

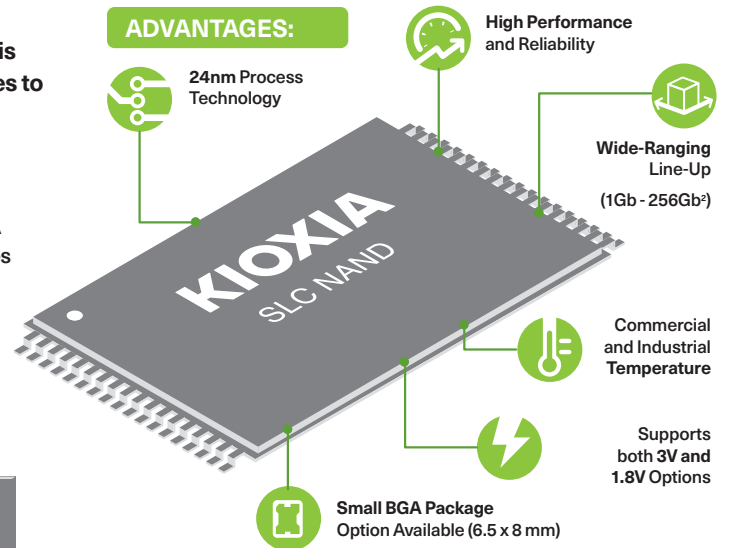
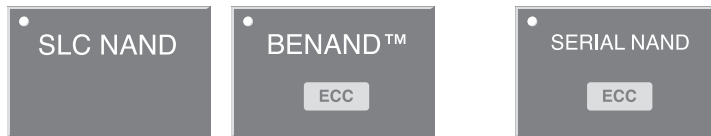
SLC NAND: Reliable, High-Performing, Low-Density NAND

KIOXIA delivers flash-based products for next-generation storage applications. Having invented NAND flash over 30 years ago, KIOXIA is now one of the world's largest flash memory suppliers – and continues to move the technology forward.

What is SLC NAND?

Single-level cell (SLC) NAND flash memory is the original NAND architecture. A 1-bit-per-cell, non-volatile memory, SLC provides the high endurance that makes it ideally suited for a variety of consumer and industrial applications where longevity of supply is important.

KIOXIA's SLC NAND product family includes two interface options: **PARALLEL** and **SERIAL**.



PARALLEL INTERFACE:

Available as raw SLC NAND or as BENAND™ (Built-in ECC NAND). BENAND is SLC NAND with an internal hardware error correction code (ECC) engine, which removes the burden of ECC from the host processor.

SERIAL INTERFACE:

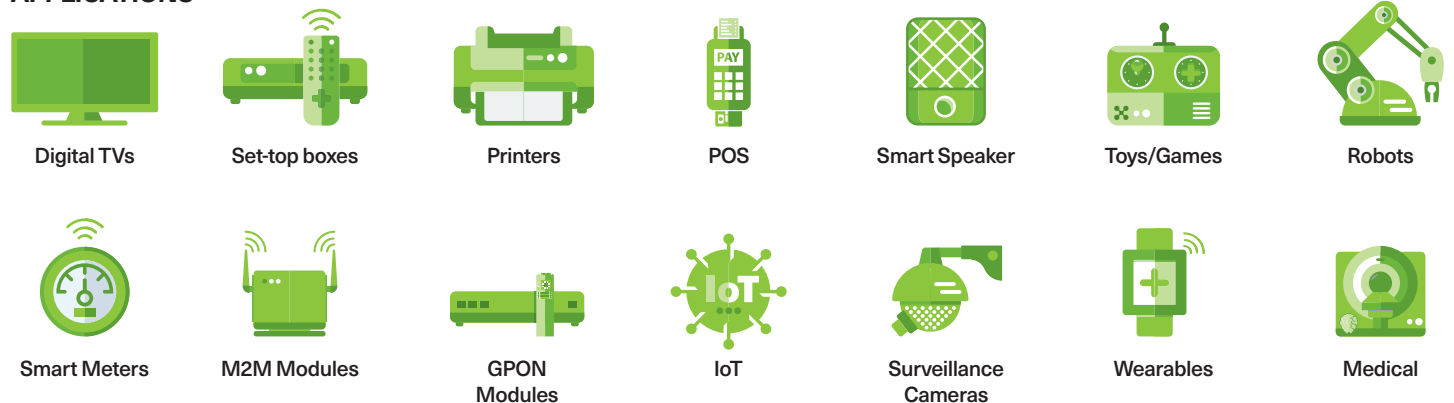
KIOXIA's Serial NAND is SLC NAND with a serial peripheral interface (SPI). SPI is an industry standard inter-chip interface that is used in NOR flash and supported by most microprocessors and microcontrollers.

KEY FEATURES:

SLC's main advantages over MLC, TLC and QLC include: ability to read and write data at high speeds, support high-write/erase cycle endurance (50K write/erase cycles), and offer I-temp availability.

SLC NAND	BENAND™	Serial NAND
<ul style="list-style-type: none"> Available in 1, 2, 4, 8, 16, 32, 64, 128, and 256 Gb densities 63 BGA, 67 BGA, TSOP, 132 BGA packages C-Temp and I-Temp 	<ul style="list-style-type: none"> Built-in ECC Uses common NAND interface No hardware change necessary Available in 1, 2, 4, and 8 Gb densities at 24nm 63 BGA, 67 BGA, and TSOP packages 	<ul style="list-style-type: none"> SLC NAND with SPI Built-in ECC Available in 1, 2, 4, and 8 Gb densities at 24nm WSON8 package Very low pin count of 6 active pins

APPLICATIONS



“SLC NAND continues to play an important role in a diverse range of consumer and industrial applications. KIOXIA is one of the world's largest suppliers of SLC NAND - and one of the few that are committed to continuing to develop and support it long term.”

- *Brian Kumagai, Director of Business Development, KIOXIA*

<https://business.kioxia.com/en-us/memory/slc-nand.html>

BENAND is a trademark of KIOXIA Corporation.
 [1] Read and write speed may vary depending on the host device, read and write conditions, and file size.
 [2] Product density is identified based on the density of memory chip(s) within the Product, not the amount of memory capacity available for data storage by the end user. Consumer-usable capacity will be less due to overhead data areas, formatting, bad blocks, and other constraints, and may also vary based on the host device and application. For details, please refer to applicable product specifications. The definition of 1Gb = 2³⁰ bytes = 1,073,741,824 bytes. The definition of 1GB = 2³⁰ bytes = 1,073,741,824 bytes.