

The ATTO Difference: ExpressSAS 12Gb HBAs

Comparison of ATTO ExpressSAS & LSI/Avago 12Gb/s Host Bus Adapters

For over 25 years, ATTO has been an innovator in storage and network connectivity, from developing the first solid state storage device to the latest data center appliances. ATTO develops high-performance products that manage latency in the most demanding real-time environments, resulting in accelerated application performance and enhanced transaction processing. ATTO delivers performance-based solutions to applications, infrastructure, Big Data, Cloud and virtualized environments.

Lowest Power Consumption

ExpressSAS 12Gb HBAs use 40% less power than the leading competitor. And unlike some competing products, our HBAs are fully compliant with PCIe 25W power specifications. Reduced energy costs for system power and cooling add up to real savings in the data center. Adhering to PCIe power specs also simplifies integration.

Power Center Pro RAID

Whether it's to boost the performance of boot drives or to ensure data protection with block storage, RAID is an important consideration for every storage ecosystem. ATTO integrates RAID 0, 1, 1e and 10 into select model 12Gb HBAs to provide easy-to-configure, easy-to-manage RAID capabilities. Coupled with Advanced Data Streaming (ADS™) for managed data acceleration, ExpressSAS 12Gb HBAs provide consistently high bandwidth along with the peace of mind that comes with knowing your data is protected.

True 16-Port Connectivity for Large Storage Infrastructures

For the most complex storage ecosystems, ATTO's 16-port 12Gb HBAs provide internal and external connectivity. And while competing products use multiple I/O controllers and power-hungry, performance-reducing expanders or switches, ATTO makes the only HBA with a native 16-port controller. When you need the lowest latency, support for up to 2048 devices, and the highest-density connections, ExpressSAS 12Gb HBAs are the only host adapters that stand up to the task.

Interoperability

Hundreds of product certifications with dozens of industry leading partners, for hardware and software applications including, disk storage devices, removable tape, optical storage, hard disk drives, and solid state drives.

	ATTO ExpressSAS				LSI/Avago		
	H1208	H1280	H120F	H12F0	9300-8i	9300-8e	9300-16e
Channels (Ext/Int)	0/8	8/0	0/16	16/0	0/8	8/0	16/0
SAS Protocol	12Gb/s	12Gb/s	12Gb/s	12Gb/s	12Gb/s	12Gb/s	12Gb/s
Host Bus Type	x8 PCIe 3.0	x8 PCIe 3.0	x8 PCIe 3.0	x8 PCIe 3.0	x8 PCIe 3.0	x8 PCIe 3.0	x8 PCIe 3.0
Max. Transfer Rate (per channel)	1,200 MB/s	1,200 MB/s	1,200 MB/s	1,200 MB/s	1,200 MB/s	1,200 MB/s	1,200 MB/s
Connector Type	(2) x4 SFF-8643	(2) x4 SFF-8644	(4) x4 SFF-8643	(4) x4 SFF-8644	(2) x4 SFF-8643	(2) x4 SFF-8644	(4) x4 SFF-8644
Cable Support	Passive Copper	Passive Copper Active Optical	Passive Copper	Passive Copper Active Optical	Passive Copper	Passive Copper Active Optical	Passive Copper Active Optical
Max Cable Length (SAS/SATA)	10m/1m	10m/1m	10m/1m	10m/1m	10m/1m	10m/1m	10m/1m
Devices Supported	1024	1024	2048	2048	1024	1024	1024
RAID Support	0, 1, 1e, 10		0, 1, 1e, 10				
Advanced Data Streaming (ADS™) Technology	Yes	Yes	Yes	Yes			
Developer's Kit (Target Mode SDK)	Yes	Yes	Yes	Yes			
Low Profile Form Factor	Yes	Yes	Yes	Yes			
Supported OSs	Windows, Linux (Red Hat, Suse), VMware	Windows, Linux (Red Hat, Suse), VMware	Windows, Linux (Red Hat, Suse), VMware	Windows, Linux (Red Hat, Suse), VMware	Windows, Linux (Red Hat, Suse), VMware	Windows, Linux (Red Hat, Suse), VMware	Windows, Linux (Red Hat, Suse), VMware
RoHS Compliant	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Power (typ.)	11W	11W	15W	15W	13W	14.5W	28.6W
Warranty	3-year	3-year	3-year	3-year	3-year	3-year	3-year