# AOC-PTG-i1S

# SUPERMICR

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# 10 Gigabit Ethernet Adapter for High Density Systems

The Supermicro AOC-PTG-i1S is the most flexible and scalable 10 Gigabit Ethernet Adapter optimized for today's demanding data center environments. Incorporating the Intel® 10GbE network controller 82599EN, the AOC-PTG-i1S addresses the demanding needs of next-generation data centers by providing features for virtualization and flexibility for LAN and SAN networking with proven reliability and maximum performance. The AOC-PTG-i1s is designed for the industry's most powerful and high density Supermicro TwinPro SuperServer® family of products.

# **Key Features**

- Single SFP+ Connector
- Proprietary 1U Form Factor
- PCI Express 2.0 (up to 5GT/s)
- Intel<sup>®</sup> QuickData Technology
- VMDq, Next-Generation VMDq, and PC-SIG SR-IOV for Virtualized Environments
- Load Balancing on Multiple CPUs
- iSCSI Remote Boot Support
- Fibre Channel over Ethernet (FCoE) Support
- Support for most Network Operating Systems (NOSs)
- Support both DAC Twin Axial and LC Fiber-Optic Cables
- RoHS compliant 6/6

# **Specifications**

#### • General

- Intel® 82599EN 10GbE controller
- Proprietary 1U form factor
- Single SFP+ port
- PCI-E 2.0 x8 (5GT/s)
- Load balancing on multiple CPUs
- iSCSI remote boot support
- Fibre Channel over Ethernet (FCoE) Support
- Intel<sup>®</sup> PROSet Utility for Windows<sup>®</sup> 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
  - allowing 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

# **Compliance/Environmental**

RoHS Compliant 6/6, Pb Free

Supported Platforms



### OS Support:

- Windows® Server 2012 (x64 edition)
- Windows® 8 (x64 edition and 32-bit)
- Windows® Server 2008 R2 (x64 edition and 64-bit)

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- Windows® Server 2008 (x64 edition, 64-bit, and 32-bit)
- Windows® 7 (x64 edition and 32-bit)
- Windows® Vista (x64 edition and 32-bit)
- Windows® Server 2003 (x64 edition, 64-bit, and 32-bit)
- VMWare
- RedHat EL, SuSe SLES
  FreeBSD

# Cables Support:

- SFP+ direct attached twin axial cables, up to 7 meters
- LC-LC fiber-optic cables (optional SFP+ transceiver is required)

#### **Operating Conditions:**

- Operating temperature: 0°C to 55°C

#### **Physical Dimensions:**

- Card PCB dimensions (without end brackets): 10.04" (25.5cm) x 0.78" (2.0cm) (LxW)

#### **Optional Accessories**

- AOC-E10GSFPSR: SFP+ transceiver module for short range fiber cables (up to 300m)
- AOC-E10GSFPLR: SFP+ transceiver module for long range fiber cables (up to 3000m)
- AOC-TSR-FS: SFP+ transceiver module for short range fiber cables (up to 300m)
- AOC-GBIC-FSR2: SFP+ transceiver module for short range fiber cables (up to 300m), single speed (10Gb)
- CBL-0347L: 39.37" (100cm) 10GbE SFP+ to SFP+, Twinax copper cable
- CBL-0456L: 78.74" (200cm) 10GbE SFP+ to SFP+, Twinax copper cable
- CBL-0348L: 118.11" (300cm) 10GbE SFP+ to SFP+, Twinax copper cable
- CBL-0349L: 196.85" (500cm) 10GbE SFP+ to SFP+, Twinax copper cable

- Supermicro TwinPro<sup>2</sup> only Please note that this product is only available as an integrated solution with Supermicro server systems

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