



Executive Summary

Semiconductor Quarterly Report First Quarter, 2011

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INTRODUCTION

The US-Taiwan Business Council is committed to providing our members with tactical and strategic advice on how to succeed in the Taiwan market. As part of a suite of information products distributed to our members, the Council publishes several analysis reports each year. These reports are published each quarter, with an expanded report in the fourth quarter that covers the entire previous year.

The Semiconductor report focuses on the semiconductor industry as it relates to Taiwan, China, and the U.S., and provides up-to-date analysis of developments during each quarter. Each report also contains contact information valuable in initiating and maintaining a relationship with Taiwan private and government entities, as well as other useful information including trend charts and a glossary.

The US-Taiwan Business Council's Semiconductor Report has been published since the first quarter of 2002. Although these reports are distributed exclusively to members and to U.S. government employees, this executive summary provides some insight into the focus and contents of the report.

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**QUARTERLY SEMICONDUCTOR ANALYSIS
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In 2010, Japan was the largest market for semiconductor materials at US\$9.20 billion (NT\$269.74 billion), while the materials market in Taiwan reached \$9.11 billion (NT\$267.11 billion), according to a March 28 report by industry association Semiconductor Equipment and Materials International (SEMI). However, Taiwan is poised to become an even more important player in the global semiconductor supply chain this year. According to SEMI, the island may become the world's largest market for semiconductor materials in 2011, expanding to US\$9.6 billion (NT\$281.47 billion) and overtaking Japan.

For the time being, Taiwan's domination of the chip foundry and assembly segments is assured. However, startup companies in China increasingly challenge Taiwan's chip design industry - the second largest in the world behind the U.S. In addition, Taiwan's DRAM industry, which once accounted for about a fifth of the world's production of memory chips, is shrinking as it fails to keep up with larger global rivals. Japan's Elpida Memory and Micron Technology of the U.S. have formed key partnerships in Taiwan's DRAM industry with the aim of taking stakes in the companies and boosting market share.

The Taiwan government is taking steps to improve the competitiveness of the domestic chip industry, which accounts for nearly half of the market capitalization on the Taiwan Stock Exchange (TSE). Taiwan's National Science Council has been developing ties between universities, research organizations and semiconductor companies to develop new technology that enhances Taiwan's technological edge in the chip industry.

For example, Taiwan's National Chip Implementation Center (CIC) has announced a new method of fabricating chips that can cut development time by two-thirds while also cutting cost in half. The new technology stacks chip modules on top of each other, thereby enabling higher density of electronic components on a circuit board, which could lead - among other things - to smaller mobile devices. According to the National Science Council, Taiwan Semiconductor Manufacturing Co. (TSMC) - the island's biggest chipmaker - is a key investment partner in the new technology. TSMC Chairman Morris Chang has called the new technology a paradigm shift.

This quarterly analysis report will examine the factors affecting Taiwan's semiconductor industry during the first quarter of 2011, including the shifting political landscape, new rules and regulations on Chinese investments, and the impact of the Japan quake on Taiwan semiconductor companies. It will also examine closer the outlook for foundries, for the DRAM sector, and for the chip design sector in Taiwan.

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