



## Thunderbolt™ 2-to- 6Gb/s SAS/SATA Desklink Device

ThunderLink™ SH 2068

ATTO's 6Gb/s SAS/SATA to Thunderbolt Desklink Devices provide the highest available SAS and SATA performance for Direct Attached Storage infrastructures.

### 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 SAS/SATA Desklink Devices 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

6Gb/s SAS/SATA Desklink Devices are an ideal solution for users looking to achieve efficient storage scalability. ThunderLink 6Gb/s Desklink Devices offer driver support for Mac OS® X 10.9 and later and Windows® 7 and 8.1, providing a single connectivity solution for customers with heterogeneous operating system environments.

### Performance Engineered

6Gb/s SAS/SATA Desklink Devices are designed to provide flexible connectivity to SAS/SATA storage, and are engineered to manage latency for real-time environments. ATTO's Exclusive Advanced Data Streaming (ADS™) Technology maximizes CPU processes to deliver smooth and reliable data transfers and the highest consistent performance. ATTO pays close attention to detail in board design and signal integrity to minimize transmission errors and data corruption. These differentiating capabilities make ATTO the premier choice for high-performance direct-attached SAS/SATA storage connectivity.

### Advanced Management Tools

ATTO's easy-to-use ConfigTool features an intuitive GUI that simplifies the installation, management and monitoring of the Desklink Device. With advanced troubleshooting and performance tuning capabilities, ConfigTool provides users with sophisticated diagnostics and the flexibility to control settings for specific applications.

### Technical Features

- 20Gb Thunderbolt to 6Gb SAS/SATA with support for up to 128 disk or tape devices through expanders
- 6Gb/s SAS/SATA Support
- Dual 20Gbps Thunderbolt with Display Port and PCIe Support
- Thunderbolt certified for Mac and PC
- Dual ports enable daisy-chaining up to six devices
- Exclusive Advanced Data Streaming (ADS™) Technology
- ATTO ConfigTool for customized performance settings
- Proven interoperable with leading storage hardware and software vendors
- Industry's lowest power consumption
- 3-year standard product warranty
- RoHS Compliant
- Backwards compatible with 10Gb/s Thunderbolt

# Thunderbolt 2-to-6Gb/s SAS/SATA

## ThunderLink™ SH 2068

# Technical Specification

## Technical Specifications

### Applications

ATTO ThunderLink SAS/SATA products deliver high-performance and reliable connectivity solutions for the most demanding storage environments, including digital content creation, tape streaming and backup, rich content delivery, server clustering, and complex databases. ATTO ThunderLink SAS/SATA products enable users to achieve the ultimate in I/O performance for real-time and transactional applications.

### Advanced Data Streaming (ADS™)

Latency-management technology that controls the acceleration of data transfers to move large amounts of data faster and more efficiently.

### Key Features

- 6Gb/s SAS/SATA Support
- Auto Negotiation between 6Gb/s, 3Gb/s and 1.5Gb/s SAS/SATA devices
- Supports SSP, SMP, STP protocols
- SES, SNMP and S.M.A.R.T. support
- Flash ROM for easy field updates

### User Benefits

- Highest available MB/s and IOPS performance
- Superior system performance with latest SAS/SATA technology
- Low power consumption

### Management Tools

- ConfigTool (w/GUI) management and configuration utility
- Command Line Interface for advanced functionality

### External Connectivity

#### SAS/SATA Device Connectors :

- (2) 6Gb x4 mini-SAS connectors (SFF-8088)

### Operating System Support

- Mac OS® X 10.9 and later
- Windows® 7 and 8 .1

### Compliance

- FCC Part 15, Subpart B, Class B
- EN55022, Class B/EN55024
- EN60950-1
- cTUVus
- EU RoHS (2011/65/EC)

### Dimensions

- 8.66"(D) x 4.07"(W) x 1.20"(H)

### Power

- 100-240VAC, 50-60Hz, 0.5A 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

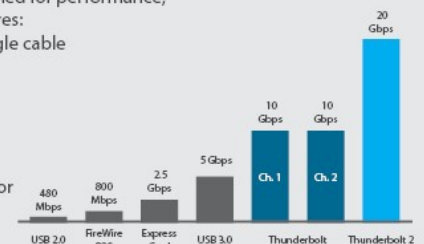
- 3 Year

ThunderLink SH 2068	
Model Number	TLFC-2068-D00 (US) TLFC-2068-DE0 (EU/ UK)
Input Connectors	(2) 20Gb/s Thunderbolt™
Output Connectors	(2)x4 6Gb/s SAS/SATA
Connector Type	(2) SFF-8088
Form Factor	Desktop
Warranty	3 Years

### What is Thunderbolt™ 2

Thunderbolt™ 2 is a new, high-speed I/O technology designed for performance, simplicity and flexibility. Thunderbolt™ 2 technology features:

- Simultaneous bidirectional, 20 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



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