



Micron and MediaTek First to Validate LPDDR5X

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Built on Micron's leading 1 α node, world's fastest mobile memory unlocks artificial intelligence and 5G innovation for smartphones

LAGUNA BEACH, Calif., Nov. 19, 2021 (GLOBE NEWSWIRE) -- **MediaTek Executive Summit** – Micron Technology, Inc. (Nasdaq: MU) announced today that MediaTek Inc. has validated Micron's low-power double data rate 5X (LPDDR5X) DRAM for MediaTek's new Dimensity 9000 5G flagship chipset for smartphones. Micron is the first semiconductor company to sample and validate this fastest, most advanced mobile memory in the industry and has shipped the first batch of samples of LPDDR5X built on its [first-to-market 1 \$\alpha\$ \(1-alpha\) node](#). Designed for high-end and flagship smartphones, Micron's LPDDR5X allows the smartphone ecosystem to unlock the next wave of data-intensive applications powered by artificial intelligence (AI) and 5G innovation.

The market delivery and validation of Micron's industry-leading 1 α -based LPDDR5X solidifies its product innovation and leadership in the mobile ecosystem, following industry-first launches for [LPDDR5, 1 \$\alpha\$ -based LPDDR4X, 176-layer NAND-based UFS 3.1](#) and [uMCP5 solutions](#). This most recent milestone follows quickly on the heels of [JEDEC's July release of the LPDDR5X extension](#) to LPDDR5, created to offer higher bandwidth and memory speed for enhanced 5G communication and performance while still conserving power. Micron has validated samples supporting data rates up to 7.5 Gb/s, with samples supporting data rates up to 8.533 Gb/s to follow. Peak LPDDR5X speeds of 8.533 Gb/s deliver up to 33% faster performance¹ than previous-generation LPDDR5.

"Innovating cutting-edge smartphone experiences requires memory technology built to address the massive bandwidth demands of the mobile market," said Raj Talluri, senior vice president and general manager of Micron's Mobile Business Unit. "Our collaboration with MediaTek to validate the world's most advanced mobile memory empowers the ecosystem to deliver the next wave of rich mobile features enhanced by 5G and AI."

These new levels of memory performance are increasingly critical for feeding massive amounts of data to the multiple heterogeneous processing engines built into today's complex smartphone systems on chips (SoCs). As mobile workloads grow more sophisticated, these advanced SoCs rely on high data rates to ensure seamless multitasking across applications and to enable AI inferencing, augmented and virtual reality, and immersive graphics.

"Our mobile customers are increasingly demanding higher bandwidth to support complex, data-hungry applications built for the 5G era. With its superfast mobile memory, Micron's LPDDR5X squarely meets this challenge for flagship devices," said JC Hsu, corporate vice president and general manager of the Wireless Communications Business Unit at MediaTek. "The Dimensity 9000 will be the first to support this critical advancement of LPDDR5X, giving carriers and device-makers the capabilities they need to deliver incredible 5G experiences at the flagship tier."

Micron is collaborating with the world's leading smartphone manufacturers and chipset vendors to enable ecosystem innovation with LPDDR5X. As part of this effort, MediaTek's Dimensity 9000 mobile SoC will be the first to support LPDDR5X memory, delivering industry-leading peak bandwidth of 60 gigabytes per second for high-end and flagship smartphones.² The new chipset is part of [MediaTek's Dimensity 5G SoC](#) portfolio, which combines the latest connectivity, multimedia, AI and imaging innovations to unlock the possibilities of 5G for consumers around the globe. Micron's delivery of LPDDR5X to partners combined with MediaTek's validation paves a path to broad market adoption.

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.

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¹ Comparing peak data rates for LPDDR5X (8.533 Gbps) to previous-generation LPDDR5 (6.4 Gbps) DRAM based on published JEDEC specifications

² Peak bandwidth calculation based on MediaTek system bandwidth of 7.5 Gb/s per pin multiplied by 64 pins and converted to gigabytes (8 bits per byte)