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Toshiba Unveils Its First MLC Solid-State Drive

The company has switched to the multi-level cell technology

Toshiba has just announced that it had started shipping 128 GB solid state drives built with the multi-level cell NAND flash technology, while other versions are still in the works. The newly released drives are far from the conventional 2.5-inch storage units, as they come in a 15 gram embedded module form factor. Toshiba's MLC drive can reach data transfer rates of 100MB/second read and 40MB/second write, thanks to the built-in SATA-II interface. The MLC technology is less reliable than the single-level cell approach, and, in order to prevent the NAND flash from prematurely wearing out, Toshiba included an innovative MLC controller that spreads the information across all the NAND cells. According to Scott Nelson, vice president, memory for Toshiba America Electronics Components, the first batch of multi-level cell solid-state drives will be used by Toshiba itself inside its PC product offerings. Recently, Toshiba started shipping an updated version of its [Dynabook SS R1 notebook](#), that comes with 128 GB of solid-state drive, and its release might be the beginning of a new SSD-based notebook line. "We believe that Toshiba MLC SSDs offer the right mix of cost and performance to satisfy today's demanding storage requirements for notebooks and ultra mobile PCs." Toshiba is also working on a 64 GB embedded module MLC NAND drive, that will enter mass production shortly. According to the company, the multi-level cell solid-state drives will be available in both 1.8 and 2.5-inch form factors, and will start shipping in sampling units in April. NAND flash analysts claim that the advent of the MLC technology will have a dramatic impact over the market. The industry is expected to either sink as a result of the estimated price drops, or to get back on track thanks to the increasing demand in MLC-based products.