## ATTO TECHNOLOGY TECHNOLOGY BRIEF

## ATTO Thunderbolt™ Products Enhance Media Workflows with RAID Portability



Feature	4808D
Part #	TSSC-4808-D00
Inputs	(2) 20Gb/s Thunderbolt
Outputs	(8) 6Gb/s SAS/SATA RAID
Max Transfer Rate	1375 MBPS
Output Connector	(2) SFF-8088
Form Factor	Desktop
RAID Support	JBOD, 0, 1, 5, 6 & 10
Warranty	3 year

## ABOUT ATTO TECHNOLOGY, INC.

For nearly 30 years, ATTO Technology, Inc., has been a global leader across the IT and media and entertainment markets, specializing in storage and network connectivity and infrastructure solutions for the most data-intensive computing environments. ATTO works collaboratively with partners to deliver a wide range of end-to-end, customized solutions to better store, manage and deliver big data. With a focus toward markets that require higher performance and with a dedication to working as an extension of customer's design teams, ATTO manufacturers host and RAID adapters, network adapters, storage controllers, Thunderbolt-enabled devices, switches and software. ATTO solutions provide a high level of connectivity to all storage interfaces, including Fibre Channel, SAS, SATA, iSCSI, 40/10GbE, FCoE and Thunderbolt. Distributing its cutting-edge products worldwide through Original Equipment Manufacturers (OEMs), systems integrators, value added resellers (VARs) and authorized resellers, ATTO is the Power Behind the Storage.

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Thunderbolt™ is a fantastic technology that offers high throughput (20 Gb/s) to peripheral devices, but even more important brings versatility to traditionally limited mobile computers. It is also changing how media professionals think about external storage by opening up many new use cases: A single Thunderbolt cable can provide connectivity to 10Gb Ethernet, 16Gb Fibre Channel, 6Gb SAS, Firewire, USB and DisplayPort as well as high-end external GPUs. Content is everything in media and entertainment (M&E), and Thunderbolt provides the high-performance connectivity needed to transfer content data to SAS or Fibre Channel storage systems. With Thunderbolt, the broadcast and film industries gain more flexibility to manage their creative assets.

Post-production is where all of a project's ingredients come together: camera content, digital effects, graphics and sound. These elements are repeatedly edited, enhanced, assembled and reviewed. Ideally, this collection of medium to high bit rate content would reside in a common storage pool that multiple creative professionals from various companies could access from different geographic locations. But the reality is that making content available in this way is both expensive and a logistical challenge.

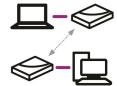


Fig. 1 - Unprotected media files transported on a removable drive between mobile laptop and workstation via "sneakernet."

Workloads are being pushed away from in-house workstations and out to mobile laptops. In most cases what happens to the large media files stored on laptops is they end up being transferred across networks that are ill-equipped to handle them. The slow transfer rates of these networks create long delays when moving data. Files may also end up stored on slow, low-end standalone drives and transported via the age-old "sneaker-net" (figure 1). This media is unprotected, and it can sometimes span multiple disks.

ATTO's ThunderStream device provides an affordable alternative for exchanging content files using Thunderbolt technology. Before Thunderbolt, hardware-accelerated RAID for laptops wasn't possible. But ATTO designed its RAID architecture with portability in mind. With the ThunderStream 4808, you can connect a laptop to high-speed storage and perform video captures, onsite previews and rough-cut edits. The RAID group created with the ThunderStream 4808 can then be connected to a SAS RAID adapter in a workstation. You simply move data from the laptop to the RAID-protected portable disk system, and then connect that disk system to a high-performance workstation in the studio for final edits and finishing (figure 2). There's no need to reformat drives or re-create RAID groups across systems — the workstation has immediate access to the content.



Fig. 2 - Media files are transferred from a laptop to a RAID-protected portable disk system.

That same disk system can then be connected to a workstation for immediate content access.

The advantages to this Thunderbolt use case include:

- Up to 10x faster data transfer rates compared with copying data using an eSATA drive
- RAID storage protects against data loss from disk failure
- RAID volumes provide increased capacity no need to break files up and distribute across multiple eSATA disks

ATTO's family of RAID products not only help to maximize your productivity, they also improve the overall value of a storage system at minimal cost by leveraging multiple technology platforms.

