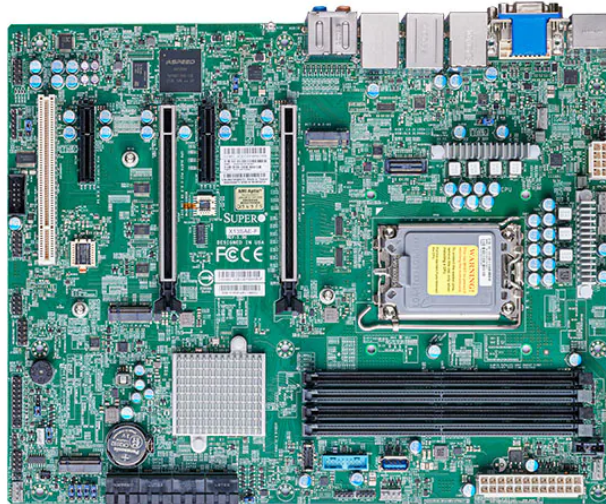


X13SAE-F



Workstation

Key Features

1. 12th Generation Intel® Core™ i3/i5/i7/i9 Processors, Single Socket LGA-1700 supported, CPU TDP supports Up to 125W TDP
2. Intel® W680
3. Single LAN with Intel® Ethernet i225LM
Single LAN with Intel® PHY I219LM LAN controller for AMT/vPro
Single LAN with RTL8211
Dedicated LAN for IPMI
4. 2 PCI-E 5.0 x16 slots (16/NA or 8/8) 2 PCI-E 3.0 x4
1 - 5V PCI 32bit
M.2 Interface: 3 PCI-E 4.0 x4, RAID 0,1,5
M.2 Form Factor: 2280
M.2 Key: M-Key
5. 128GB Unbuffered ECC/non-ECC UDIMM, DDR5-4400MHz, in 4 DIMM slots
6. Intel® W680 controller for 8 SATA3 (6 Gbps) ports; RAID 0,1,5,10
7. 1 DP 1.4a port, 1 HDMI 2.1 port, 1 DVI - D port

Specifications

Product SKUs

MBD-X13SAE-F ■ X13SAE-F

Physical Stats

Form Factor ■ ATX

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

Processor

CPU ■ 12th Generation Intel® Core™ i3/i5/i7/i9 Processors
■ Single Socket LGA-1700 (Socket H5) supported, CPU TDP supports Up to 125W TDP

Core ■ Up to 16(8+8) cores

System Memory

Memory Capacity ■ 4 DIMM slots
■ 128GB ECC/non-ECC UDIMM, DDR5-4400MHz

Memory Type ■ 128GB

DIMM Sizes ■ 8GB, 16GB, 32GB

Memory Voltage ■ 1.1V

On-Board Devices

Chipset ■ Intel® W680

SATA ■ Intel® W680 controller for 8 SATA3 (6 Gbps) ports; RAID 0,1,5,10

IPMI ■ ASPEED AST2600 BMC

Audio ■ ALC 888S HD Audio

Network Controllers ■ Single LAN with Intel® PHY I219LM LAN controller, for AMT/vPro
■ Single LAN with Intel® Ethernet i225LM
■ Single LAN with Realtek RTL8211F PHY (dedicated IPMI), Dedicated LAN for IPMI

Input / Output

LAN ■ 1 RJ45 Dedicated IPMI LAN port
■ 1 RJ45 Gigabit Ethernet LAN ports
■ 1 RJ45 2.5 Gigabit Ethernet LAN port

USB ■ 4 USB 3.2 Gen2 port(s) (4 rear type A)
■ 3 USB 3.2 Gen1 port(s) (2 via header; 1 Vertical)
■ 2 USB 3.2 Gen2x2 port(s) (1 rear type C; 1 via header)
■ 4 USB 2 port(s) (4 via header)

Video Output ■ 1 VGA port(s), 1 DVI - D port(s), 1 DP 1.4a port(s), 1 HDMI 2.1 port(s)

Serial Port ■ 1 COM Port(s) (1 header)

TPM ■ 1 TPM Header

Expansion Slots

PCI-E ■ 2 PCI-E 3.0 x4,
■ 2 PCI-E 5.0 x16 slots (16/NA or 8/8)
■ 1 - 5V PCI 32bit

M.2 ■ M.2 Interface: 3 PCI-E 4.0 x4, RAID 0, 1, 5
■ Form Factor: 2280
■ Key: M-Key

System BIOS

BIOS Type ■ 256MB SPI Flash with AMI BIOS

BIOS Features ■ ACPI 6.0
■ Plug and Play (PnP)
■ BIOS rescue hot keys
■ Riser card auto-detection support
■ SMBIOS 3.0 or later

Management

Software ■ SuperDoctor® 5, SUM, SSM, AMT, vPro, Watchdog, IPMI (Intelligent Platform Management Interface) v2.0 with KVM support

System Management Software ■ SuperDoctor 5

Power Configurations ■ Power-on mode for AC power recovery, ACPI Power Management, Power button override mechanism, Wake-on-LAN

PC Health Monitoring

Voltage ■ VBAT, System temperature, CPU temperature, 3.3V standby, 1.05 (PCH), +5V standby, +5V, +3.3V, +12V, CPU thermal trip support, +1.8V PCH

LED ■ Power LED
■ Catastrophic Error LED

FAN ■ 5x 4-pin fan headers (up to 5 fans)
■ Fan speed control
■ Overheat LED indication

Other Features ■ CPU thermal trip support for processor protection, Control of power-on for recovery from AC power loss, Chassis intrusion detection, ATX Power connector, ACPI power management, 8-pin 12v DC power connector

Operating Environment

Operating Temperature Range ■ 0°C - 50°C (32°F - 122°F)

Non-Operating Temperature Range ■ -20°C - 60°C (-4°F - 140°F)

Parts List

Parts List (Bulk Package)			
Name	Part Number	Qty	Description
Motherboard	MBD-X13SAE-F	1	X13SAE-F Motherboard
I/O Shield	MCP-260-00151-0N	1	IO shield
SATA Cables	CBL-0044L • eStore	2	SATA Cables

Parts List (Retail Package)			
Name	Part Number	Qty	Description
Motherboard	MBD-X13SAE-F	1	X13SAE-F Motherboard
I/O Shield	MCP-260-00151-0N	1	IO shield
Quick Reference Guide	MNL-2425-QRG	1	Quick Reference Guide
SATA Cables	CBL-0044L • eStore	4	SATA Cables

Optional Parts List			
Name	Part Number	Qty	Description
TPM security module (optional, not included)	AOM-TPM-9670V	1	TPM for Intel Core CPU

Chassis (Optimized for X13SAE-F)

Embedded Compact	1U	2U	3U	Mid/Mini-Tower	4U/Tower
				SC732D4-903B SC735D4-1K26B SC735D4-668B SCGS5A-754K	

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

