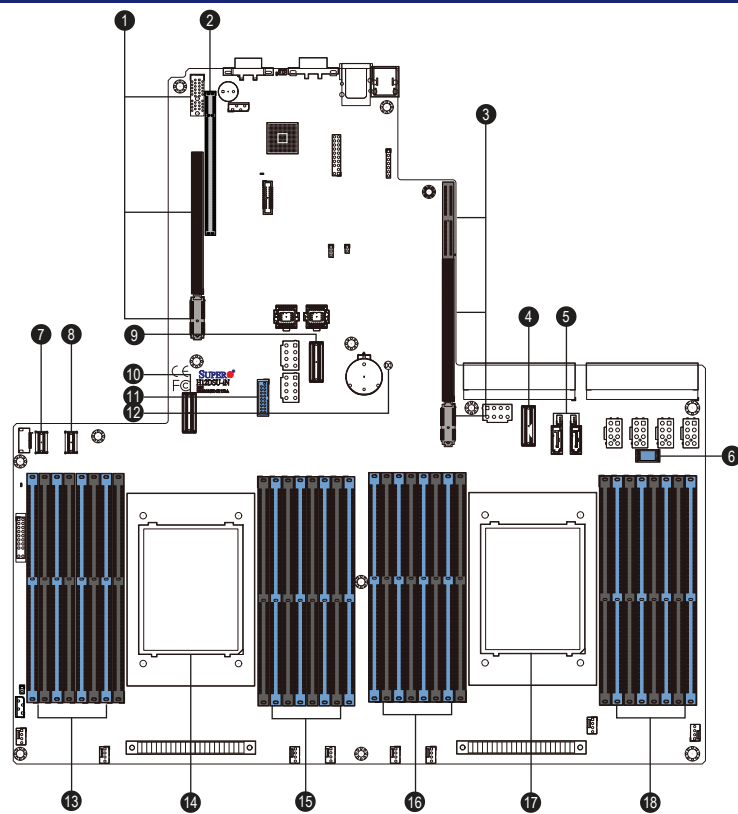


Board Layout

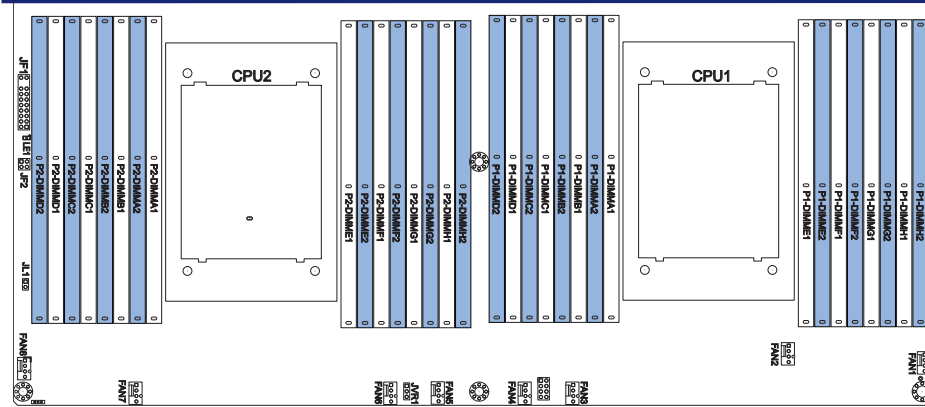


| No. | Description |
|-----|--|
| 1 | SXB1A/1B/1C: WIO-L Riser Card Support (CPU2 PCI-E 4.0 x32) |
| 2 | SXB2: WIO-R Riser Card Support (CPU2 PCI-E 4.0 x16) |
| 3 | SXB3A/3B/3C: Ultra I/O Riser Card Support (CPU1 PCI-E 4.0 x40) |
| 4 | P1 NVMe 0/1 SATA0-7 |
| 5 | SATA 3.0 8-9 |
| 6 | USB 3.0 2 |
| 7 | P2 NVMe0 SATA10-13 |
| 8 | P2 NVMe1 SATA14-17 |
| 9 | P1 NVMe2-3 |
| 10 | P2 NVMe2-3 |
| 11 | USB 3.0 3-4 |
| 12 | JBT1 |
| 13 | P2 DIMMA1-D2 slots |
| 14 | CPU2 |
| 15 | P2 DIMME1-H2 slots |
| 16 | P1 DIMMA1-D2 slots |
| 17 | CPU1 |
| 18 | P1 DIMME1-H2 slots |

Default Cable Routing

| Connector on Board/Card | Connection Backplane | Quantity of Drives | SMC Cable P/N |
|-------------------------|----------------------|--------------------|-------------------|
| JSLIM1 (MB-H12DSU-iN) | SAS 0/1/2/3 | 4 SATA Drives | CBL-SAST-1277-100 |
| JSLIM2 (MB-H12DSU-iN) | NVMe 0/1 | 2 NVMe Drives | CBL-SAST-1255-85 |
| JSLIM4 (MB-H12DSU-iN) | NVMe 2/3 | 2 NVMe Drives | CBL-SAST-1252-85 |

Memory



DIMM Module Population Sequence

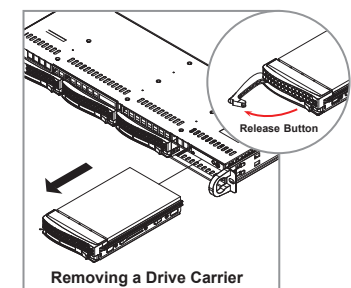
When installing memory modules, the DIMM slots should be populated in the following order: DIMMA2, DIMMB2, DIMMC2, DIMMD2, DIMME2, DIMMF2, DIMMG2, DIMMH2, then DIMMA1, DIMMB1, DIMMC1, DIMMD1, DIMME1, DIMMF1, DIMMG1, DIMMH1.

- The blue slots must be populated first.
- Always use DDR4 DIMM modules of the same type, size and speed.
- Mixed DIMM speeds can be installed. However, all DIMMs will run at the speed of the slowest DIMM.
- The motherboard supports an odd number of modules (1, 3, etc.). However, to achieve the best memory performance, a balanced memory population is recommended.

Processors and Their Corresponding Memory Modules

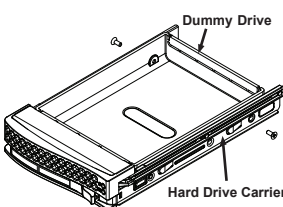
| CPU# | Channel 1 | Channel 2 | Channel 3 | Channel 4 | Channel 5 | Channel 6 | Channel 7 | Channel 8 | | | | | | | | |
|-----------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----|----|----|----|----|----|----|----|
| 8 DIMMS | | | | | | | | | | | | | | | | |
| CPU1 | | | C2 | D2 | | | G2 | H2 | | | | | | | | |
| CPU2 | | | C2 | D2 | | | G2 | H2 | | | | | | | | |
| 16 DIMMS | | | | | | | | | | | | | | | | |
| CPU1 | A2 | B2 | C2 | D2 | E2 | F2 | G2 | H2 | | | | | | | | |
| CPU2 | A2 | B2 | C2 | D2 | E2 | F2 | G2 | H2 | | | | | | | | |
| 32 DIMMS | | | | | | | | | | | | | | | | |
| CPU1 | A1 | A2 | B1 | B2 | C1 | C2 | D1 | D2 | E1 | E2 | F1 | F2 | G1 | G2 | H1 | H2 |
| CPU2 | A1 | A2 | B1 | B2 | C1 | C2 | D1 | D2 | E1 | E2 | F1 | F2 | G1 | G2 | H1 | H2 |

Hard Drive Installation



Removing a Hot-Swap Drive Carrier from the Chassis

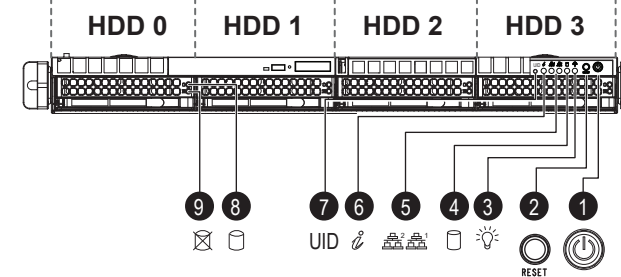
- Press the release button on the drive carrier, which will extend the drive carrier handle.
- Use the drive carrier handle to pull the drive out of the chassis.



Installing a Drive

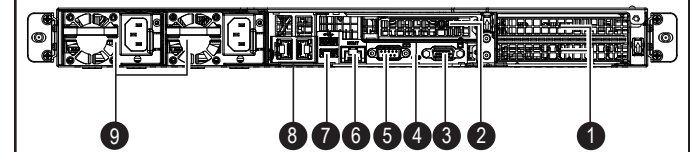
- Remove the dummy drive, by removing the screws securing the dummy drive to the carrier. These screws are not used to mount the actual hard drive.
- Insert a drive into the carrier with the PCB side facing down and the connector end toward the rear of the carrier. Align the drive in the carrier so that the screw holes line up.
- Secure the drive to the carrier with four M3 screws, included in the chassis accessory box.
- Insert the drive carrier with the disk drive into its bay, keeping the carrier oriented so that the release button is on the right side. When the carrier reaches the rear of the bay, the release handle retracts.
- Push the handle in until it clicks into its locked position.

Front View & Interface



| No. | Description |
|-----|---------------------|
| 1 | Power LED |
| 2 | Reset Button |
| 3 | Power LED |
| 4 | HDD LED |
| 5 | NIC1 LED & NIC2 LED |
| 6 | Information LED |
| 7 | UID button/LED |
| 8 | Hard Drive Signal |
| 9 | Hard Drive Fail |

Rear View



| No. | Description |
|-----|----------------------------------|
| 1 | 2 PCI-E x16 (FH/HL 9.5") Slots |
| 2 | PCI-E x16 (LP) Slot |
| 3 | VGA Port |
| 4 | UID LED |
| 5 | Serial Port |
| 6 | Dedicated LAN for IPMI |
| 7 | 2 USB 3.0 Ports |
| 8 | Ultra Riser Networking Slot* |
| 9 | Redundant Power Supply Modules** |

* Check UIO detail from product website
** Redundancy based on configuration and application load

CPU Installation

Processor Installation

- Removing the Processor Force Frame
Use a Torx T20 driver to loosen the screws holding down Force Frame in the sequence of 3-2-1. The screws are numbered on the Force Frame next to each screw hole.
- Raising the Force Frame
- Lifting the Rail Frame
- Removing the External Cap and PnP Cover Cap
- Inserting the Carrier Frame/CPU Package
- Lowering the Force Frame
- Securing the Force Frame
Secure the screws in the order 1-2-3, tightening to 16.1 kgf-cm (14 lbf-in) of torque. The Force Frame secures both the Rail Frame and CPU Package. Caution: Tightening must be executed in proper 1-2-3 sequence to avoid causing catastrophic damage to the socket or CPU Package.
- The Force Frame Secured

Heatsink Installation

- Mounting the Heatsink
- Securing the Heatsink
Using a diagonal pattern and a Torx T20 driver, tighten the four heatsink screws evenly to 16.1 kgf-cm (14.0 lbf-in) torque.

Caution

- SAFETY INFORMATION**
IMPORTANT: See installation instructions and safety warning before connecting system to power supply.
http://www.supermicro.com/about/policies/safety_information.cfm
- WARNING:**
To reduce risk of electric shock/damage to equipment, disconnect power from server by disconnecting all power cords from electrical outlets. If any CPU socket empty, install protective plastic CPU cap.
- WARNING:**
Always be sure all power supplies for this system have the same power output. If mixed power supplies are installed, the system will not operate. For more information go to : <http://www.supermicro.com/support>

