

Samsung now mass producing industry's fastest embedded memory

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Samsung Electronics announced today that it is mass producing the world's fastest embedded memory – the industry's first eMMC 5.0 devices – in 16 gigabyte (GB), 32GB and 64GB densities for next-generation smartphones and tablets.

Featuring an interface speed of 400 megabytes per second (MB/s), the lightning-fast eMMC PRO memory provides exceptionally fast application booting and loading. The chips will enable much faster multi-tasking, web-browsing, application downloading and file transfers, as

well as high-definition video capture and playback, and are highly responsive to running large-file gaming and productivity applications.

"With timely mass production of our ultra-fast eMMC PRO line-up offering a more than 10X performance increase over external [memory cards](#), Samsung will accelerate the spread of high-end mobile devices as the market for devices with larger screens and more multimedia functionality expands even further," said KyongMoo Mang, vice president of memory marketing. "We will continue to provide advanced mobile memory solutions that allow users to enjoy high definition, large-volume content seamlessly, as we also strengthen technological cooperation with mobile devices manufacturers."

Samsung's eMMC PRO [memory chips](#), being produced in 16, 32 and 64GB versions, are based on Samsung 64Gb 10nm class NAND [flash technology](#).

The new Samsung chips support the eMMC version 5.0 standard now nearing completion at JEDEC – the largest standards-setting body in the microelectronics industry.

In 32GB and 64GB densities, the new [memory solution](#) has a random read speed of 7000 IOPS (inputs/outputs per second), and a random write speed of 7000 IOPS (in cache on mode, without host overhead). In addition, these chips read sequentially at 250MB/s and write sequentially at 90MB/s.

As the fastest eMMC devices at more than 10 times the speed of a class 10 [external memory](#) card (which reads at 24MB/s and writes at 12MB/s), the new mobile memory greatly enhances the movement from one application to another in multitasking activities.

Samsung's 16GB, 32GB and 64GB eMMC 5.0 devices come in

11.5x13mm packages, making them ideal for mobile devices where space on the printed circuit board is extremely limited.

The eMMC PRO 5.0 chips come with Samsung's own intelligent NAND controller and firmware to provide a vertically integrated mobile DRAM solution.

Provided by Samsung Electronics

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