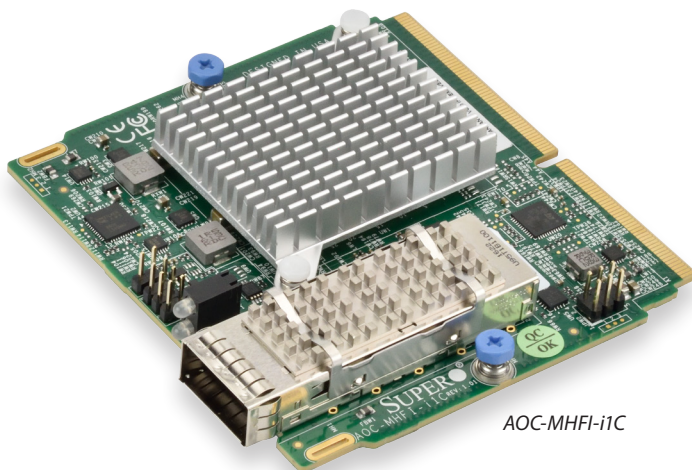


The Omni-Path Host Fabric in Supermicro Super I/O Module

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 (160mpps)**
- **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**



AOC-MHFI-i1C

Specifications

- **Bus interface:**
 - PCI-E 3.0x16
- **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

Available SKUs

SKUs	Part Number	Description
AOC-MHFI-i1C	AOC-MHFI-i1C	Single-port Omni-Path Host Fabric Adapter
	BKT-0106L	Swappable bracket for 2U+ chassis
AOC-MHFI-i1CM	AOC-MHFI-i1CM	Single-port Omni-Path Host Fabric Adapter
	BKT-0104L	Internal bracket

Similar 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-MH25G-m2S2T	SIOM	25GbE 10GbE	SFP28	2	Mellanox® ConnectX-4 Lx EN Intel® X550
			RJ45	2	
AOC-MHIBF-m2Q2G	SIOM	InfiniBand FDR GbE	QSFP+	2	Mellanox® ConnectX-3 Pro Intel® i350
			RJ45	2	
AOC-MHIBF-m1Q2G	SIOM	InfiniBand FDR GbE	QSFP+	1	Mellanox® ConnectX-3 Pro Intel® i350
			RJ45	2	

Similar Products

Type	Part Number	Description
QSFP28 Omni-Path Copper Cable	CBL-NTWK-0892-OPC05	Intel Omni-Path Passive Copper Cable QSFP28 0.5M
	CBL-NTWK-0892-OPC10	Intel Omni-Path Passive Copper Cable QSFP28 1M
	CBL-NTWK-0892-OPC15	Intel Omni-Path Passive Copper Cable QSFP28 1.5M
	CBL-NTWK-0892-OPC20	Intel Omni-Path Passive Copper Cable QSFP28 2M
	CBL-NTWK-0892-OPC30	Intel Omni-Path Passive Copper Cable QSFP28 3M
QSFP28 Omni-Path Active Optical Cable	CBL-NTWK-0892-OPF30	Intel Omni-Path Active Optical Cable QSFP28 3M
	CBL-NTWK-0892-OPF50	Intel Omni-Path Active Optical Cable QSFP28 5M
	CBL-NTWK-0892-OPF100	Intel Omni-Path Active Optical Cable QSFP28 10M
	CBL-NTWK-0892-OPF150	Intel Omni-Path Active Optical Cable QSFP28 15M
	CBL-NTWK-0892-OPF200	Intel Omni-Path Active Optical Cable QSFP28 20M
	CBL-NTWK-0892-OPF300	Intel Omni-Path Active Optical Cable QSFP28 30M
	CBL-NTWK-0892-OPF500	Intel Omni-Path Active Optical Cable QSFP28 50M