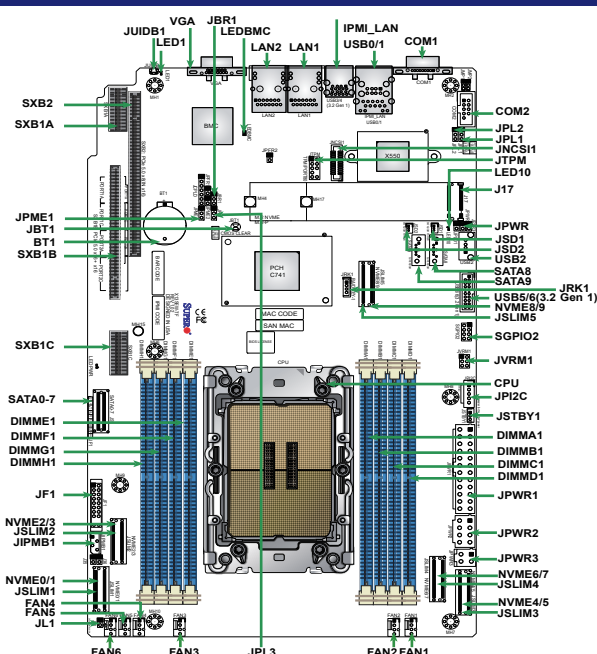


SUPERMICR SuperServer E403-13E-FRN2T Quick Reference Guide

Board Layout



Jumper	Description	Default Setting
JBR1	BIOS Recovery	Pins 1-2 (Normal)
JBT1	CMOS Clear	Open (Normal)
JPL1	I210 LAN1 Enable/Disable	Pins 1-2 (Enabled)
JPL2	I210 LAN2 Enable/Disable	Pins 1-2 (Enabled)
JPL3	X550 LAN1 and LAN2 Enable/Disable	Pins 1-2 (Enabled)
JPM1	ME Recovery	Pins 1-2 (Normal)
JVRM1	VRM SMB Clock (to BMC) VRM SMB DATA (to BMC)	Pins 1-2 (Normal) Pins 3-4 (Normal)

LED	Description	Status
LED1	UID LED	
LED10	M.2 LED	Blinking: Device Working
LEDBMC	BMC Heartbeat	Blinking Green: Device Working
LEDPWR	Onboard Power LED	Solid Green: Power On

Connector	Description
BT1	Onboard Battery
COM1, COM2	COM Port/COM Header
FAN1-FAN6	CPU/System Fan Headers
IPMI LAN	Dedicated IPMI LAN Port
J17	M.2 PCIe 3.0 x2 Connector (supports M-Key 2280 and 22110)
JCLPD	CPLD Programming Header
JF1	Front Control Panel Header
JIPMB1	System Management Bus Header (for IPMI only)
JL1	Chassis Intrusion Header
JNCS11	NC-SI Port Selection
JPI2C	Power Supply SMBus I ² C Header
JPWR1	24-pin ATX Power Connector (Required)
JPWR2, JPWR3	12 V 8-pin and 4-pin CPU Power Connectors
JRK1	Intel RAID Key Header
JSD1, JSD2	SATA DOM Power Connectors
JSLIM1-JSLIM5	MCIO Connectors (PCIe 5.0 x8)
JSTBY1	Standby Power Header
JTPM	Trusted Platform Module/Port 80 Connector
JUIDB1	Unit Identifier Switch
LAN1, LAN2	LAN (RJ45) Ports
SATA0-7 (Slimline SAS)	Intel PCH SATA 3.0 Ports (with RAID 0, 1, 5, and 10)
Connector	Description
SATA8, SATA9	SATA 3.0 Ports with SuperDOM Power
SXB1A, SXB1B, SXB1C	PCIe 5.0 x16 + x16 Supermicro Proprietary WIO Left Add-on Card Slots
SXB2	PCIe 5.0 x8 (In x16) Supermicro Proprietary WIO Right Add-on Card Slot
SGPIO2	Serial Link General Purpose I/O Header
USB0/1	Back Panel USB 2.0 Ports
USB2	Front Access USB 2.0 Type-A Header
USB3/4	Back Panel USB 3.2 Gen 1 Ports
USB5/6	Front Access USB 3.2 Gen 1 Headers
VGA	VGA Port

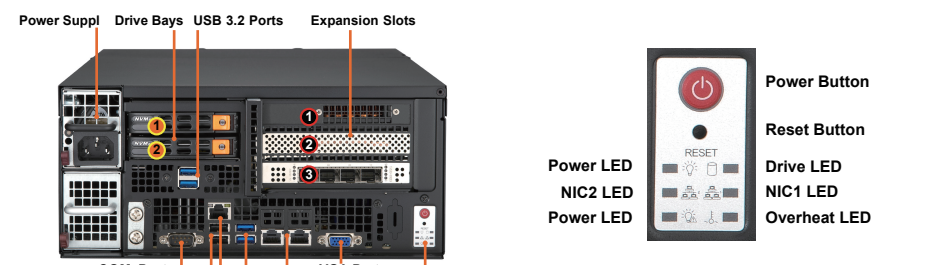
Memory Support

1 CPU, 8 DIMM Slots	
Number of DIMMs	Memory Population Sequence
1	DIMMA1 DIMME1
2	DIMMA1 / DIMMG1 DIMMC1 / DIMME1
4	DIMMA1 / DIMMG1 / DIMMC1 / DIMME1
6	DIMMA1 / DIMMG1 / DIMMC1 / DIMME1 / DIMMD1 / DIMMF1 DIMMA1 / DIMMG1 / DIMMC1 / DIMME1 / DIMMH1 / DIMMD1 / DIMMF1 DIMMA1 / DIMMG1 / DIMMB1 / DIMMH1 / DIMMD1 / DIMMF1
8	DIMMA1 / DIMMG1 / DIMMH1 / DIMMD1 / DIMMF1 / DIMMC1 / DIMME1

DDR5 Memory Support for the 5th Generation Intel® Xeon® Scalable Processors-SP					
Type	Ranks Per DIMM and Data Width (Stack)	DIMM Capacity (GB)		Speed (MT/s)	
		Memory Density 16 Gb	Memory Density 24 Gb	One DIMM per Channel *	Two DIMMs per Channel
RDIMM	SRx8 (RC D)	16 GB	24 GB ²	5600*	4400*
	SRx4 (RC C)	32 GB	48 GB ²		
	SRx4 (RC F) 9x4	NA	NA		
	DRx8 (RC E)	32 GB	48 GB ²		
	DRx4 (RC A)	64 GB	96 GB ²		
RDIMM 3DS	(4R/8R) x4 (RC A)	2H-128 GB 4H-256 GB	NA		

*Memory speed and capacity support depends on the processors used in the system.

Front View and Control Panel

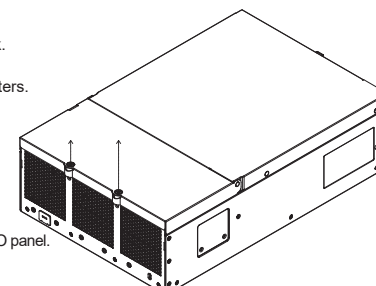


Feature	Description
Power Button	The main power switch is used to apply or remove power from the power supply to the server. Turning off system power with this button removes the main power but maintains standby power. To perform many maintenance tasks, you must unplug the system before servicing.
Reset Button	Use the reset button to reboot the system.
Power LED	Indicates power is being supplied to the system power supply units. This LED should normally be illuminated when the system is operating.
Drive LED	Indicates activity on a storage drive when flashing.
NIC2 LED	Indicates network activity on LAN port 2 when flashing.
NIC1 LED	Indicates network activity on LAN port 1 when flashing.
Power LED	Indicates power is being supplied to the system power supply units. This LED should normally be illuminated when the system is operating.
Overheat LED	Indicates an overheat condition in the system.

Accessing the System

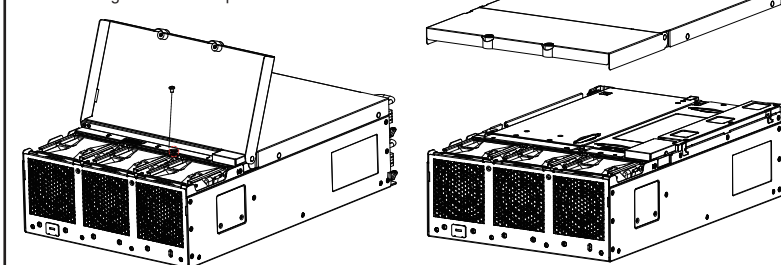
Accessing the Fans and Fan Filters

- If a lock is attached to the top cover, remove the lock.
- Remove the two screws on the fan cover.
- Flip open the fan cover to access the fans and fan filters.



Accessing the Main System

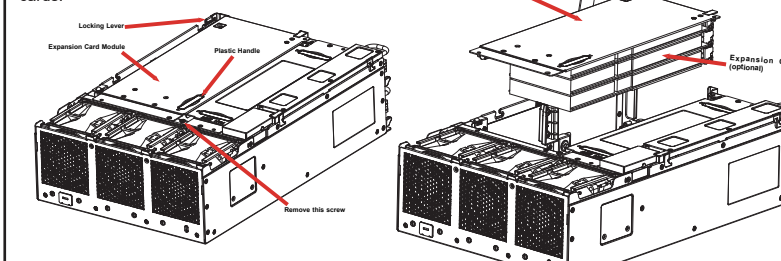
- Power down
- Remove one screw on top of the system cover near the I/O panel.
- Remove two screws on the fan cover if necessary.
- Flip open the fan cover.
- Remove the screw that has been exposed. See the figure below.
- Slightly slide the system cover towards the fans.
- Lift both segments of the top cover off the chassis.



Expansion Cards

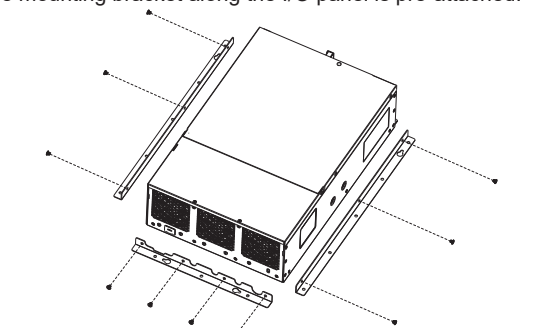
Installing Expansion Cards

- Power down the system and remove the AC power cord and the chassis cover.
- Remove the screw as shown below and set aside.
- Pull the locking lever up to release the expansion card module.
- Pull the expansion card module upward with the aid of the plastic handle.
- Set the jumper on the riser card and install expansion cards.
- Install the I/O shields for the expansion slots that are being populated.
- Connect the power cable to the expansion card if necessary.
- Reinstall the expansion card module.
- Reinstall the chassis top cover, reconnect the AC power cord and power up the system.



Mounting the Chassis on the Wall

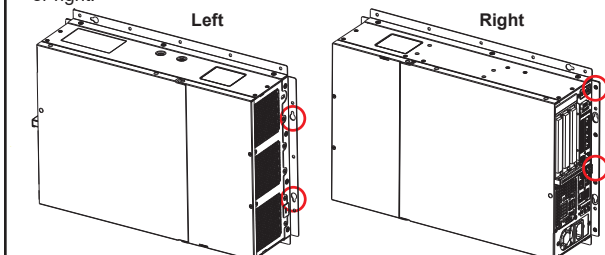
Attach the three wall mount brackets to the chassis using the ten M4xL4 screws. The mounting bracket along the I/O panel is pre-attached.



Please refer to user manual for more information.

Four Key Holes

Decide on an orientation to mount the server. The server can only be mounted with the I/O panel facing left or right.



Possible mounting orientations

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.

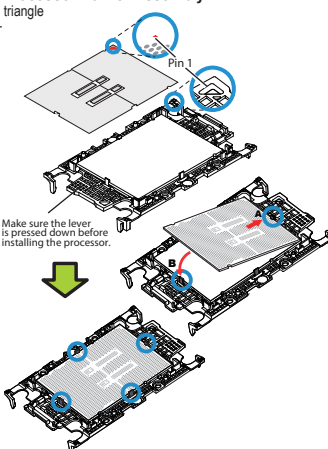
WARNING:
Always be sure all power supplies for this system have the same power output. If mixed power supplies are installed, the system will not operate.

Please clean the dust filters regularly
For more information go to: <http://www.supermicro.com/support>

Heatsink Installation

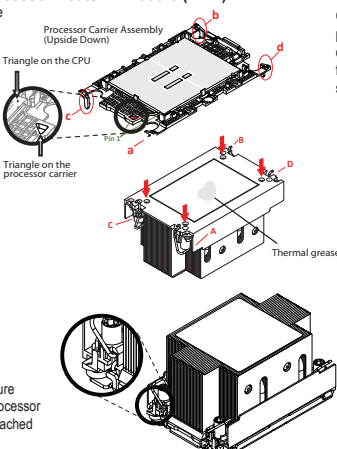
A. Creating the Processor Carrier Assembly

- Locate small gold triangle (Pin 1) on processor and corresponding hollowed triangle on carrier.
- Using the triangles as a guide, carefully align and place Point A of the processor into the carrier.
- Gently snap into place to fasten onto Point B.



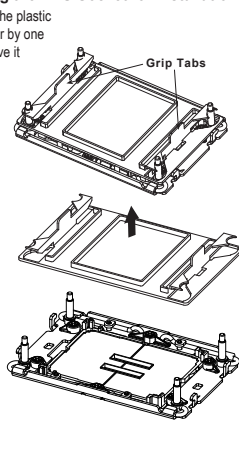
B. Assembling the Processor Heatsink Module (PHM)

- If this is a new heatsink, the thermal grease has been preapplied. Otherwise, apply the proper amount of thermal grease.
- Hold the processor carrier assembly so the processor's gold contacts are facing up, then align the holes of the processor carrier assembly with the holes on the heatsink. Press the processor carrier assembly down until it snaps into place. The plastic clips of the processor carrier assembly will lock at the four corners.
- Examine all corners to ensure that the plastic clips on the processor carrier assembly are firmly attached to the heatsink.



C. Preparing the CPU Socket for Installation

- Gently pull off the plastic protective cover by one corner to remove it from the CPU socket.



D. Installing the Process Heatsink Module

- Locate four threaded fasteners (a, b, c, d) on the CPU socket.
- Locate four PEEK nuts (A, B, C, D) and four rotating wires (1, 2, 3, 4) on the heatsink as shown below. Gently place the heatsink on the CPU socket, making sure that each nut is properly aligned with its corresponding threaded fastener.
- Press all four rotating wires outward to latch the PHM onto the CPU socket.
- With a t30-bit screwdriver, tighten all PEEK nuts in the sequence of A, B, C, and D with even pressure not greater than 8.0 in-lb. (0.904 N-m).

