ATTO Technology Inc.

High-Performance Storage & Network Solutions

2024

WWW.ATTO.COM

welcome

Corporate Overview

Established in 1988 - Upstate NY Headquarters
Experienced Engineering Leadership
Scalable Manufacturing Capacity

Customers

Original Equipment Manufacturers, System Builders and End Users supported by a robust channel.

Products

- Host Bus Adapters
- Ethernet NICs
- *i*ntelligent Bridges
- JBOF I/O Controllers
- RAM-Based Storage Appliances
- Thunderbolt ™ Adapters
- Acceleration & Analytics

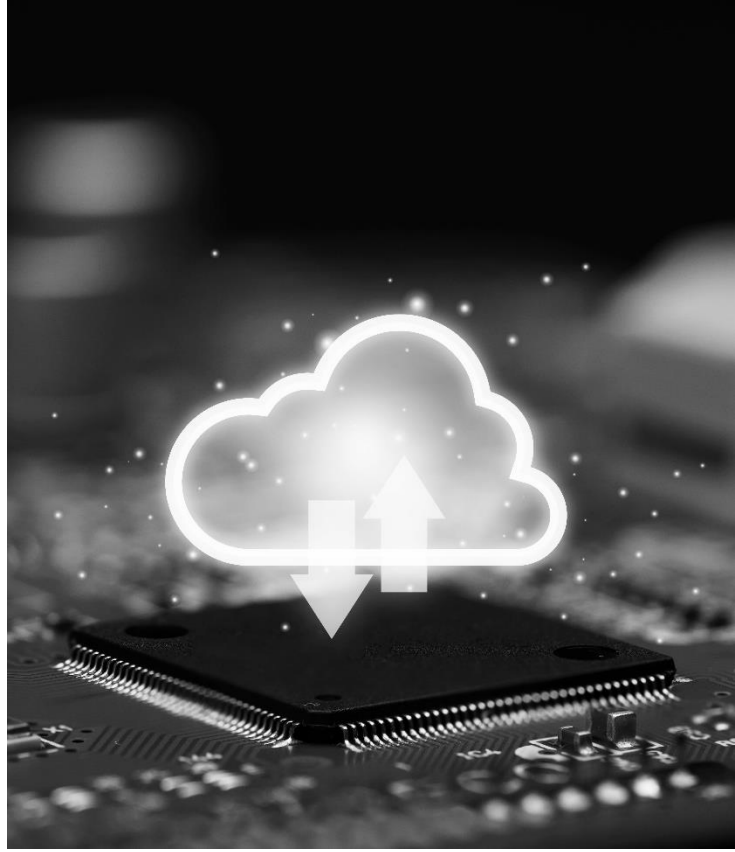
Interconnect Expertise

- ✓ Fibre Channel
- ✓ SAS/SATA
- ✓ Ethernet
- ✓ iSCSI
- ✓ iSER
- ✓ NFS over RDMA
- ✓ NVMe
- ✓ NVMe-oF
- ✓ FC-NVMe
- ✓ Thunderbolt

ATTO

Corporate Overview

ATTO Powers the Worlds Most Data - Intensive Environments



Customer Base

- Original Equipment Manufacturers
- Value-Added Resellers
- Worldwide Distribution – Over 70 Countries
- End User Base of 50,000+

Recognized Market Leader

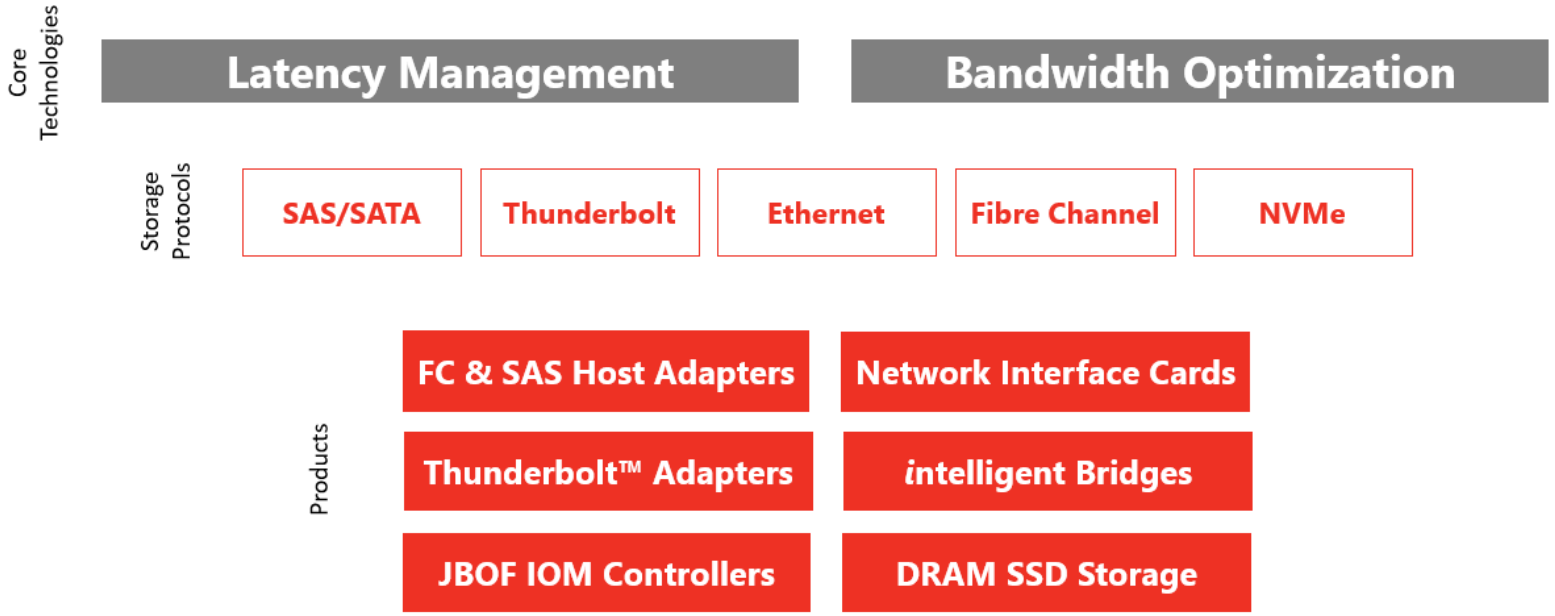
- **Market Verticals:** Engineering & Design, Media & Entertainment, Scientific Research, Oil & Gas, Education and Government
- **IT Applications:** Big Data, Backup and Recovery, Virtualization, Cloud Storage, Security, Artificial Intelligence, and Machine Learning

ATTO

What makes ATTO Products Unique?

We design with latency management and bandwidth optimization in mind.

ATTO develops high-performance products that manage latency and optimize bandwidth in the most demanding real-time environments providing unparalleled accelerated application performance and enhanced transaction processing.



ATTO

Product Portfolio

High-Performance Storage & Network Solutions

2024

ATTO

WWW.ATTO.COM

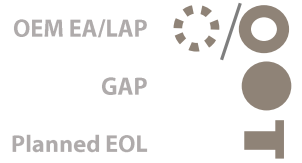
Product Line Overview

- **XstreamCORE® *i*ntelligent Bridges**
  Bring DAS into networked storage ecosystem
  FC-to-SAS, GbE-to-SAS
- **SiliconDisk™ Storage**
  RAM-based storage appliance for extremely low latency in 100 GbE enterprise fabrics
- **XstreamCORE® Embedded JBOF I/O Controllers**
  Ultra-low latency JBOF storage controller for OEM integration
- **ExpressNVM™ Smart Switch Host Adapters**
  Scalable and flexible NVMe solution management & analytics

- **ThunderLink® Thunderbolt Adapters**
  Attach mobile computer devices via Thunderbolt
  Fibre Channel, Ethernet, SAS / SATA
- **ExpressSAS®and Celerity™ Host Bus Adapters**
  High-performance connectivity
  Fibre Channel and SAS / SATA
- **FastFrame™ Network Interface Cards**
  High-performance Ethernet connectivity
  10/25/40/50/100Gb Ethernet
- **Software**
  Management - ATTO ConfigTool, LatencyScout
  Analytics - Insight Analytics, ATTO 360

ATTO

ATTO Fibre Channel Adapters



2024 | 2025 | 2026

8Gb

Celerity™ Fibre Channel 8Gb to x8 PCIe 2; SFP+ Single-, Dual- and Quad-Port

Gen6

Celerity™ 32Gb Gen 6 Fibre Channel to x8 PCIe 3 (Dual- and Single-Channel) or x16 PCIe Gen 3 (Quad-Port)

Gen7

Celerity™ Gen 7 32Gb Fibre Channel x8 PCIe 4 (Dual- and Single-Channel) or x16 PCIe Gen 3 (Quad-Port)

Celerity™ Gen 7 64Gb Fibre Channel to x8 PCIe 4 (Dual- and Single-Port)

Celerity™ Gen7 128Gb Fibre Channel to x8 PCIe 5 (Dual- & Single-Port)

General

1Q2024
- *Celerity Gen 6/7 updates for macOS, Windows, and Linux*

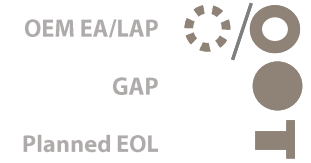
2Q2024
- *Celerity Gen 6/7 updates for FreeBSD/Illumos*

3Q2024
- *Celerity Gen 6/7 updates for macOS, Windows, and Linux*

4Q2024
- *Celerity Gen 6/7 updates for FreeBSD/Illumos*

January 2024 Company Confidential

ATTO SAS/SATA and NVMe Adapters



2024 2025 2026

SAS/SATA

ExpressSAS® GT 12Gb/s SAS/SATA to x8 PCIe 4 HBA; Integrated RAID 0, 1, 1e, 10

ExpressSAS® 24Gb/s SAS/SATA to x16 PCIe 4 (16-port internal or 16-port external) and x8 PCIe 4 (24-port internal) HBAs

ExpressSAS 24Gb/s SAS/SATA to x16 PCIe 5 (16-port internal or 16-port external); key management available

NVMe

ExpressNVM® NVMe Switch Host Adapter; x16 PCIe 4 host connection to 8- or 16-drives

ExpressNVM® NVMe Switch Host Adapter; x16 PCIe 5 host connection to 8- or 16-drives

General

1Q2024
- *ExpressNVM PCIe Gen 4*

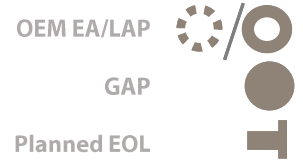
2Q2024
- *General updates*

3Q2024
- *SAS ARM driver support*
- *PCIe authentication & attestation support*

4Q2024
- *General updates*

January 2024 Company Confidential

ATTO Ethernet Network Interface Cards



2024 2025 2026

3rd Generation FastFrame™ 10/25/40/50/100Gb SmartNIC; , x8 PCIe 3 (10/25/50 GbE) or x16 PCIe 3 (100 GbE) host connectivity; ADS, RDMA, NVMe-oF, Advanced Offloads, ATTO 360

4th Generation FastFrame 4™ 10/25/40/50/100GbE SmartNICs QSFP28, SFP28, SFP+, and RJ45 connectivity. x8 PCIe 3.0 (10/25GbE) x16 PCIe 4.0 (100GbE) ADS, Advanced congestion Avoidance, Priority Flow Control, ATTO 360 optimized

4th Generation FastFrame 4™ 200/400 GbE QSFP56 SmartNIC; PCIe 4, RDMA, NVMe-oF, Offloads

FastFrame™ 5 400 GbE; PCIe 5

ATTO 360™ Tuning, Monitoring, and Analytics (Version 5)

ATTO 360™ Enterprise Edition featuring remote management and advanced networking features

- ATTO 360, ATTOview and ATTO Ethernet Suite software are included free-of-charge with all of our FastFrame Ethernet adapters. These utilities provide performance tuning, analytics, and monitoring capabilities for macOS, Windows and Linux users

General

1Q2024
- *ATTO 360 version 5.5 – All new partner profiles*

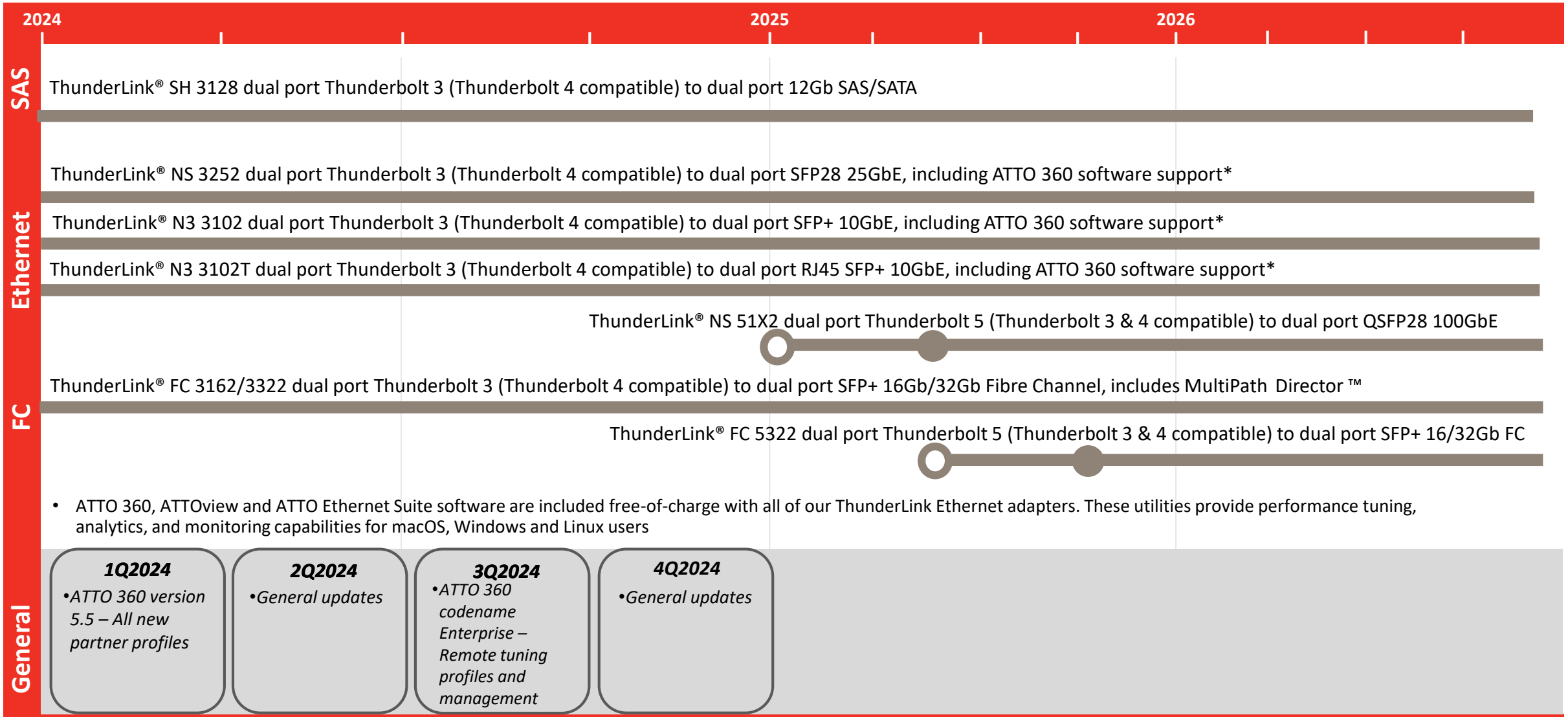
2Q2024
- *macOS driver upgrades for FF3/FF4*
- *Ethernet Suite updates for Window/Linux*

3Q2024
- *ATTO 360 codename Enterprise – Remote tuning profiles and management*
- *ATTOview major updates to storage monitoring & new alert system*

4Q2024
- *macOS driver upgrades for FF3/FF4*
- *Ethernet Suite updates for Window/Linux*

ATTO Thunderbolt™ Adapters

OEM EA/LAP
GAP
Planned EOL



- ATTO 360, ATTOview and ATTO Ethernet Suite software are included free-of-charge with all of our ThunderLink Ethernet adapters. These utilities provide performance tuning, analytics, and monitoring capabilities for macOS, Windows and Linux users

General

1Q2024
- *ATTO 360 version 5.5 – All new partner profiles*

2Q2024
- *General updates*

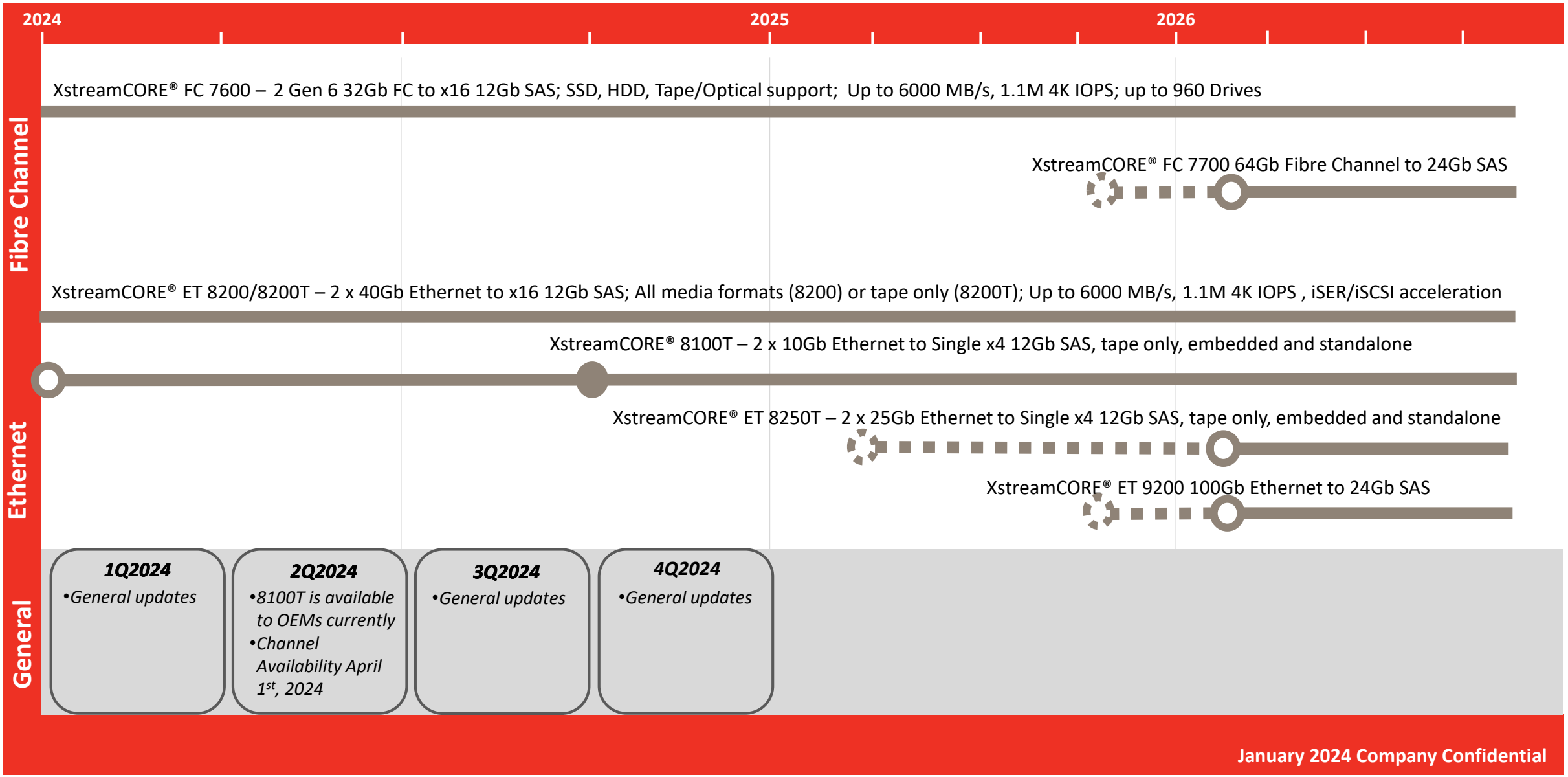
3Q2024
- *ATTO 360 codename Enterprise – Remote tuning profiles and management*

4Q2024
- *General updates*

January 2024 Company Confidential

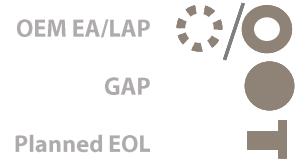
ATTO XstreamCORE® *intelligent* Bridges

OEM EA/LAP
GAP
Planned EOL



January 2024 Company Confidential

SiliconDisk™ HPC Storage



2024 2025 2026

NVMe-oF

SiliconDisk™ – shareable, ultra-low latency (<1 µsec) NVME-oF storage

- Capacity: up to 1TB persistent storage capacity
- Connectivity: 4x 100GbE (NVME-oF) standard; 50/25 GbE options available
- Form Factor: 1u rackable; dual, hot-swappable power supplies

SiliconDisk™ II – shareable, ultra-low latency (<1 µsec) NVMe-oF storage

- Capacity: up to 6TB
- Connectivity: 4x 200GbE (NVME-oF) standard; 100/50/25 GbE options available
- Form Factor: 1u rackable; dual, hot-swappable power supplies

FC-NVMe

SiliconDisk™ FC – shareable, ultra-low latency (<1 µsec) FC-NVMe storage

- Capacity: up to 1TB
- Connectivity: 4x 32Gb Fibre Channel (FC-NVME) standard
- Form Factor: 1u rackable; dual, hot-swappable power supplies

General

January 2024 Company Confidential

ATTO

High-Performance Storage
& Network Solutions
2024

WWW.ATTO.COM