

X11SPD-F (For SuperServer Only)



MicroCloud

Key Features

1. 2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors
Single Socket LGA-3647 (Socket P) supported, CPU TDP support Up to 165W TDP

2. Intel® C621

3. Up to 1TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 512GB ECC LRDIMM, DDR4-2933MHz, in 4 DIMM slots

4. 1 PCI-E 3.0 x8 (Micro Low Profile),
1 PCI-E 3.0 x16
M.2 Interface: 2 SATA/PCI-E 3.0 x4
M.2 Form Factor: 2280
M.2 Key: M-Key

5. Intel® C621 controller for 2 SATA3 (6 Gbps) ports;

6. 1 VGA port,
via KVM Connector

7. Single LAN with Realtek RTL8211E PHY (dedicated IPMI)
via Backplane

Specifications

Product SKUs

MBD-X11SPD-F ■ X11SPD-F

Physical Stats

Form Factor ■ Proprietary

Dimension ■ 4.66" x 18.5" (11.84cm x 46.99cm)

Processor

CPU ■ 2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors
 ■ Single Socket LGA-3647 (Socket P) supported, CPU TDP supports Up to 165W TDP

Core ■ Up to 24 cores

Note ■ BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake-R)

System Memory

Memory Capacity ■ 4 DIMM slots
 ■ Up to 512GB ECC LRDIMM, DDR4-2933MHz; Up to 1TB 3DS ECC RDIMM, DDR4-2933MHz

Memory Type ■ 2933/2666/2400/2133MHz ECC DDR4 LRDIMM, RDIMM (3DS)

DIMM Sizes ■ 8GB, 16GB, 32GB, 64GB, 128GB
 ■ LRDIMM: 32GB, 64GB, 128GB
 ■ RDIMM: 8GB, 16GB, 32GB, 64GB

Memory Voltage ■ 1.2V

Error Detection ■ Corrects single-bit errors
 ■ Detects double-bit errors (using ECC memory)

On-Board Devices

Chipset ■ Intel® C621

SATA ■ Intel® C621 controller for 2 SATA3 (6 Gbps) ports

IPMI ■ ASPEED AST2500
 ■ IPMI 2.0 with virtual media over LAN and KVM-over-LAN support

Graphics ■ ASPEED AST2500 BMC
 ■ Via KVM Connector

Network Controllers ■ Single LAN with Realtek RTL8211E PHY (dedicated IPMI), via Backplane

Input / Output

SATA ■ 2 SATA3 (6Gbps) port(s)

Expansion Slots

PCI-E ■ 1 PCI-E 3.0 x8 (Micro Low Profile),
 ■ 1 PCI-E 3.0 x16

M.2 ■ M.2 Interface: 2 SATA/PCI-E 3.0 x4
 ■ Form Factor: 2280
 ■ Key: M-Key

System BIOS

BIOS Type ■ 256MB UEFI

Management

Software ■ SuperDoctor® 5, NMI, SUM, KVM with dedicated LAN, IPMI2.0, Watchdog, IPMI (Intelligent Platform Management Interface) v2.0 with KVM support

System Management Software ■ IPMI (Intelligent Platform Management Interface) v1.5 / 2.0 with KVM support, SUM

Power Configurations ■ Power-on mode for AC power recovery, ACPI Power Management, CPU thermal trip support for processor protection, Control of power-on for recovery from AC power loss

PC Health Monitoring

Voltage ■ VBAT, System temperature, System level control, Supports system management utility, Monitors CPU voltages, Memory, HT, +5V standby, +5V, +3.3V, +12V, +1.8V, Monitors for CPU Cores, Memory Voltages

LED ■ UID/Remote UID
 ■ Power LED
 ■ BMC/IPMI Heartbeat LED
 ■ CPU / System Overheat LED

Temperature ■ Monitoring for CPU and chassis environment
 ■ CPU thermal trip support
 ■ Thermal Monitor 2 (TM2) support
 ■ PECI
 ■ I2C temperature sensing logic

FAN ■ Thermal control tachometer fan connectors, System level control, PWM fan speed control, Fan speed control, Pulse Width Modulated (PWM) fan connectors, Overheat LED indication

Other Features ■ WOL, UID, System level control, RoHS, M.2 NGFF connector, Control of power-on for recovery from AC power loss

Operating Environment

LAN	■ 1 RJ45 Dedicated IPMI LAN port
USB	■ 2 USB 2.0 port(s) (2 rear) ■ USB 2.0 via KVM Connector
Video Output	■ 1 VGA port(s)
Serial Port	■ 1 fast UART 16550 Serial ■ 1 COM Port(s) (1 rear), Via KVM Connector
TPM	■ 1 TPM Header
Others	■ 1 KVM Connector for VGA ■ 1 USB 0 and COM Ports

Operating Temperature Range	■ 0°C - 50°C (32°F - 122°F)
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Non-Operating Temperature Range	■ -20°C - 60°C (-4°F - 140°F)
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Operating Relative Humidity Range	■ 10% - 85% (non-condensing)
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Non Operating Relative Humidity Range	■ 10% - 95% (non-condensing)
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Parts List

Parts List (Bulk Package)			
Name	Part Number	Qty	Description
Motherboard	MBD-X11SPD-F	1	X11SPD-F Motherboard

Server (Optimized for X11SPD-F)

Server Name
<u>SYS-5039MP-H8TNR</u>

