SUPERMICR

The Most Advanced SIOM 4-port 10GbE SFP+ Ethernet Controller

Supermicro® Super I/O Modules provide flexible I/O networking options and the AOC-MTG-i4S is the most advanced, market-leading 4-port 10GbE SFP+ SIOM controller. It expands virtualization beyond the server level to the network level, and combines with hardware optimizations and offloads. It provides unmatched features for virtualization, flexibility for LAN and SAN networks, and reliable performance.

Key Features

- Quad SFP+ Connectors
- · Super I/O Module (SIOM) Form Factor
- · Network Virtualization Offloads including VXLAN and NVGRE
- Small Packet Performance
- Data Plane Developer Kit for efficient packet processing
- Low Power Consumption
- Intel® Flow Director
- · Intelligent Offloads
- · Unified networking providing a single wire support for LAN and storage
- · Asset Management Features
- NC-SI for Remote Management
- RoHS compliant 6/6
- Supports Both Direct Attach Copper and Fiber Cables

Specifications

General

- Intel® XL710-AM1 controller
- Super I/O Module (SIOM) Form Factor
- Quad SFP+ connectors with speed up to 10Gbps per port
- Load balancing on multiple CPUs
- Intel® PROSet Utility for Windows Device Manager
- Time Sync (IEEE 1588)
- Energy Efficient Ethernet (EEE)

I/O Features

- Intel® Flow Director
- MSI-X support
- Multiple Queues: 1,536 TX and RX queues per port
- Tx/Rx IP, SCTP, TCP, and UDP checksum offloading (IPv4, IPv6) capabilities
- Jumbo Frame (9.5KB)

Virtualization Features

- Next-Generation VMDq with up to 256 VMDq VMs supported
- PCI-SIG SR-IOV with up to 128 virtual ports
- Virtual Machine Load Balancing (VMLB)
- Advanced Packet Filtering
- VLAN support for up to 4096 VLAN tags
- VXLAN and NVGRE support

Storage Interface Features

- Preboot eXecution Environment (PXE) support
- iSCSI remote boot
- Simple Network Management Protocol (SNMP) and Remote Network Monitoring (RMON) static counters

· Management Features

- Asset Management support on Supermicro® platforms
- Controller asset tags such as part number, revision, serial number, and MAC addresses
- Controller thermal sensor
- NC-SI for remote management

• Advanced Software Features

- Teaming support
- IEEE 802.3ad (link aggregation control protocol)
- IEEE 802.1Q VLANs
- IEEE 802.3 2005 flow control support
- TCP segmentation/large send offload
- Interrupt moderation

Compliance/Environmental

RoHS Compliant 6/6, Pb Free



OS Support

- Windows® Server 2012 R2, 2012, 2008 R2 X86-64
- Linux RedHat EL 6.5 and 7.0 IA-32, X86-64, and IA-64
- Linux SuSE SLES 11 SP3 and 12 IA-32, X86-64, and IA-64
- FreeBSD 9 and 10 IA-32, X86-64, and IA-64
- UEFI 2.1 and 2.3 X86-64 and I-64
- VMware ESXi 5.1, ESXi 5.5 and ESXi 6.0 X86-64

Cable Support

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

Power Consumption

- Typical power consumption: 4W
- Maximum power consumption: 7W

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: 1m 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
- 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)

Supported Platforms

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

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