Compact and Powerful Dual-port 10 Gigabit Ethernet Adapter

The AOC-CTG-i2S 10 Gigabit Ethernet Adapter is the most flexible and scalable Ethernet adapter for today's demanding data center environments. Based on the Intel® 10GbE network controller 82599ES, the AOC-CTG-i2S addresses the demanding needs of the next-generation data center by providing features for virtualization, flexibility for LAN and SAN networking, and proven reliable performance. The AOC-CTG-i2S is designed in a small microLP form factor to fit Supermicro MicroCloud and Twin server systems.

Key Features

- Dual SFP+ Connectors
- MicroLP Form Factor
- PCI Express 2.0 (up to 5GT/s)
- Intel® QuickData Technology
- VMDq, Next-Generation VMDq, and PC-SIG SR-IOV for Virtualized Environments
- Load Balancing on Multiple CPUs
- iSCSI Remote Boot Support
- Fibre Channel over Ethernet (FCoE) Support
- Support for most Network Operating Systems (NOSs)
- Supports both DAC Twin Axial and LC Fiber-Optic Cables
- RoHS compliant 6/6

Specifications

- **General:**
  - Intel® 82599ES 10GbE controller
  - Compact size microLP form factor
  - Dual SFP+ and dual USB 2.0 ports
  - PCI-E x8 2.0 (5GT/s)
  - Load balancing on multiple CPUs
  - iSCSI remote boot support
  - Fibre Channel over Ethernet (FCoE) Support
  - Intel® PROSet Utility for Windows® Device Manager

- **I/O Features:**
  - Intel® QuickData Technology: DMA engine that enhances data acceleration and lowers CPU usage
  - Direct Cache Access (DCA) to avoid cache misses
  - MSI-X support to minimize the overhead of interrupts allowing load-balancing between multiple cores/CPUs
  - Tx/Rx IP, SCTP, TCP and UDP checksum offloading capabilities (IPv4, IPv6)
  - Receive and Transmit Side Scaling for Windows environments and Scalable I/O for Linux environments

- **Virtualization Features:**
  - Supports virtualization features such as VMDq, Next-generation VMDq (64 queues per port) and PC-SIG SR-IOV implementation
  - IPv6 Offloading
  - Advanced Packet Filtering
  - VLAN support to allow creation of multiple VLAN segments

- **Manageability Features:**
  - Preboot eXecution Environment (PXE) support
  - Simple Network Management Protocol (SNMP) and Remote Network Monitoring (RMON) statistics counters
  - iSCSI remote boot

- **OS Support:**
  - RedHat EL, SuSe SLES
  - FreeBSD
  - VMWare

- **Cables Support:**
  - SFP+ direct attached twin axial cables, up to 7 meters
  - LC-LC fiber-optic cables (optional SFP+ transceiver is required)

- **Operating Conditions:**
  - Operating temperature: 0°C to 55°C

- **Physical Dimensions:**
  - Card PCB dimensions (without end brackets):
    - 12.32cm (4.85in) x 3.90cm (1.54in) (LxW)

- **Power Consumption:**
  - About 8W (typical)

- **Optional Accessories:**
  - AOC-E10GSPFSR: SFP+ transceiver module for short range fiber cables (up to 300m)
  - AOC-E10GSFPLR: SFP+ transceiver module for long range fiber cables (up to 3000m)
  - AOC-CRFS: SFP+ transceiver module for short range fiber cables (up to 300m)
  - AOC-GSRC-FSR2: SFP+ transceiver module for short range fiber cables (up to 300m), single speed (10Gb)
  - CBL-0347L: 39.37” (100cm) 10GbE SFP+ to SFP+, Twinax copper cable
  - CBL-0456L: 78.74” (200cm) 10GbE SFP+ to SFP+, Twinax copper cable
  - CBL-0348L: 118.11” (300cm) 10GbE SFP+ to SFP+, Twinax copper cable
  - CBL-0349L: 196.85” (500cm) 10GbE SFP+ to SFP+, Twinax copper cable

- **Compliance/Environmental:**
  - RoHS Compliant 6/6, Pb Free

Supported Platforms

- Supermicro Twin Server and MicroCloud Systems with microLP expansion slot (See MicroLP Compatibility Matrix online)
  - http://www.supermicro.com/support/resources/aoc/microLP_compatibility.cfm

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

For the most current product information, visit: http://www.supermicro.com/products/nfo/networking.cfm#adapter