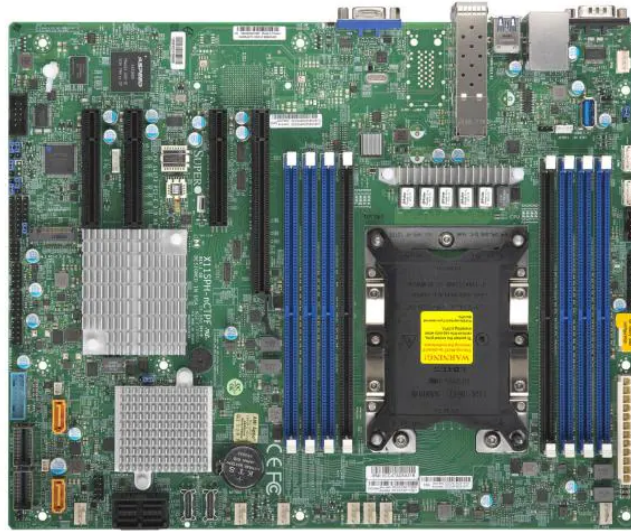


X11SPH-nCTPF



High Performance VROC support

Key Features

2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors, Single Socket LGA-3647 (Socket P) supported, CPU TDP supports Up to 205W TDP

Intel® C622 chipset

Up to 2TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 2TB 3DS ECC LRDIMM, DDR4-2933MHz, in 8 DIMM slots

Expansion slots:

1 PCIe 3.0 x16 (x16 || x8),

1 PCIe 3.0 x8 (x0 || x8),

1 PCIe 3.0 x8,

1 PCIe 3.0 x4 (in x8)

2x Port NVMe PCIe 3.0 x4 via OcuLink

M.2 NGFF connector

M.2 Interface: PCIe 3.0 x4 and SATA

Form Factor: 2280

Key: M-Key

Double Height Connector

8 SAS3 (12Gbps) via Broadcom® 3008; RAID 0, 1, 10

10 SATA3 (6Gbps) via C622

2 10G SFP+

5 USB 3.0 (2 rear, 1 Type-A, 2 via header), 8 USB 2.0 (2 rear, 6 via headers)

Specifications

Product SKUs

MBD-X11SPH-nCTPF

Physical Stats

Form Factor

ATX

Dimension

12" x 9.6" (30.48cm x 24.38cm)

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 205W TDP

Core

Up to 28 cores

System Memory

Memory Capacity

8 DIMM slots

Up to 2TB 3DS ECC LRDIMM, DDR4-2933MHz; Up to 2TB 3DS ECC RDIMM, DDR4-2933MHz

Memory Type

2933/2666/2400/2133 MT/s ECC DDR4 LRDIMM (3DS), RDIMM (3DS)

DIMM Sizes

LRDIMM: 32GB, 64GB, 128GB

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

Memory Voltage

1.2V

Error Detection

Corrects single-bit errors

On-Board Devices

Chipset

Intel® C622

SATA

Intel® C622 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10

Broadcom® 3008 SW controller for 8 SAS3 (12 Gbps) ports; RAID 0,1,10

IPMI

ASPEED AST2500

Graphics

0 ASPEED AST2500 BMC port(s)

Network Controllers

Dual LAN with 10G SFP+ with Intel® X722 + Inphi CS4227

Input / Output

SATA

10 SATA3 (6Gbps) port(s)

SAS

8 SAS port(s)

LAN

2 10G SFP+ LAN ports

USB

3 USB 3 port(s) (1 Type A; 2 via header)

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

2 USB 3.0 port(s) (2 rear)

Video Output

1 VGA port(s)

Serial Port

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

DOM

2 SATA DOM (Disk on Module) power connector support

TPM

1 TPM Header

Expansion Slots

PCIe

1 PCIe 3.0 x16 (x16 or x8),

1 PCIe 3.0 x8 (x0 or x8),

1 PCIe 3.0 x8,

1 PCIe 3.0 x4 (in x8 slot)

M.2

M.2 Interface: PCIe 3.0 x4; SATA

Form Factor: 2280

Key: M-Key

System BIOS

BIOS Type

AMI UEFI

BIOS Features

ACPI 6.0

RTC (Real Time Clock) Wakeup

SMBIOS 3.0 or later

Management

Software

SuperDoctor® 5, NMI, SUM, KVM with dedicated LAN, SPM, Intel® Node Manager, IPMI2.0, Watchdog

Power Configurations

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

PC Health Monitoring

Voltage

VBAT, Supports system management utility, Monitors CPU voltages, Chassis intrusion header, 3.3V standby, +5V standby, +5V, +3.3V, +12V, +1.8V, 8 -fan status

LED

UID/Remote UID

Suspend static indicator LED

CPU / System Overheat LED

Temperature

CPU thermal trip support

PECI

FAN

8x 4-pin fan headers (up to 8 fans)

System level control

PWM fan speed control

Dual Cooling Zone

Overheat LED indication

Other Features

WOL

UID

RoHS

Control of power-on for recovery from AC power loss

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	57.5 cm SATA FLAT S-S PBF

I/O Shield

Part Number	MCP-260-00109-0N • eStore
Qty	1
Description	STD I/O Shield for X11SPH-nCTPF with EMI Gasket

Standard Parts (Retail Package)

I/O Cables

Part Number	CBL-0044L • eStore
Qty	2
Description	57.5 cm SATA FLAT S-S PBF

I/O Shield

Part Number	MCP-260-00109-0N • eStore
Qty	1
Description	STD I/O Shield for X11SPH-nCTPF with EMI Gasket

QRG

Part Number	MNL-1949-QRG
Qty	1
Description	Motherboard Quick Reference Guide

Optional Parts

1U I/O Shield

Part Number	MCP-260-00114-0N
Qty	1
Description	1U I/O Shield for X11SPH-nCTPF with EMI Gasket

TPM security module

Part Number	AOM-TPM-9671H	AOM-TPM-9670H	AOM-TPM-9671V	AOM-TPM-9670V
Qty	1	1	1	1
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