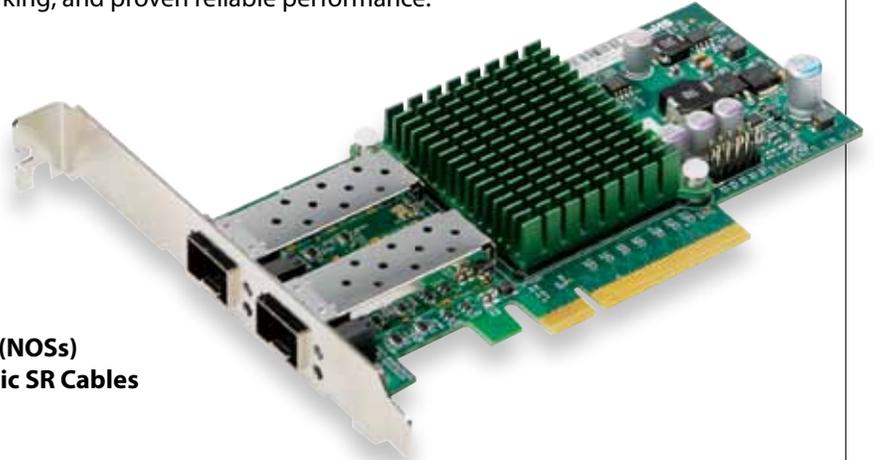# AOC-STGN-i2S

SUPERMICR®

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**
- **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
  - 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

- **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)

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

SUPERMICR®
RoHS
compliant

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

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