CONTACT INFORMATION

- Website: www.supermicro.com
- General Information: marketing@supermicro.com
- **QUICK REFERENCE GUIDE REV. 1.0c** Technical Support: support@supermicro.com
   Phone: +1 (408) 503-8000, Fax: +1 (408) 503-8008

FOR YOUR SYSTEM TO WORK PROPERLY, PLEASE DOWNLOAD APPROPRIATE DRIVERS/IMAGES/USER'S MANUAL FROM THE LINKS BELOW:

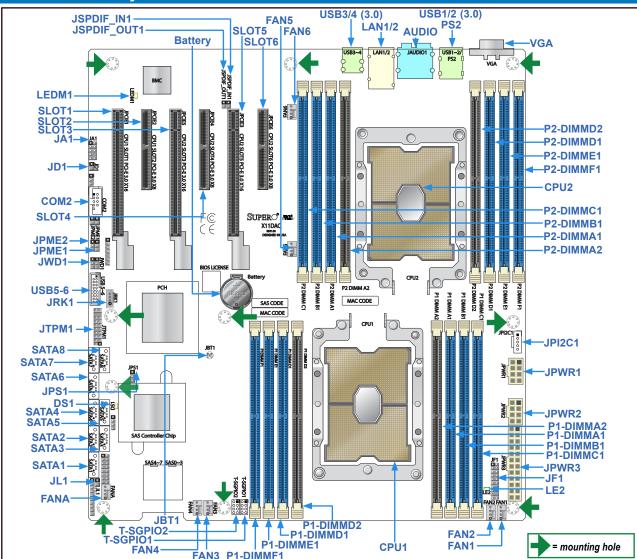
- Manuals: http://www.supermicro.com/support/manuals
- Drivers & Utilities: http://www.supermicro.com/wftp
- Safety: http://www.supermicro.com/about/policies/safety\_information.cfm

#### PACKAGE CONTENTS

- One (1) Supermicro Motherboard
- Six (6) SATA Cables
- One (1) I/O Shield • One (1) Supermicro QRG
- 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.



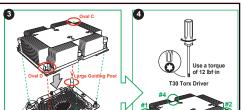
**Motherboard Layout and Features** 



## **CPU/Heatsink Installation**

Fabric CPU and Processor Clip

2



Mounting the Processor Heatsink Module into the CPU socket (on the motherboard)

Installing Processor/Heatsink Module	
	1 2
Oval C	PWR Power Button O Ground
	Reset > Reset Button O O Ground
	3.3V O O Power Fail LED
Use a torque	UID LED O O OH/Fan Fail LED
Oval D VLarge Guilding Post T30 Torx Driver	3.3V Stby O O NIC2 Active LED
#4	3.3V Stby O NIC1 Active LED
	3.3V Stby O O HDD LED
	3.3V O O PWR LED
Small Guiding Post #3	x o o >x
Printed Triangle	NMI O O Ground
Mounting the Processor Heatsink Module Tighten the screws in the	

**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

طراحان شبسکه آرکسنا ARKA NETWORK DESIGNERS arkanetwork.com

# **Jumpers/Connectors/LED Indicators**

Jumper						
JBT1	CMOS Clear			Open (Normal)		
JPME1	ME Recovery			Pins 1-2 (Normal)		
JPME2	Manufacturing Mode Select		t	Pins 1-2 (Normal)		
JPS1	SAS Statu	IS		Pins 1-2 (Enabled)		
JWD1	Watch Do	g Timer Enable		Pins 1-2 (Reset)		
Connectors						
BT1	Onboard CMOS battery socket					
COM2		COM header for front access				
FAN1-6, FANA		System/cooling fan header		s (FAN1-6, A)		
SATA0~3, SATA 4	~7 SATA 3.0 headers supporte		ers supporte	ed by the PCH		
JA1		Audio header for front access				
JD1		Speaker/buzzer header (optional) (Note 1)		otional) (Note 1)		
JF1	Front Control Panel header		r			
JL1		Chassis Intrusion header (Note 2)				
JPI <sup>2</sup> C1		Power Supply SMBus I <sup>2</sup> 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/JSPD	PDIF_IN1/JSPDIF_OUT1 SPDIF Audio In/Out headers		rs			
JTPM1		Port 80 connector for Trusted Platform Module (TPM)				
LAN1/LAN2		Dual 1GbE Ethernet ports on the IC		on the IO back panel		
SAS0~3		SAS Connections 0-3 supported by LSI SAS 3008 Con		orted by LSI SAS 3008 Controller		
SAS4~7		SAS Connections 4-7 supported by LSI SAS 3008 Controlle				
SLOT1		PCI-Express 3.0 x16 Slot supported by CPU1		supported by CPU1		
SLOT2	T2 PCI-Express 3.0		x8 Slot supported by CPU1			
SLOT3/SLOT5		PCI-Express 3.0 x16 Slots supported by CPU2		supported by CPU2		
SLOT4/SLOT6		PCI-Express 3.0 x8 Slots supported by CPU2		supported by CPU2		
T-SGPIO1/T-SGPI	O2	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	SA VGA Port					
LED Indicators						
DS1			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.

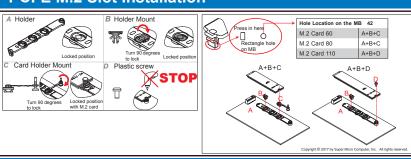
### **Memory Support**

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.)

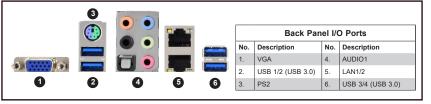
Memory Population Table for the X11DP Motherboard w/16 DIMM Slots Onboard			
When 1 CPU is used:	Memory Population Sequence		
1 CPU & 1 DIMM	CPU1: P1-DIMMA1		
1 CPU & 2 DIMMs	CPU1: P1-DIMMA1/P1-DIMMD1		
1 CPU & 3 DIMMs	CPU1: P1-DIMMC1/P1-DIMMB1/P1-DIMMA1		
1 CPU & 4 DIMMs	CPU1: P1-DIMMB1/P1-DIMMA1/P1-DIMMD1/P1-DIMME1		
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-DIMMD2/P1-DIMMD1/P1-DIMME1/P1-DIMMF		
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-DIMMF CPU2: P2-DIMMC1/P2-DIMMB1/P2-DIMMA1/P2-DIMMA2/P2-DIMMD2/P2-DIMMD1/P2-DIMME1/P2-DIMMF		

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

#### **PCI-E M.2 Slot Installation**



## **Back Panel I/O Connectors**



MNL-2082-QRG-10c