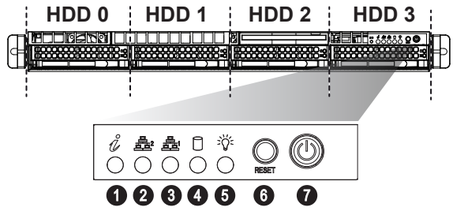
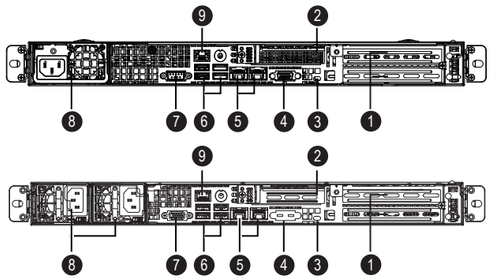
SUPERMICRO® SuperServer 5019P-WT/WTR Quick Reference Guide

Front View & Interface



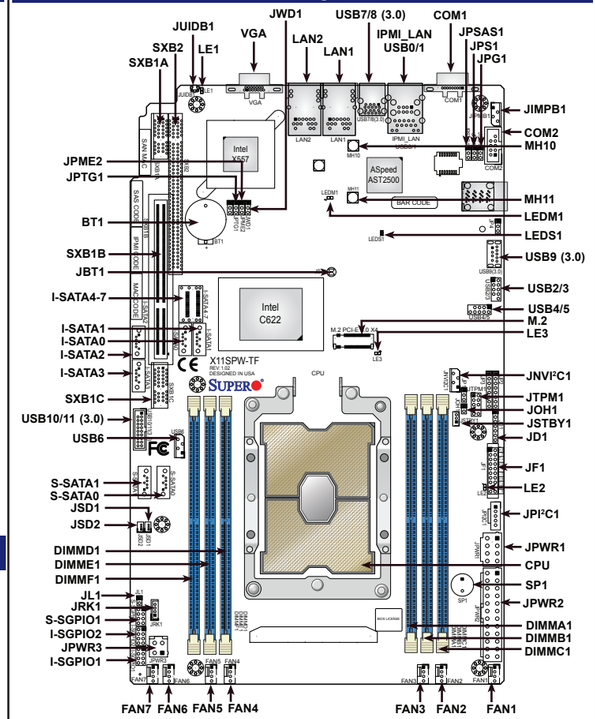
Control Panel Features		
Item	**Feature**	**Description**
1	Power Button	The main power switch is used to apply or remove power from the power supply to the server system. Turning off system power with this button removes the main power but keeps standby power supplied to the system. Therefore, you must unplug system before servicing.
2	UID Button	Pressing the UID (unit identifier) button illuminates an LED on both the front and rear of the chassis for easy system location in large stack configurations. The LED will remain on until the button is pushed a second time. Another UID button on the rear of the chassis serves the same function.
3	Universal Information LED	Refer to "Universal Information LED" table in Section "1.4 Server Chassis Features" of the User's Manual.
4	NIC1 LED	Indicates network activity on GLAN1 when flashing.
5	NIC2 LED	Indicates network activity on GLAN2 when flashing.
6	HDD LED	Indicates IDE channel activity. SAS2/SATA drive and/or DVD-ROM drive activity when flashing.
7	Power LED	Indicates power is being supplied to the system's power supply units. This LED should normally be illuminated when the system is operating.

Rear View



No.	Description	No.	Description
1	PCI-E 3.0x16 Expansion Slot (FH, FL)	6	2x USB2.0 and 2x USB 3.0 Ports
2	PCI-E 3.0x8 Expansion Slot (LP)	7	Serial Port
3	UID Button	8	Redundant Power Supply Module
4	VGA Port	9	Dedicated LAN for IPMI
5	LAN1 & LAN2 Port		

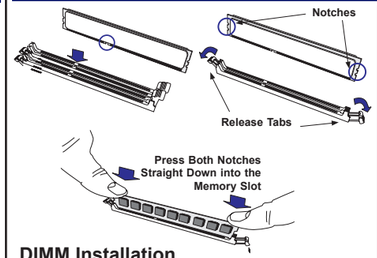
Board Layout



Jumpers and Connectors

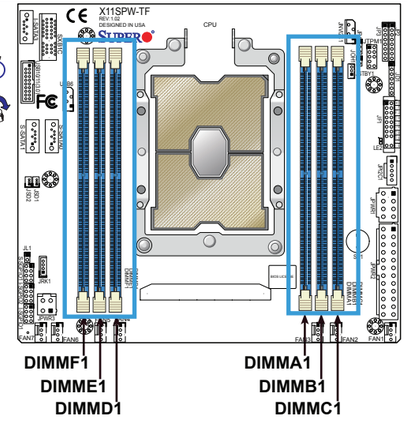
Jumper	Description	Default Setting
JBT1	Cear CMOS	Open (Normal)
JPG1	VGA Enable/Disable	Pins 1-2 (Enabled)
JPME2	ME Manufacturing Mode	Pins 1-2 (Normal)
JPS1	SAS 3.0 Enable/Disable	Pins 1-2 (Enabled)
JPSAS1	SAS HDD Enable/Disable	Pins 1-2 (Enabled)
JPTG1	LAN Enable/Disable	Pins 1-2 (Enabled)
JWD1	Watch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

Memory



DIMM Installation

1. Insert the desired number of DIMMs into the memory slots in the following order: DIMMA1, DIMMD1, DIMMB1, DIMME1, DIMMC1, DIMMF1. For the best performance, please use the memory modules of the same type and speed.
2. Push the release tabs outwards on both ends of the DIMM slot to unlock it.
3. Align the key of the DIMM module with the receptive point on the memory slot.
4. Align the notches on both ends of the module against the receptive points on the ends of the slot.
5. Press the notches on both ends of the module straight down into the slot until the module snaps into place.
6. Press the release tabs to the lock positions to secure the DIMM module into the slot.



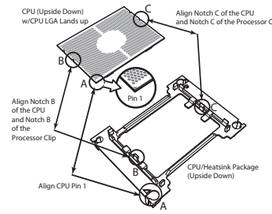
Jumpers and Connectors

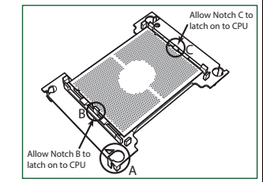
Connector	Description
BT1	Onboard Battery
COM1/COM2	COM Port/COM Header
FAN1 ~ FAN7	System Fan Headers
IPMI LAN	Dedicated IPMI LAN Port
I-SATA0 ~ I-SATA7	Intel® PCH SATA 3.0 Ports (with RAID 0, 1, 5, 10)
I-SGPIO1, I-SGPIO2, S-SGPIO1	Serial Link General Purpose I/O Headers
JD1	Speaker/Power LED Indicator (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
JNVI²C1	NVMe I²C Header
JOH1	Overheat LED Indicator
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 Add-on Card (Requires 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
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

CPU Installation

Supports 1st and 2nd Generation Intel® Xeon® Scalable Processors 82xx/81xx/62xx/61xx/52xx/51xx/42xx/41xx/32xx-/31xx with a thermal design power (TDP) of up to 205W and 28 cores

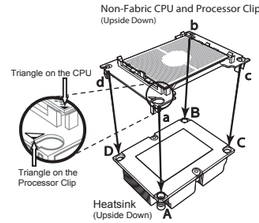
Note: The X11SPW-TF motherboard does not support FPGA or Fabric processors.

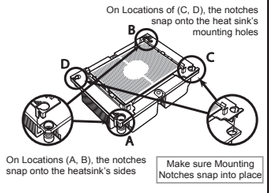




Processor Carrier Assembly (with CPU mounted on the Processor Clip)

Attaching the Non-F Model Processor Carrier Assembly to the Heatsink to Form the Processor Heatsink Module (PHM)

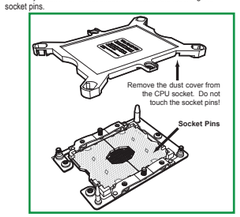




Removing the Dust Cover from the CPU Socket Before Installing the Processor Heatsink Module (PHM)

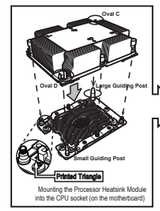
Remove the dust cover from the CPU socket.

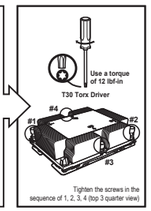
Note: Touching the socket pins may cause damage and could ultimately result in CPU malfunction. Please avoid touching the socket pins.



Installing the Processor Heatsink Module (PHM)

Note: Do not use excessive force when tightening the screws to avoid damaging the LGA lands and the processor.

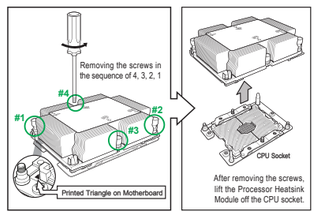




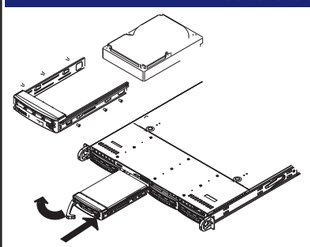
Removing the Processor Heatsink Module (PHM) from the Motherboard

Expose the socket and socket pins as shown in the illustration on the right. Remember to snap the dust cover back in at the end.

Note: Touching the socket pins may cause damage and could ultimately result in CPU malfunction. Please avoid touching the socket pins.



Hard Drive Installation



Mounting a Drive in a Drive Carrier

1. Install a new drive into the carrier with the printed circuit baord side facing down so that the mounting holes align with those in the carrier.
2. Secure the drive to the carrier with six screws, as shown.

Installing/Removing SATA Drives

1. To remove a carrier, push the release button located beside the drive LEDs.
2. Swing the colored handle fully and use it to pull the unit straight out.

Beep Code

BIOS Error Beep Codes		
Beep Code/LED	**Error Message**	**Description**
1 beep	Refresh	Circuits have been reset. (Ready to power up)
5 short,1 long	Memory error	No memory detected in the system
5 long, 2 short	Display memory read/write error	Video adapter missing or with faulty memory
1 long continuous	System OH	System overheat condition

Caution

⚠ SAFETY INFORMATION

IMPORTANT: See installation instructions and safety warning before connecting system to power supply.
http://www.supermicro.com/about/policies/safety_information.cfm

⚠ WARNING:

To reduce risk of electric shock/damage to equipment, disconnect power from server by disconnecting all power cords from electrical outlets.
If any CPU socket empty, install protective plastic CPU cap

⚠ WARNING:

Always be sure all power supplies for this system have the same power output. If mixed power supplies are installed, the system will not operate.

For more information go to : http://www.supermicro.com/support