

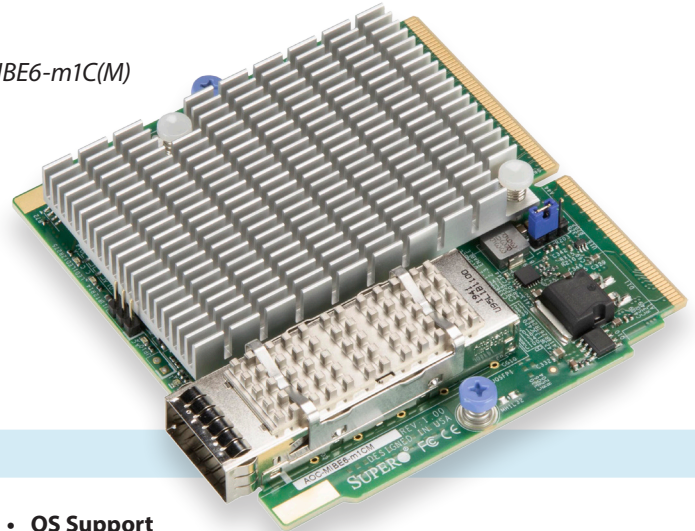
# AOC-MIBE6-m1C & AOC-MIBE6-m1CM



## The Ultimate InfiniBand Adapter in Supermicro Super I/O Module (SIOM) Form Factor

The AOC-MIBE6-m1C(M) is a powerful and versatile InfiniBand and Ethernet controller in a flexible small form-factor SIOM. Featuring Mellanox® ConnectX-6 controller, it can provide up to 100Gbps InfiniBand EDR / HDR-100, or 100Gbps Ethernet connectivities optimized for high-performance computing networks and are ideal for demanding Enterprise and HPC applications.

AOC-MIBE6-m1C(M)



### Key Features

- Super I/O Module (SIOM) Form Factor
- Mellanox® ConnectX-6 Controller
- Up to 100Gbps InfiniBand EDR / HDR-100, or 100Gbps Ethernet
- NC-SI for Remote Management
- Asset Management Features with thermal sensor
- PCIe Gen4 and PCIe Gen3 support
- RoHS compatible

### Specifications

#### • General

- Super I/O Module (SIOM) Form Factor
- Mellanox® ConnectX-6 Controller
- Single QSFP28 port with speed up to 100Gbps
- PCIe 4.0 compliant

#### • Networking Features

- Jumbo frame support (9.6KB)
- IEEE 802.3ad, 802.1AX Link Aggregation
- VMware NetQueue support
- IEEE 802.1Q, 802.1P VLAN tags and priority
- IEEE 802.3az Energy Efficient Ethernet
- IEEE 802.3ap based autonegotiation and KR startup
- IEEE 802.1Qau (QCN) – Congestion Notification

#### • Offload Features

- RDMA over Converged Ethernet (RoCE)
- TCP/UDP/IP stateless offload
- Large Receive Offload (LSO)
- Receive Side Scaling (RSS)
- Transmit Side Scaling (TSS)
- Data Plane Development Kit (DPDK) for kernel bypass application
- Open VSwitch (OVS) offload using ASAP2
- Flexible match-action flow tables Tunneling encapsulation / de-capsulation
- Intelligent interrupt coalescence
- Header rewrite supporting hardware offload of NAT router

#### • Management Features

- Jumper for standby power (default disabled)
- Network Controller Sideband Interface (NC-SI)
  - o NC-SI is not supported during standby with default setting
- Preboot eXecution Environment (PXE) support
- iSCSI remote boot support
- Asset Management with thermal sensor

#### • OS Support

- Windows® Server
- Linux RHEL
- Linux SLES
- Linux Ubuntu
- Linux CentOS
- FreeBSD
- VMware
- OpenFabrics Enterprise Distribution (OFED)
- OpenFabrics Windows Distribution (WinOF-2)

#### • Power Consumption

- Maximum 20W

#### • Operating Conditions

- Operating temperature: 0°C to 55°C (32°F to 131°F)
- Storage temperature: -40°C to 65°C (-40°F to 149°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 SKUs

Product Part Number	Bracket Included	Description
AOC-MIBE6-m1C	BKT-0164L	1-port 100GbE QSFP28 Adapter with a swappable bracket for 2U+ chassis (Storage Servers)
AOC-MIBE6-m1CM	BKT-0163L	1-port 100GbE QSFP28 Adapter with an internal bracket for 1U chassis (Twin Systems)