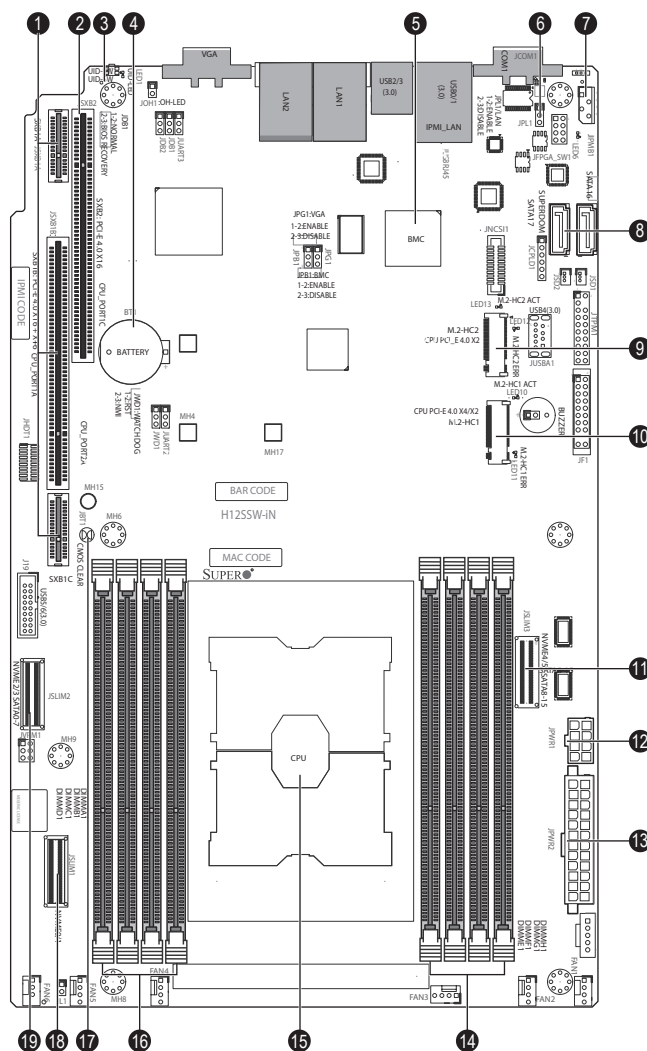


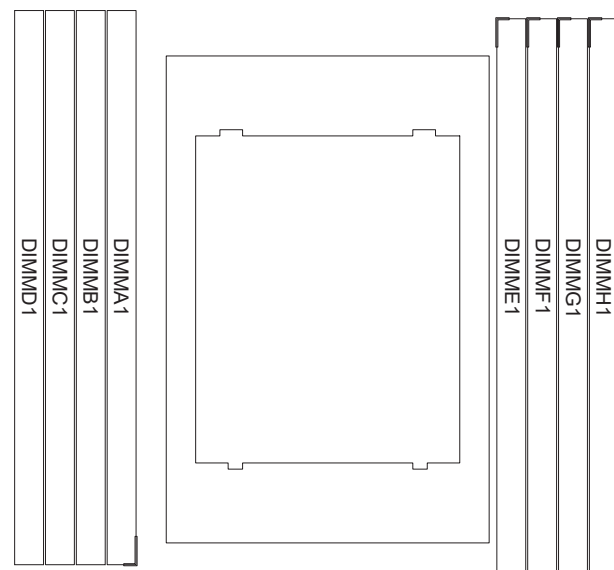
# SUPERMICR<sup>®</sup> A+ Server AS -114S-WTRT / AS -114S-WTRT-EU Quick Reference Guide

## 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

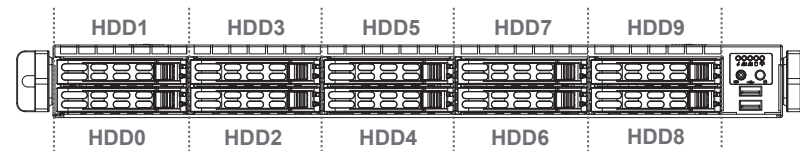
When populating the motherboard with DIMM modules, please keep in mind the following:

- 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  | ✓                           | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓ |

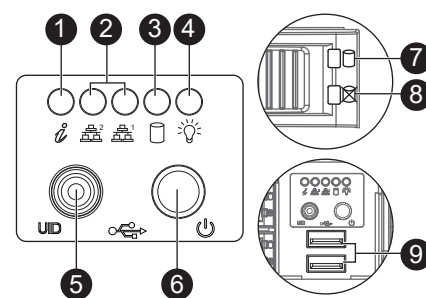
\* NOTE: Most configurations populating fewer than eight channels are supported, but not recommended.

## Front View & Interface



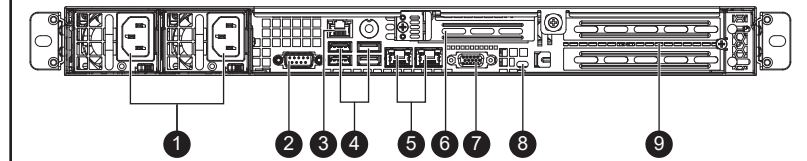
| Slot | Description                          |
|------|--------------------------------------|
| 0~7  | 2.5" Hot-Swap SATA3 Drive Bays       |
| 8~9  | Hot-Swap SATA3/ U.2 NVMe* Drive Bays |

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



| No. | Description               |
|-----|---------------------------|
| 1   | Universal Information LED |
| 2   | LAN1 LED & LAN2 LED       |
| 3   | Device Activity LED       |
| 4   | Power LED                 |
| 5   | UID Button                |
| 6   | Power Button              |
| 7   | Device Activity LED       |
| 8   | Device Status LED         |
| 9   | USB 3.0 Ports             |

## Rear View



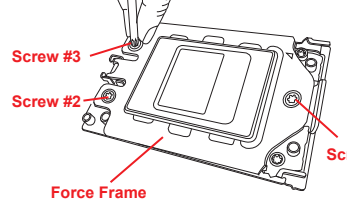
| No. | Description                     |
|-----|---------------------------------|
| 1   | Redundant Power Supply Modules* |
| 2   | Serial Port                     |
| 3   | Dedicated LAN for IPMI          |
| 4   | 4 USB 3.0 Ports                 |
| 5   | 2 10GbBase-T LAN Ports          |
| 6   | 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

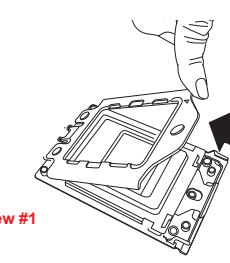
## CPU Installation

### Processor Installation

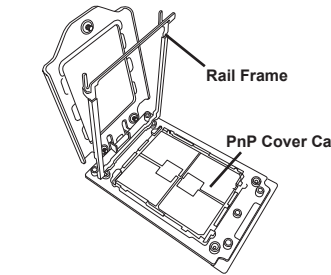
1. Removing the Processor Force Frame  
Use a Torx T20 driver to loosen the screws holding down Force Frame in the sequence of 3-2-1. The screws are numbered on the Force Frame next to each screw hole.



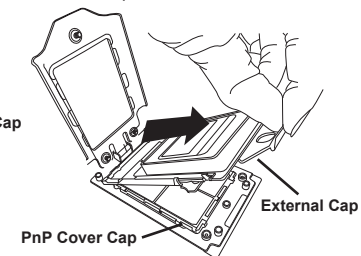
2. Raising the Force Frame



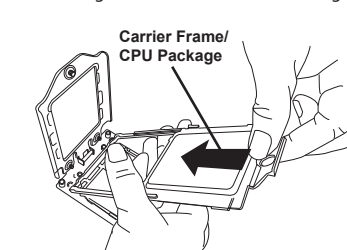
3. Lifting the Rail Frame



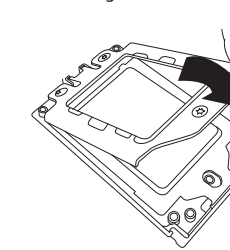
4. Removing the External Cap and PnP Cover Cap



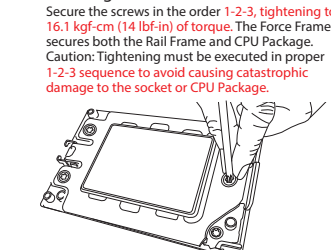
5. Inserting the Carrier Frame/CPU Package



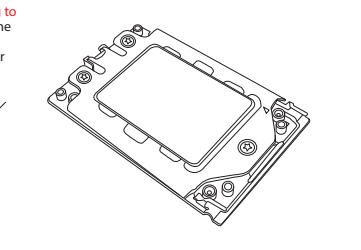
6. Lowering the Force Frame



7. Securing the Force Frame

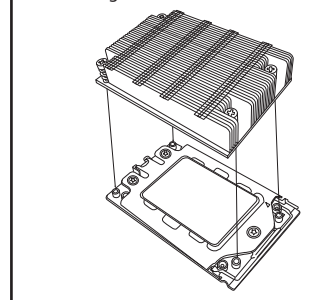


8. The Force Frame Secured



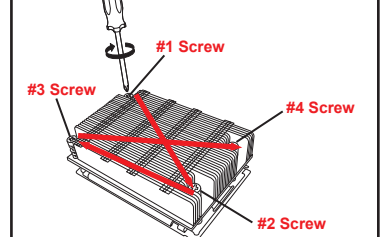
## Heatsink Installation

1. Mounting the Heatsink

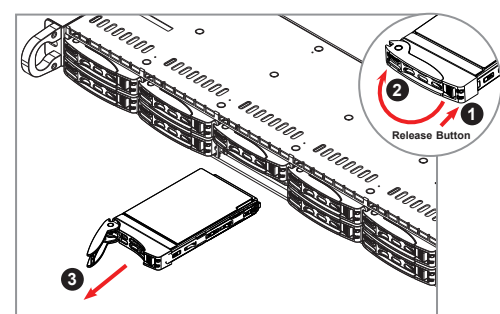


2. Securing the Heatsink

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.

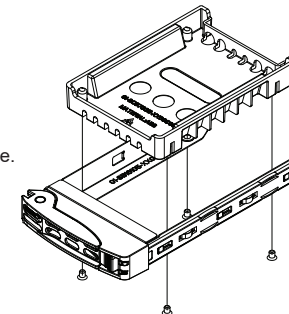


## Hard Drive Installation



### 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. 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.
2. 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.
3. Secure the drive to the carrier with four M3 screws, included in the chassis accessory box.
4. 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.
5. Push the handle in until it clicks into its locked position.

## 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>

