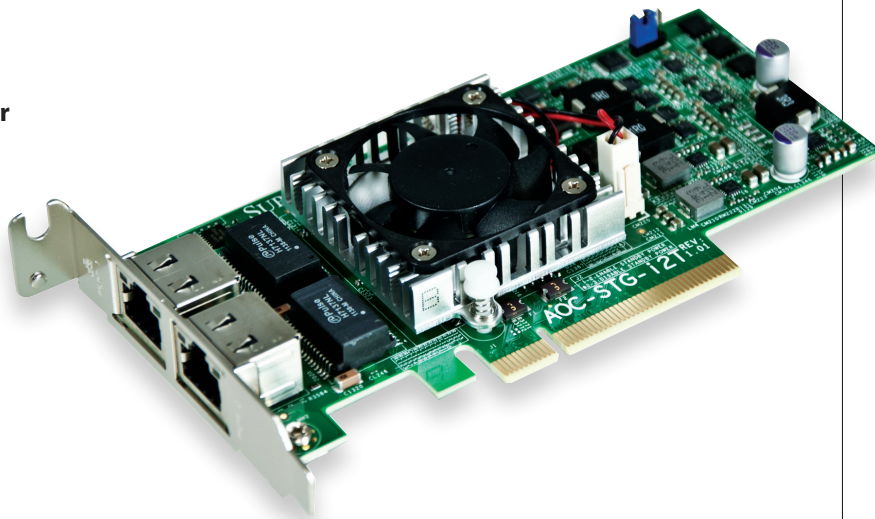


The Low Cost, Low Power 10Gb Ethernet Adapter for Advanced Datacenters

The Supermicro AOC-STG-12T 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-12T 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-12T 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/CPU's
 - 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)
 - Low latency interrupts
 - DCA support
- **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 eXecution 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
 - Linux 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)

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

For the most current product information, visit:

www.supermicro.com