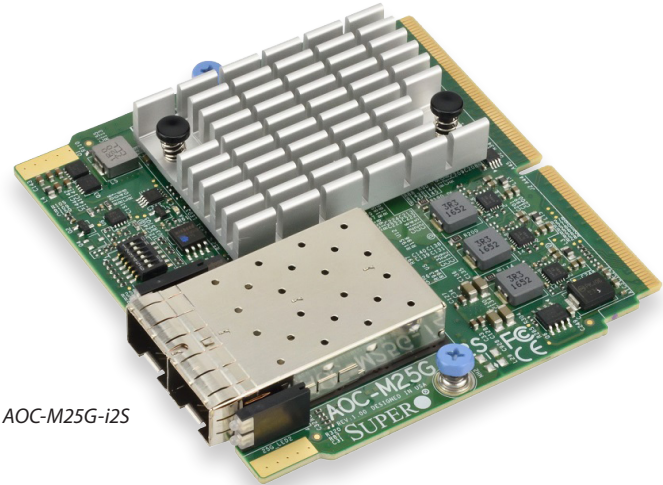


## Advanced 25GbE Ethernet Controller in Supermicro Super I/O Module

The Supermicro® AOC-M25G-i2S is one of the most advanced 25GbE controllers in the market. It provides 2-ports of 25GbE SFP28 connectivity in small form factor SIOM and is based on the Intel® XXV710 chipset. The 25GbE bandwidth enables rapid networking deployment in an agile data center environment. Supermicro® Asset Management and thermal detection give the extra layer of controller health management and peace of mind. For customers who require faster and more reliable networking demands, the AOC-M25G-i2S is an excellent choice to enhance network connectivity in data centers and enterprise environments.

### Key Features:

- Super I/O Module (SIOM) Form Factor
- Intel® XXV710 25GbE controller, Dual SFP28 connectors
- Network Virtualization: VXLAN and NVGRE
- Intel® Ethernet Flow Director for hardware based application traffic steering
- Data Plane Development Kit (DPDK) optimized for efficient packet processing
- NC-SI for Remote Management
- Asset Management Features
- RoHS compliant 6/6



AOC-M25G-i2S

## Specifications

- **General**
  - Super I/O Module (SIOM) Form Factor
  - Intel® XXV710 25GbE controller
  - Dual SFP28 connectors with speed up to 25Gbps per port
  - Time Sync (IEEE1588)
- **I/O Features**
  - Intel® Ethernet Flow Director
  - Intel® XXV710 25GbE controller
  - MSI-X support
  - Multiple queues: 1,536 Tx and Rx queues per port
  - Tx/Rx IP, SCTP, TCP, and UDP checksum offloading (IPv4, IPv6) capabilities
- **Virtualization Features**
  - Next-Generation VMDq with up to 256 VMDq VMs supported
  - SR-IOV
  - Virtual Machine Load Balancing (VMLB)
  - VLAN support
  - VXLAN and NVGRE support
- **Management Features**
  - Preboot eXecution Environment (PXE) support
  - iSCSI boot
  - Asset Management features with thermal sensor
  - NC-SI for remote management
- **Advanced Software Features**
  - Teaming support
  - IEEE 802.3ad (link aggregation control protocol)
  - IEEE 802.1Q VLANs
  - IEEE 802.3 2005 flow control support
  - IEEE 802.1p
  - Receive Side Scaling
- **Operation System Support**
  - Windows Server 2008 R2 / 2012 / 20012 R2 / 2016
  - Linux Stable Kernel version 2.6/4.x
  - Linux RHEL 6.9 / 7.3
  - Linux SLES 11 SP4 / 12 SP1
  - FreeBSD 10.3 / 11
  - UEFI 2.1 / 2.3 / 2.4
  - VMware vSphere 5.1 / 5.5
  - VMware ESXi 6.0 U3 / 6.0
- **Power Consumption**
  - Maximum 11.8W
- **Operating Conditions**
  - Operating temperature: 0°C to 55°C (32°F to 131°F)
  - Storage temperature: -40°C to 70°C (-40°F to 158°F)
  - Storage humidity: 90% non-condensing relative humidity at 35°C
- **Physical Dimensions**
  - Card PCB dimensions: 92mm (3.62in) x 87.1mm (3.43in) (W x D)
- **Supported Platforms:**
  - Supermicro® motherboards with Super I/O Module slot
  - Supermicro® server systems with Super I/O Module slot (See SIOM Compatibility Matrix online)

[http://www.supermicro.com/support/resources/AOC/AOC\\_Compatibility\\_SIOM.cfm](http://www.supermicro.com/support/resources/AOC/AOC_Compatibility_SIOM.cfm)

Please note that this product is sold only as part of an integrated solution with Supermicro server systems

## Available Supermicro SKUs

SKUs	Part Number	Description
AOC-M25G-i2S	AOC-M25G-i2S	2-port 25 Gigabit Ethernet Adapter
	BKT-0144L	Swappable bracket for 2U+ chassis
AOC-M25G-i2SM	AOC-M25G-i2SM	2-port 25 Gigabit Ethernet Adapter
	BKT-0143L	Internal bracket

## Optional Parts List

	Part Number	Description
SFP28 Copper Cable	CBL-NTWK-0944-MS28C05M	0.5m 25GbE SFP28 to SFP28, Passive
SFP28 Copper Cable	CBL-NTWK-0944-MS28C10M	1m 25GbE SFP28 to SFP28, Passive
SFP28 Copper Cable	CBL-NTWK-0944-MS28C15M	1.5m 25GbE SFP28 to SFP28, Passive
SFP28 Copper Cable	CBL-NTWK-0944-MS28C20M	2m 25GbE SFP28 to SFP28, Passive
SFP28 Copper Cable	CBL-NTWK-0944-MS28C25M	2.5m 25GbE SFP28 to SFP28, Passive
SFP28 Copper Cable	CBL-NTWK-0944-MS28C30M	3m 25GbE SFP28 to SFP28, Passive
SFP28 Optical Module	AOM-SFP28-25GbE-SR-1-MLN	SFP28 transceiver module 25G, SR, MMF, LC

## Similar Supermicro Products

Product Part Number	Form Factor	Speed	Connector Type	Total Ports	Chipset
AOC-MGP-i2	SIOM	1GbE	RJ45	2	Intel® i350
AOC-MGP-i4	SIOM	1GbE	RJ45	4	Intel® i350
AOC-MTGN-i2S	SIOM	10GbE	SFP+	2	Intel® 82599
AOC-MTG-i4S	SIOM	10GbE	SFP+	4	Intel® XL710
AOC-MTG-i2T	SIOM	10GbE	RJ45	2	Intel® X550
AOC-MTG-i4T	SIOM	10GbE	RJ45	4	Intel® X550
AOC-M25G-m4S	SIOM	25GbE	SFP28	4	Mellanox® CX-4 Lx EN
AOC-MH25G-m2S2T	SIOM	25GbE	SFP28	2	Mellanox® ConnectX-4 Lx EN
		10GbE	RJ45	2	Intel® X550
AOC-MHIBF-m2Q2G	SIOM	InfiniBand FDR GbE	QSFP+	2	Mellanox® ConnectX-3 Pro
			RJ45	2	Intel® i350
AOC-MHIBF-m1Q2G	SIOM	InfiniBand FDR GbE	QSFP+	1	Mellanox® ConnectX-3 Pro
			RJ45	2	Intel® i350
AOC-MHFI-i1C	SIOM	Omni-Path	QSFP28	1	Intel® OPA HFI