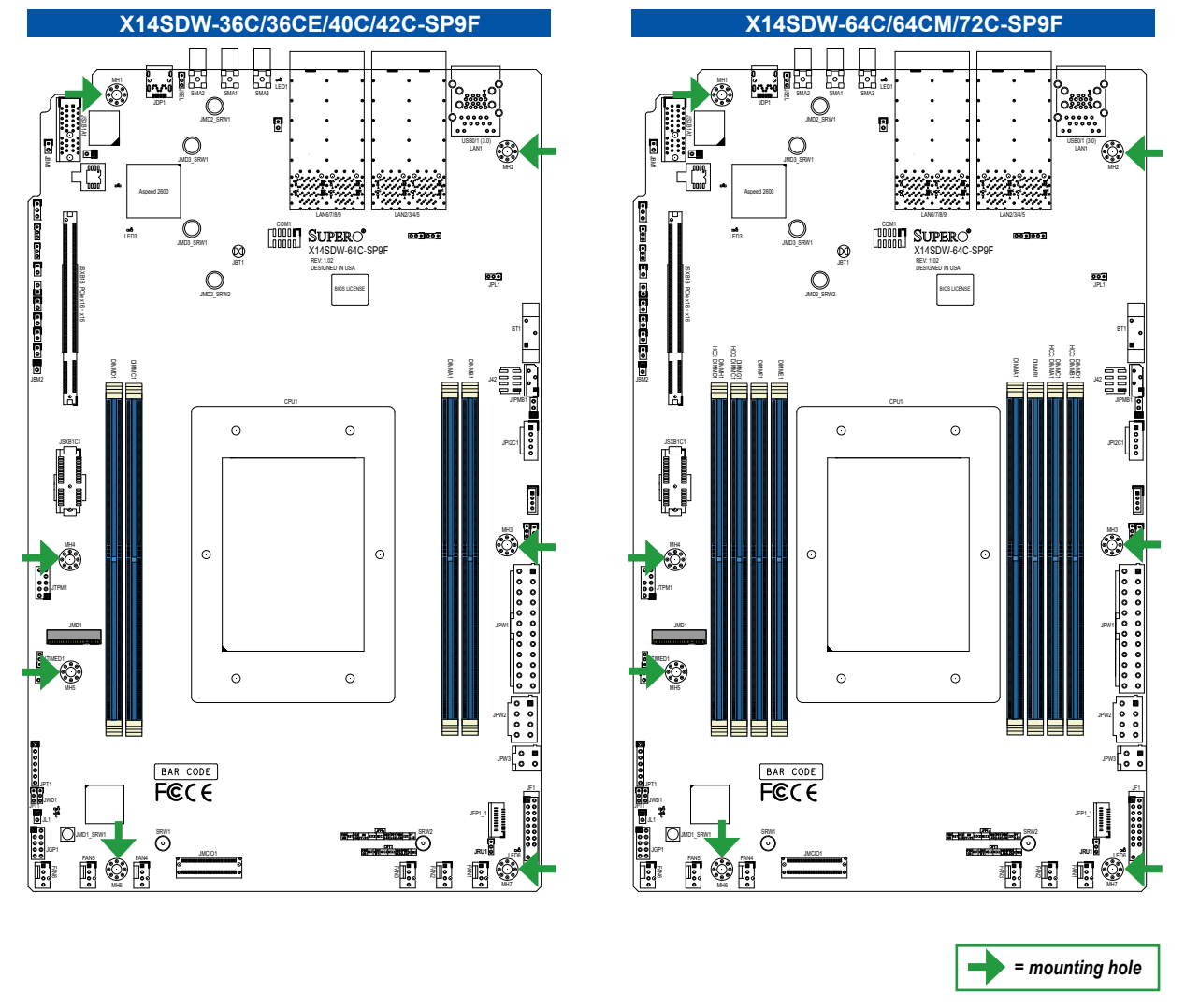


Motherboard Layout and Features



Front Control Board Header (JFP1)

1	Power Button
2	Reset/UID Button
3	UID LED_N
4	Fail LED_N (OH/FF/FP)
5	LAN-2 Activity LED
6	LAN-1 Activity LED (Aggregate all LAN)
7	Storage Drive Activity LED
8	Standby LED_N
9	PowerRoT LED_N
10	P3V3_STBY
11	GND
12	I2C Data
13	I2C Clock
14	GND
15	Power Fail LED_P
16	P5V_USB
17	P5V_USB
18	P5V_USB
19	Power Fail LED_N
20	GND

Front Control Panel (JF1)

		1	2		
PWR	Power Button	○	○	GND	
		○	○	GND	
Reset	Reset Button	○	○	X	
		○	○	OH/Fan Fail LED	
	+3.3 V	○	○	NIC2 Link LED	
	+3.3 V Stby	○	○	NIC1 Link LED	
	+3.3 V	○	○	HDD LED	
	+3.3 V Stby	○	○	PWR LED	
	X	○	○	X	
	NMI	○	○	GND	
		19	20		

Jumpers, Connectors, and LED Indicators

Jumpers		
Jumper	Description	Default Setting
JBM1	Disable IPMI Shared LAN	Pins 1-2 (Enabled)
JBM2	Disable IPMI Dedicated/Shared LAN	Pins 1-2 (Enabled)
JBT1	CMOS Clear	Open (Normal)
JPL1	LAN Enable/Disable	Pins 1-2 (Enabled)
JPT1	Onboard TPM 2.0 Enable/Disable	Pins 1-2 (Enabled)
JRU1	JFP1 Signal Select Jumper	Pins 1-2 (UID Button)
JSEL	SMA1 Voltage Select	Pins 1-2 (+3.3 V)
JWD1	Watchdog Timer	Pins 1-2 (Reset)

Connectors	
Connector	Description
BT1	Onboard Battery
COM1	COM Header
FAN1-FAN6	CPU/System Fan Headers
J42	Dry Contact
JDP1	DisplayPort 1.1
JF1	Front Control Panel Header
JFP1	Front Control Board Header
JGP1	General Purpose I/O Header
JIPMB1	4-pin BMC External I ² C Header
JL1	Chassis Intrusion Header
JMCIO1	Mini Cool Edge I/O Connector
JMD1	M.2-C PCIe 4.0 x2 Slot
JPI2C1	Power System Management Bus (SMB) I ² C Header
JPW1	24-pin ATX Main Power Connector (Required)
JPW2	8-pin +12 V CPU Power Connector (Required)
JPW3	4-pin Power Out for GPU Card
JRK1	Intel RAID Key Header
JSXB1A1	PCIe 5.0 x16 + x16 Supermicro Proprietary WIO Left Add-on Card Slot
JSXB1B	PCIe 5.0 x16 + x16 Supermicro Proprietary WIO Left Add-on Card Slot
JSXB1C1	PCIe 5.0 x16 + x16 Supermicro Proprietary WIO Left Add-on Card Slot
JTIMED1	CPU Precision Time Measurement Header
JTPM1	Trusted Platform Module/Port 80 Connector
LAN1	1G (RJ45) LAN ports
LAN2/3/4/5	25G LAN Ports
LAN6/7/8/9	25G LAN Ports
SMA1	1 PPS In
SMA2	1 PPS Out
SMA3	GNSS In
USB0/1	USB 3.0 Ports

LED Indicators		
LED	Description	Status
LED1	GNSS 1 PPS	Blinking: Receiving GNSS signal
LED3	BMC Heartbeat	Blinking Green: BMC Normal
LED6	Power LED	LED On: Onboard Power On

Processor Support

The X14SDW Series motherboard supports the Intel® Xeon® 6 SoC series, HCC, and XCC processors.

The X14SDW-36C/36CE/40C/42C-SP9F motherboards support the HCC SoC processor with a Thermal Design Power (TDP) of up to 235 W.

The X14SDW-64C/64CM/72C-SP9F motherboards support the XCC SoC processor with a Thermal Design Power (TDP) of up to 325 W.

Memory Support

HCC SoC: Supports up to 512 GB of ECC DDR5 RDIMM memory with speeds of up to 6400 MT/s in four slots.

XCC SoC: Supports up to 1 TB of ECC DDR5 RDIMM memory with speeds of up to 6400 MT/s in eight slots.

DIMM Memory Installation

When installing memory modules for HCC SoC, the DIMM slots should be populated in the following order: HCC: DIMMA1, HCC: DIMMB1, HCC: DIMMC1, and HCC: DIMMD1.

When installing memory modules for XCC SoC, the DIMM slots should be populated in the following order: DIMMA1, DIMMB1, DIMMC1, DIMMD1, DIMME1, DIMMF1, DIMMG1, and DIMMH1.

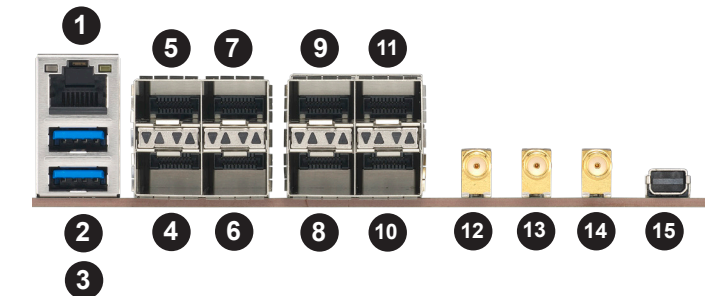
It is recommended to use DIMM modules of the same type, size, and speed. Mixed DIMM speeds can be installed. However, all DIMMs will run at the speed of the slowest DIMM. The motherboard will support odd-numbered modules. However, for best memory performance, install DIMM modules in pairs to activate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

Motherboard SKU Guidelines

X14SDW-36CE/40C/42C/64C/72C-SP9F: Equipped with Timesync and GNSS module.

X14SDW-36C/64CM-SP9F: Equipped without Timesync and GNSS module.

I/O Ports



#	Description	#	Description	#	Description
1.	LAN1	6.	LAN4	11.	LAN9
2.	USB0 (3.0)	7.	LAN5	12.	SMA3
3.	USB1 (3.0)	8.	LAN6	13.	SMA1
4.	LAN2 (NCSI support)	9.	LAN7	14.	SMA2
5.	LAN3	10.	LAN8	15.	DisplayPort 2.1