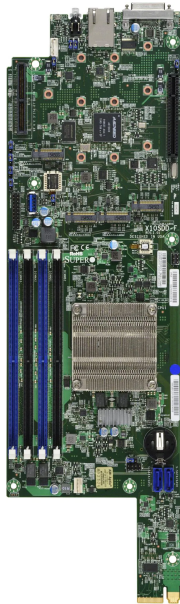


X10SDD-F



MicroCloud Key Features

1. Intel® Xeon® processor D-1541, Single socket FCBGA 1667, 8-Core, 45W

2. System on Chip

3. Up to 128GB ECC RDIMM DDR4 2133MHz or 64GB ECC/Non-ECC UDIMM in 4 Sockets

4. Expansion slots: 1 PCI-E 3.0 x8,
1 PCI-E 3.0 x8 (Micro LP)

5. M.2 Interface: PCI-E 3.0 x4,
PCI-E 3.0 x4, PCI-E 2.0 x4, PCI-E 2.0 x2;
M.2 Form Factor: 2242, 2280, 22110

6. Network option via Micro LP card

7. 2 SATA3 (6Gbps ports)

8. 1 USB 3.0 (Type A), 2 USB 2.0 (rear), 2 USB 2.0 via KVM

9. VGA, serial, COM, KVM mouse/kb port

Links & Resources

- [Tested Memory List](#)
- [Tested HDD / SSD List](#)
- [Tested M.2 List](#)
- [Tested AOC List](#)
- [Motherboard Manual](#)
- [Quick Reference Guide](#)
- [Update Your BIOS](#)
- [BMC/IPMI Firmware](#)
- [Download the Latest Drivers and Utilities](#)
- [Download Drivers CD](#)
- [OS Compatibility](#)

Specifications

Product SKUs

MBD-X10SDD-F	■ X10SDD-F
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Physical Stats

Form Factor	■ Proprietary
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Dimensions	■ 4.75" x 19.95" (12.07cm x 50.67cm)
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Processor/Cache

CPU	<ul style="list-style-type: none"> ■ Intel® Xeon® Processor D-1541. ■ Single Socket FCBGA1667 supported, CPU TDP support 45W
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System Memory

Memory Capacity	<ul style="list-style-type: none"> ■ 128GB Registered ECC RDIMM ■ Up to 64GB Unbuffered ECC/non-ECC UDIMM, DDR4-2133MHz, in 4 DIMM slots
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Memory Type	■ 2133/2400MHz ECC DDR4 RDIMM and ECC/Non-ECC UDIMM
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DIMM Sizes	■ 4GB, 8GB, 16GB, 32GB
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Memory Voltage	■ 1.2V
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Error Detection	<ul style="list-style-type: none"> ■ Corrects single-bit errors ■ Detects double-bit errors (using ECC memory)
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On-Board Devices

Chipset	■ System on Chip
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SATA	■ 2 SATA3 (6 Gbps) ports;
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IPMI	<ul style="list-style-type: none"> ■ Support for Intelligent Platform Management Interface v.2.0 ■ IPMI 2.0 with virtual media over LAN and KVM-over-LAN support
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Network Controllers	■ Intel® i350, 2x Gigabit LAN ports
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Graphics	■ Aspeed AST2400 BMC
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Input / Output

USB	<ul style="list-style-type: none"> ■ 2 USB 2.0 ports (2 rear Type A) ■ 1 USB 3.1 Gen1 ports, 1 Type A); ■ 2x USB 2.0 ports via KVM
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Video Output	■ 1 VGA port
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TPM	■ 1 TPM Header
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Expansion Slots

PCI-E	<ul style="list-style-type: none"> ■ 1 PCI-E 3.0 x8 (Micro Low Profile), ■ 1 PCI-E 3.0 x8
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M.2	■ 2 M.2 M-Key SATA/PCI-E 3.0 x4, 2242/2280/22110
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System BIOS

BIOS Type	■ 128Mb SPI Flash EEPROM with AMI BIOS
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BIOS Features	<ul style="list-style-type: none"> ■ ACPI 5.0 ■ PCI FW 3.0 ■ Plug and Play (PnP) ■ UEFI 2.4 ■ SMBIOS 2.8 ■ USB Keyboard support
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Management

Software	<ul style="list-style-type: none"> ■ Intel® Node Manager, IPMI (Intelligent Platform Management Interface) v2.0 with KVM support, IPMI2.0, KVM with dedicated LAN, NMI, SuperDoctor® 5, Watchdog
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Power Configurations	<ul style="list-style-type: none"> ■ ACPI Power Management ■ Main Switch Override Mechanism ■ Power-on mode for AC power recovery
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PC Health Monitoring

Voltage	<ul style="list-style-type: none"> ■ +12V, +3.3V, +5V, +5V standby, 1.2V (VDIMM), 3.3V standby, Memory, Memory Voltages, Monitors CPU voltages, Monitors for CPU Cores, Supports system management utility, System level control, System temperature
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FAN	<ul style="list-style-type: none"> ■ 1x 4-pin fan header (up to 1 fan), Fan speed control, Low noise fan speed control, Overheat LED indication, Pulse Width Modulated (PWM) fan connectors, PWM fan speed control, Status monitoring for speed control, System level control, Thermal control tachometer fan connectors
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Temperature	■ N/A
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LED	■ N/A
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Other Features	<ul style="list-style-type: none"> ■ ACPI power management, CPU thermal trip support for processor protection, Hyper-Speed Technology hardware acceleration, M.2 NGFF connector, Node Manager Support, RoHS, SDDC, System level control, UID, WOL
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Operating Environment

Operating Temperature Range	■ 0°C ~ 60°C (32°F ~ 140°F)
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Non-Operating Temperature Range ■ -20°C ~ 60°C (-4°F ~ 140°F)

Operating Relative Humidity Range ■ 10% ~ 85% (non-condensing)

Non-Operating Relative Humidity Range ■ 10% ~ 95% (non-condensing)

Parts List

Parts List (Bulk Package)			
Name	Part Number	Qty	Description
Motherboard	MBD-X10SDD-F	1	X10SDD-F Motherboard