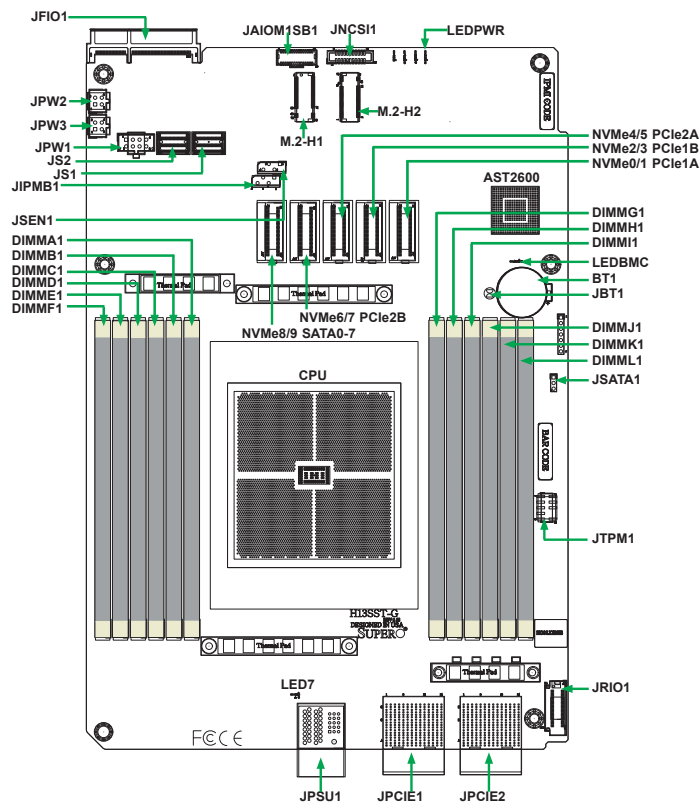


# SUPERMICRO® A+ Server 2115GT-HNTF Quick Reference Guide

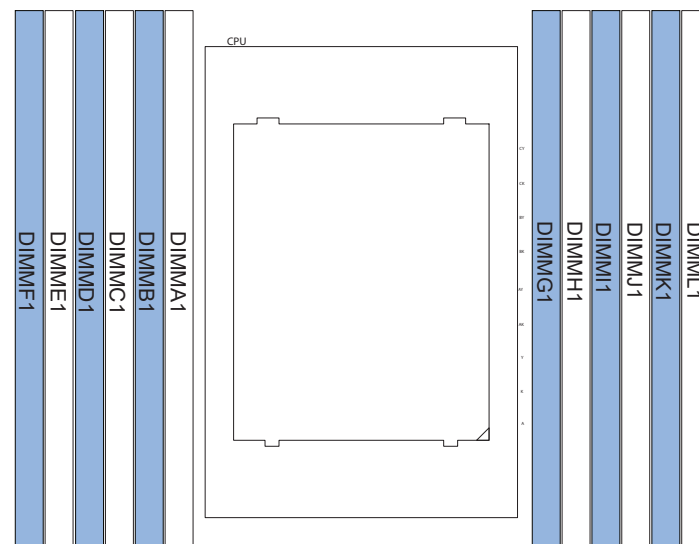
## Board Layout



Jumper	Description	Default Setting
JBT1	CMOS Clear	Open (Normal)
JSATA1	Hybrid MCIO select	Open (Normal)
LED	Description	Status
LED_PWR	Power LED	Solid Green: Power On
LEDBMC	BMC Heartbeat LED	Green: Blinking (BMC normal), Green: Fast blinking (BMC initializing)

Connector	Description
JNCSI1	NCSI connector
JAIOM1SB1	AIOM1 Sideband Signals Header
JFI01	Grand Twin Front IPMI and Onboard NIC Module Connector
JPW1	12V/5V 8-pin GPU and NVMe power connector
JPW2-JPW3	12V 4-pin GPU and NVMe power connectors
JPSU1	Serverboard Main Power Supply Connector
JRIO1	Grand Twin Rear IPMI Module Connector
BT1	Onboard Battery
M.2-H1/M.2-H2	M.2 PCIe/SATA Interfaces
NVMe0/1 PCIe1A	NVMe Ports 0/1
NVMe2/3 PCIe1B	NVMe Ports 2/3
NVMe4/5 PCIe2A	NVMe Ports 4/5
NVMe6/7 PCIe2B	NVMe Ports 6/7
NVMe8/9 SATA0-7	NVMe Ports 8/9 / SATA 0-7
JIPMB1	4-pin External BMC I²C Header

## Memory



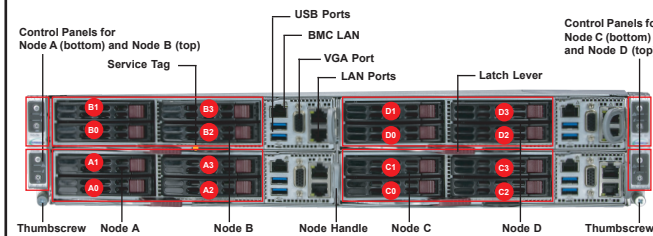
### DIMM Module Population

- It is recommended that DDR5 DIMM modules of the same type, size and speed should be installed.
  - 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.
- Please follow below table for installing memory modules.

Type	DIMM Population	Maximum DIMM Capacity (GB)		Maximum Frequency (MHz)
		1 Channel	8 Channels	
RDIMM	1R (1 Rank)	32GB	256GB	4800
	2R or 2DR (2 Ranks)	64GB	512GB	4800
LRDIMM dual die	4DR (4 Ranks)	128GB	1TB	4800
	2S4R (8 Ranks)	256GB	2TB	4800
3DS LRDIMM	2S2R (4 Ranks)	128GB	1TB	4800
	2S4R (8 Ranks)	256GB	2TB	4800

DIMM Population Guide												
Channel												
CPU#	F1	E1	D1	C1	B1	A1	G1	H1	I1	J1	K1	L1
1 DIMM (not recommended)												
CPU1						X						
2 DIMMs (not recommended)												
CPU1						X	X					
4 DIMMs (not recommended)												
CPU1				X	X	X	X		X			
6 DIMMs (not recommended)												
CPU1			X	X	X	X	X	X	X			
8 DIMMs (conditionally recommended for 16-64 Cores)												
CPU1	X		X	X	X	X	X	X	X	X		X
10 DIMMs (conditionally recommended for 16-64 Cores)												
CPU1	X	X	X	X	X	X	X	X	X	X	X	X
12 DIMMs (Recommended for best memory performance)												
CPU1	X	X	X	X	X	X	X	X	X	X	X	X

## Front View & Interface

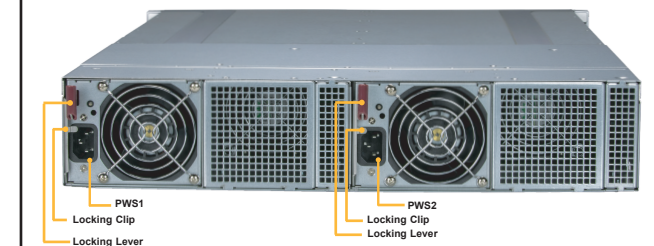


Feature	Description
Control Panel	Four control panels with labels are located as follows: node A bottom left, node B top left, node C bottom right, and node D top right
Service Tag	Pull-out service tags with BMC password labels for each node
Drive Bays	Optional 16 hot-swappable drive bays (four per node)
BMC LAN	One BMC dedicated LAN port (per node)
USB Ports	Two USB 3.0 ports (per node)
VGA Port	One video port (per node)
LAN Ports	Two LANs integrated Network connections depend on GrandTwin IO solution
Node Handles	One handle per node supporting node tray removal
Thumbscrews	Two thumbscrews to secure the server onto the rack

## Control Panel

Color, Status	Information LED	Description
Red, solid	Power Button	An overheat condition has occurred.
Red, blinking at 1Hz	BMC Button/UID LED	Fan failure, check for an inoperative fan.
Red, blinking at 0.25Hz	Node Label	Power failure, check for a non-operational power supply
Red, solid, with Power LED blinking green		Fault detected
Blue and red, blinking at 10Hz		Recovery mode
Blue, solid		UID has been activated locally to locate the server in a rack environment.
Blue, blinking at 1Hz		UID has been activated using the BMC to locate the server in a rack environment.
Blue, blinking at 2Hz		BMC is resetting
Blue, blinking at 4Hz		BMC is setting factory defaults
Blue, blinking at 10Hz with Power LED blinking green		BMC/BIOS firmware is updating

## Rear View



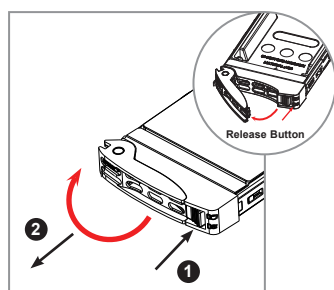
Feature	Description
Power Supplies	Two 2200W Titanium level redundant power supply modules PWS1 on the left, and PWS2 on the right

## CPU Installation

### Processor Installation

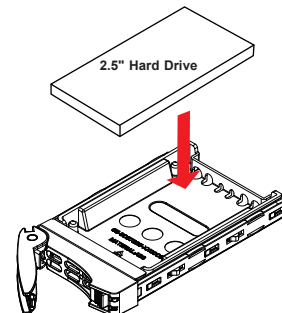
- Removing the Processor Force Frame  
Use a Torx T20 driver to loosen the screws holding down Force Frame in the sequence of 3-2-1. The screws are numbered on the Force Frame next to each screw hole.
- Raising the Force Frame
- Lifting the Rail Frame
- Removing the External Cap and PnP Cover Cap
- Inserting the Carrier Frame/CPU Package
- Lowering the Force Frame
- Securing the Force Frame  
Secure the screws in the order, tightening to 16.1 kgf-cm (1.4 lbf-in) of torque. The Force Frame secures both the Rail Frame and CPU Package. Caution: Tightening must be executed in proper 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

- 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 (1.4 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>

