ATTO ThunderLink® NS 3101
THUNDERBOLT™ 3 TO 10GB ETHERNET

INDUSTRY PROVEN TECHNOLOGY
ATTO Technology, Inc. has 30 years of experience developing first-to-market high performance and reliable storage connectivity solutions for customers. ATTO ThunderLink® Ethernet adapters 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 adapters boasts an extensive list of customer design wins and certifications with respected industry partners. Now, the time tested combination of ATTO and 10GbE is being integrated with the latest in cutting edge high performance Thunderbolt connectivity.

FLEXIBLE CONNECTIVITY SOLUTIONS
ATTO 10GbE adapters provide the most flexible and scalable connectivity for today’s high bandwidth content creation environments. ThunderLink 10GbE adapters offer driver support for Windows® 7 and later, and macOS® Sierra and later, providing a single connectivity solution for customers with heterogeneous operating system environments. Growing adoption of 10 Gb Ethernet combined with increased bandwidth of Thunderbolt 3 delivers much-needed performance benefits to bandwidth intensive applications.

PERFORMANCE ENGINEERED
When faced with the challenge of architecting solutions that allow guaranteed delivery and easy deployment into your workflow, ATTO ThunderLink provides a purpose-built solution. With 10Gb data transfer rates and multiple offloads (TCP, IPv4, UDP), ATTO Ethernet Thunderbolt adapters 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 10GbE, ThunderLink 10GbE delivers superior throughput to meet that need.

ADVANCED MANAGEMENT TOOLS
ThunderLink 10GbE adapters provide a common foundation for both local and storage networks. The ThunderLink NS 3101 leverages standard OS management and monitoring tools to dramatically reduce the cost and complexity of a data center’s administration and infrastructure.
ATTO ThunderLink® NS 3101
Thunderbolt™ 3 to 10Gb Ethernet

APPLICATIONS
ThunderLink® 10GbE adapter solutions allow the unparalleled performance of 10 Gigabit Ethernet to meet the performance and economic needs of today’s growing data centers. The ThunderLink NS 3101 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
- Tx/TCP segmentation offload (Large Send Offload—LSO)
- Low latency interrupts
- PCI-SIG SRIOV support
- Interrupt levels MSI, MSI-X
- Plug and play specification support
- Advanced Packet Filtering
- VLAN support with tag filtering, insertion and stripping

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

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 SFP+
  via Quad to Serial Small Form Factor Pluggable Adapter
- 2 LED indicators per port

THUNDERBOLT CABLING
- 40Gb/s cables are designated with a “3” marking
  - Active
  - 1M - 40 Gb/s performance
  - 2M - 40 Gb/s performance
  - Passive
  - .5M - 40 Gb/s performance
  - 1M - 20 Gb/s performance
  - 2M - 20 Gb/s performance

NETWORK STANDARDS
- IEEE802.3ae: 10GBASE-SR, 10GBASE-LR
- IEEE 802.3az (Energy Efficient Ethernet)
- IEEE 802.1p (Priority Encoding)
- IEEE 802.1q (VLAN tagging)
- IEEE 802.3ad (Link aggregation)
- IEEE 802.1qbb (Priority flow control)
- IEEE 802.1qag (Enhanced Transmission)
- IEEE 8023.3AD (Load-balancing, failover)

OPERATING SYSTEM SUPPORT
- Windows® 7 and later
- macOS® Sierra and later

DIMENSIONS
- 8.66”(D) x 4.07”(W) x 1.20”(H)

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

COMPLIANCE
- FCC Part 15 Subpart B, Class A
- EN55032, Class A/EN55024
- EN60950-1
- EN60825-1
- EN60825-2
- cTUVus
- EU RoHS (2011/65/EU)
- TAA Compliant (Country of Origin: USA)

OPERATING TEMPERATURE
HARDWARE ENVIRONMENT
- Temperature: 0–40°C
- Humidity: 10–90% non-condensing

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

WARRANTY
- 3 Years

ORDERING INFORMATION
- Phone: 716-691-1999
- ThunderLink NS 3101: TLNS-3101-D00
- ThunderLink NS 3101: TLNS-3101-D00 (UK/EMEA)

COMPLEMENTARY PRODUCTS
- ATTO Celerity™ Fibre Channel HBAs
- ATTO ExpressSAS® HBAs and RAID Adapters
- ATTO FastFrame™ NICs
- ATTO FibreBridge® Fibre Channel storage controllers
- ATTO Thunderbolt™ adapters
- ATTO premium cables

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ATTO ThunderLink® NS 3101

Model Number
- TLNS-3101-D00 (US)
- TLNS-3101-D00 (UK/EMEA)

Input Connectors
- (2) 40Gb/s Thunderbolt™ USB-C

Output Connectors
- (1) 10GbE

Connector Type
- SFP+

Form Factor
- Desktop

Warranty
- 3 Year

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