ATTO

Tech Sheet

ThunderLink™

Thunderbolt™-to- 10GbE (10GBASE-T, RJ45) Desklink™ Device

ThunderLink™ NT 1102

ATTO's 10 Gigabit Ethernet to Thunderbolt 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 10.6.8 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 Ethernet and storage networks. The ThunderLink NT 1102 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 10GbE (10GBASE-T, RJ45) port
- Up to 10Gb/s throughput
- Dual 10Gbps Thunderbolt with Display Port and PCIe Support
- Supports ATTO Xtend SAN iSCSI initiators
- Dual ports enable daisy-chaining up to six devices
- Exclusive Advanced Data Streaming (ADS™) Technology
- TCP, UDP and IPv4 checksum offloading and Tx/TCP segmentation offloading
- Minimized interrupts for low latency
- Industry's lowest power consumption
- 3-year standard product warranty
- RoHS Compliant

Thunderbolt-to-10GbE Copper Desklink Device

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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 software iSCSI initiators, to meet the performance and economic needs of today's growing data centers. The ThunderLink NT-1102 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 and IPv4 checksum offloading
- Tx/TCP segmentation offload (Large Send Offload—LSO)
- Low latency interrupts
- Interrupt moderation
- Interrupt levels INTA, MSI,
- IEEE 802.3 2005 flow control support
- VLAN support with tag insertion and stripping

Advanced Software Features

- Adaptive load balancing
- 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

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

External Connectivity

- 10Gb/s, 1Gb/s, 100Mb/s two RJ-45 connectors
- 2 LED indicator per port
- LED Indicators: LINK (solid), ACTIVITY (blinking), LINK SPEED (ON = 10Gb, OFF = 1Gb, 100Mb)

Operating System Support

- Mac OS® X 10.6.8 and later

Compliance

- FCC Part 15 Subpart B, Class B
- EN55022, Class B/EN55024
- EN60950-1
- $_{C}TUV_{US}$
- EU RoHS (2002/95/EC)

Dimensions

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

Power Adapter

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

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

Warranty

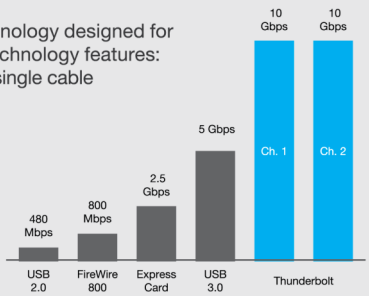
- 3 Years

ThunderLink NT 1102	
Model Number	TLNT-1102-D00 (US) TLNT-1102-DE0 (EU/UK)
Input Connectors	(2) 10Gb/s Thunderbolt™
Output Connectors	(2) 10GbE
Connector Type	(2) RJ45
Form Factor	Desktop
Warranty	3 Years

What is Thunderbolt™

Thunderbolt™ technology is a new, high-speed I/O technology designed for performance, simplicity, and flexibility. Thunderbolt™ technology features:

- Simultaneous bi-directional, 10 Gbps transfers over a single cable
- Dual-protocol support (PCI Express and DisplayPort)
- Compatible with existing DisplayPort devices
- Daisy-chaining devices
- Choice of electrical or optical cables
- Low latency with highly accurate time synchronization for professional audio and video applications
- Uses native protocol software drivers
- Power-over-cable for bus-powered devices



Product features and specifications are subject to change without notice.