## AOC-S25GC-i4S



The Supermicro AOC-S25GC-i4S features Intel's state of the art Columbiaville E810-CAM1 Ethernet solution that delivers high performance leading-edge 25Gb per second transfer rate in a PCI-E Gen 4 architecture with backward compatibility to PCI-E Gen 3. It also supports RoCE v2, iWarp, DCDB, VXLAN, NVGRE and Geneve. With support for Advance Device Queue and Dynamic Device Personalization to deliver faster application response with lower latency, AOC-S25GC-i4S is an excellent network solution for cloud-scale networking, telecommunications, machine learning and big data analytics.

## **Key Features**

- Quad Port SFP28 Connector
- · Low-Profile, Short Length Standard Form Factor
- PCI-E 4.0 backward compatible to PCI-E 3.0
- Intel E810-CAM1 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)



### **Specifications**

#### General

- Intel E810-CAM1 Ethernet Controller
- Compact size low-profile standard form factor
- PCI-F 4.0
- Quad QSFP28 connectors
- Application Device Queues (ADQ)
- Dynamic Device Personalization (DDP)

#### Host Interface

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

## Networking Features:

- Jumbo Packet (9K Max)
- Teaming
- Virtual LANs 802.1q VLAN tagging

#### Stateless Offload Features

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

#### Virtualization Features:

- VXLAN
- NVGRE
- Geneve
- SR-IOV
- 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)

- iWARP
- 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

<sup>\*</sup> Require NC-SI cable and motherboard support