About ATTO

For over 30 years, ATTO Technology, has been a global leader across the IT and media & entertainment markets, specializing in network and storage connectivity and infrastructure solutions for the most data-intensive computing environments. ATTO works with partners to deliver end-to-end solutions to better store, manage and deliver data.

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Advanced Network Management

ATTO FastFrame™ 10GbE NICs provide a common foundation for both Ethernet and storage networks. FastFrame NICs leverage unified network investments and eliminate the need for multiple adapters and switches, while reducing power and cooling expenses. By providing multi-protocol support and leveraging 10Gb converged enhanced Ethernet links, FastFrame NICs dramatically reduce the cost and complexity of a data center's cabling infrastructure.

Applications

FastFrame 10GbE NICs combine the unparalleled performance of 10Gb Ethernet, the lossless benefits of enhanced Ethernet, and robustness of software iSCSI initiators to meet the performance and economic needs of today's growing data centers. FastFrame, NS12 is ideal for applications that require low latency, high-bandwidth data transfers such as data back-up and restoration, video-on-demand and video streaming, medical imaging, and clustered databases.

General Features

- Intel Ethernet Controller #82599
- Data rate per port: 10GbE
- TCP, UDP and IPv4 checksum offloading
- Tx/TCP segmentation offload (Large Send Offload—LSO)
- IPsec offload
- Low latency interrupts
- MSI-X support Multiple Independent Queues (16 queues per port)*
- Interrupt moderation*
- Data Center Bridging (DCB) support
- IPsec offload
- Priority-Based Flow Control 802.1Qbb rev.0*
- Enhanced Transmission Selection 802.1Qaz rev.0
- Data Center Bridging (DCBX) 802.1Qaz rev.0 protocol
- Header splits and Replication in Receive
- Receive Side Scaling for multiple Rx queues*
- Direct Cache Access (DCA) eliminates cache misses and reduces CPU load
- Interrupt levels INTA, MSI, MSI-X*
- Plug and play specification support
- Time Sync for networked Ethernet equipment 1588, 802.1as*
- VMDq and next-generation VMDq QoS features
- IEEE 802.3 2005 flow control support*
- Advanced Packet Filtering

Bus Specifications

- x8 PCI Express 2.0
- Supports PCI Express Base 2.0 and CEM Spec 2.0

Management Tools

- Easy system monitoring with Simple Network Management Protocol (SNMP) and Remote Network Monitoring (RMON) Statistic Counters
- Watchdog Timer for chip/driver status monitoring

Advanced Software Features

- Adaptive load balancing
- Teaming support
- IEEE802.3ad (link aggregation control protocol)
- PCIe Hot Plug/Active peripheral interconnect
- IEEE 802.1Q VLANs*

User Benefits

- Multiple offloads for lower processor usage and increased throughput
- Reduced power, cooling and cabling costs
- Low total cost of ownership (TCO) with high bandwidth over a single link

External Connectivity

- Dual speed 10G/1G, two or one LC fiber-optic connectors (NS12)
- Dual 10GBASE-T RJ45 connections via SFP+ adapter (NS12-002)
- Supports 10G SFP + Cu for Direct Attach
- 2 LED indicators per port
- LED Indicators: LINK (solid), ACTIVITY (blinking), LINK SPEED (green = 10Gb, yellow = 1Gb)

Network Standards

- IEEE802.3ae: 10GBASE-SR, 10GBASE-LR SFF-8431: 10GSFP+Cu (aka direct attach)
- 10GBASE-T (NS12-002 model via SFP+ adapter
- 802.1 Qbb: Priority Flow Control
- 802.1 Qaz: Enhanced Transmission
- DCBX Protocol

Operating System Support

- Windows Server*
- Windows*
- macOS*
- SUSE Linux® Enterprise Server (SLES)
- Red Hat Enterprise Linux (RHEL)

Agency Approvals

- FCC Part 15.107(b), Class B
- FCC Part 15.109(g), Class B
- EN55022: 2006, Class B

Compliance

- RoHS

Environmental and Physical Specs

- Operating environment: 0°C to 55°C (32°F to 131°F)
- Non operating environment: -40°C to 70°C (-40°F to 157°F)
- Airflow required: 100 lfm
- Humidity: 5% to 95% non-condensing
- Power Consumption: 5.9W

Warranty

- Three year

Ordering Information

- Phone: 716-691-1999

ATTO FastFrame

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