# **SOLUTION BRIEF**



## **About ATTO**

For over 30 years, ATTO Technology, has been a global leader across the IT and media & entertainment markets, specializing in network and storage connectivity and infrastructure solutions for the most data-intensive computing environments. ATTO works with partners to deliver end-to-end solutions to better store, manage and deliver data.

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# **About Seagate**

Seagate crafts the datasphere, helping to maximize humanity's potential by innovating world-class, precisionengineered data management solutions with a focus on sustainable partnerships.

# Seagate Nytro X 2U24

Seagate® Nytro® X 2U24 is the datasphere's affordable all-flash array (AFA) system for critical workloads that demand the highest performance. The Nytro X 2U24 provides high performance, low latency, and intelligent features at a fraction of the cost of other AFA solutions, with up to 24 super-fast solid state drives (SSD) that can deliver up to 7GB/s sequential read, 5.5GB/s sequential write throughput performance.

This flexible solution's unique design leverages an ASIC-based architecture to deliver ultra-fast data access and predictable AFA performance at consistent low latencies. This system is full of features that enable extreme cost efficiency, performance, and up to 99.999% data availability. Parallel architecture, multi-core processing, data replication, and fast streaming capabilities make access to data unfettered, while exclusive Seagate ADAPT data protection technology enables fast and efficient drive rebuilds that virtually eliminate system downtime.

# ATTO and Seagate Fibre Channel MultiPath Director™ Solutions

ATTO has deployed a unique, high availability media content management solution in partnership with Seagate Technology. This specialized solution offers highperformance, high-availability storage with ATTO Celerity™ and ThunderLink® line of Fibre Channel adapters and Seagate® Nytro®X 2U24 to provide content developers and video professionals easy access to create and manage content with flexibility to scale performance and capacity to various workflows.

# MultiPath Director™

ATTO MultiPath Director™ is a specialized driver incorporated into ATTO Celerity Fibre Channel host bus adapters and Thunderbolt adapters that enable Linux®, Windows® or Mac® workstations and servers to connect to enterprise-class storage with consistent, high performance, uninterrupted access to data.

Connect Windows, Linux & Mac Servers and Workstations

# Windows / Linux All-in-One Work stations Mobile Work stations Mac Pro ATTO Celerity ATTO ThunderLink ATTO ThunderLink ATTO Celerity Fibre Channel Switches Fibre Channel Switches Fibre Channel Switches



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ATTO Celerity™ 32Gb Fibre Channel Host Bus Adapters						
Product Features			FC-321E			
Part Number	CTFC-324E-000	CTFC-322E-000	CTFC-321E-000			
Fibre Channel Ports	4	2	1			
Max. Data Rate	32Gb/s	32Gb/s	32Gb/s			
Max. Transfer Rate	12800MB/s	6400MB/s	3200MB/s			
Bus Type	PCIe 3.0 x16	PCIe 3.0 x8	PCle 3.0 x8			
Auto Negotiation	32Gb, 16Gb, 8Gb	32Gb, 16Gb, 8Gb	32Gb, 16Gb, 8Gb			
Connector Type	Optical SFP+ LC	Optical SFP+ LC	Optical SFP+ LC			
Max. Cable Length (OM3)	100m - 16Gb 50m - 32Gb	100m - 16Gb 50m - 32Gb	100m - 16Gb 50m - 32Gb			
Low-Profile Form Factor	No	Yes	Yes			
Developer's Kit <sup>1</sup> (Target Mode API)	Yes	Yes	Yes			
Warranty	3 year	3 year	3 year			

ATTO Celerity™ 16Gb Fibre Channel Host Bus Adapters						
Product Features			FC-161P			
Part Number	CTFC-164P-000	CTFC-162P-000	CTFC-161P-000			
Fibre Channel Ports	4	2	1			
Max. Data Rate	16Gb/s	16Gb/s	16Gb/s			
Max. Transfer Rate	6400MB/s	3200MB/s	1600MB/s			
Bus Type	PCIe 3.0 x8	PCIe 3.0 x8	PCIe 3.0 x8			
Auto Negotiation	16Gb, 8Gb, 4Gb	16Gb, 8Gb, 4Gb	16Gb, 8Gb, 4Gb			
Connector Type	Optical SFP+ LC	Optical SFP+ LC	Optical SFP+ LC			
Max. Cable Length (OM3)	150m - 8Gb 100m - 16Gb	150m - 8Gb 100m - 16Gb	150m - 8Gb 100m - 16Gb			
Low-Profile Form Factor	Yes	Yes	Yes			
Developer's Kit <sup>1</sup> (Target Mode API)	Yes	Yes	Yes			
Warranty	3 year	3 year	3 year			

ATTO Celerity™ 8Gb Fibre Channel Host Bus Adapters						
Product Features			FC-81EN			
Part Number	CTFC-84EN-000	CTFC-82EN-000	CTFC-81EN-000			
Fibre Channel Ports	4	2	1			
Max. Data Rate	8Gb/s	8Gb/s	8Gb/s			
Max. Transfer Rate	3200MB/s	1600MB/s	800MB/s			
Bus Type	PCIe 2.0 x8	PCIe 2.0 x8	PCIe 2.0 x8			
Auto Negotiation	8Gb, 4Gb, 2Gb	8Gb, 4Gb, 2Gb	8Gb, 4Gb, 2Gb			
Connector Type	Optical SFP+ LC	Optical SFP+ LC	Optical SFP+ LC			
Max. Cable Length (OM3)	500m - 2Gb 380 m - 4Gb 150 m - 8Gb	500m - 2Gb 380 m - 4Gb 150 m - 8Gb	500m - 2Gb 380 m - 4Gb 150 m - 8Gb			
Low-Profile Form Factor	No	Yes	Yes			
Developer's Kit¹ (Target Mode API)	Yes	Yes	Yes			
Warranty	3 year	3 year	3 year			

ATTO ThunderLink® Thunderbolt™ to Fibre Channel Adapters							
Product Features							
Input Connectors	(2) 40Gb/s Thunderbolt 3 (USB-C)	(2) 40Gb/s Thunderbolt 3 (USB-C)	(2) 20Gb/s Thunderbolt 2	(2) 20Gb/s Thunderbolt 2			
Output Connectors	(2) 32Gb Fibre Channel	(2) 16Gb Fibre Channel	(2) 16Gb Fibre Channel	(2) 8Gb Fibre Channel			
Included Output Connector Type	Optical SFP+ LC	Optical SFP+ LC	Optical SFP+ LC	Optical SFP+ LC			
Warranty	3 year	3 year	3 year	3 year			

<sup>[1]</sup> Available for qualified OEM sales only. Please contact your ATTO representative



## **Benefits**

- Centralized Fibre Channel storage can now be connected to macOS®, Windows® and Linux® workstations as well as servers.
- MultiPath Director™ enables automatic failover and failback for Fibre Channel paths ensuring continued access to data.
- Load balancing across multiple Fibre
   Channel paths to storage increases overall system performance.
- ATTO ConfigTool™ is a GUI-based utility to locally or remotely manage and monitor the multiple data paths between the hosts and the storage. Helps customize the settings of your ATTO host bus adapter to maximize the performance of your storage connections. Easily identify problem areas to expedite troubleshooting efforts.
- ATTO Advanced Data Streaming (ADS™)
   Technology provides for controlled latency and acceleration of data designed to deliver multiple streams of video concurrently without dropping frames.
- Consistency for improved productivity—
   An ATTO multipathing solution delivers simplified centralized management, consistent timeout policies across all workstations/servers, ease of maintenance with driver/firmware revisions and ease of install/troubleshooting.



