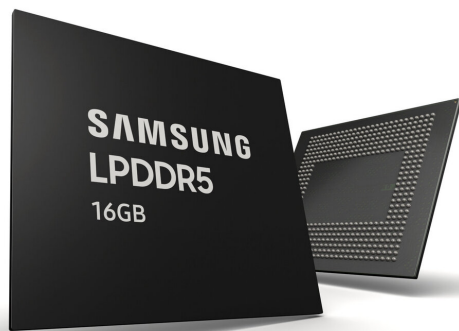


Samsung begins mass production of 16Gb LPDDR5 memory chips on world's largest semiconductor line

1 September 2020, by Bob Yirka



Credit: Samsung

Samsung Electronics has announced on its blog page that the company has begun mass production of its 16Gb LPDDR5 mobile memory chips on a new production line. In its announcement, the company claims that the production process is the first to use extreme ultraviolet (EUV) technology. In investing so much into their new production facility, the company is also making it clear to consumers and competitors alike that they believe consumers will soon be clamoring for more memory capacity in their mobile devices.

The new production line was built onto the Pyeongtaek facility located a few hundred miles south of Seoul. They have named it Pyeongtaek Line 2, and it is now the largest semiconductor production line ever built. It covers more than 128,900 square meters of land, which, Samsung notes, adds up to approximately 16 soccer fields. The [company](#) also notes that the new production line will be used to develop the company's most

advanced semiconductor technology, starting with 16Gb LPDDR5 mobile [memory](#) chips. The dram will be used, as its name implies, in [mobile devices](#). Samsung claims the memory chips will have the highest memory performance available today in addition to the largest capacity. They anticipate a need for such chips as consumers transition to 5G phones which will also have AI capabilities—both of which are expected to grab a lot of memory.

Samsung notes that their new line will also be the first to utilize EUV as part of the manufacturing process, a process that involves both lasers and light-sensitive chemicals to etch circuitry onto a silicon base. They claim that it will provide for faster production speeds and higher capacity throughput. They also note that LPDDR5 is approximately 16 percent faster than the 12 Gb LPDDR5 currently used in most high-end phones. It operates at 6,400 Mb/s. The company claims such speed will allow for the transfer of 10 5GB-sized full-HD movies in just one second. They also note that the memory chips are 30 percent thinner than their predecessors, which will allow them to be used in both standard and foldable devices. Using them in either type of device should allow for thinner devices or more space for batteries or other add-ons, such as cameras.

More information: Samsung: news.samsung.com/global/samsun...t-semiconductor-line

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