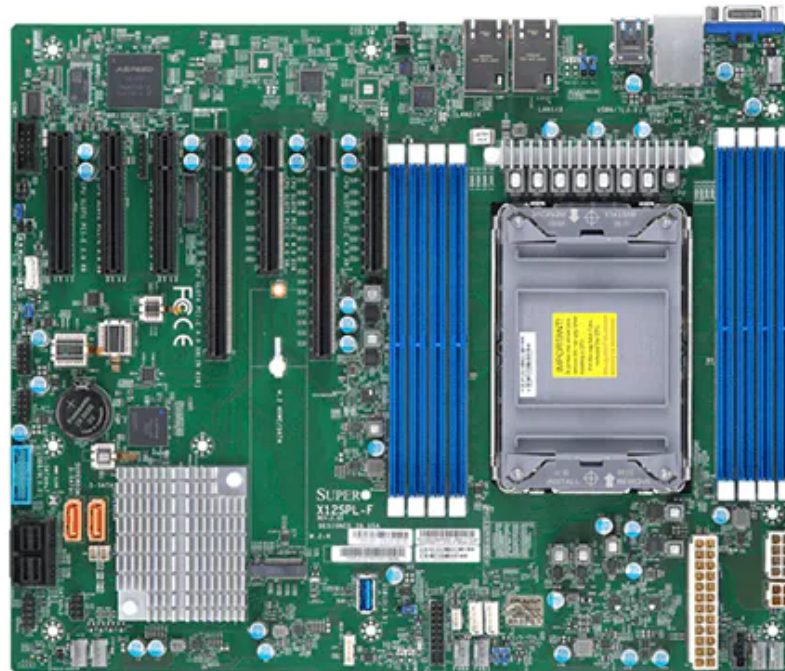


X12SPL-F



Key Features

3rd Gen Intel® Xeon® Scalable processors, Single Socket LGA-4189 (Socket P+) supported, CPU TDP supports Up to 270W TDP

Intel® C621A

Up to 2TB 3DS ECC RDIMM, DDR4-3200MHz; Up to 2TB 3DS ECC LRDIMM, DDR4-3200MHz

Up to 2TB Intel® Optane™ Persistent Memory, in 8 DIMM slots

2 PCIe 4.0 x8,

1 PCIe 4.0 x16,

1 PCIe 4.0 x8 (in x16 slot)

3 PCIe 3.0 x8

M.2 Interface: 1 SATA/PCIe 3.0 x4

M.2 Form Factor: 2280/22110

M.2 Key: M-Key

Intel® C621A controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10

Dual LAN with Intel® i210 Gigabit Ethernet Controller

Specifications

Product SKUs

MBD-X12SPL-F

Physical Stats

Form Factor

ATX

Dimension

12.1" x 10" (30.73cm x 25.4cm)

Processor

CPU

3rd Gen Intel® Xeon® Scalable processors
Single Socket LGA-4189 (Socket P+)
supported, CPU TDP supports Up to 270W
TDP

Core

Up to 40 cores

System Memory

Memory Capacity

8 DIMM slots
Up to 2TB Intel® Optane™ Persistent
Memory 200 Series
Up to 2TB 3DS ECC LRDIMM, DDR4-
3200MHz; Up to 2TB 3DS ECC RDIMM,
DDR4-3200MHz

Memory Type

3200/2933/2666MHz ECC , DDR4 LRDIMM
(3DS), RDIMM (3DS)

DIMM Sizes

8GB, 16GB, 32GB, 64GB, 128GB, 256GB

Memory Voltage

1.2V

Error Detection

Corrects single-bit errors

On-Board Devices

Chipset

Intel® C621A

SATA

Intel® C621A controller for 10 SATA3 (6
Gbps) ports; RAID 0,1,5,10

IPMI

ASPEED AST2600 BMC

Graphics

1 ASPEED AST2600 BMC port(s)

Network Controllers

Dual LAN with Intel® i210 Gigabit Ethernet
Controller

Input / Output

Expansion Slots

PCIe

1 PCIe 4.0 x16,
1 PCIe 4.0 x8 (in x16 slot),
2 PCIe 4.0 x8,
3 PCIe 3.0 x8

M.2

M.2 Interface: 1 SATA/PCIe 3.0 x4
Form Factor: 2280/22110
Key: M-Key

System BIOS

BIOS Type

AMI UEFI

BIOS Features

ACPI 6.2
SMBIOS 3.0 or later
UEFI 2.7

Management

Software

SuperDoctor® 5, [SUM](#), KVM with
dedicated LAN, [SPM](#), Intel® Node
Manager, [SSM](#), [IPMI2.0](#), Watchdog

Power Configurations

Power-on mode for AC power recovery,
ACPI Power Management, CPU thermal
trip support for processor protection

PC Health Monitoring

Voltage

VBAT, System temperature, Monitors CPU
voltages, HT, Chassis intrusion header,
3.3V standby, +5V standby, +5V, +3.3V,
+12V, +1.8V, 7-fan status

LED

UID/Remote UID
Suspend static indicator LED
CPU / System Overheat LED

Temperature

CPU thermal trip support
PECI

FAN

7x 4-pin fan headers (up to 7 fans)
System level control
PWM fan speed control
Fan speed control
Overheat LED indication

SATA

10 SATA3 (6Gbps) port(s)

LAN

2 RJ45 Gigabit Ethernet LAN ports

USB

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

5 USB 3.2 Gen1 port(s) (2 via header; 2 rear; 1 type A)

Video Output

1 VGA port(s)

Serial Port

1 COM Port(s) (1 header)

DOM

2 SATA **DOM** (Disk on Module) power connector support

TPM

1 TPM Header

Other Features

WOL, UID, RoHS, Chassis intrusion header, Chassis intrusion detection, ATX Power connector, ACPI power management, RoT

Operating Environment**Operating Temperature Range**

0°C - 50°C (32°F - 122°F)

Non-Operating**Temperature Range**

-40°C - 70°C (-40°F - 158°F)

Operating Relative**Humidity Range**

10% - 85% (non-condensing)

Non Operating Relative**Humidity Range**

10% - 95% (non-condensing)

Parts List

Standard Parts (Bulk Package)

CPU carrier

Part Number	SKT-1205L-P4IC-FXC
Qty	1
Description	CPU carrier for 3rd Gen Intel Xeon Scalable Processors

I/O Cables

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

I/O Shield

Part Number	MCP-260-00130-0N
Qty	1
Description	STD I/O Shield for X12SPL-F with EMI Gasket

Standard Parts (Retail Package)

CPU carrier

Part Number	SKT-1205L-P4IC-FXC
Qty	1

Description CPU carrier for 3rd Gen Intel Xeon Scalable Processors

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-260-00130-0N
Qty 1
Description STD I/O Shield for X12SPL-F with EMI Gasket

QRG

Part Number MNL-2270-QRG
Qty 1
Description Motherboard Quick Reference Guide

Optional Parts

1U I/O Shield

Part Number	MCP-260-00132-0B	MCP-260-00131-0N
Qty	1	1
Description	1U I/O Shield for X12SPL-F with EMI Gasket (for standard 1U chassis: SC510, SC504, SC505)	1U I/O Shield for X12SPL-F with EMI Gasket (for standard 1U chassis: SC813M, SC815, SC512, SC514, SC515, SC113)

TPM security module

Part Number	AOM-TPM-9671H	AOM-TPM-9670H	AOM-TPM-9671V	AOM-TPM-9670V
Qty	1	1	1	1
Description	SPI capable TPM 1.2 with Infineon 9670 controller with horizontal form factor	SPI capable TPM 2.0 with Infineon 9670 controller with horizontal form factor	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
