AOC-STGN-i2S and AOC-STGN-i1S



AOC-STGN-i2S

AOC-STGN-i1S

The Ultimate 10G SFP+ Ethernet Controller with NC-SI remote management

AOC-STGN-i2S and AOC-STGN-i1S are the most flexible and scalable Ethernet adapters for today's demanding data center environments. Based on the new Intel 10GbE network controller 82599, they address the demanding needs of the nextgeneration data center by providing unmatched features for virtualization, flexibility for LAN and SAN networking.

Key Features

- Dual and single SFP+ Connectors
- Low-Profile Standard 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)
- Support both DAC Twin Axial and LC Fiber-Optic Cables
- RoHS compliant 6/6
- Network Controller Sideband Interface (NC-SI)

Specifications

General:

- Intel® 82599 10GbE controller
- Dual SFP+ ports (AOC-STGN-i2S)
- Single SFP+ port (AOC-STGN-i1S)
- Compact size low-profile standard form factor
- 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 and allows 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
- VXLAN through Software

Manageability 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 (Only supported with Supermicro motherboards with corresponding NC-SI connectors)

Cables Support:

- SFP+ direct attached twin axial cables, up to 7 meters
- LC-LC fiber-optic cables (optional SFP+ transceiver is required)
- NC-SI cable (comes with motherboard)

Compliance/Environmental

RoHS Compliant 6/6, Pb Free

OS Support:

- Windows Server 2012 (x64 Edition)

Windows 8 (x64 Edition and 32-bit)

Windows Server 2008 R2 (x64 Edition, 64-bit)

Windows Server 2008 (x64 Edition, 64-bit, and 32-bit)

Windows 7 (x64 Edition and 32-bit)

Windows Vista (x64 Edition and 32-bit)

- Windows Server 2003 (x64 Edition, 64-bit, and 32-bit)
- VMWare
- RedHat EL, SUSE SLES
- Free BSD

· Operating Conditions:

- Operating temperature: 0°C to 55°C

Physical Dimensions:

- Card PCB dimensions:
- 10.16cm (4.00in) x 6.90cm (2.73in)
- Height of end brackets:

standard - 12cm (4.725in),

low-profile - 7.94cm (3.13in)

Optional Accessories

- AOC-E10GSFPSR: SFP+ transceiver module for short range fiber cables (up to
- AOC-E10GSFPLR: SFP+ transceiver module for long range fiber cables (up to
- AOC-TSR-FS: SFP+ transceiver module for short range fiber cables (up to
- AOM-TSFP-709DMZ-AVG: SFP+ transceiver module for short range fiber
- CBL-0347L: 1M 10GbE SFP+ to SFP+ copper cable, Pull type
- CBL-NTWK-0347: 1M 10GbE SFP+ to SFP+ copper cable, Push Type - CBL-NTWK-0456: 2M 10GbE SFP+ to SFP+ copper cable, Push Type
- CBL-0348L: 3M 10GbE SFP+ to SFP+ copper cable, Pull release
- CBL-0349L: 5M 10GbE SFP+ to SFP+ copper cable, 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

- Motherboards with minimum PCI-E x8 slot
- Server Systems with low-profile or full-height PCI-E x8 expansion slot
- NC-SI feature is only supported by Supermicro® motherboards with corresponding NC-SI connectors

Please note that this product is only available to OEM customer and is sold as integrated solution with Supermicro server systems