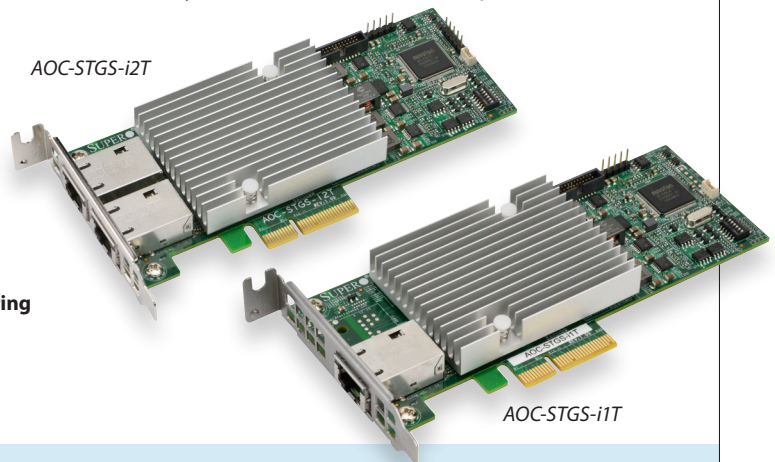


The Supermicro AOC-STGS-i2T/i1T are the most feature rich low power dual/single-port 10GbE-T controllers in the market today. Based on the Intel® X550 chipset with features such as VXLAN and NVGRE, they offer flexible connectivity selection for all networking requirements. The second generation integrated 10GbE MAC+PHY drives down both cost and power enabling a highly cost effective deployment of 10GbE in the data center. With Supermicro® Asset Management and thermal detection to provide an extra layer of security and a peace of mind, the AOC-STGS-i2T/i1T 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:

- Dual/Single RJ45 Connectors
- Low-Profile, Short Length Standard Form Factor
- PCI-E 3.0 x4 (8GT/s)
- Asset Management Features with thermal sensor
- Intel's second generation, Dual-port/Single-port 10GbE controller with integrated MAC and PHY
- IEEE 802.3az Energy Efficient Ethernet (EEE)
- VXLAN and NVGRE
- VMDq, PCI-SIG SR-IOV for Virtualization Environments
- Intel Ethernet Flow Director for hardware-based application traffic steering
- Jumbo Frames support up to 15.5KB
- Time Sync IEEE1588
- NC-SI for IPMI support
- RoHS compliant 6/6



Specifications

General

- Intel® X550 AT2 (i2T)/X550 AT (i1T) 10GbE controller with integrated MAC and PHY
- Compact size low-profile standard form factor
- PCI-E 3.0 x4 (8GT/s, 5GT/s or 2.5GT/s) interface
- Dual/Single RJ45 connectors with speed up to 10Gb/port
- Maximum power consumption: 11W (-i2T); 9W (-i1T)

I/O Features

- Intel Flow Director
- MSI-X Support
- Multiple Queues: 128 Tx and Rx Per Port
- TCP/UDP, IPv4 Checksum Offloads
- RSS for Windows Environment Scalable I/O for Linux Environments
- IPv6 Support for IP/TCP and IP/UDP Receive Checksum Offload
- Tx TCP Segmentation Offload
- Large FC Receive
- Support for Packets Up to 15.5KB
- DMA Coalescing
- Flow Director Filters:
 - Up to 32 KB – Two Signature Filters
 - Up to 8 KB – Two Perfect-match Filters
- Receive Side Coalescing (RSC)

Virtualization Features

- Multi-mode I/O Virtualization Operations
- VXLAN
- NVGRE
- Virtual Machine Device Queues (VMDq)
- Next Generation VMDq
- 64 Transmit (Tx) and Receive (Rx) Queue Pairs Per Port
- Flexible Port Partitioning: 64 Virtual Functions Per Port
- Support for PCI-SIG SR-IOV Specification
- IEEE 802.1Q VLAN

Remote Boot Options

- Preboot eXecution Environment (PXE) Flash Interface Support
- Intel Ethernet iSCSI Remote Boot
- Intel Boot Agent software: Linux boot via PXE or BOOTP, Windows Deployment Services, or UEFI

Compliance/Environmental

- RoHS Compliant 6/6, Pb Free



Management Features

- Asset Management features with thermal sensor
- NC-SI for IPMI Support

Security and Power Management

- Receive Packet Filtering
- Integrated IPsec Security Engines for Offloads of up to 1024 Security Associations (SA) for Each Tx and Rx
- IEEE 802.3az Energy Efficient Ethernet (EEE)
- LAN Disable Function
- Anti-spoofing for MAC and VLANs

Cable Support

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

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: 15cm x 6.89cm (5.9in x 2.71in) (LxW)
- Height of end brackets: standard – 12cm (4.725in), low-profile – 8cm (3.15in)

Weight

- i2T: 120g (0.2645lb); i1T: 111g (0.2455lb)

Supported Platforms

- Motherboards with minimum PCI-E 3.0 x4 expansion slot
- Server Systems with low-profile or full-height PCI-E 3.0 x4 expansion slot
- NC-SI feature is only supported by Supermicro® motherboards with corresponding NC-SI connectors

Please note that this product is only available to OEM customers and is sold as an integrated solution with Supermicro server systems

Operating System/Architecture Support

Operating System	IA32	X64	IPF
Windows 7 SP1		x	
Windows 8		x	
Windows 8.1		x	
Windows 10		x	
Windows Server 2008 R2		x	
Windows Server 2012		x	
Windows Server 2012 R2		x	
Windows PE 3.0 (2008 R2 PE)	x	x	
Windows PE 4.0 (2012 PE)	x	x	
Windows PE 5.0 (2012 R2 PE)	x	x	
Linux Stable Kernel Version 2.6/3.x/4.x	x	x	x

Operating System	IA32	X64	IPF
Linux RHEL 6.7	x	x	
Linux RHEL 7.1	x	x	
Linux SLES 11 SP4	x	x	x
Linux SLES 12	x	x	
FreeBSD 10.2	x	x	
UEFI 2.1		x	x
UEFI 2.3		x	x
UEFI 2.4		x	
VMware ESXi 5.5		x	
VMware ESXi 6.0		x	

Optional Parts List

	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-0608	RJ45 CAT6A 550MHz Rated Blue 12 ft patch cable
CAT6A Cable	CBL-NTWK-0609	RJ45 CAT6A 550MHz Rated Blue 15 ft patch cable
CAT6A Cable	CBL-NTWK-0610	RJ45 CAT6A 550MHz Rated Blue 18 ft patch cable
CAT6A Cable	CBL-NTWK-0611	RJ45 CAT6A 550MHz Rated Blue 21 ft patch cable
CAT6A Cable	CBL-NTWK-0612	RJ45 CAT6A 550MHz Rated Blue 24 ft patch cable
SFP+ Transceiver module	AOC-E10GSFSPR	SFP+ transceiver module for short range fiber cables (up to 300m), 10G/1G, 825nm, MMF, LC
SFP+ Transceiver module	AOC-E10GSFPLR	SFP+ transceiver module for short range fiber cables (up to 3000m), 10G/1G, 1310nm, MMF, LC
SFP+ Transceiver module	AOM-TSFP-709DMZ-AVG	SFP+ transceiver module for short range fiber cables, 10G/1G, 850nm, MMF, LC

Similar Products

Product Part Number	Form Factor	Speed	PCI-E	Connector Type	Total Ports	Chipset
AOC-STG-i4S	Standard Low Profile	10GbE	PCI-E 3.0 x8	SFP+	4	Intel® XL710
AOC-STG-b4S	Standard Low Profile	10GbE	PCI-E 3.0 x8	SFP+	4	QLogic BCM57840
AOC-STGN-i1S	Standard Low Profile	10GbE	PCI-E 2.0 x8	SFP+	1	Intel® 82599EN
AOC-STGN-i2S	Standard Low Profile	10GbE	PCI-E 2.0 x8	SFP+	2	Intel® 82599ES
AOC-STG-i2T	Standard Low Profile	10GbE	PCI-E 2.1 x8	RJ45	2	Intel® X540
AOC-STGF-i2S	Standard Low Profile	10GbE	PCI-E 3.0 x8	SFP+	2	Intel® X710
AOC-STG-i4T	Standard Low Profile	10GbE	PCI-E 3.0 x8	RJ45	4	Intel® XL710
AOC-S25G-m2S	Standard Low Profile	25GbE	PCI-E 3.0 x8	SFP28	2	Mellanox® CX-4 Lx EN

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