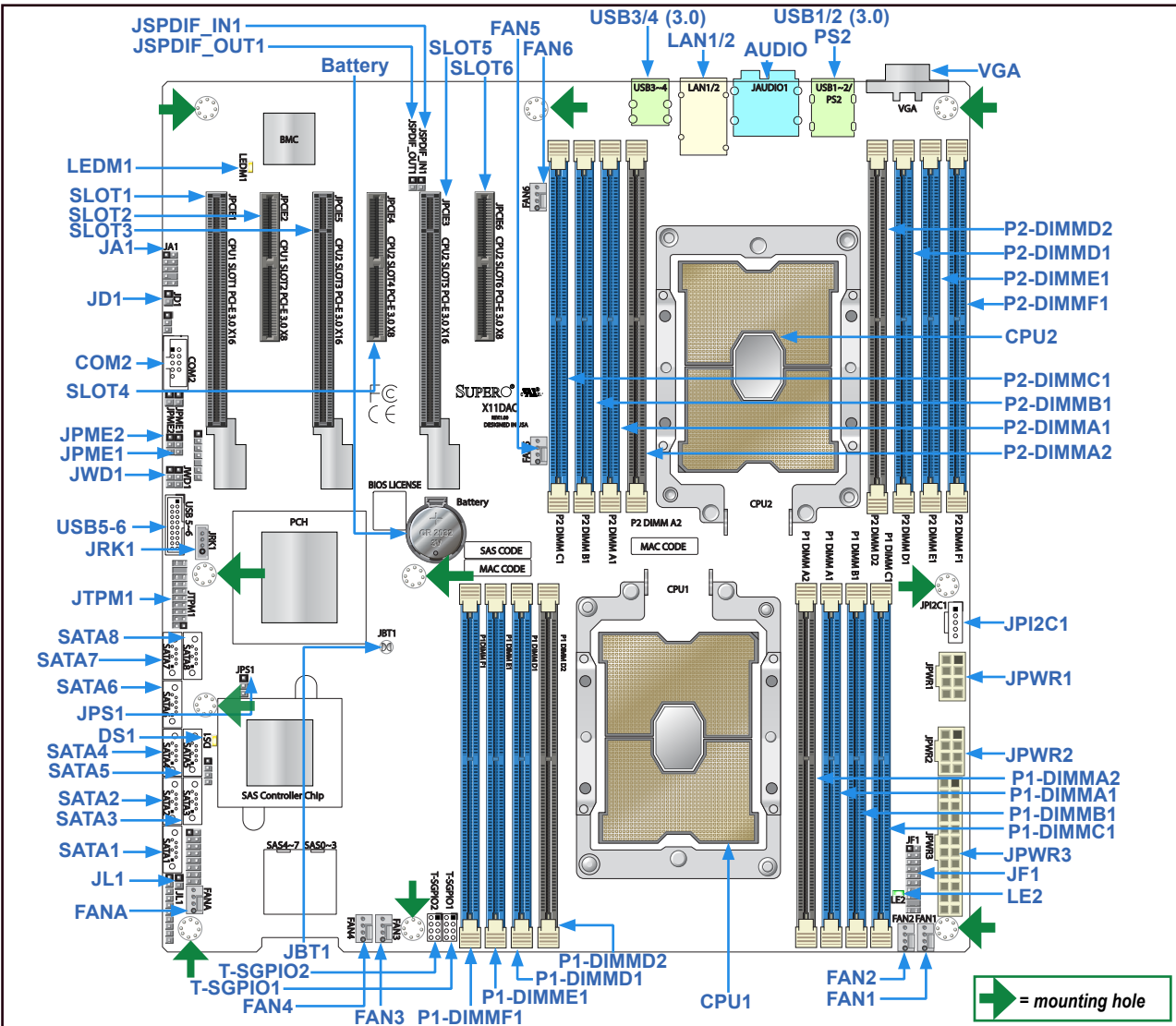


Motherboard Layout and Features



Jumpers/Connectors/LED Indicators

Jumper	Description	Default
JBT1	CMOS Clear	Open (Normal)
JPME1	ME Recovery	Pins 1-2 (Normal)
JPME2	Manufacturing Mode Select	Pins 1-2 (Normal)
JPS1	SAS Status	Pins 1-2 (Enabled)
JWD1	Watch Dog Timer Enable	Pins 1-2 (Reset)

Connectors	Description
BT1	Onboard CMOS battery socket
COM2	COM header for front access
FAN1-6, FANA	System/cooling fan headers (FAN1-6, A)
SATA0~3, SATA 4~7	SATA 3.0 headers supported by the PCH
JA1	Audio header for front access
JD1	Speaker/buzzer header (optional) (Note 1)
JF1	Front Control Panel header
JL1	Chassis Intrusion header (Note 2)
JPI ² C1	Power Supply SMBus I ² C header
JPWR1/JPWR2	8-pin Power Supply connectors
JPWR3	24-pin ATX main power supply connector
JRK1	Intel VROC RAID Key for NVMe SSD
JSPDIF_IN1/JSPDIF_OUT1	SPDIF Audio In/Out headers
JTPM1	Port 80 connector for Trusted Platform Module (TPM)
LAN1/LAN2	Dual 1GbE Ethernet ports on the IO back panel
SAS0~3	SAS Connections 0-3 supported by LSI SAS 3008 Controller
SAS4~7	SAS Connections 4-7 supported by LSI SAS 3008 Controller
SLOT1	PCI-Express 3.0 x16 Slot supported by CPU1
SLOT2	PCI-Express 3.0 x8 Slot supported by CPU1
SLOT3/SLOT5	PCI-Express 3.0 x16 Slots supported by CPU2
SLOT4/SLOT6	PCI-Express 3.0 x8 Slots supported by CPU2
T-SGPIO1/T-SGPIO2	General Purpose Serial I/O Port1/Port2
USB1/2, USB3/4	Back panel USB 3.0 Ports 1/2, 3/4
USB5/6	Front Accessible USB 3.0 header
VGA	VGA Port

LED Indicators	Description	Indicator
DS1	SAS Heartbeat LED	Blinking Green: SAS Normal
LE2	Onboard Power LED	On: Onboard power on
LEDM1	BMC Heartbeat LED	Blinking Green: BMC normal

LED Indicators	Description	Indicator
DS1	SAS Heartbeat LED	Blinking Green: SAS Normal
LE2	Onboard Power LED	On: Onboard power on
LEDM1	BMC Heartbeat LED	Blinking Green: BMC normal

Notes: 1. This feature is available when an external speaker/buzzer is used. 2. Please connect a cable from the Chassis Intrusion header at JL1 to the chassis to receive an alert via IPMI. 3. To avoid causing interference with other components, please be sure to use an add-on card that is fully compliant with the PCI-standard on a PCI slot.

CPU Support

This motherboard supports dual Intel Xeon Scalable-SP or 2nd Gen Intel Xeon Scalable-SP (Socket P) series processors with support of UltraPath Interconnect (UPI) of up to 10.4 GT/s.

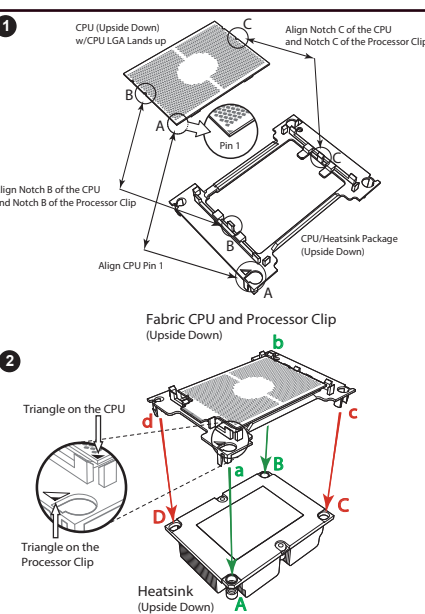
Memory Support

This motherboard supports up to 4TB of 3DS LRDIMM, LRDIMM, 3DS RDIMM, RDIMM, NV-DIMM DDR4 (288-pin) ECC 2933/2666/2400/2133 MHz memory modules in 16 slots. (Notes: 1. 2933 MHz memory is supported by 2nd Gen Intel Xeon Scalable-SP(82xx/62xx) series processors only. 2. Unbalanced memory configuration decreases memory performance and is not recommended.)

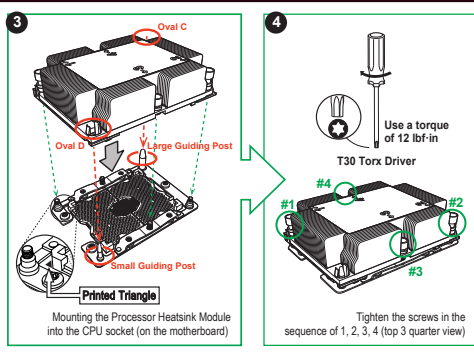
Memory Population Table for the X11DP Motherboard w/16 DIMM Slots Onboard	
When 1 CPU is used:	Memory Population Sequence
1 CPU & 1 DIMM	CPU1: P1-DIMMA1
1 CPU & 2 DIMMs	CPU1: P1-DIMMA1/P1-DIMMD1
1 CPU & 3 DIMMs	CPU1: P1-DIMMC1/P1-DIMMB1/P1-DIMMA1
1 CPU & 4 DIMMs	CPU1: P1-DIMMB1/P1-DIMMA1/P1-DIMMD1/P1-DIMME1
1 CPU & 5 DIMMs (Unbalanced: not recommended)	CPU1: P1-DIMMC1/P1-DIMMB1/P1-DIMMA1/P1-DIMMD1/P1-DIMME1
1 CPU & 6 DIMM	CPU1: P1-DIMMC1/P1-DIMMB1/P1-DIMMA1/P1-DIMMD1/P1-DIMME1/P1-DIMMF1
1 CPU & 7 DIMMs (Unbalanced: not recommended)	CPU1: P1-DIMMB1/P1-DIMMB2/P1-DIMMA1/P1-DIMMA2/P1-DIMMD1/P1-DIMME1/P1-DIMMF1
1 CPU & 8 DIMMs (Unbalanced: not recommended)	CPU1: P1-DIMMB1/P1-DIMMB2/P1-DIMMA1/P1-DIMMA2/P1-DIMMD1/P1-DIMME1/P1-DIMMF1
When 2 CPUs are used:	Memory Population Sequence
2 CPUs & 2 DIMMs	CPU1: P1-DIMMA1 CPU2: P2-DIMMA1
2 CPUs & 4 DIMMs	CPU1: P1-DIMMA1/P1-DIMMD1 CPU2: P2-DIMMA1/P2-DIMMD1
2 CPUs & 6 DIMMs	CPU1: P1-DIMMC1/P1-DIMMB1/P1-DIMMA1 CPU2: P2-DIMMC1/P2-DIMMB1/P2-DIMMA1
2 CPUs & 8 DIMMs	CPU1: P1-DIMMB1/P1-DIMMA1/P1-DIMMD1/P1-DIMME1 CPU2: P2-DIMMB1/P2-DIMMA1/P2-DIMMD1/P2-DIMME1
2 CPUs & 10 DIMMs	CPU1: P1-DIMMC1/P1-DIMMB1/P1-DIMMA1/P1-DIMMD1/P1-DIMME1/P1-DIMMF1 CPU2: P2-DIMMC1/P2-DIMMB1/P2-DIMMA1/P2-DIMMD1/P2-DIMME1
2 CPUs & 12 DIMMs	CPU1: P1-DIMMC1/P1-DIMMB1/P1-DIMMA1/P1-DIMMD1/P1-DIMME1/P1-DIMMF1 CPU2: P2-DIMMC1/P2-DIMMB1/P2-DIMMA1/P2-DIMMD1/P2-DIMME1/P2-DIMMF1
2 CPUs & 14 DIMMs (Unbalanced: not recommended)	CPU1: P1-DIMMC1/P1-DIMMB1/P1-DIMMA1/P1-DIMMA2/P1-DIMMD1/P1-DIMME1/P1-DIMMF1 CPU2: P2-DIMMC1/P2-DIMMB1/P2-DIMMA1/P2-DIMMA2/P2-DIMMD1/P2-DIMME1/P2-DIMMF1
2 CPUs & 16 DIMMs (Unbalanced: not recommended)	CPU1: P1-DIMMC1/P1-DIMMB1/P1-DIMMA1/P1-DIMMA2/P1-DIMMD1/P1-DIMME1/P1-DIMMF1 CPU2: P2-DIMMC1/P2-DIMMB1/P2-DIMMA1/P2-DIMMA2/P2-DIMMD1/P2-DIMME1/P2-DIMMF1

Notes: 1. Memory speed is dependent on the type of processors used in the system. 2. Using unbalanced memory topology such as populating two DIMMs in one channel while populating one DIMM in another channel on the same motherboard will result in reduced memory performance. 3. To avoid causing interference with other components, please be sure to use an add-on card that is fully compliant with the PCI Standards on a PCI slot card that is fully compliant with the PCI Standards on a PCI slot.

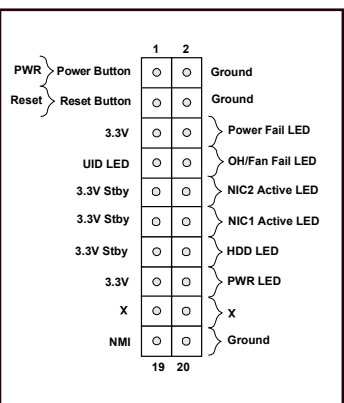
CPU/Heatsink Installation



Installing Processor/Heatsink Module



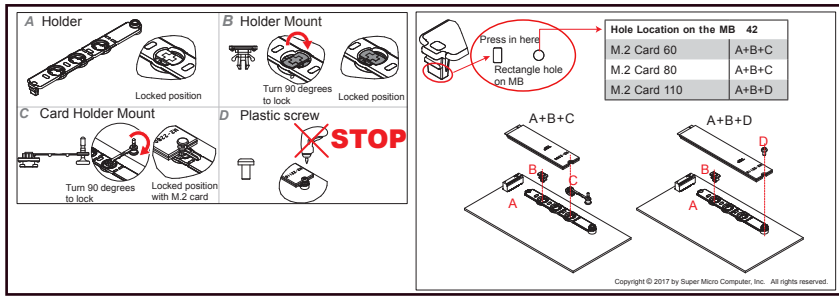
Front Control Panel (JF1)



Notes: 1. Please refer to Chapter 2 of the user's manual for detailed instructions of CPU/Heatsink and memory installation. 2. Please refer to our website at www.supermicro.com for CPU/Memory support updates. 3. All graphics shown in this quick reference guide are for illustration only. Your components



PCI-E M.2 Slot Installation



Back Panel I/O Connectors

