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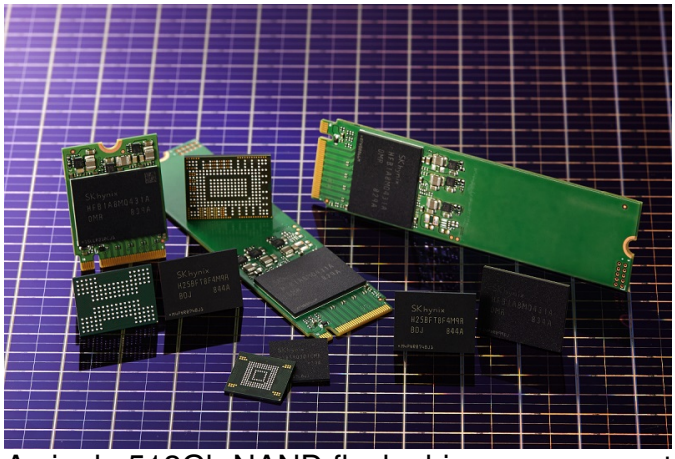
SK Hynix presents the first 96-layer 512Gb CTF-based 4D NAND flash based on TLC (Triple-Level Cell) arrays using a 3D CTF (Charge Trap Flash) design paired with PUC (Periphery Under Cell) technology.



A single 512Gb NAND flash chip can represent up to 64GB of storage. As the company puts it, the combination of 3D CTF with PUC is an industry first, and allows for the finest performance and productivity yet.

The 4D NAND chip also reduces chip size by 30% and increases bit productivity per wafer by 49% compared to current 72-layer 512Gb 3D NAND, and offers 30% higher write and 25% higher read performance. Data bandwidth clocks at 64KB, and a multiple gate insulator architecture allows for data I/O speeds reaching 1200Mbps at 1.2V operation power.

The technology will allow SK Hynix to build 1TB client SSDs equipped with own controllers and firmware within the year. Enterprise SSDs based on 96-layer 512Gb 4D NAND flash should follow on H2 2019. The mobile market will see UFS 3.0 in H1 2019, and the company will rollout ultra-high density 96-layer 1Tb TLC and QLC (Quad-Level Cell) in 2019.

“This 96-Layer CTF-based 4D NAND, with the industry’s top cost competitiveness and performance, will become a milestone in the company’s NAND Flash business, as a platform in developing future products,” SK Hynix says. “The company plans to start the early stage mass production of it within this year and further expand the production in M15 to actively respond to a variety of clients."

Go SK Hynix Launches the World's First CTF-based 4D NAND Flash (96-Layer 512Gb TLC)