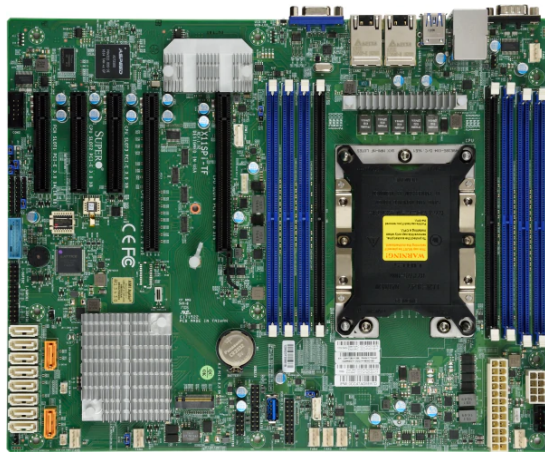




High Performance VROC support

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 205W TDP
2. Intel® C622
3. Up to 2TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 2TB 3DS ECC LRDIMM, DDR4-2933MHz, in 8 DIMM slots
4. Expansion slots:
 - 1 PCI-E 3.0 x16,
 - 1 PCI-E 3.0 x16 (x16 || x8),
 - 1 PCI-E 3.0 x8 (x0 || x8),
 - 1 PCI-E 3.0 x8,
 - 1 PCI-E 3.0 x4 (in x8)
5. 2 10GbE LAN ports
6. 10 SATA3 (6Gbps) via C622
7. I/O: 1 VGA, 2 COM, TPM header
8. 5 USB 3.0 (2 rear, 1 Type-A, 2 via header), 6 USB 2.0 (2 rear, 4 via headers)
9. M.2 NGFF connector
 - M.2 Interface: PCI-E 3.0 x4 and SATA
 - 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-X11SPi-TF	■ X11SPi-TF
----------------------	-------------

Physical Stats

Form Factor	■ ATX
Dimensions	■ 12" x 9.6" (30.48cm x 24.38cm)

Processor/Cache

CPU	■ 2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors, Single Socket LGA-3647 (Socket P) supported, CPU TDP support Up to 205W TDP
Cores / Cache	■ Up to 28 cores
Note	■ BIOS version 3.0a or above is required to support 2nd Generation Intel Xeon Scalable Processors-SP ■ BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake-R)

System Memory

Memory Capacity	■ Up to 2TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 2TB 3DS ECC LRDIMM, DDR4-2933MHz, in 8 DIMM slots
Memory Type	■ 2933/2666/2400/2133MHz ECC DDR4 RDIMM, LRDIMM
DIMM Sizes	■ RDIMM: 8GB, 16GB, 32GB, 64GB ■ LRDIMM: 32GB, 64GB, 128GB ■ 3DS LRDIMM: 64GB, 128GB, 256GB
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
IPMI	■ ASPEED AST2500
Network Controllers	■ Dual LAN with 10GBase-T with Intel® X722 + X557
Graphics	■ Aspeed AST2500 BMC

Input / Output

SATA	■ 10 SATA3 (6Gbps) port
LAN	■ 2 RJ45 10GBase-T ports
USB	■ 6 USB 2.0 ports (2 rear + 4 headers) ■ 5 USB 3.0 ports (2 rear + 2 headers + 1 Type A)
Video Output	■ 1 VGA port
Serial Port / Header	■ 2 COM Ports (1 rear, 1 header)
TPM	■ TPM Header

Expansion Slots

PCI-E	■ 1 PCI-E 3.0 x16, ■ 1 PCI-E 3.0 x16 (x16 or x8), ■ 1 PCI-E 3.0 x8 (x0 or x8), ■ 1 PCI-E 3.0 x8, ■ 1 PCI-E 3.0 x4 (in x8 slot)
M.2	■ M.2 Interface: PCI-E 3.0 x4 and SATA ■ Form Factor: 2280, 22110 ■ Key: M-Key ■ Double Height Connector

System BIOS

BIOS Type	■ AMI UEFI
BIOS Features	■ ACPI 6.0 ■ RTC (Real Time Clock) Wakeup ■ SMBIOS 3.0 or later

Management

Software	■ Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, NMI, SPM, SUM, SuperDoctor® 5, Watchdog
Power Configurations	■ ACPI Power Management ■ Power-on mode for AC power recovery

PC Health Monitoring

Voltage	■ +1.8V, +12V, +3.3V, +5V, +5V standby, 3.3V standby, 7-fan status, Chassis intrusion header, HT, Monitors CPU voltages, Supports system management utility, VBAT
FAN	■ 7x 4-pin fan headers (up to 7 fans), Fan speed control, Overheat LED indication, PWM fan speed control, System level control
Temperature	■ CPU thermal trip support, PECCI
LED	■ CPU / System Overheat LED, UID/Remote UID, Suspend static indicator LED
Other Features	■ ACPI power management, Control of power-on for recovery from AC power loss, CPU thermal trip support for processor protection, M.2 NGFF connector, RoHS, UID, WOL

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

Parts List (Bulk Package)			
Name	Part Number	Qty	Description
Motherboard	MBD-X11SPi-TF	1	X11SPi-TF Motherboard
I/O Cables	CBL-0044L	2	57.5 cm SATA FLAT S-S PBF
I/O Shield	MCP-260-00042-0N	1	STD I/O Shield for X11SPi-TF with EMI Gasket

Parts List (Retail Package)			
Name	Part Number	Qty	Description
Motherboard	MBD-X11SPi-TF	1	X11SPi-TF Motherboard
QRG	MNL-1900-QRG	1	Motherboard Quick Reference Guide
I/O Cables	CBL-0044L	6	57.5 cm SATA FLAT S-S PBF
I/O Shield	MCP-260-00042-0N	1	STD I/O Shield for X11SPi-TF 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 X11SPi-TF)

Embedded Compact	1U	2U	3U	Mid / Mini-Tower	4U / Tower
	● SC813MFTQC-350CB2 ● SC813MFTQC-R407CB SC113MFAC2-341CB SC113MFAC2-R606CB SC512F-350B1 SC113MFAC2-605CB SC515-350 SC515-R407 SC514-R407C 1U Heatsink:SNK-P0067PS	SC823TQ-653LPB SC213LT-600LPB SC825TQC-R740LPB SC213A-R740LPB SC822T-333LPB 2U Heatsink:SNK-P0068APS4	SC833T-653B 2U Heatsink:SNK-P0068APS4		SC842TQC-668B 2U Heatsink:SNK-P0068APS4

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

Server (Optimized for X11SPi-TF)

Server Name
<u>SYS-5019P-MT</u>
<u>SYS-5019P-MTR</u>