

SUPERMICR[®]

X11SPW-CTF/-TF

Quick Reference Guide 1.1a

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

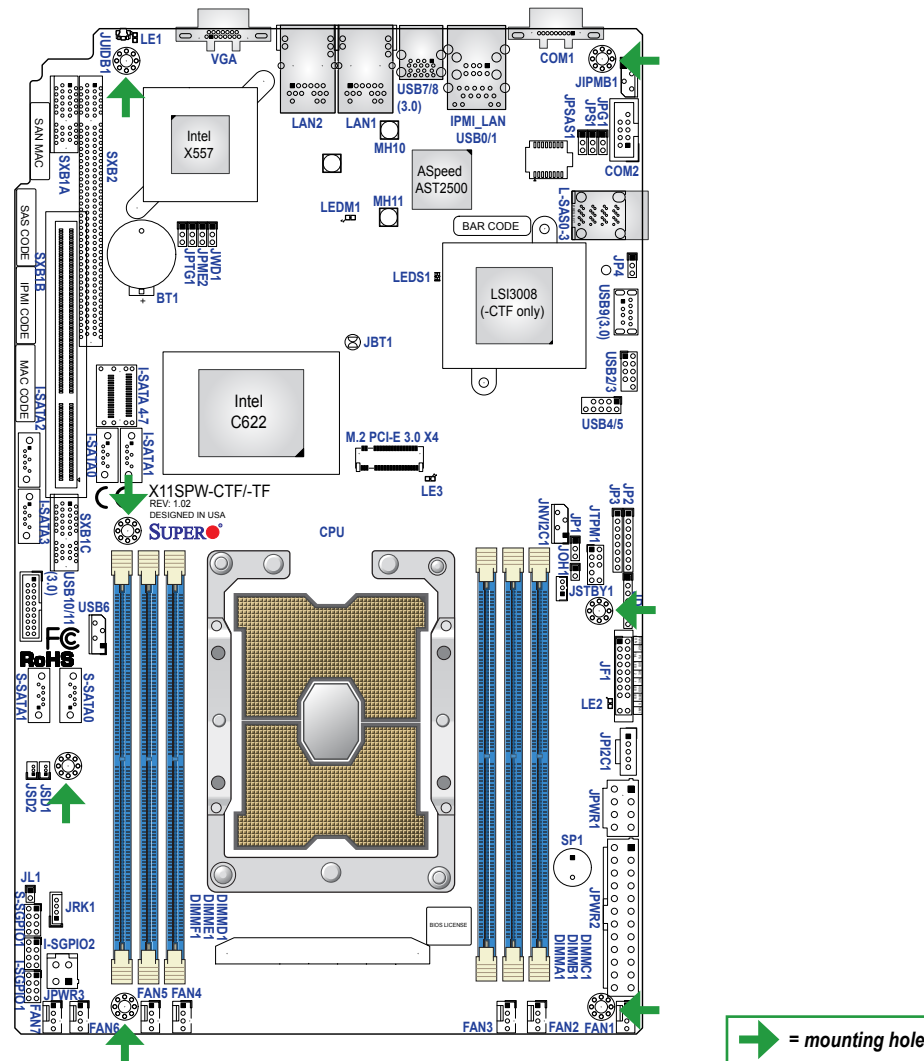
PACKAGE CONTENTS

- One (1) Supermicro Motherboard
- Six (6) SATA Cables
- One (1) Quick Reference Guide



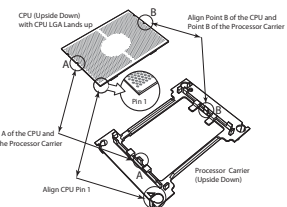
WARNING: This product can expose you to chemicals including lead, known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov.

Motherboard Layout and Features

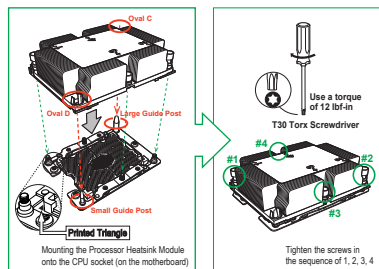


CPU and PHM Installation

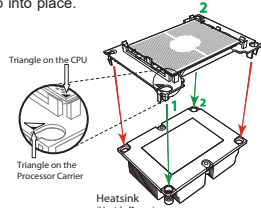
- 1 Assemble the processor carrier assembly by inserting the CPU into the processor carrier.



- 3 After assembling the PHM, mount it onto the CPU socket of the motherboard. Use a T-30 Torx-bit screwdriver to gradually install four screws into the mounting holes from #1-4.



- 2 To form the processor heatsink module (PHM), mount the processor carrier assembly onto the heatsink and snap into place.



Front Control Panel (JF1)

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

Connectors and LED Indicators

Connectors		
Connector	Description	
BT1	Onboard Battery	
COM1, COM2	COM Port, COM Header	
FAN1 ~ FAN7	System Fan Headers	
IPMI_LAN	Dedicated IPMI LAN Port	
I-SATA0~7	Intel® PCH SATA 3.0 Ports (with RAID 0, 1, 5, 10)	
I-SGPIO1, I-SGPIO2, S-SGPIO1	Serial Link General Purpose I/O Headers	
JD1	Speaker/Power LED Indicator (Pins 1-3: Power LED, Pins 4-7: Speaker)	
JF1	Front Control Panel Header	
JIPMB1	4-pin BMC External I²C Header (for an IPMI card)	
JL1	Chassis Intrusion Header	
JNV²C1	NVMe I²C Header	
JOH1	Overheat LED Header	
JPI²C1	Power System Management Bus (SMB) I²C Header	
JPWR1	8-pin 12V DC Power Connector for CPU (Required)	
JPWR2	24-pin ATX Power Connector	
JPWR3	4-pin 12V Power Connector for GPU Card (Requires an extra 12V power at up to 75W)	
JRK1	Intel RAID Key Header	
JSD1, JSD2	SATA DOM Power Connectors	
JSTBY1	Standby Power Header	
JTPM1	Trusted Platform Module (TPM)/Port 80 Connector	
JUIDB1	Unit Identifier (UID) Switch	
LAN1, LAN2	10GbE LAN Ports	
L-SAS0~3	Four SAS 3.0 Ports (with RAID 0, 1, 10) (X11SPW-CTF only)	
M.2	M.2 PCI-E 3.0 x4 or SATA 3.0 Slot	
MH10, MH11	M.2 Mounting Holes	
SP1	Internal Speaker/Buzzer	
S-SATA0~1	SATA 3.0 Ports with SATA DOM Power	
SXB1A, SXB1B, SXB1C	Supermicro Proprietary WIO Left Add-on Card Slots	
SXB2	Supermicro Proprietary WIO Right Add-on Card Slot	
USB0/1	Back Panel Universal Serial Bus (USB) 2.0 Ports	
USB2/3, USB4/5	Front Accessible USB 2.0 Headers	
USB6	USB 2.0 Header (Not customized for the front panel)	
USB7/8	Back Panel USB 3.0 Ports	
USB9	USB 3.0 Type-A Header	
USB10/11	Front Accessible USB 3.0 Header	
VGA	VGA Port	
LED Indicators		
LED	Description	Status
LE1	Unit Identifier (UID) LED	Solid Blue: Unit Identified
LE2	Onboard Power LED	Solid Green: Power On
LE3	M.2 LED	Blinking Green: Device Working
LEDM1	BMC Heartbeat LED	Blinking Green: BMC Normal
LEDS1	SAS Activity LED	Blinking Green: SAS Active Solid Red: SAS Error

Note: Refer to Chapter 1 of the User Manual for detailed information on jumpers, connectors, and LED indicators.

Jumpers

Jumpers		
Jumper	Description	Default
JBT1	CMOS Clear	Open (Normal)
JPG1	VGA Enable/Disable	Pins 1-2 (Enabled)
JPME2	ME Manufacturing Mode	Pins 1-2 (Normal)
JPS1	SAS 3.0 Enable/Disable	Pins 1-2 (Enabled)
JPSAS1	SAS HDD Enable/Disable	Pins 1-2 (Enabled)
JPTG1	LAN Enable/Disable	Pins 1-2 (Enabled)
JWD1	Watchdog Timer	Pins 1-2 (Reset)

CPU Support

The X11SPW-CTF/-TF supports the Intel® Xeon 81xx/61xx/51xx/41xx/31xx and 82xx/62xx/52xx/42xx/32xx series (Socket P0-LGA3647) processors with up to 28 cores and a thermal design power (TDP) of up to 205W.

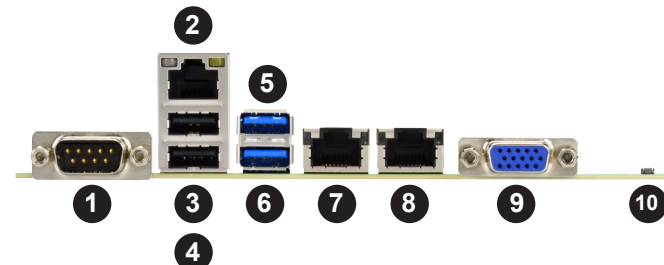
Memory Support and Installation

The X11SPW-CTF/-TF supports up to 384GB of RDIMM, 768GB of LRDIMM, and 1.5TB of 3DS LRDIMM DDR4 (288-pin) ECC memory with speeds of up to 2933MHz in six memory slots. See below for additional memory information.

- Always use DDR4 memory of the same type, size and speed. Mixed DIMM speeds can be installed. However, all DIMMs will run at the speed of the slowest DIMM.
- The motherboard will support odd-numbered modules (one or three modules installed). However, to achieve the best memory performance, a balanced memory population is recommended.
- Memory capacity and frequency is CPU dependent.
- 2933MHz memory is supported by the 82xx/62xx series processors.

1 CPU, 6-DIMM Slots	
Number of DIMMs	Memory Population Sequence
1	DIMMA1
2	DIMMA1 / DIMMD1
3	DIMMC1 / DIMMB1 / DIMMA1
4	DIMMB1 / DIMMA1 / DIMMD1 / DIMME1
5	DIMMC1 / DIMMB1 / DIMMA1 / DIMMD1 / DIMME1
(Unbalanced: Not Recommended)	
6	DIMMC1 / DIMMB1 / DIMMA1 / DIMMD1 / DIMME1 / DIMMF1

Back Panel I/O Connectors



#	Description	#	Description
1	COM Port 1	6	USB7 (3.0)
2	Dedicated IPMI LAN	7	LAN1
3	USB1 (2.0)	8	LAN2
4	USB0 (2.0)	9	VGA Port
5	USB8 (3.0)	10	UID Switch

Note: Refer to Chapter 2 of the User Manual for detailed information on memory support and CPU/motherboard installation instructions.