



Samsung Introduces Industry's First 256-Gigabyte Universal Flash Storage, for High-end Mobile Devices

Samsung's new UFS memory accelerates mobile innovation with data storage that's faster than a SATA-based SSD for PCs

SEOUL, Korea – February 25, 2016 – Samsung Electronics Co., Ltd., the world leader in advanced memory technology, announced today that it is now mass producing the industry's first 256-gigabyte (GB) embedded memory based on the Universal Flash Storage (UFS) 2.0 standard, for next-generation high-end mobile devices. The newly introduced embedded memory features outstanding performance for mobile devices that exceeds that of a typical SATA-based SSD for PCs.

"By providing high-density UFS memory that is nearly twice as fast as a SATA SSD for PCs, we will contribute to a paradigm shift within the mobile data storage market," said Joo Sun Choi, Executive Vice President, Memory Sales and Marketing, Samsung Electronics. "We are determined to push the competitive edge in premium storage line-ups – OEM NVMe SSDs, external SSDs, and UFS – by moving aggressively to enhance performance and capacity in all three markets."

The new Samsung UFS memory satisfies needs for ultra-fast speed, large data capacity and compact chip size in high-end smartphones. It is based on the company's most advanced V-NAND flash memory chips and a specially-designed high-performance controller. The UFS memory handles up to 45,000 and 40,000 input/output operations per second (IOPS) for random reading and writing respectively, over two times faster than the 19,000 and 14,000 IOPS of the previous generation of UFS memory.

For sequential reading, the 256GB UFS takes advantage of two lanes of data transfer to move data at up to 850MB/s, which is nearly twice as fast as a typical SATA-based SSD used in PCs. In terms of sequential writing, it supports up to 260MB/s, which is approximately three times faster than high-performance external micro SD cards.

As a result, the new 256GB UFS memory is capable of supporting seamless Ultra HD video playback and multitasking functionality on large-screen mobile devices, such as watching 4K Ultra HD movies on a split screen, while searching image files or downloading video clips. Its 256GB capacity also allows an unmatched amount of data storage on the mobile device itself. For example, one 256GB UFS chip can store about 47 full HD movies, therefore enabling much greater flexibility in handheld consumer electronics.

In addition, with the advent of next-generation smartphones that support the USB 3.0 interface, users will be able to transfer data much faster between mobile devices. The USB 3.0 interface will allow sending a 5GB-equivalent Full-HD video clip (average 90-min. movie size) in 12 seconds. Within this new storage environment, mobile users will get to take full advantage of the performance benefits of Samsung's latest UFS memory.

Using Samsung's advanced memory technology, the new UFS memory chips are extremely compact, even smaller than an external micro SD card, giving greater flexibility to smartphone designers.

Samsung announced availability of its 128GB UFS memory in February of last year. In only a year, it has doubled the capacity and speed of UFS memory, which should spur further growth of the mobile marketplace. Samsung will extend its premium storage line-ups that are based on its advanced V-NAND flash memory including the new 256GB UFS, and increase their production volume in line with increases in global demand.

About Samsung Electronics Co., Ltd.

Samsung Electronics Co., Ltd. inspires the world and shapes the future with transformative ideas and technologies that redefine the worlds of TVs, smartphones, wearable devices, tablets, cameras, digital appliances, printers, medical equipment, network systems, and semiconductor and LED solutions. We are also leading in the Internet of Things space with the open platform SmartThings, our broad range of smart devices, and through proactive cross-industry collaboration. We employ 319,000 people across 84 countries with annual sales of US \$196 billion. To discover more, and for the latest news, feature articles and press material, please visit the Samsung Newsroom at news.samsung.com.

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