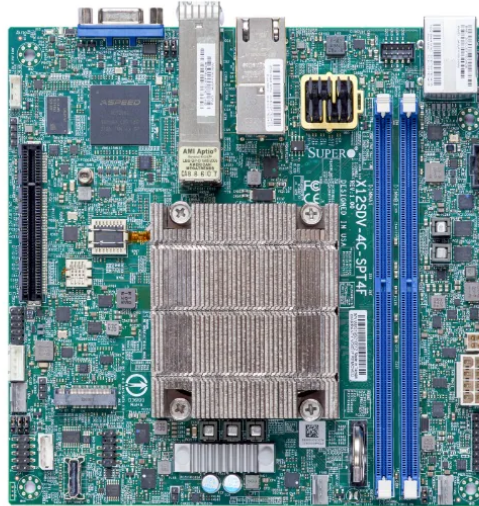


X12SDV-10C-SPT4F



**Embedded
Xeon D SoC**
Dual 25GbE LAN
Dual 10GBase-T LAN
IPMI

Key Features

- System on Chip
- Intel® Xeon® Processor D-1749NT, CPU TDP 90W, Intel Quick Assist Technology
- Up to 128GB Registered ECC RDIMM, DDR4-2667MHz, in 2 DIMM slots
- 1 PCIe 4.0 x8
- 1 OCuLink Connector (4 SATA/PCIe 3.0 x4)
- 1 M.2 M-Key 2280 (SATA/PCIe 4.0 x4)
- Dual 25G SFP28 with Intel SoC
- Dual 10Gbase-T RJ-45 with Intel® Ethernet Controller X550-AT2
- 12V DC or ATX Power Input

Optimized Servers

[SYS-E200-12D-10C](#)

Specifications

Product SKUs**MBD-X12SDV-10C-SPT4F****Physical Stats****Form Factor**

Mini-ITX

Dimension

6.75" x 6.75" (17.15cm x 17.15cm)

Processor**CPU**

Intel® Xeon® Processor D-1749NT

Single Socket FCBGA-2227 supported, CPU TDP supports Up to 90W TDP

Core

Up to 10 cores / 15MB Cache

System Memory**Memory Capacity**

2 DIMM slots

Up to 128GB ECC RDIMM, DDR4-2666MHz; Up to 128GB ECC/non-ECC , DDR4-2666MHz

Memory Type

2666/2400 MT/s ECC/non-ECC DDR4 RDIMM

DIMM Sizes

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

UDIMM: 4GB, 8GB, 16GB, 32GB

Memory Voltage

1.2V

Error Detection

Corrects single-bit errors

Detects double-bit errors (using ECC memory)

On-Board Devices**Chipset**

System on Chip

SATA

SoC controller for 4 SATA3 (6 Gbps) ports; RAID 0,1,5,10

4 SATA ports via OcuLink (or PCIe3.0 x4 for NVMe)

IPMI

ASPEED AST2600 BMC

Graphics

1 Aspeed AST2600 BMC port(s)

Network Controllers

Dual LAN with 25G SFP28 LAN via SoC

Dual LAN with 10GBase-T with Intel® X550

Input / Output**LAN**

2 SFP28 25 Gigabit Ethernet LAN ports

2 RJ45 10GBase-T ports

USB

2 USB 2 port(s) (2 via header)

2 USB 3 port(s) (2 rear type A)

Video Output

1 VGA D-Sub Connector port(s)

Serial Port

1 COM Port(s) (1 header)

TPM

1 TPM Header & Chip both

Expansion Slots**PCIe**

1 PCIe 4.0 x8,

1 PCIe 3.0 x4 (or 4x SATA), via Oculink

M.2

M.2 Interface: 1 SATA/PCIe 4.0 x4

Form Factor: 2280

Key: M-Key

System BIOS**BIOS Type**

AMI 32MB SPI Flash EEPROM

BIOS Features

ACPI 6.3

UEFI 2.7

SMBIOS 3.3

Plug and Play (PnP)

PCI FW 3.0

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

ATX Power connector, +12V DC Power Input, CPU thermal trip support for processor protection, Power-on mode for AC power recovery

Security**Hardware**

Trusted Platform Module (TPM) 2.0

PC Health Monitoring**Voltage**

3.3V standby, +5V standby, +5V, +3.3V, +12V, Memory Voltages, Monitors CPU Core Voltages

LED

UID/Remote UID

BMC/IPMI Heartbeat LED

Overheat/Fan Fail/PWR Fail LED

Power Indicator LED

LAN temperature

Temperature

CPU thermal trip support

peripheral temperature

System temperature

Memory temperature

NVMe temperature

Platform Environment Control Interface (PECI)/TSI

FAN

3x 4-pin fan headers (up to 3 fans)

System level control

PWM fan speed control

Fan speed control

3 fans with tachometer monitoring

Overheat LED indication

Other Features

UID, RoHS, Node Manager Support, Chassis intrusion header, ATX Power connector, ACPI power management, 8-pin 12v DC power connector, 12V DC or ATX Power Source, Intel® QuickAssist Technology

Operating Environment**Operating Temperature Range**

0°C - 60°C (32°F - 140°F)

Non-Operating Temperature Range

-40°C - 85°C (-40°F - 185°F)

Operating Relative Humidity Range

10% - 85% (non-condensing)

Non Operating Relative Humidity Range

10% - 95% (non-condensing)

Parts List

Standard Parts (Bulk Package)

ATX Power Cable

Part Number CBL-PWEX-1063 • [eStore](#)

Qty 1

Description 6CM ATX Power Signal Cable

I/O Shield

Part Number MCP-260-00098-0N • [eStore](#)

Qty 1

Description Standard I/O Shield

Standard Parts (Retail Package)

ATX Power Cable

Part Number CBL-PWEX-1063 • [eStore](#)

Qty 1

Description 6CM ATX Power Signal Cable

COM Cable

Part Number CBL-CDAT-0605

Qty 1

Description COM Cable 20cm

I/O Shield

Part Number MCP-260-00098-0N • [eStore](#)

Qty 1

Description Standard I/O Shield

OCuLink to 4x SATA Cable

Part Number CBL-SAST-0933 • [eStore](#)

Qty 1

Description 50CM OCuLink to 4x SATA Cable

OCuLink to U.2 Cable

Part Number CBL-SAST-0956 • [eStore](#)

Qty 1

Description 55CM OCuLink to U.2
Cable with Molex Power
Header

QRG

Part Number MNL-2478-QRG
Qty 1
Description Motherboard Quick
Reference Guide
