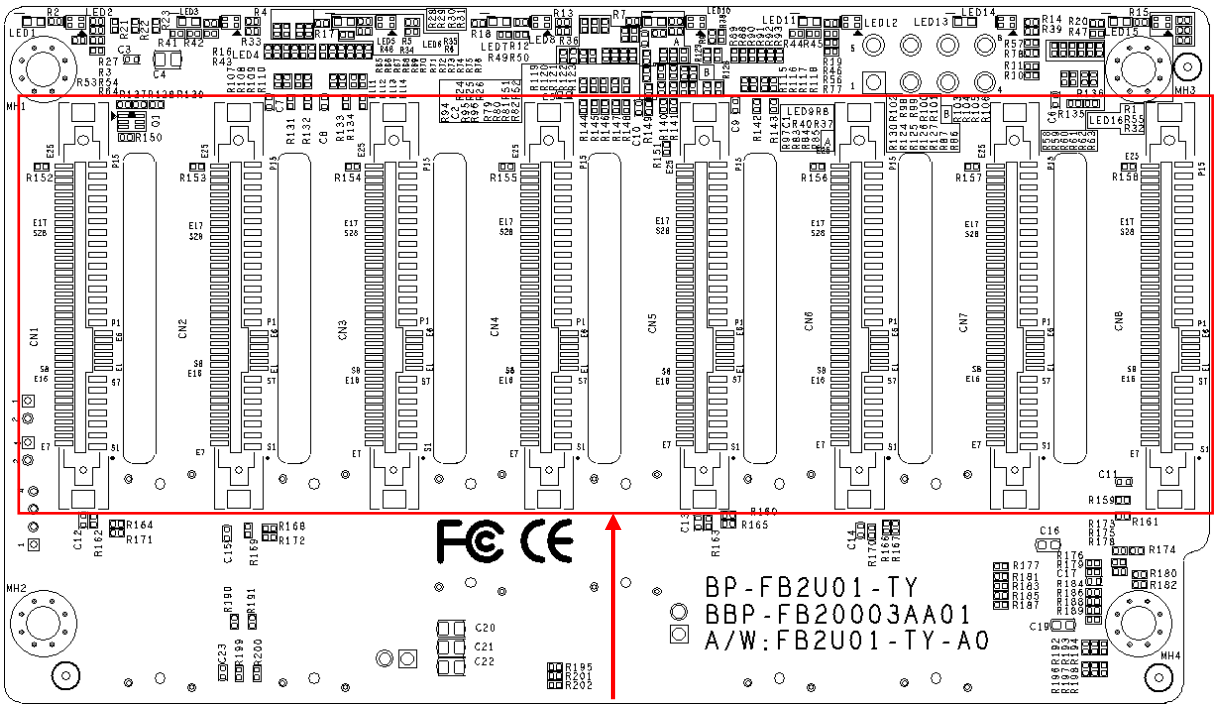



| PCA9552 LED address | switch 3-6 | switch 2-5 | switch 1-4 |
|---|---|---|---|
| 0xC0 | OFF | OFF | OFF |
| 0xC2 | OFF | OFF | ON |
| 0xC4 | OFF | ON | OFF |
| 0xC6 | OFF | ON | ON |
| 0xC8 | ON | OFF | OFF |
| 0xCA | ON | OFF | ON |
| 0xCC | ON | ON | OFF |
| 0xCE | ON | ON | ON |

# 3.3 Disk Drive Backplane: 8 Bay (SKU3/4/5)

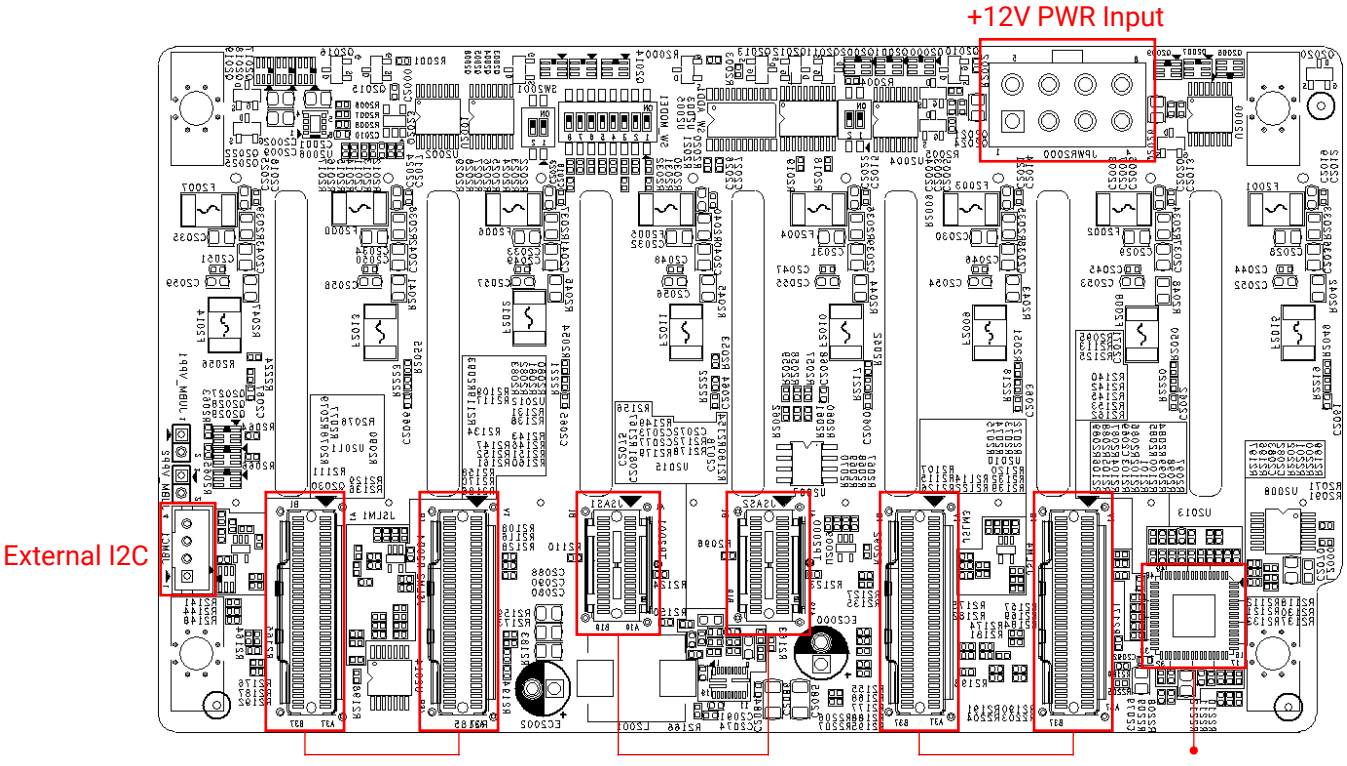
## 3.3.1 Placement

Top view



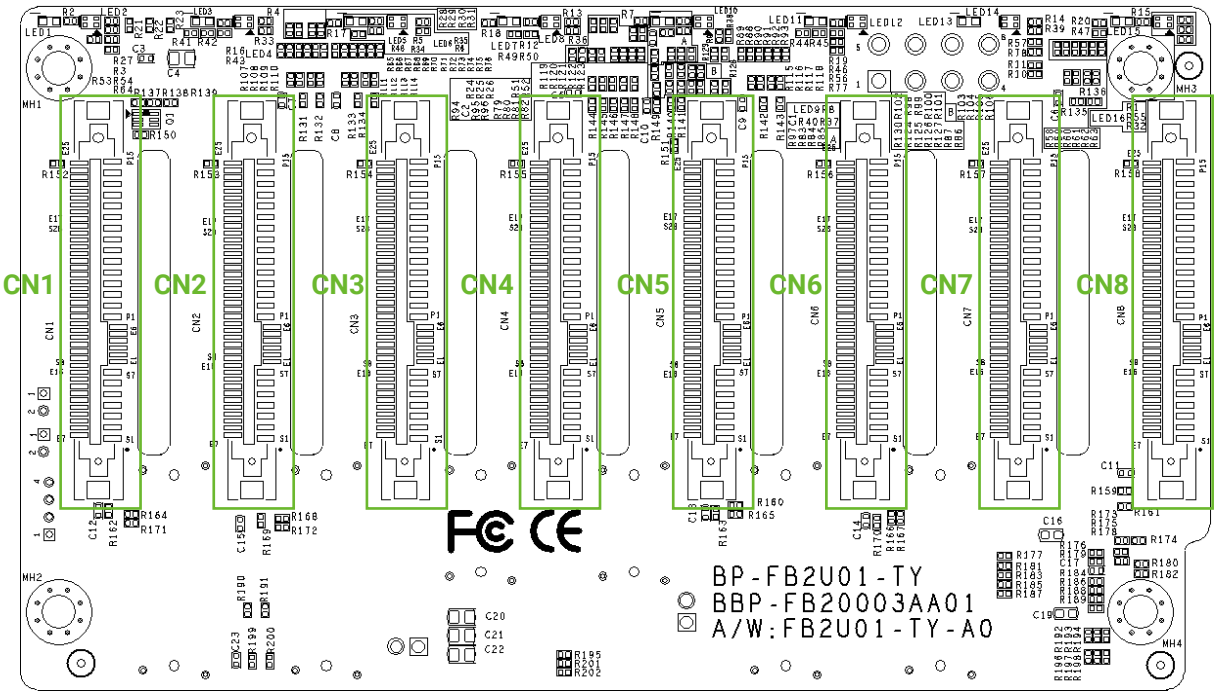

8BAYU.2/SAS Receptacle Connector

Bottom view

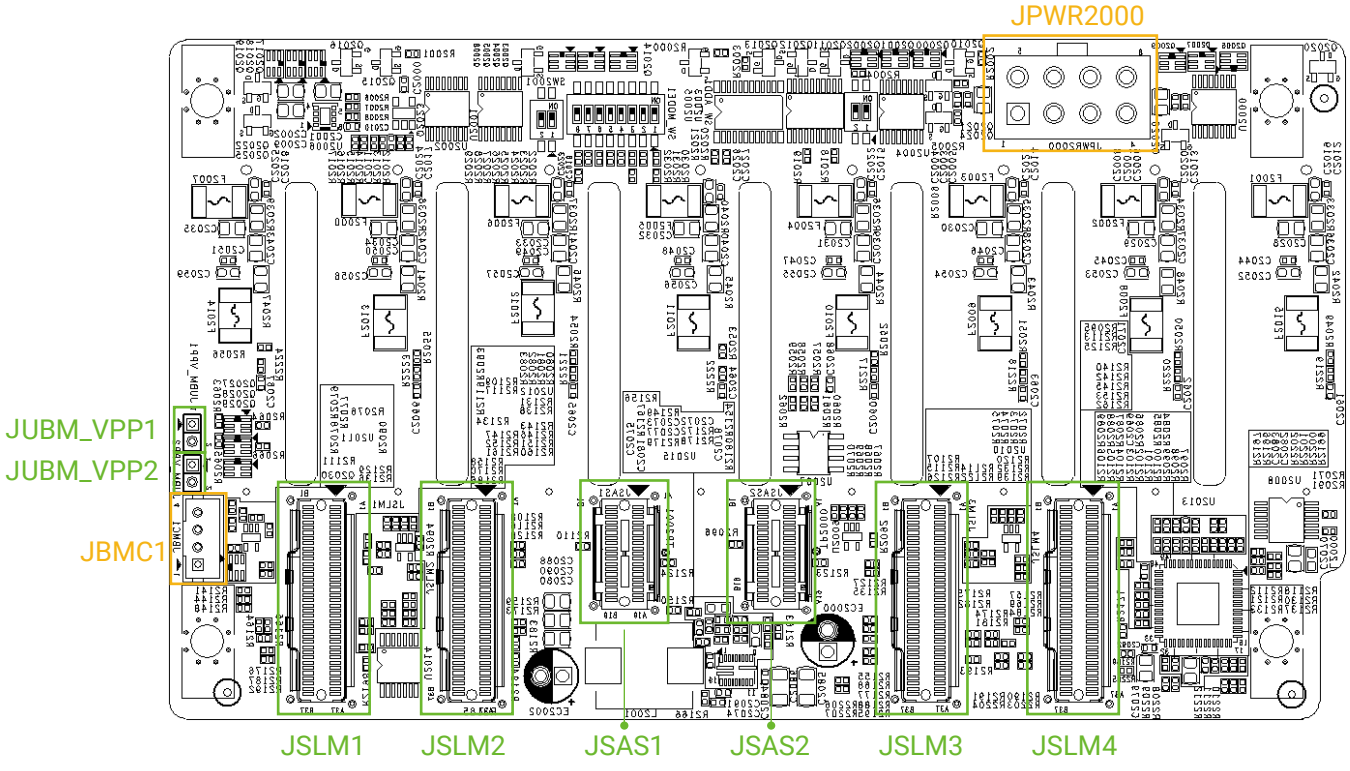


### 3.3.2 Connector

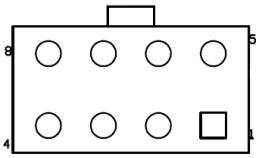
Top view




Bottom view

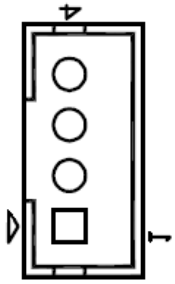


Power Suppply (JPWR 2000)
1x4 power connector, PH5.5 / +12V power in, 7A per pin



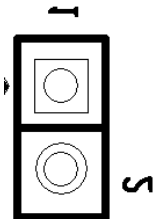
| | | | |
|---|---|---|---|
| +12V | 5 | 1 | GND |
| +12V | 6 | 2 | GND |
| +12V | 7 | 3 | GND |
| +12V | 8 | 4 | GND |

External I2C (JBMC1)
2x4 pin box header, PH2.0



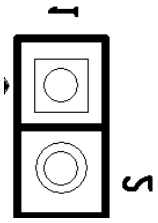
| | | | |
|---|---|---|---|
| BP_BMC_SDA | 3 | 1 | SMB_ALART_N |
| BP_BMC_SCL | 4 | 2 | GND |

JUMB_VPP1



| | |
|---|---|
| Open | VPP Operation(default) |
| Short | UBM Operation |

JUBM_VPP2



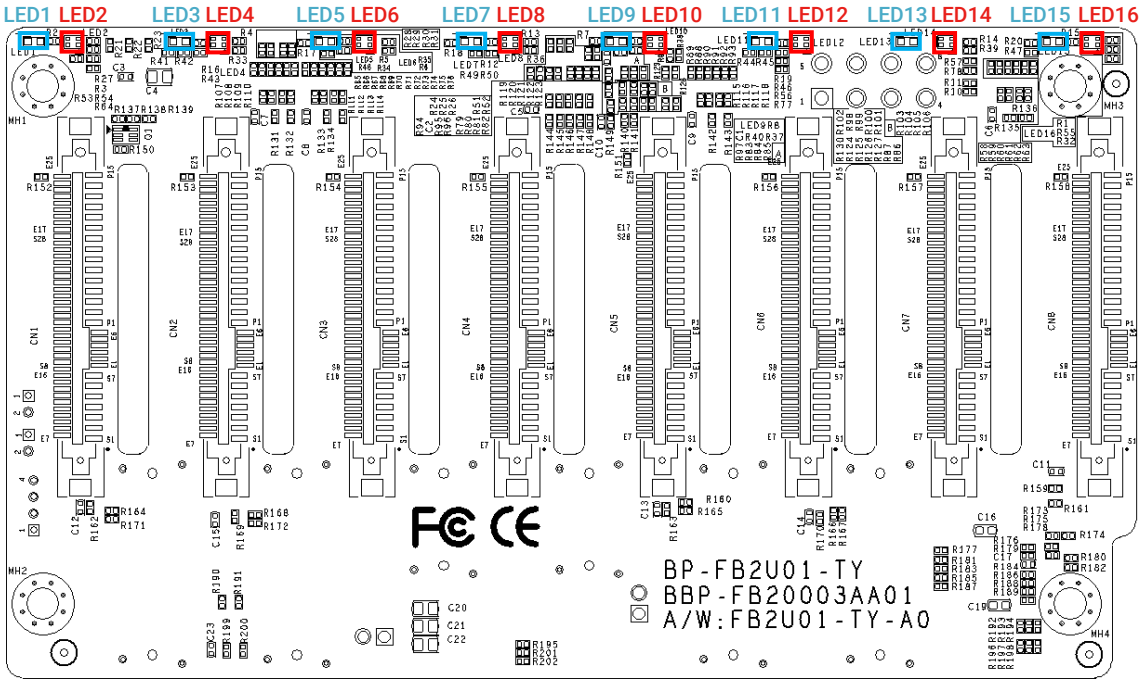
| | |
|---|---|
| Open | VPP Operation(default) |
| Short | UBM Operation |

- Device Mapping

| | | |
|---|---|---|
| JSLM1 | CN1 | NVMe Drive1 |
| | CN2 | NVMe Drive2 |
| JSLM2 | CN3 | NVMe Drive3 |
| | CN4 | NVMe Drive4 |
| JSLM3 | CN5 | NVMe Drive5 |
| | CN6 | NVMe Drive6 |
| JSLM4 | CN7 | NVMe Drive7 |
| | CN8 | NVMe Drive8 |
| JSAS1 | CN1 | SAS Drive1 |
| | CN2 | SAS Drive2 |
| | CN3 | SAS Drive3 |
| | CN4 | SAS Drive4 |
| JSAS2 | CN5 | SAS Drive5 |
| | CN6 | SAS Drive6 |
| | CN7 | SAS Drive7 |
| | CN8 | SAS Drive8 |

### 3.3.3 LED Indicator

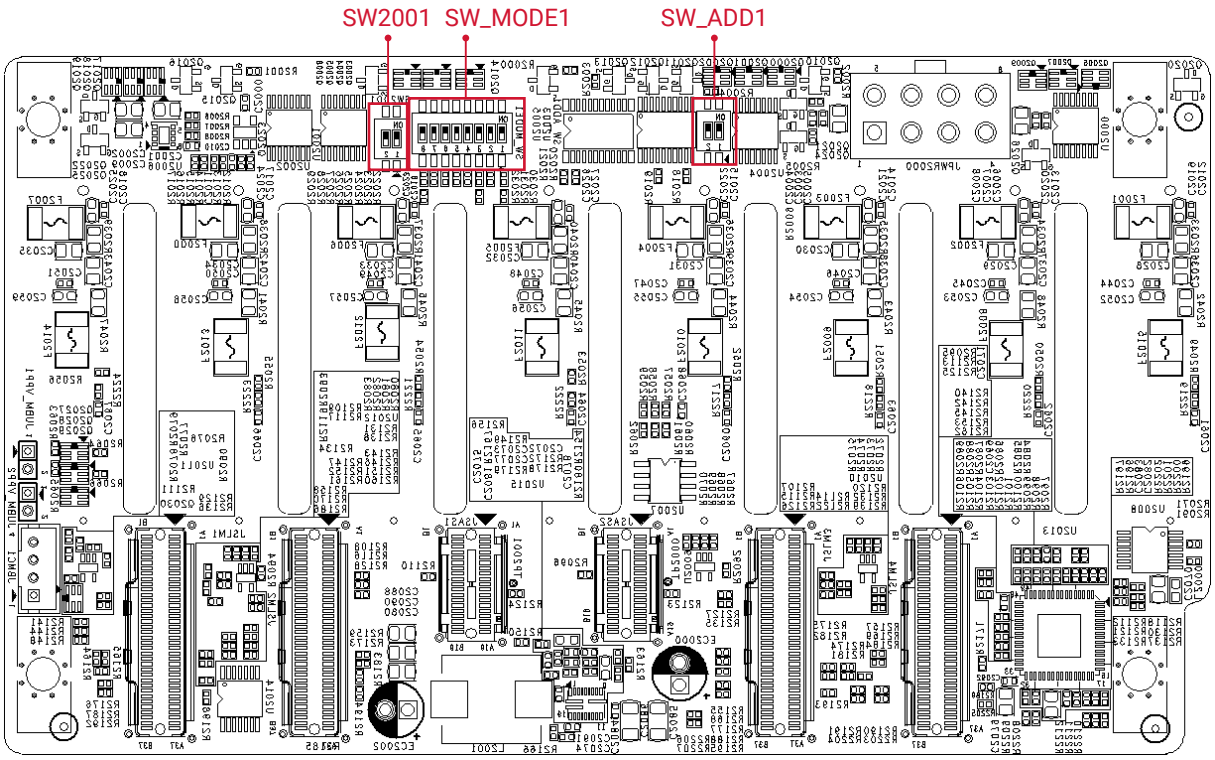
Top view




| Indicator | | Color | Behavior |
|---|---|---|---|
| HDD1-8 Activity LED | LED | Blue (On) | HDD present |
| | 1 | | |
| | 3 | | |
| | 5 | Blue (Blinking) | HDD activity is detected or External control. |
| | 7 | | |
| | 9 | | |
| | 11 | Off | HDD is not connected. |
| | 13 | | |
| | 15 | | |
| HDD1-8 Fail LED | LED | Yellow (On) | HDD Fault |
| | 2 | | |
| | 4 | | |
| | 6 | Yellow (Blinking) | HDD Rebuild |
| | 8 | | |
| | 10 | | |
| | 12 | Off | Normal |
| | 14 | | |
| | 16 | | |
| HDD1-8 Locate LED | LED | GEN (On) | HDD Locate |
| | 2 | | |
| | 4 | | |
| | 6 | | |
| | 8 | | |
| | 10 | Off | Normal |
| | 12 | | |
| | 14 | | |
| | 16 | | |

### 3.3.4 DIP-Switch

Bottom view



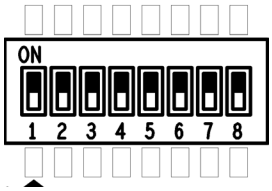

SW2001


| Pin1 | Pin2 | 9100 BMC Address |
|---|---|---|
| off | off | 0xC6h |
| on | off | 0xC4h |
| off | on | 0xC2h |
| on | on | 0xC0h (Default) |

SW_ADD1


| Pin1 | Pin2 | PCA9548 Address | LM75 Address |
|---|---|---|---|
| off | off | 0xE6h | 0x96h |
| on | off | 0xE4h | 0x94h |
| off | on | 0xE2h | 0x92h |
| on | on | 0xE0h (Default) | 0x90h (Default) |

SW502




| SHP0 ID & SHP1 ID Configuration Settings for AMD Mode | | | | | | | |
|---|---|---|---|---|---|---|---|
| Pin1 | Pin2 | Pin3 | SHP0 SMBUS Address | Pin4 | Pin5 | Pin6 | SHP1 SMBUS Address |
| off | off | off | 0x50h/0x52h (Default) | off | off | off | 0x50h/0x52h (Default) |
| on | off | off | 0x54h/0x56h | on | off | off | 0x54h/0x56h |
| off | on | off | 0x58h/0x5Ah | off | on | off | 0x58h/0x5Ah |
| on | on | off | 0x5Ch/0x5Eh | on | on | off | 0x5Ch/0x5Eh |
| off | off | on | 0x60h/0x62h | off | off | on | 0x60h/0x62h |
| on | off | on | 0x64h/0x66h | on | off | on | 0x64h/0x66h |
| off | on | on | 0x68h/0x6Ah | off | on | on | 0x68h/0x6Ah |
| on | on | on | 0x6Ch/0x6Eh | on | on | on | 0x6Ch/0x6Eh |

| VPP ID & VPP1 ID Configuration Settings for INTEL Mode | | | | | |
|---|---|---|---|---|---|
| Pin1 | Pin2 | VPP0 SMBUS Address | Pin3 | Pin4 | VPP1 SMBUS Address |
| off | off | 0x40h/0x42h (Default) | off | off | 0x40h/0x42h (Default) |
| on | off | 0x44h/0x46h | on | off | 0x44h/0x46h |
| off | on | 0x48h/0x4Ah | off | on | 0x48h/0x4Ah |
| on | on | 0x4Ch/0x4Eh | on | on | 0x4Ch/0x4Eh |

| Vendor ID Configuration Settings | | |
|---|---|---|
| Pin7 | Pin8 | Vendor |
| off | off | UMB Only |
| on | off | AVAGO |
| off | on | AMD |
| on | on | INTEL (Default) |

# Chapter 4. Technical Support

www.aicipc.com

### Taiwan, Global Headquarters

**Address: No. 152, Section 4, Linghang N. Rd, Dayuan District, Taoyuan City 337, Taiwan**
**Tel: +886-3-433-9188**
**Fax: +886-3-287-1818**
**Sales Email: sales@aicipc.com.tw**
**Support Email: support@aicipc.com**

### Shanghai, China

**Address: Room 215, Building 4, No.471 Guiping Road, Xuhui District, Shanghai City, 200233 China**
**Tel: +86-21-54961421**
**Sales Email: sales@aicipc.com.cn**
**Support Email: support@aicipc.com**

### Moscow, Russia

**Address: No.500, 5th Floor, 5th Entrance, 32A, Khoroshevskoye Shosse, Moscow, 123007**
**Tel: +7-4997019998**
**Sales Email: support-ru@aicipc.com.tw**
**Support Email: rma.russia@aicipc.com.tw**

### North California, United States

**Address: 48531 Warm Springs Boulvard Suite 404 Fremont, CA 94539, United States**
**Tel: +1-510-573-6730**
**Sales Email: sales@aicipc.com**
**Support Email: support@aicipc.com**

### South California, United States

**Address: 21808 Garcia Lane City of Industry, CA 91789, United States**
**Toll free: + 1-866-800-0056**
**Tel: +1-909-895-8989**
**Fax: +1-909-895-8999**
**Sales Email: sales@aicipc.com**
**Support Email: support@aicipc.com**

### New Jersey, United States

**Address: 322 Route 46 West Suite 100 Parsippany, NJ 07054 United States**
**Tel: +1-973-884-8886**
**Fax: +1-973-884-4794**
**Sales Email: sales@aicipc.com**
**Support Email: support@aicipc.com**

### Houten, The Netherlands

**Address: Peppelkade 58, 3992AK, Houten, The Netherlands**
**Tel: +31-30-6386789**
**Fax: +31-30-6360638**
**Sales Email: sales@aicipc.nl**
**Support Email: support@aicipc.com**

For additional technical support or questions about trouble shooting, please contact the AIC® representative nearest to you or visit our AIC® website for more information.
AIC® website: https://www.aicipc.com/en/faq.