SUPERMICRO®
X11SPM-F/-TF/-TPF
Quick Reference Guide 1.1

Contact Information
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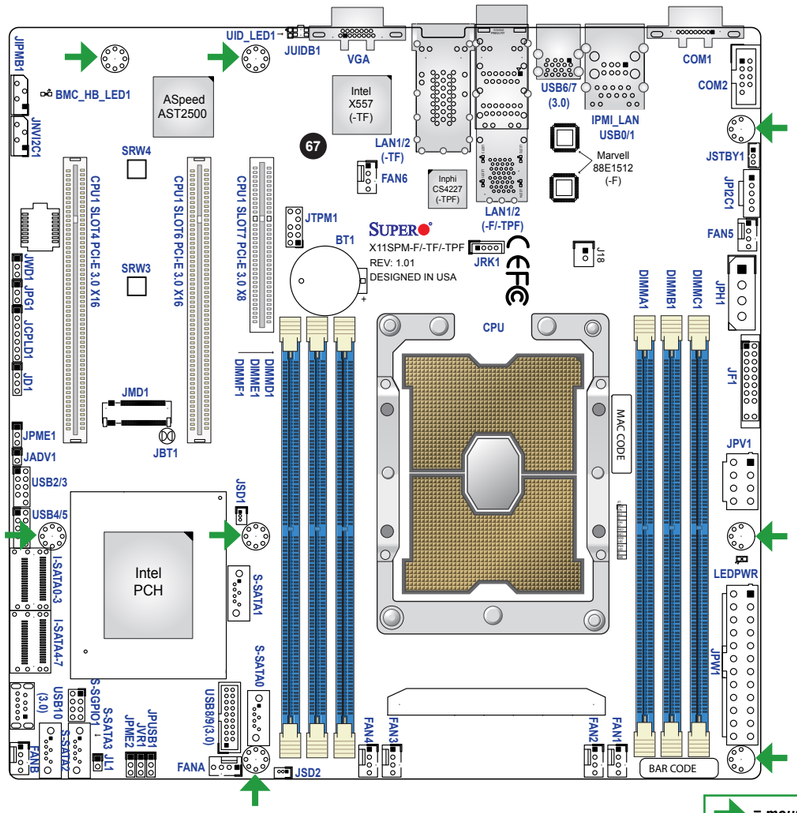
- General Information: marketing@supermicro.com
- Technical Support: support@supermicro.com
- Phone: +1 (408) 503-8000, Fax: +1 (408) 503-8008

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

Package Contents
- One (1) Supermicro Motherboard
- Four (4) SATA Cables
- One (1) I/O Shield
- One (1) Quick Reference Guide

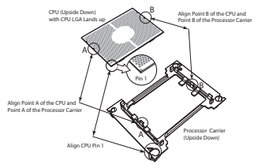
WARNING: This product can expose you to chemicals including lead, known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov.

Motherboard Layout and Features

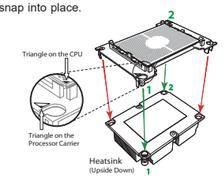


CPU and PHM Installation

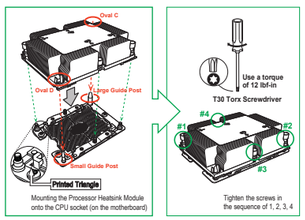
1. Assemble the processor carrier assembly by inserting the CPU into the processor carrier.



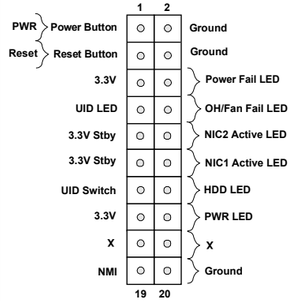
2. To form the processor heatsink module (PHM), mount the processor carrier assembly onto the heatsink and snap into place.



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.



Front Control Panel (JF1)



Connectors and Jumpers

Connectors

Connector	Description
BT1	Onboard Battery
COM1, COM2	COM Port, COM Header
FAN1 ~ FAN6, FANA, FANB	CPU/System Fan Headers
IPMI_LAN	Dedicated IPMI LAN Port
I-SATA0~7, S-SATA0~3	Intel PCH SATA 3.0 Ports (with RAID 0, 1, 5, 10)
J18	External RTC Battery Header
JD1	4-pin Speaker Header
JF1	Front Control Panel Header
JIPMB1	4-pin BMC External I²C Header (for an IPMI card)
JL1	Chassis Intrusion Header
JMD1	M.2 PCI-E 3.0 x4 Slot (Supports M-Key 2280 and 2242)
JNVI²C1	NVMe I²C Header
JPH1	4-pin Power Connector for HDD
JPI²C1	Power System Management Bus (SMB) I²C Header
JPV1	8-pin 12V CPU Power Connector
JPW1	24-pin ATX Power Connector
JRK1	Intel RAID Key Header
JSD1, JSD2	SATA DOM Power Connectors
JSTBY1	Standby Power Header
JTPM1	Trusted Platform Module/Port 80 Connector
JUIDB1	Unit Identifier (UID) Switch
LAN1, LAN2	1G BASE-T Ports (for X11SPM-F) 10G BASE-T Ports (for X11SPM-TF) 10G SFP+ Ports (for X11SPM-TPF)
SLOT4	CPU PCI-E 3.0 x16 Slot
SLOT6	CPU PCI-E 3.0 x16 Slot
SLOT7	CPU PCI-E 3.0 x8 Slot
SRW3, SRW4	M.2 Mounting Holes
S-SGPIO1	Serial Link General Purpose I/O Header
USB0/1	Back Panel Universal Serial Bus (USB) 2.0 Ports
USB2/3, USB4/5	Front Accessible USB 2.0 Headers
USB6/7	Back Panel USB 3.0 Ports
USB8/9	Front Accessible USB 3.0 Header
USB10	USB 3.0 Type-A Header
VGA	VGA Port

Jumpers

Jumper	Description	Default Setting
JBT1	CMOS Clear	Open (Normal)
JPG1	VGA Enable/Disable	Pins 1-2 (Enabled)
JPME1	ME Recovery	Pins 1-2 (Normal)
JPME2	ME Manufacturing Mode	Pins 1-2 (Normal)
JPUSB1	Power Source Select For USB Port 0/1/6/7	Pins 1-2 (Standby)
JWD1	Watchdog Timer	Pins 1-2 (Reset)

LED Indicators

LED Indicators

LED	Description	Status
BMC_HB_LED1	BMC Heartbeat LED	Blinking Green: Device Working
LEDPWR	Onboard Power LED	Solid Green: Power On
UID_LED1	UID LED	Solid Blue: Unit Identified

CPU Support

The X11SPM-F/-TF/-TPF 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 165W.

Memory Support

The X11SPM-F/-TF/-TPF 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.

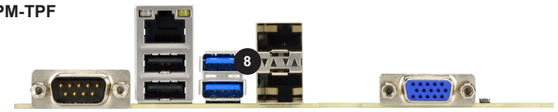
- Always use DDR4 memory of the same type, size and speed. Mixed DIMM speeds can be installed. However, all DIMMs will run at the speed of the slowest DIMM.
- The motherboard will support odd-numbered modules. However, to achieve the best memory performance, a balanced memory population is recommended.
- 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 (Unbalanced: Not Recommended)	DIMMC1 / DIMMB1 / DIMMA1 / DIMMD1 / DIMME1
6	DIMMC1 / DIMMB1 / DIMMA1 / DIMMD1 / DIMME1 / DIMMF1

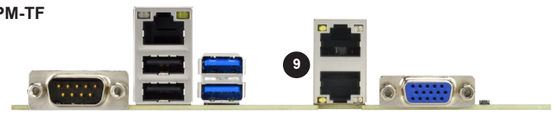
Back Panel I/O Connectors

X11SPM-F

X11SPM-TPF



X11SPM-TF



#	Description	#	Description	#	Description
1	COM Port 1	5	USB7 (3.0)	9**	LAN1/2 (-TF only)
2	Dedicated IPMI LAN	6	USB6 (3.0)	10	VGA Port
3	USB1	7**	LAN1/2 (-F only)	11	UID Switch
4	USB0	8**	LAN1/2 (-TPF only)		

Note: 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.

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

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

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