AOC-STG-i2T

SUPERMICR

The Low Cost, Low Power 10Gb Ethernet Adapter for Advanced Datacenters

The Supermicro AOC-STG-i2T is the lowest power and least cost 10GbE adapter solution in today's data center marketplace. The auto-negotiation feature between 1GbE and 10GbE provided by the AOC-STG-i2T offers users the backwards compatibility they need for a smooth transition to 10GbE. It reliably addresses the demanding needs of bandwidth-intensive applications at a fraction of the cost of traditional 10GbE adapters by utilizing cost-effective RJ-45 connectors at a much longer cabling distance. The Supermicro AOC-STG-i2T 10GbE adapter is truly a best-in-class solution for advanced data centers.

Key Features

- Dual RJ45 Connectors
- Low-Profile, Short Length Standard Form Factor
- PCI Express 2.1 (2.5GT/s or 5GT/s)
- Intel[®] QuickData Technology
- VMDq, Next-Generation VMDq, and PC-SIG SR-IOV for Virtualized Environments
- Jumbo Frames Support up to 15.5KB
- Load Balancing on Multiple CPUs
- iSCSI Remote Boot Support
- Fibre Channel over Ethernet (FCoE)
 Support the most popular Network
- Operating Systems (NOSs)
- Support RJ-45 Category-6 or 6A
- RoHS compliant 6/6

Specifications

- General:
 - Intel® X540 10GbE controller with integrated 10GBase-T copper PHYs
 - Compact size low-profile standard form factor
 PCI-E x8 2.1 (2.5GT/s or 5GT/s) interface
 - Dual RJ-45 connectors with speed up to 10Gb/port
 - Load balancing on multiple CPUs
 - Intel[®] PROSet Utility for Windows[®] Device Manager
 - Maximum power consumption: about 13W

• I/O Features:

- Intel® QuickData Technology: DMA engine that enhances data acceleration and lowers CPU usage
- Support jumbo frames of up to 15.5KB
- 802.1q VLAN support
- Two integrated independent 10GBase-T interfaces operate at 10GBase-T (10Gb/s) and 1000Base-T (1Gb/s) modes
- Direct Cache Access (DCA) to avoid cache misses
- MSI-X support to minimize interrupt overhead of and allow load-balancing between multiple cores/CPUs
 Receive and Transmit Side Scaling for Windows environment
- and Scalable I/O for Linux environments
 Performance Features:
- TCP/UDP Segmentation Offload
- IPv6 Support for IP/TCP and IP/UDP Receive Checksum Offload
- Supports Fibre Channel over Ethernet (FCoE)
- Supports Fibre Channel over Ethernet (
 Low latency interrupts
- DCA support

Compliance/Environmental

RoHS Compliant 6/6, Pb Free

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 as integrated solution with Supermicro server systems

• Virtualization Features:

- Support for Virtual Machine Device Queues (VMDq and Next-generation VMDq)
- L2 Ethernet MAC address and VLAN filters
- PC-SIG SR-IOV implementation
- Advanced Packet Filtering
 VLAN support to allow creation of multiple VLAN segments
- Manageability Features:
- Preboot eXecuation Environment (PXE) support
- Simple Network Management Protocol (SNMP) and
- Remote Network Monitoring (RMON) statistics counters
- iSCSI remote boot
- OS Support:
 - Windows[®] Server 2008 R2 SP1, 7 SP1, Server 2008 SP2, Vista SP2, Server 2003 R2, 2003 SP2, 2008 SP2
 - Linix Kernel version 3.1.x & 2.6.X
- FreeBSD 8
- Cables Support:
- RJ-45 Category-6 up to 55m; Category-6A up to 100m
- 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)

For the most current product information, visit: www.supermicro.com