X13SEM-TF

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

8 NVMe ports PCIe 5.0 x4 via 4 MCIO connectors

1 PCIe 5.0 x8,

2 PCIe 5.0 x16,

4 PCIe 5.0 x8 MCIO connectors

M.2 Interface: 2 PCIe 4.0 x2

M.2 Form Factor: 2280, 22110

M.2 Key: M-Key

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; RAID (SATA) 0,1,5,10

Optimized Servers

SYS-211E-FRN2T (/de/products/system/iot/2u/sys-211e-frn2t)   SYS-211E-FRDN2T (/de/products/system/iot/2u/sys-211e-frdn2t)

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 (/de/support/resources/cpu-4th-gen-intel-xeon-scalable)
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
4800/4400/4000 MT/s 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; 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 10 Gigabit Ethernet LAN ports
1 RJ45 Dedicated IPMI LAN port
USB
6 USB 2.0 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 (/SATADOM/) (Disk on Module) power connector support
TPM
1 TPM Header

Expansion Slots
PCIe
2 PCIe 5.0 x16,
1 PCIe 5.0 x8,
4 PCIe 5.0 x8 MCIO connector
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
Redfish API (/manuals/other/RedfishRefGuide.pdf), Supermicro Server Manager (SSM) (/solutions/SMS_SSM.cfm), Supermicro Power Manager (SPM) (/solutions/SMS_SPM.cfm), Supermicro Update Manager (SUM) (/solutions/SMS_SUM.cfm), SuperDoctor® 5 (/en/solutions/management-software/superdoctor), Super Diagnostics Offline (/en/solutions/management-software/super-diagnostics-offline), KVM with dedicated LAN (/manuals/other/BMC_IPMI_X13_H13.pdf#page=112), IPMI 2.0 (/solutions/IPMI.cfm)

Security
Hardware
Trusted Platform Module (TPM) 2.0

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

I/O Shield

Part Number	MCP-260-00042-0N • *e*Store (https://store.supermicro.com/mcp-260-00042-0n.html)
Qty	1
Description	STD I/O Shield for X13SEM-TF/-F with EMI Gasket

SATA cable

Part Number	CBL-0044L • *e*Store (https://store.supermicro.com/supermicro-sata-flat-straight-straight-57-5cm-cable-cbl-0044l.html)
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 • *e*Store (https://store.supermicro.com/mcp-260-00042-0n.html)
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 • *e*Store (https://store.supermicro.com/supermicro-sata-flat-straight-straight-57-5cm-cable-cbl-0044l.html)
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