

# KIOXIA

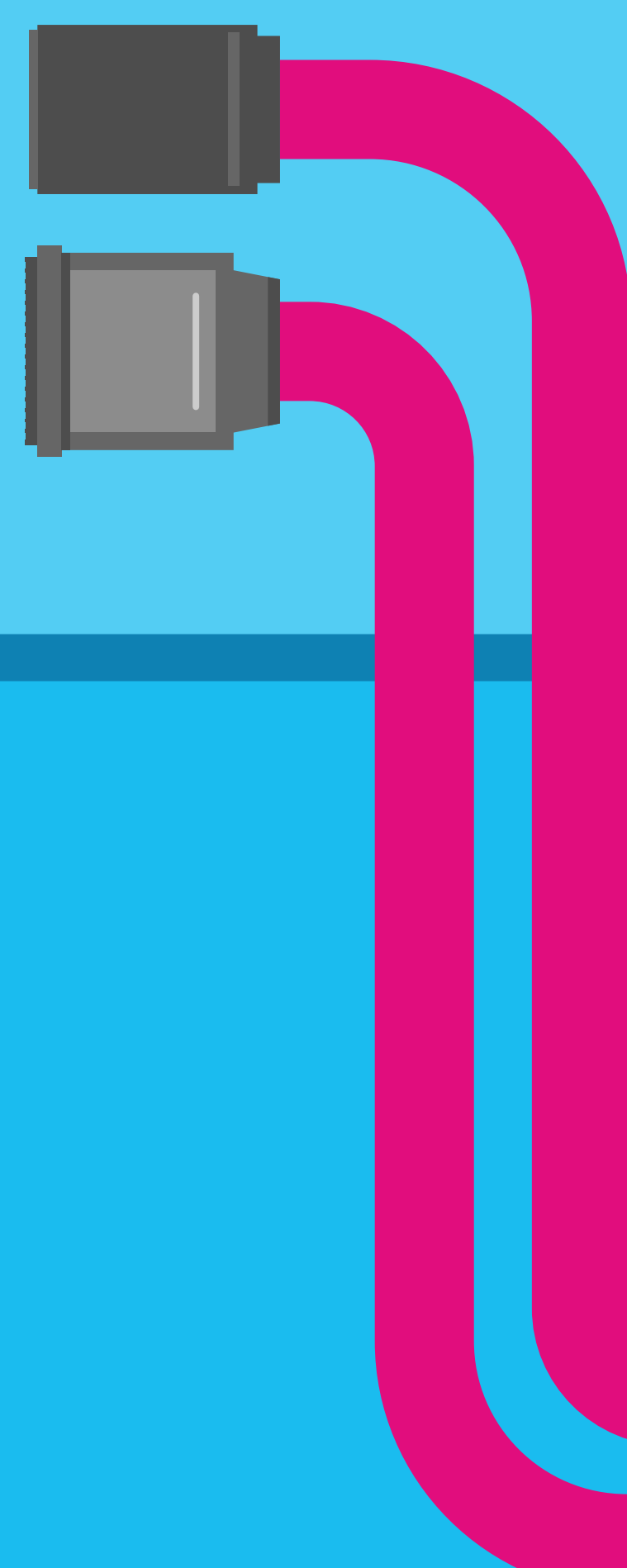
## Enterprise Transformation

with

# 24G SAS

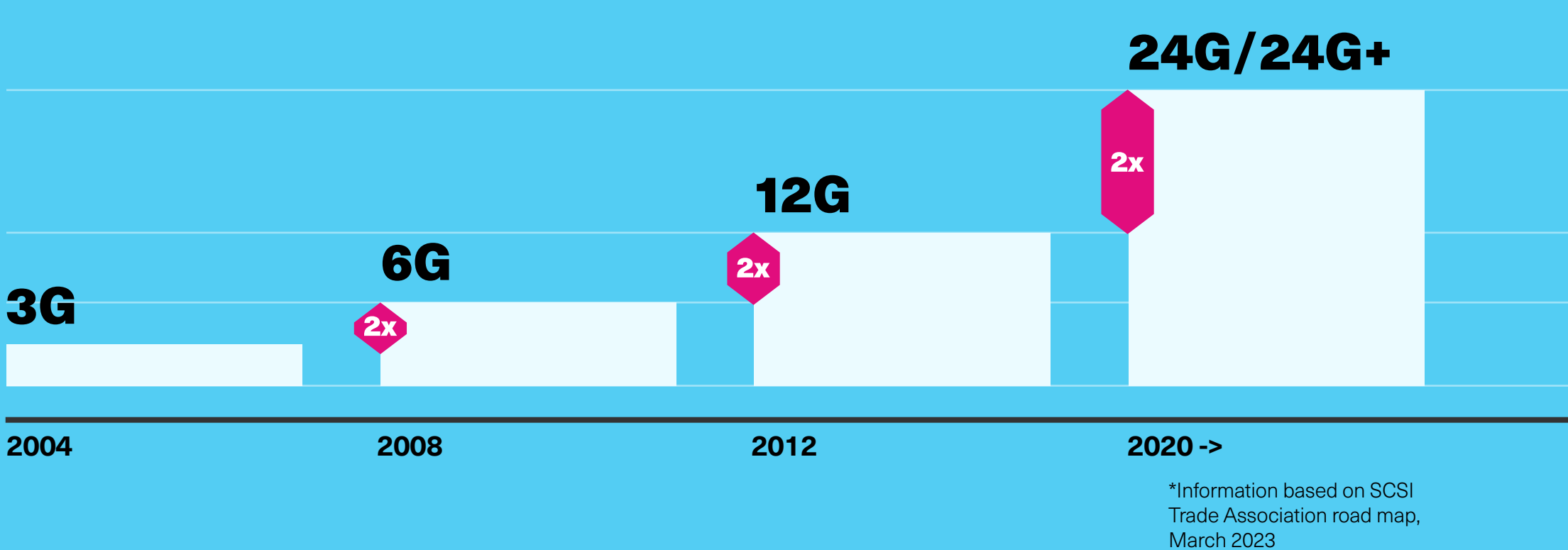
**KIOXIA continues to drive innovation and development of the widely deployed and trusted data storage interface!**

- Serial Attached SCSI (SAS) has **30+ years** of proven reliability, performance, high-availability and data integrity
- Designed for enterprise servers and storage
- Connects SAS and SATA SSDs and HDDs



## SAS Roadmap

Doubling effective bandwidth with each generation



## 24G SAS Key Features



### Features

- 22.5 Gb/s Transfer Rate
- 128 / 150b Encoding + Forward Error Correction
- Adaptive PHY Training Algorithm
- SAS Storage Intelligence

### Benefits

- Doubles Effective Performance
- Enterprise Reliability and Data Integrity
- Dynamically Optimizes Signal Integrity
- Better SSD Management

## 12Gb/s SAS vs. 24G SAS

**Sustained 4 KiB Random Read**

400,000 IOPS

**720,000 IOPS**

**Sustained 4 KiB Random Write**

90,000 IOPS

**175,000 IOPS**

**Sustained 128 KiB Sequential Read**

2,100 MB/s

**4,200 MB/s**

**Sustained 128 KiB Sequential Write**

2,000 MB/s

**4,100 MB/s**

\*Performance comparison is based on publicly available performance specifications of a 1 DWPD 7.68 TB PM7 Series SAS SSD and a leading 1 DWPD 7.68 TB 12Gb/s SAS SSD

## KIOXIA PM7 Series 24G SAS SSD

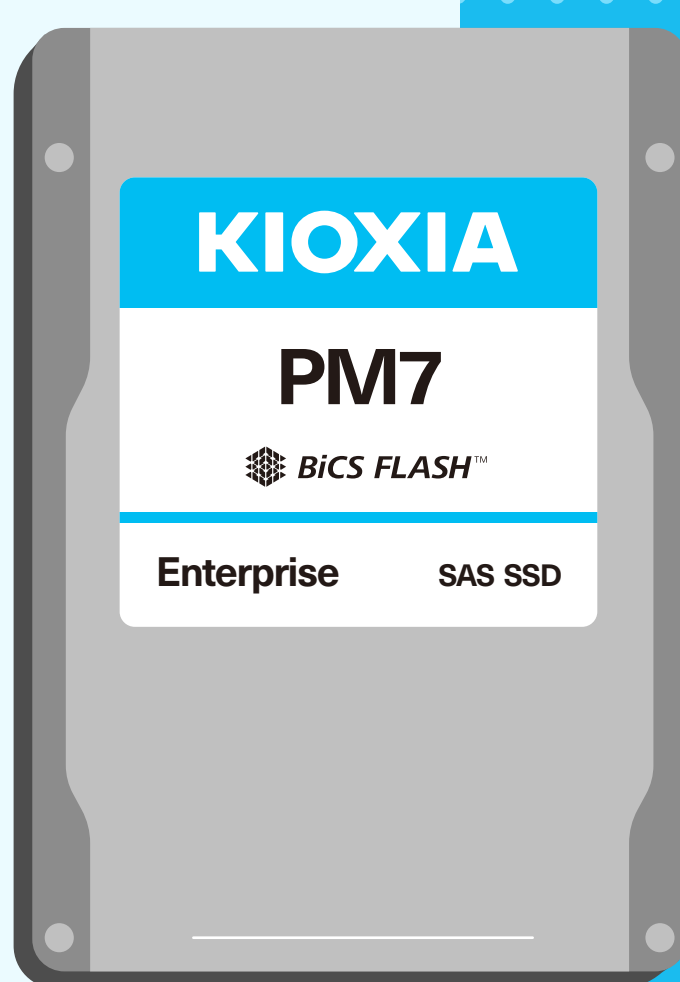
**Endurance:** 1, 3 DWPD

**Capacities:** 1.6 TB – 30.72 TB

**Security Options:** Non-SED, SIE, SED, FIPS 140-3 [1] [2] [3] [4] [5]

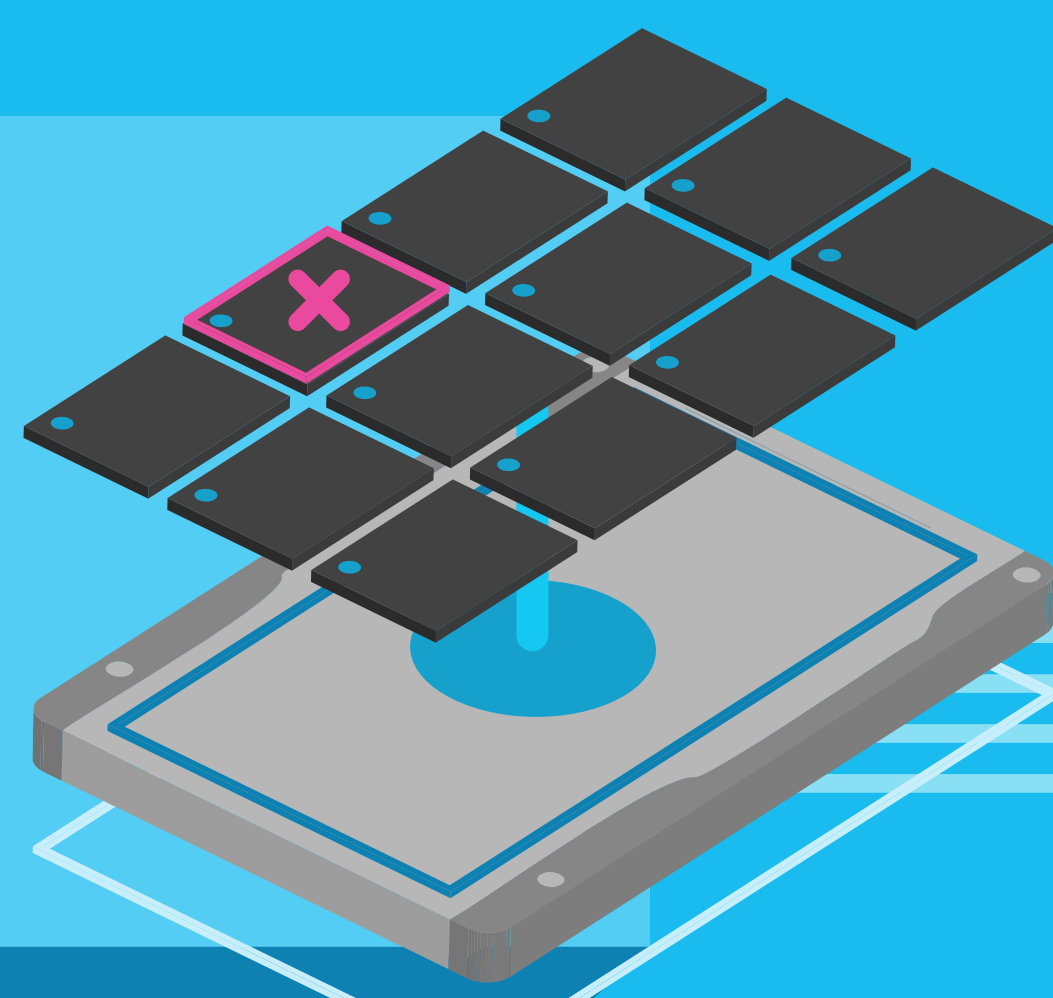
**SFF-TA-1001 Support (also known as U.3)**

**Comprehensive SAS SSD line up with a solution for any application**



## Flash Die Failure Protection

KIOXIA Flash Die Failure Protection allows for a NAND die to fail and the SSD will continue to function with full reliability.



Definition of capacity: Kioxia Corporation defines a megabyte (MB) as 1,000,000 bytes, a gigabyte (GB) as 1,000,000,000 bytes and a terabyte (TB) as 1,000,000,000,000 bytes. A computer operating system, however, reports storage capacity using powers of 2 for the definition of 1 GB = 2<sup>30</sup> bytes = 1,073,741,824 bytes and 1 TB = 2<sup>40</sup> bytes = 1,099,511,627,776 bytes and therefore shows less storage capacity. Available storage capacity (including examples of various media files) will vary based on file size, formatting, settings, software and operating system, and/or pre-installed software applications, or media content. Actual formatted capacity may vary.

For performance measurements, read and write speeds may vary depending on the host device, read and write conditions and file size.

[1] Sanitize Instant Erase (SIE), Self-Encrypting Drive (SED) and FIPS (Federal Information Processing Standards) SED security optional models are available.

[2] SIE optional model supports Cryptographic Erase, which is a standardized feature defined by the technical committees (SCSI) of INCITS (the InterNational Committee for Information Technology Standards).

[3] SED optional model supports TCG Enterprise SSC.

[4] FIPS SED optional model utilizes a security module designed to comply with FIPS 140-2 and FIPS 140-3, which define security requirements for cryptographic module by NIST (National Institute of Standards and Technology). For the latest validation status, please make inquiries through "Contact us".

[5] Security optional models are not available in all countries due to export and local regulations.

Information in this document, including product pricing and specifications, content of services, and contact information is current and believed to be accurate on the date of the announcement, but is subject to change without prior notice. Technical and application information contained here is subject to the most recent applicable KIOXIA product specifications.

Company names, product names and service names may be trademarks of third-party companies.