AOC-MTGN-i2S



The Ultimate 10G SFP+ Ethernet Controller in Supermicro Super I/O Module

Supermicro® Super I/O Modules provide flexible I/O networking options and the AOC-MTGN-i2S is the most flexible and scalable 10GbE SFP+ SIOM controller for today's demanding data center environments. Based on Intel 10GbE network controller 82599, they address the demanding needs of the next generation data center by providing unmatched features for virtualization, flexibility for LAN and SAN networking.

Key Features

- Dual SFP+ Connectors
- Super I/O Module (SIOM) Form Factor
- 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
- Asset Management Features
- NC-SI for Remote Management
- RoHS compliant 6/6
- Support both Direct Attach Copper and Fiber Cables



Specifications

General

- Intel® 82599ES 10GbE controller
- Super I/O Module (SIOM) Form Factor
- Dual SFP+ ports
- Load balancing on multiple CPUs
- iSCSI remote boot support
- Fibre Channel over Ethernet (FCoE) Support
- Intel® PROSet Utility for Windows® Device Manager
- Time Sync IEEE 1588

• I/O Features

- Direct Cache Access (DCA) to avoid cache misses
- MSI-X support to minimize the overhead of interrupts and allows loadbalancing 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

- VMDq, Next-generation VMDq (64 queues per port)
- PC-SIG SR-IOV implementation (64 virtual functions per port)
- Advanced Packet Filtering
- VLAN support to allow creation of multiple VLAN segments
- VXLAN through Software

Management Features

- Preboot eXecution Environment (PXE) support
- Simple Network Management Protocol (SNMP) and Remote Network Monitoring (RMON) statistics counters
- iSCSI remote boot
- NC-SI for remote management
- Asset Management support on Supermicro® platforms
- Controller asset tags such as part number, revision, serial number, and MAC addresses

Advanced Software Features

- Teaming support
- IEEE 802.3ad (link aggregation control protocol)
- IEEE 802.1Q VLANs
- IEEE 802.3 2005 flow control support

OS Support

- Windows Server 2012 R2, 2012, 2008 R2 (x64 Edition)
- Windows 8.1, 8, 7 (x64 Edition)
- RedHat Linux, SUSE Linux, FreeBSD, UEFI, VMWare

Cable Support

- SFP+ direct attach twinaxial copper cables up to 7m
- Fiber-optic cables (with required optional SFP+ transceivers)

Power Consumption

- Typical power consumption: 6.2W
- Maximum power consumption: 7.2W

Operating Conditions

- Operating temperature: 0°C to 55°C (32°F to 131°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)

Optional Accessories:

- AOC-E10GSFPSR: SFP+ transceiver module for short range fiber cables (up to 300m), 10G/1G, 850nm, MMF, LC
- AOC-E10GSFPLR: SFP+ transceiver module for long range fiber cables (up to 10km), 10G/1G, 1310nm, MMF, LC
- AOC-TSR-FS: SFP+ transceiver module for short range fiber cables (up to 300m), 10G/1G, 850nm, MMF, LC
- AOM-TSFP-709DMZ-AVG: SFP+ transceiver module for short range fiber cables, 10G/1G, 850nm, MMF, LC
- CBL-0347L: 1m 10GbE SFP+ to SFP+ copper cable, Passive, 30AWG, Pull Type
- CBL-NTWK-0347: 1 m 10GbE SFP+ to SFP+ copper cable, Passive, 30AWG, Push Type
- CBL-NTWK-0456: 2m 10GbE SFP+ to SFP+ copper cable, Passive, 30AWG, Push Type
- CBL-0348L: 3m 10GbE SFP+ to SFP+ copper cable, Passive, 24AWG, Pull release
- CBL-0349L: 5m 10GbE SFP+ to SFP+ copper cable, Passive, 24AWG, Pull release
- CBL-SFP+AOC-1M: 1m 10GbE SFP+ to SFP+ Fiber Active Optical Cable (AOC)
- CBL-SFP+AOC-3M: 3m 10GbE SFP+ to SFP+ Fiber Active Optical Cable (AOC)
- CBL-SFP+AOC-5M: 5m 10GbE SFP+ to SFP+ Fiber Active Optical Cable (AOC)

Compliance/Environmental

- RoHS Compliant 6/6, Pb Free

Supported Platforms

- Supermicro® motherboards with Super I/O Module slot
- Supermicro® server systems with Super I/O Module slot

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