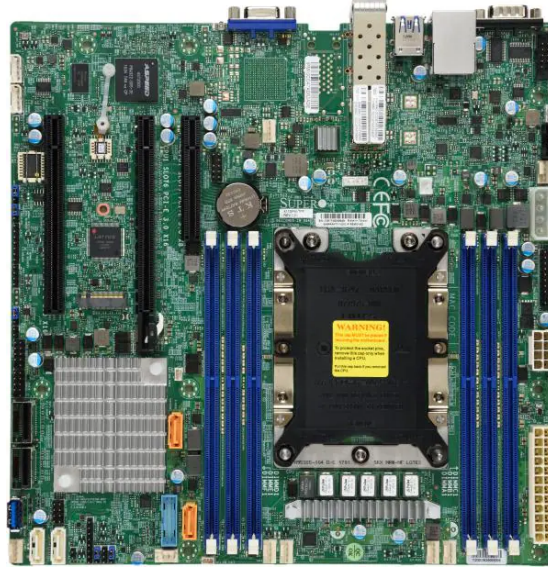


X11SPM-TPF



**Embedded Ready
VROC support**

Key Features

2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors, , Single Socket LGA-3647 (Socket P) supported, CPU TDP support Up to 165W TDP

Intel® C622 chipset

Up to 1.5TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 1.5TB 3DS ECC LRDIMM, DDR4-2933MHz, in 6 DIMM slots;

Up to 1TB Intel Optane DC Persistent Memory in memory mode (Cascade Lake Only)

Expansion slots: 2 PCIe 3.0 x16, 1 PCIe 3.0 x8 (in x8)

M.2 NGFF connector

M.2 Interface: PCIe 3.0 x4

Form Factor: 2242, 2280

Key: M-Key

2 10G SFP+

12 SATA3 (6Gbps) via C622

Supports 12V DC power input

5 USB 3.0 (2 rear, 1 Type-A, 2 via header), 6 USB 2.0 (2 rear, 4 via headers)

I/O: 1 VGA, 2 COM, 1 TPM header

Specifications

Product SKUs**MBD-X11SPM-TPF****Physical Stats****Form Factor**

microATX

Dimension

9.6" x 9.6" (24.38cm x 24.38cm)

Processor**CPU**

2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors

Single Socket LGA-3647 (Socket P) supported, CPU TDP supports Up to 165W TDP

Core

Up to 28 cores

System Memory**Memory Capacity**

6 DIMM slots

Up to 1.5TB 3DS ECC LRDIMM, DDR4-2933MHz; Up to 1.5TB 3DS ECC RDIMM, DDR4-2933MHz

Memory Type

2933/2666/2400/2133 MT/s ECC DDR4 LRDIMM (3DS), RDIMM (3DS)

DIMM Sizes

LRDIMM: 32GB, 64GB, 128GB

RDIMM: 8GB, 16GB, 32GB, 64GB

Memory Voltage

1.2V

Error Detection

Corrects single-bit errors

On-Board Devices**Chipset**

Intel® C622

SATA

Intel® C622 controller for 12 SATA3 (6 Gbps) ports; RAID 0,1,5,10

IPMI

ASPEED AST2500

Graphics

1 ASPEED AST2500 BMC port(s)

Network Controllers

Dual LAN with 10G SFP+ with Intel® X722 + Inphi CS4227

Input / Output**SATA**

12 SATA3 (6Gbps) port(s)

LAN

2 10G SFP+ LAN ports

USB

3 USB 3 port(s) (1 Type A; 2 via header)

6 USB 2.0 port(s) (4 via header; 2 rear)

2 USB 3.0 port(s) (2 rear)

Video Output

1 VGA port(s)

Serial Port

2 COM Port(s) (1 header; 1 rear)

DOM2 SATA DOM (Disk on Module) power connector support**TPM**

1 TPM Header

Expansion Slots**PCIe**

2 PCIe 3.0 x16,

1 PCIe 3.0 x8

M.2

M.2 Interface: PCIe 3.0 x4

Form Factor: 2280, 2242

Key: M-Key

System BIOS**BIOS Type**

AMI UEFI

BIOS Features

ACPI 6.0

RTC (Real Time Clock) Wakeup

SMBIOS 3.0 or later

Management**Software**SuperDoctor® 5, NMI, SUM, KVM with dedicated LAN, SPM, Intel® Node Manager, IPMI2.0, Watchdog**Power Configurations**

Power-on mode for AC power recovery, ACPI Power Management

PC Health Monitoring**Voltage**

VBAT, Supports system management utility, Monitors CPU voltages, Chassis intrusion header, 3.3V standby, +5V standby, +5V, +3.3V, +12V, +1.8V, 8 -fan status

LED

UID/Remote UID

Suspend static indicator LED

CPU / System Overheat LED

Temperature

CPU thermal trip support

PECI

FAN

8x 4-pin fan headers (up to 8 fans)

System level control

PWM fan speed control

Fan speed control

Overheat LED indication

Other Features

WOL, UID, RoHS, M.2 NGFF connector, CPU thermal trip support for processor protection, Control of power-on for recovery from AC power loss, ACPI power management

Operating Environment**Operating Temperature Range**

0°C - 60°C (32°F - 140°F)

Non-Operating Temperature Range

-20°C - 60°C (-4°F - 140°F)

Operating Relative Humidity Range

10% - 85% (non-condensing)

Non Operating Relative Humidity Range

10% - 95% (non-condensing)

Parts List

Standard Parts (Bulk Package)

I/O Cables

Part Number	CBL-0044L • eStore
Qty	2
Description	57.5 cm SATA FLAT S-S PBF

I/O Shield

Part Number	MCP-260-00109-0N • eStore
Qty	1
Description	STD I/O Shield for X11SPM-TPF with EMI Gasket

Standard Parts (Retail Package)**I/O Cables**

Part Number	CBL-0044L • eStore
Qty	4
Description	57.5 cm SATA FLAT S-S PBF

I/O Shield

Part Number	MCP-260-00109-0N • eStore
Qty	1
Description	STD I/O Shield for X11SPM-TPF with EMI Gasket

QRG

Part Number	MNL-1939-QRG
Qty	1
Description	Motherboard Quick Reference Guide

Optional Parts**1U I/O Shield**

Part Number	MCP-260-00114-0N
Qty	--
Description	1U I/O Shield for X11SPM-TPF with EMI Gasket

TPM security module

Part Number	AOM-TPM-9671V	AOM-TPM-9670V
Qty	--	--
Description	SPI capable TPM 1.2 with Infineon 9670 controller with vertical form factor	SPI capable TPM 2.0 with Infineon 9670 controller with vertical form factor
