X11SAE-F

Key Features

Workstation

1. Single socket H4 (LGA 1151) supports Intel® Xeon® processor E3-1200 v5/v6, Intel® 6th/7th Gen. Core™ i7/i5/i3 series, Intel® Celeron® and Intel® Pentium®
2. Intel® C236 chipset
3. Up to 64GB Unbuffered ECC/non-ECC UDIMM DDR4 2400MHz; 4 DIMM slots
4. 2 PCI-E 3.0 x16 (run at 16/NA or 8/8), 2 PCI-E 3.0 x1, and 2 5V PCI 32-bit slots
5. Single GbE LAN with Intel® i210-AT (Share with IPMI); single GbE LAN with Intel® i219LM
6. 8 SATA3 (6Gbps) via C236; RAID 0, 1, 5, 10 + 1 PCI-E M.2 (support PCI-E x4 only, 2242/2260/2280)
7. I/O: 1 VGA, 2 COM, TPM header
8. 6 USB 3.0 (2 rear + 4 via header(s))
   6 USB 2.0 (2 rear + 4 via header(s))
   2 USB 3.1 (10Gbps, rear)

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 Drivers CD
▶ OS Compatibility
▶ Guide to enable Keyboard and Mouse under Windows 7 Installation

Specifications

Product SKUs

MBD-X11SAE-F	▪ X11SAE-F

Physical Stats

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

Processor/Cache

CPU	▪ Intel® 6th/7th Generation Core™ i3 series, Intel® 6th/7th Generation Core™ i5 series, Intel® 6th/7th Generation Core™ i7 series, Intel® Xeon® processor E3-1200 v6/v5. ▪ Socket H4 (LGA 1151) supported, CPU TDP support Up to 95W TDP ▪ A graphic integrated CPU is needed to have on-board video from DVI and DP ports. Examples: E3-1235L v5, E3-1275 v5
Note	▪ BIOS version 2.0 or above is required to support 7th Generation Intel® Core™ i3 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 ▪ 4x 288-pin DDR4 DIMM slots, Up to 64GB DDR4 ECC UDIMM
Memory Type	▪ 2400/2133/1866/1600MHz ECC DDR4 SDRAM 72-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 8 SATA3 (6 Gbps) ports; RAID 0,1,5,10 + 1 PCI-E M.2(PCI-E x4, 2242/2260/2280) (No Raid support)
IPMI	▪ OOB Bios refresh function is not supported ▪ Single LAN with Intel® Ethernet Controller

Expansion Slots

PCI-E	▪ 2 PCI-E 3.0 x16, ▪ 2 PCI-E 3.0 x12 - 5V PCI 32bit ▪ ***2 PCI-E x16 slots are running at x16/NA or x8/x8 ***
M.2	▪ M.2 Interface: 1 PCI-E 3.0 x4 ▪ Form Factor: 2242/2260/2280 ▪ Key: M-Key

System BIOS

BIOS Type	▪ AMI UEFI
BIOS Features	▪ Plug and Play (PnP) ▪ DMI 2.3 ▪ PCI 3.0 ▪ ACPI 5.0 ▪ USB Keyboard support ▪ Hardware BIOS Virus protection ▪ SMBIOS 3.0 ▪ UEFI 2.3.1 ▪ RTC (Real Time Clock) Wakeup

Management

Software	▪ IPMI2.0, SPM, SuperDoctor® 5, Watchdog
Power Configurations	▪ ACPI Power Management ▪ Keyboard Wakeup from Soft-Off ▪ CPU Fan auto-off in sleep mode ▪ Power-on mode for AC power recovery

PC Health Monitoring

Voltage	▪ +12V, +3.3V, +5V, +5V standby, Chassis intrusion header, Monitors CPU voltages, VBAT
FAN	▪ 5x 4-pin fan headers (up to 5 fans), Fan speed control, Overheat LED indication
Temperature	▪ CPU thermal trip support, I2C temperature sensing logic, PECI, Thermal Monitor 2 (TM2) support
LED	▪ CPU / System Overheat LED, Suspend static indicator LED, UID/Remote UID
Other Features	▪ 8-pin 12v DC power connector, ACPI power management, ATX Power connector, Control of power-on for recovery from AC power loss, CPU thermal trip support for processor protection, Intel Smart Response Technology, WOL

Network Controllers	I210-AT (Share with IPMI) Single LAN with Intel® PHY I219LM LAN controller	Operating Environment	
		Operating Temperature Range	▪ 0°C ~ 50°C (32°F ~ 122°F)
Audio	▪ ALC 888S HD Audio		
Graphics	▪ Aspeed AST2400 BMC ▪ ***VGA is for IPMI only***		

Input / Output

USB	▪ 6 USB 2.0 ports (2 rear + 4 headers) ▪ 6 USB 3.1 Gen1 ports (2 Rears Type A, 4 headers) ▪ 2 USB 3.1 Gen2 ports , 2 Type A)
Video Output	▪ 1 DVI - D port, 1 DP (DisplayPort) port, 1 HDMI port, 1 VGA port, ▪ ***VGA is for IPMI only***
Serial Port / Header	▪ 2 COM Ports (2 headers)
TPM	▪ 1 TPM Header

Note: For optimized or compatible chassis, additional parts may be required, please check with Supermicro sales rep

Parts List

Parts List (Bulk Package)

Name	Part Number	Qty	Description
Motherboard	MBD-X11SAE-F	1	X11SAE-F Motherboard
SATA cable	CBL-0044L	2	57.5CM SATA FLAT S-S PBF
IO shield	MCP-260-00063-1N	1	X11SAE-F I/O Shield

Parts List (Retail Package)

Name	Part Number	Qty	Description
Motherboard	MBD-X11SAE-F	1	X11SAE-F Motherboard
Quick Reference Guide	MNL-1820-QRG	1	X11SAE-F Quick Reference Guide
SATA cable	CBL-0044L	6	57.5CM SATA FLAT S-S PBF
IO shield	MCP-260-00063-1N	1	X11SAE-F I/O Shield

Chassis (Optimized for X11SAE-F)

Embedded Compact	1U	2U	3U	Mid/Mini-Tower	4U/Tower
				🔴 SC732D4-903B 🔴 SC732D4-865B SCGS5A-753K SCGS5A-753R SC732D3-1200B SC733TQ-668B SC732D4F-903B SC732D2-903B 2U Heatsink:SNK-P0046A4	🔴 SC743TQ-1200B-SQ SC743AC-1200B-SQ SC745BAC-R1K28B2 SC842TQC-668B 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