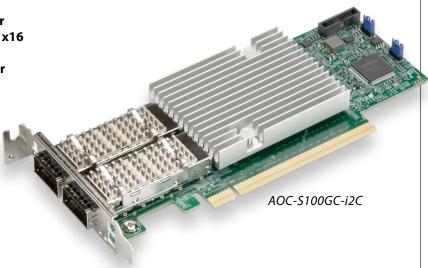
# AOC-S100GC-i2C



The Supermicro AOC-S100GC-i2C is a high performance leading edge 100Gb/s Ethernet adapter featuring Intel E810-CAM2 with PCIe Gen 4 support with backward compatibility to PCIe Gen 3. It is also a feature rich adapter that provides support to RoCE, iWarp, DCDB, VXLAN, NVGRE and Geneve. The support of both RoCE and iWarp deliver a low latency and high efficiency over Ethernet network. The Supermicro AOC-S100GC-i2C adapter is an excellent solution for your cloud-scale networking, storage, machine learning, data analytics and HPC.

## **Kev Features:**

- Dual Port QSFP28 Connector
- Low-Profile, Short Length Standard Form Factor
- PCI-E 4.0 x16 backward compatible to PCI-E 3.0 x16
- Intel E810-CAM2 Ethernet Controller
- Asset Management Feature with thermal sensor
- Intel Ethernet Flow Director
  - Application Device Queues (ADQ)
- Data Plan Development Kit
- · Low Latency RDMA over Converged Ethernet (iWARP and RoCE v2)
- VxLAN, NVGRE and Geneve
- Jumbo Packet (9K Max)
- NC-SI for IPMI support
- RoHS compliant 6/6
- Dynamic Device Personalization (DDP)
- Flexible Ethernet Port Configuration



# **Specifications**

#### **General:**

- Intel E810-CAM2 Ethernet Controller
- Compact size low-profile standard form factor
- PCI-E 4.0
- Dual QSFP28 connectors

# **Host Interface:**

- PCI-E v4.0 (16GT/s)
- Backward compatible with PCIe v3.0
- Message Signal Interrupt (MSI-X)

## **Networking Features:**

- Jumbo Packet (9K Max)
- Teaming
- Virtual LANs 802.1q VLAN tagging
- Up to four 25Gb Connections or eight 10Gb connections

#### **Stateless Offload Features:**

- TCP, UDP, IPv4, IPv6 checksum offload
- Large Send Offload
- Receive Segment Coalescing
- TCP segmentation Offload
- Large Receive Offload
- Receive Side Scaling (RSS)

#### Virtualization Features:

- VXLAN
- NVGRE
- Geneve
- 768 Virtual Station Interface (VSI)
- 8 Physical Functions (PF)
- Microsoft VM Queue
- VMWare NetQueue
- DPDK Support
- QoS: Priority-based Flow Control (802.1Qbb)
- Enahanced Transmission Selection (802.1Qaz)

#### • RDMA over Converged Ethernet (iWARP and RoCE):

- RoCEv2
- Data Center Bridging

## Manageability:

- Network Controller Sideband Interface (NC-SI)\*
- Asset Management with Thermal Sensors

### Remote Boot:

- iSCSI Boot
- Legacy PXE Boot
- UEFI PXE Boot

# • Data Center Bridging:

- Enhanced transmission IEEE 802.1Qaz
- Priority based Flow Control IEEE 802.1Qbbb
- Edge Virtual Bridging IEEE 802.Qbg

# · Power Saving:

- ACPI Compliant power management
- Pass through Energy Efficient Ethernet (IEEE802.3az-2010)

## Operating Conditions:

- Storage temperature: -40°C to 70°C (-40°F to 158°F)
- Storage humidity: 90% non-condensing relative humidity at 35°C

\*Require NC-SI cable and motherboard support

# AOC-S100GC-i2C



# **Optional Parts List**

	Product Part Number	Description
Copper Cable	CBL-NTWK-0942-MQ28C05M	Ethernet, QSFP28, 100GbE, Passive, 0.5M
	CBL-NTWK-0942-MQ28C10M	Ethernet, QSFP28, 100GbE, Passive, 1M
	CBL-NTWK-0942-MQ28C15M	Ethernet, QSFP28, 100GbE, Passive, 1.5M
	CBL-NTWK-0942-MQ28C20M	Ethernet, QSFP28, 100GbE, Passive, 2M
	CBL-NTWK-0942-MQ28C25M	Ethernet, QSFP28, 100GbE, Passive, 2.5M
	CBL-NTWK-0942-MQ28C30M	Ethernet, QSFP28, 100GbE, Passive, 3M
	CBL-NTWK-0943-SQ28C10M	Ethernet, QSFP28, 100GbE, Passive, 1M