



Micron Delivers the World's Most Compact UFS Package to Enable Next-Generation Phone Designs and Larger Batteries

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Company extends UFS 4.0 mobile storage leadership with proprietary firmware features to accelerate data-rich experiences

BARCELONA, Spain, Feb. 27, 2024 (GLOBE NEWSWIRE) -- **Mobile World Congress** -- Micron Technology, Inc. (Nasdaq: MU) announced today that it is delivering qualification samples of an enhanced version of its Universal Flash Storage (UFS) 4.0 mobile solution with breakthrough proprietary firmware features delivered in the world's most compact UFS package at 9x13 millimeters (mm). Built on its advanced 232-layer 3D NAND and offering up to 1 terabyte (TB) capacity, the UFS 4.0 solution provides best-in-class performance and end-to-end innovation, enabling faster and more responsive experiences on flagship smartphones.

Micron UFS 4.0 accelerates data-intensive experiences with up to 4300 megabytes per second (MBps) sequential read and 4000 MBps sequential write speed, twice the performance of previous generations.¹ With these speeds, users will be able to launch their favorite productivity, creativity, and emerging AI apps more quickly. Large language models in generative AI applications can be loaded 40% faster², resulting in a smoother experience when initializing conversations with AI digital companions.

"Micron's latest UFS 4.0 solution enables world-class storage performance and reduced power in the world's smallest UFS package," said Mark Montierth, general manager and corporate vice president of Micron's Mobile Business Unit. "Supercharged with breakthrough firmware advancements to keep smartphones running like new, Micron UFS 4.0 raises the bar for mobile storage with enhanced performance, flexibility and scalability to accelerate the rollout of generative AI-capable smartphones."

Compact package design lays the foundation for energy-efficient, ultra-slim smartphones

Since introducing its UFS 4.0 solution last June with an 11x13 mm package, Micron has reduced the footprint for its UFS 4.0 solution to offer the world's most compact managed NAND package size at 9x13 mm. These significant space savings result in an optimal size for next-generation foldable and ultra-slim smartphone designs and free more real estate for manufacturers to provide a larger battery. In tandem with the solution's 25% increase in power efficiency³, these benefits enable extended battery life for users, even when running power-draining features such as AI, augmented reality, gaming and multimedia apps.

Micron raises the bar for mobile flash storage with proprietary firmware innovation

This launch builds on [Micron's ramp](#) and high-volume production of UFS 4.0 storage last year with custom firmware updates such as:

- **High-Performance Mode (HPM):** This proprietary feature optimizes performance during intensive smartphone use by prioritizing critical tasks over background tasks. This results in over 25% improvement in speed when launching multiple applications thanks to twice-as-fast storage access during heavy usage.⁴
- **One Button Refresh (OBR):** OBR allows consumers to reap top performance from their devices longer by automatically cleaning and optimizing data so smartphones can continue operating in a like-new state. Users will benefit from faster read/write performance, resulting in 10% faster app launches⁵, snappy camera roll access and seamless multi-tasking.
- **Zoned UFS (ZUFS):** Micron UFS 4.0 now allows the host to specify different zones where data can be stored, improving the usefulness of the device over time. This ZUFS approach reduces write amplification to maximize the finite cycles of data that devices can program and erase without degrading device performance — ultimately extending the smartphone life span while keeping devices feeling like new for longer.

Micron's teams of engineers architected these innovative firmware features in its global labs by anticipating emerging use cases, running real-world simulations and collaborating with customers to incorporate feedback. In its joint customer labs across the U.S., China and Korea, Micron works in lockstep with smartphone OEMs to understand critical pain points and develop bespoke solutions to break down these bottlenecks.

Availability

Micron is now shipping samples of its upgraded UFS 4.0 in capacities of 256 gigabytes (GB), 512GB and 1TB. These expansive capacities unlock the benefits of AI by allowing flagship smartphones to accommodate all the data analyzed and generated by on-device AI assistants in addition to users' growing photo libraries, ensuring greater security versus the cloud. With all their data stored locally, consumers will also benefit from always-on access to their personal data and powerful AI features, even while offline or in places with spotty service.

Resources

Solution page: [Ultra-fast UFS](#)

About Micron Technology, Inc.

We are an industry leader in innovative memory and storage solutions transforming how the world uses information to enrich life *for all*. With a relentless focus on our customers, technology leadership, and manufacturing and operational excellence, Micron delivers a rich portfolio of high-performance DRAM, NAND and NOR memory and storage products through our Micron® and Crucial® brands. Every day, the innovations that our people create fuel the data economy, enabling advances in artificial intelligence and 5G applications that unleash opportunities — from the data center to the intelligent edge and across the client and mobile user experience. To learn more about Micron Technology, Inc. (Nasdaq: MU), visit [micron.com](https://www.micron.com).

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¹ As compared to previous-generation UFS 3.1 176-layer NAND

² As compared to previous-generation UFS 3.1 176-layer NAND

³ As compared to previous-generation UFS 3.1 176-layer NAND

⁴ As compared to devices with UFS 4.0 without HPM enabled

⁵ As compared to devices with UFS 4.0 without OBR enabled

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