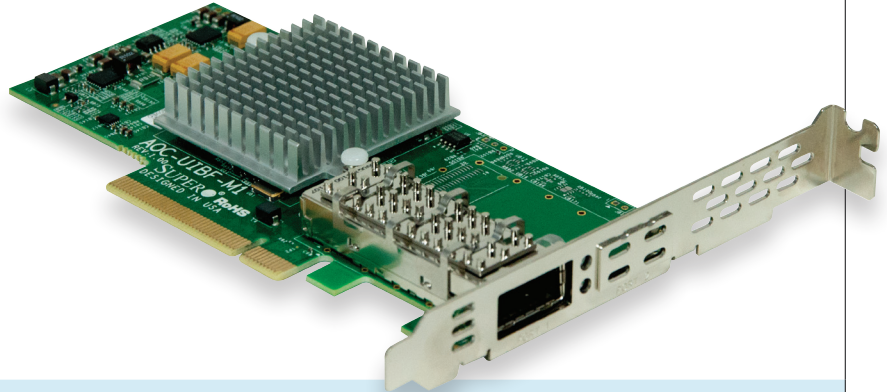


Compact and Powerful InfiniBand FDR Adapter

The AOC-UIBF-m1 is the most compact, yet powerful, InfiniBand adapter in the market. Based on the Mellanox® ConnectX-3 FDR controller with Virtual Protocol Interconnect (VPI), it provides the highest performing and most flexible server interconnect solution for Enterprise Data Centers and High-Performance Computing environments. The AOC-UIBF-m1 simplifies system development by serving both InfiniBand and Ethernet fabrics in one hardware design. The AOC-UIBF-m1 is designed to fit Supermicro UIO server systems.

Key Features

- Single QSFP Connector
- Low-profile UIO Form Factor
- PCI Express 3.0 (up to 8GT/s)
- Virtual Protocol Interconnect (VPI)
- 1µs MPI ping latency
- Up to 56Gbps InfiniBand or 40Gbps Ethernet
- CPU offload of transport operations
- Application offload
- GPU communication acceleration
- End-to-end QoS and congestion control
- Hardware-based I/O virtualization
- Ethernet encapsulation (EoB)
- RoHS compliant 6/6



Specifications

- **General**
 - Mellanox® ConnectX-3 FDR controller
 - Compact size UIO form factor
 - Single QSFP port
 - PCI-E 3.0 x8 (8GT/s) interface
- **Connectivity**
 - Interoperable with InfiniBand or 10/40GbE switches
 - Passive copper cable with ESD protection
 - Powered connectors for optical and active cable support
- **InfiniBand**
 - IBTA Specification 1.2.1 compliant
 - Hardware-based congestion control
 - 16 million I/O channels
 - 256 to 4Kbyte MTU, 1Gbyte messages
- **Enhanced InfiniBand**
 - Hardware-based reliable transport
 - Collective operations offloads
 - GPU communication acceleration
 - Hardware-based reliable multicast
 - Extended Reliable Connected transport
 - Enhanced Atomic operations
- **Ethernet**
 - IEEE Std 802.3ae 10 Gigabit Ethernet
 - IEEE Std 802.3ba 40 Gigabit Ethernet
 - IEEE Std 802.3ad Link Aggregation and Failover
 - IEEE Std 802.3az Energy Efficient Ethernet
 - IEEE Std 802.1Q, .1p VLAN tags and priority
 - IEEE Std 802.1Qau Congestion Notification
 - IEEE P802.1Qaz D0.2 ETS
 - IEEE P802.1Qbb D1.0 Priority-based Flow Control
 - Jumbo frame support (9.6KB)
- **Hardware-based I/O Virtualization**
 - Single Root IOV
 - Address translation and protection
 - Dedicated adapter resources
 - Multiple queues per virtual machine
 - Enhanced QoS for vNICs
 - VMware NetQueue support
- **Additional CPU Offloads**
 - RDMA over Converged Ethernet
 - TCP/UDP/IP stateless offload
 - Intelligent interrupt coalescence
- **Flexboot™ Technology**
 - Remote boot over InfiniBand
 - Remote boot over Ethernet
 - Remote boot over iSCSI
- **Protocol Support**
 - Open MPI, OSU MVAPICH, Intel MPI, MS
 - MPI, Platform MPI
 - TCP/UDP, EoB, IPoB, SDP, RDS
 - SRP, iSER, NFS RDMA
 - uDAPL
- **Operating Systems/Distributions**
 - Novell SLES, Red Hat Enterprise Linux (RHEL), and other Linux distributions
 - Microsoft Windows Server 2008/CCS 2003, HPC Server 2008
 - OpenFabrics Enterprise Distribution (OFED)
 - OpenFabrics Windows Distribution (WinOF)
 - VMware ESX Server 3.5, vSphere 4.0/4.1
- **Physical Dimensions**
 - Card PCB dimensions (without end brackets): 14.29cm (5.63") x 6.35cm (2.50") (L x W)
 - Height of end brackets: Standard – 12cm (4.73"), low-profile – 7.94cm (3.13")
- **Operating Condition**
 - Operating Temperature: 0°C to 55°C
- **Optional Accessories**
 - CBL-0490L: 39.4" (100cm) QSFP to QSFP InfiniBand FDR 56Gbps Passive Copper
 - CBL-0496L: 118.1" (300cm) QSFP to QSFP InfiniBand FDR 56Gbps Passive Copper

Compliance/Environmental

- RoHS Compliant 6/6, Pb Free



Supported Platforms

- Supermicro UIO Server Systems with UIO slot

Please note that this product is only available as an integrated solution with Supermicro server systems