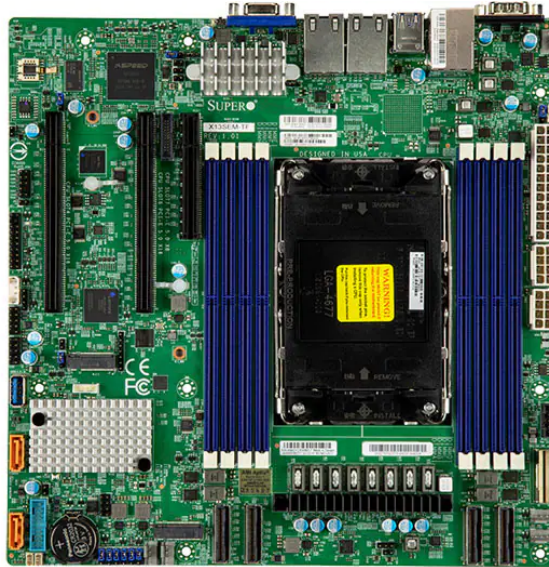


# X13SEM-TF

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## Key Features

4th Gen Intel® Xeon® Scalable processors, Single Socket LGA-4677 (Socket E) supported, CPU TDP supports Up to 350W TDP

Intel C741® Chipset

Up to 2TB 3DS ECC RDIMM, DDR5-4800MT/s (1DPC) in 8 DIMM slots

1 PCIe 5.0 x8,

2 PCIe 5.0 x16,

8 PCIe 5.0 NVMe x4 Internal Port(s)

**M.2 Interface:** 2 PCIe 4.0 x2

**M.2 Form Factor:** 2280, 22110

**M.2 Key:** M-Key

8 NVMe ports PCIe 5.0 x4 via 4 MCIO connectors

Dual LAN with 10GBase-T with Intel® X550

5 USB 3.2 Gen1 (2 rear, 1 Type-A, 2 via header), 6 USB 2.0 (2 rear, 4 via headers)

Intel® C741 controller for 10 SATA3 (6 Gbps) ports or 2 PCIe 3.0 x4 NVMe + 2 SATA3 ports

## Specifications

**Product SKUs****MBD-X13SEM-TF****Physical Stats****Form Factor**

microATX

**Dimension**

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

**Processor****CPU****4th Gen Intel® Xeon® Scalable processors**

Single Socket LGA-4677 (Socket E) supported, CPU TDP supports Up to 350W TDP

**Core**

Up to 60 cores

**System Memory****Memory Capacity**

8 DIMM slots

Up to 2TB 3DS ECC RDIMM, DDR5-4800MHz

**Memory Type**

4800/4400/4000MHz ECC DDR5 RDIMM (3DS) Up to 256GB of memory with speeds of up to 4800MT/s (1DPC)

**DIMM Sizes**

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

RDIMM: 16GB, 32GB, 64GB, 128GB, 256GB

**Memory Voltage**

1.1V

**Error Detection**

Corrects single-bit errors

**On-Board Devices****Chipset**

Intel® C741

**SATA**

Intel® C741 controller for 10 SATA3 (6 Gbps) ports

**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 10 Gigabit Ethernet LAN ports

1 RJ45 Dedicated IPMI LAN port

**USB**

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

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

**Video Output**

1 VGA D-Sub Connector port(s)

**Serial Port**

1 COM Port(s) (1 rear)

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

1 TPM Header

**Expansion Slots****PCIe**

2 PCIe 5.0 x16,

1 PCIe 5.0 x8

**M.2**

M.2 Interface: 2 PCIe 4.0 x2

Form Factor: 2280/22110

Key: M-Key

**System BIOS****BIOS Type**

AMI UEFI

**BIOS Features**

ACPI 6.4

SMBIOS 3.5 or later

UEFI 2.8

**Management****Software**

SuperDoctor® 5, SPM, SUM, SSM, IPMICFG, IPMIView for Linux/Windows, SMCIPMITool, Trusted Platform Module (TPM), Chassis Intrusion Detection

**PC Health Monitoring****Voltage**

VBAT, System level control, Supports system management utility, Monitors CPU voltages, Chipset Voltage, Chassis intrusion header, 5 - fan status, +5V standby, +5V, +3.3V, +12V

**LED**

UID/Remote UID

CPU / System Overheat LED

**Temperature**

Monitoring for CPU and chassis environment

CPU thermal trip support

Thermal Monitor 2 (TM2) support

PECI

**FAN**

5x 4-pin fan headers (up to 5 fans)

Fan speed control

5 fans with tachometer status monitoring

Overheat LED indication

**Other Features**

WOL, UID, Node Manager Support, M.2 NGFF connector, Control of power-on for recovery from AC power loss, Chassis intrusion detection, ACPI power management

## Parts List

### Standard Parts (Bulk Package)

**CPU carrier**

Part Number	SKT-1333L-0000-FXC	SKT-1424L-001B-FXC
Qty	1	1

Description	CPU carrier for 4th Gen Intel® Xeon® Scalable processors (XCC)	CPU carrier for 4th Gen Intel® Xeon® Scalable processors (MCC)
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**I/O Shield**

Part Number	MCP-260-00042-0N • <a href="#">eStore</a>
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Qty	1
Description	STD I/O Shield for X13SEM-TF/-F with EMI Gasket

**SATA cable**

Part Number	CBL-0044L • <a href="#">eStore</a>
Qty	2
Description	57.5 cm SATA FLAT S-S PBF

**Standard Parts (Retail Package)****CPU carrier**

Part Number	SKT-1333L-0000-FXC	SKT-1424L-001B-FXC
Qty	1	1
Description	CPU carrier for 4th Gen Intel® Xeon® Scalable processors (XCC)	CPU carrier for 4th Gen Intel® Xeon® Scalable processors (MCC)

**I/O Shield**

Part Number	MCP-260-00042-0N • <a href="#">eStore</a>
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Qty	1
Description	STD I/O Shield for X13SEM-TF/-F with EMI Gasket

**QRG**

Part Number	MNL-2408-QRG
Qty	1
Description	Quick Reference Guide

**SATA cable**

Part Number	CBL-0044L • <a href="#">eStore</a>
Qty	2
Description	57.5 cm SATA FLAT S-S PBF

**Optional Parts****TPM security module**

Part Number	AOM-TPM-9670V
Qty	1
Description	SPI capable TPM 2.0 with Infineon 9670 controller with vertical form factor