



Executive Summary

Taiwan Semiconductor Quarterly Report Second Quarter, 2010

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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 *Taiwan 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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After bottoming out in the first quarter of 2009, the global chip industry is now in its sixth quarter of strong growth. Taiwan companies are prime beneficiaries of this uptrend, and even Taiwan DRAM makers – some of which appeared to be on the brink of bankruptcy a year ago – are rebuilding themselves and branching out into new markets.

Business is about to get even better for Taiwan chipmakers. At the end of June, Taiwan signed the Economic Cooperation Framework Agreement (ECFA) with China. While most provisions of the actual trade agreement will not directly affect chipmakers, it does offer better intellectual property rights protection and government support for cross-Strait business. Taiwan's growing relationship with China will have a huge impact on the direction of its economy going forward, and ECFA is a positive framework from which to start building out that relationship further.

Many in the policy community hope that the ECFA will also come with a so-called peace dividend, arguing that because of the stronger trade ties, Taiwan will not have to worry as much about a potential war with China. In fact, the opposite may be true – particularly as the Taiwan populace has become increasingly uneasy because they fear their economy is being swallowed by China, while also seeing that the current government often gives in to Beijing's requests. Until now, it has seemed that the control Beijing has been trying to exercise over Taiwan was accepted by the Ma Ying-jeou Administration as a tradeoff for the signing of the ECFA. If that is the case, now that an agreement has been reached Taiwan can return to doing as it pleases. But if current domestic trends continue, later this year the ruling Kuomintang (KMT) may find itself on the losing end of key elections for five major Taiwan cities. Moreover, major losses in those elections would undermine the Ma administration's ability to deliver on new initiatives with China. This in turn will frustrate a China anxious to see additional benefits in political and military areas of cross-Strait relations.

The global chip industry has strengthened so much over the past few months that major market watchers have revised upward their global growth forecasts. Taiwan Semiconductor Manufacturing Company (TSMC), for example, has raised its full year chip growth forecast to 30%, from the 22% growth estimate mentioned in the Council's Q1 report, and from the 18% growth figure estimated in early 2010. Market researcher iSuppli also recently raised its 2010 forecast, estimating 35.1% growth in the market and total revenue for 2010 of US\$310.3 billion (NT\$10.02 trillion).

In the pursuit of this huge market, Taiwan chipmakers are projected to invest more than any other country in the world in capital expenditures (capex). An internal survey by the US-Taiwan Business Council (Council) seems to indicate that the largest Taiwan chipmakers are currently forecasting spending US\$14.1 billion (NT\$455.39 billion) on capex this year – higher than current estimates by market researchers and other industry groups. The biggest spender of the group, TSMC, says it's simply trying to keep up with market demand, but its spending tab also serves another purpose – to fend off new competition from deep-pocketed GlobalFoundries.

TSMC's fight with GlobalFoundries will be based on cash and customers. Both companies are able to spend billions on new capital equipment, TSMC because of its size and GlobalFoundries because oil-rich United Arab Emirates (UAE) backs it. In fact, GlobalFoundries is the centerpiece of Abu Dhabi's plans to become a worldwide chip-manufacturing hub, and that is a plan both Taiwan and South Korea need to pay attention to. Taiwan and South Korea both receive the largest share of their chip revenue from chip manufacturing, and that is exactly the industry that Abu Dhabi wants to muscle into. Indeed, the threat Abu Dhabi poses to Taiwan's chip manufacturing industry is graver than the threat GlobalFoundries poses to TSMC alone. The fight will be epic, and with its oil money backing, the UAE will be a formidable competitor.

This quarterly report will detail the state of the industry in the second quarter of 2010, and will examine the prospects for a continued chip boom. The report will then look at ECFA and what impact the trade accord may have on Taiwan's chip and technology sectors. The massive spending plans by chipmakers on the island will be the focus of the next section of the report, followed by a detailed look at the new rivals for both TSMC and Taiwan's chip industry - GlobalFoundries and the UAE.

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