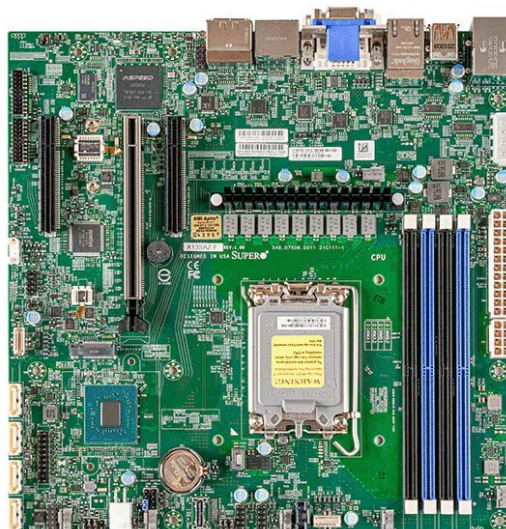


X13SAZ-F



Micro-ATX Embedded Motherboard Intel Core Processors Series 2 & 14th/13th/12th Gen Core i Processor

Key Features

Intel® Core Processors Series 2 & 14th/13th/12th Gen Core i Processor, Single Socket LGA-1700 supported, CPU TDP supports Up to 125W TDP (**bios v5.x or above)

Intel® R680E

Up to 128GB Unbuffered ECC/non-ECC UDIMM, DDR5-4400MHz, in 4 DIMM slots

1 PCIe 5.0 x16 slot, 2 PCIe 4.0 x4 slots, 1 PCIe 4.0 x4 OCulink port M.2 Interface: 1 PCIe 4.0 x4 M.2 Form Factor: 2280/22110 M.2 Key: M-Key

Dual 2.5 Gigabit LAN with Intel® Ethernet i225LM LAN controller [AMT/vPro]

Intel® R680E Controller for 4 SATA3 (6 Gbps) ports; RAID 0,1,5,10

4 Independent Displays (1 VGA port, 2 DP++ ports, 1 HDMI 2.0b port, 1 DVI - D port)

Supports 12V DC power input

Onboard TPM2.0

Optimized Servers

[SYS-111AD-HN2 \(/en/products/system/iot/1u/sys-111ad-hn2\)](#)

Specifications

Product SKUs
MBD-X13SAZ-F**Physical Stats**
Form Factor

Micro-ATX

Dimension

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

Processor**CPU**

Single L0 (LGA-1700)

Intel® Core™ 3/5/7 (Series 2) and 14th/13th/12th Gen Core i3/i5/i7/
i9 Processors**Core Count**

Up to 24C

System Memory**Memory**

Slot Count: 4 DIMM Slots

Max Memory (2DPC): Up to 128GB 4400MT/s ECC/non-ECC DDR5
UDIMM**Memory Voltage**

1.1V

Error Detection

Corrects single-bit errors

Detects double-bit errors (using ECC memory)

On-Board Devices**Chipset**

Intel R680E

SATA

4 SATA (6Gbps) via Intel R680E; RAID 0/1/5/10 support

Network Controller

Dual LAN with Intel® Ethernet i225LM

Input / Output**USB**

4 USB 2.0 port(s) (header)

4 USB 3.2 Gen2 Type-A port(s) (Rear)

2 USB 3.2 Gen2 port(s) (Header)

2 USB 3.2 Gen1 port(s) (Header)

Video

1 VGA port(s)

1 HDMI 2.0b port(s)

1 DVI - D port(s)

2 Display Port port(s)

Serial

2 COM port(s) (header)

Audio

Rear Audio

ALC 888S HD Audio

TPM

1 TPM 2.0 onboard

Expansion Slots**PCI-Express (PCIe) Configuration**

1 PCIe 5.0 x16 slot

2 PCIe 4.0 x4 (in x8) slots

M2

1 M.2 PCIe 4.0 x4 slot (M-key 2280/22110)

System BIOS**BIOS Type**

AMI UEFI

BIOS Features

SMBIOS 3.0 or later

UEFI 2.7

PCI FW 3.0

ACPI 6.1

RTC (Real Time Clock) Wakeup

Management**Software**[SuperCloud Composer® \(https://
www.supermicro.com/en/solutions/management-
software/supercloud-composer\)](https://www.supermicro.com/en/solutions/management-software/supercloud-composer)[Supermicro Server Manager \(SSM\) \(https://
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software/supermicro-server-manager\)](https://www.supermicro.com/en/solutions/management-software/supermicro-server-manager)[Supermicro Power Manager \(SPM\) \(https://
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software/super-diagnostics-offline\)](https://www.supermicro.com/en/solutions/management-software/super-diagnostics-offline)[Supermicro Thin-Agent Service \(TAS\) \(https://
www.supermicro.com/en/solutions/management-
software/thin-agent-service\)](https://www.supermicro.com/en/solutions/management-software/thin-agent-service)[SuperServer Automation Assistant \(SAA\) New!
\(https://www.supermicro.com/en/solutions/
management-software/superserver-automation-
assistant\)](https://www.supermicro.com/en/solutions/management-software/superserver-automation-assistant)[Plug-ins for 3rd Party Software \(https://
www.supermicro.com/en/solutions/management-
software/plugins\)](https://www.supermicro.com/en/solutions/management-software/plugins)[IPMI Utilities \(https://www.supermicro.com/en/
solutions/management-software/ipmi-utilities\)](https://www.supermicro.com/en/solutions/management-software/ipmi-utilities)**System Management Software**

Wake-on-LAN

Watchdog

KVM with dedicated LAN

Power Configurations

ACPI Power Management
ATX Power connector
+12V DC Power Input

Security**Hardware**

Trusted Platform Module (TPM) 2.0

Features

Cryptographically Signed Firmware
Secure Boot
Secure Firmware Updates
System Lockdown

PC Health Monitoring**Voltage**

+1.35V,+1.5V,+1.8V,+12V,+3.3V,+5V,+5V standby,1.05 (PCH),6 fans
with tachometer status monitoring,BMC/IPMI Heartbeat
LED,Chipset voltage,CPU temperature,Dual cooling zones,Memory
temperature,UID,VBAT

LED

Power LED

Temperature

CPU thermal trip support
Monitoring for CPU and chassis environment

FAN

6x 4-pin fan headers (up to 6 fans)

Other Features

12V DC or ATX Power Source
ACPI power management
ATX power connector
Chassis intrusion detection
M.2 NGFF connector
RoHS

Operating Environment**Environmental Spec.**

Operating Temperature: 0°C to 60°C (32°F to 140°F)
Non-operating Temperature: -40°C to 85°C (-40°F to 185°F)
Operating Relative Humidity: 10% to 85% (non-condensing)
Non-operating Relative Humidity: 5% to 95% (non-condensing)

Parts List

Certain products may not be available in your region
