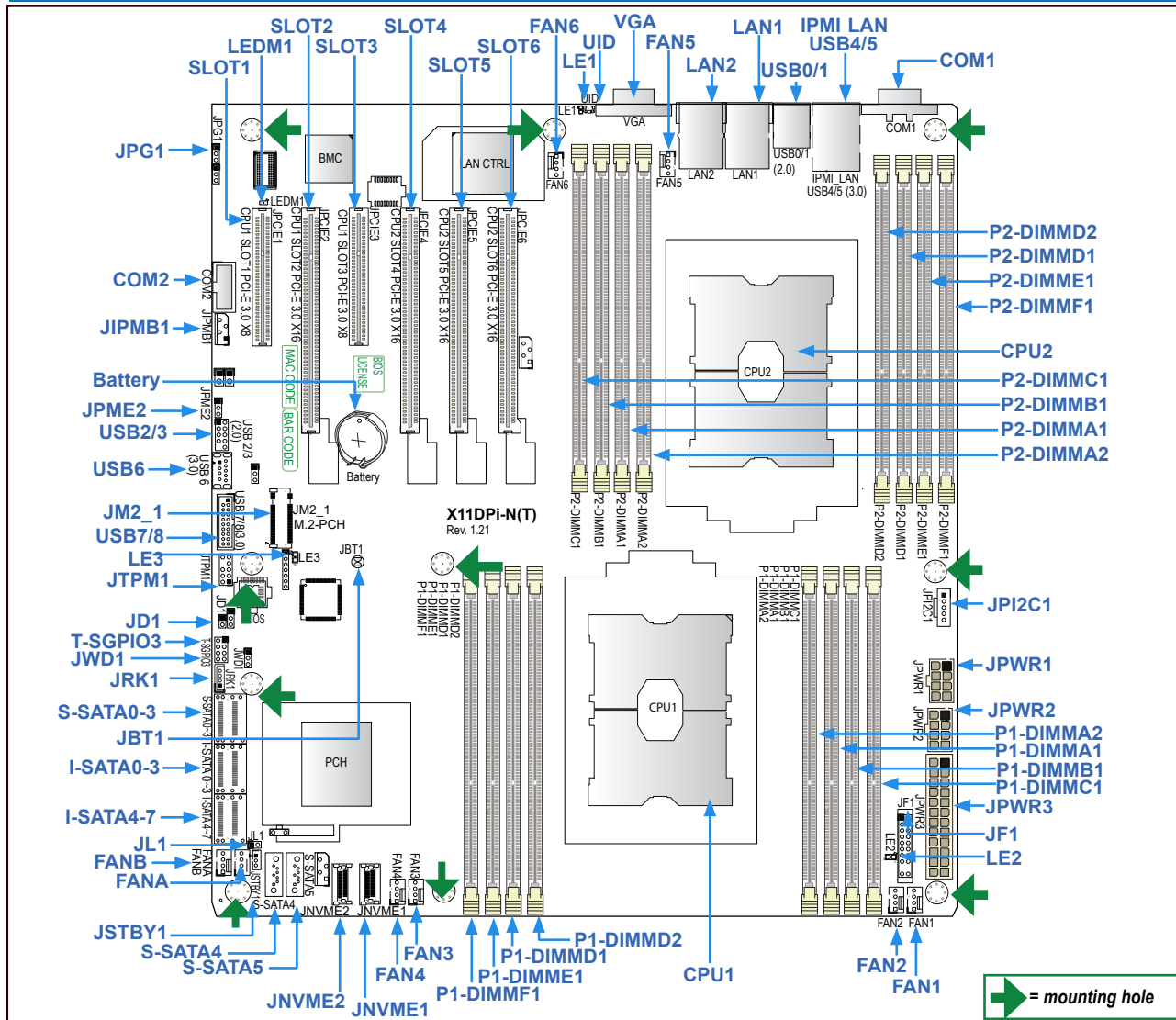
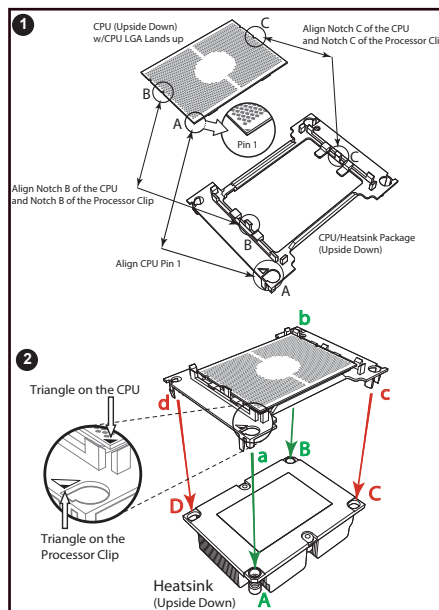




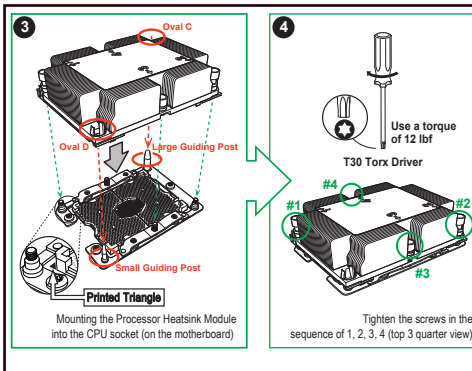
Motherboard Layout and Features



CPU/Heatsink Installation



Installing Processor/Heatsink Module



Notes: 1. Refer to Chapter 2 of the user's manual for detailed installation instructions. 2. Intel 621/x722 supports two G (1GbE) LAN ports on the X11DPi-N and two 10G (10GbE) LAN ports on the X11DPi-NT. 3. 10GbE LAN ports are for X11DPi-NT only. 4. Please refer to our website at www.supermicro.com for CPU/Memory support updates. 5. All graphics in this quick reference guide are for illustration only. Your components may or may not look the same as the graphics shown in this quick reference guide.

Front Control Panel (JF1)

Power	1	2	Ground
Reset			Ground
3.3V			Power Fail LED
UID LED			OH/Fan Fail LED
3.3V Stry			NIC2 Active LED
3.3V Stry			NIC1 Active LED
3.3V Stry			HDD LED
3.3V			PWR LED
X			X
NMI			Ground
	19	20	

Jumpers and Connectors

Jumper	Description	Default Setting
JBT1	CMOS Clear	Open (Normal)
JPG1	VGA Enable	Pins 1-2 (Enabled)
JPME2	Manufacturing Mode Select	Pins 1-2 (Normal)
JWD1	Watch Dog Timer Enable	Pins 1-2 (Reset to System)

Connector	Description
BT1	Onboard CMOS battery socket
COM1/COM2	Back panel COM port/COM header for front access
FAN1-6, FANA/FANB	System cooling fan headers (FAN1-FAN6, FAN A, FAN B)
IPMI_LAN	Dedicated IPMI_LAN port
I-SATA0~3, I-SATA4~7	SATA 3.0 connection header supported by the Intel PCH
JD1	Internal speaker/buzzer header
JF1	Front Panel Control header
JIPMB1	4-pin BMC External I ² C header (for an IPMI-supported card)
JL1	Chassis Intrusion header
JM2_1	PCI-E M.2 slot
JNVME1/JNVME2	NVMe Connector1/NVMe Connector2
JPI ² C1	Power Supply SMBbus I ² C header
JPWR1/JPWR2	8-pin power supply connectors
JPWR3	24-pin ATX main power supply connector
JRK1	Intel RAID Key header for NVMe SSD
JSTBY1	Standby power header
JTPM1	Trusted Platform Module (TPM)/Port 80 connector
LAN1/LAN2	Gigabit LAN/10G LAN Ethernet ports on the IO back panel
S-SATA0-3	S-SATA 3.0 connection Header supported by the Intel SCU
S-SATA4/S-SATA5	S-SATA Ports w/power pins built-in & support SuperDOM devices

SLOT1/SLOT3	PCI-Express 3.0 x8 Slots supported by CPU1
SLOT2	PCI-Express 3.0 x16 Slot supported by CPU1
SLOT4/SLOT5/SLOT6	PCI-Express 3.0 x16 Slots supported by CPU2
T-SGPIO3	General Purpose Serial I/O Port
UID	Unit Identifier (UID) Switch
USB0/1 & USB4/5	Back panel USB 2.0 Ports (USB0/1) & USB 3.0 Ports (USB4/5)
USB2/3	Front Accessible USB 2.0 Header
USB6	Type A USB 3.0 Header
USB7/8	Front Accessible USB 3.0 Header
VGA	VGA Port

LED Indicators

LED	Description	Status
LE1	UID (Unit Identifier) LED	Solid Blue: Unit identified
LE2	Onboard Power LED	On: Onboard power on
LE3	M.2 Active LED	On: M.2 active
LEDM1	BMC Heartbeat LED	Blinking Green: BMC normal

CPU Support

This motherboard supports dual Intel 81xx/61xx/51xx/41xx/31xx (Socket P0) series processors with support of UltraPath Interconnect (UPI) of up to 10.4 GT/s.

Memory Support

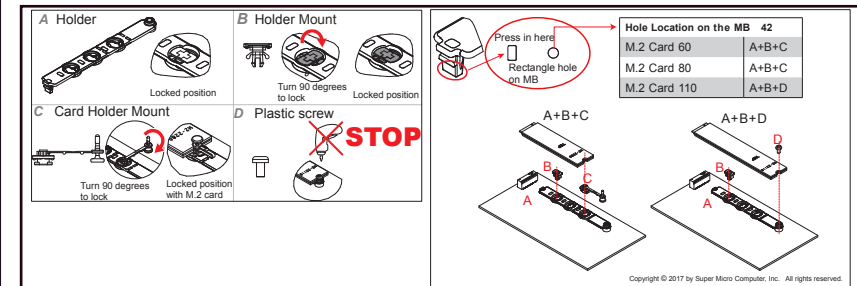
This motherboard supports up to 2TB of 3DS LRDIMM/LRDIMM/3DS RDIMM/RDIMM/ NV-DIMM DDR4 ECC 2666/2400/2133 MHz memory in 16 memory slot. Please refer to the tables below for memory population instructions.

Memory Population Table for the X11DP Motherboard w/16 DIMM Slots Onboard

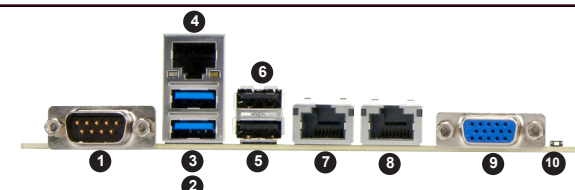
When 1 CPU is used:	Memory Population Sequence
1 CPU & 1 DIMM	CPU1: P1-DIMMA1
1 CPU & 2 DIMMs	CPU1: P1-DIMMA1/P1-DIMMD1
1 CPU & 3 DIMMs	CPU1: P1-DIMMC1/P1-DIMMB1/P1-DIMMA1
1 CPU & 4 DIMMs	CPU1: P1-DIMMB1/P1-DIMMA1/P1-DIMMD1/P1-DIMME1
1 CPU & 5 DIMMs (Unbalanced: not recommended)	CPU1: P1-DIMMC1/P1-DIMMB1/P1-DIMMA1/P1-DIMMD1/P1-DIMME1
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-DIMMD2/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-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-DIMMD2/P1-DIMMD1/P1-DIMME1/P1-DIMMF1 CPU2: P2-DIMMC1/P2-DIMMB1/P2-DIMMA1/P2-DIMMA2/P2-DIMMD2/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 will reduce memory performance. An example of unbalanced memory is populating two DIMMs in one channel while populating one DIMM in another channel on the same motherboard. 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.

PCI-E M.2 Slot Installation



Back Panel I/O Connectors



No.	Description	No.	Description
1.	COM1	6.	USB 1 (USB 2.0)
2.	USB 4 (USB 3.0)	7.	GLAN1 (X11DPi-N), 10G_LAN1 (X11DPi-NT)
3.	USB 5 (USB 3.0)	8.	GLAN2 (X11DPi-N), 10G_LAN2 (X11DPi-NT)
4.	IPMI LAN	9.	VGA
5.	USB 0 (USB 2.0)	10.	Unit Identifier Switch (UID)