# **AOC-STGN-i2S**



# The Ultimate Dual-Port 10 Gigabit Ethernet Controller with the Flexibility and Scalability required for Virtual and Unified Storage Environments

The latest member of Supermicro's network adapter family, the **AOC-STGN-i2S** is the most flexible and scalable Ethernet adapter for today's demanding data center environments. Based on the new Intel® 10GbE network controller 82599ES, the AOC-STGN-i2S addresses the demanding needs of the next-generation data center by providing unmatched features for virtualization, flexibility for LAN and SAN networking, and proven reliable performance.

#### **Key Features**

- Dual 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 SR Cables
- RoHS compliant 6/6



#### **Specifications**

#### General:

- Intel® 82599ES 10GbE controller
- 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

#### **Compliance/Environmental**

• RoHS Compliant 6/6, Pb Free



#### Manageability Features:

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

#### OS Support:

- Windows® Vista SP2, 2003 SP2, 2008 SP2
- RedHat EL, SuSe SLES
- FreeBSD

# Cables Support:

- SFP+ direct attached twin axial cables, up to 10 meters
- Dual LC fiber-optic SR cables, up to 300 meters

### Operating Conditions:

- Operating temperature: 0°C to 55°C

# Physical Dimensions:

- Card PCB dimensions:
- 13.65cm (5.37in) x 6.35cm (2.50in) (LxW)
- Height of end brackets:

standard - 12cm (4.725in),

low-profile – 7.94cm (3.13in)

## **Supported Platforms**

- Motherboards with minimum PCI-E x8 slot
- Server Systems with low-profile or full-height PCI-E x8 expansion slot

#### **Optional Accessories**

- AOC-E10GSFPSR: SFP+ transceiver module for short range fiber cables (up to 300m)
- CBL-0347L: 1m Twinax copper cable
- CBL-0348L: 3m Twinax copper cable
- · CBL-0349L: 5m Twinax copper cable

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