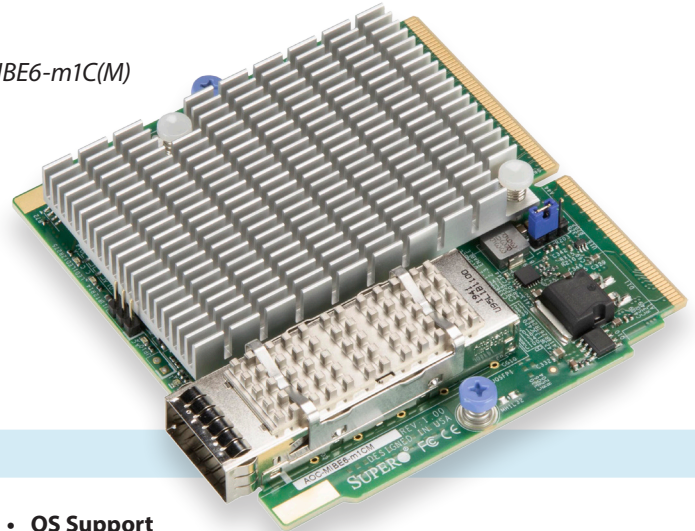# AOC-MIBE6-m1C & AOC-MIBE6-m1CM

SUPERMICRO®

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.

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

AOC-MIBE6-m1C(M)

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*

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)

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