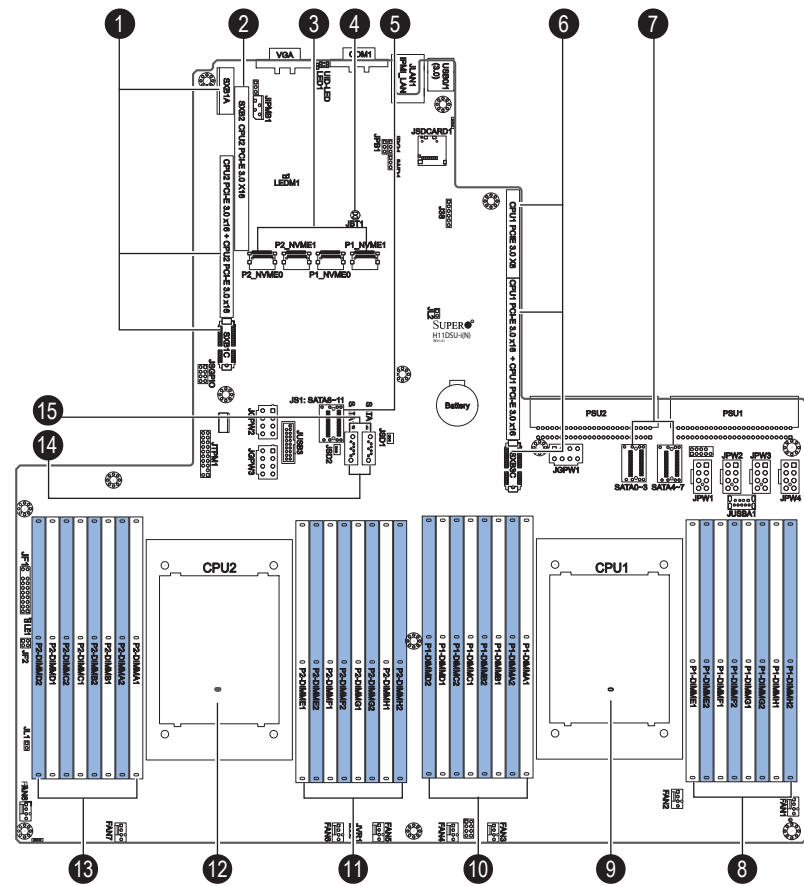


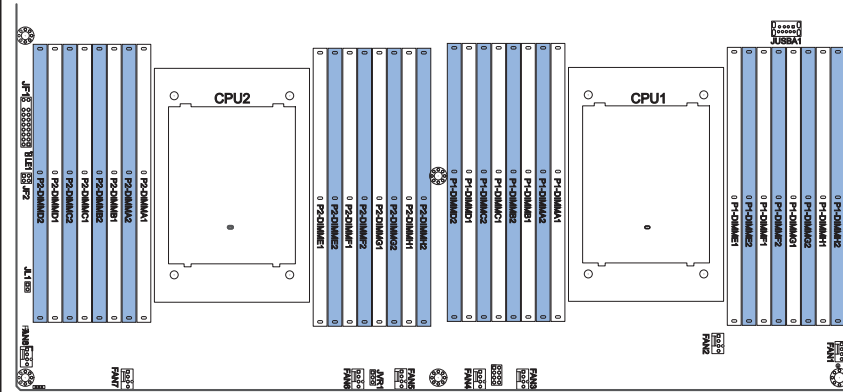
# SUPERMICR<sup>®</sup> A+ Server 2123US-TN24R25M Quick Reference Guide

## Board Layout



No.	Description
1	SXB1A/1B/1C: WIO-L Riser Card Support (CPU2 PCI-E 3.0 x16 and CPU2 PCI-E 3.0 x16)
2	SXB2: WIO-R Riser Card Support (CPU2 PCI-E 3.0 x16)
3	P1-NVME0/1, P2-NVME0/1: Processor 1 NVMe Ports, Processor 2 NVMe Ports
4	JBT1: CMOS Clear
5	JS1: SATA8~11 (SATA 3.0 Ports)
6	SXB3A/3B/3C: Ultra I/O Riser Card Support (CPU1 PCI-E 3.0 x 8, CPU1 PCI-E 3.0 x16)
7	SATA0~7 Ports
8	P1-DIMME1~H2 slots
9	CPU1
10	P1-DIMMA1~D2 slots
11	P2-DIMME1~H2 slots
12	CPU2
13	P2-DIMMA1~D2 slots
14	JSD1, JSD2: SATA DOM (Device on Module) power connectors 1/2
15	SATA12, 13 Ports

## Memory



### DIMM Module Population Sequence

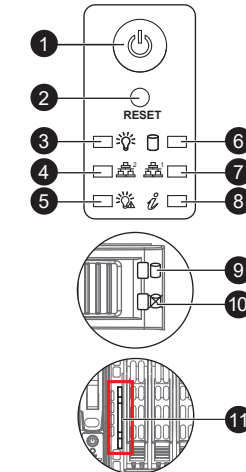
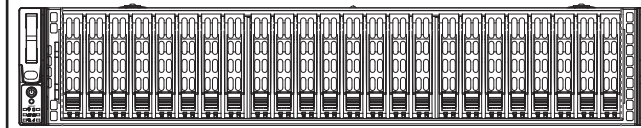
When installing memory modules, the DIMM slots should be populated in the following order: DIMMA2, DIMMB2, DIMMC2, DIMMD2, DIMME2, DIMMF2, DIMMG2, DIMMH2, then DIMMA1, DIMMB1, DIMMC1, DIMMD1, DIMME1, DIMMF1, DIMMG1, DIMMH1.

- 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 will support odd-numbered modules (1 or 3 modules installed).
- However, to achieve the best memory performance, fully populate the motherboard with validated memory modules.

### Processors and their Corresponding Memory Modules

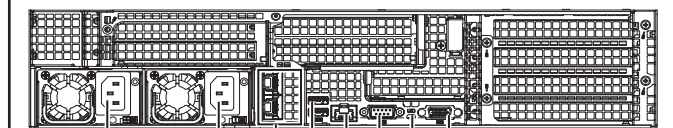
CPU#	Channel 1	Channel 2	Channel 3	Channel 4	Channel 5	Channel 6	Channel 7	Channel 8
8 DIMMS								
CPU1	A2	B2	C2	D2	E2	F2	G2	H2
16 DIMMS								
CPU1	A1	A2	B1	B2	C1	C2	D1	D2
	E1	E2	F1	F2	G1	G2	H1	H2
16 DIMMS								
CPU1	A2	B2	C2	D2	E2	F2	G2	H2
CPU2	A2	B2	C2	D2	E2	F2	G2	H2
32 DIMMS								
CPU1	A1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

## Front View & Interface



No.	Description
1	Power Button
2	Reset Button
3	Power LED
4	NIC2 LED
5	Power Fail LED
6	HDD
7	NIC1 LED
8	Information LED
9	Power Failure LED
10	Device Activity LED
11	Service/Asset Tag

## Rear View



No.	Description
1	Two redundant power supply modules
2	Two RJ45 LAN ports
3	Two USB 3.0 ports
4	Dedicated LAN port for IPMI
5	Video connector
6	Unit ID button and indicator light
7	Serial connector

## CPU Installation

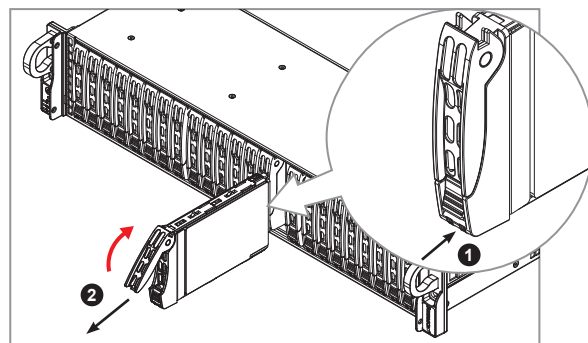
### Processor Installation

- 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**

## Hard Drive Installation

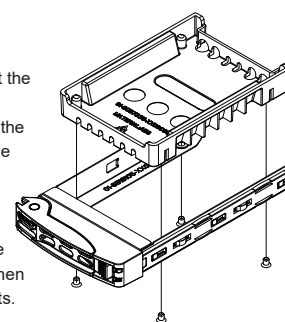
### Removing a Hot-Swap Drive Carrier from the Chassis

- 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.



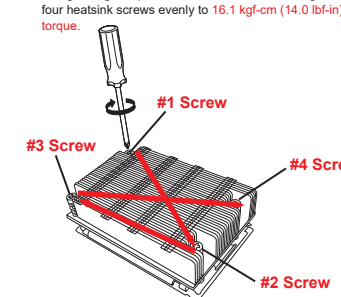
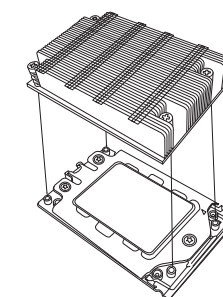
### Installing a Drive

- 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.



## 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](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>

