



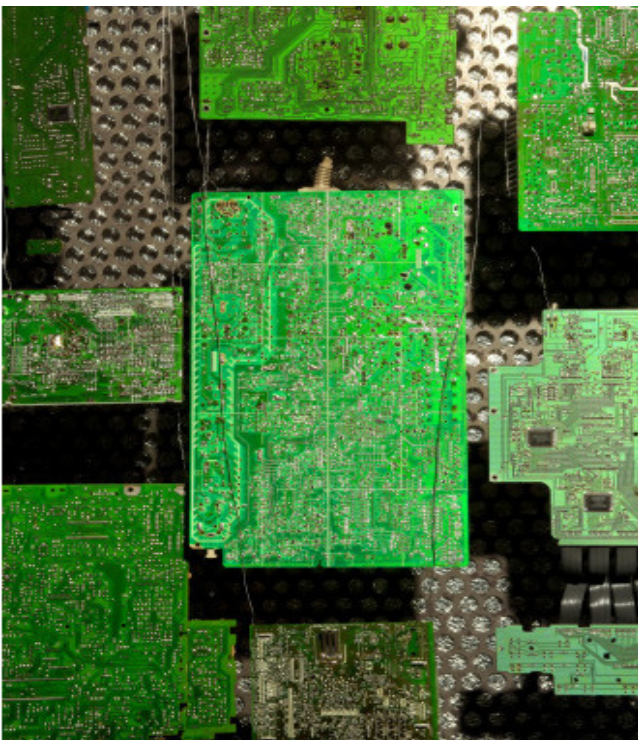
China: Integrated Circuits Industry

Overview of Emerging Tier II Markets

INTRODUCTION

Objective of this report is to provide an overview of the Chinese market for Integrated Circuits¹ (IC), with focus on four key emerging markets – Shenzhen, Suzhou, Tianjin and Chengdu – beyond established cities such as Shanghai and Beijing. The report includes the three IC segments: design, manufacturing, and packaging & testing.

EXECUTIVE SUMMARY



IC demand. China is the world's largest IC market, worth about \$ 64² billion or about 30% of the world market. With continued shift of electronics production to China, the Chinese market will continue to outgrow the world market, with expected CAGR (Compound Annual Growth Rate) of 29% between 2006 and 2010 (compared to 9% for the rest of the world). Almost two-thirds of the ICs used in China go into products made for export.

IC supply. Despite strong growth, domestic IC production continues to lag behind demand and China still relies on imports, with total industry revenue accounting for only \$13.2³ billion in 2006. The largest segment is packaging & testing, which accounted for almost half the domestic IC industry. Supply is dominated by foreign companies and large multinationals in particular - the top ten IC suppliers account for about one-third of total sales. Most of these companies are supplying both domestically manufactured ICs (own facility and/or outsourced production) and imported ICs (that are manufactured overseas)

1 Also simply called "chips"

2 Source: CCID; All US\$ equivalent in this report calculated at USD-RMB exchange rate of 7.6

3 Source: CCID; it includes IC design, manufacturing, packaging & testing companies in China

Key trends. The gap between demand and domestic supply is expected to continue growing, representing good opportunities for foreign IC exporters, especially those for advanced ICs. Chinese IC design companies, limited by the lack of qualified labor force, continue to lag behind foreign ones. However, there are a growing number of overseas-based Chinese IC designers returning to China with solid know-how and contributing to the overall development of the domestic IC industry.

Best Prospects. Best prospects for foreign exporters include ICs for computer, telecom, consumer electronics and automotive electronics devices; more specifically Analog Devices, ASIC (Application Specific Integrated Circuits), ASSP (Application Specific Standard Parts), CPU, MCU (Micro Controller Unit), Memory, DSP (Digital Signal Processing) and Peripheral ICs.

Key emerging markets. Besides the established Tier I markets, there are opportunities in rapidly growing Tier II cities such as Shenzhen, Suzhou, Tianjin and Chengdu, which are the focus of this report. Shenzhen is the most important electronics manufacturing location in China; Suzhou is an important IC manufacturing location and a center for computer and consumer electronics production; Tianjin is a key telecommunication equipment manufacturing location and one of the pioneer cities for the implementation of 3G technology; Chengdu is the economical center of western China, with strong TV and DVD player production. Two of the largest domestic IC suppliers, SMIC and Intel, have also set up facilities in Chengdu in the last 3 – 4 years.

