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## Semico IPI Reveals Clear-Cut Upward Trend for 2006

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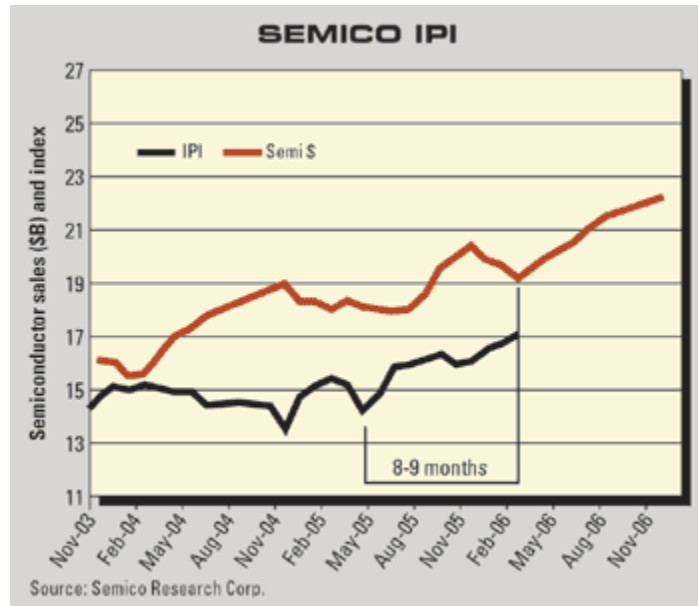
There are a lot of positive signs for the semiconductor industry for 2006 and into 2007. At the end of 2005, there was a strong economic environment as well as healthy end markets, and the semiconductor industry had low inventories and high capacity utilization rates. In spite of these strengths, many market observers and industry leaders were skeptical of [Semico](#)'s optimistic forecast.

As we enter into the second quarter, the market is clearly gaining a head of steam. With only a few exceptions, first-quarter financial results have exceeded expectations both for chip and semiconductor equipment companies. Many companies are reporting all-time record sales and profits. Orders are strong for the second quarter, and the consumer continues to buy electronics.

Crude oil prices continue to be volatile, but the higher prices have been taken in stride and appear to have had little short-term economic impact. Additionally, the markets that consume semiconductor devices, such as cell phones, notebook PCs, MP3 players and HDTVs, all continue to exhibit strong demand. Capacity expansion has been on the conservative side. Semico's January 2006 capex spending forecast of 12% growth in 2006 looks right on track and, following Semico's lead, other observers are now upgrading their views.

With capacity utilization being high, we see a significant push to focus on manufacturing yields in order to supply the industry with as many chips as possible out of the current factories. With tight capacity and some parts on allocation, die shrinks and process improvements to increase productivity have been emphasized and are taking top priority.

Capacity shortages do not only affect wafer fabs; there is a similar situation in the back end with test and assembly. Low profits and overcapacity that has occurred over several years has led to under-investment. As a result, there are now real shortages in the contract test assembly business creating challenges to the supply chain.



This environment creates a situation that is characterized as a seller's market vs. a buyer's market. We are seeing longer lead times, with stable to rising prices on many devices. This is something that the semiconductor industry has not enjoyed in several years!

Adding to Semico's optimism is the direction of Semico's inflection point indicator (IPI). The IPI has risen from 14.2 in April 2005 to an all-time high of 17.1 in February 2006. This is a clear-cut upward trend, resulting from the fact that the IPI registered an increase in nine out of the last 10 months. Given that the Semico IPI has proven to accurately forecast the worldwide semiconductor market 8-9 months in advance, this indicates strength in the market between February and November 2006. The second and third quarters will be particularly strong, and each month is forecast to show growth year-over-year. Overall, Semico forecasts worldwide semiconductor revenues will increase 17.3% in 2006.

We expect the communications market will be a key driver for the industry. New wireless technologies, including 802.11n, WiMAX and UWB, will create new demand. Cell phones, which have a substantial impact on overall semiconductor sales, continue to gain traction, expanding on a global basis. Nokia raised its annual growth projections for overall mobile devices from 10% to 15%, which certainly bodes well for the market. Their new outlook now exceeds our 13.3% CAGR forecast for the next several years. There is also a shift in the market demand toward a greater percentage of higher-end phones. These phones enjoy a significantly richer semiconductor bill of materials as they support audio, video and computing features. We continue to tout the consumer as a key driver for the industry, as the digital home moves closer to becoming a reality. The expansion of the consumer's digital library is a key catalyst in the development of home networks and storage. This is the first step to the reality of a digital home.

The bottom line is that there are plenty of signs to support an overall forecast of 17.3%. Do we see anything on the horizon that could undercut this? Recently, there has been a softening of prices in the NAND flash and DRAM markets. While unit shipments continue to be on track, the downside of falling prices is a direct hit on total revenue shipments. If memory prices continue to fall at the current rate, it could result in a shortfall. The effect would be a revision of total worldwide semiconductor revenue shipment growth to ~13.0%.