

## The First Consumer SSD With 3D V-NAND

Written by Marco Attard  
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Samsung launches the 850 Pro SSD range, the first packing the company's [Vertical NAND \(V-NAND\) technology](#) to bring boosts in performance, density and durability when compared to normal SSDs.



V-NAND technology stacks 32 cell layers on top of each other into "3D" structure stacks, using a "vertical interconnect process" to connect layers electronically by punching holes from highest to bottom layers.

The result? Samsung claims 850 Pro drives offer twice the durability of regular SSDs (it even offers a 10-year warranty), a 30% decrease in power consumption (or 93% when in die mode) and sequential read/write speeds of up to 550MBps/520MBps.

Reviewers seem to agree, too-- for instance [Tom's Hardware](#) describes the drive as "fastest of all time", if one restricted by its SATA 6GB/s interface.

Also included in the drive are Self-Encrypting Drive (SED) technology, Dynamic Thermal Guard protection and software such as Install Navigator and the Magician monitor.

The 850 Pro SSD will be available later on July in 125GB, 256GB, 512GB and 1TB capacities.

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