# **AOC-MTG-i4T & AOC-MTG-i2T**



# The Most Compact and Advanced 10GBase-T Adapters

The Supermicro AOC-MTG-i4T and AOC-MTG-i2T are the most feature rich low power 10GBase-T controllers in the market today. Based on the Intel® X550 chipset with virtualization features such as VXLAN and NVGRE, they offer flexible connectivity selection for all networking requirements. The second generation integrated 10GbE MAC+PHY drives down both cost and power enabling a highly cost effective deployment of 10GbE in the data center. The AOC-MTG-i4T and AOC-MTG-i2T are among the most innovative 10GbE controllers in the market and an excellent choice to expand network connectivity in data centers and enterprise environments.

## **Key Features:**

- Super I/O Module (SIOM) Form Factor
- Intel® X550 10GbE controller. The second generation, 10GBase-T controller with integrated MAC and PHY
- Backward compatibility with existing 1000Base-T networks simplifies the transition to 10 GbE
- Quad and Dual RJ45 Connectors
- Network Virtualization Offloads: VXLAN and NVGRE
- VMDq and SR-IOV for virtualized Environment
- Asset Management Features with thermal sensor
- NC-SI for Remote Management
- Supports RJ-45 Category-6 and 6A cables
- RoHS compliant 6/6



# **Specifications**

#### General:

- Intel® X550 10GbE controller with integrated 10GBase-T copper PHYs
- Super I/O Module (SIOM) Form Factor
- Quad and dual RJ45 ports

#### I/O Features:

- MSI/MSI-X support
- Low Latency
- Multiple Queues 64 Tx and Rx Per Port
- Tx/Rx IP, SCTP, TCP, and UDP Checksum Offloading (IPv4, IPv6) Capabilities
- Tx TCP Segmentation Offload (IPv4, IPv6)
- Receive and Transmit Side Scaling for Windows Environment and Scalable I/O for Linux Environments (IPv4, IPv6 and TCP/ UDP)

#### • Virtualization Features:

- Multi-mode I/O Virtualization Operations
- Network Virtualization Stateless Offload: VXLAN, NVGRE
- Support for Virtual Machine Device Queues (VMDq)
- 64 Transmit (Tx) and Receive (Rx) Queue Pairs Per Port
- Flexible Port Partitioning 64 VFs per Port
- PCI-SIG SR-IOV
- 802.1q VLAN support

#### · Management Features:

- Preboot eXecution Environment (PXE) support
- Remote Boot iSCSI and FCoE
- IEEE 1588
- Asset Management support on Supermicro® platforms
- NC-SI for Remote Management

#### · Cables Support:

- RJ-45 Category-6 up to 55m; Category-6A up to 100m

### Power Consumption:

- AOC-MTG-i4T: Typical 22W, Maximum 26W
- AOC-MTG-141: Typical 22W, Maximum 20W - AOC-MTG-12T: Typical 11W, Maximum 13W

#### • 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: 92mm (3.62in) x 87.1mm (3.43in) (W x D)

#### • Supported Platforms:

- Supermicro® motherboards with Super I/O Module slot
- Supermicro® server systems with Super I/O Module slot

## See SIOM Compatibility Matrix online

http://www.supermicro.com/support/resources/AOC/AOC\_Compatibility\_SIOM.cfm

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

# **AOC-MTG-i4T & AOC-MTG-i2T**



## **Available SKUs**

SKUs	Description	Description		
AOC-MTG-i4T	AOC-MTG-i4T	4-port 10 Gigabit Ethernet Adapter		
	BKT-0088L	Swappable bracket for 2U+ chassis		
AOC-MTG-i4TM	AOC-MTG-i4TM	4-port 10 Gigabit Ethernet Adapter		
	BKT-0087L	Internal bracket		
AOC-MTG-i2T	AOC-MTG-i2T	2-port 10 Gigabit Ethernet Adapter		
	BKT-0086L	Swappable bracket for 2U+ chassis		
AOC-MTG-i2TM	AOC-MTG-i2TM	2-port 10 Gigabit Ethernet Adapter		
	BKT-0085L	Internal bracket		

# **Operating System Support**

Operating System Support	IA32	X64	IPF
Windows 7 SP1		х	
Windows 8, 8.1		х	
Windows 10		х	
Windows Server 2008 R2		х	
Windows Server 2012, 2012R2		х	
Windows PE 3.0 (2008 R2 PE)	х	х	
Windows PE 4.0 (2012 PE)	X	х	
Windows PE 5.0 (2023 R2 PE)	X	х	
Linux Stable Kernel Version 2.6/3.x/4.x	X	X	х
Linux RHEL 6.7, 7.1	X	х	
Linux SLES 11 SP4	X	X	X
Linux SLES 12	х	х	
FreeBSD 10.2	X	х	
UEFI 2.1, 2.3		х	х
UEFI 2.4		X	
VMWare ESXi 5.5, 6.0		X	

# **Optional Accessories**

Product Part Number	Part Number	Description		
CAT6A Cable	CBL-NTWK-0603	RJ45 CAT6A 550MHz Rated Blue 3 ft. patch cable		
CAT6A Cable	CBL-NTWK-0604	RJ45 CAT6A 550MHz Rated Blue 5 ft. patch cable		
CAT6A Cable	CBL-NTWK-0605	RJ45 CAT6A 550MHz Rated Blue 6 ft. patch cable		
CAT6A Cable	CBL-NTWK-0606	RJ45 CAT6A 550MHz Rated Blue 9 ft. patch cable		
CAT6A Cable	CBL-NTWK-0607	RJ45 CAT6A 550MHz Rated Blue 10 ft. patch cable		
CAT6A Cable	CBL-NTWK-0612	RJ45 CAT6A 550MHz Rated Blue 24 ft. patch cable		

## **Similar Products**

Product Part Number	Form Factor	Speed	Connector Type	Total Ports	Controller
AOC-MGP-i2	SIOM	1GbE	RJ45	2	Intel® i350
AOC-MGP-i4	SIOM	1GbE	RJ45	4	Intel® i350
AOC-MTGN-i2S	SIOM	10GbE	SFP+	2	Intel® 82599
AOC-MTG-i4S	SIOM	10GbE	SFP+	4	Intel® XL710