CONTACT INFORMATION
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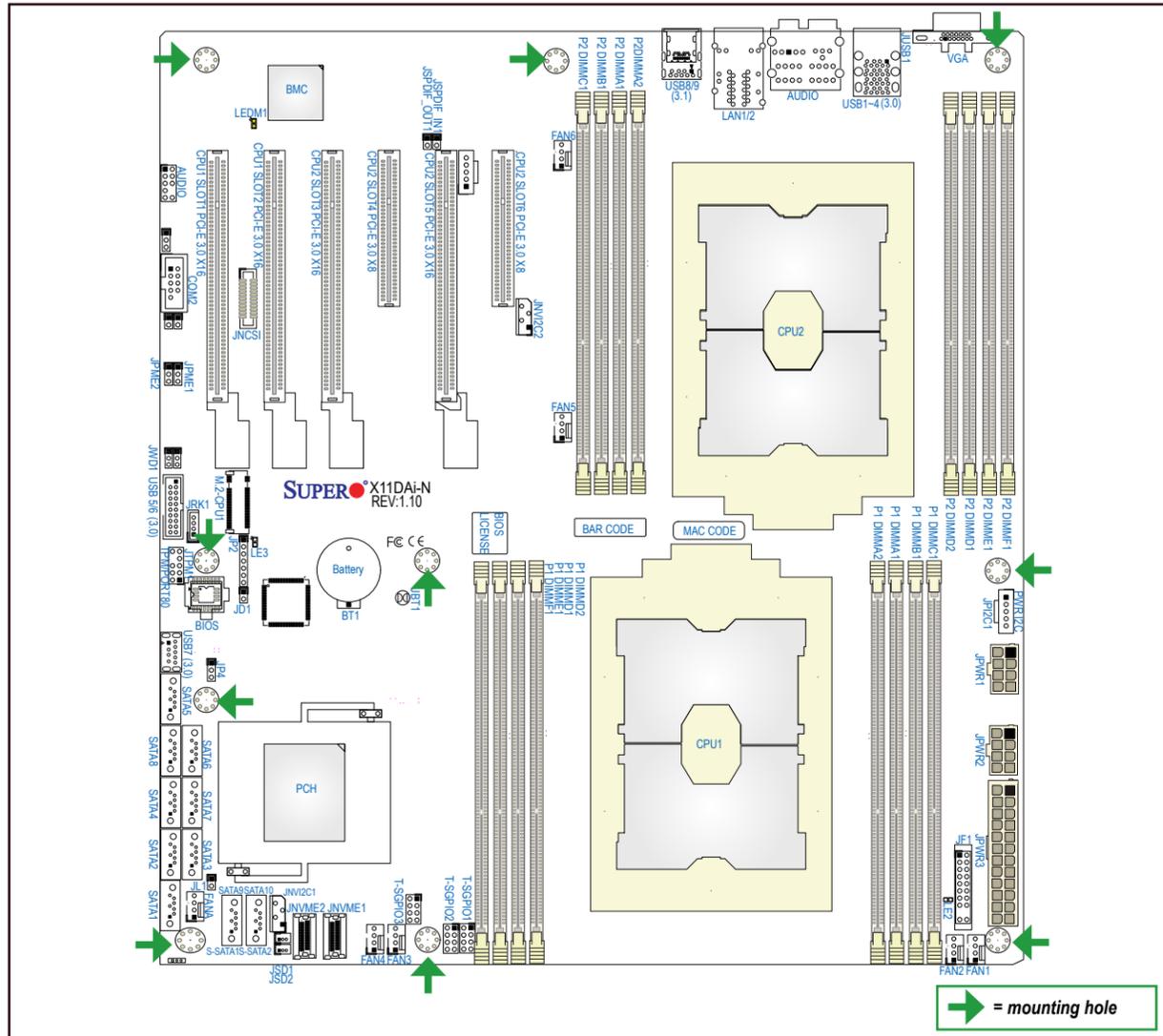**FOR YOUR SYSTEM TO WORK PROPERLY, PLEASE DOWNLOAD APPROPRIATE DRIVERS/IMAGES/USER'S MANUAL FROM THE LINKS BELOW:**
- Manuals: http://www.supermicro.com/support/manuals
- Drivers & Utilities: http://www.supermicro.com/wftp
- Safety: http://www.supermicro.com/about/policies/safety_information.cfm

PACKAGE CONTENTS
- One (1) Supermicro Motherboard
- Six (6) SATA Cables (CBL-0044L)
- One (1) I/O Shield (MCP-260-00115-ON)
- One (1) Quick Reference Guide (MNL-1957-QRG)

Motherboard Layout and Features

= mounting hole

CPU/Heatsink Installation

Installing Processor/Heatsink Module

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 may or may not look the same as the graphics shown in this quick reference guide.

Front Panel Control (JF1)

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

Jumpers, Connectors and LED Indicators

Jumpers

JBT1	CMOS Clear	Open (Normal)
JPME1	ME Recovery	Pins 1-2 (Normal)
JPME2	Manufacturing Mode Select	Pins 1-2 (Normal)
JWD1	Watch Dog Timer Enable	Pins 1-2 (Reset)

Connectors

Audio (JA1)	Audio connector for front access
Audio (JAUDIO1)	Audio port on the I/O back panel
BT1	Onboard CMOS Battery
COM2 (JCOM2)	COM/Serial Port header for front access
FAN1-6, FANA	System cooling fan headers (FAN1-FAN6, FAN A)
JD1	Speaker/buzzer header (optional) (Note1)
JF1	Front Panel Control header
JIPMB1	4-pin BMC external I²C header (for an IPMI card)
JL1	Chassis intrusion header (Note 2)
JNCSI	NCSI header
JNVI²C1/2	NVMe SMBus (I²C) headers used for PCI-E hot-plug SMBus clock & data connections. (Note 4)
JNVME1/2	NVMe slots 1/2 (Note 3)
JP2	Complex-Programmable Logical Device (CPLD) header
JP4	5V/5V AUX switch
JSD1/JSD2	SATA DOM (Disk-on-Module) power connectors 1/2
JPI²C1	Power supply SMBus I²C 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_In/Out	SPDIF Audio In/Out connectors
JTPM1	Port 80 connector for Trusted Platform Module (TPM)
LAN1/LAN2	Gigabit LAN (1G LAN) Ethernet ports on the IO back panel
M.2-CPU1	M.2 Slot supported by CPU1
SATA1~4, 5~8	SATA 3.0 connection headers supported by the Intel PCH
S-SATA1/2	Powered S-SATA connection headers w/support of SuperDOM
Slot1/Slot2	PCI-Express 3.0 X16 slots 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-SGPIO1/2/3	General Purpose Serial I/O ports 1/2/3
USB1/2/3/4 (3.0)	Backpanel USB 3.0 ports 1/2/3/4
USB7 (3.0)	Front Accessible USB 3.0 Type A connector (USB 7)
USB5/6 (3.0)	USB 3.0 connections 5/6 for front access
USB8/9 (3.1)	Back panel USB 3.1 ports 8/9
VGA	VGA port on the I/O back panel

LED Indicators

LE2	Onboard Power LED	On: Onboard power on
LE3	M.2 LED	Blinking Green: Device Working
LEDM1	BMC Heartbeat LED	Blinking Green: BMC normal

Note: 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.** When installing an NVMe device on a motherboard, please be sure to connect JNVME1 first for your system to work properly. **4.** An SMCI-proprietary NVMe add-on card and cable are required; available for a Supermicro complete system only.
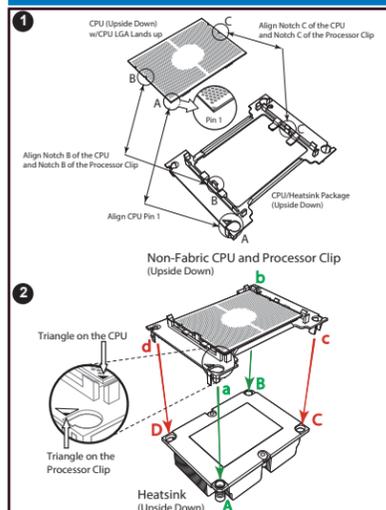
CPU Support

Dual Intel Xeon Scalable-SP or 2nd Gen Intel Xeon Scalable-SP Series processors (Socket P0); each processor supports dual full-width Intel UltraPath Interconnect (UPI) links of up to 10.4 GT/s one direction per UPI.
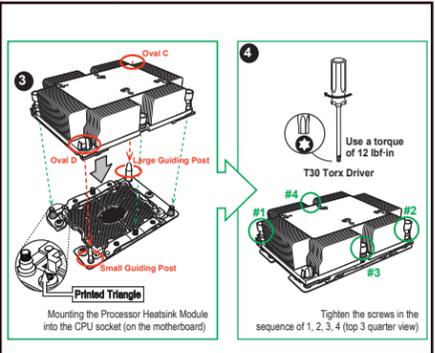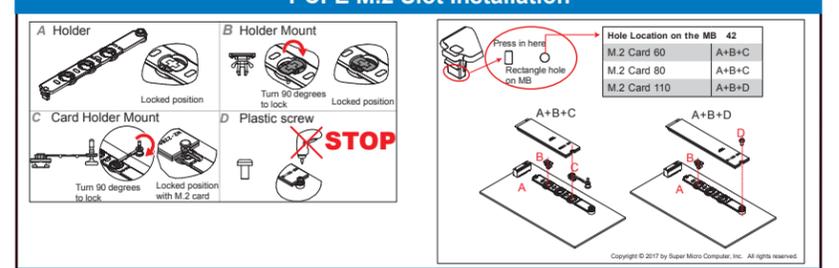
Memory Support

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.** Up to 5TB is supported with (L)RDIMM and DCPMM populated in a balanced memory configuration. **2.** 2933 MHz memory is supported by 2nd Gen Intel Xeon Scalable-SP(82xx/62xx) series processors only. **3.** Unbalanced memory configuration decreases memory performance and is not recommended.)

*1 CPU 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	CPU1: P1-DIMMC1/P1-DIMMB1/P1-DIMMA1/P1-DIMMD1/P1-DIMME1 (*Unbalanced: not recommended)
1 CPU & 6 DIMM	CPU1: P1-DIMMC1/P1-DIMMB1/P1-DIMMA1/P1-DIMMD1/P1-DIMME1/P1-DIMMF1
1 CPU & 7 DIMMs	CPU1: P1-DIMMC1/P1-DIMMB1/P1-DIMMA1/P1-DIMMA2/P1-DIMMD1/P1-DIMME1/P1-DIMMF1 (*Unbalanced: not recommended)
1 CPU & 8 DIMMs	CPU1: P1-DIMMC1/P1-DIMMB1/P1-DIMMA1/P1-DIMMA2/P1-DIMMD2/P1-DIMMD1/P1-DIMME1/P1-DIMMF1 (*Unbalanced: not recommended)
*2 CPUs 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	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 (*Unbalanced: not recommended)
2 CPUs & 16 DIMMs	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 (*Unbalanced: not recommended)

PCI-E M.2 Slot Installation

	Hole Location on the MB	
M.2 Card 60	A+B+C
M.2 Card 80	A+B+C
M.2 Card 110	A+B+D

Back Panel I/O Connectors

Back Panel I/O Ports

No.	Description	No.	Description
1.	VGA	6.	7.1 HD Audio
2.	USB 1 (USB 3.0)	7.	GLAN1
3.	USB 2 (USB 3.0)	8.	GLAN2
4.	USB 3 (USB 3.0)	9.	USB 8 (USB 3.1) type C
5.	USB 4 (USB 3.0)	10.	USB 9 (USB 3.1) type A