The Omni-Path Host Fabric in Supermicro Super I/O Module

High Performance Computing (HPC) solutions require the highest levels of performance, scalability, and availability to power complex application workloads. Designed specifically for HPC, the AOC-MHFI-i1C, uses an advanced "on-load" design that automatically scales fabric performance with rising server core counts, making these adapters ideal for today’s increasingly demanding workloads. Available in SIOM form factor and operates at 100Gbps throughput. The AOC-MHFI-i1C is the most compact and powerful networking adapter in the market today.

Key Features:
- Omni-Path Host Fabric Interface (HFI)
- Super I/O Module (SIOM) Form Factor
- 100 Gbps link speed
- Single QSFP28 Connector
- End-to-end fabric optimization
- Scalable, low latency MPI (less than 1μs end-to-end)
- High MPI message rates (160mmps)
- Efficient storage communication with new 8K and 10K MTUs
- Congestion control and QoS (with deterministic latency)
- Low Power Consumption
- Scalable to tens-of-thousands of nodes
- Open Fabrics Alliance (OFA) software
- MSI-X interrupt handling for high performance on multi-core hosts

Specifications
- Bus interface: PCI-E 3.0 x16
- Device type: End point
- Advanced interrupts: MSI-X, INTx
- ASIC: Single Intel® OP HFI ASIC
- Max Data Rate: 100 Gbps
- Virtual Lanes: Configurable from one to eight VLs plus one management VL
- MTU: Configurable MTU size of 2 KB, 4 KB, 8 KB, or 10KB
- Interfaces: Supports QSFP28 Quad Small Form Factor pluggable passive copper cables, Optical Transceivers, and Active Optical Cables
- Port: One Intel® OP 4X Host Fabric Interface QSFP28
- Software Operating Systems: Red Hat Enterprise Linux, SUSE Enterprise Linux Server, CentOS, Scientific Linux
- Power Consumption: Copper: Typical 7.4W, Maximum 11.7W; Optical: Typical 10.6W, Maximum 14.9W (Class 4 Optics)
- Operating Conditions: Operating temperature: 0°C to 40°C (32°F to 104°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)

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

For the most current product information, visit: www.supermicro.com

October 2017
# Available SKUs

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# Similar Products

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