SUPERMICRO®

X11SDV-4C/8C/12C/16C-TP8F

Quick Reference Guide 1.0b

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For your system to work properly, please download appropriate drivers/images/user's manual from the links below:

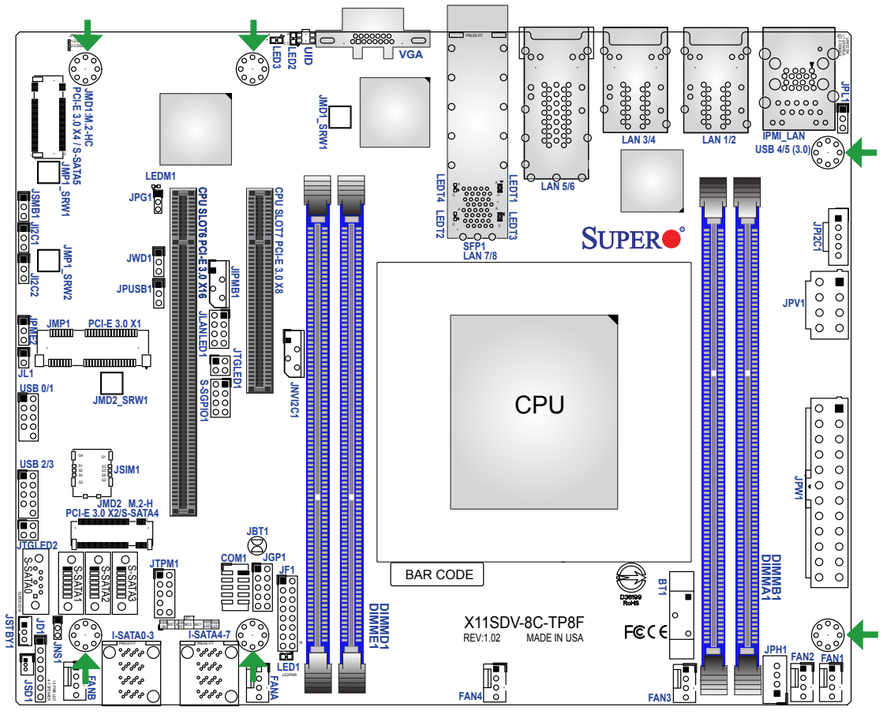
- Manuals: http://www.supermicro.com/support/manuals
- Drivers & Utilities: https://www.supermicro.com/wftp/driver/
- Safety: http://www.supermicro.com/about/policies/safety_information.cfm

Package Contents

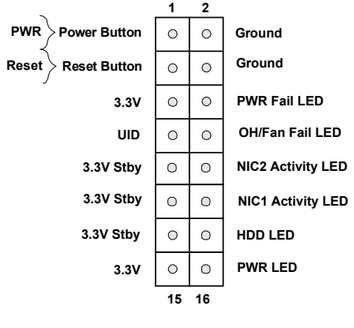
- One (1) Supermicro Motherboard
- Four (4) SATA Cables
- One (1) I/O Shield
- One (1) Quick Reference Guide
- Two (2) Mini-SAS HD Cables

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.

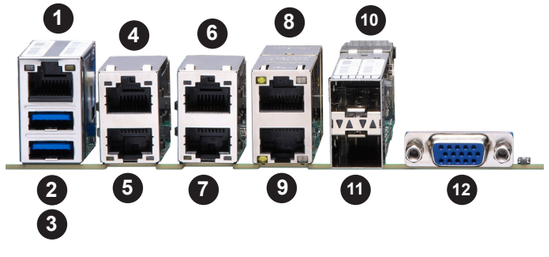
Motherboard Layout and Features



Front Control Panel (JF1)



Back Panel I/O Connectors



#	Description	#	Description	#	Description
1	IPMI_LAN	5	LAN1	9	LAN5
2	USB5	6	LAN4	10	SFP LAN8
3	USB4	7	LAN3	11	SFP LAN7
4	LAN2	8	LAN6	12	VGA

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
JBT1	CMOS Clear	Open: Normal, Short: Clear CMOS
JI2C1, JI2C2	SMB to PCI-E Slots Enable/Disable	Pins 2-3 (Disabled)
JNS1	Mini-SAS HDD NVMe/SATA Mode Select	Pins 1-2: SATA (Default), Pins 2-3: NVMe
JPG1	Onboard VGA Enable	Pins 1-2 (Enabled)
JPL1	LAN 1/2/3/4 Enable	Pins 1-2 (Enabled)
JPME2	ME Manufacturing Mode	Pins 1-2 (Normal)
JPUSB1	USB Wake Up	Pins 1-2 (Enabled)
JWD1	Watch Dog	Pins 1-2 (Reset)

Connectors

Connector	Description
BT1	Onboard Battery
COM1	COM Header
FAN1 - FAN4, FANA, FANB	System Fan Connectors
IPMI_LAN	Dedicated IPMI LAN Port
I-SATA0-3, I-SATA4-7	Eight Intel® PCH SATA 3.0 Ports or Two NVMe U.2 Ports (See jumper JNS1 setting)
JD1	PWR LED/Speaker Header (Pins 1-3: PWR 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	LAN1 - LAN4 Activity LED Header
JMD1	M.2 PCI-E 3.0 x4/S-SATA5 Connector (M-Key 2280)
JMD2	M.2 PCI-E 3.0 x2/S-SATA4 Connector (B-Key 3042)
JMD1_SRW1, JMD2_SRW1	M.2 Holding Screws
JMP1	Mini PCI-E x1 Connector
JMP1_SRW1	Mini PCI-E x1 Connector Holding Screw
JNVI2C1	NVMe I²C Header
JPI2C1	Power I²C System Management Bus (Power SMB) Header
JPH1	4-pin Power Connector for HDD use
JPW1	24-pin Main Power Connector
JPV1	12V 8-pin DC Power Connector (Required to provide extra power to CPU, or as alternative power for special enclosure when the 24 pin ATX power is not in use)
JSD1	SATA Disk On Module (DOM) Power Connector
JSIM1	Nano SIM Slot for M.2 B-Key WAN card support
JSMB1	System Management Bus Header
JSTBY1	+5V Standby Power Header
JTGLED1	LAN7/LAN8 Activity LED Header
JTGLED2	LAN5/LAN6 Activity LED Header
JTPM1	Trusted Platform Module (TPM)/Port 80 Header
LAN1 - LAN4	1GbE (RJ45) LAN Ports
LAN5 - LAN6	10GbE (RJ45) LAN Ports
LAN7 - LAN8	10G SFP+ LAN Ports
S-SATA0 - S-SATA3	SATA 3.0 Ports

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
S-SGPIO1	Serial General Purpose I/O Header for S-SATA0-3
SLOT6	CPU PCI-E 3.0 x16 Slot
SLOT7	CPU PCI-E 3.0 x8 Slot
UID	Unit Identifier Button
USB0/1, USB2/3	Front Accessible USB 2.0 Ports
USB4/5	Back Panel USB 3.0 Ports
VGA	VGA Port

LED Indicators

LED	Description	Status
LED1	Power LED	Solid Green: Power On
LED2	UID LED	Solid Blue: Unit Identified
LED3	Overheat/PWR Fail/Fan Fail	Solid Red: Overheat Blinking Red: PWR Fail or Fan Fail
LEDM1	BMC Heartbeat	Blinking Green: BMC Normal

CPU Support

The X11DV-4C/8C/12C/16C-TP8F motherboard supports an Intel® Xeon® D-2100 Series SoC.

Memory Support

The X11SDV-4C/8C/12C/16C-TP8F motherboard supports up to 256GB of ECC RDIMM and 512GB of ECC LRDIMM DDR4 memory.

DIMM Memory Installation

When installing memory modules, the DIMM slots should be populated in the following order: DIMMA1, DIMMB1, DIMMD1, DIMME1.

- Always use DDR4 DIMM modules 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, for best memory performance, install DIMM modules in pairs to activate memory interleaving.

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

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