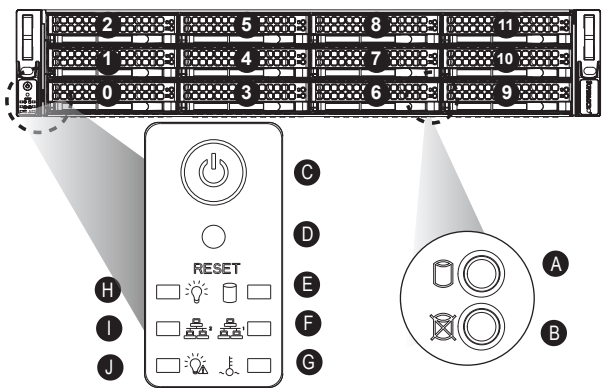


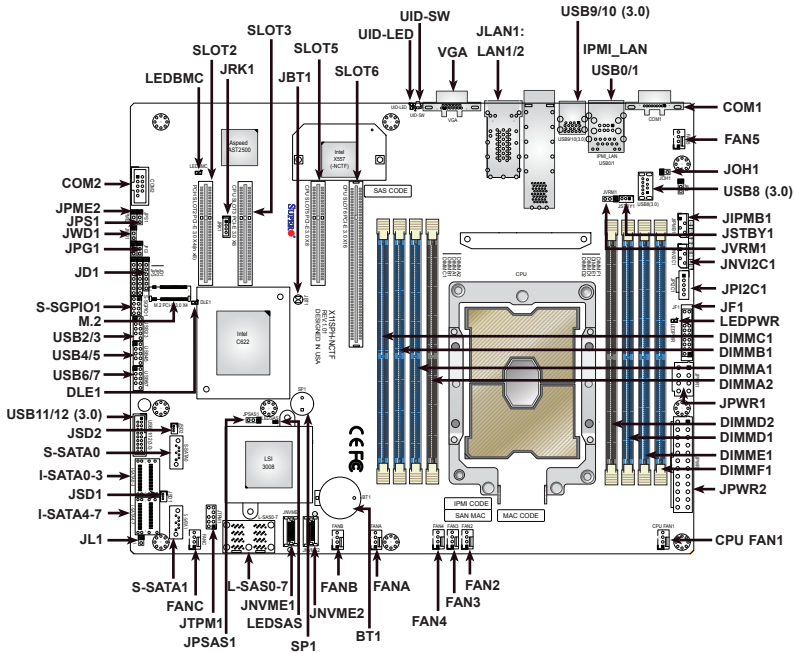
# SUPERMICR<sup>®</sup> SuperServer 5029P-E1CTR12L Quick Reference Guide

## Front View & Interface



No.	Description	No.	Description
A	Hard Drive Signal	F	LAN1 LED
B	Hard Drive Fail	G	Overheat & Fan Fail LED
C	Power Button	H	Power LED
D	Reset Button	I	LAN2 LED
E	Device Activity LED	J	Power Failure LED

## Board Layout



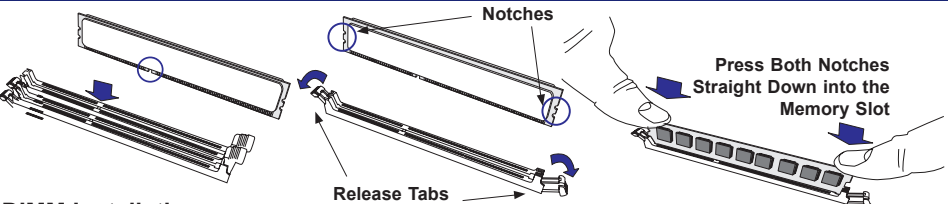
## Jumpers and Connectors

Jumper	Description	Default Setting
JBT1	Cear CMOS	Open (Normal)
JPSAS1	SAS HDD Enable/Disable	Pins 1-2 (Enabled) (Default)
JPS1	SAS 3.0 Enable/Disable	Pins 1-2 (Enabled)
JPG1	VGA Enable/Disable	Pins 1-2 (Enabled)
JPME2	ME Manufacturing Mode	Pins 1-2 (Normal)
JWD1	Watch Dog Timer	Pins 1-2 (Reset)
LED	Description	Status
DLE1	PCI-E 3.0 M.2 LED	Blinking Green: Device Working
LEDBMC	BMC Heartbeat LED	Blinking Green: BMC Normal
LEDPWR	Onboard Power LED	Solid Green: Power On
LEDSAS	SAS Activity LED	Blinking Green: SAS Active Solid Red: SAS Error
UID LED	Rear UID LED	Blue On: Unit Identified
Connector		
Connector		Description
BT1		Onboard Battery
COM1, COM2		COM Port, COM Header
FAN1 ~ FAN5, FANA ~ FANC		CPU/System Fan Headers (FAN1: CPU Fan)
IPMI_LAN		Dedicated IPMI LAN Port
I-SATA0~3, I-SATA4~7		Intel® PCH SATA 3.0 Ports (with RAID 0, 1, 5, 10)

## Jumpers and Connectors

Connector	Description
JD1	Power LED/Speaker Header (Pins 1-3: Power LED, Pins 4-7: Speaker)
JF1	Front Control Panel Header
JIPMB1	4-pin BMC External I <sup>2</sup> C Header (for an IPMI Card)
JL1	Chassis Intrusion Header
JNVI <sup>2</sup> C1	NVMe I <sup>2</sup> C Header
JNVME1, JNVME2	NVM Express (NVMe) PCI-Express 3.0 X4 Ports
JOH1	Overheat LED Indicator
JPI <sup>2</sup> C1	Power I2C System Management Bus (SMB) Header
JPWR1	8-pin 12V CPU Power Connector
JPWR2	24-pin ATX Power Connectors
JRK1	Intel RAID Key Header
JSD1, JSD2	SATA DOM Power Connectors
JSTBY1	Standby Power Header
JTPM1	Trusted Platform Module/Port 80 Connector
JVRM1	VRM SMBus Header (for programming use)
LAN1, LAN2	Dual 10G BASE-T Ports
L-SAS0~7	Eight SAS 3.0 Ports
M.2 Slot	M.2 PCI-E 3.0 x4 Slot (Supports M-Key 2280)
S-SATA0, S-SATA1	SATA 3.0 Ports with SATA DOM Power
S-SGPI01	Serial Link General Purpose I/O Connection Header
SLOT2	PCH PCI-E 3.0 x4 (in x8) Slot
SLOT3	CPU PCI-E 3.0 x8 Slot
SLOT5, SLOT6	CPU PCI-E 3.0 x8/x16 Slot (Supports Auto Switch)
SP1	Internal Speaker/Buzzer
USB0/1	Back Panel Universal Serial Bus (USB) 2.0 Ports
USB2/3, USB4/5, USB6/7	Front Accessible USB 2.0 Headers
USB8	USB 3.0 Type-A Header
USB9/10	Back Panel USB 3.0 Ports
USB11/12	Front Accessible USB 3.0 Header
VGA	VGA Port

## Memory



### DIMM Installation

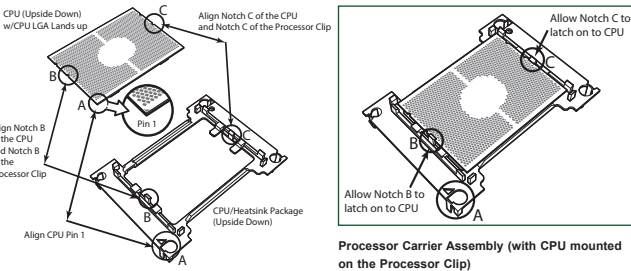
- Insert the desired number of DIMMs into the memory slots, in the order of DIMMA1, DIMMD1, DIMMB1, DIMME1, DIMMC1, DIMMF1, DIMMA2, DIMMD2. For best performance, please use the memory modules of the same type and speed.
- Push the release tabs outwards on both ends of the DIMM slot to unlock it.
- Align the key of the DIMM module with the receptive point on the memory slot.
- Align the notches on both ends of the module against the receptive points on the ends of the slot.
- Press the notches on both ends of the module straight down into the slot until the module snaps into place.
- Press the release tabs to the lock positions to secure the DIMM module into the slot.

## Beep Code

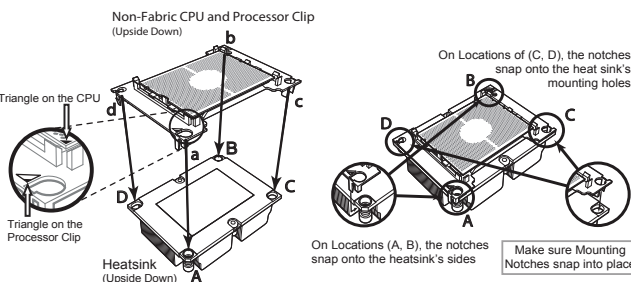
Hard Drive Carrier LED Indicators			BIOS Beep (POST) Codes		
LED	State/Condition	Indication	Beep Code	Error Message	Description
Green	Blinking	Drive activity	1 beep	Refresh	Circuits have been reset. (Ready to power up)
Red	Blinking	Drive rebuilding	5 short beeps + 1 long beep	Memory error	No memory detected in the system
Red	Solid on	Drive failure	5 long beeps + 2 short beeps	Display memory read/write error	Video adapter missing or with faulty memory
			1 long continuous	System OH	System Overheat

## 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 X115PH-nCTF motherboard does not support FPGA or Fabric processors.



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

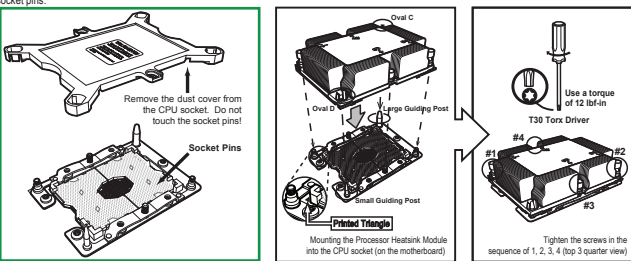


### Removing the Dust Cover from the CPU Socket Before Installing the Processor Heatsink Module (PHM)

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.

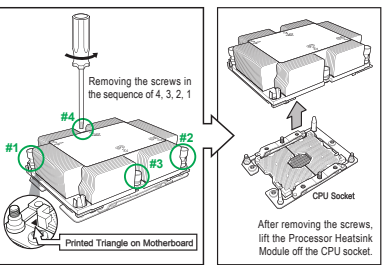
### Installing the Processor Heatsink Module (PHM)

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.



## Caution

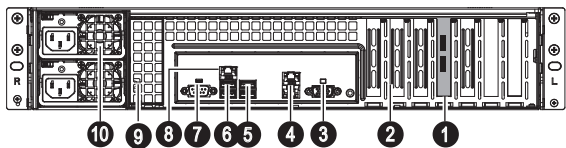
**SAFETY INFORMATION**  
IMPORTANT: See installation instructions and safety warning before connecting system to power supply.  
[http://www.supermicro.com/about/policies/safety\\_information.cfm](http://www.supermicro.com/about/policies/safety_information.cfm)

**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>

## Rear View

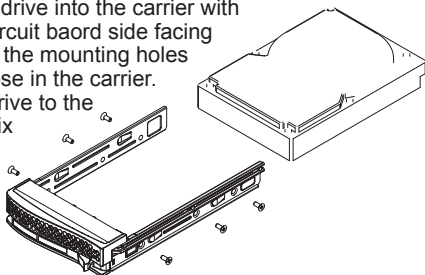


No.	Description
1	JBOD Expansion Port
2	4 Low-Profile PCI-E Expansion Slots
3	VGA Port
4	RJ45 LAN1/LAN2 Ports
5	USB 3.0 (2~3 Ports)
6	USB 2.0 (0~1 Ports)
7	COM1 Port
8	Dedicated LAN for IPMI
9	Optional Drive Bays
10	Redundant Power Supply Modules

## SATA Drive Installation

### Mounting a Drive in a Drive Carrier

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



### Installing/Removing SATA Drives

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

