Samsung stacks memory chips on top of each other in its new 8GB DIMM and increases memory density by 50% (compared to conventional DIMM technology)



The new registered or buffered (RDIMM) product is based on Samsung's own Green DDR3 DRAM and 40nm circuitry.

The industry refers to the process as through silicon via (TSV). It creates vertical micron-sized holes through the chip silicon (instead of just horizontal) to create a denser architecture.

Samsung says the technology saves up to 40% of power consumption, and will apply it to memory with 30nm-class (and smaller) circuitry.

The memory is aimed for high-density, high-performance server systems

The company says its major system-making partners are already successfully testing the new RDIMM product. It is expected to start shipping in 2011's second half.

Go Samsung Readies Memory with Chip Stacking Technology

## **3D Memory Stacking From Samsung**

Written by Marco Attard 10 December 2010