# **SOLUTION BRIEF**





#### XstreamCORE® 7600 Features

- xCORE™ acceleration technology eliminates bottlenecks
- eCORE™ control engine adds common, open storage services
- XstreamVIEW<sup>™</sup> remote management user interface for configuration, monitoring and management
- Host LUN Mapping Initiator for LUN mapping
- Drive Map Director<sup>™</sup> patented SAS device mapping
- Support for Extended Copy (LID1) to offload CPU, memory and storage fabric
- VMware Ready
- Supports IPv4 & IPv6
- Persistent Event Log gathers at least 40,000 hardware, software and network events
- · Built-in temperature monitoring

ATTO XstreamCORE 7600 Intelligent Bridge		
4K IOPS	1.1M	
Throughput	6,400 MB/s	
<b>Host Ports</b>	2) 32Gb FC	
x4 SAS Ports	4 (16 PHYs)	
SKU	XCFC-7600-002	

# Maximize Fault Tolerance by Enabling High-Availability Clusters

ATTO XstreamCORE® 7600 Fibre Channel Intelligent Bridges

#### Overview

ATTO XstreamCORE 7600 provides for data replication and mirroring between multiple data center sites that are geographically separated, helping deliver continuous availability of mission critical data to ensure non-disruptive workflows.

# High Availability and Fault Recovery

High availability technology serves to minimize the duration of outages resulting from failures and facilitates swift system service restoration. High availability clusters offer automated fault recovery, responding reactively by restarting virtual machines when necessary to overcome unforeseen disruptions. ATTO XstreamCORE 7600 Intelligent Bridges allow storage architects to share direct-attached storage.

These configurations are commonly used in scenarios where data centers are closely situated, like in metropolitan or campus environments. Deploying a highly available stretch cluster setup provides advantages such as improved load balancing and data redundancy. XstreamCORE 7600 writes data synchronously and asynchronously at multiple data sites to avoid downtime, allowing for better workload mobility with increased on-site data availability. This capability allows organizations to ensure the uninterrupted flow of their operations, even when specific events or maintenance tasks are carried out under controlled conditions.

# **Disaster Avoidance and Mitigation**

Achieving data center resiliency requires taking proactive measures to prevent upcoming storage outages. Disaster avoidance technologies can help configure hosts, clusters, or sites in a way that ensures minimal interruptions to system functionality. In High-Availability configurations, a secondary site can seamlessly take control of storage in the event of a failure or scheduled maintenance, ensuring uninterrupted access to data. This capability allows organizations to ensure continuity of their operations even during controlled events or maintenance tasks.

Using ATTO XstreamCORE 7600 can provide a robust disaster mitigation strategy that significantly reduces downtimes caused by untimely outages.



# Virtualizing the SAN Component

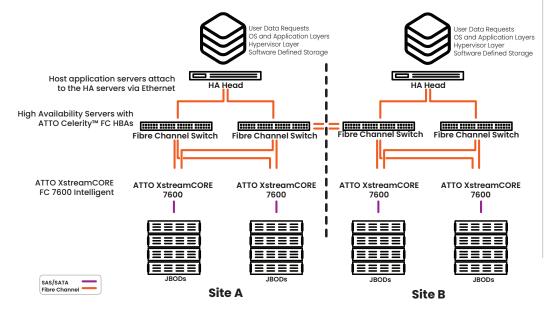
In the face of a site failure or network disconnection, there is a risk of data loss, decreased productivity, and negative revenue impact. To address these risks and improve resource management, operational efficiency, and responsiveness to business requirements, virtualization technologies are becoming increasingly important in modern data centers.

ATTO offers reliable and high-performance storage controllers and fiber channel products and solutions that can be invaluable to organizations looking to implement data center virtualization. The XstreamCORE 7600 creates shared storage pools that can be distributed among virtual machines and applications as needed, with the ability to offload data migration tasks from the hypervisor.

### Reducing footprint on Compute Resources

ATTO XstreamCORE intelligent bridges utilize specialized hardware to ensure reliable performance and full data isolation during crucial data migration. This guarantees uninterrupted business operations in a shared environment, making it a cost-efficient option for application delivery infrastructure. It places a strong emphasis on return on investment, operational efficiency, and agility.

By consolidating storage resources into shared, reusable assets that are independent of server platforms, ATTO XstreamCORE makes it easier to adapt data center infrastructure to accommodate various workflow models and service requests effectively. This transformation helps organizations to optimize their storage resources, enhancing their business operations.



### **Applications**

#### Disaggregate Storage from Servers

Incorporating storage within the server introduces a possible vulnerability where, in the event of a server failure, access to on-site storage is severed. This can result in an avoidable failover to the secondary host site, thereby diminishing overall system resiliency. However, a straightforward modification to the architecture, achieved through the implementation of ATTO intelligent Bridges, can effectively eliminate this undesirable scenario.

#### Enable Multi-Tenancy and Path Failover

When employing a server connected to SAS JBOD or JBOF enclosures, storage maintains its resilience when all servers across both sites share access to the same storage pool. In the event that one or more servers experience a failure, there is no need for a failover process since the secondary onsite servers will continue to communicate with on-site storage. This setup ensures uninterrupted access to data and high availability without the need for complex failover procedures.

#### Maximize Data Integrity and Performance Over Distance

With switched environments, synchronous and asynchronous mirroring between host sites can be up to 400km apart.
While in unswitched environments, Fibre Channel allows up to a 10km distance between clusters allowing for a resilient solution on large campuses, manufacturing companies and other sites that don't require extended distances. In either case, ensuring continuous replication of shared storage and maintain business continuity without undermining architectural agility is key.

ATTO Celerity	321P	322P	324P
Ports	Single	Dual	Quad
Bus	x8 PCle 4.0	x8 PCle 4.0	x16 PCIe 3.0
Connectors	SFP+	SFP+	SFP+
Form Factor	Low Profile	Low Profile	Low Profile
Max Transfer Rate	3200MB/s	6400MB/s	12.8GB/s



ATTO Celerity™ Fibre Channel HBAs

