



**Embedded  
High Performance  
PCIe 5.0 x16 slot  
4 Independent Displays**

**Key Features**

- 13th/12th Generation Intel® Core™ i9/i7/i5/i3/Pentium/Celeron Processor, Single Socket LGA-1700 supported, CPU TDP supports Up to 125W TDP
- Intel® Q670E
- Up to 128GB Unbuffered non-ECC UDIMM, DDR5-4400MHz, in 4 DIMM slots
- 1 PCIe 5.0 x16 slot,
- 1 PCIe 4.0 x4 slot,
- 1 PCIe 3.0 x4 slot,
- 1 PCIe 3.0 x2 slot,
- 1 PCIe 4.0 NVMe x4 SlimSAS 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® Q670E Controller for 8 SATA3 (6 Gbps) ports; RAID 0,1,5,10
- 4 Independent Displays (1 VGA port, 1 DP 1.4a port, 1 HDMI 2.0b port, 1 DVI - D port)
- Onboard TPM2.0

**Specifications**

<b>Product SKUs</b> <b>MBD-X13SAQ</b>
<b>Physical Stats</b> <b>Form Factor</b> Micro-ATX
<b>Dimension</b> 9.6" x 9.6" (24.38cm x 24.38cm)
<b>Processor</b> <b>CPU</b> 13th/ 12th Generation Intel Core i9/Core i7/Core i5/Core i3/Pentium/Celeron Processor Single Socket LGA-1700 supported
<b>Core</b> Up to 24 cores
<b>System Memory</b> <b>Memory Capacity</b> 4 DIMM slots Up to 128GB Unbuffered non-ECC UDIMM, DDR5-4400MHz *Supports up to 128GB of DDR5 UDIMM with speeds of up to 4400MT/s with one DIMM, or 4000MT/s with two DIMM single rank, or 3600MT/s with two DIMM dual rank in four memory slots
<b>Memory Type</b> 4400/4000/3600 MT/s
<b>DIMM Sizes</b> 4GB, 8GB, 16GB, 32GB
<b>Memory Voltage</b> 1.1V
<b>On-Board Devices</b> <b>Chipset</b> Intel Q670E
<b>SATA</b> Intel Q670E controller for 8 SATA3 (6 Gbps) ports; RAID 0,1,5,10
<b>Audio</b> ALC 888S HD Audio
<b>Network Controllers</b> Dual LAN with Intel® Ethernet i225LM
<b>Input / Output</b> <b>SATA</b> 8 SATA3 (6Gbps) port(s)
<b>USB</b> 4 USB 2 port(s) (2 via header; 2 rear Type A) 4 USB 3.2 Gen2 port(s) (2 via header; 2 rear type A) 2 USB 3.2 Gen1 port(s) (2 via header) 2 USB 3.2 Gen2x2 port(s) (2 rear type C)
<b>Video Output</b> 1 VGA port(s), 1 DVI - D port(s), 1 DP 1.4a port(s), 1 HDMI 2.0b port(s)
<b>Serial Port</b> 6 COM Port(s) (2 header; 4 header)
<b>TPM</b> TPM TPM 2.0 onboard

<b>Expansion Slots</b> <b>PCIe</b> 1 PCIe 5.0 x16, 1 PCIe 4.0 x4 (in x8 slot), 1 PCIe 3.0 x4, 1 PCIe 3.0 x2 (in x4 slot), 1 PCIe 4.0 x4 SlimSAS
<b>M.2</b> M.2 Interface: 1 PCIe 4.0 x4 Form Factor: 2280/22110 Key: M-Key
<b>System BIOS</b> <b>BIOS Type</b> AMI UEFI
<b>BIOS Features</b> ACPI 6.1 SMBIOS 3.0 or later PCI FW 3.0 UEFI 2.7 RTC (Real Time Clock) Wakeup
<b>Management</b> <b>System Management Software</b> Wake-on-LAN, Watchdog
<b>Power Configurations</b> ACPI Power Management, ATX Power connector
<b>Security</b> <b>Hardware</b> Trusted Platform Module (TPM) 2.0
<b>PC Health Monitoring</b> <b>Voltage</b> VBAT, 4 fans with tachometer monitoring, 1.05 (PCH), +5V standby, +5V, +3.3V, +12V, +1.8V, +1.5V, +1.35V
<b>LED</b> Power LED
<b>Temperature</b> Monitoring for CPU and chassis environment CPU thermal trip support
<b>Other Features</b> RoHS M.2 NGFF connector Chassis intrusion detection ATX Power connector ACPI power management
<b>FAN</b> 4x 4-pin fan headers (up to 4 fans)
<b>Operating Environment</b> <b>Operating Temperature Range</b> 0°C - 60°C (32°F - 140°F) <b>Non-Operating Temperature Range</b> -40°C - 85°C (-40°F - 185°F) <b>Operating Relative Humidity Range</b> 10% - 85% (non-condensing) <b>Non Operating Relative Humidity Range</b> 5% - 95% (non-condensing)

## Parts List

### Standard Parts (Bulk Package)

#### I/O Cables

Part Number CBL-0044L • [eStore](#)  
(<https://store.supermicro.com/supermicro-sata-flat-straight-straight-57-5cm-cable-cbl-0044l.html>).

Qty 2  
Description 57.5CM SATA FLAT S-S PBF

#### I/O Shield

Part Number MCP-260-00125-1N  
Qty 1  
Description Standard I/O Shield for X13SAQ with EMI Gasket

### Standard Parts (Retail Package)

#### I/O Cables

Part Number CBL-0044L • [eStore](#)  
(<https://store.supermicro.com/supermicro-sata-flat-straight-straight-57-5cm-cable-cbl-0044l.html>).

Qty 8  
Description 57.5CM SATA FLAT S-S PBF

#### I/O Shield

Part Number MCP-260-00125-1N  
Qty 1  
Description Standard I/O Shield for X13SAQ with EMI Gasket

#### QRG

Part Number QRG-2466  
Qty 1  
Description Motherboard Quick Reference Guide

### Optional Parts

#### 1U LHS Riser Card for CSE-510

Part Number RSC-S-6G5  
Qty -  
Description 1U LHS Standard Riser card with one PCIe 5.0 X16 slot.,H

#### 4U CPU Heat Sink for Socket H(optional, not included)

Part Number SNK-P0086AP4 • [eStore](#)  
(<https://store.supermicro.com/4u-active-cpu-cooler-x13-snk-p0086ap4.html>).

Qty -  
Description CPU Active Heatsink for 4U chassis

#### COM Cable

Part Number CBL-CDAT-0604 • [eStore](#)  
(<https://store.supermicro.com/2-9-pin-to-20pin-cable-cbl-cdat-0604.html>).

Qty -  
Description 40CM Dual Serial Port Cable with bracket

#### I/O Shield

Part Number MCP-260-00125-1N  
Qty -  
Description 2U I/O shield for SC731/732/823/825

#### USB Cable

Part Number CBL-CUSB-0835 • [eStore](#)  
(<https://store.supermicro.com/supermicro-usb-3-1-b-key-to-usb-3-0a-female-x2-55cm-cable-cbl-cusb-0835.html>).

Qty -  
Description Dual USB3.1 Type A Cable with Bracket

Global SKU ([/de/products/SMC\\_global\\_skus](/de/products/SMC_global_skus))