SUPERMICRO®
X12SPZ-SPLN6F/LN4F
Quick Reference Guide 1.0a

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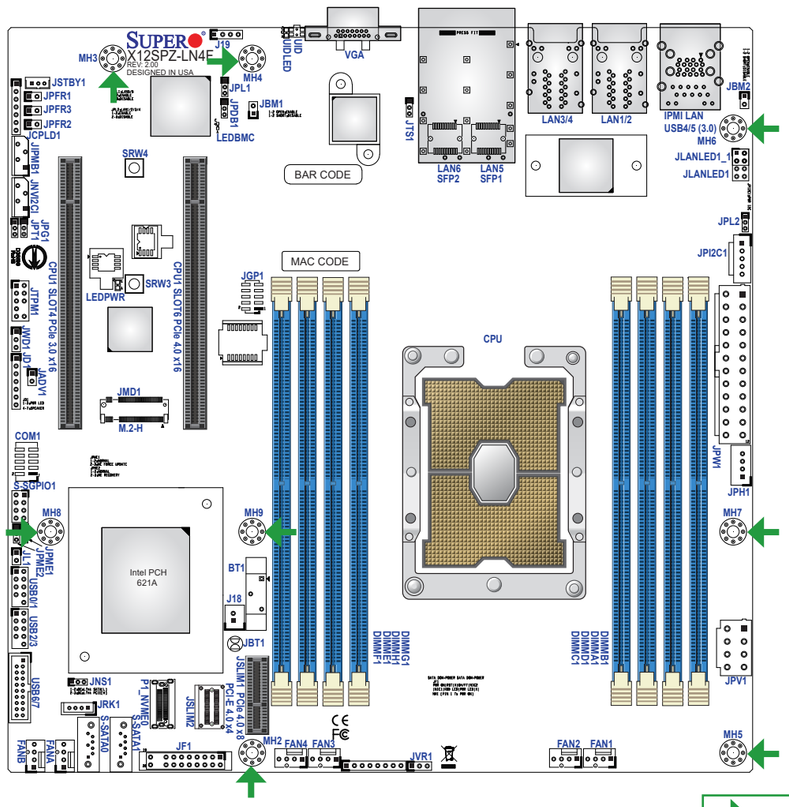
For your system to work properly, please download appropriate drivers/images/user's manual from the links below:
- Manuals: http://www.supermicro.com/support/manuals
- Drivers & Utilities: https://www.supermicro.com/wdl/driver/
- Safety: http://www.supermicro.com/about/policies/safety_information.cfm

Package Contents
- One Supermicro Motherboard
- One Quick Reference Guide
- One I/O Shield
- Two SATA Cables
- One CPU Carrier

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.

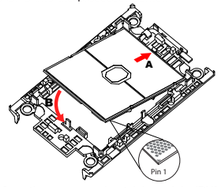
Motherboard Layout and Features



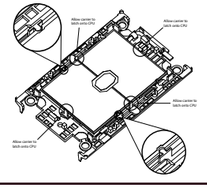
= *mounting hole*

CPU and PHM Installation

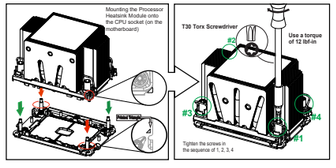
1. Assemble the processor carrier assembly by inserting the CPU into the processor carrier.



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

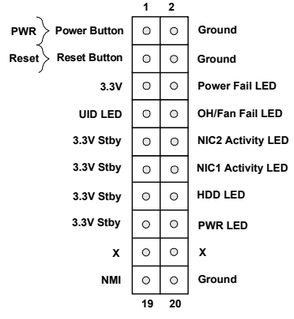


3. After assembling the PHM, mount it onto the CPU socket of the motherboard. Use a T-30 Torx-bit screwdriver to gradually install four screws into the mounting holes from #1-4.



*Please order CPU carrier SKT-1205L-P4IC-FXC or SKT-1205L-P4IC-TYC from Supermicro to pair with the CPU heatsink.

Front Control Panel



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.

Jumpers and Connectors

Jumpers

Jumper	Description	Default Setting
JBM1	Disable IPMI Share LAN	Pins 1-1 (Enabled)
JBM2	Disable IPMI Dedicated/Share LAN	Pins 1-1 (Enabled)
JBT1	CMOS Clear	Open (Normal)
JNS1	OCulink to 4x SATA or PCIe x4 Selection	Pins 2-3 (PCIe x4)
JPDB1	COM1 Function Selection	Pins 1-2 (BMC COM port)
JPG1	VGA Enable/Disable	Pins 1-2 (Enabled)
JPL1	LAN5/6 Enable/Disable	Pins 1-2 (Enabled)
JPL2	LAN1/2/3/4 Enable/Disable	Pins 1-2 (Enabled)
JPME1	ME Recovery Mode	Pins 1-2 (Normal)
JPME2	Manufacturing Mode	Pins 1-2 (Normal)
JPT1	Onboard TPM Enable/Disable	Pins 1-2 (Enabled)

Connectors

Connector	Description
BT1	Onboard Battery
COM1	COM Header
FAN1 - FAN4, FANA, FANB	CPU/System Fan Headers (FAN1: CPU Fan)
IPMI LAN	Dedicated IPMI LAN Port
J18	Extended COMS Battery Connector
JD1	Speaker (Pins 1-3: Power LED, Pins 4-7: Speaker)
JF1	Front Control Panel Header
JGP1	General Purpose I/O Header
JIPMB1	System Mangement Bus Header (for IPMI only)
JL1	Chassis Intrusion Header
JLANLED1	LAN3 - LAN6 Activity LED Header for SPLN6F
JLANLED1_1	LAN3 - LAN4 Activity LED Header for LN4F
JMD1	M.2 M-Key 2242/2280 (PCIe x4/SATA) Slot
JNVI²C1	Non-Volatile Memory (NVMe) I²C Header
JPH1	4-pin HDD Power Connector
JPI²C1	Power I²C System Management Bus (Power SMB) Header
JPW1	24-pin ATX Power Connector (Required)
JPV1	8-pin CPU Power Connector (Required)
JRK1	Intel RAID Key Header
JSLIM1	PCIe 4.0 x8 SlimSAS Connector
JSLIM2	PCIe 4.0 x4 SlimSAS Connector
JSTBY1	Standby Power Header
JTPM1	Trusted Platform Module (TPM)/Port 80 Connector

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

Connectors and LED Indicators

Connectors

Connector	Description
LAN1/2, LAN3/4	LAN RJ45 Port
LAN5, LAN6	25G/10G Fiber LAN Ports
MH2 - MH9	Mounting Holes
P1_NVME0	OCulink Connector (to 4x SATA or PCIe x4)
S-SATA0, S-SATA1	SATA 3.0 Ports
S-SGPIO1	Serial Link General Purpose I/O Header
SLOT4	CPU1 PCIe 4.0 x16 Slot
SLOT6	CPU1 PCIe 4.0 x16 Slot
SRW3, SRW4	M.2 Mounting Holes
UID	Unit Identifier Switch
USB0/1, USB2/3	Front Accessible USB 2.0 Headers
USB4/5	Back Panel USB 3.0 Ports
USB6/7	Front Accessible USB 3.0 Header
VGA	VGA Port

LED Indicators

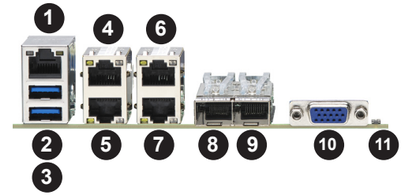
LED	Description	Status
LEDBMC	BMC Heartbeat	Blinking Green: BMC Normal
LEDPWR	Onboard Power LED	Solid Green: Power On
UID LED	Unit Identifier LED	Solid Blue: Unit Identified

CPU and Memory Support

The X12SPZ-SPLN6F/LN4F motherboard supports a 3rd Generation Intel® Xeon Scalable Processor with up to 40 cores in a Socket P+ socket.

The motherboard supports up to 2TB of ECC RDIMM and LRDIMM DDR4 memory with speeds of up to 3200MHz in eight memory slots.

Back Panel I/O Connectors



#	Description	#	Description	#	Description
1.	IPMI LAN	5.	LAN1	9	SFP28 LAN6
2.	USB5	6.	LAN4	10	VGA Port
3.	USB4	7.	LAN3	11	UID Switch
4.	LAN2	8.	SFP28 LAN5		

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

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