# AOC-STG-i4T

The AOC-STG-i4T is a high density, low power 4-port 10GBase-T controller based on the Intel® XL710 and X557 chipsets. Combined with hardware optimizations and off-loads, this controller enables rapid network provisioning in an agile data center. With Supermicro Asset Management and thermal detection to provide an extra layer of security and peace of mind, the AOC-STG-i4T is the best choice for customers who requires high 10GbE port density and reliable networking hardware.

### **Key Features:**

- Low-Profile Standard Short-length Form Factor
- PCI Express 3.0 (8GT/s)
- 4 RJ45 Connectors
- Network Virtualization Offloads
- Ethernet Flow Director
- Data Plane Developer Kit for Efficient Packet Processing
- Small Packet Performance
- Intelligent Offloads
- Unified Networking Support for NAS and SAN
- Asset Management Features
- NC-SI for Remote Management
- RoHS compliant 6/6
- Supports Both Direct Attach Copper and Fiber Cables

### **Specifications**

- General:
  - Intel<sup>®</sup> X710 + X557 controller
  - Half-length low-profile standard form factor
    BCL 5.3.0 v8 (8CT/c) interface
  - PCI-E 3.0 x8 (8GT/s) interface
    4 RJ45 connectors
  - 4 RJ45 connector
    10Gb/s per port
  - Load balancing on multiple CPUs
  - Intel<sup>®</sup> PROSet Utility for Windows Device Manager

### I/O Features:

- Intel<sup>®</sup> Flow Director
- MSI-X support
- Multiple queues: 1,536 Tx and Rx queues per port
- Tx/Rx IP, SCTP, TCP, and UDP checksum offloading (IPv4, IPv6) capabilities

#### Virtualization Features:

- Next-Generation VMDq with up to 256 VMDq VMs supported
- SR-IOV with up to 128 virtual ports
- Virtual Machine Load Balancing (VMLB)
- Advanced Packet Filtering
- VLAN support for up to 4,096 VLAN tags
- VXLAN and NVGRE support

#### Storage Interface Features:

- Preboot eXecution Environment (PXE) support
- iSCSI remote boot
- iSCSI Acceleration
- Simple Network Management Protocol (SNMP) and Remote Network Monitoring (RMON) static counters

### Management Features:

- Asset Management support on Supermicro® X10 generation platforms
  Controller asset tags such as part number, revision, serial number, and
- MAC addresses
- Controller thermal sensor
- NC-SI for Remote Management

## **Compliance/Environmental**

• RoHS Compliant 6/6, Pb Free

### Advanced Software Features:

- Teaming support
- IEEE 802.3ad (link aggregation control protocol)
  IEEE 802.1Q VLANs
- IEEE 802.3 2005 flow control support
- IEEE 802.1p
- TCP segmentation/large send offload
- Interrupt moderation

#### • OS Support:

- Windows<sup>®</sup> 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 and ESXi 5.5 X86-64

### • Power Consumption:

- Typical power consumption: 15.5W
- Maximum power consumption: 19.8W
- 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: 14.99cm (5.9in) x 6.90cm (2.73in) (L x H)
- Height of end brackets: standard 12cm (4.725in), low-profile 7.94cm (3.13in)

# Supported Platforms

- Supermicro motherboards with minimum PCI-E 3.0 x8 slot
- Supermicro server systems with low-profile or full-height PCI-E 3.0 x8
  expansion slot
- NC-SI is supported by Supermicro motherboards with corresponding connection

Please note that this product is sold only as part of an integrated solution with Supermicro server systems

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



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