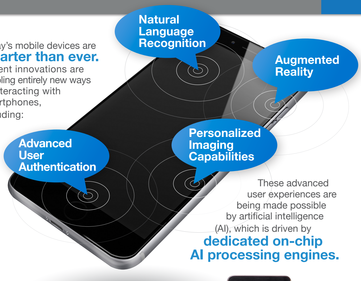
Micron Announces

Leading-Edge Mobile 3D NAND Solution for Flagship Smartphones

Advanced Smartphone Experiences Driving Need for Faster Access to Data

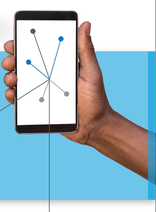
Today's mobile devices are **smarter than ever.** Recent innovations are enabling entirely new ways of interacting with smartphones, including:



These advanced user experiences are being made possible by artificial intelligence (AI), which is driven by **dedicated on-chip AI processing engines.**

Fast, High-Capacity NAND Storage Solution

If you're designing a **a next-gen mobile user experience**

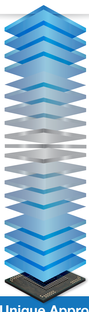


Meets higher requirements for:

Smaller Size

By utilizing our **CMOS under Array (CuA) technology,** our new mobile NAND products pack more storage cells into a smaller die area to deliver the **industry's smallest physical footprint for a 32GB die.**

Micron's innovative **triple-level cell (TLC) 3D NAND technology** solves the storage performance challenge.



Our Unique Approach

We place all of the flash memory layers on top of the logic array to maximize the use of space in the smartphone design.

The UFS Advantage

Our select 3D NAND products use the Universal Flash Storage (UFS) 2.1 standard which enables

ultra-fast mobile experience

Significantly **boost read/write speeds** and boot-up times.

Experience **seamless HD streaming, higher bandwidth gameplay** and **faster multimedia file loading**.

Enhance mobile camera performance when capturing bursts of photos, like panoramas or action shots.

6 Reasons to Design in 3D NAND from Micron

1 Enhanced Performance

- Offers random writes of 40,000 IOPS, with the 64-layer TLC 3D NAND products performing 50% faster than previous-generation TLC 3D NAND.
- UFS 2.1 High-Speed Gear 3 Interface – Delivers 200% higher bandwidth versus a MMC 5.1; uses Command Queue technology to read and write commands simultaneously.
- 4K read mode – improves random read performance.

2 Power Efficiency

Our 3D NAND's sleep mode greatly reduces power consumption by only powering the active NAND die while leaving all other die idle in standby mode.

3 High Capacity Storage

64 layer TLC 3D NAND technology with CMOS under Array technology doubles the storage density of previous generation TLC 3D NAND while maintaining the same package size.

4 Improved Reliability

Micron's unique floating gate technology provides superior data retention[1] compared to charge trap gates used by competitors.

5 Smallest 3D NAND Die

Our 3D NAND die is one of the smallest available; it fits into 11.5mm x 13mm discrete UFS or MCPs—making it ideal for your ultra-small mobile applications.

6 Trusted Memory Partner

Over the last three decades, Micron has developed a worldwide reputation as an expert in research, design, process development and manufacturing of memory and storage solutions. Ourtechnical experts collaborate closely with our customers, equipment suppliers, industry partners, universities and other strategic partners to enable successful integration of innovative memory-based systems and solutions ideal for our mobile customers.

1. Floating-gate technology uses isolated charge storage nodes for superior cell-to-cell charge isolation, delivering higher data retention and reliability.

Micron's new mobile 3D NAND products are available in **3 different capacities**

256 GB **128 GB** **64 GB**