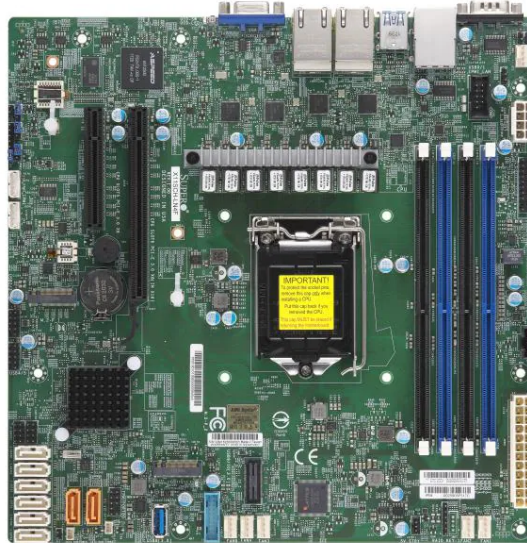


# X11SCH-LN4F

---



## Key Features

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 supports Up to 95W TDP

Intel® C246 chipset

Up to 128GB DDR4 2666MHz ECC UDIMM; 4 DIMM slots

Expansion slots: 1 PCIe 3.0 x8 (in x16) and 1 PCIe 3.0 x8 slots

2x M.2 NGFF connectors

**M.2 Interface:** PCIe 3.0 x4

Form Factor: 2280, 22110

Key: M-Key

8 SATA3 (6Gbps) via C246; RAID 0, 1, 5, 10

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))

Quad GbE LAN ports via Intel® i210

2 SuperDOM with built-in power

I/O: 1 VGA, 2 COM, 1 TPM header

## Specifications

**Product SKUs****MBD-X11SCH-LN4F****Physical Stats****Form Factor**

Micro-ATX

**Dimension**

9.6" x 9.6" (24.38cm x 24.38cm)

**Processor****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 supports Up to 95W TDP

**Core**

Up to 8 cores, 16 threads

**System Memory****Memory Capacity**

4 DIMM slots

Up to 128GB ECC , DDR4-2666MHz

**Memory Type**

2666/2400/2133 MT/s SDRAM 72-bit,

**DIMM Sizes**

4GB, 8GB, 16GB, 32GB

**Memory Voltage**

1.2V

**Error Detection**

Corrects single-bit errors

**On-Board Devices****Chipset**

Intel® C246

**SATA**

Intel® C246 controller for 8 SATA3 (6 Gbps) ports; RAID 0,1,5,10

**IPMI**

ASPEED AST2500

**Graphics**

1 ASPEED AST2500 BMC port(s)

**Network Controllers**

Quad LAN with Intel® Ethernet Controller I210

**Input / Output****SATA**

8 SATA3 (6Gbps) port(s)

**LAN**

4 RJ45 Gigabit Ethernet LAN ports

**USB**

6 USB 2.0 port(s) (4 via header; 2 rear)

3 USB 3.1 Gen1 port(s) (2 via header; 1 type A)

2 USB 3.1 Gen2 port(s) (2 rear)

**Video Output**

1 VGA port(s)

**Serial Port**

2 COM Port(s) (1 header; 1 rear)

**TPM**

1 TPM Header

**Expansion Slots****PCIe**

1 PCIe 3.0 x8 (in x16 slot),

1 PCIe 3.0 x8

**M.2**

M.2 Interface: PCIe 3.0 x4

Form Factor: 22110, 2280

Key: M-Key

**System BIOS****BIOS Type**

256MB UEFI

**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

**Management****Software**SuperDoctor® 5, NMI, SUM, SPM, Intel® Node Manager, SSM,IPMI2.0, Watchdog**System Management Software**

IPMI (Intelligent Platform Management Interface) v1.5 / 2.0 with KVM support

**Power Configurations**

Power-on mode for AC power recovery, ACPI Power Management

**PC Health Monitoring****Voltage**

VBAT, System level control, Supports system management utility, Monitors CPU voltages, Chipset Voltage, Chassis intrusion header, 6 -fan status, +5V standby, +5V, +3.3V, +12V, Memory Voltages

**LED**

UID/Remote UID

CPU / System Overheat LED

**FAN**

6x 4-pin fan headers (up to 6 fans)

Thermal control tachometer fan connectors

Fan speed control

6 fans with tachometer status monitoring

Overheat LED indication

**Other Features**

WOL, UID, Node Manager Support, M.2 NGFF connector, Dual Cooling Zones, CPU thermal trip support for processor protection, Control of power-on for recovery from AC power loss, Chassis intrusion header, Chassis intrusion detection, ACPI power management

**Operating Environment****Operating Temperature Range**

0°C - 50°C (32°F - 122°F)

**Non-Operating Temperature Range**

-40°C - 70°C (-40°F - 158°F)

**Operating Relative Humidity Range**

8% - 90% (non-condensing)

**Non Operating Relative Humidity Range**

5% - 95% (non-condensing)

## Parts List

### Standard Parts (Bulk Package)

**I/O Cables**

Part Number CBL-0044L • [eStore](#)  
 Qty 2  
 Description 57.5CM SATA FLAT S-S PBF

---

**I/O Shield**

Part Number MCP-260-00042-0N • [eStore](#)  
 Qty 1  
 Description STD I/O Shield for X11SCH-LN4F with EMI Gasket

---

**Standard Parts (Retail Package)**

**I/O Cables**

Part Number CBL-0044L • [eStore](#)  
 Qty 6  
 Description 57.5CM SATA FLAT S-S PBF

---

**I/O Shield**

Part Number MCP-260-00042-0N • [eStore](#)  
 Qty 1  
 Description STD I/O Shield for X11SCH-LN4F with EMI Gasket

---

**QRG**

Part Number MNL-2105-QRG  
 Qty 1  
 Description Motherboard Quick Reference Guide

---

**Optional Parts**

**TPM security module**

Part Number	AOM-TPM-9671H	AOM-TPM-9670H	AOM-TPM-9671V	AOM-TPM-9670V
Qty	--	--	--	--
Description	SPI capable TPM 1.2 with Infineon 9670 controller with horizontal form factor	SPI capable TPM 2.0 with Infineon 9670 controller with horizontal form factor	SPI capable TPM 1.2 with Infineon 9670 controller with vertical form factor	SPI capable TPM 2.0 with Infineon 9670 controller with vertical form factor

---

