

# KIOXIA

## Enterprise Transformation

with

# 24G SAS

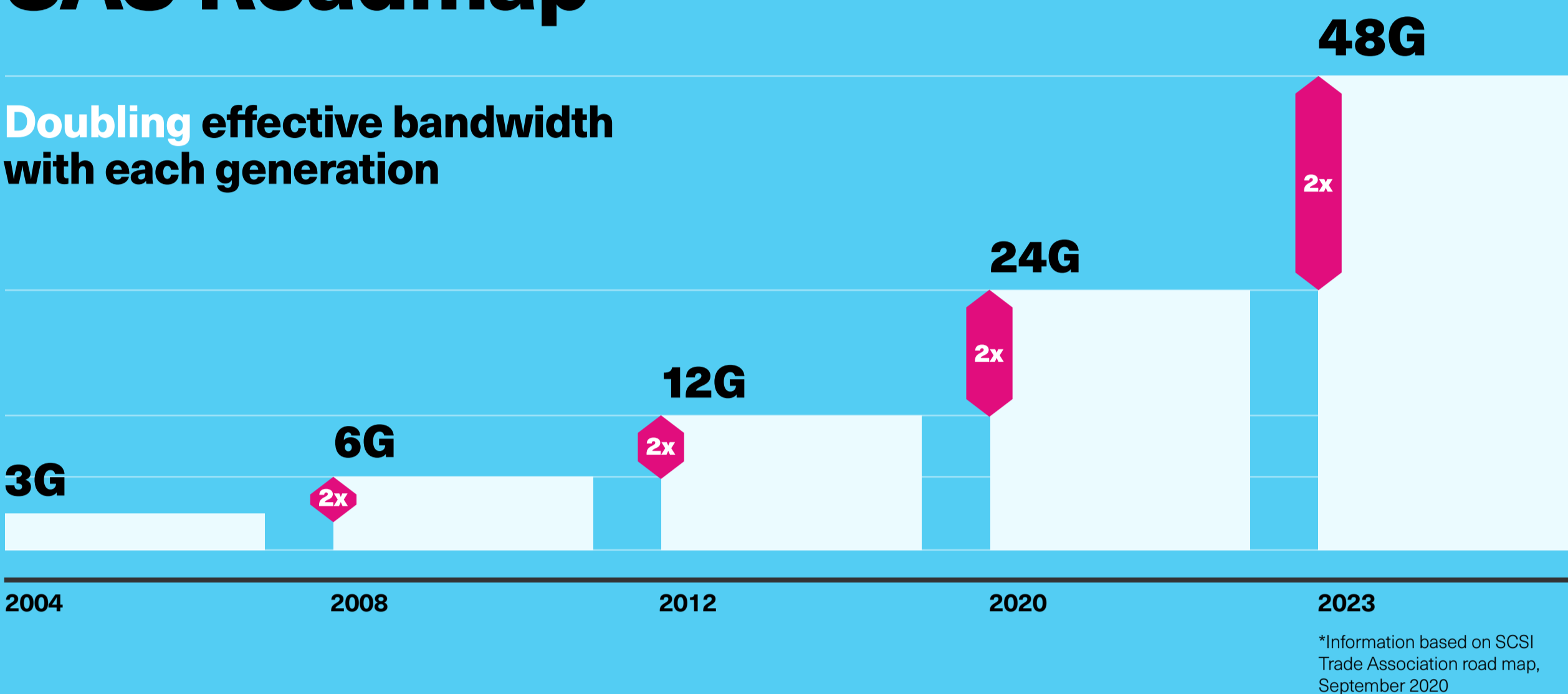
**KIOXIA continues to drive innovation and development of the widely deployed and trusted data storage interface!**

- 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**



\*Information based on SCSI Trade Association road map, September 2020

## 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

Random Read IOPS

400,000

**595,000**

Random Write IOPS

90,000

**155,000**

Sequential Read Throughput

2,100 MB/s

**4,150 MB/s**

Sequential Write Throughput

2,000 MB/s

**3,700 MB/s**

\*Performance comparison is based on publicly available performance specifications of a 1 DWPD 7.68TB PM6 Series SAS SSD and a leading 1 DWPD 7.68TB 12Gb/s SAS SSD

## KIOXIA PM6 Series 24G SAS SSD

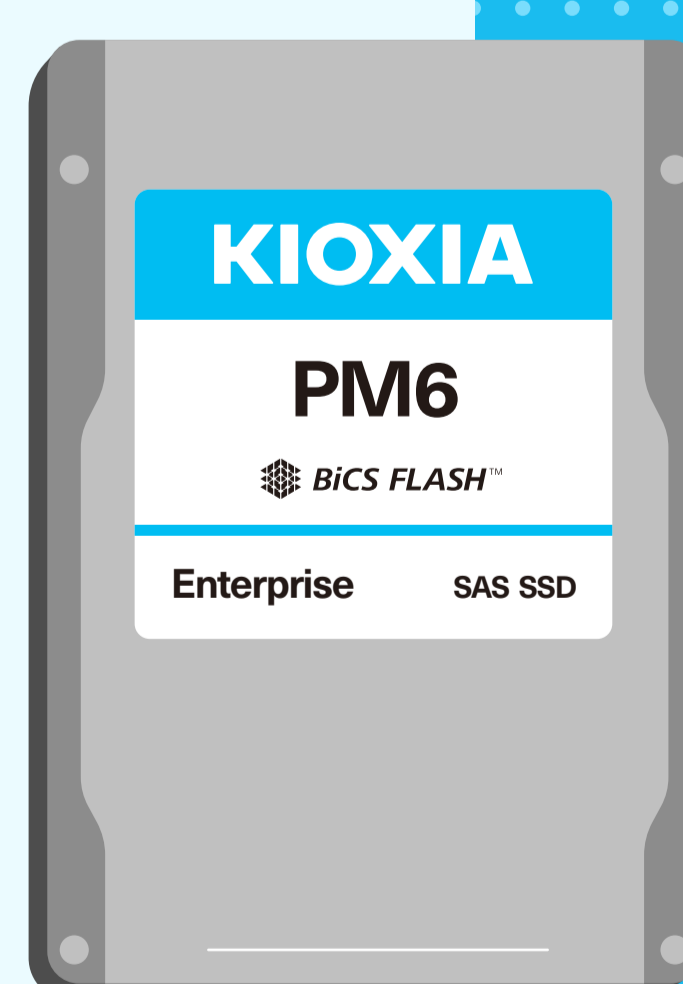
**Endurance:** 1, 3, 10 DWPD

**Capacities:** 400 GB – 30.72 TB<sup>1</sup>

**Security Options:** Non-SED, SIE, SED, FIPS 140-2

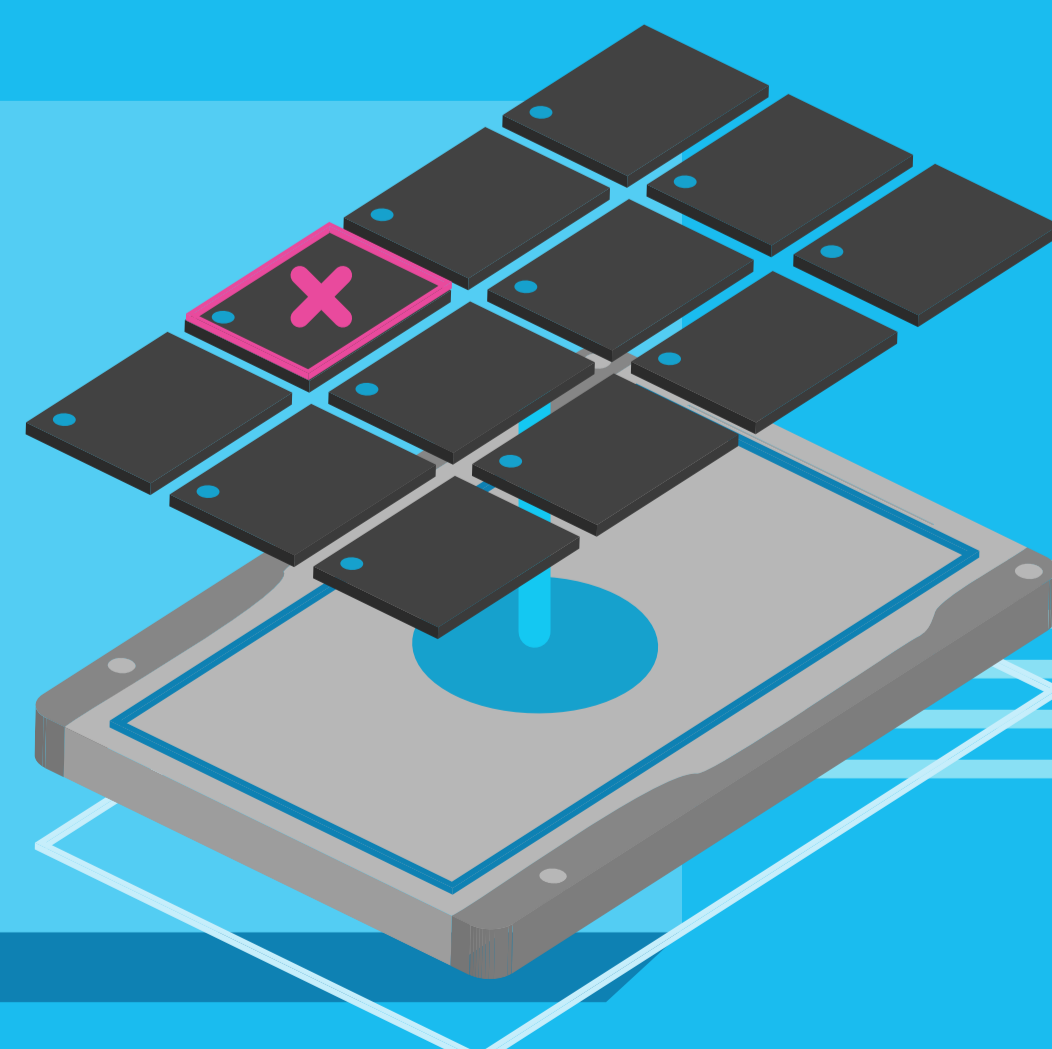
**2.5-inch Form Factor** (15mm Z-height)

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



## Flash Die Failure Protection

Today, a NAND flash die failure can render some SSDs inoperable, risking user data and reducing system performance. KIOXIA Flash Die Failure Protection allows for a NAND die to fail and the SSD will continue to function with full reliability.



## KIOXIA

<sup>1</sup> KIOXIA 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 1Gb = 2<sup>30</sup> bits = 1,073,741,824 bits, 1GB = 2<sup>30</sup> bytes = 1,073,741,824 bytes and 1TB = 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.

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.

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

The following trademarks, service and/or company names – PCIe, PCI-SIG – are not applied, registered, created and/or owned by KIOXIA Europe GmbH or by affiliated KIOXIA group companies. However, they may be applied, registered, created and/or owned by third parties in various jurisdictions and therefore protected against unauthorized use.

© 2021 KIOXIA Europe GmbH. All rights reserved.

Enterprise Transformation with 24G SAS Infographic | September 2021 | v1.2a