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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: <https://www.supermicro.com/wdl/driver>
- Safety: http://www.supermicro.com/about/policies/safety_information.cfm

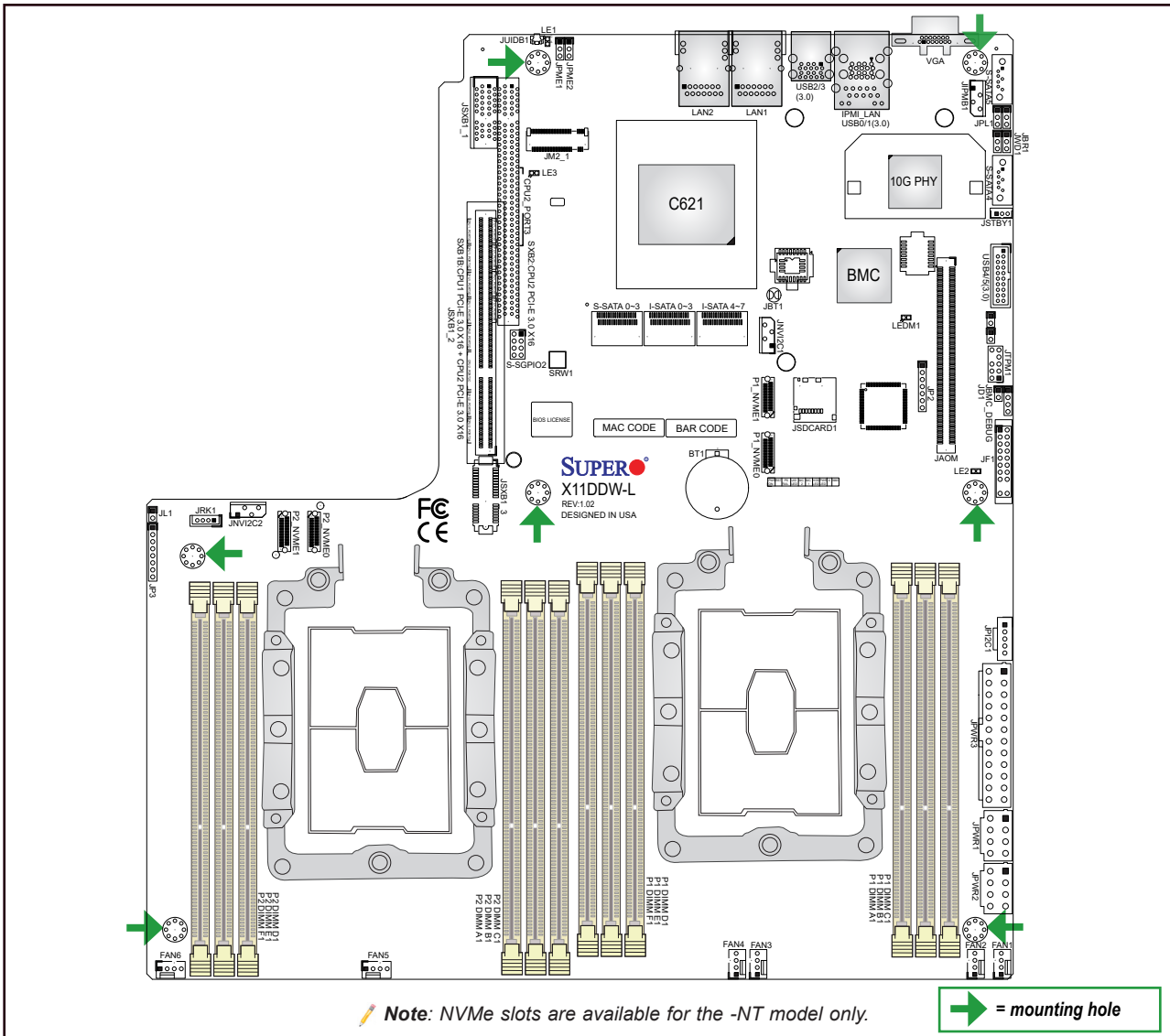
PACKAGE CONTENTS

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



WARNING: This product can expose you to chemicals including lead, known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov.

Motherboard Layout and Features



Note: NVMe slots are available for the -NT model only.

→ = mounting hole

Jumpers, Connectors and LED Indicators

Jumpers		
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		
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 I ² C header (for an IPMI card)	
JL1	Chassis intrusion header (Note 2)	
JM2_1	PCIe M.2 from PCH	
JNVI ² C1/JNVI ² C2	NVMe SMBus (I ² C) headers used for PCI-E hot-plug SMBus clock & data connections (Note 3)	
JPI ² C1	Power Supply SMBbus I ² C 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		
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
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. 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 Support

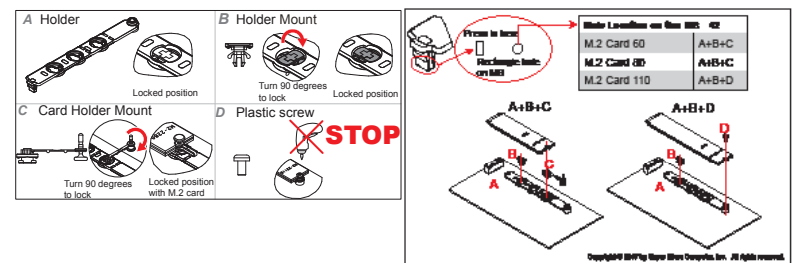
This motherboard supports dual Intel Xeon Scalable-SP or 2nd Gen Intel Xeon Scalable-SP series processors (Socket P); each processor supports dual full-width Intel QuickPath Interconnect (QPI) links of up to 10.4GT/s one direction per QPI.

Memory Support

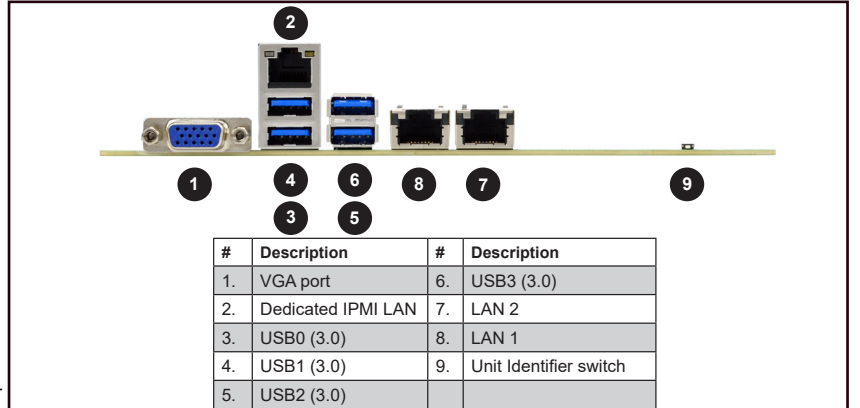
This motherboard supports up to 3TB of 3DS LRDIMM, LRDIMM, 3DS RDIMM, RDIMM, NV-DIMM DDR4 (288-pin) ECC 2933/2666/2400/2133 MHz memory modules in 12 slots. (Notes: 1. Up to 4TB is supported with (L)RDIMM and DCPMM populated in a balanced memory configuration. 2. 2933 MHz memory is supported by 2nd Gen 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:	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
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



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)		