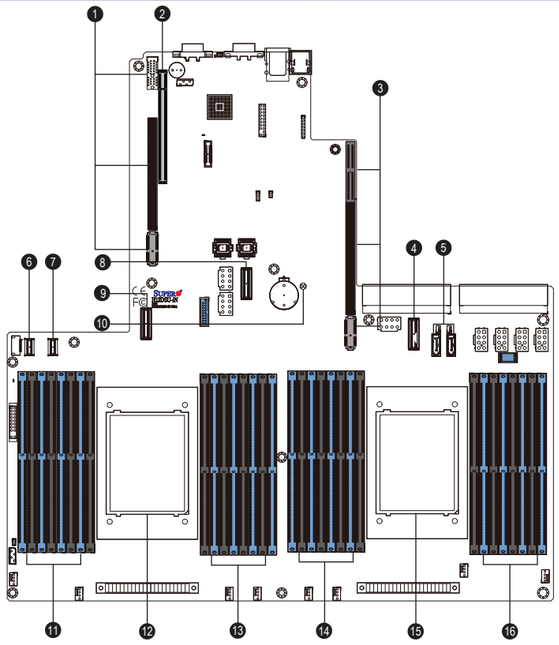
SUPERMICRO® A+ Server AS -2124US-TNRP Quick Reference Guide

Board Layout

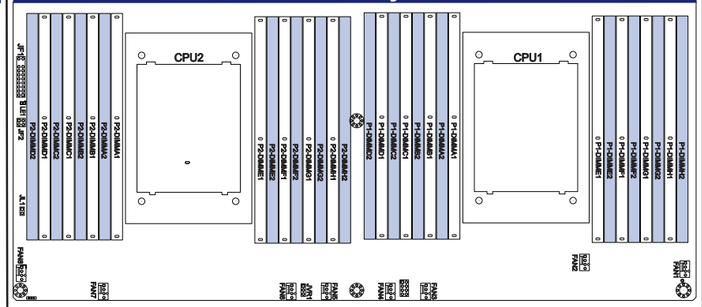


No.	Description
1	SXB1A/1B/1C: WIO-L Riser Card Support (CPU2 PCI-E 4.0 x32)
2	SXB2: WIO-R Riser Card Support (CPU2 PCI-E 4.0 x16)
3	SXB3A/3B/3C: Ultra I/O Riser Card Support (CPU1 PCI-E 4.0 x40)
4	CPU1 NVMe Ports 0-1, SATA0-7
5	SATA DOM 3.0 8-9
6	CPU2 NVMe Port 0, SATA10-13
7	CPU2 NMVe Port 1, SATA14-17
8	CPU1 NVMe Ports 2-3
9	CPU2 NVMe Ports 2-3
10	JBT1 - CMOS Clear
11	CPU2 DIMMA1-D2 Slots
12	CPU2
13	CPU2 DIMME1-H2 Slots
14	CPU1 DIMMA1-D2 Slots
15	CPU1
16	CPU1 DIMME1-H2 Slots

Default Cable Routing

Connector on Board/Card	Connection Backplane	HDD Bay	SMC Cable P/N
JSLIM1 (P1 NVMe0/1), (MB-H12DSU-iN)	NVMe 1	0-1	CBL-SAST-1268-85
JSLIM2 (P1 NVMe2/3), (MB-H12DSU-iN)	NVMe 3	2-3	CBL-SAST-1256A-85
AOC- 2UR68G4-i4XTS slot, AOC-SLG4-4E4T	NVMe 5 & 7	4-7	CBL-SAST-1282-85
AOC-2UR68G4-i4XTS internal slot, AOC-SLG4-2E4T	NVMe 9	8-9	CBL-SAST-1265A-85
AOC-2UR68G4-i4XTS slot, AOC-SLG4-2E4T	NVMe 11	10-11	CBL-SAST-1265A-85
JSLIM3-1&2 (P2 NVMe0/1), (MB-H12DSU-iN)	NVMe 13	12-13	CBL-SAST-1262F-85
JSLIM4 (P1 NVMe2/3), (MB-H12DSU-iN)	NVMe 15	14-15	CBL-SAST-1248-85
RSC-W2-66G4 slot, AOC-SLG4-4E4T	NVMe 17 & 19	16-19	CBL-SAST-1282-85
RSC-WR-6 slot, AOC-SLG4-4E4T	NVMe 21 & 23	20-23	CBL-SAST-1265A-85

Memory



DIMM Module Population Sequence

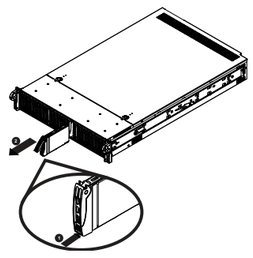
When installing memory modules, the DIMM slots should be populated in the following order: DIMMA2, DIMMB2, DIMMC2, DIMMD2, DIMME2, DIMMF2, DIMMG2, DIMMH2, then DIMMA1, DIMMB1, DIMMC1, DIMMD1, DIMME1, DIMMF1, DIMMG1, DIMMH1.

- 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 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

Hard Drive Installation

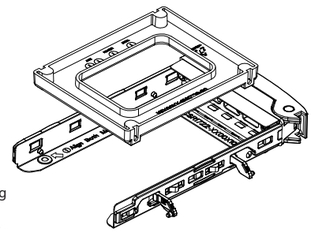


Removing a Hot-Swap Drive Carrier from the Chassis

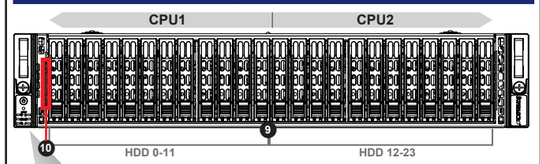
1. Press the release button on the drive carrier, which will extend the drive carrier handle.
2. Use the drive carrier handle to pull the drive out of the chassis.

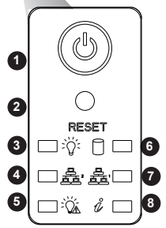
Installing a Drive

1. Remove the dummy drive, which comes pre-installed in the drive carrier. Pull open the latches on the left side of the carrier and remove the dummy.
2. Insert a drive into the carrier with the PCB side facing down and the connector end toward the rear of the carrier.
3. Secure the drive to the carrier by closing the latches on the side of the carrier.
4. Insert the drive carrier with the drive into its bay, keeping the carrier oriented so that the release button is on the bottom. When the carrier reaches the rear of the bay, the release handle retracts.
5. Push the handle in until it clicks into its locked position.



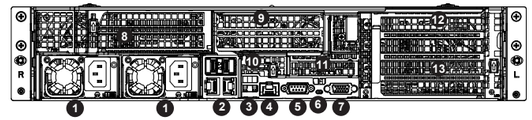
Front View & Interface





Item	Features
1	Power Button
2	Reset
3	Power LED
4	NIC2 LED
5	Power Fail LED
6	HDD
7	NIC1 LED
8	Information LED
9	Storage Drives
10	Asset/Service Tag

Rear View

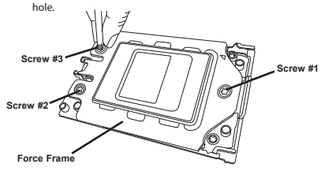


Item	Features
1	Two redundant power supply modules
2	Two RJ45 ports and two 10G SFP+ ports
3	Two USB 3.0 ports
4	IPMI dedicated LAN port
5	VGA
6	UID LED
7	COM port
8	AOC- 2UR68G4-i4XTS slot #1, installed AOC-SLG4-4E4T
9	AOC-2UR68G4-i4XTS slot #2, installed AOC-SLG4-2E4T
10	AOC-2UR68G4-i4XTS internal slot #3, installed AOC-SLG4-2E4T
11	RSC-WR-6 slot #4, installed AOC-SLG4-4E4T
12	PCI-E 4.0 x16 slot (FH 9.5" L/10.5" L) (CPU2)
13	RSC-W2-66G4 slot #6, installed AOC-SLG4-4E4T

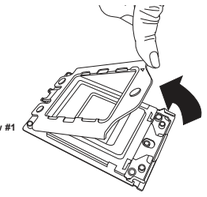
CPU Installation

Processor Installation

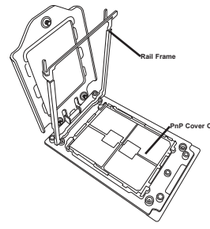
1. Removing the Processor Force Frame
Use a Torx T20 driver to loosen the screws holding down Force Frame in the sequence of 3-2-1. The screws are numbered on the Force Frame next to each screw hole.



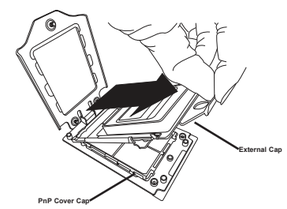
2. Raising the Force Frame



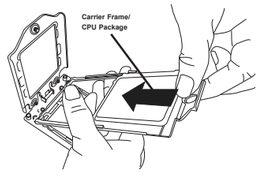
3. Lifting the Rail Frame



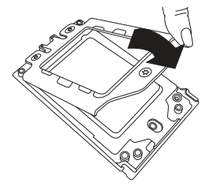
4. Removing the External Cap and PnP Cover Cap



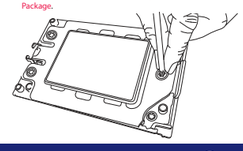
5. Inserting the Carrier Frame/CPU Package



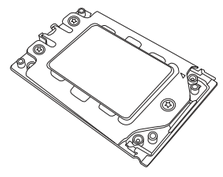
6. Lowering the Force Frame



7. 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.

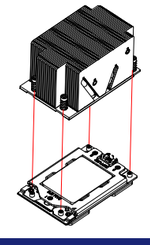


8. The Force Frame Secured

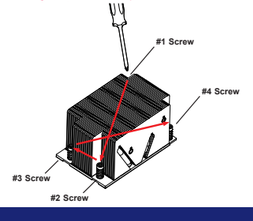


Heatsink Installation

1. Mounting the Heatsink



2. 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