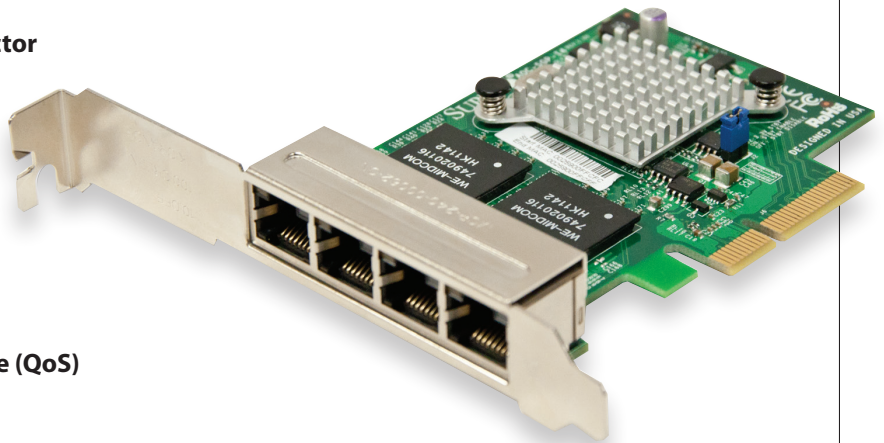


The Compact and Feature-Rich 4-port Ethernet Controller

With the AOC-SGP-i4, Supermicro has extended the boundaries of Ethernet technology to create the most compact and feature-packed 4-port Ethernet controller in the market, and allow it to fit in the smallest space in the ever-densifying server system. With ultra-small footprint and rich of power management technology feature set, the AOC-SGP-i4 represents the next step in the Gigabit Ethernet networking evolution for enterprise and data center environments

Key Features

- **3.9-inch Length, Low-Profile Standard Form Factor**
- **PCI Express 2.1 (2.5GT/s or 5GT/s)**
- **4 RJ-45 ports**
- **Intel® I/O Acceleration Technology (I/O AT)**
- **VMDq, Next-Generation VMDq, and PC-SIG SR-IOV for Virtualized Environments**
- **Jumbo Frame Support up to 9.5KB**
- **IEEE 802.3az – Energy Efficient Ethernet (EEE)**
- **Low Power Consumption (5W Typical)**
- **iSCSI Remote Boot Support**
- **Flexible I/O Virtualization and Quality of Service (QoS)**
- **PXE Boot Support**
- **RoHS compliant 6/6**



Specifications

- **General**
 - Intel® i350 GbE controller
 - Compact size low-profile standard form factor
 - PCI-E 2.1 x4 (2.5GT/s or 5GT/s) interface
 - Quad RJ-45 connectors
 - Intel® PROSet Utility for Windows® Device Manager
 - Intel® I/O Acceleration Technology (I/O AT)
 - Power consumption: about 5W
- **Ethernet Features**
 - IEEE 802.3 auto-negotiation for speed, duplex, and flow control
 - IEEE 802.3x and 802.3z compliant flow control support
 - Automatic cross-over detection function (MDI/MDI-X)
 - 1Gb/s Ethernet IEEE 802.3, 802.3u, 802.3ab PHY specifications Compliant
 - IEEE 1588 protocol and 802.1AS implementation
- **Power Management and Efficiency**
 - IEEE 802.3az – Energy Efficient Ethernet (EEE) which reduces power consumption of the PHY by about 50%
 - DMA Coalescing reduces platform power consumption
 - Active State Power Management (ASPM) support
 - LAN disable function
 - MAC Power Management controls
 - Low Power Link Up – Link Speed Control
- **Virtualization Features**
 - VM to VM Packet forwarding (Packet Loopback)
 - Eight TX and RX queue pairs per port to support VMWare NetQueue and Microsoft VMQ
 - Flexible Port Partitioning: 32 Virtual Functions
 - PC-SIG SR-IOV implementation
 - IEEE 802.1q VLAN support
 - IEEE 802.1q advanced packet filtering
- **Performance Features**
 - TCP/UDP, IPv4 and IPv6 checksum offloads to improve CPU usage
 - Low Latency Interrupts
 - Tx TCP segmentation offload (IPv4, IPv6) increases throughput and lowers processor usage
 - Receive Side Scaling (RSS) for Windows environment, Scalable I/O for Linux environments
 - Jumbo Frames support up to 9.5K Bytes
 - Intelligent interrupt generation
- **Remote Boot Options**
 - Preboot eXecution Environment (PXE) support
 - iSCSI remote boot for Windows, Linux, and VMware
- **OS Support**
 - Windows® XP SP3, Vista SP2, 7 SP1 2003 SP2, 2008 SP2, 2008 R2S
 - RedHat EL 5.5, 6.0; SuSe SLES 10 SP3, 11 SP1
 - FreeBSD 8.0
 - VMware ESX 4.0, 4.1, 5.0
 - Xen
- **Cables Support**
 - RJ-45 Category-5/5e up to 100m
- **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)
- **Physical Dimensions**
 - Card PCB dimensions: 9.91cm (3.90in) x 6.35cm (2.50in) (L x H)
 - Height of end brackets: standard – 12cm (4.725in), low-profile – 7.94cm (3.13in)

Compliance/Environmental

- RoHS Compliant 6/6, Pb Free



Supported Platforms

- Motherboards with minimum PCI-E x4 slot
- Server Systems with low-profile or full-height PCI-E x8 expansion slot

Please note that this product is only available as integrated solution with Supermicro server systems

For the most current product information, visit:

www.supermicro.com