

# Western Digital Acquires Virident



## OBJECTIVE ANALYSIS SEMICONDUCTOR MARKET RESEARCH



VIRIDENT

### Whopping \$685 Million Purchase Price

Disk drive maker Western Digital Corp announced on 9 September 2013 that it is buying Virident Systems, Inc. which will be merged into HGST, a wholly-owned subsidiary of Western Digital.. Virident will be acquired for approximately \$685 million in cash, consisting of about \$645 million in enterprise value, net of Virident's estimated cash balance.

Virident believes its integration with HGST will strengthen its marketing by leveraging HGST's strong brand, extensive channel relationships, and global customer reach.

#### Who is Virident?

Virident is a small independent manufacturer of very high end PCIe SSDs. The company has, from the beginning, had a relentless focus on consistency of performance, which is one aspect of SSDs that has received very little attention until recently.

Virident started out as a manufacturer of two high-performance dedicated appliances, one for running MySQL database software, and the other to support the open-source memcached storage network caching software. Virident and competitor Schooner both entered this market at the same time. Both found that data centers were moving away from dedicated hardware and toward virtualization, forcing both companies to revise their plans. Schooner focused on software optimization and was recently acquired by SanDisk. Virident migrated to NAND flash-based PCIe SSDs similar to, but faster than, those pioneered by Fusion-io. It was able to do this because its original appliances were based on NOR flash, a very badly-behaved technology when it comes to write cycles. Virident applied its superior understanding of flash write cycle management to NAND and achieved superior results.

Until late 2012 Virident had a strong technology focus. Although it won accolades at the most extreme computing powerhouses, like the San Diego Supercomputing Center, it never focused enough attention on selling the product to gain broad acceptance. Almost exactly one year ago Mike Gustafson was hired as Virident's CEO and started putting in place what he called a "Rock Star Management Team." This organization of seasoned storage sector sales and marketing leaders were chartered to bring real revenues in the front door and to achieve sales in proportion to Virident's stellar technology.

#### About That \$685 Million Purchase Price...

Given the fact that Fusion-io dominates the PCIe SSD market it is surprising to

see Virident's purchase price at exactly half of Fusion-io's current \$1.36 billion market capitalization. This is especially remarkable given how much stronger Fusion-io's sales performance is in the market it created.

While Objective Analysis does not perform company valuations for acquisitions, Western Digital must have arrived at this number through careful consideration of the future sales outlook for Virident's products, and this was probably enabled through the work of Gustafson's Rock Stars. Virident lists stellar OEMs as partners who resell the Virident product, and the company has had good success at LinkedIn.

### **Western Digital's Plans Now Come into Focus**

Now that Western Digital has acquired HGST, the leader in SAS-interface SSDs, and is seeking regulatory approval on its pending acquisition of sTec, the addition of Virident will round out its enterprise SSD hardware offering. Although sTec has faded in recent times, the company's early dominance of the Fibre Channel SSD market gave sTec a strong background in the peculiarities of designing NAND flash SSDs and a deep appreciation for the OEM qualification process in enterprise storage. Add in Virident's strengths in making NAND flash perform consistently at high speeds and you have a well-rounded recipe for SSD excellence which we expect to help Western Digital accomplish its plans to dominate this space.

One question remains about Virident's relationship with Seagate Technology. In January of this year Seagate invested \$40 million in Virident and began shipping Virident PCIe SSDs to Seagate customers. Since Seagate and Western Digital are the top two of only three remaining hard disk drive manufacturers, it is clear that the Seagate/Virident relationship must come to an end. Yet, Seagate has no other PCIe SSD offering. Objective Analysis anticipates issuing an Alert at some future date with news of how Seagate will address this problem. It is very likely to come in the form of a similar acquisition.

Objective Analysis has published a report: [\*\*\*The Enterprise SSD: Technologies and Markets\*\*\*](#), which outlines the enterprise SSD market and profiles its players, forecasting unit shipments and revenues over the following five years. The report can be purchased for immediate download from the Objective Analysis website.

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Jim Handy

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PO Box 440

Los Gatos, CA 95031-0440

USA

+1 (408) 356-2549