



Executive Summary

Semiconductor Quarterly Report First Quarter, 2008

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 people of Taiwan spoke loud and clear when they cast their ballots for their new president on March 22, 2008. Kuomintang (KMT) candidate Ma Ying-jeou rode to victory on a platform of greater economic cooperation with China, and he will take office as Taiwan's president on May 20.

Given that the KMT controls three-fourths of the legislature in Taiwan, Ma and his new Cabinet team will be able to put his policies in place swiftly – policies that he hopes will usher in a bold new era of trade, investment, and cooperation between Taiwan and China.

The new administration promises far-reaching changes across Taiwan's economy. Investment regulations targeted at slowing technology transfer and the flow of technology investment cash to China will disappear or ease significantly. The president-elect has also promised to open direct air and shipping links across the Taiwan Strait, with flights between Taipei and Shanghai slated to begin as early as July. In addition, Ma has pledged to lift investment caps on Taiwan corporate and individual investments in China.

Most importantly for the semiconductor industry, he has said he will push for China technology investment rules in line with U.S. regulations - a substantial easing compared to the current policies. The changes envisioned would give Taiwan chipmakers much greater access to China, both to build advanced chip factories and for research and development centers.

For Taiwan companies, changed regulations mean that they now stand on the cusp of a new era in which they can start to invest at a more reasonable pace in China. Chip testing and packaging companies, the only chipmakers that really do benefit from lower labor costs, are already active in China. The new regulations will give them more leeway to spread their wings, and other sub-sectors of the industry - including the fabs themselves - will follow.

The foundry chipmakers, particularly Taiwan Semiconductor Manufacturing (TSMC) and United Microelectronics (UMC), will be able to compete against China's foundries on their own turf and using a similar level of technology. The arrival of the industry's two principal players will place additional pressure on China's already challenged domestic players. Semiconductor Manufacturing International Corporation (SMIC) has operated for several years under a "build it and they will come" philosophy when it comes to constructing new wafer fabrication plants, but business has not come in as quickly as expected, leaving the company paying off loans for expensive fab equipment without having secured enough customers. With more Taiwan investment on the way into the market, SMIC, among others, will face greater competition for both customers, technology partners and domestic investors, who will have a broader pool of established companies from which to choose.

These changes **do not** mean, however, that the tide of the entire chip industry will shift from Taiwan to China. Chip fabrication plants are so expensive that low cost labor, proximity to electronics assemblers and other such considerations are less important than in other technology clusters. With the proper tax incentives, any country should be able to compete for the investment of a chip fab, so long as their infrastructure (electricity, water, transportation, etc.) can support it.

There is no doubt that with the aid of Taiwan investment, China's semiconductor industry will grow, and China will certainly become another player in the global chip trade. Nevertheless, at least for the next decade or more China's indigenous chip technology will lag the rest of the world with export controls, poor intellectual property protection and inferior domestic technology all contributing. In addition, while China remains the principal focus of Taiwan's companies, a shift is already underway away from some coastal areas of China and away from the market as a whole as costs there rise. It is noteworthy that leading

Taiwan companies such as Hon Hai (Foxconn) and Formosa Plastics have both made multi-billion dollar commitments to Vietnam in the past 18-24 months, as their cost/benefit analyses of the China market change.

This report, on the first quarter of 2008, will discuss in detail the results of Taiwan's presidential election, and what those results might mean for the long-term economic development of the island and of its semiconductor sector. Next, the report will discuss probable changes in trade between Taiwan and China, including new rules for chipmakers. Finally, the report will key in on how the U.S. and Japan are likely to be affected by the change in power in Taiwan.

REPORT TABLE OF CONTENTS

Table of Contents

| | |
|--|----|
| Letter from the President..... | 1 |
| About the Council | 2 |
| Semiconductor Analysis | 3 |
| Introduction | 3 |
| Taiwan Voters Give China a Chance..... | 4 |
| Changes in U.S.-Taiwan-China Trade after the Inauguration..... | 5 |
| <i>Impact on Chipmakers</i> | 6 |
| What the Taiwan Election Means to the U.S. and Japan..... | 9 |
| Conclusions & Recommendations | 10 |
| Glossary of Terms..... | 11 |
| Taiwan Government Contact Information | 19 |
| United States Government Contact Information | 27 |
| Suggestions of Sources for Semiconductor Industry Information..... | 33 |
| Semiconductor Headlines: First Quarter 2008..... | 35 |
| Appendix | 41 |
| Trend: The Philadelphia Semiconductor Index | 41 |
| Trend: The Taiwan Stock Index | 42 |
| Trend: US\$:NT\$ Exchange Rate..... | 42 |