

# Research Report on China Integrated Circuit Industry, 2018-2022

<https://marketpublishers.com/r/R8B8A178A50EN.html>

Date: April 2018

Pages: 60

Price: US\$ 2,600.00 (Single User License)

ID: R8B8A178A50EN

## Abstracts

### DESCRIPTION

The Chinese government strongly supports the integrated circuit industry, which is the foundation and core of the information industry. The central government and a number of local governments have issued encouraging policies to foster the industry in fiscal revenue and infrastructure. As the strategy of Made in China 2025 is carried out, the transformation and upgrading of the industry is accelerating, which drives the demand for integrated circuits. It is expected that in the coming years, the Chinese government will continue to intensify the support for the IC industry.

In 2017, the sales value of local IC companies reached approximately USD 80.15 billion, representing an increase of more than 20% YOY. Among it, that of the IC manufacturing industry reached about USD 21.55 billion, and that of the design industry and the packaging and testing industry were respectively USD 30.71 billion and USD 27.99 billion.

According to CRI's research, China's integrated circuit industry continues to develop after joining the WTO, but still far lags behind the global advanced level. Compared with leading international companies, China's chip manufacturing industry is at least 1 to 2 generations behind in terms of the advanced technologies. The IC design in China still stands at a low level and makes single products. The gap of technologies on packaging and testing between Chinese companies and International mainstreams is to be bridged. Besides, China's high-end IC products heavily rely on imports. In 2017, China imported 377 billion units of integrated circuits, with an increase of 10.1% YOY, and the import value reached USD 260.14 billion, with an increase of 14.6% YOY. In the same year, China exported USD 66.88 billion of integrated circuits, with a deficit of nearly

USD 200 billion. China is already an important market for global chip companies. For example, in 2017, the sales value of several major US chip companies to China exceeded USD 50 billion. Among them, more than half of the sales revenue of Qualcomm, Broadcom, Micron, Marvell and Skyworks came from the Chinese market.

CRI considers that segments such as automotive electronics, industrial automation, internet of things and communications equipment have been the main driving force for China's integrated circuit market in recent years. The global PC production has been on the decline while that of smart phones is likely to increase. At the same time, the development of related industries such as cloud computing, internet of things and big data has propelled the demand for integrated circuits.

In China, the production and sales volumes of consumer electronics and traditional home appliance basically remain stable. Driven by the upgrading of consumption and smart home appliances, the IC market has grown slightly. The main drivers for such growth arise from the increase in smart mobile devices and the rapid growth of emerging consumer electronics products such as drones.

China is the world's largest automotive producer and consumer, as well as the largest electronics manufacturing base and the largest manufacturing outsource base in the world. It is expected that China will remain the world's largest IC consumer market for a long time, and the market size will continue to grow. In recent years, automotive electronics has been a hot area in the global IC market. In 2017, the auto production in China reached 29.02 million units, with an increase of 3.2% YOY, of which new energy vehicles (electric vehicles) were 794,000 units, with an increase of approximately 54% YOY. The demand for integrated circuits of each new energy vehicle far exceeds that of traditional fuel vehicles. With the rapid increase in the production of new energy vehicles in China, the automotive sector has become an important driver for the growth of the IC market.

In recent years, as China's labor costs increase, automation has gradually become the common choice of the manufacturing industry. As the output of industrial automation equipment such as CNC machine tools and industrial robots continues to rise in China, the demand for integrated circuits is rapidly lifting.

With the rising informatization and rapid-developed internet of things in China, the demand for smart cities, smart logistics and industrial monitoring has continued to increase. According to CRI, in 2017, the market size of internet of things exceeded CNY 1 trillion. Subsequently, its development has brought about a rise in demand for various

sensors.

According to CRI's analysis, due to the relatively outdated technology of domestic IC industry, the manufacturing will face enormous risks once it involves in international trade disputes or sanctions. For Chinese IC manufacturers, it will take a very long time (10-20 years) and numerous investment (above USD 100 billion) to improve the technologies of integrated circuits. It is expected that in the coming years, some local IC companies will upgrade the technical level and production capacity of integrated circuits through self-developed and imported advanced technologies and equipment. For overseas IC-related companies, the Chinese market provides plentiful investment opportunities.

This report may convey more information to readers:

The economic environment of China's IC industry

Supportive government policies for the IC industry

Supply status of China's IC industry

Analysis on the demand for integrated circuits in the Chinese market

Competition landscape of IC industry in China

Analysis on the imports and exports of integrated circuits in China

Major Chinese enterprises in the IC industry

Threats and Challenges of China's IC industry

Prospect of China's IC industry, 2018-2022

## Contents

### **1 OVERVIEW ON INTEGRATED CIRCUIT INDUSTRY IN CHINA**

#### 1.1 Definition and Classification

##### 1.1.1 Definition

##### 1.1.2 Classification

#### 1.2 Methodology

##### 1.2.1 Data Resources

##### 1.2.2 Parameters and Assumptions

### **2 DEVELOPMENT ENVIRONMENT OF INTEGRATED CIRCUIT INDUSTRY IN CHINA, 2015-2018**

#### 2.1 Macro Economy

##### 2.1.1 Chinese Economy

##### 2.1.2 International Economy

#### 2.2 Policy Environment of the Industry

##### 2.2.1 Overview of Industry Policies

##### 2.2.2 Key Policies

##### 2.2.3 Development Trend of Industry Policies

#### 2.3 Technology Environment

#### 2.4 Environment of International Trade

### **3 ANALYSIS OF OPERATION STATUS OF INTEGRATED CIRCUIT INDUSTRY IN CHINA, 2013-2017**

#### 3.1 Supply

##### 3.1.1 Total Supply Volume

##### 3.1.2 Supply Structure

#### 3.2 Demand

##### 3.2.1 Total Demand Volume

##### 3.2.2 Demand Structure

#### 3.3 Analysis on Sub-sectors

##### 3.3.1 IC Design

##### 3.3.2 Chip Manufacturing

##### 3.3.3 Packaging Test

### **4 COMPETITION LANDSCAPE OF CHINA'S IC INDUSTRY, 2013-2017**

- 4.1 Barriers to Entry in China's IC Industry
  - 4.1.1 Policy Barriers
  - 4.1.2 Technological Barriers
  - 4.1.3 Capital Barriers
  - 4.1.4 Barriers to Sales Channels
- 4.2 Competitive Structure of China's IC Industry
  - 4.2.1 Bargaining Power of Upstream Suppliers
  - 4.2.2 Bargaining Power of Downstream Users
  - 4.2.3 Market Competition
  - 4.2.4 Threats of New Entrants
  - 4.2.5 Substitutes for Integrated Circuits
- 4.3 Competition in Sub-sectors of IC Industry in China
  - 4.3.1 Design
  - 4.3.2 Chip Manufacturing
  - 4.3.3 Packaging and Testing

## **5 INDUSTRY CHAIN OF INTEGRATED CIRCUITS IN CHINA, 2015-2018**

- 5.1 Introduction of Industry Chain
  - 5.1.1 Structure
  - 5.1.2 Features
- 5.2 Upstream of IC Industry
  - 5.2.1 Polysilicon Industry
  - 5.2.2 Special Equipment Manufacturing for Electronics Industry
- 5.3 Major Downstream of IC Industry
  - 5.3.1 Overview
  - 5.3.2 Automobile
  - 5.3.3 Electronics Manufacturing
  - 5.3.4 Industrial Automation
  - 5.3.5 Internet and Communications
  - 5.3.6 Other Industries

## **6 ANALYSIS OF SUB-SECTORS OF IC INDUSTRY IN CHINA, 2013-2017**

- 6.1 Integrated Circuit Design Industry
  - 6.1.1 Operation Status
  - 6.1.2 Development Trend
- 6.2 Integrated Circuit Manufacturing

- 6.2.1 Operation Status
- 6.2.2 Development Trend
- 6.3 Packaging and Testing Industry of Integrated Circuits
  - 6.3.1 Operation Status
  - 6.3.2 Development Trend

## **7 ANALYSIS OF IMPORT AND EXPORT OF IC INDUSTRY IN CHINA, 2013-2017**

- 7.1 Import of Integrated Circuits
  - 7.1.1 Overview on Imports
  - 7.1.2 Structure of Imports
  - 7.1.3 Major Import Resources
- 7.2 Export of Integrated Circuits
  - 7.2.1 Overview on Exports
  - 7.2.2 Structure of Exports
  - 7.2.3 Major Export Destinations

## **8 MAJOR CHINESE ENTERPRISES IN IC INDUSTRY, 2015-2018**

- 8.1 Semiconductor Manufacturing International Corporation
- 8.2 Tianjin Zhonghuan Semiconductor Co., Ltd.
- 8.3 Jiangsu Changjiang Electronics Technology Co., Ltd.
- 8.4 Tongfu Microelectronics Co., Ltd.
- 8.5 Hangzhou Silan Microelectronics Co., Ltd.
- 8.6 Jilin Sino-Microelectronics Co., Ltd.
- 8.7 Tianshui Huatian Technology Co., Ltd.
- 8.8 Will Semiconductor Co. Ltd.
- 8.9 Gigadevice Semiconductor Inc.
- 8.10 Shanghai Fortune Techgroup Co., Ltd.
- 8.11 Unigroup Guoxin Co., Ltd.
- 8.12 Shanghai Belling Corp., Ltd.
- 8.13 Beijing Fuxing Xiaocheng Electronic Technology Stock Co., Ltd.
- 8.14 Shenzhen Danbond Technology Co., Ltd.
- 8.15 Ingenic Semiconductor Inc.
- 8.16 Zhejiang East Crystal Electronic Co., Ltd.
- 8.17 Tech Semiconductors Co., Ltd.
- 8.18 Netac Technology
- 8.19 Unigroup Guoxin Co., Ltd.
- 8.20 All Winner Technology Co., Ltd.

## **9 PROSPECT OF CHINA'S IC INDUSTRY, 2018- 2022**

### **9.1 Influencing Factors in Development of China's IC Industry**

#### **9.1.1 Driving Power and Opportunities for IC Industry**

#### **9.1.2 Threats and Challenges of IC Industry**

### **9.2 Forecast on Supply of IC Industry, 2018-2022**

#### **9.2.1 Forecast on Production Volume of Domestically-produced Integrated Circuits**

#### **9.2.2 Forecast on Integrated Circuit Import**

### **9.3 Forecast on Demand for Integrated Circuits in China, 2018-2022**

#### **9.3.1 Forecast on Overall Demand**

#### **9.3.2 Forecast on Demand in Segment Markets**

## Selected Charts

### SELECTED CHARTS

Chart Chinese GDP, 2013-2017  
Chart Key Policies on China's IC Industry, 2013-2018  
Chart Production Volume of Integrated Circuits in China, 2013-2017  
Chart Structure of IC Products in China in 2017  
Chart Production Volume of Automobiles in China, 2013-2017  
Chart Production Volume of Mobile Phones in China, 2013-2017  
Chart Market Size of Integrated Circuits in China, 2013-2017  
Chart Import Volume and Value of Integrated Circuits, 2013-2017  
Chart Major Import Resources of Integrated Circuits in 2017  
Chart Proportion of Sales Revenue of Design Industry in IC Industry in China, 2013-2017  
Chart Sales Revenue of China's Design Industry, 2013-2017  
Chart Sales Revenue of China's IC Manufacturing Industry, 2013-2017  
Chart Sales Revenue of China's Packaging and Testing of IC Industry, 2013-2017  
Chart Production Volume of Integrated Circuits in Different Regions, 2017  
Chart Forecast on Production Volume of Chinese Integrated Circuits, 2018-2022  
Chart Forecast on Imported Integrated Circuits to China, 2018-2022

### COMPANIES MENTIONED

- 1 Semiconductor Manufacturing International Corporation
- 2 Tianjin Zhonghuan Semiconductor Co., Ltd.
- 3 Jiangsu Changjiang Electronics Technology Co., Ltd.
- 4 Tongfu Microelectronics Co., Ltd.
- 5 Hangzhou Silan Microelectronics Co., Ltd.
- 6 Jilin Sino-Microelectronics Co., Ltd.
- 7 Tianshui Huatian Technology Co., Ltd.
- 8 Will Semiconductor Co. Ltd.
- 9 Gigadevice Semiconductor Inc.
- 10 Shanghai Fortune Techgroup Co., Ltd.
- 11 Unigroup Guoxin Co., Ltd.
- 12 Shanghai Belling Corp., Ltd.
- 13 Beijing Fuxing Xiaocheng Electronic Technology Stock Co., Ltd.
- 14 Shenzhen Danbond Technology Co., Ltd.
- 15 Ingenic Semiconductor Inc.

- 16 Zhejiang East Crystal Electronic Co., Ltd.
- 17 Tech Semiconductors Co., Ltd.
- 18 Netac Technology
- 19 Unigroup Guoxin Co., Ltd.
- 20 All Winner Technology Co., Ltd.

## I would like to order

Product name: Research Report on China Integrated Circuit Industry, 2018-2022

Product link: <https://marketpublishers.com/r/R8B8A178A50EN.html>

Price: US\$ 2,600.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

[info@marketpublishers.com](mailto:info@marketpublishers.com)

## Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/R8B8A178A50EN.html>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:  
Last name:  
Email:  
Company:  
Address:  
City:  
Zip code:  
Country:  
Tel:  
Fax:  
Your message:

**\*\*All fields are required**

Customer signature \_\_\_\_\_

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <https://marketpublishers.com/docs/terms.html>

To place an order via fax simply print this form, fill in the information below and fax the completed form to +44 20 7900 3970