



Executive Summary

Semiconductor Quarterly Report First Quarter, 2009

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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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The semiconductor industry began to rebound ahead of other sectors in the first quarter of 2009, and that helped spark the current global stock market upturn. Some people believe the strengthening in the market is an indication that demand for electronics devices is rebounding, but that is unlikely. Indeed, current activity resembles an inventory rebuild and not a true increase in consumer demand. We are therefore likely to see more pain in the industry before a true, long term rebound occurs, and more consolidation is necessary to bring that to fruition.

Taipei attempted action toward consolidation in its DRAM sector in March with the formation of Taiwan Memory Company (TMC) - the new entity designed to straighten out issues with bad loans in Taiwan's DRAM industry. On the surface, the government says that it wants TMC to become a technology giant. However, as three out of Taiwan's five major DRAM manufacturers may not be able to make it through this downturn, the company will also ultimately become a vehicle for the consolidation of Taiwan's DRAM industry.

Despite much bad news for the DRAM sector, a few positive trends did emerge for Taiwan in the first quarter of 2009.

The first involves China as a growing market for Taiwan chipmakers. Companies such as MediaTek and VIA Technologies of Taiwan have focused their efforts on China, and their fortunes turned before their U.S. peers. In fact, MediaTek is using China in an effort to become a global chip powerhouse. China's economy has also buffered both Taiwan and U.S. chipmakers from the global downturn. Some aspects of Beijing's stimulus plan - such as subsidies for the buildup of 3G mobile phone networks in China and subsidies to farmers and others for certain technology products like personal computers and LCD TVs - is stimulating demand and boosting chip revenues.

The other major trend is of U.S. technology giants like Microsoft and IBM turning to their Taiwan partners in their attempts to capture market share in China. Microsoft is teaming up with MediaTek, the largest seller of mobile phone chips in China, to create a mobile phone form factor ideally suited for Windows Mobile. The result should be an army of low-cost smartphones based on Microsoft's platform. It's a master stroke for Microsoft and something Google should consider for its Android platform. A key reason MediaTek has done well in China is that the company has built relationships with hundreds of Chinese electronics device makers. MediaTek gives them a complete device design, inside and out, along with its low-cost chips. The Chinese companies can either use the MediaTek design as is or create their own design for the shell of the device, either way it offers them the ability to immediately enter a new product market without any R&D.

The IBM deal is different but still depends on relationships for success. Big Blue teamed up with the world's largest contract electronics manufacturing service company, Hon Hai Precision Industry (known also by its trade name, Foxconn), to sell software in the Greater China (China, Hong Kong, Taiwan, and Macau) region. IBM executives say that the partnership will help them expand more quickly in the area, and they are likely right. Hon Hai runs factories all over China and counts many Japanese and Chinese multinationals as its major customers. Hon Hai can use those existing relationships to market IBM's software throughout Asia.

China isn't the only attraction for major deals with Taiwan companies. Chip giant Intel also inked an agreement in principal to work with Taiwan Semiconductor Manufacturing Company (TSMC). Intel wants to offer its Atom microprocessor cores to TSMC's portfolio of customers for chip designs involving the need for a processing core. Atom is Intel's low-power chip for small devices such as netbooks and, Intel hopes,

smartphones as well. The company is counting on TSMC to help it take on the entire mobile phone chip industry.

This quarterly report will focus first on the state of Taiwan's semiconductor industry as it emerges from the depths of the past three months. Next will be a discussion on the remaking of Taiwan's DRAM industry, and its implications for companies in both the U.S. and Taiwan. The final section will discuss China's growing impact on Taiwan's chip industry as well as new partnerships between U.S. and Taiwan companies aimed at winning in China.

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