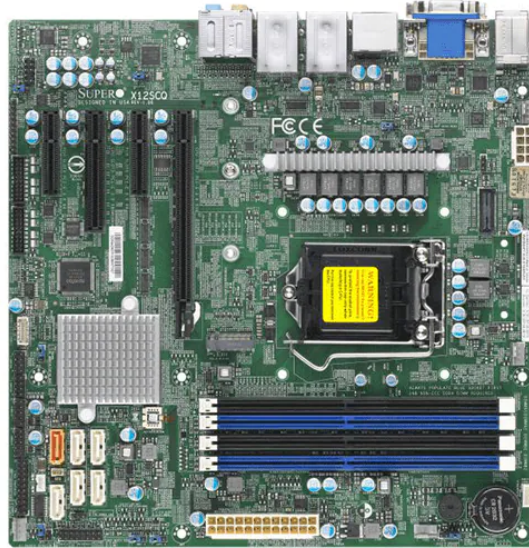


# X12SCQ

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## Embedded High Performance vPro AMT

### Key Features

11th/10th Generation Intel® Core™ i9/Core™ i7/Core™ i5/Core™ i3/Pentium®/Celeron® Processor

Single Socket LGA-1200 (Socket H5) supported, CPU TDP supports Up to 125W TDP

Intel® Q470E

Intel® Q470 controller for 6 RAID 0,1,5,10

Single LAN with Intel® PHY I219LM LAN controller

Single LAN with Intel® Ethernet Controller I210-AT

Up to 128GB Unbuffered non-ECC UDIMM, DDR4-2933MHz, in 4 DIMM slots

1 PCIe 3.0 x16 (in x16 slot),

1 PCIe 3.0 x8,

2 PCIe 3.0 x4

**M.2 Interface:** 1 PCIe 3.0 x4, RAID 0 & 1

**M.2 Form Factor:** 2242/2280

**M.2 Key:** M-Key

1 VGA port, 1 HDMI port, 1 DP (DisplayPort) port, 1 DVI - D port

### Specifications

**Product SKUs****MBD-X12SCQ****Physical Stats****Form Factor**

Micro-ATX

**Dimension**

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

**Processor****CPU**

11th/10th Generation Intel® Core™ i9/Core™ i7/Core™ i5/Core™ i3/Pentium®/Celeron® Processor

Single Socket LGA-1200 (Socket H5) supported, CPU TDP supports Up to 125W TDP

**Core**

Up to 10 cores

**Note**

\*\*The X12SCQ does not support the Intel 10th/11th generation processor 2M cache SKUs. These processors will not boot with the latest BIOS version.

**System Memory****Memory Capacity**

4 DIMM slots

Up to 128GB Unbuffered non-ECC UDIMM, DDR4-2933MHz

**Memory Type**

2933/2666/2400/2133 MT/s

**DIMM Sizes**

4GB, 8GB, 16GB, 32GB

**Memory Voltage**

1.2V

**On-Board Devices****Chipset**

Intel® Q470E

**SATA**

Intel® Q470 controller for 6 ports; RAID 0,1,5,10

**Audio**

ALC 888S HD Audio

**Graphics**

1 Intel® HD Graphics port(s)

**Network Controllers**

Single LAN with Intel® PHY I219LM LAN controller

Single LAN with Intel® Ethernet Controller I210-AT

**Input / Output****SATA**

6 SATA3 (6Gbps) port(s)

**LAN**

2 RJ45 Gigabit Ethernet LAN ports

**USB**

6 USB 3.1 Gen2 port(s) (2 via header; 2 rear type A; 2 rear type C)

6 USB 2.0 port(s) (4 via header; 2 rear)

**Video Output**

1 VGA port(s), 1 DP (DisplayPort) port(s), 1 HDMI port(s), 1 DVI - D port(s)

**Serial Port**

4 COM Port(s) (4 header)

**TPM**

1 TPM TPM 2.0 onboard

**Expansion Slots****PCIe**

2 PCIe 3.0 x4,

1 PCIe 3.0 x16 (in x16 slot),

1 PCIe 3.0 x8

**M.2**

M.2 Interface: 1 PCIe 3.0 x4, RAID 0 &amp; 1

Form Factor: 2242/2280

Key: M-Key

**System BIOS****BIOS Type**

AMI UEFI

**BIOS Features**

ACPI 6.1

SMBIOS 3.0 or later

PCI FW 3.0

UEFI 2.7

RTC (Real Time Clock) Wakeup

**Management****Power Configurations**

ATX Power connector

**Security****Hardware**

Trusted Platform Module (TPM) 2.0

**PC Health Monitoring****Voltage**

VBAT, 4 fans with tachometer monitoring, 4 -fan status, 1.05 (PCH), +5V standby, +5V, +3.3V, +12V, +1.8V, +1.5V, +1.35V

**LED**

Power LED

**Temperature**

Monitoring for CPU and chassis environment

CPU thermal trip support

**FAN**

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

4 fans with tachometer monitoring

**Other Features**

RoHS

M.2 NGFF connector

Chassis intrusion detection

ATX Power connector

ACPI power management

**Operating Environment****Operating Temperature Range**

0°C - 60°C (32°F - 140°F)

**Non-Operating Temperature Range**

-40°C - 85°C (-40°F - 185°F)

**Operating Relative Humidity Range**

10% - 85% (non-condensing)

**Non Operating Relative Humidity Range**

5% - 95% (non-condensing)

## Parts List

### Standard Parts (Bulk Package)

**I/O Cables**Part Number CBL-0044L • [eStore](#)

Qty	2
Description	57.5 cm SATA FLAT S-S PBF

**I/O Shield**

Part Number	MCP-260-00125-1N
Qty	1
Description	Standard I/O Shield

**Standard Parts (Retail Package)****I/O Cables**

Part Number	CBL-0044L • <a href="#">eStore</a>
Qty	4
Description	57.5 cm SATA FLAT S-S PBF

**I/O Shield**

Part Number	MCP-260-00125-1N
Qty	1
Description	Standard I/O Shield for X12SCQ with EMI Gasket

**QRG**

Part Number	MNL-2281-QRG
Qty	1
Description	Motherboard Quick Reference Guide

**Optional Parts****4U CPU Heat Sink for Socket H(optional, not included)**

Part Number	SNK-P0051AP4.
Qty	--
Description	4U Active CPU Heat Sink

**COM Cable**

Part Number	CBL-CDAT-0604 • <a href="#">eStore</a>	CBL-CUSB-0984 • <a href="#">eStore</a>
Qty	--	--
Description	40CM Dual Serial Port Cable with bracket	20CM Dual Serial Port Cable

**USB3.1 Cable**

Part Number	CBL-CUSB-0835 • <a href="#">eStore</a>
Qty	--
Description	Dual USB3.1 Type A Cable with Bracket