ATTO ThunderLink® Thunderbolt™ 3 to 25Gb Ethernet

**Industry Proven Technology**

ATTO has over 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 combination of ATTO and 25GbE is being integrated with the latest in cutting edge high performance Thunderbolt connectivity.

**Flexible Connectivity Solutions**

ATTO 25GbE adapters provide the most flexible and scalable connectivity for today's high bandwidth content creation environments. Growing adoption of 25GbE 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 25Gb/s 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.

**Advanced Management Tools**

ATTO ThunderLink 25GbE adapters provide a common foundation for both local and storage networks. ThunderLink NS 3252 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 3252
THUNDERBOLT™ 3 TO 25Gb ETHERNET

APPLICATIONS
ATTO ThunderLink® 25GbE adapter solutions allow the unparalleled performance of 25 Gigabit Ethernet to meet the performance and economic needs of today’s growing data centers. ThunderLink NS 3252 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.

KEY FEATURES
- Data rate per port: 25GbE
- Tx/TCP segmentation offload (Large Send Offload—LSO)
- Low latency interrupts
- PCI-SIG SR0V 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

CONNECTIVITY
- 25Gb/s SFP28
- Backwards compatible with 10GbE SFP+
- 2 LED indicators per port
- TLNS-3252 using ATTO 25/10G SFPs
  - 25G Speed:
    - 100 meters on OM4
    - 70 meters on OM3
  - 10G Speed:
    - 100 meters on OM3

THUNDERBOLT™ CABLEING
- 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 802.1qb (Priority flow control)
- IEEE 802.1qaz (Enhanced Transmission)
- IEEE 802.1AD (Load-balancing, failover)

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

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

COMPLIANCE
- FCC Part 15 Subpart B, Class B
- EN55032, Class B/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: 99% non-condensing

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

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

WARRANTY
- Three Years

ORDERING INFORMATION
- Phone: 716-691-1999
- ThunderLink NS 3252: TLNS-3252-D00
- ThunderLink NS 3252: TLNS-3252-DE0
  (UK/EMEA)

COMPLEMENTARY PRODUCTS
- ATTO Celerity™ Fibre Channel HBAs
- ATTO ExpressSAS® HBAs
- ATTO FastFrame™ NICs
- ATTO XstreamCORE™ storage controllers
- ATTO ThunderLink™ Thunderbolt™ adapters
- ATTO premium cables

ATTO ThunderLink® NS 3252
Model Number
TLNS-3252-D00 (US)
TLNS-3252-DE0 (UK/EMEA)
Input Connectors
(2) 40Gb/s Thunderbolt™USB-C
Output Connectors
(2) 25GbE
Connector Type
SFP28
Form Factor
Desktop
Warranty
3 Year