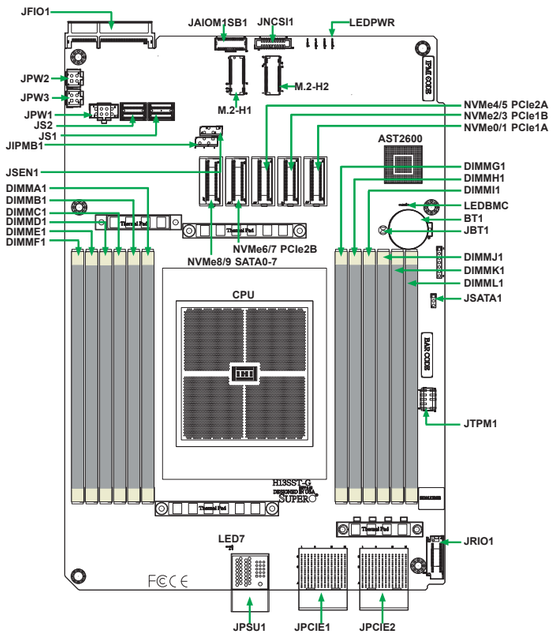
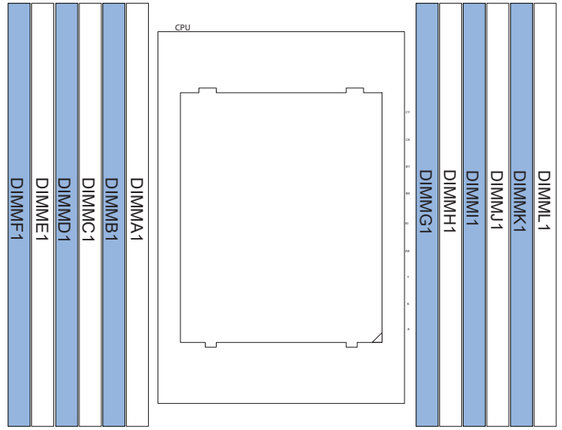
SUPERMICRO® A+ Server 2115GT-HNTR Quick Reference Guide

Board Layout



Jumper	Description	Default Setting
JBT1	CMOS Clear	Open (Normal)
JSATA1	Hybrid MCIO select	
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	
JFIO1	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.

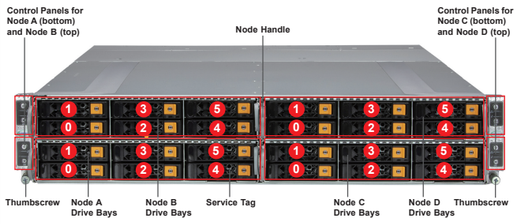
Populating RDIMM/RDIMM 3DS/LRDIMM/LRDIMM 3DS DDR4 Memory Modules

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
3DS LRDIMM	2S2R (4 Ranks)	128GB	1TB	4800
	2S4R (8 Ranks)	256GB	2TB	4800
3DS RDIMM	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			
6 DIMMs (not recommended)												
CPU1				X	X	X	X	X	X			
8 DIMMs (conditionally recommended for 16-64 Cores)												
CPU1		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	
12 DIMMs (Recommended for best memory performance)												
CPU1	X	X	X	X	X	X	X	X	X	X	X	X

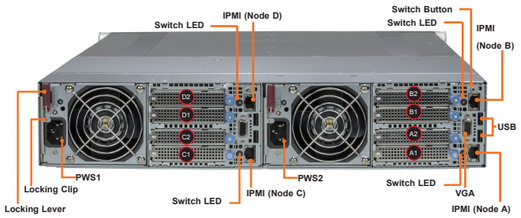
Front View & Interface



Front Chassis Features	
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.
Drive Bays	24 hot-swappable drive bays (six per node)
Node Handles	One handle per node supporting node tray removal
Thumbscrews	Two thumbscrews to secure the server onto the rack
Service Tag	Pull-out service tags with BMC password labels for each node

Information LED	
Color, Status	**Description**
Red, solid	An overheat condition has occurred.
Red, blinking at 1Hz	Fan failure, check for an inoperative fan.
Red, blinking at 0.25Hz	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



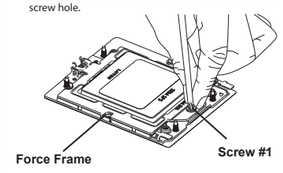
Rear Chassis Features	
Feature	**Description**
Power Supplies	Two 2200W Titanium level redundant power supply modules PWS1 on the left, and PWS2 on the right
A1 A2 B1 B2 C1 C2 D1 D2	Flexible networking options with AIOM/OCP NIC 3.0 slots
IPMI LAN Port	Four RJ45 dedicated LAN ports for IPMI
USB	Four USB 3.0 ports
VGA Port	Two VGA ports
Switch LED	Depressing the switch button illuminates a switch LED on the lower node and vice versa. The function indicates USB and VGA activity on the corresponding node when illuminating.

CPU Installation

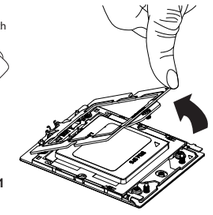
Processor Installation

1. Removing the Processor Force Frame

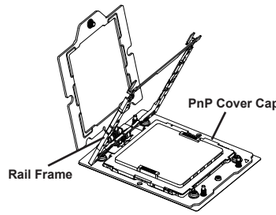
Use a Torx T20 driver to loosen the screws holding down Force Frame in the sequence of 3-2-1. The screws are numbered on the Force Frame next to each screw hole.



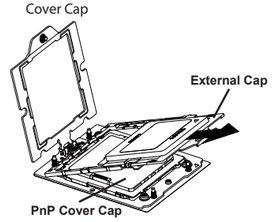
2. Raising the Force Frame



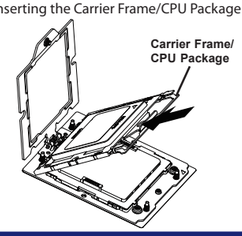
3. Lifting the Rail Frame



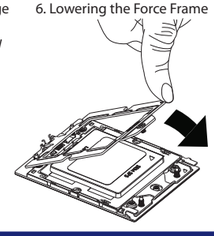
4. Removing the External Cap and PnP Cover Cap



5. Inserting the Carrier Frame/CPU Package

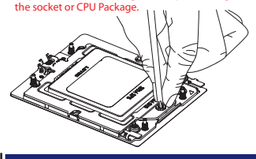


6. Lowering the Force Frame

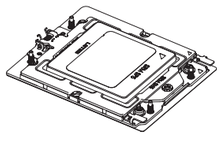


7. Securing the Force Frame

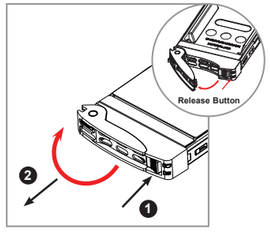
Secure the screws in the order , tightening to 16.1 kgf-cm (14 lbf-in) of torque. The Force Frame secures both the Rail Frame and CPU Package.
Caution: Tightening must be executed in proper sequence to avoid causing catastrophic damage to the socket or CPU Package.



8. The Force Frame Secured

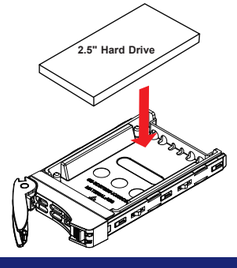


Hard Drive Installation



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.

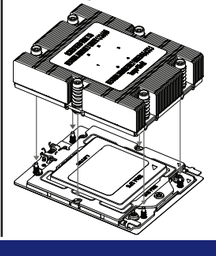


Installing a Drive

1. 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.
2. Push the handle in until it clicks into its locked position.

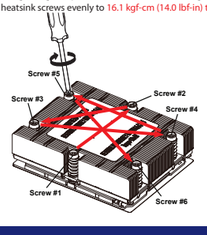
Heatsink Installation

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