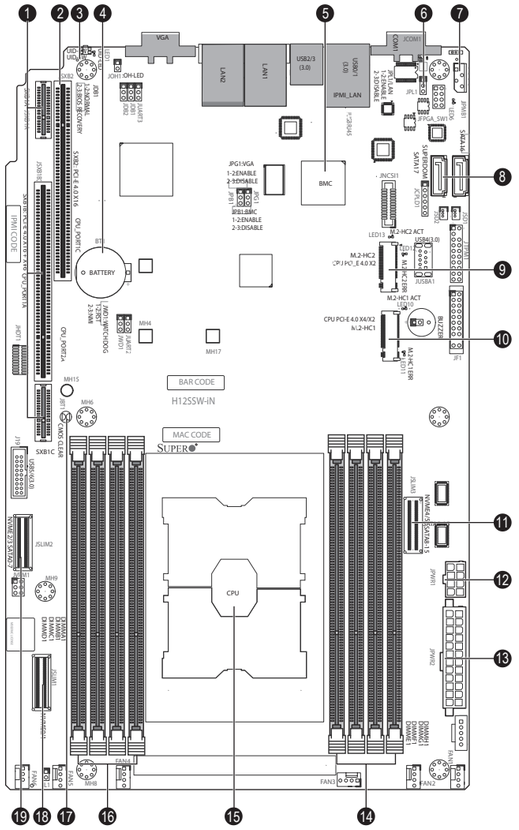
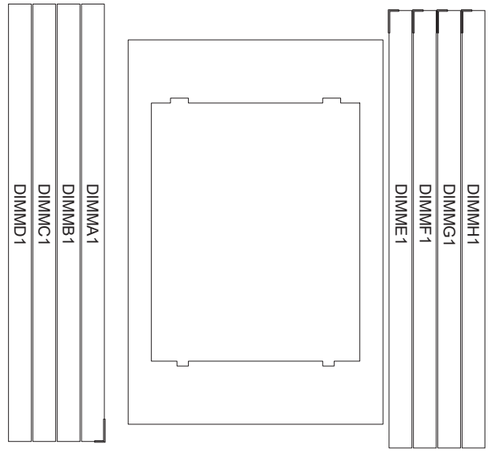
SUPERMICRO® A+ Server AS -1014S-WTRT / AS -1014S-WTRT-EU Quick Reference Guide

Board Layout



No.	Description
1	SXB1A/SXB1C: Riser slots, SXB1B: PCI-E 4.0 x16 + x16
2	SXB2: PCI-E 4.0 x16
3	UID SW: Unit ID switch (push-button toggle switch ON/OFF)
4	BT1: Clear CMOS
5	BMC
6	JPL1/LAN: LAN Enable/Disable
7	JIPMB1: 4-pin External BMC I2C Header (for an IPMI Card)
8	SATA0/SATA1: Internal SATA Ports
9	M.2-C2: M.2 Slots
10	M.2-C1: M.2 Slots
11	NVME 4/5: NVMe slots 0~5, SATA 8-15: SATA slots
12	JPWR1: 12V 8-pin ATX CPU power connector
13	JPWR2: 24-pin ATX power supply connector
14	DIMME1~DIMMH1 slots
15	CPU
16	DIMMA1~DIMMD1 slots
17	JBT1: Clear CMOS
18	NVME 0/1: NVMe slots
19	NVME 2/3: NVMe slots, SATA 0-7: SATA slots

Memory



DIMM Module Population

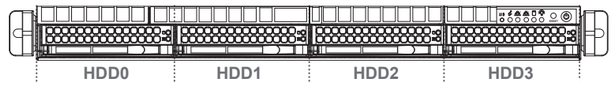
When populating the motherboard with DIMM modules, please keep in mind the following:

- Always use DDR4 DIMM modules of the same type, size and speed.
- All eight memory channels per CPU socket should be populated with each channel having equal capacity. This enables the memory subsystem to operate in eight-way interleaving mode, which should provide the best performance in most cases.
- In most configurations, populating fewer than eight channels is supported, but not recommended.

The Processors and its Memory Module Distribution								
	Channel							
CPU#	D1	C1	B1	A1	E1	F1	G1	H1
1 DIMM (Not Recommended)								
CPU1		✔						
2 DIMMs (Not Recommended)								
CPU1	✔	✔						
4 DIMMs (Not Recommended)								
CPU1	✔	✔					✔	✔
6 DIMMs								
CPU1	Unbalanced, not recommended							
8 DIMMs								
CPU1	✔	✔	✔	✔	✔	✔	✔	✔

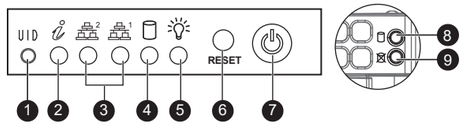
*** NOTE: Most configurations populating fewer than eight channels are supported, but not recommended.**

Front View & Interface



Slot	Description
0~3	3.5" Hot-Swap SATA3/ U.2 NVMe* Drive Bays

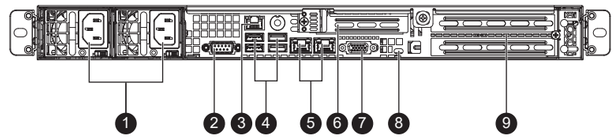
*** U.2 NVMe support requires additional parts in optional parts list**



No.	Description	No.	Description
1	UID Button	6	Reset Button
2	Universal Information LED	7	Power Button
3	LAN1 LED & LAN2 LED	8	Device Activity LED
4	HDD LED	9	Device Status LED
5	Power LED		

Universal Information LED States	
State	Indication
Fast Blinking Red (1x/sec)	Fan Fail
Slow Blinking Red (1x/4 sec)	CPU Overheat
Solid Blue	Local UID Button Depressed
Blinking Blue	IPMI-Activated UID

Rear View



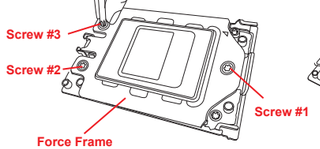
No.	Description
1	Redundant Power Supply Modules*
2	Serial Port
3	Dedicated LAN for IPMI
4	4 USB 3.0 Ports
5	2 10GbBase-T LAN Ports
6	1 PCI-E 4.0 x16 (LP) Slot
7	VGA Port
8	UID Switch & UID LED
9	2 PCI-E 4.0 x16 (FH/FL) Slots

*Redundancy based on configuration and application load

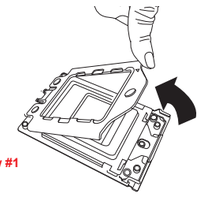
CPU Installation

Processor Installation

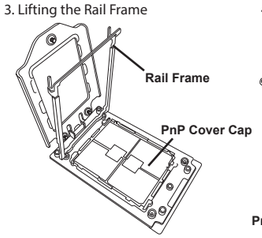
1. Removing the Processor Force Frame
   Use a Torx T20 driver to loosen the screws holding down Force Frame in the sequence of 3-2-1. The screws are numbered on the Force Frame next to each screw hole.



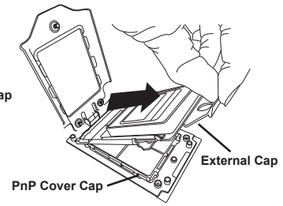
2. Raising the Force Frame



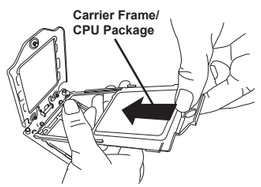
3. Lifting the Rail Frame



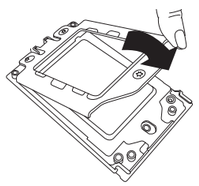
4. Removing the External Cap and PnP Cover Cap



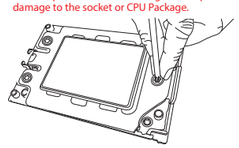
5. Inserting the Carrier Frame/CPU Package



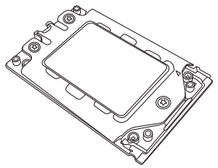
6. Lowering the Force Frame



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.

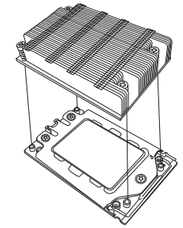


8. The Force Frame Secured

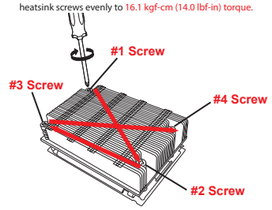


Heatsink Installation

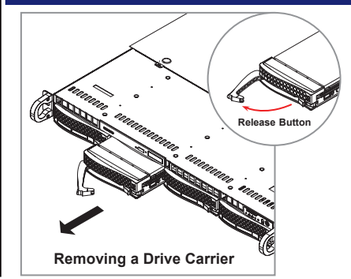
1. Mounting the Heatsink



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.

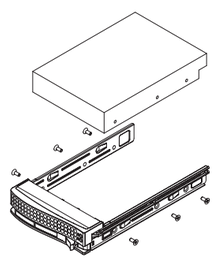


Hard Drive Installation



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. To add a new drive, install it into the carrier with the printed circuit board side facing down so that the mounting holes align with those in the carrier.
2. Secure the drive to the carrier with the screws provided, then push the carrier completely into the drive bay. You should hear a *click* when the drive is fully inserted. This indicates that the carrier has been fully seated and connected to the HDD backplane, which automatically makes the power and logic connections to the hard drive.

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