China Semiconductor Industry Report, 2014-2015

Jul. 2015

ResearchInChina

www.researchinchina.com

STUDY GOAL AND OBJECTIVES

This report provides the industry executives with strategically significant competitor information, analysis, insight and projection on the competitive pattern and key companies in the industry, crucial to the development and implementation of effective business, marketing and R&D programs.

REPORT OBJECTIVES

- To establish a comprehensive, factual, annually updated and cost-effective information base on market size, competition patterns, market segments, goals and strategies of the leading players in the market, reviews and forecasts.
- To assist potential market entrants in evaluating prospective acquisition and joint venture candidates.
- To complement the organizations' internal competitor information gathering efforts with strategic analysis, data interpretation and insight.
- To suggest for concerned investors in line with the current development of this industry as well as the development tendency.
- To help company to succeed in a competitive market, and

METHODOLOGY

Both primary and secondary research methodologies were used in preparing this study. Initially, a comprehensive and exhaustive search of the literature on this industry was conducted. These sources included related books and journals, trade literature, marketing literature, other product/promotional literature, annual reports, security analyst reports, and other publications. Subsequently, telephone interviews or email correspondence was conducted with marketing executives etc. Other sources included related magazines, academics, and consulting companies.

INFORMATION SOURCES

The primary information sources include Company Reports, and National Bureau of Statistics of China etc.

Abstract

According to China Semiconductor Industry Association, the total value of the entire semiconductor industry chain exceeded RMB300 billion in 2014, of which only RMB104.7 billion or one-third was concerned with products (excluding foreign companies). The IC export volume is still optimistic in a relative sense, but it is mostly contributed by foreign companies in China, rather than local enterprises.

Without foreign companies, Taiwanese enterprises and software business, Chinese semiconductor industryturns to be a real pattern like this: the output value of China semiconductor industry approximated USD12.5 billion in 2014, of which USD5 billion came from IC design, USD3.7 billion from IC fabrication, USD3.8 billion from IC packaging and testing. Apparently, IC design accounted for a higher proportion, in fact, the foundries of IC design companies mainly referred to Taiwanese TSMC or UMC, especially large IC design companies; about 80% of wafers were produced by Taiwanese TSMC. This means the irrelevance between IC design companies and foundries in Mainland China.

Since 2014, Chinese financial institutions or enterprises which are adept at capital operation and have huge capitalhave acquired semiconductor companies worldwide vigorously. China is trying to expand its semiconductor industry rapidly through acquisitions. However, the semiconductor industry requires long-term accumulation of talents and technologies, the semiconductor industry of China still has a long way to go even if it renders capital operation.

Chinese government makes great efforts to support the memory sector of the semiconductor industry with the investment of at least USD10 billion, because China is the largest memory market and buys 75% of the global memory. If the global memory industry structure remains stable, China will import tens of billions in USD of memory each year.

Most of Chinese IC design companies rely on their powerful parent companies which are partly state-owned enterprises with dominating positions and non-market-oriented operation to thrive and almost no independent IC design companies exist. For example, the parent company of Nari Smart-chip Microelectronics is a subsidiary of State Grid with main products -- smart meter IC and a monopoly position.

Room 502, Block 3, Tower C, Changyuan Tiandi Building, No. 18, Suzhou Street, Haidian District, Beijing, China 100080
Phone: +86 10 82600828 ● Fax: +86 10 82601570 ● www.researchinchina.com ● report@researchinchina.com

The parent company of CEC Huada is China Electronics Corporation (CEC) which monopolizes the ID card-use IC market. Non-state-owned large enterprises Huawei, ZTE, Datang Telecom (with TD-SCDMA technology) and SMIC Microelectronics act as the backers of Hisilicon, ZXIC, Leadcore Technology and Galaxycore respectively.

Independent IC design companies include Spreadtrum, RDA, Rockchip and Allwinner Technology. Spreadtrum and RDA which need a lot of money but hold limited financing channels have been acquired by state-owned enterprises. Major shareholders and technology sources of Goodix and FocalTech are actually Taiwanese companies.

In Mainland China, IC design companies are highly dependent on mobile phone and tablet PC markets. Some companies are even completely dependent on the smart card market, such as Nari Smart-chip Microelectronics, Fudan Microelectronics and Hua Hong Integrated Circuit.

Taiwanese IC design companies which are mostly independent firms are superior in technology to their counterparts in Mainland China; even if some Taiwanese companies relied on the parent companies at early stages, they have become dependent slowly, such as Himax and Novatek. Taiwanese IC design companies largely rely on the upstream industry chain instead of the downstream. Five of Taiwan's top 18 IC design companies focus on LCD driver because Taiwan's LCD panel industry ranks first in the world by shipment. In Chinese Mainland, IC design companies specialize in the digital field except RDA; in contrast, there are many Analog and Mixed IC design companies as well as two high-tech ASIC design companies of a certain scale in Taiwan.

The report covers the followings:
1. Global Semiconductor Market and Industry;
2. China Semiconductor Market and Industry;
3. Eleven Chinese IC Design Companies
4. Five Chinese Foundries
5. Four Chinese Packaging and Testing Companies

Room 502, Block 3, Tower C, Changyuan Tiandi Building, No. 18, Suzhou Street, Haidian District, Beijing, China 100080
Phone: +86 10 82600828 ● Fax: +86 10 82601570 ● www.researchinchina.com ● report@researchinchina.com

Ranking of Foundries in Mainland China, 2014 (Excluding Foreign and Taiwanese Companies)

Company	Revenue (USD mln)
SMIC	1,970
HHNEC	665
CSMC/ China Resources Microelectronics	318
Huali	296
Wuhan Xinxin	174
ASMC	132

Ranking of IC Design Companies in China, 2014

Company	Revenue (RMB bn)
Hisilicon	14.6
Spreadtrum	7.2
CEC Huada	3.2
Datang Semiconductor	3.1
ZXIC	3
Rockchip	2.8
Nari Smart-chip Microelectronics	2.5
RDA	2.2
Galaxycore	2
Allwinner Technology	1.2
GigaDevice	0.9
SMIC Microelectronics	0.6

Table of contents

Selected Charts

- Global Semiconductor Market Size, 2013-2019E
- Product Distribution of Global Semiconductor Market, 2013-2016E
- Growth Rate of Global Semiconductor Products by Market Size, 2013-2016E
- Semiconductor Outsourced Supply Chain
- Semiconductor Company Systems
- Semiconductor Outsourced Supply Chain Example
- Food Chain IC CAD Design Industry
- Top25 Semiconductor Sales Leaders, 1Q2014
- Top25 Semiconductor Sales Leaders, 1Q2015
- Worldwide IC Sales by Company Headquarters Location, 1990-2013
- Fabless IC Sales Marketshare by Company Headquarters Location, 2013
- Top 10 IC Manufacturers in China, 2008-2013
- Ranking of FIQFN Vendors, 2013
- Ranking of FOWLP Vendors, 2013
- Ranking of Stacked Package Vendors, 2013
- Ranking of Global Top 24 Packaging and Testing Companies by Revenue, 2013-2015
- Operating Margin and Gross Margin of Global Major OSAT Vendors, 2013-2015
- Global Foundry Market Size, 2008-2018E
- Global Memory Market Size, 2009-2016E
- Global Memory Market by Type, 2014
- Automotive Memory Market Size, 2008-2015
- Automotive Memory Market by Technology, 2010-2015
- DRAM Industry Capex, 2008-2015
- DRAM Oversupply Ratio, 2013-2016E
- DRAM Demand by Devices, 2013-2015E

Selected Charts

- DRAM GB/SystemDRAM GB/System, 2013-2015
- DRAM Oversupply Ratio, Q1 2014-Q4 2016
- NAND Industry Capex, 2008-2015E
- Mainstream Tech-node on Typical Smartphone IC, 2011-2018E
- Average IC Costs of a Mobile Phone, 2008-2016E
- Frequency Bands per Mobile Handset Device, 2000-2018E
- Cellular Terminal Shipment Forecast by Cellular Standard, 2000-2018E
- LTE-enabled Cellular Terminal Forecast, 2011-2018E
- Global Mobile Phone Shipment, 2007-2015
- Global 3G/4G Mobile Phone Shipment by Region, 2011-2014
- Major Mobile Phone Vendors' Shipment, Q1 2015
- Market Share of Major Mobile Phone Vendors, Q1 2015
- Market Share of Major Mobile Phone OS, Q1 2015
- Worldwide Smartphone Sales to End Users by Vendor, 2014
- Worldwide Smartphone Sales to End Users by Operating System, 2014
- Shipment of Global Top 10 Smartphone Vendors, Q1 2015
- Share of Major Vendors in Chinese Smartphone Market, 2014
- Share of Major Vendors in Chinese 4G Mobile Phone Market, 2014
- Share of Major Vendors in Chinese Smartphone Market, Q1 2015
- Laptop Computer Shipment, 2008-2015
- Shipment of Global Major Laptop ODM Vendors, 2010-2014
- Global Tablet PC Shipment, 2011-2016E
- Shipment of Top Five Tablet Vendors, Q4 2014
- Shipment, Market Share and Growth of Top Five Tablet Vendors, 2014
- Global Server Market Size, 2013-2018E

Selected Charts

- Top 5 Corporate Family, Worldwide Server Systems Factory Revenue, 2013
- Top 5 Corporate Family, Worldwide Server Systems Factory Revenue, Q4 2014
- Market Share of Global Server Vendors, 2015
- China's IC Market Size, 2011-2017E
- China's IC Import Value, 2006-2014
- China's IC Export Value, 2006-2014
- Revenue of China IC Industry, 2008-2014
- Capex of China IC Industry, 2008-2014
- Ranking of Top 10 IC Design Companies in China by Revenue, 2004 vs 2014
- China Foundry Sales Share of Pure-play IC Foundry Market, 2002-2018
- Structure of China's IC Foundation
- Size of China's Semiconductor Packaging and Testing Industry, 2009-2015
- Number and Capacity of Semiconductor Packaging and Testing Enterprises in China, 2010-2014
- Ranking of Top 30 IC Packaging and Testing Enterprises in China by Revenue, 2014
- Top 18 IC Design Companies in Taiwan, 2014
- Ranking of Top 30 IC Design Companies in China, 2013
- Huawei's Revenue and Operating Margin, 2007-2015
- Huawei's Selected Financial Data, 2010-2014
- Huawei's Revenue by Region, 2011-2014
- Huawei's Revenue by Business, 2011-2014
- Spreadtrum's Revenue, 2003-2014
- Selected Financial Data of Datang Semiconductor, 2014
- Selected Financial Data of Leadcore Technology, 2012-2014
- Galaxycore's Revenue and Gross Margin, 2011-2014
- Galaxycore's Revenue by Product, 2011-2014

Selected Charts

- Galaxycore's Revenue by Pixel, 2011-2014
- Galaxycore's Product Shipment, 2011-2014
- Galaxycore's Assets, Liabilities and Cash Flow, 2011-2014
- Balance Sheet of Allwinner Technology, 2012-2014
- Revenue and Profit of Allwinner Technology, 2012-2014
- Selected Financial Indicators of Allwinner Technology, 2012-2014
- Revenue of Allwinner Technology by Application, 2012-2014
- Major Suppliers of Allwinner Technology, 2014
- Major Suppliers of Allwinner Technology, 2013
- Major Suppliers of Allwinner Technology, 2012
- Major Products of Allwinner Technology
- Silan's Revenue by Business, 2010-2014
- GigaDevice's Product Structure
- GigaDevice's Balance Sheet, 2011-2013
- GigaDevice's Revenue and Operating Income, 2011-2013
- GigaDevice's Cash Flow, 2011-2013
- GigaDevice's Financial Indicators, 2011-2013
- Distribution of GigaDevice's Clients, 2013
- Distribution of GigaDevice's Suppliers, 2013
- Revenue and Operating Margin of SMIC Microelectronics, 2009-2015
- Revenue of SMIC Microelectronics by Business, 2009-2014
- Revenue of SMIC Microelectronics by Product, 2009-2014
- RDA's Product Roadmap
- RDA's Main Customers
- RDA's Revenue by Product

Selected Charts

- SMIC's Milestones
- SMIC's Fab Capacity
- SMIC's Revenue and Operating Margin, 2007-2015
- SMIC's Capacity, 2008-2014
- SMIC's Gross Margin, 2008-2014
- SMIC's Balance Sheet, 1Q2015
- SMIC's Cash Flow, 1Q2015
- SMIC's Net Profit and Gross Margin, 3Q2011-1Q2015
- SMIC's EBITDA, 3Q2011-1Q2015
- SMIC's Utilization Rate, 3Q2011-1Q2015
- SMIC's Revenue by Region, 2010-2014
- SMIC's Quarterly Revenue Breakdown by Geography, 2013Q2-2015Q1
- SMIC's Revenue by Application, 2010-2014
- SMIC's Quarterly Revenue Breakdown by Application, 2013Q2-2015Q1
- SMIC's Revenue Breakdown by Node, 2010-2014
- SMIC's Quarterly Revenue Breakdown by Node, 2013Q2-2015Q1
- SMIC's Quarterly Capacity, 2013Q2-2015Q1
- SMIC's Technology Migration on Application
- Revenue, Gross Profit and Operating Income of Huahong Grace, 2011-2015
- Revenue, Net Income and Asset-Liability Ratio of Huahong Group, 2011-2014
- Revenue Breakdown of Huahong Grace by Product, 2011-2014
- Revenue Breakdown of Huahong Grace by Node, 2011-2014
- Capacity Utilization of Huahong Grace, 2011-2014
- Revenue Breakdown of Huahong Grace by Client, 2011-2014
- Revenue Breakdown of Huahong Grace by Region, 2011-2014

Selected Charts

- Revenue Breakdown of Huahong Grace by Application, 2011-2014
- XMC's Roadmap
- XMC's 3D IC Technology Platform
- Revenue and Gross Margin of Shanghai Advanced Semiconductor Manufacturing, 2008-2015
- ASMC's Revenue by Application, Q2 2013-Q1 2015
- ASMC's Revenue by Region, Q2 2013-Q1 2015
- ASMC's Revenue by Client, Q2 2013-Q1 2015
- ASMC's Revenue by Fab, Q2 2013-Q1 2015
- ASMC's UTILRate (%), Q2 2013-Q1 2015
- JCET's Revenue and Operating Margin, 2006-2015
- JCET's Output, 2011-2014
- JCET's CHIP Packaging Cost Structure, 2012-2013
- JCET's Revenue by Product, 2013-2014
- Global CU Pilluar Capacity Distribution, 2012
- JCET's Assets and Liabilities, 2009-2014
- JCET's Quarterly Revenue, Q1 2007-Q1 2015
- JCET's Quarterly Net Income, Q1 2007-Q1 2015
- Revenue and Profit of JCET's Major Subsidiaries, 2013-2014
- JCET's Roadmap
- Revenue and Operating Income of Nantong Fujitsu Microelectronics, 2007-2015
- Balance Sheet of Nantong Fujitsu Microelectronics, 2012-2014
- Cash Flow of Nantong Fujitsu Microelectronics, 2012-2014
- Key Ratio of Nantong Fujitsu Microelectronics, 2012-2014
- Revenue and Operating Margin of TianShuiHuaTian microelectronics, 2006-2015
- Revenue and Operating Income of China Wafer Level CSP, 2010-2015
- Revenue of China Wafer Level CSP by Client, 2014

How to Buy

You can place your order in the following alternative ways:

1.Order online at www.researchinchina.com

2.Fax order sheet to us at fax number:+86 10 82601570

3. Email your order to: report@researchinchina.com

4. Phone us at +86 10 82600828/ 82601561

Choose type of format

PDF (Single user license) …………..2,300 USD

Hard copy ………………………. 2,450 USD

PDF (Enterprisewide license)…....... 3,600 USD

※ **Reports will be dispatched immediately once full payment has been received. Payment may be made by wire transfer or credit card via PayPal.**

Party A:			
Name:			
Address:			
Contact Person:		Tel	
E-mail:		Fax	

Party B:			
Name:	Beijing Waterwood Technologies Co., Ltd (ResearchInChina)		
Address:	Room 502, Block 3, Tower C, Changyuan Tiandi Building, No. 18, Suzhou Street, Haidian District, Beijing, China 100080		
Contact Person:	Liao Yan	Phone:	86-10-82600828
E-mail:	report@researchinchina.com	Fax:	86-10-82601570
Bank details:	Beneficial Name: Beijing Waterwood Technologies Co., Ltd Bank Name: Bank of Communications, Beijing Branch Bank Address: NO.1 jinxiyuan shijicheng,Landianchang,Haidian District,Beijing Bank Account No #: 110060668012015061217 Routing No # : 332906 Bank SWIFT Code: COMMCNSHBJG		

Title	**Format**	**Cost**
Total		

ResearchInChina
www.researchinchina.com

RICDB service

About ResearchInChina

ResearchInChina (www.researchinchina.com) is a leading independent provider of China business intelligence. Our research is designed to meet the diverse planning and information needs of businesses, institutions, and professional investors worldwide. Our services are used in a variety of ways, including strategic planning, product and sales forecasting, risk and sensitivity management, and as investment research.

Our Major Activities

- ***Multi-users market reports***
- ***Database-RICDB***
- ***Custom Research***
- ***Company Search***

RICDB (http://www.researchinchina.com/data/database.html), is a visible financial data base presented by map and graph covering global and China macroeconomic data, industry data, and company data. It has included nearly 500,000 indices (based on time series), and is continuing to update and increase. The most significant feature of this base is that the vast majority of indices (about 400,000) can be displayed in map.

After purchase of our report, you will be automatically granted to enjoy 2 weeks trial service of RICDB for free.

After trial, you can decide to become our formal member or not. We will try our best to meet your demand. For more information, please find at www.researchinchina.com

For any problems, please contact our service team at: