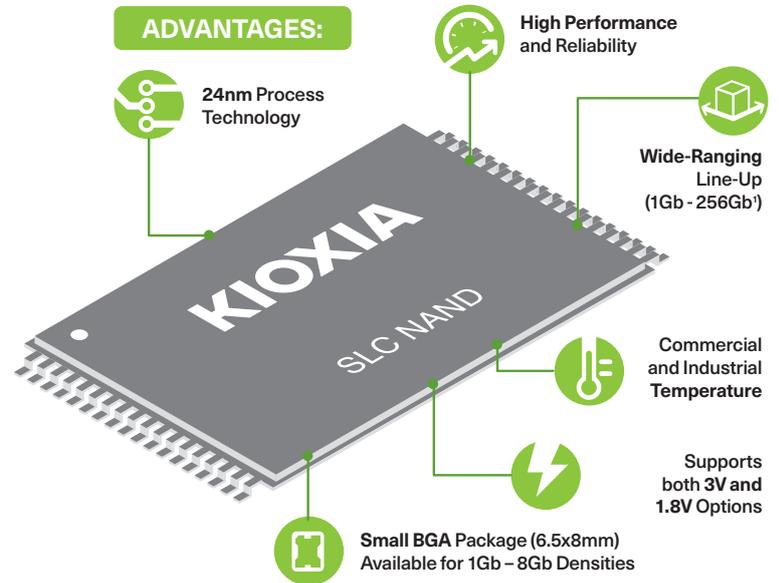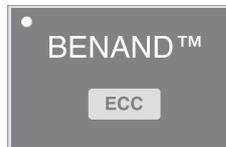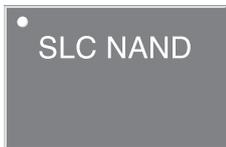# KIOXIA

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.

SLC NAND

BENAND™
ECC

ADVANTAGES:

24nm Process Technology

High Performance and Reliability

Wide-Ranging Line-Up (1Gb - 256Gb[1])

Commercial and Industrial **Temperature**

Supports both **3V and 1.8V** Options

Small BGA Package (6.5x8mm) Available for 1Gb – 8Gb Densities

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.

KEY FEATURES:

SLC's main advantages over MLC, TLC and QLC include: ability to read and write data at low latency, support high-write/erase cycle endurance, and offer I-temp availability.

SLC NAND	BENAND™
• Available in 1, 2, 4, 8, 16, 32, 64, 128, and 256 Gb densities	• Built-in ECC
• 63 BGA, 67 BGA, TSOP, 132 BGA packages	• Uses common NAND interface
• Package line-up differs by product density	• No hardware change necessary
• C-Temp and I-Temp	• Available in 1, 2, 4, and 8 Gb densities at 24nm
	• 63 BGA, 67 BGA, and TSOP packages

APPLICATIONS

Digital TVs Set-top boxes Printers POS Smart Speaker Toys/Games Robots

Smart Meters M2M Modules GPON Modules IoT Surveillance Cameras Wearables Medical

"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."
- Julie Martin, Senior Manager of Business Development, KIOXIA