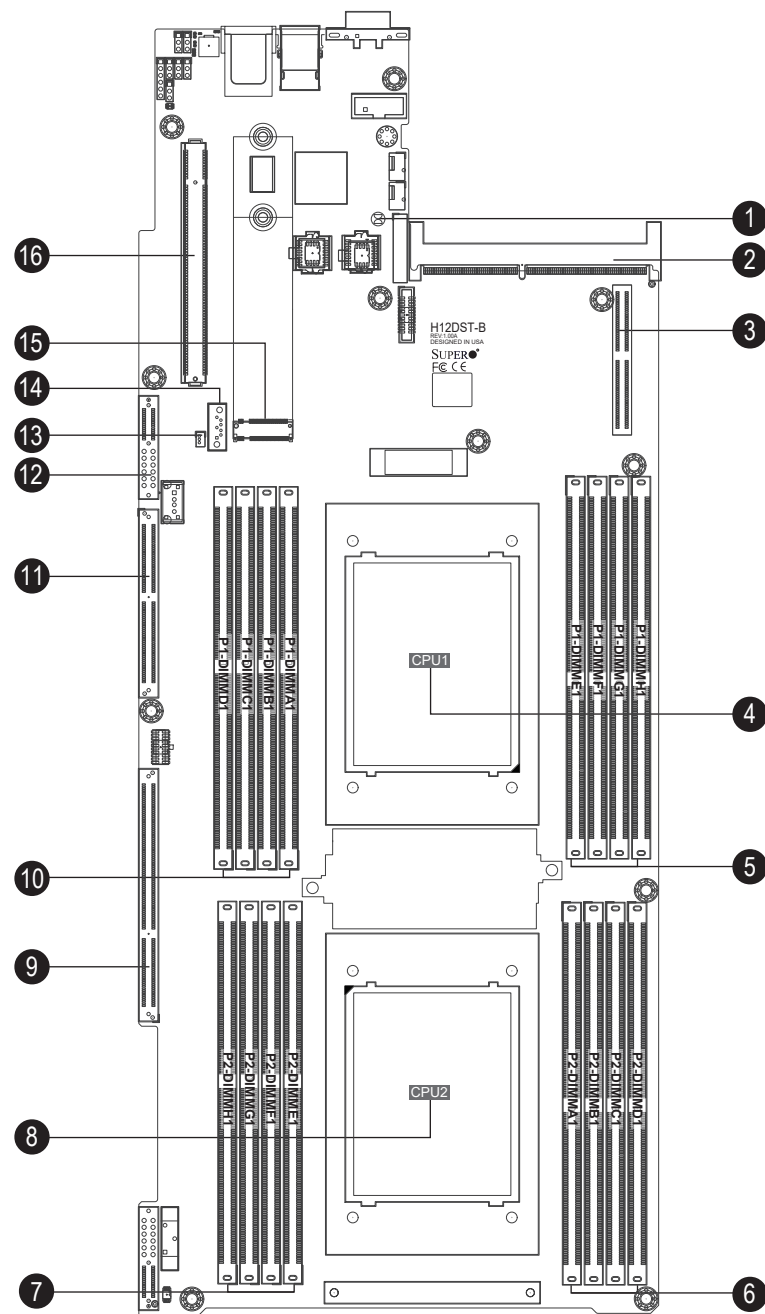


**Board Layout**



No.	Description	No.	Description
1	JBT1: Clear CMOS	9	SXB2: PCI-E 4.0 x24 slot supported by CPU2
2	SIOM: PCI-E 4.0 x16 slot for proprietary add-on module supported by CPU1	10	P1-DIMMA1~D1 slots
3	SXB4: PCI-E 4.0 x16 right hand riser slot supported by CPU1	11	SXB1: PCI-E 3.0 x4 slot supported by CPU2 and SATA connections (SATA0~5) by CPU1
4	CPU1	12	JF2: PCI-E 3.0 x4 slot supported by CPU2
5	P1-DIMME1~H1 slots	13	JSD1: SATA DOM power connector
6	P2-DIMMA1~D1 slots	14	SATA6: SATA DOM with power-pin connector
7	P2-DIMME1~H1 slots	15	J2: M.2 connector PCI-E 3.0 x4 supported by CPU1 and SATA7 connection
8	CPU2	16	SXB3: PCI-E 4.0 x16 left hand riser slot supported by CPU1

**Memory**

**DIMM Module Population**

Keep the following in mind:

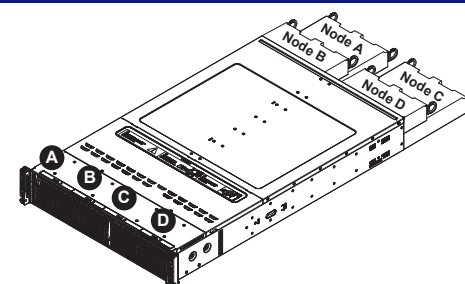
- Always use DDR4 DIMM modules of the same type, size and speed.
- Mixed DIMM speeds can be installed. However, all DIMMs will run at the speed of the slowest DIMM.
- The motherboard will support odd-numbered modules (1 or 3 modules installed). However, to achieve the best memory performance, fully populate the motherboard with validated memory modules.

Processors and their Corresponding Memory Modules										
Channel										
CPU#	D1	C1	B1	A1	CPU	E1	F1	G1	H1	
<b>2 DIMM (Not Recommended)</b>										
CPU1		✓								
CPU2		✓								
<b>4 DIMMs (Not Recommended)</b>										
CPU1	✓	✓								
CPU2	✓	✓								
<b>8 DIMMs</b>										
CPU1	✓	✓						✓	✓	
CPU2	✓	✓						✓	✓	
<b>12 DIMMs (for 7003 CPU only)</b>										
CPU1	✓	✓		✓		✓		✓	✓	
CPU2	✓	✓		✓		✓		✓	✓	
<b>16 DIMMs</b>										
CPU1	✓	✓	✓	✓		✓	✓	✓	✓	
CPU2	✓	✓	✓	✓		✓	✓	✓	✓	

Always use DDR4 DIMM modules of the same type, size and speed. To achieve the best memory performance, a balanced memory population is recommended, as shown in the table.

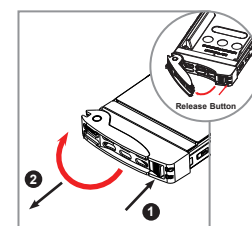
**Nodes and Corresponding Hard Drives**

Drives Controlled by Nodes
Node A controls drives A0, A1 A2, A3, A4 and A5
Node B controls drives B0, B1, B2, B3, B4 and B5
Node C controls drives C0, C1, C2, C3, C4 and C5
Node D controls drives D0, D1, D2, D3, D4 and D5



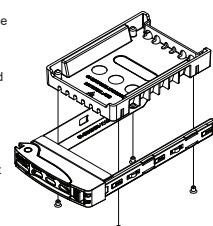
**Hard Drive Installation**

**Removing a Hot-Swap Drive Carrier from the Chassis**



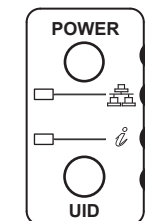
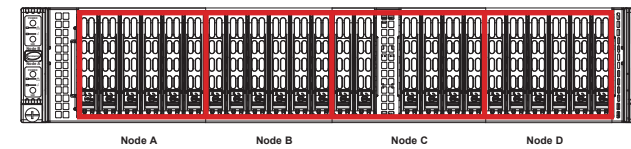
1. Press the release button on the drive carrier, which will extend the drive carrier handle.
2. Use the drive carrier handle to pull the drive out of the chassis.

**Installing a Drive**



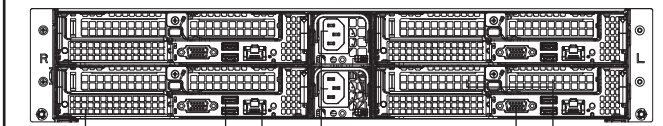
1. Remove the dummy drive, by removing the screws securing the dummy drive to the carrier. These screws are not used to mount the actual hard drive.
2. Insert a drive into the carrier with the PCB side facing down and the connector end toward the rear of the carrier. Align the drive in the carrier so 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.

**Front View & Interface**



No.	Description
1	Power button
2	NIC LED
3	Information LED
4	UID button/LED

**Rear View**



No.	Description
1	2 PCIe 4.0 x16 LP slots in each node
2	VGA Connector
3	IPMI LAN Port
4	USB (3.0) Ports
5	SIOM Slot
6	*Redundant Power Supply Modules

\*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.

**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>

