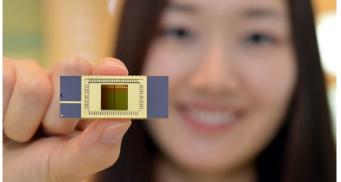
Samsung Produces 3D Vertical NAND

Written by Marco Attard 07 August 2013

Samsung claims it "breaks through the current scaling limit for existing NAND flash technology" as it kicks off mass production of the first 3D Vertical NAND (V-NAND) flash memory.



According to the company V-NAND offers 128Gb density in a single chip through the use of a proprietary vertical cell structure based on 3D Charge Trap Flash (CTF) technology and the vertical interconnect process.

The combination provides twice the scaling of 20nm-class planar NAND flash, beating the scaling limits of traditional NAND flash products caused by cell-to-cell interference. The "3D" structure stacks cell layers vertically, using an etching technology (aka the "vertical interconnect process") to connect layers electronically by punching holes from highest to bottom layers.

Samsung does not announce actual products making use of 3D V-NAND flash as yet, but the company says it will find future consumer and enterprise applications (such as embedded NAND storage and SSDs) soon enough.

Go Samsung Starts Mass Producing Industry's First 3D Vertical NAND Flash