$1.1 Billion Deal Merges Strengths of Two Market Leaders

On June 16, 2014, SanDisk and Fusion-io announced an agreement under which SanDisk will acquire Fusion-io for approximately $1.1 billion in cash, net of cash assumed. The transaction has been approved by the boards of directors of both companies, and is subject to standard closing conditions, including clearance from regulatory authorities and the completion of a tender offer. The companies expect the transaction to close in the third quarter of 2014..

SanDisk & SSDs

SanDisk has been in the SSD market since the company's inception 26 years ago with the introduction of NOR flash-based product with an IDE (Parallel ATA) interface in the late 1980s. Another SanDisk acquisition, msystems, made a good business of selling flash-based SSDs to the military for prices as high as $70,000 by the late 1990s.

After making a big push to promote SSDs in the PC in 2004, SanDisk finally came to the understanding that consumers don't see the value in spending a few hundred additional dollars for fast boot. Meanwhile, several start-ups started to recognize that flash in the enterprise was an easy sale, since every dollar spent on flash was more than offset by measurable revenue increases or cost savings.

By 2011 SanDisk had learned that the enterprise SSD market was undergoing greater growth than its client counterpart, and it acquired Pliant Technology, a burgeoning SAS SSD start-up founded by SAS experts from the HDD business. This was followed by the acquisition of FlashSoft, a caching software start-up, then SMART Storage Systems, the SSD arm of SMART Modular. SMART had gained an excellent position in the SSD business first by acquiring an established SSD producer named Adtron, then by performing very solid execution while tapping into the parent company's well-cultivated relationships with leading OEMs. SMART was also the first company to license Diablo technology's Memory Channel Storage which SMART branded as its ULLtraDIMM.

Fusion-io: More Strategy than SSDs

Very few people seem to understand Fusion-io's strategy, and this has helped the company to maintain its market leadership for a number of years when others, like sTec, have lost businesses they created to the competition. Fusion-io wanted to bring the advantages of flash to the computing environment, while other companies focused on making fast flash storage. This difference in perspective

has kept Fusion-io one step ahead of its competition.

While other companies built SSDs that put flash behind a slow HDD interface Fusion-io went a little bit further to use the faster PCIe interface. After this approach gained popularity Fusion-io's competitors decided to make PCIe SSDs, but by that time Fusion-io had learned that customers wanted to use shared storage so it introduced caching software. The competition later learned that this was also important, and started to roll out caching software, but by that time Fusion-io was optimizing software stacks to eliminate delays that were unimportant to HDD-based systems, but that cut the speed of flash accesses in half. So far Fusion-io's competition hasn't started to compete in this area, but that hasn't caused the company to stop and rest - it has gone on to roll out software that allows PCIe flash to mimic system DRAM memory, atomic I/O support that halves SSD accesses in high-reliability environments, and real-time compression and decompression for cost, speed, and reliability benefits. By continuing to address needs that other companies don't yet understand Fusion-io has thrown hurdles in their competitors' paths while it creates a market in which Fusion-io alone participates, allowing the company to benefit from premium prices.

What Does This Mean for SanDisk?
As with many of its competitors, SanDisk was trying to catch up to Fusion-io's 2009 product offerings by supplying PCIe SSDs from Pliant and caching software from FlashSoft. This approach put SanDisk behind Fusion-io along with its competitors forcing all of them to compete on cost. Now, SanDisk will enjoy the leadership that Fusion-io had, providing the higher margins available to market leaders.

SanDisk will be able to grow this business using its fine-tuned manufacturing machine to take Fusion-io's business to heights it previously could not reach. We would expect for SanDisk to port Fusion-io's software products to other types of storage to accelerate the performance of systems based on all of SanDisk enterprise SSDs, whether PCIe, or SATA, SAS, or even the DDR3-based ULLtraDIMM. Although Fusion-io limited its hardware offerings to PCIe cards to maintain focus, SanDisk is already in volume production of all SSD form factors, and Fusion-io's software will enhance the performance of any of these.

What Does This Mean for Fusion-io?
Fusion-io has been a smaller consumer of NAND flash, which raises some questions about ongoing supply as the market tightens, which it continues to do. With this acquisition Fusion-io will have guaranteed flash supply at a lower cost than it could purchase on the open market, allowing margins to increase. The abundant supply of flash and SanDisk's strong finances will appease any concerns that OEMs, system inegrators, and end users might have had about the stability of Fusion-io as a source. This has been a limitation in the past, causing Fusion-io to become overly dependent on a handful of larger customers, a state of affairs that worried many investors away from purchasing its stock.

We have heard from SanDisk employees that started off at SMART Storage and Pliant, two of SanDisk's former acquisitions, that SanDisk's engineers have an amazing understanding of NAND flash and how to control it. This expertise will benefit Fusion-io as well as it has benefited these earlier acquisitions.

Is This Good for Fusion-io's Customers?

OEMs who have been reluctant to use Fusion-io's products are likely to gain comfort from the backing that SanDisk brings to the company. Objective Analysis anticipates that this acquisition will allow Fusion-io product revenues to grow significantly faster than was previously possible. To the customers it will appear to be a stronger version of the same company, with the same products and the same performance, but with a wider portfolio.

How Will Investors Fare?

Objective Analysis believes that Fusion-io was limited by the company's small size and certain other questionable aspects of its business, including its misunderstood strategy (explained above) and its prospective difficulties in sourcing flash chips. In this vein we expect the SanDisk acquisition to add value to Fusion-io without detracting from SanDisk's performance. During a conference call SanDisk CFO Judy Bruner stated that management expects the deal to generate approximately $50M of pre-tax synergies by the second half of next year.

What Does This Mean to the Competition?

In this single move SanDisk has acquired a leadership position that other SSD and HDD makers have been trying to catch up to. Fusion-io has a unique vision about where flash belongs in the computing environment, and has been able to use that vision to build a business that continually sets the company apart. With this acquisition all of that leadership falls into SanDisk's hands.

It will be very challenging for other companies to catch up even if they stop playing the game the way they have in the past (by copying Fusion-io products after they have gained acceptance) and connect with customers to learn what are the most pressing issues yet to be addressed.

Objective Analysis sees this move as one that will create a large gap between SanDisk and other enterprise SSD makers which is likely to remain a SanDisk advantage for a number of years.

Objective Analysis has recently issued a report exploring the enterprise SSD market which can be purchased for immediate download from our website.

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