# SUPERMICRO® A+ Server 2113S-WN24RT Quick Reference Guide

## Board Layout
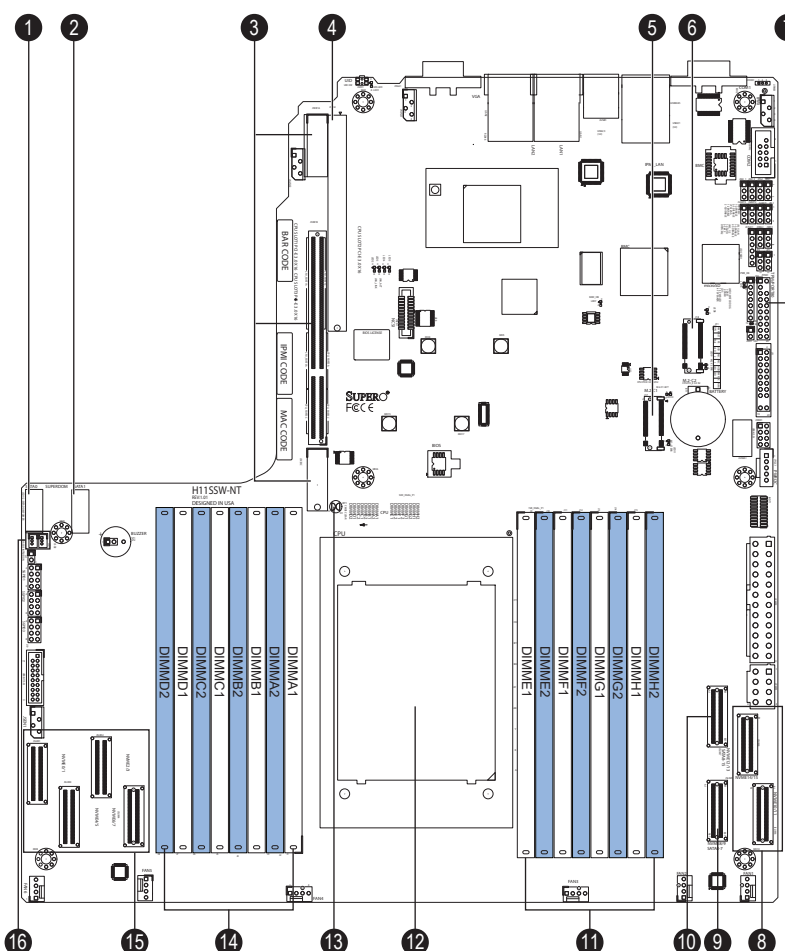


| No. | Description | No. | Description |
|---|---|---|---|
| 1 | SATA0 Internal SATA Port | 9 | NVMe slots 8-9 / SATA slots 0-7 |
| 2 | SATA1 Internal SATA Port | 10 | NVMe slots 12-13 / SATA slots 8-15 |
| 3 | JSXB1A, JSXB1B Riser slots | 11 | DIMM slots E1~H2 |
| 4 | JSXB2 Riser slot | 12 | CPU slot |
| 5 | M.2-C1 M.2 Slot | 13 | Clear CMOS |
| 6 | M.2-C2 M.2 Slot | 14 | DIMM slots A1~D2 |
| 7 | Trusted Platform Module (TPM)/ Port 80 connector | 15 | NVMe slots 0~7 |
| 8 | NVMe slots 10-11, & 14-15 | 16 | JSD1, JSD2 SATA DOM power connector |

## Memory
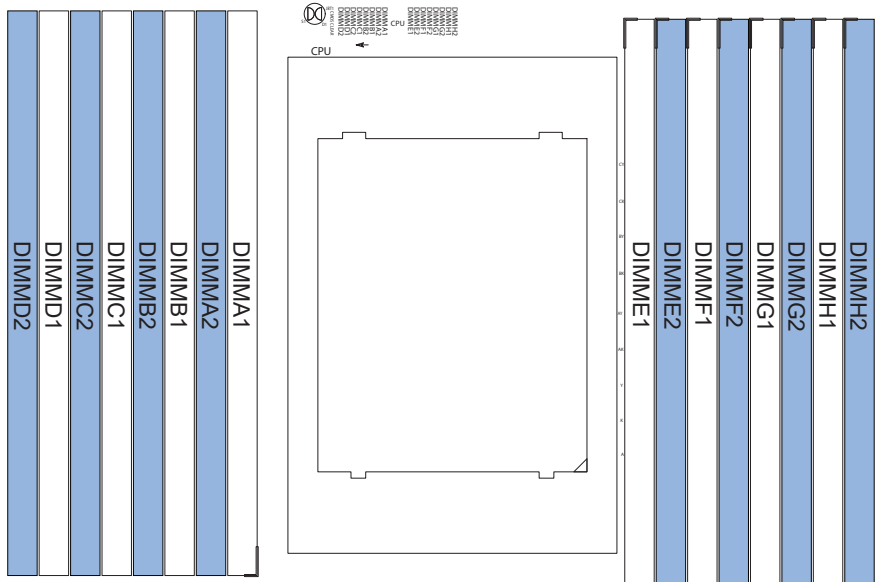


### DIMM Module Population Sequence

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 |
|---|---|---|---|---|---|---|---|---|
| **4 DIMMS*** | | | | | | | | |
| CPU1 | A2 | | C2 | | E2 | | G2 | |
| **6 DIMMS** | | | | | | | | |
| Unbalanced, not recommended | | | | | | | | |
| **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 |

*Note: To achieve optimal memory performance, a minimum of at least one DIMM for each channel pair in the system (e.g., A, C, E, G) is recommended.

## Front View & Interface



| Slot | Description |
|---|---|
| 0~23 | Hot-Swap NVMe Drive Bays |



| No. | Description |
|---|---|
| 1 | Power Button |
| 2 | Reset Button |
| 3 | Power LED |
| 4 | NIC2 LED |
| 5 | Power Fail LED |
| 6 | HDD LED |
| 7 | NIC1 LED |
| 8 | Universal Information LED |

## Rear View



| No. | Description |
|---|---|
| 1 | Redundant power supply modules |
| 2 | 2x Hot-swap Rear 2.5" SATA Drive Bays (Optional) |
| 3 | Serial Port |
| 4 | Dedicated IPMI LAN Port |
| 5 | 4x USB3.0 Ports |
| 6 | 2x RJ45 10GBase-T LAN Ports |
| 7 | VGA Port |
| 8 | PCI-E 3.0 x16 FHHL Slot |

## 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



## 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.

## 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