



20Gb/s Thunderbolt™ 2 to 10GBASE-T

ThunderLink™ NT 2102

Thunderbolt 2 to ATTO's 10 Gigabit Ethernet Desklink Devices provides maximum throughput for high bandwidth network connectivity for demanding IT and media and entertainment applications.

Industry Proven Technology

ATTO has over 25 years of experience developing first-to-market high performance and reliable storage connectivity solutions for customers. ATTO ThunderLink Ethernet products now provide creative professionals using Thunderbolt-enabled hosts, cost effective access to storage not previously available using FireWire or USB. The integrated family of ThunderLink products boasts an extensive list of customer design wins and certifications with respected industry partners.

Flexible Connectivity Solutions

ATTO 10GbE Desklink Devices provide the most flexible and scalable connectivity for today's high bandwidth content creation environments. By leveraging support for software iSCSI initiators, including ATTO Xtend SAN, ThunderLink 10GbE Desklink Devices can support both local and storage area networks. ThunderLink 10GbE Desklink Devices offer driver support for Mac OS® X 10.9 and later and Windows® 7 and 8 (Linux® when Thunderbolt-enabled platforms become available), providing a single connectivity solution for customers with heterogeneous operating system environments.

Performance Engineered

With 10Gb/s data transfer rates and multiple offloads (TCP, IPv4, UDP), ATTO Ethernet Desklink Devices are the premier connectivity choice for bandwidth-intensive applications such as data back-up and restoration, IP content delivery, medical imaging, and video rendering. With multi-core processors driving the need for higher bandwidth, ThunderLink 10GbE delivers superior throughput to meet that need.

Advanced Management Tools

ThunderLink 10GbE Desklink Devices provide a common foundation for both local and storage networks. The ThunderLink NT 2102 leverages standard OS management and monitoring tools to dramatically reduce the cost and complexity of a data center's administration and infrastructure.

Technical Features

- Dual 10GBASE-T (RJ45 Copper) ports
- Supports 4K video file transfer and display simultaneously with dual 20Gb/s Thunderbolt 2
- Supports ATTO Xtend SAN iSCSI initiator
- Daisy chain up to 5 additional Thunderbolt technology-enabled devices
- Backwards compatible with 10Gb/s Thunderbolt
- Exclusive Advanced Data Streaming (ADS™) Technology
- Minimized interrupts for low latency
- TCP, UDP and IPv4 checksum offloading and Tx/TCP segmentation offloading
- Industry's lowest power consumption
- 3-year standard product warranty
- RoHS Compliant

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Technical Specifications

Applications

ThunderLink 10GbE Desklink Device solutions combine the unparalleled performance of 10 Gigabit Ethernet, the lossless benefits of Enhanced Ethernet and robustness of iSCSI initiator software, to meet the performance and economic needs of today's growing data centers. The ThunderLink NT 2102 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

- Data rate per port: 10GbE
- TCP, UDP, IPv4, and IPv6 checksum offloading
- Tx/TCP segmentation offload (Large Send Offload—LSO)
- Low latency interrupts
- Interrupt Moderation
- Interrupt levels INTA, MSI, MSI-X
- Data Center Bridging (DCB) support
 - Priority-Based Flow Control 802.1Qbb rev.0
 - Enhanced Transmission Selection 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
- IEEE 802.3 2005 flow control support
- 802.1p—Priority Encoding
- 802.1q—VLAN Tagging
- 802.3ad—Link Aggregation
- Override MAC Address
- VLAN support with tag insertion and stripping
- Plug and play specification support
- Advanced Packet Filtering

Advanced Software Features

- Adaptive load balancing
- Teaming support
- PCI Hot Plug/Active peripheral interconnect

Network Standards

- IEEE802.3ae: 10GBASE-SR, 10GBASE-LR
- SFF-8431: 10GSFP+Cu (Direct Attach Copper)
- 802.1 qbb: Priority Flow Control
- 802.1 qaz: Enhanced Transmission
- DCBX Protocol

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

Operating System Support

- Mac OS® X 10.9 and later
- Windows 7 and 8

Dimensions

- Depth 9", Width 5", Height 2.5"

Power Adapter

- 100-240VAC, 50-60Hz, 0.6A Max
- 12VDC

External Connectivity

- 10Gb/s, 1Gb/s, 100Mb/s two RJ45 connectors
- 2 LED indicator per port
- LED Indicators: LINK (solid), ACTIVITY (blinking), LINK SPEED (ON = 10Gb, OFF = 1Gb, 100Mb)

Environmental

Operating Temperature :

- Temperature: 0-40° C
- Humidity: 10-90% non-condensing

Storage Temperature :

- Temperature: -40 C to 70° C
- Humidity: 5-95% non-condensing

Compliance

- FCC Part 15 Subpart B, Class B
- EN55022, Class B/EN55024
- EN60950-1
- cTUVus
- EU RoHS (2002/95/EC)

Warranty

- 3 Years

Ordering Information

Phone: 716-691-1999 ext. 241

Thunderbolt 2 to 10GBASE-T

ThunderLink NT 2102: TLNT-2102-D00

ThunderLink NT 2102: TLNT-2102-DE0

Complementary Products

ATTO Celerity™ Fibre Channel HBAs
 ATTO ExpressSAS™ HBAs and RAID Adapters
 ATTO FastFrame™ CNAs & NICs
 ATTO FastStream™ RAID Storage Controllers
 ATTO FibreBridge™ Fibre Channel Bridges
 ATTO FibreConnect™ Fibre Channel Switches
 ATTO premium cables

ThunderLink NT 2102	
Model Number	TLNT-2102-D00 (US) TLNT-2102-DE0 (UK/EMEA)
Input Connectors	(2) 20Gb/s Thunderbolt™ 2
Output Connectors	(2) 10GbE
Connector Type	RJ45 Copper
Form Factor	Desktop
Warranty	3 Years

