



ExpressSAS H60F & H6F0 6Gb/s SAS/SATA Host Adapters

16-port SAS/SATA Host Adapters Featuring ADS™ Technology



Product Features

Blazing Fast Performance

- Up to 6Gb/s per port transfer rates with SAS, SAS 2.0, SATA and SATA II connectivity
- Advanced x8 PCIe 2.0 host interface
- Achieve I/O and data throughput necessary for advanced video (uncompressed HD, 2K and 4K film) and transactional database applications

Smooth Data Streaming

- ATTO's exclusive ADS™ Technology manages latency to alleviate data transfer bottlenecks and move data more efficiently
- Maximize data flow using the fastest available bus interconnect and bus management technology

One Click Installation

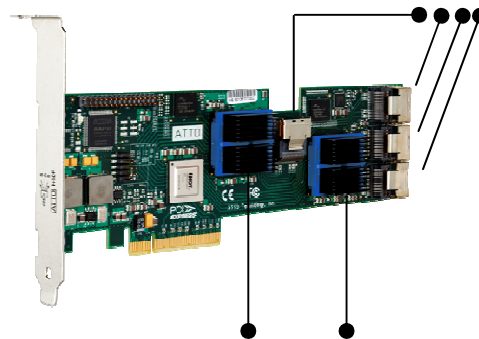
- Save time with factory preset configurations for plug and play operation
- Intuitive multi-platform GUI configuration utility to simplify installation, management and monitoring
- BIOS setup utility provides flexibility for custom applications

ATTO's line of ExpressSAS 6Gb/s Host Adapters help users alleviate their performance-related concerns by providing the fastest available connections to SAS/SATA storage. With connectivity options including 16-external ports and 16-internal ports, ATTO ExpressSAS 6Gb Host Adapters are ideal for a wide variety of IT and digital video environments requiring a high-level of performance, such as transactional databases, email servers, large server farms, uncompressed HD video, and 2K and 4K film.

Leveraging ATTO's 20 years of experience with SCSI hardware and utilizing the latest PCI Express 2.0 bus technology, ExpressSAS Host Adapters provide a blazing-fast storage connectivity solution with enhanced reliability and performance.

ATTO's user-friendly GUI utility simplifies management, monitoring, and configuration. ExpressSAS Host Adapters incorporate ATTO's time-tested and field-proven Advanced Data Streaming (ADS™) Technology to maximize data transfer rates. In addition, ATTO provides industry standard PCIe to SAS control using Serial SCSI Protocol (SSP), Serial ATA Tunneling Protocol (STP), and Serial Management Protocol (SMP).

16 independent 6Gb SAS lanes
Up to 1.2GB/s per lane (full duplex)



Two Independent Controllers
8 independent 6Gb/s SAS lanes per controller

Technical Highlights

- Connectivity options:
 - 16 internal ports (H60F)
 - 16 external ports (H6F0)
- x8 PCIe 2.0 host interface
- Available in low-profile (H60F) and half-height (H6F0) form factor
- Advanced 6Gb/s SAS throughput
- SAS, SAS 2.0, SATA and SATA II connectivity
- Supports a maximum 512 SAS/SATA drives
- Exclusive Advanced Data Streaming (ADS™) Technology
- User friendly configuration utility
- Driver support for Windows®, Linux, Mac® OS X and VMware® ESX Server
- RoHS Compliant
- 3-year standard product warranty

Technical Specification

6Gb/s SAS/SATA Host Adapters

For More Information:
www.ATTOTech.com
or to Purchase:
www.ATTOSTore.com
(716) 691-1999



ExpressSAS H60F & H6F0

ATTO Technology, Inc.

SAS/SATA Host Adapters

Hardware Specifications													
Applications	<ul style="list-style-type: none"> Support for IT server and digital media workgroup solutions requiring high-bandwidth and reliability. Applications include audio/video, VOD, fixed content, database and other data intensive environments. 												
Advanced Capabilities	<ul style="list-style-type: none"> Device support for SAS, SAS 2.0, SATA and SATA II User friendly GUI for quick and easy configuration Advanced management functions PC BIOS bootability 												
PCI Bus Specifications	<ul style="list-style-type: none"> x8 PCI Express 2.0 host interface 												
Connectors	<ul style="list-style-type: none"> Mini SAS connectors 												
Software Specifications													
Driver Support	<ul style="list-style-type: none"> Windows® Server 2003, 2008, XP, Vista, 7 Mac® OS X (10.4.x - 10.6.x) Linux® (Red Hat and SuSE) VMware® ESX Server 3.5 												
Agency Approvals													
Safety and Environmental	<ul style="list-style-type: none"> FCC Part 15, Subpart B, Class B EN55022: 2006, Class B EN55024: 1998 + A1: 2001 & A2: 2003 EN60950-1: 2001 												
Compliance	<ul style="list-style-type: none"> RoHS Compliant 												
Environmental & Physical Specifications													
Dimensions & Power	<table border="1"> <thead> <tr> <th></th> <th>H60F</th> <th>H6F0</th> </tr> </thead> <tbody> <tr> <td>• Length</td> <td>8.638"</td> <td>6.600"</td> </tr> <tr> <td>• Height</td> <td>2.846"</td> <td>4.376"</td> </tr> <tr> <td>• Power (W - typical)</td> <td>22W</td> <td>22W</td> </tr> </tbody> </table>		H60F	H6F0	• Length	8.638"	6.600"	• Height	2.846"	4.376"	• Power (W - typical)	22W	22W
	H60F	H6F0											
• Length	8.638"	6.600"											
• Height	2.846"	4.376"											
• Power (W - typical)	22W	22W											
Operating Environment (Pending)	<ul style="list-style-type: none"> Temperature: 0-40° C (32°-104°F) Humidity: 5 - 95% non-condensing 												
Storage Environment (Pending)	<ul style="list-style-type: none"> Temperature: -40°-70°C (-40°-157°F) Humidity: 5 - 95% non-condensing 												
Airflow	<ul style="list-style-type: none"> 100 lf/m (min) recommended 												
Cables													
Internal SFF-8087 to SFF-8087 – 0.5 Meter	CBL-8087-INT												
Internal SFF-8087 to SFF-8484 – 0.5 Meter	CBL-8484-INT												
Internal SFF-8087 to (4) x1 SATA – 0.5 Meter	CBL-SATA-INT												
External SFF-8088 to SFF-8088 - 3 Meter	CBL-8088-EX3												
External SFF-8088 to SFF-8470 - 3 Meter	CBL-8470-EX3												
Ordering Information													
Model Number	<ul style="list-style-type: none"> ESAS-H60F-000 (16 ports internal), ESAS-H6F0-000 (16 ports external) 												

