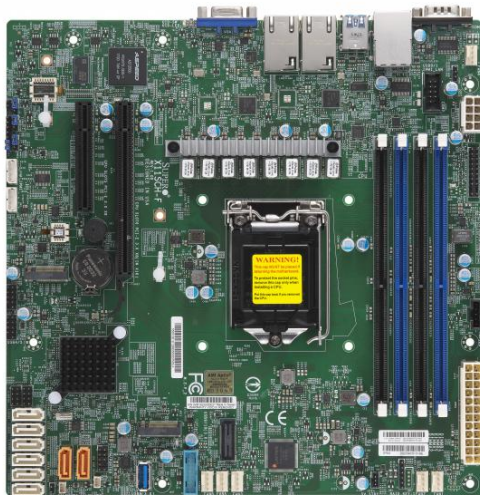




Key Features

1. 8th/9th Generation Intel® Core™ i3/Pentium®/Celeron® Processor, Intel® Xeon® E-2100 Processor, Intel® Xeon® E-2200 Processor., Single Socket LGA-1151 (Socket H4) supported, CPU TDP support Up to 95W TDP
2. Intel® C246 chipset
3. Up to 128GB DDR4 2666MHz ECC UDIMM; 4 DIMM slots
4. Expansion slots: 1 PCI-E 3.0 x8 (in x16) and 1 PCI-E 3.0 x8 slots
5. Dual GbE LAN ports via Intel® i210
6. 8 SATA3 (6Gbps) via C246; RAID 0, 1, 5, 10
7. I/O: 1 VGA, 2 COM, TPM header
8. 2 SuperDOM with built-in power
9. 2 USB 3.1 Gen 2 (rear); 3 USB 3.1 Gen 1 (1 Type A, 2 via header(s)); 6 USB 2.0 (2 rear, 4 via header(s))
10. 2x M.2 NGFF connectors
M.2 Interface: PCI-E 3.0 x4
Form Factor: 2280, 22110
Key: M-Key
Double Height Connector

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 Driver CD](#)

[OS Compatibility](#)

[Optimization](#)

Specifications

Product SKUs

MBD-X11SCH-F	■ X11SCH-F
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Physical Stats

Form Factor	■ Micro-ATX
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Dimensions	■ 9.6" x 9.6" (24.38cm x 24.38cm)
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Processor/Cache

CPU	■ 8th/9th Generation Intel® Core® i3/Pentium®/Celeron® Processor, Intel® Xeon® E-2100 Processor, Intel® Xeon® E-2200 Processor. ■ Single Socket LGA-1151 (Socket H4) supported, CPU TDP support Up to 95W TDP
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Cores / Cache	■ 8 cores, 16 threads
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Note	■ BIOS version 1.0b or above is required to support Intel® Xeon® E-2200 and 9th Generation Intel® Core® i3/Pentium®/Celeron® Processors
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System Memory

Memory Capacity	■ Up to 128GB DDR4 ECC UDIMM, DDR4-2666MHz, in 4 DIMM slots
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Memory Type	■ 2666/2400/2133MHz ECC DDR4 SDRAM 72-bit
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DIMM Sizes	■ 4GB, 8GB, 16GB, 32GB
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Memory Voltage	■ 1.2V
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Error Detection	■ Corrects single-bit errors
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On-Board Devices

Chipset	■ Intel® C246
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SATA	■ Intel® C246 controller for 8 SATA3 (6 Gbps) ports; RAID 0,1,5,10
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IPMI	■ ASPEED AST2500
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Network Controllers	■ Dual LAN with Intel® Ethernet Controller I210
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Graphics	■ Aspeed AST2500 BMC
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Input / Output

USB	■ 6x USB 2.0 ports (2 rear, 4 via headers); 2x USB 3.1 Gen2 ports (rear); 3x USB 3.1 Gen1 ports (1 Type-A, 2 via header)
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Video Output	■ 1 VGA port
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Serial Port / Header	■ 2 COM Ports (1 rear, 1 header)
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TPM	■ 1 TPM Header
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Expansion Slots

PCI-E	■ 1 PCI-E 3.0 x8 (in x16 slot), ■ 1 PCI-E 3.0 x8
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M.2	■ M.2 Interface: PCI-E 3.0 x4 ■ Form Factor: 2280, 22110 ■ Key: M-Key ■ Double Height Connector
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System BIOS

BIOS Type	■ UEFI 256Mb
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BIOS Features	■ ACPI 6.0 ■ SMBIOS 2.7 ■ Plug and Play (PnP) ■ RTC (Real Time Clock) Wakeup ■ UEFI 2.7 ■ USB Keyboard support ■ PCI 3.0
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Management

Software	■ Intel® Node Manager, IPMI2.0, NMI, SPM, SSM, SUM, SuperDoctor® 5, Watchdog
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Power Configurations	■ ACPI Power Management ■ Power-on mode for AC power recovery
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PC Health Monitoring

Voltage	■ +12V, +3.3V, +5V, +5V standby, 6 -fan status, Chassis intrusion header, Chipset Voltage, Memory Voltages, Monitors CPU voltages, Supports system management utility, System level control, VBAT
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FAN	■ 6x 4-pin fan headers (up to 6 fans), 6 fans with tachometer status monitoring, Fan speed control, Overheat LED indication, Thermal control tachometer fan connectors
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Temperature	■ N/A
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LED	■ CPU / System Overheat LED, UID/Remote UID
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Other Features	■ ACPI power management, Chassis intrusion detection, Chassis intrusion header, Control of power-on for recovery from AC power loss, CPU thermal trip support for processor protection, Dual Cooling Zones, M.2 NGFF connector, Node Manager Support, UID, WOL
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Operating Environment

Operating Temperature Range	■ 0°C ~ 50°C (32°F ~ 122°F)
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Non-Operating Temperature Range	■ -40°C - 70°C (-40°F - 158°F)
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Operating Relative Humidity Range	■ 8% - 90% (non-condensing)
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Non-Operating Relative Humidity Range	■ 5% - 95% (non-condensing)
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Parts List

Parts List (Bulk Package)			
Name	Part Number	Qty	Description
Motherboard	MBD-X11SCH-F	1	X11SCH-F Motherboard
I/O Cables	CBL-0044L	2	57.5CM SATA FLAT S-S PBF
I/O Shield	MCP-260-00042-0N	1	STD I/O Shield for X11SCH-F with EMI Gasket

Parts List (Retail Package)			
Name	Part Number	Qty	Description
Motherboard	MBD-X11SCH-F	1	X11SCH-F Motherboard
QRG	MNL-2105-QRG	1	Motherboard Quick Reference Guide
I/O Cables	CBL-0044L	6	57.5CM SATA FLAT S-S PBF
I/O Shield	MCP-260-00042-0N	1	STD I/O Shield for X11SCH-F with EMI Gasket

Optional Parts List			
Name	Part Number	Qty	Description
TPM security module	AOM-TPM-9670H		SPI capable TPM 2.0 with Infineon 9670 controller with horizontal form factor
TPM security module	AOM-TPM-9670V		SPI capable TPM 2.0 with Infineon 9670 controller with vertical form factor
TPM security module	AOM-TPM-9671H		SPI capable TPM 1.2 with Infineon 9670 controller with horizontal form factor
TPM security module	AOM-TPM-9671V		SPI capable TPM 1.2 with Infineon 9670 controller with vertical form factor

Chassis (Optimized for X11SCH-F)

Embedded Compact	1U	2U	3U	Mid/Mini-Tower	4U/Tower
	SC813MFTQC-R407CB SC514-R407C SC515-R407 1U Heatsink:SNK-P0046P				

 = Most optimized Chassis for SuperServer Configuration
Blue color = Compatible
Green color = Global SKU & Compatible
Red dot & green color = Optimized + Global SKU