AOC-CGP-i2



Compact, Powerful and Feature-Rich, 2-port Gigabit Ethernet Controller for Twin Family and MicroCloud Systems

These microLP adapters are the latest innovation from Supermicro, designed to fit easily inside the densest systems. The AOC-CGP-i2 is based on the latest Intel® Ethernet controller i350 and is packed with advanced features for superior virtualization and application performance. The AOC-CGP-i2 also has industry leading power management features to optimize power consumption. This adapter is truly the ideal solution for customers who want to expand network connectivity in the densest Supermicro Twin family and MicroCloud server systems.

Key Features

- MicroLP form factor for Twin Family and MicroCloud Systems
- PCI Express 2.1 (2.5GT/s or 5GT/s)
- 2 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 (4W Typical)
- iSCSI Remote Boot Support
- PXE Boot Support
- Flexible I/O Virtualization and Quality of Service (QoS)
- RoHS compliant 6/6

Specifications

General

- Intel® i350 GbE controller
- Compact size microLP form factor
- PCI-E 2.1 x4 (2.5GT/s or 5GT/s) interface
- Dual RJ-45 connectors
- Intel® PROSet Utility for Windows® Device Manager
- Intel® I/O Acceleration Technology (I/O AT)
- Power consumption: Typical 4W

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)
- 8 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

Compliance/Environmental

• RoHS Compliant 6/6, Pb Free



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: 11.3cm (4.45in) x 3.9cm (1.54in) (L x H)

Supported Platforms

- Twin Family and MicroCloud Systems

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