Executive Summary

Semiconductor Quarterly Report
First Quarter, 2010

©2010 US-Taiwan Business Council
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.

For more information, please contact us directly at the below address, or visit us online at www.us-taiwan.org.

US-Taiwan Business Council
1700 North Moore Street, Suite 1703
Arlington, Virginia 22209

Phone: (703) 465-2930
Fax: (703) 465-2937
Email: Council@us-taiwan.org

www.us-taiwan.org
Taiwan’s chip industry has been a principal beneficiary of the ongoing global semiconductor industry rebound. The strength of the rebound has been uncanny - while doubters have forecast inventory overbuilding and double-booking, such scenarios have not, so far, come to pass. Instead, Taiwan companies have had to expand production to keep pace with orders, and have had to work towards using ever-more advanced technology to keep up with customer designs.

Taiwan chipmakers remain bullish about prospects for their industry this year. Global sales of personal computers, electronics, and mobile phones have continued to sizzle, despite debt woes around the world. There are some fears that the falling value of the Euro, along with debt troubles in the Eurozone, may impact sales, but some executives say that those fears are overblown.

“Greece is a very small part of Europe, and even problems in Portugal would not hurt us,” said Acer CEO Gianfranco Lanci at the company’s first quarter investors conference. Lanci sees Eurozone problems being contained, and believes that people in major European economies will continue to purchase technology gear at the current pace.

Yet Taiwan electronics makers have shifted their strategies this year in response to changes in the global economy. Many companies - including smartphone maker HTC and netbook pioneer Asustek - in the past have launched new products in Europe first, only later bringing them to the U.S. However, they are now taking the opposite track and launching products first in the U.S. to take advantage of the rising dollar, expanding to Europe later in the cycle. While Taiwan chipmakers may remain neutral about such decisions by local electronics makers –many count U.S. chip designers as their primary customers – their fiscal health still remains tied to the vigor of major end-markets.

There have been, so far, no signs of a slowdown in the chip industry. In fact, chip sales continue to expand at such a pace that Taiwan Semiconductor Manufacturing Company (TSMC) chairman Morris Chang told the company’s first quarter investors conference that internal market research had caused the company to revise upwards its global growth forecasts for technology end-markets this year. TSMC raised its 2010 growth forecast for the personal computer market to 17% (from 14%), for the mobile phone market to 13% (from 12%), for the global chip market to 22% (from 18%), while also forecasting that the foundry business will outpace the global chip market with 36% growth this year. The company kept its growth view for consumer electronics unchanged at 7%.

DRAM makers have also witnessed a strong rebound in regards to pricing, as DRAM prices have jumped into profitable territory and stayed there for much of the first quarter. Taiwan DRAM makers forecast a return to profitability during the upcoming quarters, and remain upbeat on prospects for the market this year. A strong computer market means brisk sales for DRAM chips, and the continued success of Microsoft’s Windows 7 operating system gives them cause to remain optimistic.

Nevertheless, problems remain for the most heavily indebted of the Taiwan DRAM companies. Samsung Electronics, the South Korean memory chip giant, recently announced a massive increase in capital spending for DRAM production equipment. The move could send DRAM prices down, as companies anticipate a new glut in the memory chip supply. A decline in prices would be very bad for some Taiwan DRAM makers, who are already operating on razor-thin margins.

This report will focus on a few key issues, starting with the continued rebound for Taiwan foundry chipmakers. Next, it will discuss the new rules for technology investment in China by Taiwan companies, regulatory changes that Taipei outlined in February and later expanded on. The following section will
contain an update on China’s chip industry. While Chinese foundry chipmakers are still no threat to their Taiwan rivals, the nation’s chip design industry is growing and could represent a potentially lucrative market in the future. The report will also continue our ongoing discussion on Taiwan’s DRAM sector, analyzing possible problems posed by the capex spending increase by Samsung. Finally, the report will cover moves by Intel to develop its own intellectual property library, potentially moving forward on its Atom plans alone, without TSMC.
REPORT TABLE OF CONTENTS

Table of Contents

Letter from the President ........................................................................................................... 1
About the US-Taiwan Business Council .................................................................................. 2
Semiconductor Analysis .......................................................................................................... 3
  Introduction ............................................................................................................................... 3
  State of the Industry ............................................................................................................... 4
  Taiwan Eases China Technology Investment Regulations but Keeps Leash on Its Companies .......................................................................................................................... 5
    The China Investment Rules ............................................................................................... 6
  China’s Foundry Chipmakers Struggle, but Chip Designers Shine ........................................ 7
  Taiwan’s DRAM Debacle ........................................................................................................ 9
    DRAM Rebound ................................................................................................................ 11
  Intel Building Its Own SoC lines and IP Libraries, Likely to Scuttle TSMC Deal .................. 12
Conclusions ............................................................................................................................ 13
Glossary of Terms .................................................................................................................. 15
Taiwan Government Contact Information .............................................................................. 25
United States Government Contact Information ..................................................................... 33
Suggestions of Sources for Taiwan Semiconductor Industry Information ......................... 39
Semiconductor Headlines - First Quarter 2010 ..................................................................... 41
Appendix .................................................................................................................................. 49
  Trend: The Philadelphia Semiconductor Index ................................................................. 49
  Trend: The Taiwan Stock Index .......................................................................................... 50
  Trend: US$:NT$ Exchange Rate ......................................................................................... 50