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**FOR YOUR SYSTEM TO WORK PROPERLY, PLEASE DOWNLOAD APPROPRIATE**

**DRIVERS/IMAGES/USER'S MANUAL FROM THE LINKS BELOW:**

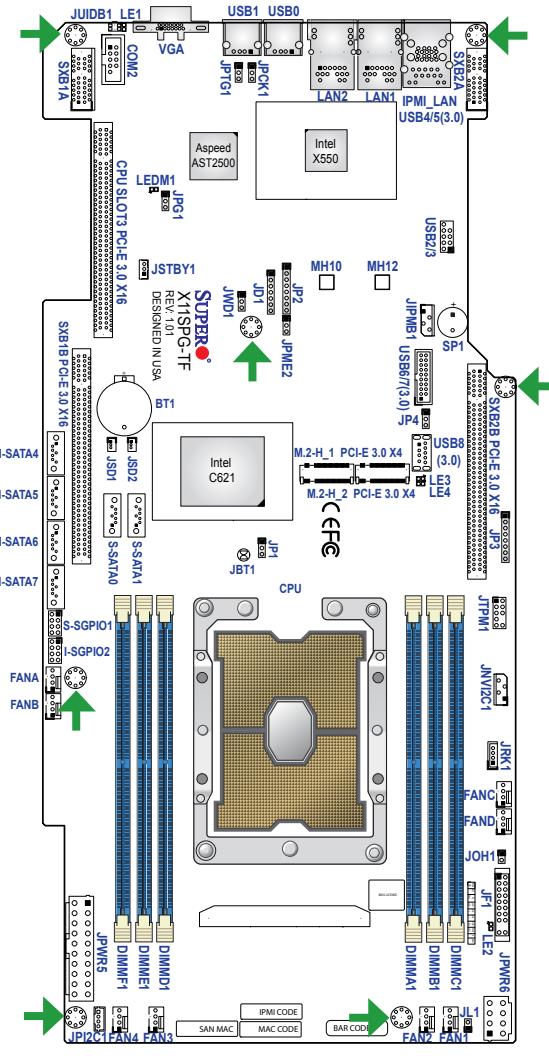
- Manuals: <http://www.supermicro.com/support/manuals>
- Drivers & Utilities: <https://www.supermicro.com/wftp/driver>
- Safety: [http://www.supermicro.com/about/policies/safety\\_information.cfm](http://www.supermicro.com/about/policies/safety_information.cfm)

**PACKAGE CONTENTS**

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

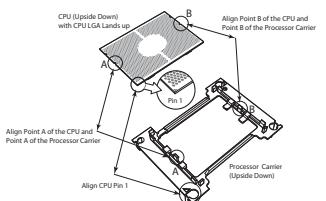
**WARNING:** This product can expose you to chemicals including lead, known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

**Motherboard Layout and Features**

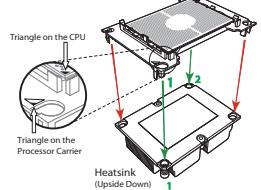


**CPU and PHM Installation**

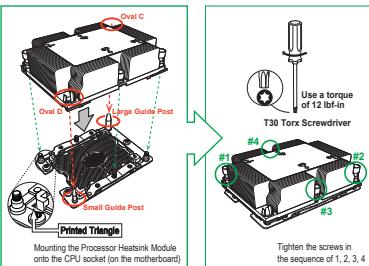
1 Assemble the processor carrier assembly by inserting the CPU into the processor carrier.



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 LED Indicators**

Connectors		
Connector	Description	
BT1	Onboard Battery	
COM2	COM Header	
FAN1 ~ FAN4	CPU/System Fan Headers	
FANA ~ FAND	GPU Fan Headers	
IPMI_LAN	Dedicated IPMI LAN Port	
I-SATA4 ~ I-SATA7	Intel® PCH SATA 3.0 Ports (with RAID 0, 1, 5, 10)	
I-SGPI01, S-SGPI01	Serial Link General Purpose I/O Connection Headers (I-SGPIO: SATA use; S-SGPIO: sSATA use)	
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	
JNVI²C1	NVMe I²C Header	
JOH1	Overheat LED Indicator	
JPI²C1	Power I²C System Management Bus (SMB) Header	
JPWR5	20-pin ATX Power Connector	
JPWR6	8-pin Power Connector for GPU	
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	
M.2_H_1, M.2_H_2	Dual M.2 PCI-E 3.0 x4 or SATA 3.0 Slots (Supports M-Key 2280)	
MH10, MH12	M.2 Mounting Holes	
SLOT3	Middle CPU PCI-E 3.0 x16 Slot	
SP1	Internal Speaker/Buzzer	
S-SATA0, S-SATA1	SATA 3.0 Ports with SATA DOM Power	
SXB1A, SXB1B	Left PCI-E 3.0 x16 GPU Slot	
SXB2A, SXB2B	Right PCI-E 3.0 x16 GPU Slot	
USB0, USB1	Back Panel Universal Serial Bus (USB) 2.0 Ports	
USB2/3	Front Accessible USB 2.0 Header	
USB4/5	Back Panel USB 3.0 Ports	
USB6/7	Front Accessible USB 3.0 Header	
USB8	USB 3.0 Type-A 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, LE4	M.2 LED	Blinking Green: Device Working
LEDM1	BMC Heartbeat LED	Blinking Green: BMC Normal

**Jumpers**

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

**CPU Support**

The X11SPG-TF supports the Intel® Xeon 81xx/61xx/51xx/41xx/31xx and 82xx/62xx/52xx/42xx/32xx series (Socket P0-LGA3647) processors with a thermal design power (TDP) of up to 205W and 28 cores.

**Memory Support**

The X11SPG-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	(Unbalanced: Not Recommended) DIMMC1 / DIMMB1 / DIMMA1 / DIMMD1 / DIMME1
6	DIMMC1 / DIMMB1 / DIMMA1 / DIMMD1 / DIMMF1

**Back Panel I/O Connectors**

1	Dedicated IPMI LAN	4	LAN1	7	USB1
2	USB5 (3.0)	5	LAN2	8	VGA Port
3	USB4 (3.0)	6	USB0	9	UID Switch

**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 2 of the User Manual for detailed information on memory support and CPU/motherboard installation instructions.