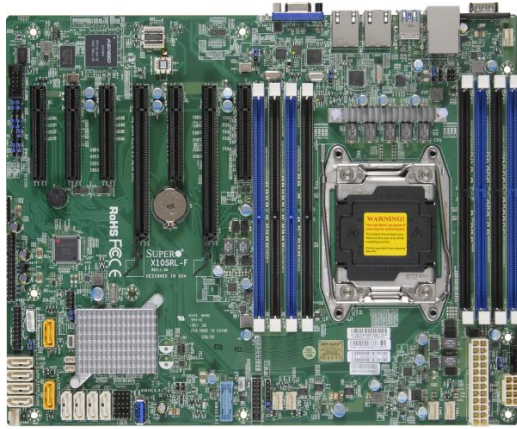




Embedded Key Features

1. Single socket R3 (LGA 2011) supports
Intel® Xeon® processor E5-2600 v4†/ v3 and E5-1600 v4†/ v3 family
2. Intel® C612 chipset
3. Up to 1TB† ECC 3DS LRDIMM, up to DDR4- 2400†MHz; 8 DIMM slots
4. 7 PCI-E slots total:
2 PCI-E 3.0 x8, 2 PCI-E 3.0 x8 (in x16), 2 PCI-E 3.0 x4 (in x8) or 1 x8 + 1 x0 (auto-
switch), & 1 PCI-E 2.0 x4 (in x8)
5. Intel® i210 Dual port GbE LAN
6. 10 SATA3 (6Gbps) via C612
7. 1 VGA, 2 COM, 1 TPM
8. 4 USB 3.0 ports, 8 USB 2.0 ports
9. 2 SuperDOM with built-in power

Links & Resources

[Tested Memory List](#)

[Tested HDD / SSD List](#)

[Tested AOC List](#)

[Motherboard Manual](#)

[Quick Reference Guide](#)

[Update Your BIOS](#)

[BMC/IPMI Firmware](#)

[Download the Latest Drivers and Utilities](#)

[Download Drivers CD](#)

[Heat Sink Compatibility](#)

[OS Compatibility](#)

[Optimization](#)



Specifications

Product SKUs

- MBD-X10SRL-F ■ X10SRL-F

Physical Stats

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

Processor/Cache

- CPU ■ Intel® Xeon® Processor E5-1600 v3, Intel® Xeon® Processor E5-1600 v4, Intel® Xeon® processor E5-2600 v3, Intel® Xeon® processor E5-2600 v4.
 ■ Single Socket LGA-2011-3 (Socket R3) supported, CPU TDP support Up to 145W TDP
- Cores / Cache ■ Up to 22 cores † / Up to 55MB† cache
- Note ■ † BIOS version 2.0 or above is required
- Note ■ ** Motherboard supports this maximum TDP. Please verify your system can thermally support.

System Memory

- Memory Capacity ■ Up to 256GB Registered ECC RDIMM, DDR4-2400MHz; Up to 512GB LRDIMM LRDIMM, DDR4-2400MHz, in 8 DIMM slotsUp to 1TB ECC 3DS LRDIMM
- Memory Type ■ 2400□ / 2133/1866/1600MHz ECC DDR4 SDRAM 72-bit, 288-pin (RDIMM / LRDIMM) / 284-pin gold-plated DIMMs
- DIMM Sizes ■ RDIMM: 4GB, 8GB, 16GB, 32GB
 ■ LRDIMM: 32GB, 64GB
 ■ 3DS LRDIMM: 128GB
- Memory Voltage ■ 1.2V
- Error Detection ■ Corrects single-bit errors
 ■ Detects double-bit errors (using ECC memory)

On-Board Devices

- Chipset ■ Intel® C612
- SATA ■ Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10
- IPMI ■ Support for Intelligent Platform Management Interface v.2.0
 ■ IPMI 2.0 with virtual media over LAN and KVM-over-LAN support
 ■ ASPEED AST2400 BMC
- Network Controllers ■ Dual LAN with Intel® Ethernet Controller I210Supports 10Base-T, 100BASE-TX, and 1000BASE-T, RJ45 output
- Graphics ■ Aspeed AST2400 BMC

Input / Output

- SATA ■ 10 SATA3 (6Gbps) port
- LAN ■ 2 RJ45 Gigabit Ethernet LAN ports
 ■ 1 RJ45 Dedicated IPMI LAN port
- USB ■ 8 USB 2.0 ports (2 rear + 6 via headers)
 ■ 4 USB 3.0 ports (2 rear + 1 via header + 1 Type A)
- Video Output ■ 1 VGA port
- Serial Port / Header ■ 2 COM Ports (1 rear, 1 header)
 2 fast UART 16550 serial
- TPM ■ TPM Header

Expansion Slots

- PCI-E ■ 2 PCIe 3.0 x4 (in x8 slot) Auto-switch to 1 x8 and 1 x0,
 ■ 2 PCIe 3.0 x8,
 ■ 2 PCIe 3.0 x8 (in x16 slot)
 ■ 1 PCIe 2.0 x4 (in x8 slot)

System BIOS

- BIOS Type ■ 128Mb SPI Flash EEPROM with AMI BIOS
- BIOS Features ■ Plug and Play (PhP)
 ■ APM 1.2
 ■ DMI 2.3
 ■ PCI 2.3
 ■ ACPI 1.0 / 2.0 / 3.0 / 4.0
 ■ USB Keyboard support
 ■ SMBIOS 2.7.1
 ■ UEFI 2.3.1
 ■ RTC (Real Time Clock) Wakeup

Management

- Software ■ Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, NMI, SPM, SUM, SuperDoctor® 5, Watchdog
- Power Configurations ■ ACPI Pow er Management
 ■ Keyboard Wakeup from Soft-Off
 ■ CPU Fan auto-off in sleep mode
 ■ Pow er-on mode for AC pow er recovery

PC Health Monitoring

- Voltage ■ +12V, +3.3V, +5V, +5V standby, HT, VBAT
- FAN ■ 6x 4-pin fan headers (up to 6 fans), Low noise fan speed control, Pulse Width Modulated (PWM) fan connectors, Status monitoring for on/off control, Status monitoring for speed control
- 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, Suspend static indicator LED, UID/Remote UID
- Other Features ■ Chassis intrusion detection, Chassis intrusion header, Chipkill support, RoHS, Halogen Free

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-X10SRL-F	1	X10SRL-F Motherboard
I/O Cable 1	CBL-0044L	2	57.5CM SATA FLAT S-S PBF
I/O Shield	MCP-260-00042-0N	1	STD I/O shield for X9 socket R server MB with Gasket

Chassis (Optimized for X10SRL-F)

Embedded Compact	1U	2U	3U	Mid/Mini-Tower	4U/Tower
1U Heatsink:SNK-P0047PS 2U Heatsink:SNK-P0048AP4	● SC813MFTQ-R606CB ● SC813MFTQ-R400CB ● SC813MFTQ-441CB 1U Heatsink:SNK-P0047PS 2U Heatsink:SNK-P0048AP4	● 213LT-600LPB ● 826TQ-R500LPB ● 823TQ-653LPB ● 825TQ-563LPB ● 825TQ-R720LPB 1U Heatsink:SNK-P0047PS 2U Heatsink:SNK-P0048AP4	● SC833T-653B ● SC836TQ-R500B ● SC836BE1C-R1K03B 1U Heatsink:SNK-P0047PS 2U Heatsink:SNK-P0048AP4	● SC732I-500B ● SC732D4F-903B	● SC743T-665B ● SC842i-500B ● SC842TQ-665B ● SC842TQ-865B 1U Heatsink:SNK-P0047PS 2U Heatsink:SNK-P0048AP4

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