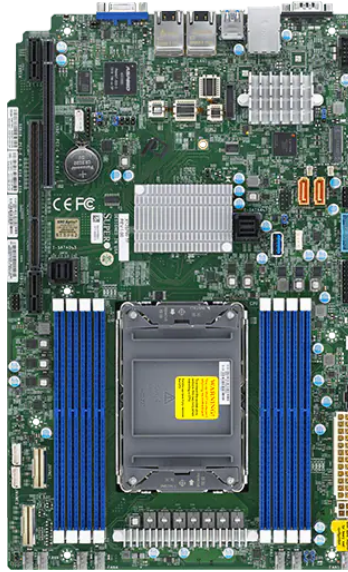


X12SPW-TF



WIO
3 AOC in 1U
Dual 10GbE

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 200 Series, in 8 DIMM slots

1 PCIe 4.0 x16 Right Riser Slot,

1 PCIe 4.0 x32 Left Riser Slot,

4 PCIe 4.0 NVMe x4 Internal Port(s)

M.2 Interface: PCIe 3.0 x4 and SATA

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 10GBase-T with Intel® X550

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

2 SuperDOM with built-in power

Optimized Servers

[SYS-110P-FDWTR](#)

[SYS-110P-WTR](#)

[SYS-510P-WT](#)

[SYS-510P-WTR](#)

[SYS-520P-WTR](#)

[SYS-E403-12P-FN2T](#)

[SYS-110P-FRDN2T](#)

[SYS-110P-FRN2T](#)

[SYS-110P-FDWTR-NEBS-DC](#)

[SYS-110P-FWTR](#)

Specifications

Product SKUs**MBD-X12SPW-TF****Physical Stats****Form Factor**

Proprietary WIO

Dimension

8" x 13" (20.32cm x 33.02cm)

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

ECC, DDR4 LRDIMM (3DS), RDIMM (3DS)

DIMM Sizes

LRDIMM 3DS: 128GB, 256GB

LRDIMM: 64GB, 128GB

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

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 10GBase-T with Intel® X550

Input / Output**SATA**

10 SATA3 (6Gbps) port(s)

LAN

2 RJ45 10GBase-T ports

USB

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

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

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**

1 PCIe 4.0 x16 Right Riser Slot,

1 PCIe 4.0 x32 Left Riser Slot,

2 PCIe 4.0 x8 SlimSAS connector

M.2

M.2 Interface: PCIe 3.0 x4; SATA

Form Factor: 2280, 22110

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**

[Redfish API](#), [Supermicro Server Manager \(SSM\)](#),
[Supermicro Power Manager \(SPM\)](#), [Supermicro Update Manager \(SUM\)](#), [SuperDoctor® 5](#), [Super Diagnostics Offline](#)
[, KVM with dedicated LAN](#), [IPMI 2.0](#)

Power Configurations

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

Security**Hardware**

Trusted Platform Module (TPM) 2.0

PC Health Monitoring**Voltage**

VBAT, Supports system management utility, 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

Other Features

WOL

UID

RoHS

Control of power-on for recovery from AC power loss

ACPI power management

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

8% - 90% (non-condensing)

Non Operating Relative Humidity Range

5% - 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

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

QRG

Part Number	MNL-2246-QRG
Qty	1
Description	Motherboard Quick Reference Guide

Optional Parts

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

