SILICON DISK™
RAM-based Storage Appliance

Ultra Low-Latency Storage for 100Gb Ethernet
Enterprise Fabric Architectures

ATTO
The Power Behind the Storage
SiliconDisk™ Storage Appliance

RAM-based Storage Appliance

- Extremely-low latency storage for 100GbE fabric architectures
- 6.4M 4k IOPS
- 35GB/sec sustained throughput
- Predictable latency of <600 nanoseconds

A New Storage Tier

SiliconDisk storage provides performance and low latency that is exponentially faster than traditional SDDs and even NVME storage solutions.

High-performance storage for latency-sensitive applications
Rethink your Storage Architecture

**Application Targets**
- Workgroup & cloud architectures
- AI/ML
- Imaging and rendering
- Database indexes
- Shared memory mailbox
- Server clusters
- Composable infrastructures
- Wherever ultra-low, deterministic latency is critical to application performance

**Direct-attached & fabric-attached configurations**
**Provides scalable, shareable, low-latency** storage anywhere on the network fabric

*Shared, high-performance storage where it’s needed most*
Under the Hood

What Makes SiliconDisk™ Better
SiliconDisk – Better By Design

- ATTO Custom ASIC w (4) integrated 100Gb Ethernet Ports
  - No separate 100GbE NIC ICs used for speed
  - Independent ports can also be configured as (16) 35GbE ports
- Four independent, low-latency xCORE™ I/O Acceleration Engines
  - xCORE engines provide full bandwidth thru HW data-movers
  - Each host port leverages an independent xCORE engine
  - xCORE engines share an internal fabric for access to all RAM
- eCORE™ engine with four ARM processors for commands
  - Capable of running future custom or third party applications
- BU controller w M.2 SSD interface for future non-volatility feature
- ATTO Insight Analytics™ performance monitoring, analytics & optimization
  - Measures real-time performance at 100ns thru embedded hardware
  - No impact on data performance for perfect analytics
- Memory fully protected with ATTO patent pending technology

xCORE Data Acceleration Delivers <600 Nanosecond Latency – Even at Peak I/O Load