



Celerity FC-324P

ATTO Celerity 64/32Gb Gen 7 Fibre Channel host bus adapters provide the highest performing SAN storage connectivity for physical and virtual infrastructures.

Technical Features

- Single-, dual-, and quad-channel configurations (SFP included)
- 6400 MB/s per channel throughput (64Gb) 3200 MB/s per channel throughput (32Gb)
- Driver support for Windows®, Linux®, macOS®, illumos, VMware® and more
- ATTO Advanced Data Streaming (ADS™) Technology
- ATTO ConfigTool™ for customized performance settings
- Proven interoperability with leading storage hardware and software vendors
- Supports NVMe-over-Fabrics (FC-NVMe)
- Supports SR-IOV (single root i/o virtualization)
- Support for N_Port ID Virtualization and Virtual Fabric
- Target mode (Developer, SCST, LIO and more) support
- Three-year standard product warranty
- Low power consumption
- Trunking (Port Aggregation) with Brocade Switches
- Silicon Root of Trust for authenticating firmware
- Fast Path architecture for latency improvement

MultiPath Director™

- Multiple paths to storage for improved data integrity and reliability
- High-performance shared storage for workgroups
- Load-balancing and failover in heterogeneous OS environments
- Available through authorized OEMs

About ATTO

For over 35 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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ATTO Celerity™ 64/32Gb Gen 7 Fibre Channel HBAs Gen 7 Fibre Channel Host Bus Adapters

Industry Proven Technology

ATTO has over 30 years of experience developing and delivering reliable first-to-market Fibre Channel storage connectivity solutions to customers. ATTO Celerity Fibre Channel connectivity solutions are consistently the highest-performing host bus adapters (HBAs) for server virtualization deployments, faster backups and scalable cloud initiatives. Offering performance to match new multi-core processors and faster PCIe 4.0 server host bus architectures, the integrated family of Celerity Gen 7 Fibre Channel HBAs boast an extensive list of customer design wins and certifications with respected industry partners.

Flexible Connectivity

With single-, dual-, and quad-channel configurations, Celerity Gen 7 Fibre Channel HBAs are an ideal solution for users looking to achieve the highest I/O and data throughput for advanced video and enterprise-class IT applications. Celerity Gen 7 HBAs offer driver support for Windows, Linux, macOS, illumos, VMware and more, providing a single connectivity solution for customers with heterogeneous operating system environments.

Performance Engineered

Celerity HBAs are designed to provide fast, redundant and highly available connectivity to Fibre Channel storage and are engineered to manage latency for real-time applications. ATTO Advanced Data Streaming (ADS) Technology provides controlled acceleration of data to deliver the most consistent performance and reliable data transfers. Specialized Fibre Channel drivers with support for multiple OS platforms and OEM-specific solutions, such as target mode and multipathing, make ATTO the premier choice for high-performance Fibre Channel storage area network (SAN) connectivity.

Advanced Management Tools

Easy-to-use ATTO360 Storage™ features an intuitive GUI that simplifies the installation, management and monitoring of the HBA. Preset tuning profiles automatically configure adapters to guarantee best performance. With advanced troubleshooting and performance tuning capabilities, Celerity HBAs provide users with sophisticated diagnostics and the flexibility to control settings for specific applications.

Applications

ATTO Celerity Fibre Channel HBAs deliver high-performance and reliable connectivity solutions for the most demanding storage environments, including physical and virtual data centers, tape streaming and backup, rich content delivery and server clustering. Celerity HBAs enable users to achieve the ultimate in I/O performance for real-time and transactional applications.

Advanced Data Streaming (ADS)

Latency-management technology that controls the acceleration of data transfers to move large amounts of data faster and more efficiently.

Key Features

- Auto Negotiation to 64Gb, 32Gb and 16Gb devices
- Supports point-to-point and direct fabric/switch attach
- ANSI Fibre Channel: FC-FS, FCP
- Flash ROM for easy field upgrades
- Fibre Channel Class 3 Support
- Buffer Credits: 80
- Pluggable optical LC SFP+
- ATTO Branded SFPs must be used
- Initiator and target mode (OEM) support
- Supports FDMI and WMI
- Supports NPIV and Virtual Fabric
- Supports Thunderbolt™ technology

User Benefits

- Superior performance for enterprise applications
- Increased switch port availability
- Seamless integration into existing Fibre Channel SANs
- Extensive certification with SAN infrastructure components
- Support for virtualized server environments

Management Tools

- ATTO360 Storage, ATTO ConfigTool™, and ATTO vConfigTool™ management and configuration utility
- ATTO Command Line Tools

Bus Specifications

- PCI Express 4.0 host interface (Single and Dual only)
- Supports PCI Express Base Spec 4.0
- Supports FC-PI-7
- Supports SFF-8431
- Supports PCI Express CEM Spec 3.0
- PCI Hot Plug spec 1.1

External Connectivity

- Low profile brackets for FC-321P, FC-322P, FC-324P, FC-641E, FC-642E, FC-644E
- Pluggable 32Gb optical LC SFP+ modules included (32GFC versions)
- 64Gb optical LC SFP+ modules included (64GFC versions)
- External LEDs for boot status and visual indication of the operating state

Operating System Support

- Windows
- Windows Server®
- Linux
- illumos
- VMware
- FreeBSD
- macOS

Agency Approvals

- UL, cUL, CSA: US and Canada
- TUV: Europe
- FCC class A: US
- ICES: Canada
- EMC Directives (CE Mark) Class A: Europe
- VCCI class A: Japan
- BSMI class A: Taiwan
- MSIP (Formerly KCC): Korea
- RCM: Australia

Compliance

- RoHS (meet EU and China standards)
- TAA Compliant—Country of Origin USA

Dimensions

- FC-321P, FC-322P, FC-324P, FC-641E, FC-642E, FC-644E
- Length 6.595", Height 2.709"

Operating Temperature

Hardware Environment

- Temperature: 0-55° C
- Humidity: 10 -90% non-condensing

Storage Environment

- Temperature: -40°-70°C (-40°-157°F)
- Humidity: 5 -95% non-condensing

Operating Power (Typical)

- FC-321P: 9.8W • FC-641P: 9.8W
- FC-322P: 10.6W • FC-642P: 10.6W
- FC-324P: 24.9 • FC-644P: 24.9W

Warranty

- Three-year standard product warranty



Celerity FC-321P



Celerity FC-322P

ATTO Celerity	FC-321P	FC-322P	FC-324P	FC-641E	FC-642E	FC-644E
Ports	Single	Dual	Quad	Single	Dual	Quad
Bus Characteristics	x8 PCIe 4.0	x8 PCIe 4.0	x16 PCIe 3.0	x8 PCIe 4.0	x8 PCIe 4.0	x16 PCIe 4.0
Form Factor	Low Profile	Low Profile	Low Profile	Low Profile	Low Profile	Low Profile
Max Transfer Rate	3200 MB/s	6400 MB/s	12.8GB/s	6400 MB/s	12.8GB/s	25.6 GB/s
SKU	CTFC-321P-000	CTFC-322P-000	CTFC-324P-000	CTFC-641E-000	CTFC-642E-000	CTFC-644E-000