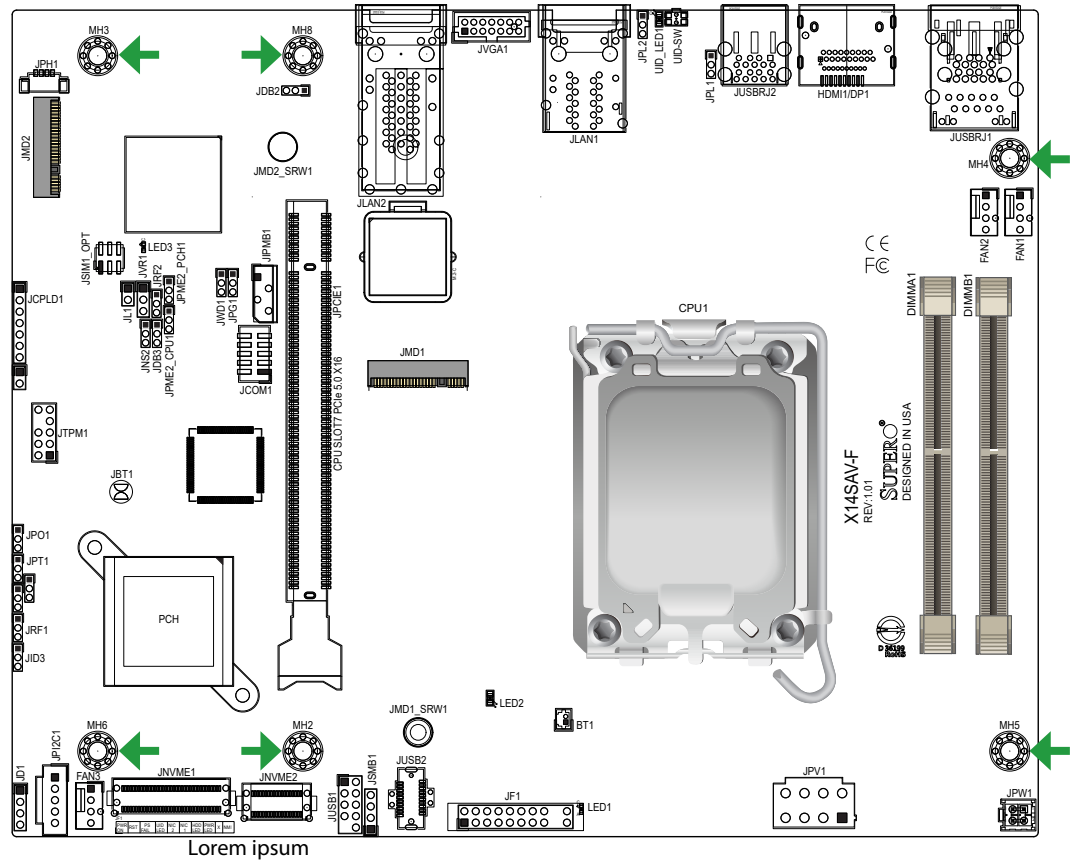




Motherboard Layout and Features



→ = mounting hole

Jumpers and Connectors

Jumpers			
Jumper	Description	Default Setting	
JBT1	CMOS Clear	Open (Normal)	
JNS2	M.2 B-Key Mode Selection	Pins 1-2 (USB 3.0) Pins 2-3 (PCIe 4.0)	
JPG1	VGA Enable/Disable	Pins 1-2 (Enabled)	
JPL1	LAN1 Enable/Disable	Pins 1-2 (Enabled)	
JPL2	LAN2 Enable/Disable	Pins 1-2 (Enabled)	
JPO1	CPU Throttle when PWR_FAIL	Pins 1-2 (Enabled) Pins 2-3 (Disabled) (Default)	
JPT1	Onboard TPM 2.0 Enable/Disable	Pins 1-2 (Enabled)	
JRF1, JRF2	PCIe Bifurcation	JRF1	JRF2
		Pins 2-3	Pins 2-3
		Pins 1-2	Pins 1-2
JSIM_OPT1	USB or PCIe Interface Optional SIM Detect M.2 B-Key Storage LED	Pins 1-3 Short (USB) Pins 2-4 Short (Low Active) Pins 5-6 Enabled	
JWD1	Watchdog Timer	Pins 1-2 (Reset)	

Connectors	
Connector	Description
BT1	CMOS Battery
FAN1-FAN3	Fan Headers
HDMI1/DP1	High Definition Multimedia Interface/DisplayPort
JCOM1	COM Header (supports RS232)
JD1	Speaker/Buzzer (Pins 1-4: Speaker, Pins 3-4: Buzzer)
JF1	Front Control Panel Header
JIPMB1	External BMC I ² C Header
JL1	Chassis Intrusion Header
JLAN1	2.5 G LAN1/2 Ports
JLAN2	10 G LAN3/4 Ports
JMD1	M.2 M-Key Slot (PCIe 5.0 x4)
JMD2	M.2 B-Key Slot (PCIe 4.0/USB 3.0)
JMD1_SRW1	M.2 Mounting Hole for JMD1
JMD2_SRW1	M.2 Mounting Hole for JMD2
JNVME1	MCIO Slot supports two PCIe x4 Connectors
JNVME2	MCIO Slot supports four SATA (or PCIe x4 by OEM BIOS)
JPCIE1	PCIe 5.0 x16 Slot
JPH1	4-pin HDD Power Connector
JPI2C1	Power System Management Bus (SMB) I ² C Header
JPV1	8-pin +12 V DC Power Connector for CPU (Required) or alternative single power input for when the 24-pin ATX is not in use.
JPW1	4-pin +12 V Power Source
JSMB1	System Management Bus Header
JTPM1	Trusted Platform Module/Port 80 Connector
JUSB1	USB 2.0 Header (USB0/1)
JUSB2	USB 3.2 (10 Gb) Header (USB6/7)

Connectors and LED Indicators

Connectors		
Connector	Description	
JUSBRJ1	BMC LAN/USB4/5 Ports (USB 3.2, 10 Gb)	
JUSBRJ2	USB 3.2 (10 Gb) Ports (USB2/3)	
JVGA1	VGA Header	
MH2-MH6, MH8	Mounting Holes	
UID_SW	Unit Identifier Button	

LED Indicators		
LED	Description	Status
LED1	Power LED	Solid Green: Power On
LED2	OH/Fan Fail LED	Blinking Red: OH/Fan fail
LED3	BMC LED	Blinking Orange: BMC Normal
UID_LED1	Unit Identifier (UID) LED	Solid Blue: Unit Identified

Processor Support

The X14SAV-TLN4F/F motherboard supports the Intel® Core Ultra 9/7/5 Series 2 Processor with a Thermal Design Power (TDP) of up to 125 W in the LGA 1851 socket.

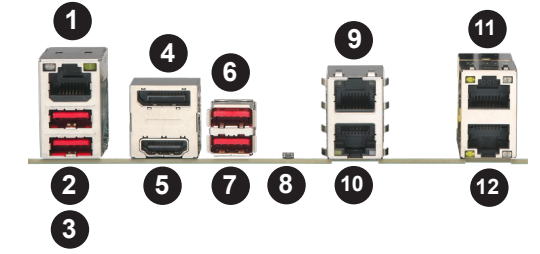
Memory Support

The motherboard supports up to 96 GB of ECC or Non-ECC DDR5 SODIMM memory with speeds of up to 5600 MT/s in two memory slots.

DIMM Memory Installation

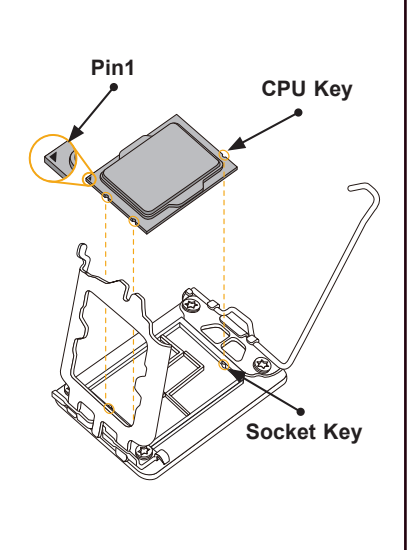
- When installing memory modules, the DIMM slots should be populated in the following order: DIMMA1, DIMMB1.
- It is recommended to use DIMM modules of the same type, size, and speed. Mixed DIMM speeds can be installed. However, all DIMMs will run at the speed of the slowest DIMM.
 - The motherboard will support odd-numbered modules. However, for best memory performance, install DIMM modules in pairs to activate memory interleaving.

I/O Ports

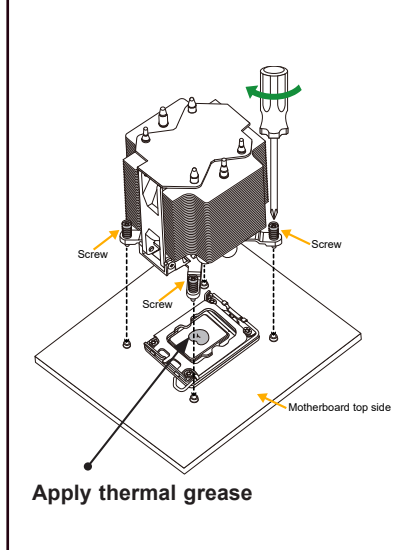


#	Description	#	Description	#	Description
1	BMC LAN Port	5	HDMI 2.1 Port	9	LAN2
2	USB4 (3.2, 10 Gb)	6	USB2 (3.2, 10 Gb)	10	LAN1
3	USB5 (3.2, 10 Gb)	7	USB3 (3.2, 10 Gb)	11	LAN4
4	DisplayPort	8	UID Button	12	LAN3

Processor Installation



Heatsink Installation



Front Control Panel (JF1)

	1	2	
PWR	Power Button	○ ○	Ground
Reset	Reset Button	○ ○	Ground
	+3.3 V	○ ○	Power Fail LED
	UID LED	○ ○	OH/Fan Fail LED
	+3.3 V Stby	○ ○	NIC2 Link LED
	+3.3 V Stby	○ ○	NIC1 Link LED
	+3.3 V	○ ○	HDD LED
	+3.3 V Stby	○ ○	PWR LED
	X	○ ○	X
	NMI	○ ○	Ground

Note: Graphics shown in this quick reference guide are for illustration only. Your components may or may not look exactly the same as drawings shown in this guide.

Note: Refer to the Component Installation section of the user manual for detailed information on jumpers, connectors, and LED Indicators.

Note: Refer to the Component Installation section of the user manual for detailed information on memory support and processor installation instructions.