

## China IC Card and Smart Card Industry Report, 2007-2008 (Second Edition)



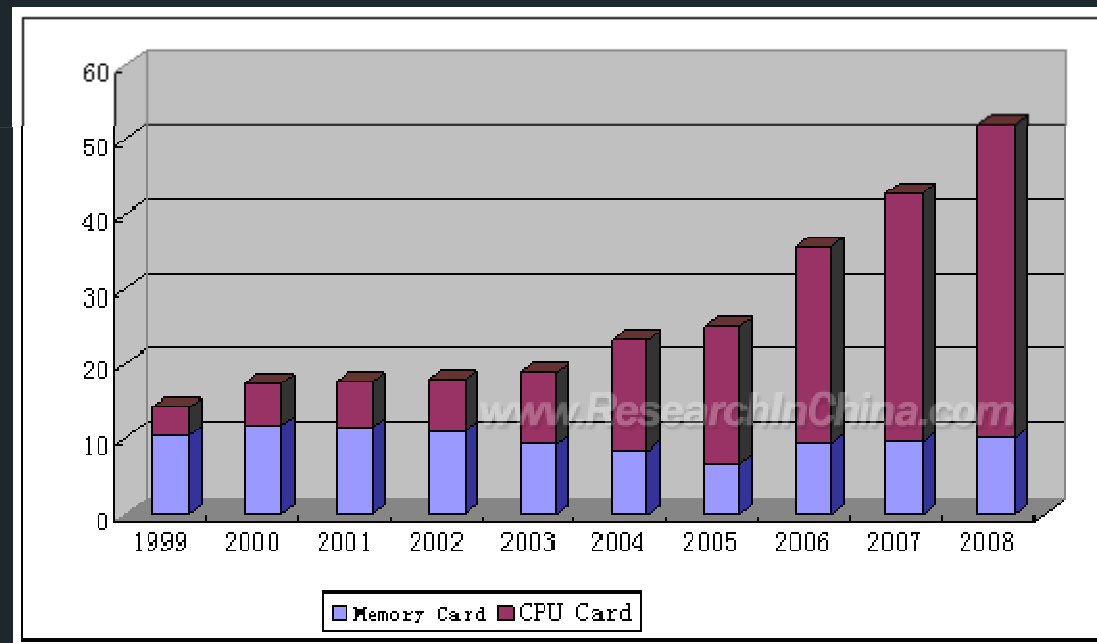
The report has made depth analysis and forecast of China IC card market, focus on the six key global IC chip suppliers, and nearly 50 manufacturers in china of IC card chip, COS, card packaging and IC card device.

The global SIM card shipment has reached 2.6 billion cards in 2007, up 27% year-on-year; the overall percentage of 3G SIM cards was 14%. According to SIM Alliance, the market scale of SIM card will break 3 billion by the end of 2008, considering the great demand from mobile operators in developing countries. For example, China Mobile, the global largest telecom operator, had ordered more than 280 million cards in the first three quarters of 2007, rising 60% compared to the same period in 2006.

Moreover, the shipment of mobile phone card was 650 million in china in the year of 2007. India market also enjoyed a dramatically growth, its mobile phone card shipment had increased to 194 million cards in 2007 from 123 million cards in 2006, rising 58% year-on-year; Latin America, Mid East and Africa were also achieved a great market growth in 2007.

### Global Shipment of Memory Card and CPU Card, 1999-2008

(Unit: 100 million)



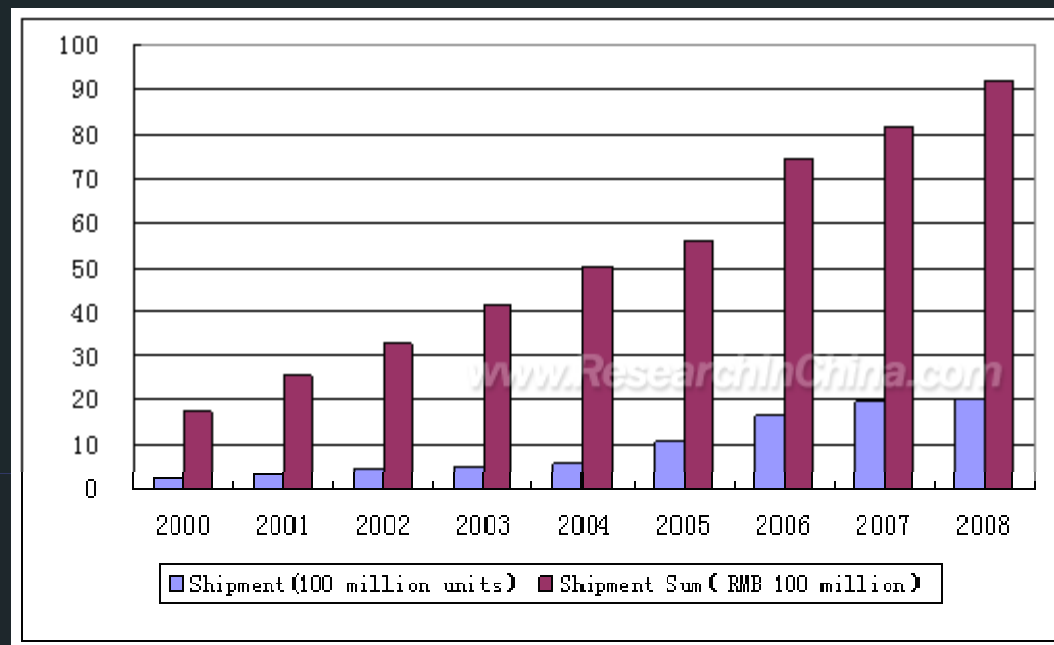
Source: Eurosmart

From the figure above, it can be seen that the total IC card shipment keeps a growth; meanwhile, the shipment ratio of CPU card keeps an increase as well, however, the memory card shipment declines. The growth of memory card shipment in 2006 and 2007 was mainly attributed to second generation ID card project and bus card project in china, about 300 million ID cards and 30 million bus cards were issued respectively during the period. According to the Eurosmart, the shipment of CPU card will reach as many as 4.205 billion by the end of 2008.

According to China Information Industry Trade Association, IC card shipment in china was 1.08 billion cards in 2005, up 91.8% year-on-year; and the shipment value increased 11.1% to RMB 5.607 billion. In 2006, the shipment was 1.676 billion cards, rising 55.2% year-on-year; and the shipment value rose 32.4% to RMB 7.426 billion. The shipment reached 1.993 billion cards in 2007, ascending 19% compared to 2006; and the shipment value was RMB 8.165 billion, only increased 9%, which was mainly due to the price drop, especially the dramatic price drop of SIM cards.

Based on the information from China Information Industry Trade Association, by the method of time series and taking the factors into account like the second generation ID card project and EMV transfer project of bank cards as well as the 2008 Olympic Game, ResearchInChina estimated that IC card shipment in China will reach 2.02 billion cards by the end of 2008, and the shipment value will reach RMB 9.21 billion.

### China IC Card Shipment and Shipment Value, 2000-2008



Source: China Information Industry Trade Association

In 2007, Infineon had the best sales performance in global IC card chip Market, followed by NXP, Samsung, Atmel, Renesas and ST Microelectronics, they are all together had 92.1% shares of global IC card chip market.

During 2007-2008, the development of China IC card market is featured as enhanced application in traditional sectors as well as continual new applications. In addition, the application system has entered the new updating period (such as social insurance CPU card and non-contact CPU card).

# Table of Contents

- **1 IC Card and Relevant knowledge**
- 1.1 Definition
- 1.2 Classification
- 1.3 RFID
- 1.4 Security System
- 1.5 International Standards
- 1.5.1 Touch IC Card Standard ISO 7816
- 1.5.2 Non-touch IC Card Standard
- 1.6 Gold Card Project in China
- 1.7 IC Card Quality Supervision & Inspection Organization
- 1.8 Global IC Card Alliances
- 1.8.1 APSCA
- 1.8.2 EuroSmart
- 1.8.3 Radicchio
- 1.8.4 SCA
- **2 EMV Card to Smart Card**
- 2.1 EMV Standard
- 2.2 International EMV Transfer
- 2.2.1 Background
- 2.2.2 Transfer Mode
- 2.2.3 Status Quo
- 2.3 China EMV Transfer Background, Standard and Plan
- 2.4 Status Quo
- 2.4.1 China has Built International Authoritative EMV Testing Lab
- 2.4.2 Unipay has Started EMV Transfer
- 2.4.3 Industrial and Commercial Bank of China (Smart Card R&D and EMV Transfer)
- 2.4.4 Agricultural Bank of China (System Updating to meet EMV Transfer)
- 2.4.5 Bank of China (EMV Transfer Strategies)
- 2.4.6 Construction Bank of China (IC Card Issuing and EMV Transference Thoughts)
- 2.4.7 China First EMV Transfer Trial City--Shanghai
- 2.4.8 EMV Transfer Trial has Started in Beijing
- **3 IC Card Market Analysis**
- 3.1 Global IC Card Market
- 3.2 China IC Card Market
- 3.2.1 IC Card Shipment
- 3.2.2 Existing Problems and Applications Forecast

- 3.3 China Telecom IC Card Market
  - 3.3.1 Mobile Phone Card Market
  - 3.3.2 Market Share Growth of Domestic Players
  - 3.3.3 USIM Card has a Good Market Potential
  - 3.3.4 Declining Public Payphone IC Card
  - 3.3.5 Card Separation of PHS – PIM Card Market
- 3.4 China Non-telecom IC Card Market
  - 3.4.1 The Second Generation ID Card
  - 3.4.2 Bus Card
  - 3.4.3 Social Insurance IC Card
  - 3.4.4 IC Card Development in Education Sector
  - 3.4.5 Fiscal Card and Fiscal Processor
  - 3.4.6 Other Sectors
- 3.5 Competition Pattern
  - 3.5.1 Development Trend
  - 3.5.2 Price Trend
  - 3.5.3 Sales Channels
  - 3.5.4 Top Ten Manufacturers of Smart Card
- **4 IC Card Upstream Industry**
  - 4.1 IC Card Issuance Flow
  - 4.2 IC Card Industry Chain
  - 4.3 IC Card Chip Industry Layout
  - 4.4 Global IC Card Upstream Manufacturers
    - 4.4.1 Infineon
    - 4.4.2 ATMEL
    - 4.4.3 Samsung
    - 4.4.4 ST
    - 4.4.5 Renesas
    - 4.4.6 NXP
- **5 IC Card Chip Manufacturers in China**
  - 5.1 Datang Microelectronics Technology Co., Ltd
    - 5.1.1 Company Profile
    - 5.1.2 Financial Results
    - 5.1.3 IC Products
  - 5.2 Shanghai Fudan Microelectronics Co., Ltd
    - 5.2.1 Company Profile
    - 5.2.2 Development Course
    - 5.2.3 Financial Results
  - 5.3 Shanghai Huahong Group Co., Ltd
    - 5.3.1 Company Profile
    - 5.3.2 Shanghai Huahong Jitong Smart Card System Co., Ltd
    - 5.3.3 Shanghai Huahong NEC Electronics Co., Ltd
    - 5.3.4 Shanghai Huahong Integrated Circuit Co., Ltd
    - 5.3.5 Beijing Huahong Integrated Circuit Co., Ltd

- 5.4 Beijing Tsinghua Tongfang Microelectronics Co., Ltd
- 5.4.1 Company Profile
- 5.4.2 Operations
- 5.5 Shanghai Belling Co., Ltd
- 5.5.1 Company Profile
- 5.5.2 Operations
- 5.5.3 Clients
- 5.6 CEC Huada Electronic Design Co., Ltd
- 5.6.1 Company Profile
- 5.6.2 Financial Results
- 5.6.3 Smart Card Products
- 5.6.4 Strategies
  
- **6 IC Card Manufacturers in China**
- 6.1 Gemalto
- 6.1.1 Company Profile
- 6.1.2 Operations
- 6.1.3 Joint Ventures
- 6.2 Watch Data System Co., Ltd
- 6.2.1 Company Profile
- 6.2.2 Operations
- 6.2.3 Oversea Markets
- 6.2.4 Clients
  
- 6.2.5 Products
- 6.3 Tianjin Jiepu Smart Card Co., Ltd
- 6.3.1 Company Profile
- 6.3.2 Products
- 6.3.3 Clients
- 6.4 Gemplus Goldpac Group Co., Ltd
- 6.4.1 Company Profile
- 6.4.2 Clients
- 6.4.3 Partners
- 6.5 Jingking Wader Technology (Shenzhen) Co., Ltd
- 6.5.1 Company Profile
- 6.5.2 Partners
- 6.5.3 Clients
- 6.6 Beijing Aviation Zhitong Technology Co., Ltd
- 6.6.1 Company Profile
- 6.6.2 Products
- 6.6.3 Partners
- 6.7 Zhongshan Dahua Intelligent Technology Co., Ltd
- 6.7.1 Company Profile
- 6.7.2 Products
- 6.8 Shenzhen Mingwah Aohan Technology Co., Ltd

- 6.8.1 Company Profile
- 6.8.2 Products
- 6.8.3 Competitive Advantages
- 6.8.4 Financial Results
- 6.8.5 Partners
- 6.9 Shanghai Solaic IC Card Co., Ltd
- 6.9.1 Company Profile
- 6.9.2 Products
- 6.10 Shanghai Feilo Acoustics Co., Ltd
- 6.10.1 Company Profile
- 6.10.2 Financial Results
- 6.10.3 Shanghai Changfeng Smart Card Co., Ltd
- 6.10.4 Shanghai Pujiang Smart Card System Co., Ltd
- 6.10.5 Products
- 6.11 Shanghai China Card Group
- 6.12 Shenzhen Tsinghua Wumao Information Technology Co., Ltd
- 6.12.1 Company Profile
- 6.12.2 Branches
- 6.12.3 Products
- 6.13 Zhuhai Eastcom Peace Smart Card Co., Ltd
- 6.13.1 Company Profile
- 6.13.2 Products
- 6.13.3 Oversea Markets
- 6.13.4 Operations
- 6.14 Aerospace Information Co., Ltd
- 6.14.1 Company Profile
- 6.14.2 Projects
- 6.14.3 Products
- 6.14.4 Operations
- 6.15 China Electronics Smart Card Co., Ltd
- 6.15.1 Company Profile
- 6.15.2 Products
- 6.16 Wuhan Tianyu Industry Co., Ltd
- 6.17 Shenzhen Hongcard Technical Co., Ltd
- 6.17.1 Company Profile
- 6.17.2 Clients
- 6.17.3 Partners
- **7 China IC Card System Solutions and Relevant Software Manufacturers**
- 7.1 Beijing Feitian Technology Co., Ltd
- 7.1.1 Company Profile
- 7.1.2 Clients
- 7.1.3 Oversea Markets
- 7.2 China Smartech Development Co., Ltd
- 7.2.1 Company Profile



- 7.2.2 Products
- 7.3 Fujian Newland Computer Co., Ltd
  - 7.3.1 Company Profile
  - 7.3.2 Operations
- 7.4 Guangdong Tecsun Technology Co., Ltd
  - 7.4.1 Company Profile
  - 7.4.2 Products
  - 7.4.3 Operation by Application Product
  - 7.4.2 Products
  - 7.4.5 Partners
- 7.5 Beijing Orient Card Digital Information Technology Co., Ltd
  - 7.5.1 Company Profile
  - 7.5.2 Clients
- 7.6 Beijing Shuoliang Information Technology Co., Ltd
  - 7.6.1 Company Profile
  - 7.6.2 Partners
- 7.7 Dalian Hengji Electronics Technical Co., Ltd
  - 7.7.1 Company Profile
  - 7.7.2 Products
- 7.8 Jiangsu Hengbao Co., Ltd
  - 7.8.1 Company Profile
  - 7.8.2 Products
  - 7.8.3 Operations
  - 7.8.4 Clients
- 7.9 Hainan Pacific Intellectual Technology Co., Ltd
- **8 China IC Card Read/Write Device Manufactures**
  - 8.1 Beijing Furong Electronics Co., Ltd
    - 8.1.1 Company Profile
    - 8.1.2 Products
  - 8.2 Beijing Changmao Technology Co., Ltd
    - 8.2.1 Company Profile
    - 8.2.2 Products
  - 8.3 Fujian Landi Commercial Equipment Co., Ltd
    - 8.3.1 Company Profile
    - 8.3.2 Products
  - 8.4 China -Vision Intelligent Card Reader Co., Ltd
  -
- **9 China IC Card Materials and Printing Manufacturers**
  - 9.1 Jiangsu Huaxin Plastic Industry Developing Co., Ltd
  - 9.2 Shaanxi Zhongcai Technology Group Co., Ltd
  - 9.3 Eternal Group
  - 9.4 Zhenzhou Wanguang Smart Card Technology Co., Ltd

## Selected Charts

- Structure Map of Contact CPU Card Chip
- IC Card Classification
- Global EMC Card Issuance, 2004-2006
- Top Three Security concerns of Card-holders
- The Relationship between EMV Terminal Cognition and Utilization Rate
- Global IC Card Shipment, 1999-2008
- China IC Card Shipment and Shipment Value, 2000-2008
- China's IC Card Sales Revenue Distribution, 2007
- China IC Card Market Share according to Application, 2007-2008
- China Mobile Phone Card Issuance, 2001-2007
- Number of 3G Mobile Phone User in China, 2006-2010
- Pay Phone Card Issuance in China, 2001-2007
- Issuance of Second Generation ID Card in China, 2004-2008
- Issuance of Bus Card in China, 2001-2007
- Issuance of Social Insurance Card in China, 2001-2007
- Issuance of Educational Card in China, 2001-2007
- China IC Card Export Value, 2007
- IC Card Industry Chain
- Market Share Distribution of Global IC Card Chip Manufacturers, 2007
- Global IC Card Microprocessor Sales, 2005-2010
- Global Business of Infineon
- Communication Solutions of Infineon

- Global Production Network of Infineon
- Infineon's Sales Revenue, 2003-2008
- Atmel's Financial Results, 2003-2007
- Atmel's Sales Revenue according to Division, 2001 and 2007
- Atmel's Clients, 2007
- Sales Revenue and Profit of Samsung Semiconductor Division, 2004-2008
- ST's Net Revenue Growth According to Market Segmentations, 2007
- ST's Net Revenue and Gross Profit, Q1,2008
- ST's Net Revenue and Gross Profit, Q2,2008
- ST's Product Roadmap of IC Card for Financial System
- ST's Product Roadmap of IC Card for Electronic Governmental Affairs
- ST's SoC Product Roadmap
- Global MCU Market Share of Renesas according to Application
- Global Smart Card Production Network of Renesas
- Smart Card Partners of Renesas in China
- Smart Card Technology Plans of Renesas
- Mobile Communication Products of Renesas
- Financial ID Card Products of Renesas
- Dual-module/non-contact Product Plans of Renesas
- NXP's Sales, 2005-2007
- NXP's Sales according to Division, 2005-2007
- Datang Microelectronics' Sales Revenue and Gross Profit, 2004-2008
- Fudan Microelectronics' Sales Revenue and Gross Profit Margin, 2004-2008
- Tongfang Microelectronics' Net Profit, 2005-H1 2008
- Shanghai Belling's Sales Revenue and Total Profit, 2004-2008

- Gemalto's Sales Revenue, Q3 2007
- Gemalto's Sales Revenue according to Region, Q3 2007
- Gemalto's Clients
- Watch's Sales Revenue, 2003-2007
- Watch's Card Issuance, 2004-2007
- Intelligence Transportation System Frame Developed by Beijing Aviation Zhitong
- Beijing Aviation Zhitong's Partners
- Zhongshan Dahua's Sales Network in China
- Feilo's Sales Revenue and Profit, 2002-H1 2008
- Smart Card Sales Revenue of Shanghai Changfeng, 2004-2007
- Smart Card Sales Revenue of Shanghai Pujiang, 2004-2007
- Shanghai China Card Group's Organizational Structure
- Shanghai China Card Group's Production Capacity, 2008
- Domestic and Foreign Sales Revenue of Zhuhai Eastcom Peace Smart Card, H1 2008
- Sales Revenue and Profit of Aerospace Information Co., Ltd
- Investor Structure of China Electronics Smart Card Co., Ltd
- Main Module Packaging Products of China Electronics Smart Card Co., Ltd
- Clients of Shenzhen Hongcard Technical Co., Ltd
- Products of China Smartech Development Co., Ltd
- Sales Revenue of Fujian Newland Computer Co., Ltd, 2002-H1 2008
- Guangdong Tecsun's Social Insurance Card Solutions
- Guangdong Tecsun's Social Insurance Card Clients
- Guangdong Tecsun's in-place Image Certificate Card Sample

- Jiangsu Hengbao's Product Catalogue
- Jiangsu Hengbao's Investment Projects, 2007
- Jiangsu Hengbao's Clients
- Beijing Furong Electronics' Organizational Structure
- The Second Generation ID Card Solutions of Shenzhen China Vision Electronic Read and Write Equipment Co., Ltd
- Products of China Vision Electronic Read and Write Equipment Co., Ltd
- Qualifications of Jiangsu Huaxin Plastics Development Co., Ltd
- Zhenzhou Wanguang's Products
- Standard of EMV Level 1 and EMV Level 2
- Global EMV Transfer according to Region, 2006
- EMV Transfer Comparison in Europe, 2006
- Bank Card Fraud Loss in UK, 2004-2007
- Domestic and Oversea Loss of UK Bank Card Fraud, 2007
- Content of China Financial IC Card Specifications (V2.0)
- Global IC Card Shipment according to Application, 2006-2008
- Global Non-touch IC Card Shipment according to Application, 2007
- Quarterly Samsung Electronics' Memory Sales Revenue and Growth, H1 2008
- Renesas' Smart Card Shipment in the World and China
- Smart Card Projects of Renesas in China
- Overview of Datang Microelectronics
- Datang Microelectronics' Performance
- Datang Microelectronics' IC Card Development Courses
- Datang Microelectronics' IC Card Production Capacity

- Datang Microelectronics' IC Card Products and Types
- Products of Shanghai Huahong Jitong Smart Card System Co., Ltd
- Products of Shanghai Huahong Integrated Circuit Co., Ltd
- Regional Agents of Shanghai Huahong Integrated Circuit Co., Ltd
- Production Capacity of Shanghai Pujiang Smart Card System Co., Ltd
- Clients of Shanghai Pujiang Smart Card System Co., Ltd
- Feilo's Sales Revenue and Growth of IC Card and Relevant Software Development and System Integration, 2005-H1 2007
- Shenzhen Tsinghua Wumao's Products
- Zhuhai Eastcom Peace's Revenue and Profit according to Product, 2006-H1 2008
- Aerospace Information's Sales Revenue and Gross Profit Margin according to Product, H1 2008
- Overview and Production Capacity of China Electronics Smart Card Co., Ltd
- Fujian Newland Computer's Sales Revenue and Profit according to Product, H1 2008
- Fujian Newland Computer's Sales Revenue according to Region, H1 2008
- Tecsun IC Card Product Chip Manufacturers
- Chip Providers of Tecsun Contact IC Cards
- Chip Providers of Tecsun Inductive IC Cards
- Tecsun' CPU Card Specifications
- Tecsun's Magnetic Card Specifications
- Orient Card's Clients
- Jiangsu Hengbao's Sales Revenue and Gross Profit according to Product, 2003-H1 2007

## How to Buy

Product details			How to Order
Single user	USD	File	By email: report@researchinchina.com
	3,000	PDF	By fax: 86-10-82600829
Enterprisewide	4,500	PDF	By online: www.researchinchina.com
Publication date: Nov. 2008			
For more information, call our office in Beijing, China: Tel: 86-10-82600828 Website: www.researchinchina.com			