



ATTO Technology, Inc.

# Storage Server Motherboard Replacement

## MicroATX RAID Storage Controller

### Low Latency Fibre Channel Storage Connectivity

What if you could replace motherboards, HBAs, RAID adapters, operating systems, system hard drives, processors, NICs, DIMMs, software and all the maintenance associated with them in your storage server with a single embedded unified drop in solution? The ATTO FastStream is a MicroATX RAID controller that fits within a standard ATX Rack-mount storage chassis. With built in RAID, web management, SAS/SATA ports, host connectivity, a battery-free BBU option and featuring an embedded maintenance-free operating system FastStream is your storage server solution.

#### Overview

ATTO developed the FastStream to become your branded storage solution. FastStream allows you to take industry proven technology and create your own storage product utilizing ATTO's storage expertise. Adding your look and feel, logo, naming and support information to the ATTO ExpressNAV™ Storage Manager GUI is just the start. Configurations can be set up with configuration files that allow you to cus-



5550 (RAID 5)	SATA Drives	8550 (RAID 5)	SATA Drives	9000 (RAID 5)	SATA Drives
Dual 4Gb Fibre Channel Host Ports		Quad 8Gb Fibre Channel Host Ports		Dual 16Gb Fibre Channel Host Ports	
<b>Reads</b>	701 MB/sec	<b>Reads</b>	1000 MB/sec	<b>Reads</b>	1250 MB/sec
<b>Writes</b>	594 MB/sec	<b>Writes</b>	750 MB/sec	<b>Writes</b>	800 MB/sec
<b>IOPS</b>	60,000	<b>IOPS</b>	60,000	<b>IOPS</b>	60,000
<b>10 Bit HD Streams</b>	3	<b>10 Bit HD Streams</b>	5	<b>10 Bit HD Streams</b>	6
<b>DVCPPro® HD Streams</b>	17	<b>DVCPPro® HD Streams</b>	30	<b>DVCPPro® HD Streams</b>	30

#### Only Storage Powered by ATTO includes these industry exclusive technologies

**Advanced Data Streaming (ADS™)** - Manages latency by providing controlled acceleration to maintain consistent high performance with minimal performance degradation when storage is shared among several workstations

**DriveAssure™** - maximizes uptime by preventing premature drive failures and slowdowns. This technology includes several components including a guaranteed latency response, media scrubbing, media scans and error handling

**CacheAssure™** - Maintenance-free supercap technology which protects cached data in the event of a power failure (optional)

**MultiPath Director™** - Allows multiple paths to be used for Failover, Failback and Load Balancing in Windows, Mac OS & Linux

**Data Recovery Mode** - Several proactive measures are taken to prevent drive failures, however in the event that multiple drives do fail, ATTO FastStream includes a powerful recovery mode that attempts to rescue drive data

## Enclosure Flexibility

Since the FastStream is based on the ATX standard, there are several enclosure options where the FastStream can be embedded. If you currently use an enclosure then you can work with ATTO to get a no-charge eval of our embedded controller to test form, fit and function. If you do not have an enclosure provider, ATTO has relationships with several top manufacturers and can help to facilitate introductions depending on your needs.

## 2 Port or 4 Port Fibre Channel

FastStream powered solutions keep it simple with dual port controllers (5550, 9000) that can give performance for up to 30 streams of DVCPro HD, DNxHD or Prores HQ video or 3 streams of 10-bit uncompressed HD video and a controller with additional ports (8550) which enables 4 users to share content without the need for a switch while the 5550 and 9000 controllers are an economical models which provide the same ATTO features found in the 8550 controller.

## Rebuild Technology

One of the most important functions of a RAID solution for Media & Entertainment is degraded performance which is performance during a drive rebuild. Storage solutions powered by the ATTO FastStream give users the ability to achieve performance during a drive rebuild enabling editors to work on projects at full stream counts.

## Ease of Use

ATTO FastStream features installation wizards for audio and video applications to allow you to spend less time managing your storage leaving you with more time to complete your project. The FastStream was engineered from the ground up to not only be easy to use, but easy to setup, maintain and manage storage from one central location.

## Interoperability

FastStream based solutions borrow from ATTO's rich interoperability and testing methodologies with industry leading products including General IT applications, NLE Editing software, Video Capture, Hard Drives, Enclosures, EBODs, JBODS, Switches and Host Adapters. Testing which is specific to Audio and Video applications is completed to make sure that ATTO based solutions are the highest performing with the highest level of interoperability in the industry.

### Enclosure Interoperability

<b>Tested Compatible with ATX enclosures from:</b>
AIC
Chenbro
Ci Design
Dynapower
iStarUSA
JMR
Supermicro

**Software - NLE Editors from Avid, Adobe & Apple**  
**Backup Software - CA, CommVault, Symantec**  
**Audio/Video - ProTools, Matrox, Blackmagic, AJA**  
**Tape Drives - LTO-4, LTO-5 from HP and IBM**

### Drive Interoperability

<b>Tested Compatible with hard drives from:</b>
Fujitsu AL9Se
Seagate Cheetah
Seagate Savvio
Seagate Barracuda
Samsung SpinPoint (Enterprise class)
Hitachi GST Deskstar (Enterprise class)
Hitachi GST Ultrastar (Enterprise class)
Western Digital RE (Enterprise Class)

**Switches - ATTO, Brocade, Emulex & Qlogic**  
**HBA's - ATTO, Apple, Brocade, Emulex & Qlogic**  
**SAN Management - StorNext, Xsan, MetaSAN, FibreJet**