



# Meeting the High-Performance Demands of Media Creation Environments

## SOLUTION BENEFITS

- Provides multiple users with shared access to large amounts of stored data
- Fulfills the high-availability demands of digital media applications
- Provides a completely redundant, high performance solution
- Up to 100% faster system performance than competitive solutions
- Up to 9 streams of uncompressed HD video

## CERTIFICATION

- Linux and Windows operating platforms

## KEY FEATURES

### Supermicro SuperServer® 7048GR-TR

- Supports up to 4 GPU/Xeon Phi™ cards with the very latest x86 dual Intel® Xeon® processor E5-2600 v3 product family up to 36 cores per node and 160W TDP
- Supports redundant Titanium Level power supplies, integrated IPMI 2.0 with KVM over dedicated LAN
- Offered with Supermicro Global Services and Support featuring Next Business Day or 4-Hour Same Day hardware maintenance service to increase system uptime and productivity

### ATTO Advanced Data Streaming (ADS™)

- Low latency and smooth, reliable data transfers with reduced potential for dropped frames
- Manages data acceleration to maximize the number of transactions processed by the host's CPU

### ATTO MultiPath Director™

- Enables multipathing protection for servers, workbooks and workstations, providing a completely redundant, high availability solution for digital media applications
- Redundant data paths with failover protection, guarantee uninterrupted access to your data
- Load-balancing eliminates bottlenecks by using multiple paths to optimize data transfers consistently across all OS platforms

## Challenge

Infrastructure requirements for post-production environments have changed radically over the past decade. The fragmented, bandwidth-limited storage solutions of the past no longer adequately serve the needs of today's media professionals. High bandwidth is required to meet the speed and accessibility demands of high-performance applications. In addition, data management strategies need to be maximized to support collaborative workflows that provide access to 8K, 4K, 3D, and other high-resolution content across multiple workstations.

## Solution

To meet the workflow challenges of current media creation environments, a production infrastructure must combine high performance and high availability with reliability. With Supermicro Workstation and ATTO Celerity™ Fibre Channel HBAs featuring MultiPath Director™, creative professionals are able to meet the low-latency, high bandwidth storage and network connectivity needs for media workflows.

Supermicro's SuperServer® 7048GR-TR is a "SuperWorkstation" optimized for high performance computing. Generating massive parallel processing power and unrivaled networking flexibility with PCI-E 3.0 expansion slots, Supermicro GPU/Xeon Phi™ Superserver systems deliver maximum processing acceleration for the most compute-intensive workloads. The 7048GR-TR supports the latest Intel Xeon E5-2600 v3 family processors and accommodates up to 4 GPU cards to power graphics-intensive applications such as 3D animation/visualization and special effects rendering. High-efficiency redundant power supplies, "Whisper-Quiet" fans and optimized air flow chassis design make it suitable for desktop production environments.

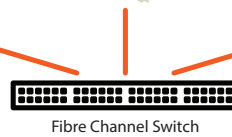
Supermicro Workstation with ATTO Celerity 162E FC HBA



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Supermicro Workstation with ATTO Celerity 162E FC HBA



ATTO Celerity 16Gb Fibre Channel HBAs feature MultiPath Director, a proprietary driver that enables redundant data paths for failover protection and load-balancing, and Advanced Data Streaming™ (ADS), a latency management technology found throughout the ATTO product range that ensures smooth data transfers with a reduced potential for dropped frames. The combination of Supermicro workstations and ATTO Fibre Channel HBAs enable professionals to pass multiple uncompressed HD and 4K video streams.

**BENCHMARK CONFIGURATION**

**Test Tool**

- IOmeter server I/O performance storage measurement tool

**Workstation**

- Supermicro SuperServer<sup>®</sup> 7048GR-TR

**Storage**

- NetApp FC 5500 Series – 16Gb

**Operating Platform**

- Windows 7
- Adobe Premiere

**Connection**

- ATTO Celerity FC-162E 16Gb/s Fibre Channel HBA with MultiPath Director<sup>™</sup>



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**ABOUT SUPERMICRO**

Supermicro Computer, Inc., a global leader in high-performance, high-efficiency server technology and innovation is a premier provider of end-to-end green computing solutions for HPC, Data Center, Cloud Computing, Enterprise IT, Hadoop/Big Data and Embedded Systems worldwide. Supermicro's advanced server Building Block Solutions<sup>®</sup> offers a vast array of modular, interoperable components for building energy-efficient, application-optimized, computing solutions.



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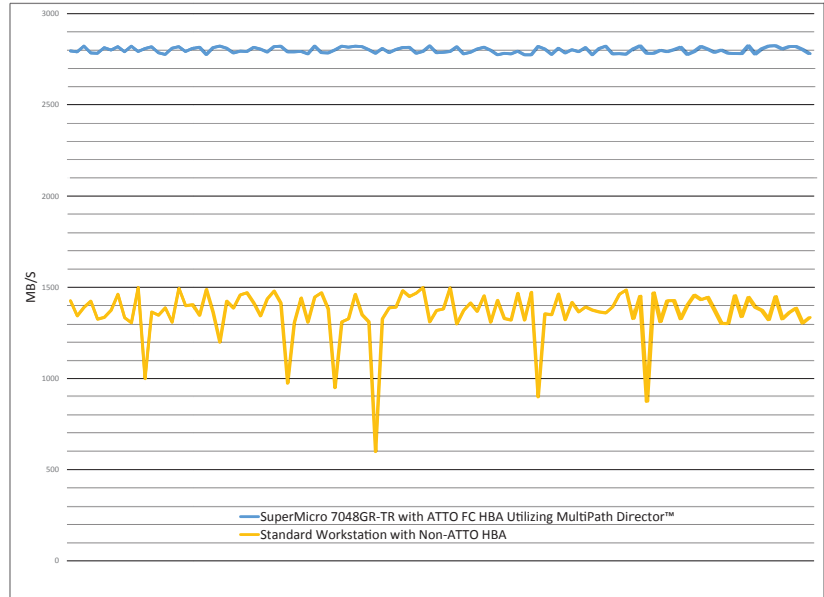
**ABOUT ATTO TECHNOLOGY**

ATTO Technology, Inc. is a global leader of storage and network connectivity and infrastructure solutions for data-intensive computing environments. ATTO provides a wide range of end-to-end solutions to help customers better store, manage and deliver their data. Our experience in engineering advanced technology into real-world product solutions, provides customers with a unique competitive advantage.

**Solution Benchmark**

ATTO conducted performance testing in a Windows workstation environment to provide creative professionals with insight into the benefits of the Supermicro and ATTO solution.

The Supermicro-ATTO solution outperformed similar competitor solutions running in a Windows 7/Adobe Premiere environment. With the 7048GR-TR, the system was capable of delivering up to 9 streams of uncompressed HD video. This measured performance advantage demonstrates that the Supermicro-ATTO solution supports more streams per workstation, reducing rendering bottlenecks and increasing cost savings since editors are enabled to be more productive.



*The SuperMicro SuperServer<sup>®</sup> 7048GR-TR workstation, combined with ATTO's Celerity FC HBA and the load balancing benefits of MultiPath Director<sup>™</sup>, is able to provide up to 100% faster throughput than other workstation/HBA configurations, while ADS latency management technology reduces the potential for dropped frames.*

Additionally, the testing demonstrates the latency and performance advantage the solution brings to a real-time creative environment. The SuperMicro SuperServer<sup>®</sup> 7048GR-TR workstation, combined with ATTO's Celerity 16Gb FC HBAs and the load balancing benefits of MultiPath Director<sup>™</sup> provides up to 100% faster throughput than other workstation/HBA configurations, while ADS latency management technology reduces the potential for dropped frames.

**Where To Buy**

**Supermicro website:**

<http://www.supermicro.com/products/system/4U/7048/SYS-7048GR-TR.cfm>

**ATTO website:**

<https://www.attotech.com/products/adapters/fibre-channel-hba/16gb/ctfc-162E-000>