

# NAND Advantages for Multiple Markets

Micron® NAND Flash Memory

Micron does more than design and manufacture NAND Flash memory. We strive to solve design challenges through better engineering—by raising the bar on features, functionality, and performance. We'll work with you so you can leverage our design expertise, systems understanding, and familiarity with the overall NAND market to your best advantage.

Whether your application calls for conventional MLC or SLC NAND, MCPs, e-MMC™ embedded memory, SSDs, embedded USBs, Serial NAND, or Enterprise NAND, we can offer you an innovative, optimized solution.

## Innovative NAND Solutions

### Discrete NAND Devices

#### *SLC, MLC-2, MLC-3 NAND*

Our high-density, discrete NAND Flash memory matches performance characteristics with the very different needs of nonvolatile solid state storage applications for a better cost-per-bit. We offer a wide range of densities, voltages, and configurations with Pb-free packaging, plus extensive support with controller manufacturers and software support options.

## Why Micron® NAND is the Best Fit for Your Applications

### 1. Technical Support Throughout Your Design Cycle

Multistage technical assistance helps you design in some of the industry's highest-quality memory with ease.

### 2. Micron's NAND Expertise

NAND process technology expertise ensures optimum performance and reliability.

### 3. Specialized Products

Specialized solutions take NAND in new directions to enable applications that are storing data in new ways.

### 4. Quality Products

Stringent quality and reliability testing makes our devices stand out as some of the highest-quality parts in the industry.



## Embedded NAND

### *MCPs*

Whether you're trying to minimize power consumption, maximize board space, increase speed, or do everything at once, our MCPs can drive your design no matter the application. Go ahead and mix and match devices, configurations, and package options. And with our Beagle Board and TI OMAP™ solutions, go beyond mobile—to power your next automotive, consumer, embedded, or medical application.

### *e-MMC™ Embedded Memory*

Our e-MMC embedded memory combines high-capacity NAND Flash memory with a high-speed, MultiMediaCard (MMC) controller in a single package. So, if you're looking to simplify your hardware and software integration, know that our e-MMC solutions have an easy-to-use BGA package, a managed interface, internal error handling, and a high-performance controller. It's everything you want, plus the performance and reliability you need, and it will get you to market quickly.

### *RealSSD™ Products*

Our RealSSD family—solid state drives and embedded USBs—targets a wide spectrum of needs, from low-density, cost-effective embedded solutions, to standard HDD replacement drives and tier-0 enterprise storage.

## Specialty NAND

### *High-Speed NAND Interface*

Built on the ONFI standard, our high-speed NAND interface delivers ultra-fast read and write throughputs—up to five times the performance of a standard asynchronous NAND interface. And compliance with ONFI standards enables both backward-compatible and forward-looking designs.

### *Serial NAND*

Our Serial NAND Flash is a lower-cost, higher-density alternative to serial peripheral interface (SPI) NOR solutions. Serial NAND is available at densities starting at 1Gb and offers faster write performance than NOR at a much lower cost-per-bit. Serial NAND will help improve performance, increase density, eliminate a controller or card slot, and shrink your BOM costs.

### *Enterprise NAND*

Our Enterprise NAND is a high-endurance NAND Flash solution optimized for intensive enterprise storage applications where endurance is the top priority. It far surpasses standard NAND cycle rates by delivering 300,000 WRITE/ERASE cycles for SLC and 30,000 for MLC. And it does it with an ONFI-standard package.

## Contact Us

Our long tradition of innovation and technology leadership has helped shape our broad NAND Flash offering. Take a closer look at the products, features, and design support we offer, knowing we cover everything from mobile, to embedded, to enterprise storage applications. Read more about our NAND Flash memory products at [micron.com/nand](http://micron.com/nand).

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