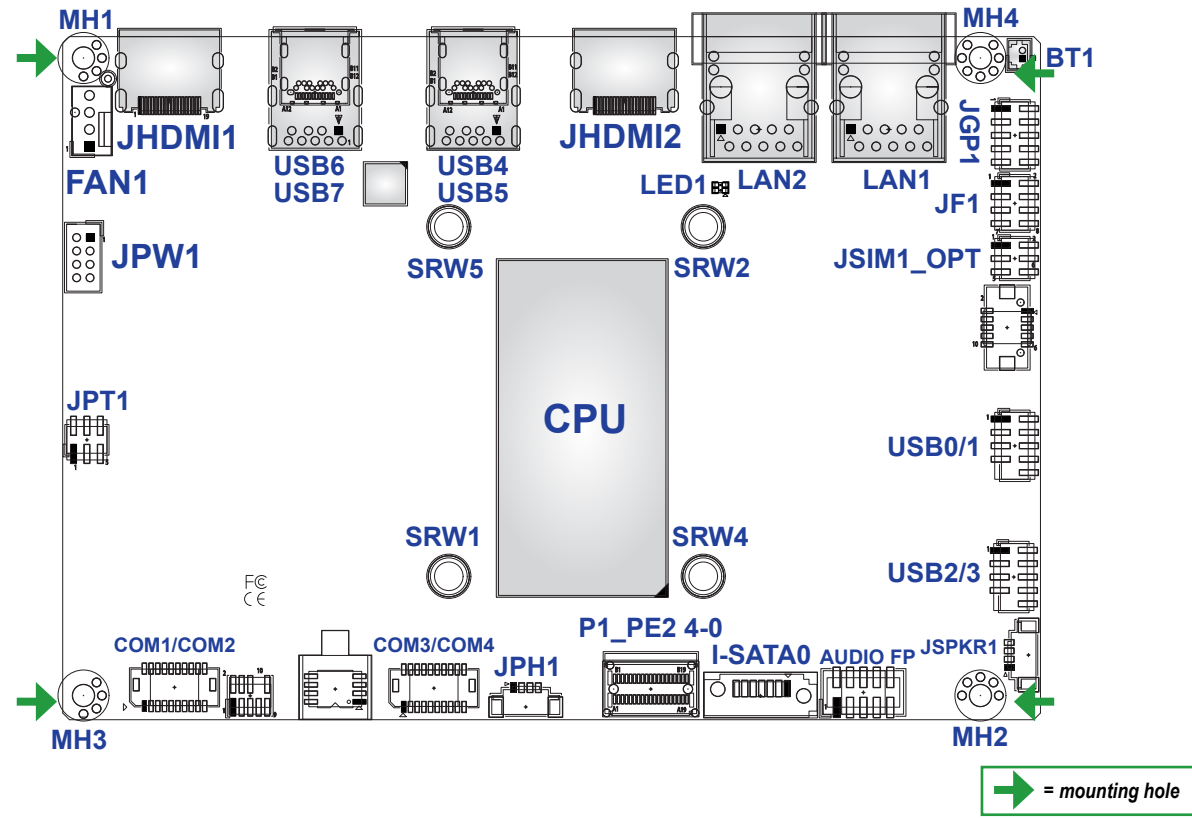


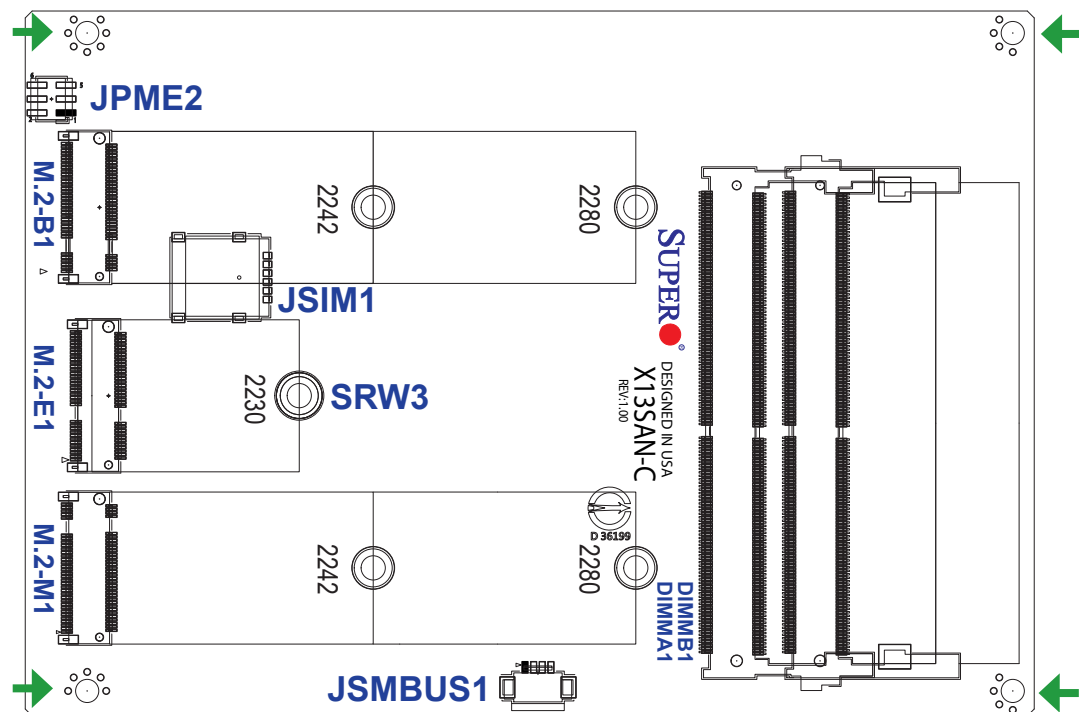


**Motherboard Layout and Features**

**Top Layout and Mechanical Drawing**



**Bottom Layout and Mechanical Drawing**



**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.

**Jumpers, LED Indicators and Connectors**

Jumpers		
Jumper	Description	Default
JPME2	CMOS Clear Manufacturing Mode	Pins 1-3 (Normal) Pins 4-6 (Normal)
JPT1	Force Power On TPM 2.0 Enable/Disable	Pins 2-4 (Force power on) Pins 1-3 (Enable)
JSIM1_OPT	SIM Detect Option 5G/LTE USB/PCIe Option M.2 B-Key Storage LED	Pins 2-4 (Low Active) Pins 1-3 (USB) Pins 5-6 (Enabled)

LED Indicators		
LED	Description	Status
LED1	Onboard Power LED	Green: System on Red: S5 or main power fail Off: System off

Connectors	
Connector	Description
BT1	Battery Cable Header
FAN1	4-pin fan header
AUDIO FP	Front panel audio header (line-out, mic-in)
COM1/COM2	COM header for two RS232/422/485
COM3/COM4	COM header for two RS232
I-SATA0	SATA 6 Gb/s port
JF1	Front Control Panel header
JGP1	8-bit General Purpose I/O header
JHDMI1	Back Panel HDMI 2.0b port
JHDMI2	Back Panel HDMI 1.4b port
JPH1	4-pin HDD power connector
JPW1	8-pin 12-24 V main power-in connector
JSIM1	Nano SIM Card slot
JSMBUS1	System Management Bus header
JSPKR1	Speaker-out with 3 W Amplifier
LAN1, LAN2	2.5G RJ45 LAN ports
M.2-B1	M.2 B-Key 2242/2280/3042 slot with a Nano SIM slot and support for SATA 6 Gb/s or PCIe 3.0 x1/USB 3.0/USB 2.0
M.2-E1	M.2 E-Key 2230 slot for PCIe 3.0 x1/USB 2.0/Intel CNVi
M.2-M1	M.2 M-Key PCIe 4.0 x4 2242/2280 slot
P1_PE2 4-0	PCIe 4.0 x4 SlimSAS Slot
USB0/1, USB 2/3	Front-accessible USB 2.0 headers for four USB 2.0 ports
USB4, USB6	USB 3.2 (10 Gb/s)/DisplayPort 1.4 Alt Mode Type-C ports on the rear I/O panel (USB6 only supports USB 3.2 signal)
USB5, USB7	USB 3.2 (10 Gb/s) Type-A ports on the rear I/O panel

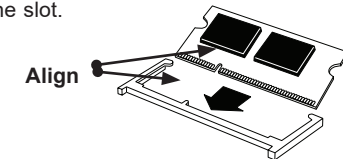
**Note:** Refer to Chapter 1 of the User Manual for detailed information on jumpers, connectors, and LED indicators.

**CPU and Memory Support**

X13SAN-H/-H-WOHS supports 12th Generation Intel® Core™ i7-1265UE.  
 X13SAN-E/-E-WOHS supports 12th Generation Intel® Core™ i5-1245UE.  
 X13SAN-L/-L-WOHS supports 12th Generation Intel® Core™ i3-1215UE.  
 X13SAN-C/-C-WOHS supports 12th Generation Intel® Celeron® 7305E.  
 The X13SAN-H/-E/-L/-C and X13SAN-H/-E/-L/-C-WOHS motherboards support up to 64 GB of Non-ECC DDR5 SO-DIMM with speeds of up to 4800 MT/s in two memory slots.

**SO-DIMM Memory Installation**

- Position the SO-DIMM module's bottom key so it aligns with the receptive point on the slot.



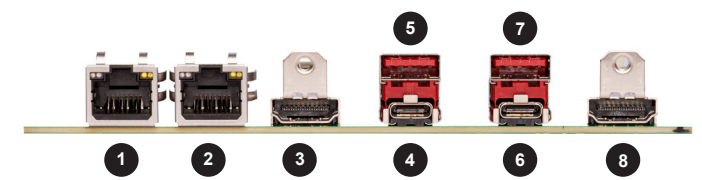
- Insert the SO-DIMM module vertically at about a 45-degree angle. Press down until the module locks into place. The side clips will automatically secure the SO-DIMM module, locking it into place.



**SO-DIMM Memory Uninstallation**

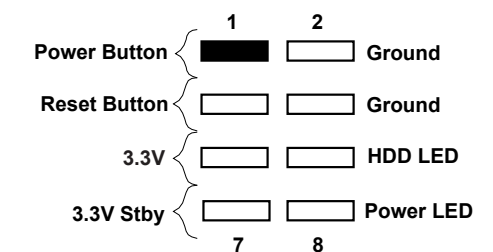
- Push the side clips at the end of slot to release the SO-DIMM module. Pull the SO-DIMM module up to remove it from the slot.

**Rear I/O Panel Connectors**



#	Definition	#	Description
1	2.5G RJ45 LAN	5	USB 3.2 Type-A
2	2.5G RJ45 LAN	6	USB 3.2/DP 1.4 Type-C
3	HDMI 1.4b	7	USB 3.2 Type-A
4	USB 3.2/DP 1.4 Type-C	8	HDMI 2.0b

**Front Control Panel (JF1)**



**Note:** Refer to Chapter 2 of the User Manual for detailed information on memory support and CPU/motherboard installation instructions.