# **AOC-CTGS-i2T**



# The most compact Dual-Port 10GbE adapter with 10GBase-T in the market

The AOC-CTGS-i2T is the latest microLP 2-port 10GBase-T controller for our compact and high density MicroCloud and Twin series servers. With compact design and lower power consumption, it can fit in small spaces while providing the highest networking bandwidth for data centers. The AOC-CTGS-i2T is packed with management features such as Asset Management and NC-SI which allow customers to monitor the servers remotely as well as the health of the card itself. Based on the latest Intel® X550 controller, the AOC-CTGS-i2T is an excellent choice for customers who are looking to expand their network connectivity with highest bandwidth.

## **Key Features**

- Dual RJ45 Connectors
- MicroLP Form Factor
- PCI Express 3.0 x4 (8GT/s)
- Network Virtualization Offloads: VXLAN and NVGRE
- VMDg and SR-IOV for Virtualized Environment
- Ethernet Flow Director
- Jumbo Frames support up to 15.5KB
- IEEE 802.3az Energy Efficient Ethernet (EEE)
- DMA coalescing
- Asset Management Features
- Supports RJ-45 Category-6 and 6A (10GBASE-T)
- RoHS compliant 6/6

## **Specifications**

#### • General:

- Intel® X550 10GbE controller with integrated 10GBase-T copper PHYs - MicroLP form factor
- PCI-E 3.0 x4 (8GT/s) interface
- Dual RJ45 connectors with speeds up to 10Gb/s per port
- Load balancing on multiple CPUs
- Intel® PROSet Utility for Windows Device Manager

#### • I/O Features:

- Two integrated interfaces operate at 10GBASE-T, 1000BASE-T and 100BASE-TX
- MSI/MSI-X support
- 128 Tx and Rx queues per port

## Network Features:

- Supports jumbo frames up to 15.5KB
- IEEE 802.3az Energy Efficient Ethernet (EEE)

#### **Performance Features:**

- TCP/UDP segmentation offload - IPv6 support for IP/TCP and IP/UDP receive checksum offload
- Intel® Flow Director - Receive-Side Scaling (RSS)
- TCP Receive Side Coalescing (RSC)
- Supports Fibre Channel over Ethernet (FCoE)
- DMA coalescing

#### • Virtualization Features:

- Support for Virtual Machine Device Queues (VMDg1 and Next Generation VMDq)
- L2 Ethernet MAC Address filters and VLAN filters
- PCI-SIG SR-IOV (64 VFs)
- RSS table per VF
- Simple VEPA, VEB (Virtual Ethernet Bridge)
- E-tag filtering
- 802.1q VLAN support
- Network Virtualization Stateless Offload: VXLAN, NVGRE

# **Compliance/Environmental**

• RoHS Compliant 6/6, Pb Free



#### Manageability Features:

- Preboot eXecution Environment (PXE) support
  - iSCSI remote boot
- Statistics for Management and Remote Network Monitoring (RMON)
- IEEE 1588 with per-packet timestamp
- Asset Management support on Supermicro® platforms
- Controller asset tags such as part number, revision, serial number, and MAC addresses
- Controller thermal sensor
- NC-SI for remote management
- OS Support:
  - Windows® Server 2012 R2, 2012, 2008 R2 X86-64
  - Linux RedHat EL 6.5 and 7.0 IA-32, X86-64, and IA-64
  - Linux SuSE SLES 11 SP3 and 12 IA-32, X86-64, and IA-64
  - FreeBSD 9 and 10 IA-32, X86-64, and IA-64
  - UEFI 2.1 and 2.3 X86-64 and I-64
  - VMware ESXi 5.1, ESXi 5.5 and ESXi 6.0 X86-64
- Cable Support:
- RJ-45 Category-6 up to 55m; Category-6A up to 100m
- Power Consumption
- Typical power consumption: 12W
- 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)
  - Storage humidity: 90% non-condensing relative humidity at 35°C
- Physical Dimensions:
  - Card PCB dimensions: 11.3cm (4.45in) x 3.9cm (1.54in) (L x H)
- Optional Accessories:
  - CBL-NTWK-0603: RJ45 CAT6A 550MHz Rated Blue 3 ft. patch cable
  - CBL-NTWK-0604: RJ45 CAT6A 550MHz Rated Blue 5 ft. patch cable
  - CBL-NTWK-0605: RJ45 CAT6A 550MHz Rated Blue 6 ft. patch cable
  - CBL-NTWK-0606: RJ45 CAT6A 550MHz Rated Blue 9 ft. patch cable
  - CBL-NTWK-0607: RJ45 CAT6A 550MHz Rated Blue 10 ft. patch cable
  - CBL-NTWK-0608: RJ45 CAT6A 550MHz Rated Blue 12 ft. patch cable
  - CBL-NTWK-0609: RJ45 CAT6A 550MHz Rated Blue 15 ft. patch cable
  - CBL-NTWK-0610: RJ45 CAT6A 550MHz Rated Blue 18 ft. patch cable
  - CBL-NTWK-0611: RJ45 CAT6A 550MHz Rated Blue 21 ft. patch cable - CBL-NTWK-0612: RJ45 CAT6A 550MHz Rated Blue 24 ft. patch cable

## Supported Platforms

Supermicro Twin Server and MicroCloud Systems with MicroLP expansion slot (See MicroLP Compatibility Matrix online) http://www.supermicro.com/support/resources/aoc/microLP\_compatibility.

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