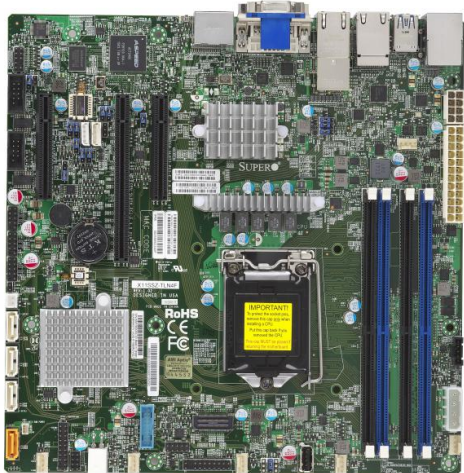




**vPro AMT
IPMI
Dual 10GbE
Embedded
Key Features**

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](#)

- 1. Single socket H4 (LGA 1151) supports Intel® Xeon® processor E3-1200 v6/v5, Intel® 7th/6th Gen. Core™ i7/i5/ i3 series, Intel® Celeron® and Intel® Pentium®
- 2. Intel® C236 chipset
- 3. Up to 64GB DDR4 2400MHz ECC/Non-ECC Unbuffered UDIMM; 4 DIMM slots
- 4. 1 PCIe 3.0 x16 (in x16),
2 PCIe 3.0 x4 (in x8)
- 5. Dual 10GbE LAN via Intel® X550-BT2
Dual GbE LAN via Intel® i219LM + i210AT
- 6. 2 DP, 1 DVI-I, 3 independent displays via Intel HD Graphics, VGA port for BMC
- 7. 4 SATA3 (6Gbps) via C236; RAID 0, 1, 5, 10
- 8. I/O: 1 SATA DOM, 2 COM, TPM 1.2 header, ALC 888S HD Audio
- 9. IPMI, AMT vPro
- 10. Supports 12V DC power input

Specifications

Product SKUs

- MBD-X11SSZ-TLN4F

- X11SSZ-TLN4F

Physical Stats

- Form Factor

- Micro-ATX
- Dimensions

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

Processor/Cache

- CPU

- Intel® 6th Generation Core™ i3 series
 - Intel® 6th Generation Core™ i5 series
 - Intel® 6th Generation Core™ i7 series
 - Intel® 7th Generation Core™ i3 series
 - Intel® 7th Generation Core™ i5 series
 - Intel® 7th Generation Core™ i7 series
 - Intel® Celeron®
 - Intel® Pentium®
 - Intel® Xeon® processor E3-1200 v5 series
 - Intel® Xeon® Processor E3-1200 v6 series
 - Socket H4 (LGA 1151) supported; CPU TDP support Up to 91W
- Note

- BIOS version 2.0 or above is required to support 7th Generation Intel® Core™ Processors and Intel® Xeon® Processor E3-1200 v6 series

System Memory

- Memory Capacity

- Up to 64GB Unbuffered ECC/non-ECC UDIMM, DDR4-2400MHz, in 4 DIMM slots
- Memory Type

- 2400/2133/1866MHz ECC DDR4 SDRAM 72/64-bit, 288-pin (UDIMM) gold-plated DIMMs
- DIMM Sizes

- 4GB, 8GB, 16GB
- Memory Voltage

- 1.2V
- Error Detection

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

On-Board Devices

- Chipset

- Intel® C236
- SATA

- Intel® C236 controller for 4 SATA3 (6 Gbps) ports; RAID 0,1,5,10
- Network Controllers

- Dual Intel® X550 10GBase-T Ethernet Controller
 - Single Intel® PHY I219LM LAN controller
 - Single Intel® Ethernet Controller I210-AT
- Audio

- ALC 888S HD Audio
- Graphics

- Intel® HD Graphics, Aspeed AST2400 BMC
 - 3 Independent Displays, VGA is from BMC, A CPU with processor graphics is required for Intel HD Graphics (DV/DP). Example: E3-1275 v5

Input / Output

- USB

- 9 USB 2.0 ports (2 rear, 6 via header(s), 1 Type A)
 - 4 USB 3.0 ports (2 rear, 2 via header(s))
 -
- Video Output

- 2 DP (DisplayPort) port(s), 1 DVI-I port(s), 1 VGA port(s)
- Serial Port / Header

- 2 COM Ports (2 header(s))
- TPM

- 1 TPM 2.0 Header

Expansion Slots

- PCI-E

- 1 PCI-E 3.0 x16 (in x16 slot)
 - 2 PCI-E 3.0 x4 (in x8 slot)
 -

System BIOS

- BIOS Type

- AMI UEFI
- BIOS Features

- UEFI 2.3.1
 - USB Keyboard support
 - Hardware BIOS Virus protection
 - SMBIOS 2.7.1
 - Plug and Play (PnP)
 - APM 1.2
 - DMI 2.3
 - PCI 2.3
 - ACPI 1.0 / 2.0 / 3.0 / 4.0

Management

- Software

- AMT
 - IPM2.0
 - KVM with dedicated LAN
 - NMI
 - SuperDoctor® 5
 - vPro
 - 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, 1.2V (VDIMM), 6-fan status, Chassis intrusion header, Monitors CPU voltages, Supports system management utility, System level control, VBAT
- FAN

- 6x 4-pin fan headers (up to 6 fans)
 - 6 fans with tachometer status monitoring
 - Fan speed control
 - Overheat LED indication
 - Pulse Width Modulated (PWM) fan connectors
 - PWM fan speed control
 - System level control
 - Thermal control tachometer fan connectors
- Temperature

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

- CPU / System Overheat LED
 - UID/Remote UID
- Other Features

- 8-pin 12v DC power connector
 - ACPI power management
 - ATX Power connector
 - Chassis intrusion header
 - Control of power-on for recovery from AC power loss
 - CPU thermal trip support for processor protection
 - Intel Smart Response Technology
 - RoHS
 - System level control
 - UID
 - WOL

Operating Environment

- Operating Temperature Range

- 0°C ~ 60°C (32°F ~ 140°F)
- Non-Operating Temperature Range

- 20°C ~ 60°C (-4°F ~ 140°F)
- Operating Relative Humidity Range

- 10% ~ 85% (non-condensing)
- Non-Operating Relative Humidity Range

- 10% ~ 95% (non-condensing)

Parts List

Parts List (Bulk Package)			
Name	Part Number	Qty	Description
Motherboard	MBD-X11SSZ-TLN4F	1	X11SSZ-TLN4F Motherboard
I/O Cables	CBL-0044L	2	57.5CM SATA FLAT S-S PBF
I/O Shield	MCP-260-00093-0N	1	Standard I/O Shield for X11SSZ with EMI Gasket

Parts List (Retail Package)			
Name	Part Number	Qty	Description
Motherboard	MBD-X11SSZ-TLN4F	1	X11SSZ-TLN4F Motherboard
QRG	MNL-1744-QRG	1	Motherboard Quick Reference Guide
I/O Cables	CBL-0044L	4	57.5CM SATA FLAT S-S PBF
I/O Shield	MCP-260-00093-0N	1	Standard I/O Shield for X11SSZ with EMI Gasket

Optional Parts List			
Name	Part Number	Qty	Description
1U I/O Shield	MCP-260-00094-0N	--	1U I/O Shield for X11SSZ with EMI Gasket in CSE-512/813
TPM security module	AOM-TPM-9655V AOM-TPM-9655H	--	TPM Module with Infineon 9655, RoHS/REACH,PBF; Vertical or Horizontal

Chassis (Optimized for X11SSZ-TLN4F)

Embedded Compact	1U	2U	3U	Mid/Mini-Tower	4U/Tower
	SC512-203B SC512F-350B SC514-R400C SC515-505 SC515-505 SC813MTQ-350CB SC813MFTQC-350CB 1U Heatsink:SNK-P0046P	SC825MTQ-R700LPB SC823MTQ-R700LPB 2U Heatsink:SNK-P0046A4		SC731i-300B SC731D-300B SC731i-403B SC732D3-1200B SC733TQ-668B 2U Heatsink:SNK-P0046A4	SC743AC-1200B-SQ SC745BAC-R1K28B2 SC842i-500B 2U Heatsink:SNK-P0046A4

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