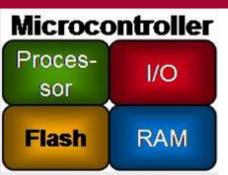
# **Microchip to Acquire SST**



# OBJECTIVE ANALYSIS SEMICONDUCTOR MARKET RESEARCH



### Microchip takes SST in a Flash of Cash

On Feb 3, 2010 Microchip Technology announced plans to acquire Silicon Storage Technology (SST). Under an agreement between the two companies Microchip will acquire all of SST's outstanding common stock for \$2.85 per share in cash for a total value of \$275 million. When the company's \$180 million in cash and liquid securities is considered, the effective purchase price is closer to \$95 million.

#### MCHP, MCU, Memory, Manfacturing, Money

Microchip, with \$250 million in revenues last quarter, is one of the healthiest microcontroller (MCU) vendors in the semiconductor market, and as close to a pure-play as they come at this size. Non-GAAP gross margins for last quarter were 59%, and with \$1.44 billion in current assets, they have cash in hand and continue to pay good dividends at a time when the semiconductor market is suffering along with the global economy. Part of the reason for this is that Microchip focuses on squeezing high margins from relatively-low-technology but high-value products with carefully-managed low-cost manufacturing, leaving the less profitable segments to their competition. Management is proud that the company has participated in the memory business for 20 years, selling EEPROMs, and has never lost money -- a feat it wants to duplicate with NOR flash.

SST is a fabless manufacturer of commodity NOR flash chips and other devices such as 8051 MCUs that tap into SST's flash technology expertise. The company's "SuperFlash" technology is unique since it can be manufactured using a logic process, so it is attractive as a component in MCUs and application-specific integrated circuits (ASICs). SST partners with foundries, allowing the foundries to offer SuperFlash to other customers for use in ASICs and MCUs under license from SST, while SST retains exclusive rights to produce discrete NOR flash chips based on this technology. Flash chips make up 60-70% of the company's \$213 million annual revenues. SST collects about 15% of the company's revenue stream as royalties for licensees' ASICs and MCUs. This business is protected by a portfolio of 360 patents with 180 pending. While Microchip sells to very broad markets, the bulk of SST's revenues are drawn from the consumer electronics and PC markets.

#### A Pick-up Game

Microchip has been on the prowl for beneficial acquisitions for the last couple years. The company has recently been taking advantage of a depressed market to buy troubled companies that have technologies that can boost Microchip's primary businesses at a time when market capitalization is at a low point. Microchip has used its strong cash position to shop for bargains, landing SST as the fifth acquisition it has made in the past 1½ years.

Recently Microchip acquired privately-held ZeroG, a fabless manufacturer of low power Wi-Fi chips, technology that is starting to be poised alongside higher-end MCU-based applications. Management states that recent acquisitions have been too small to impact the company's dividend distributions, and each acquisition will help Microchip "elbow out" a growing part of their competitors' MCU business.

#### SST Brings New Flash to Microchip's Mix

Microchip has its eye on some of SST's existing businesses along with the strong flash

memory technology. Other, low-profit or uninteresting businesses are likely to be closed, sold, or spun off.

Microchip will certainly tap into SST's SuperFlash, to collect a tidy highly-profitable royalty stream and to use the technology as it already does (to some extent) in its own products. SuperFlash is described as being less costly than Microchip's internal flash process, and since it can be produced using logic processes with geometries as small as 130nm, it is most likely to be used for MCUs containing large memories. Microchip's existing flash process will be continued in the company's own larger-geometry fabs for applications that need its higher reliability.

As for SST's present NOR Flash chip business, Microchip intends to "rationalize" the commodity business -- limiting the company's participation to the profitable segments, letting competitors squabble over low margin portions. Microchip has utilized this process effectively in many other areas of its business including EEPROMs and we expect them to be successful with it in NOR Flash. Spansion is trying similar moves to improve its health as it wends its way through bankruptcy proceedings.

Microchip believes that SST SuperFlash is used in over 4 billion MCUs annually. The company plans to continue to fund SuperFlash R&D and to grow the licensing business. The continued, if not stepped-up, licensing of SuperFlash to competitors of Microchip's key microcontroller business has some risk. One might think Microchip should keep SuperFlash technology from its direct competitors. However, the company believes the 6-12 month lead it will have on advancements in the technology will give it plenty of advantage over other MCU vendors. Microchip is confident the strengths it has with numerous other factors on which customers base their MCU choices will give it a firm leg up in larger-memory MCUs. This is a bold stance, but one that Microchip should be able to accomplish, yielding a high-profit royalty stream regardless.

#### **Odds and Ends**

There are number of other SST businesses, some with possibilities, others with a less-rosy outlook. The 8051 MCUs that SST sells are a very old architecture, one that other companies have failed to find worthy of real investment. Microchip will probably milk the existing business but not invest any further into tired if well-known designs. Efforts to change customers over to Microchip's healthy PIC MCUs will be more rewarding.

Building and selling consumer products like flash drives will probably cease since it has little benefit to the rest of Microchip's business and addresses a completely different customer base. Microchip is likely to keep SST's NAND flash controller technology which could be handy for use within MCUs. The bits of RF that SST deals in will be cherry-picked to fit with Microchip's intentions in wireless markets.

SST also has a very highly developed worldwide sales team with very good penetration of China and Taiwan. The geographic footprint could be a bonus for Microchip, where it's not redundant, although the customer base and training may not translate well for MCU products. There are possibilities that the foundry relationships SST established could be beneficial to Microchip. However, the no-nonsense management styles of the new executives may be a bit of an adjustment for the old SST.

#### Good Deal

All in all, the absorption of SST by Microchip looks like a good move -- and a good deal. It should add some sparkle to Microchip's portfolio without incurring much cost. Competitors should take note, but the move is not big enough that a tiger team need be assembled to plan a counter-attack. The acquisition of ZeroG, on the other hand, should have already scrambled the troops.

#### **For More Information**

Tom Starnes is uniquely well-versed in the MCU market and has been following Microchip for the last two decades. Jim Handy is a renowned memory analyst with a unique understanding of SST. Those wanting more information are welcome to contact either using the information below.

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