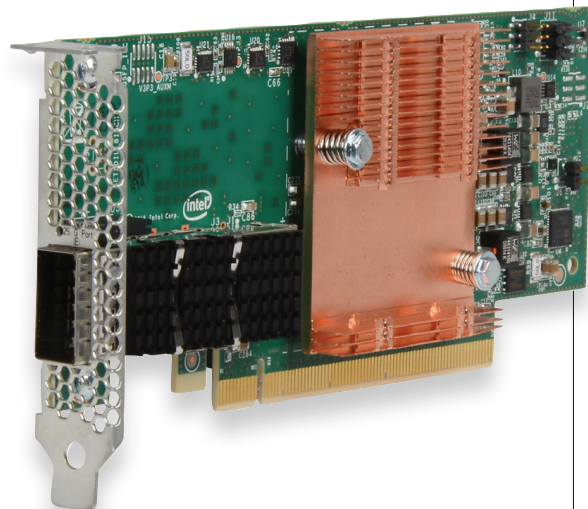


## The Right Fabric for HPC

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-SHFI-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.

### Key Features

- **100 Gbps link speed**
- **Single QSFP28 Connector**
- **Standard Low-Profile Form Factor**
- **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 – PCI-E x16
- **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, optical transceivers, and active optical cables
- **Port**
  - One Intel® OP 4X Host Fabric Interface QSFP28
- **LED**
  - Link status indicator (Green)
- **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)
- **Physical Dimensions**
  - Card PCB: 2.713 in x 6.6 in (H x L)
  - Standard Bracket: 0.725 in x 4.725 in
  - Low Profile Bracket: 0.725 in x 3.0 in
- **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)
  - Operating humidity: 5% to 85% non-condensing
  - Storage humidity: 5% to 95% non-condensing
  - Airflow requirements: 200 LFM at 55°C local ambient
- **Compliance/Environmental**
  - Complies with RoHS II Directive 2011/65/EU of the European Parliament
  - Complies with REACH Regulation (EC) No 1907/2006
- **Supported Platforms**
  - Supermicro® motherboards with PCI-E 3.0 x16 slot
  - Supermicro® server systems with PCI-E 3.0 x16 slot
  - Supermicro® Omni-Path Switch SSH-C48Q

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