# AOC-S25G6-M2S



The Supermicro AOC-S25G6-M2S is a PCIe Gen 4 Ethernet solution based on the low power consumption NVIDIA ConnectX-6 Lx controller with features such as VXLAN, NVGRE and RDMA. It is a feature rich adapter that provides unparalleled performance and functionality to your cloud service, telecommunication and enterprise data centers. With integrated asset management features in Supermicro systems, it is the most versatile 25GbE solution in the market.

To order, contact your distributor. This product is only available through Supermicro.

# **Key Features**

- **NVIDIA ConnectX-6 Lx 25GbE controller**
- Support for 25GbE and 10GbE Speed
- **Dual SFP28 connectors**
- **RDMA over Converged Ethernet**
- **VXLAN, NVGRE and Geneve**
- **Asset Management Features with thermal sensor**
- Network Controller Sideband Interface (NC-SI) for Remote Management



# **Specifications**

#### General

- NVIDIA ConnectX-6 Lx 25GbE controller
- Dual SFP28 ports

### **Storage Accelerations**

- NVMe over Fabric offloads for target
- Storage protocols: iSER, NFSoRDMA,
- SMB Direct, NVMe-oF, and more

## **RDMA over Converged Ethernet**

- RoCE v1/v2
  - Zero-Touch RoCE: no ECN, no PFC
- RoCE over overlay networks
- IPsec over RoCE
- Selective repeat
- GPUDirect®
- Dynamically Connected Transport (DCT)
- Búrst buffer offload

# **Management and Control**

- Network Controller Sideband Interface (NC-SI)
- NC-SI, MCTP over SMBus and MCTP over PCIe Baseboard Management Controller interface
- PLDM for Monitor and Control DSP0248
- PLDM for Firmware Update DSP026

### **Remote Boot**

- Remote boot over Ethernet
- Remote boot over iSCSI
- UEFI support for x86 and Arm servers
- PXE boot

#### Standards

- IEEE 802.3ae 10 Gigabit Ethernet
- IEEE 802.3by 25G supporting all FEC modes
- IEEE 802.3ad, 802.1AX Link Aggregation
- IEEE 802.3az Energy Efficient Ethernet (supports only "Fast-Wake" mode)
  IEEE 802.3ap based auto-negotiation and KR startup
- IEEE 802.1Q, 802.1P VLAN tags and priority
- IEEE 802.10az (ETS)
- IEEE 802.1Qbb (PFC)
- IEEE 802.1Qbg
- IEEE 1588v2
- IEEE 1149.1 and IEEE 1149.6 JTAG
- PCI-E 3.0 and 4.0

### **Power Consumption**

- Maximum: 15W

### **Operating Conditions**

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

## **Physical Dimensions**

PCB dimensions: 5.600 inches (L) x 2.712 inches (W)