

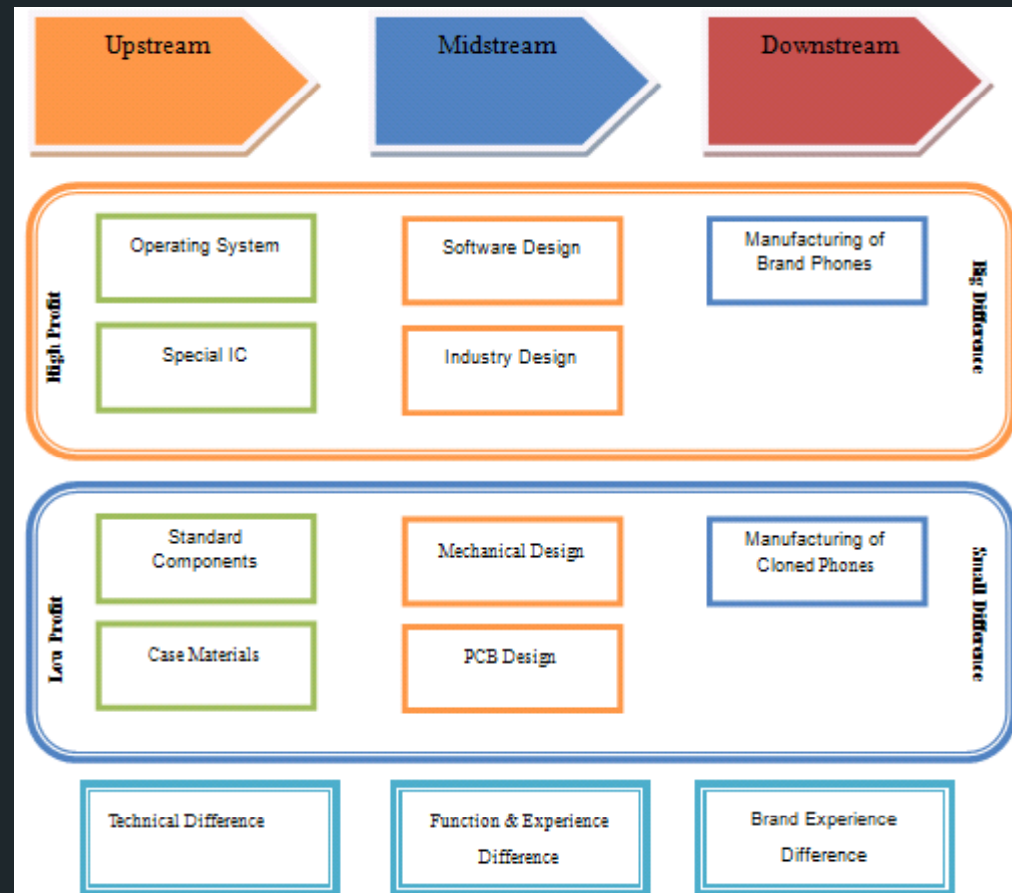
China Mobile Phone Design Industry Report, 2009-2010



Mobile phone design industry has undergone fundamental changes.

First, mobile phone design and production patterns have changed completely. The upstream and downstream of industry chain penetrate into each other. The traditional mobile phone design companies that focused on buying chip sets, designing circuit boards and adding cases have gradually quitted. Instead, the upstream, midstream and downstream of industry chain are integrated vertically so that enterprises can master the difference of mobile phones more effectively.

Profit Comparison among All Sectors of Mobile Phone Design Industry Chain



Source: ResearchInChina

It can be seen that the main impetus driving consumers to purchase mobile phones lies in the difference of models. Therefore, any link in the process of design and manufacturing that can enhance product differentiation will generate high profits.

The development trends of smart phones show that hardware differentiation plays a decreasing role in the value of mobile phones, while the differentiation in operating systems, applications and content services play an increasing one. Mobile phone manufacturers have shifted their focus from hardware differentiation to higher value-added links, such as operating system development or device and application software. That's why HP acquired Palm's Web OS. Major mobile phone manufacturers, even operators, have launched their own Application Stores (App Store) to compete for developers and service providers in order to obtain competitive advantages in content and services.

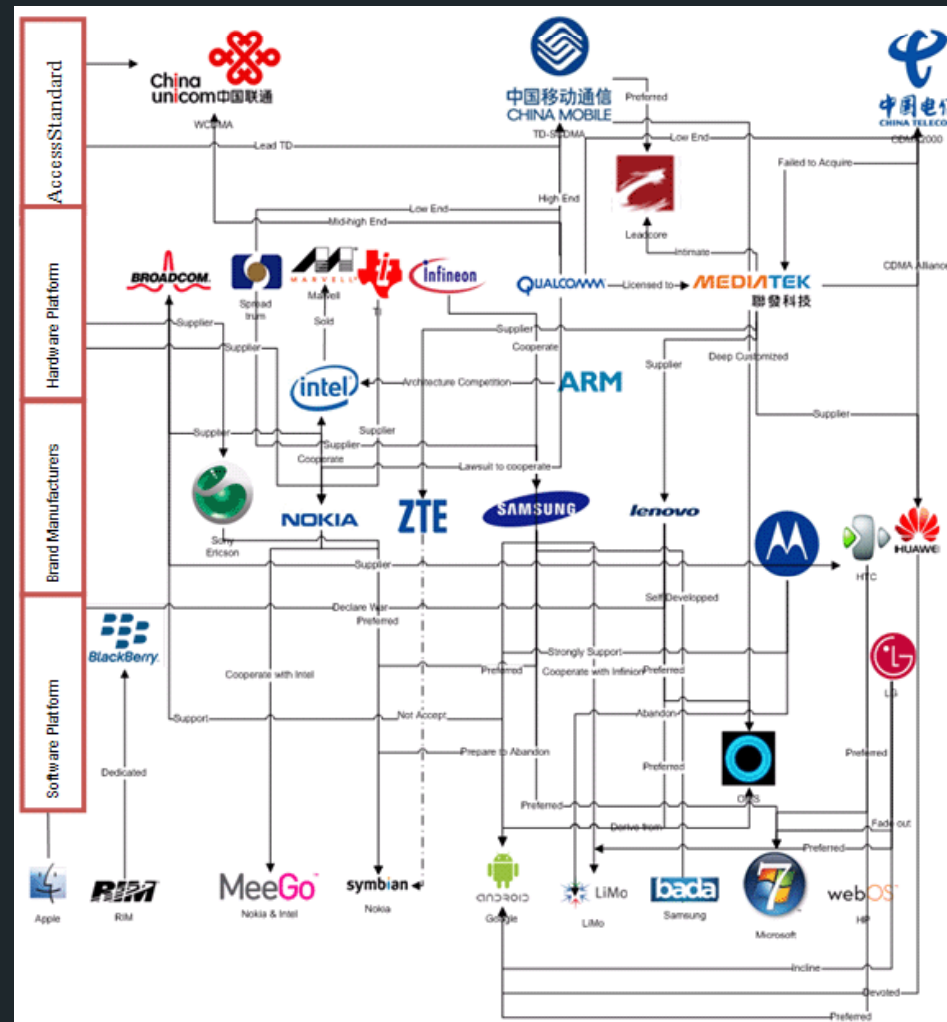
However, the increasing significance of software and content does not indicate the insignificance of other aspects. For example, the improvement of software functions of smart phones and the wireless transmission of massive content data cannot be realized without the support of chip makers and operators. For example, smart phones consume a lot of electricity, so the progress of battery technology is essential.

Second, mobile phone design industry has been greatly expanded, and more and more operators, designers, content providers and software vendors have been involved in the industry, willingly or unwillingly.

Therefore, mobile phone industry, particularly China mobile phone industry, has become quite complex. China is the world's only country that constructs three 3G communication networks simultaneously. The attitude of terminal manufacturers and chip suppliers toward 3G standards directly affects mobile users' selection of network standards.

below:

Terminal manufacturers' inclination and strategic orientation of operating system determines the functional diversification and product differentiation of mobile phones. Operators, hardware providers, software providers, mobile phone manufacturers compete to control terminals, which makes the already complicated mobile phone design industry become more sophisticated. The competitive pattern in China mobile phone design industry is sketched as below:

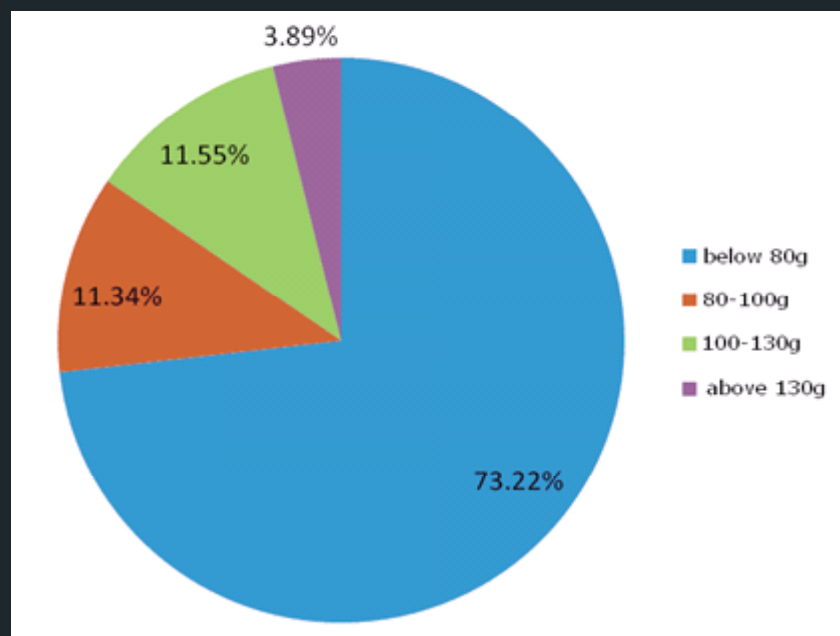


The expansion of industry chain has outdated the “plentiful models” tactic independently operated by manufacturers; the manufacturers with more upstream and downstream resources as well as an ecosystem which benefits upstream and downstream enterprises (particularly software and content providers) will have greater bargain power and more market shares.

This report sheds light on the relationship between the upstream and downstream of mobile phone industry, and delves into major hardware and software platform manufacturers in the mobile phone design industry, mobile phone manufacturers’ preference of operating systems, mobile phone case structure design companies, mobile phone industry alliances, and major mobile phone design companies in China.

The report also describes the design features and user attention of 11,626 mobile phones launched in China in 2007-2009. Design features include more than 50 parameters, namely, standard, type, call time (minute), standby time (hour), operating system, launch time, place of origin, memory, color of internal screen, materials of internal screen, screen size, color of external screen, photo sensor of digital camera, pixel of digital camera (in ten thousands), performance of digital camera, polyphonic ringtone, ringtone, version supported by WAP, web browsing, Bluetooth technology, voice-activated dialing, MP3 player, memory card, video format, recording, call firewall, input method, mail protocol, data & fax receiving, JAVA, Chinese input method, infrared interface, automatic switch, wireless protocol, alarm clock, built-in game, data line interface, phonebook, capacity of phonebook, phonebook grouping, SMS protocol, group sending of SMS, color, capacity of SMS, weight (g), length (mm), width (mm), height (mm), standard battery, accessories and so on.

Distribution of 11,626 mobile phones by Weight, 2007-2009



Source: ResearchInChina

Table of Contents

- **1 Overview of Mobile Phone Design**
- 1.1 Category
- 1.2 Industry Design
- 1.3 Mechanical Design
- 1.4 Hardware Design
- 1.5 Software Design
- 1.6 Project Management
- 1.7 Other Aspects
- **2 Mobile Phone Design Industry Chain**
- 2.1 Industry Chain
- 2.2 Development Trends of Industry Chain
- 2.3 Relationship Among All Sectors of Industry Chain
- **3 Mobile Phone Design Hardware Platform and Manufacturers**
- 3.1 Mobile Phone Application Processor
- 3.1.1 Featured phone Processor
- 3.1.2 Smart Phone Processor
- 3.2 Qualcomm
- 3.3 MTK
- 3.3.1 Smart Phone Solution MT6516
- 3.3.2 TD-SCDMA Smart Phone Solution
- 3.4 ST-Ericsson
- 3.5 Infineon
- 3.5.1 3G Smart Phone Design Platform XMM6260
- 3.5.2 3G Smart Phone Design Platform XMM-6180
- 3.5.3 Low-cost 3G Smart Phone Design Platform XMM-6130
- 3.6 TI
- 3.6.1 Mobile Phone HD Camera Co-processor OMAP-DM5x
- 3.6.2 Smart Phone and MID Platform OMAP3
- 3.7 Broadcom
- 3.8 Spreadtrum
- 3.9 Summary of Mobile Phone Hardware Platform

- **4 Mobile Phone Design Software Platform**

- 4.1 Development of Smart Phone Drives Mobile Phone Software Development
- 4.2 Development of Mobile Phone Operating System
 - 4.2.1 Nokia's Symbian
 - 4.2.2 Apple's iPhone
 - 4.2.3 Google's Android
 - 4.2.4 Microsoft's Windows Phone 7
 - 4.2.5 PALM's WebOS
 - 4.2.6 Linux Mobile
 - 4.2.8 Samsung's Bada
 - 4.2.9 BlackBerry's RIM
 - 4.2.10 China Mobile's OMS
- 4.3 Preference of Mobile Phone Manufacturers in Operating System
 - 4.3.1 Nokia
 - 4.3.2 Samsung
 - 4.3.2 LG Electronics
 - 4.3.3 HTC
 - 4.3.4 Motorola
 - 4.3.5 Sony Ericsson
 - 4.3.6 Others

- 4.3.7 Selection Strategies

- 4.4 Strategic Orientation of Operating System
- 4.4 Role of Operators in Mobile Phone Software Development

- **5 Mobile Phone Case Structure Design Companies**

- 5.1 BYD Electronic
- 5.2 Fu Yu
- 5.3 GEMS
- 5.4 Xin Kai Yuan
- 5.5 Goodbo
- 5.6 Mighty
- 5.7 Fosunny
- 5.8 Foxconn

- **6 China Mobile Phone Industry Alliance**

- 6.1 TD-SCDMA Industry Alliance
 - 6.1.1 Nature
 - 6.1.2 Objectives
 - 6.1.3 Business Scope
 - 6.1.4 Members
- 6.2 CDMA2000 Mobile Phone R & D Industry Alliance

- **7 Development Trends of Mobile Phone Terminals**
- 7.1 Development Trends of Mobile Phone Market
- 7.2 Development Trends of Mobile Phones

- **8 Key Companies in China Mobile Phone Design Industry**
- 8.1 Techfaith
- 8.2 SIM Technology (Simcom)
- 8.3 Longcheer Holdings Limited
- 8.4 A'HONG
- 8.5 Yulong
- 8.6 Tianyu Communication Equipment
- 8.7 Huawei
- 8.8 ZTE
- 8.9 Lenovo
- 8.10 Arima
- 8.11 Quanta
- 8.12 Compal
- 8.13 HTC
- 8.14 Inventec

- Appendix: Characteristics of Products Launched in Mobile Phone Market, 2007-2009

Selected Charts

- Mechanical Design Process of Mobile Phone
- Hardware Design Process of Mobile Phone
- Software Design Process of Mobile Phone
- Design Project Management Process of Mobile Phone
- Mobile Phone Design Industry Chain
- Profit Comparison among All Sectors of Mobile Phone Design Industry Chain
- Relationship among All Sectors of Mobile Phone Design Industry Chain
- Market Shares of the World's Major Non-smart Phone Application Processor Manufacturers by Value, 2008
- Market Shares of the World's Major Mobile Phone Platform Manufacturers by Revenue, 2009
- Supply Relationship between the World's Major Mobile Phone Platform Manufacturers and Mobile Phone Brands, 2009
- Market Shares of Major Mobile Phone Manufacturers in the World, 2009
- Market Shares of Major Mobile Phone Manufacturers in China, 2008-2009
- Operating Revenue of IC Suppliers in the World, 2009
- Global IC Industry, 2009
- Global Mobile Phone Chip Industry, 2009
- Demand of the World's Major IC Buyers, 2009-2010E
- Market Shares of Smart Phone CPUs, 2008
- Market Shares of Smart Phone CPUs, 2009-2010
- Market Shares of Smart Phone CPU Manufacturers, 2009-2010
- Typical Top Mobile Phone Core

- ARM Core Roadmap
- Cortex-A9 Core Framework
- STERICSSON U8500 System
- Cortex A5 Block Diagram
- Performance of Cortex A5
- Business Models of Qualcomm
- Seven Subsidiaries of Qualcomm
- Financial Data of Major Subsidiaries of Qualcomm, 2008-2009
- Revenue of Qualcomm by Region, 2006-2008
- QCT's Revenue and EBT, Q1 2007-Q3 2009
- Revenue and Gross Profit Margin of Qualcomm, 2000-2009
- Chip Shipment of Qualcomm, 2002-2007
- Proportion of Qualcomm's Chip Shipment to Global Shipment, 2002-2007
- Geographical Distribution of New Licensed Clients of Qualcomm, Jan.-Sep. 2009
- Block Diagram of QSD8250
- Mobile Phone Chip Roadmap of Qualcomm
- Main Baseband Chips of Qualcomm
- MTK Platform Development and Features of Chips
- X-Gold 618 Framework
- Block Diagram of BP3 Entertain Solution
- Revenue of TI by Business, 2007-2009
- Operating Profit of TI by Business, 2007-2009
- OMAP Business Revenue of TI, Q1 2008-Q1 2010
- Mobile Phones with OMAP3430
- OMAP Roadmap of TI
- Introduction to OMAP 4 Series

- Block Diagram of OMAP44X
- Typical Application Diagram of OMAP44X
- Software Architecture Diagram of OMAP44X
- Block Diagram of SC8800H Baseband Chip
- Mocom Platform
- Market Shares of the World's Major Mobile Phone Platform Manufacturers by Revenue
- Supply Relationship between Major Mobile Phone Platform Manufacturers and Mobile Phone Brands in the World, 2009
- Market Shares of Major Mobile Phone Manufacturers in the World, 2009
- Market Shares of Major Mobile Phone Manufacturers in China, 2008-2009
- Business Revenue of Global IC Suppliers, 2009
- Global IC Industry, 2009
- Global Mobile Phone Chip Industry, 2009
- Demand of the World's Major IC Buyers, 2009-2010E
- Market Shares of Smart Phone CPUs, 2008
- Market Shares of Smart Phone CPUs, 2009-2010
- Market Shares of Smart Phone CPU Manufacturers, 2009-2010
- CPU Parameters of Common Smart Phones
- Market Shares of Mobile Phones in the World by Category, 2009 (excluding Bandit Phones)
- Market Shares of Mobile Phones in the World by Category, 2010E (excluding Bandit Phones)
- Users' Attitude to Operating Systems by Brand

- Mobile Phone Software Platform Stack
- Market Shares of Mainstream Operating Systems by Shipment, 2009
- User Experience of Mainstream Operating Systems
- Comparison Among Mainstream Operating Systems
- Market Shares of Mainstream Operating Systems by Shipment, 2009-2011
- Symbian Platform Release Path
- Framework of Symbian S60 Platform
- Newly-opened Application Stores of Apple, 2006-2009
- Downloads of Application Software of Apple, 2006-2009
- Android Platform Release Path
- Framework of Android Platform
- Release Path of Windows Phone 7
- Framework of Bada Platform
- Manufacturers that Support OMS System of China Mobile
- Framework of Meego Platform
- Operating Systems of Samsung's Mobile Phones, 2009 (by Sales Volume)
- Operating Systems of Samsung's Mobile Phones, 2011E (by Sales Volume)
- Operating Systems of LG's Mobile Phones, 2009-2011 (by Sales Volume)
- Operating Systems of HTC's Mobile Phones, 2009-2011 (by Sales Volume)
- Global Mobile Phone Shipment, 2006-2010
- Mobile Phone Output in China, 2000-2010
- Smart Phone Shipment by Brand, 2009-2011
- Global Mobile Phone Shipment by Communication Technology, 2006-2010

- Global Mobile Phone Shipment by Region, 2006-2010
- Global Mobile Phone Penetration by Region, 2009
- Number of Mobile Phone Subscribers and Penetration Rate in China, 2006-2010
- Number of Mobile Phone Subscribers and Penetration Rate in China by Region, 2010
- Market Shares of Mobile Phones in the World by Category, 2009 (excluding Bandit Phones)
- Market Shares of Mobile Phones in the World by Category, 2010E (excluding Bandit Phones)
- Average Prices of Mobile Phones in the World by Category, 2006-2010 (excluding Bandit Phones)
- Attention to Style of Mobile Phones in China, 2009
- Attention to Color of Mobile Phones in China, 2009
- Attention to Mainstream Functions of Mobile Phones in China, 2009
- Attention to Touch Screen Mobile Phones in China, 2009
- Attention to Standard in Chinese Mobile Phone Market, 2009
- Market Shares of Operators in China, 2009 (by Revenue)
- Attention to Chinese Mobile Phone Market by Brand, 2009
- Development History of Techfaith
- Business Structure of Techfaith
- Mobile Phone Business Structure of Techfaith
- Product Platform of Techfaith
- Major Mobile Phone Design Platforms Adopted by Techfaith
- Handheld Device Solutions of Techfaith

- Mobile Phone Design Business Operation Process of Techfaith
- Business Models of Techfaith
- Major Clients of Techfaith
- Business Revenue and Net Profit of Techfaith, 2005-2009
- Business Revenue and Net Profit of SIM Technology, 2005-2009
- Corporate Structure of Longcheer Holdings Ltd
- Main Customers of Longcheer
- Main Partners of Longcheer
- Business Revenue and Net Profit of Longcheer Holdings Limited, 2005-2009
- Mobile Phone Sales Volume of A'HONG, 2005-2009
- Main Partners of YuLong
- Industry Solutions of Yulong
- ZTE's Product Potfolio
- Revenue of ZTE by Business, 2009
- Total Revenue and Mobile Phone Business Revenue of ZTE, 2006-2009
- Arima's Organization Chart
- Business Revenue of Arima, 2008-2009
- Mobile Phone Shipment of Arima, 2009-2010E
- Monthly Business Revenue of Arima, 2007-2009
- Business Revenue and Net Profit of Arima, 2006-2009
- Debt Ratio and Inventory Turnover of Arima, 2006-2009
- Quanta's Organizational Structure
- Business Revenue of Quanta, 2006-2009
- Revenue of Quanta by Product, 2010

- Monthly Business Revenue of Quanta, 2007-2009
- Business Revenue and Net Profit of Quanta, 2006-2009
- Debt Ratio and Inventory Turnover of Quanta, 2006-2009
- Business Revenue and Profit of Compal, 2008-2011E
- Mobile Phone Shipment of Compal, 2009-2010E
- Business Revenue of Compal by Product, 2009
- Mobile Phone Shipment and Average Prices of HTC, 2009
- Mobile Phone Shipment of HTC by Region, 2008-2009
- Business Revenue and Net Profit of HTC, 2006-2010
- Business Revenue Structure of Inventec by Product, 2010
- Mobile Phone Shipment of Inventec, 2009-2010E
- Business Revenue of Inventec by Product, 2009-2010
- Distribution of 11,626 mobile phones by Standard, 2007-2009
- Distribution of 11,626 mobile phones by Bar Phone / Slide Phone/ Flip Phone, 2007-2009
- Distribution of 11,626 mobile phones by Communication Time, 2007-2009
- Distribution of 11,626 mobile phones by CPU, 2007-2009
- Distribution of 11,626 mobile phones by Standby Time, 2007-2009
- Distribution of 11,626 mobile phones by Operating System, 2007-2009
- Distribution of 11,626 mobile phones by Launch Time , 2007-2009
- Distribution of 11,626 mobile phones by Memory Type, 2007-2009
- Distribution of 11,626 mobile phones by Internal Screen Color , 2007-2009
- Distribution of 11,626 mobile phones by Internal Screen Materials , 2007-2009
- Distribution of 11,626 mobile phones by Screen Size , 2007-2009

- Distribution of 11,626 mobile phones by Features of Digital Cameras, 2007-2009
- Distribution of 11,626 mobile phones by External Screen Color , 2007-2009
- Distribution of 11,626 mobile phones by Photo Sensors , 2007-2009
- Distribution of 11,626 mobile phones by Camera Pixels, 2007-2009
- Distribution of 11,626 mobile phones by Polyphonic Ringtones , 2007-2009
- Distribution of 11,626 mobile phones by Ringtone Functions , 2007-2009
- Distribution of 11,626 mobile phones by WAP Versions , 2007-2009
- Distribution of 11,626 mobile phones by Web Browsing , 2007-2009
- Distribution of 11,626 mobile phones by Bluetooth , 2007-2009
- Distribution of 11,626 mobile phones by Voice Control Dialing , 2007-2009
- Distribution of 11,626 mobile phones by MP3 Players , 2007-2009
- Distribution of 11,626 mobile phones by Memory Cards , 2007-2009
- Distribution of 11,626 mobile phones by Video Formats , 2007-2009
- Distribution of 11,626 mobile phones by Recording Function , 2007-2009
- Distribution of 11,626 mobile phones by Call Firewall , 2007-2009
- Distribution of 11,626 mobile phones by Input Modes , 2007-2009
- Distribution of 11,626 mobile phones by Mail Protocol , 2007-2009
- Distribution of 11,626 mobile phones by JAVA , 2007-2009
- Distribution of 11,626 mobile phones by Chinese Input Methods , 2007-2009
- Distribution of 11,626 mobile phones by Infrared Interface , 2007-2009
- Distribution of 11,626 mobile phones by Automatic Switching , 2007-2009
- Distribution of 11,626 mobile phones by Wireless Protocol , 2007-2009
- Distribution of 11,626 mobile phones by Alarm Function , 2007-2009
- Distribution of 11,626 mobile phones by Built-in Games , 2007-2009



- Distribution of 11,626 mobile phones by Data Line Interface , 2007-2009
- Distribution of 11,626 mobile phones by Items of Phone Book , 2007-2009
- Distribution of 11,626 mobile phones by Phone Book Capacity , 2007-2009
- Distribution of 11,626 mobile phones by Phone Book Grouping , 2007-2009
- Distribution of 11,626 mobile phones by SMS Protocol , 2007-2009
- Distribution of 11,626 mobile phones by Mass SMS Sending , 2007-2009
- Distribution of 11,626 mobile phones by Color , 2007-2009
- Distribution of 11,626 mobile phones by SMS Capacity , 2007-2009
- Distribution of 11,626 mobile phones by Weight , 2007-2009
- Distribution of 11,626 mobile phones by Length , 2007-2009
- Distribution of 11,626 mobile phones by Width , 2007-2009
- Distribution of 11,626 mobile phones by Height , 2007-2009
- Distribution of 11,626 mobile phones by Standard Battery , 2007-2009
- Distribution of 11,626 mobile phones by Accessories , 2007-2009



How to Buy

Product details			How to Order
	USD	File	By email: report@researchinchina.com
Single user	2,800	PDF	By fax: 86-10-82601570
Enterprisewide	4,200	PDF	By online: www.researchinchina.com
Publication date: May 2010			
For more information, call our office in Beijing, China:			
Tel: 86-10-82600828			
Website: www.researchinchina.com			