SUPERMICRO®
X11DDW-L/NT
QUICK REFERENCE GUIDE REV. 1.1

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
- Two (2) SATA Cables
- One (1) Quick Reference Guide

Motherboard Layout and Features
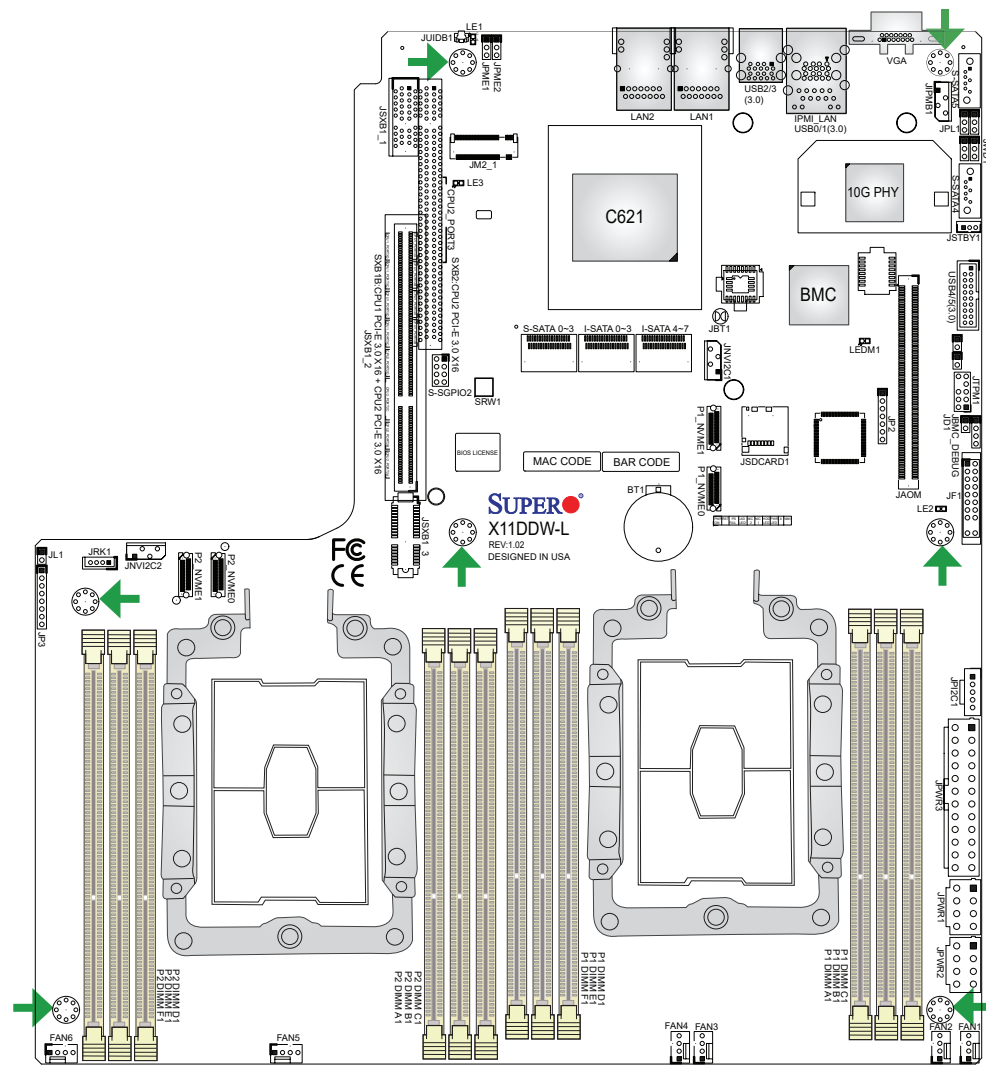
NVMe slots on -NT model only

= mounting hole

Jumpers, Connectors and LED Indicators

Jumpers

Jumper	Function	Setting
JBT1	CMOS Clear	Open (Normal)
JPL1	LAN1/LAN2 Enable	Pins 1-2 (Enabled)
JPME1	ME Recovery	Pins 1-2 (Normal)
JPME2	Manufacturing Mode (ME) Select	Pins 1-2 (Normal)
JWD1	Watch Dog Timer Enable	Pins 1-2 (Normal)

Connectors

Connector	Description
Battery (BT1)	Onboard CMOS battery
FAN1~6	System cooling fan headers
IPMI_LAN	Dedicated IPMI LAN port
JAOM	PCI-E 3.0 x16 SAS3 AOM controller slot
JD1	Speaker/buzzer header (optional) (**Note1**)
JF1	Front control panel header
JIPMB1	4-pin external BMC I²C header (for an IPMI card)
JL1	Chassis intrusion header (**Note 2**)
JM2_1	PCIe M.2 from PCH
JNVI²C1/JNVI²C2	NVMe SMBus (I²C) headers used for PCI-E hot-plug SMBus clock & data connections (**Note 3**)
JPI²C1	Power Supply SMBbus I²C header
JPWR1/JPWR2	12V 8-pin power supply connectors
JPWR3	24-pin ATX main power supply connector
JRK1	Intel VROC RAID Key for NVMe SSD
JSDCARD1	Micro SD Card slot
JSTBY1	Standby power header
JTPM1	Port 80 connector for Trusted Platform Module (TPM)
JUIDB1	Unit Identifier (UID) switch
LAN1/LAN2	Gigabit LAN (GLAN) ethernet ports on the back panel
P1_NVME0/1(-NT)	CPU1 NVM Express PCI-E 3.0 x4 ports (Note 4)
P2_NVME0/1 (-NT)	CPU2 NVM Express PCI-E 3.0 x4 ports (Note 4)
(I-)SATA0~3, 4~7	I- SATA 3.0 connectors supported by the PCH
(S-)SATA0~3	S-SATA 3.0 connectors supported by the SCU
(S-)SATA4/S-SATA5	Powered S-SATA connectors w/SuperDOM support
SXB1	PCI-E 3.0 (x16 + x16) Left Riser Card slot
SXB2	PCI-E 3.0 x16 Right Riser Card supported by CPU2
S-SGPIO2	Serial General Purpose I/O port
USB0/1	Back panel USB 3.0 ports
USB2/3	Back panel USB 3.0 ports
USB4/5	USB 3.0 headers
VGA	Back panel VGA port

LED Indicators

LED	Name	Status
LE1	UID (Unit Identifier) LED	Solid Blue: Unit Identified
LE2	Onboard Power LED	On: Onboard Power On
LE3	M.2 LED	Blinking Green: Device Working

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.** An SMCI-proprietary NVMe add-on card and cable are required; available for a Supermicro complete system only. **4.** When installing an NVMe device on a motherboard, please be sure to connect the first NVMe port (P1_NVME0) first for your system to work properly.

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.** 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.

Front Panel Control (JF1)

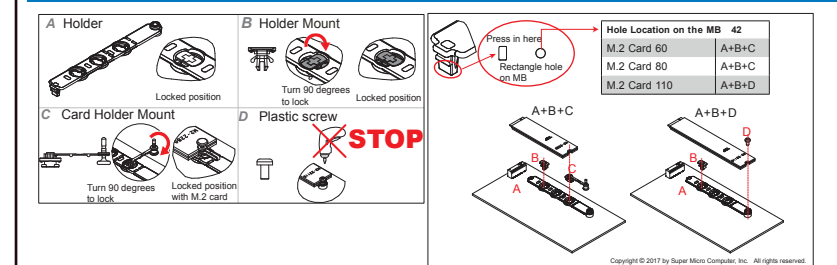|	1	2	
Power	○	○	Ground
Reset	○	○	Ground
3.3V	○	○	Power Fail LED
UID LED	○	○	OH/Fan Fail LED
3.3V	○	○	NIC2 Active LED
3.3V Stby	○	○	NIC1 Active LED
3.3V Stby	○	○	HDD LED
3.3V Stby	○	○	PWR LED
3.3V	○	○	X
X	○	○	X
NMI	○	○	Ground
	19	20	

CPU Support

This motherboard supports dual Intel Xeon Scalable-SP or 2nd Gen Intel Xeon Scalable-SP series processors (Socket P); each processor supports dual full-width Intel QuickPath Interconnect (QPI) links of up to 10.4GT/s one direction per QPI.
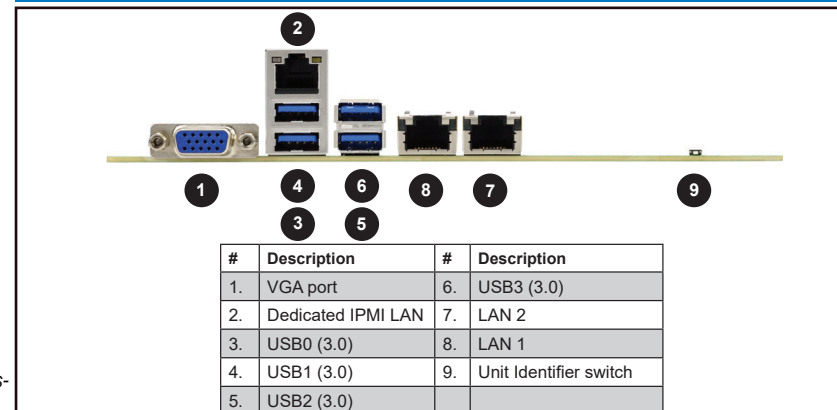
Memory Support

This motherboard supports up to 3TB of 3DS LRDIMM, LRDIMM, 3DS RDIMM, RDIMM, NV-DIMM DDR4 (288-pin) ECC 2933/2666/2400/2133 MHz memory modules in 12 slots. (**Notes: 1.** Up to 4TB 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.)

Memory Population Table

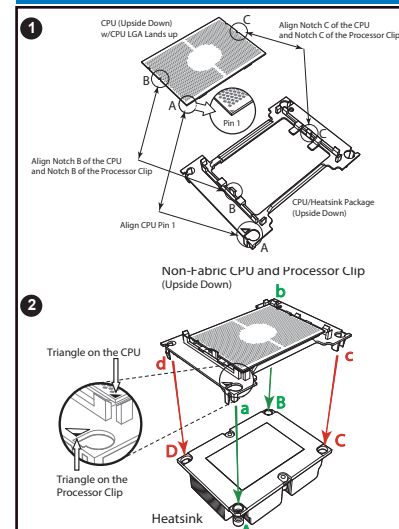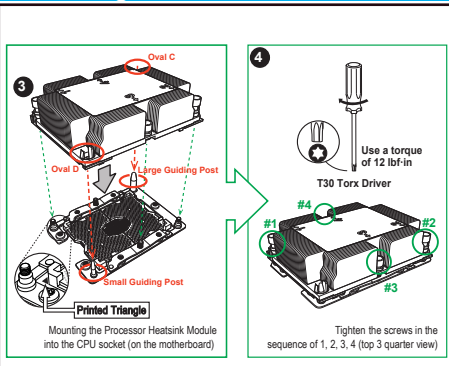| When 1 CPU is used:	CPU1: P1-DIMMA1
1 CPU & 1 DIMM	CPU1: P1-DIMMA1
1 CPU & 2 DIMMs	CPU1: P1-DIMMA1/P1-DIMMD1
1 CPU & 3 DIMMs	CPU1: P1-DIMMC1/P1-DIMMA1/P1-DIMMD1
1 CPU & 4 DIMMs	CPU1: P1-DIMMB1/P1-DIMMA1/P1-DIMMD1/P1-DIMME1
1 CPU & 5 DIMMs (Unbalanced: not recomended)	CPU1: P1-DIMMC1/P1-DIMMB1/P1-DIMMA1/P1-DIMMD1/P1-DIMME1
1 CPU & 6 DIMM	CPU1: P1-DIMMC1/P1-DIMMB1/P1-DIMMA1/P1-DIMMD1/P1-DIMME1/P1-DIMMF1
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

PCI-E M.2 Slot Installation

Hole Location on the MB	42
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

#	Description	#	Description
1.	VGA port	6.	USB3 (3.0)
2.	Dedicated IPMI LAN	7.	LAN 2
3.	USB0 (3.0)	8.	LAN 1
4.	USB1 (3.0)	9.	Unit Identifier switch
5.	USB2 (3.0)		