



China Fingerprint Identification Chip Market

Report, 2007

Address: Room 1102-1107, Intelli-center, Zhongguancun East Rd,
No 18 Hai Dian District, Beijing, China, Post: 100083
Tel: +86 10 82600828 Fax: +86 10 82600829
Email: Report@researchinchina.com

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URL	http://www.researchinchina.com/Report/Electronics/5184.html						
Abstract	<p>The principles of finger identification are similar to those of other biological identification technologies. It uses fingerprints of human body to distinguish and identify individual identity. Among all biological identification technologies, the fingerprint identification technology is the most mature and most widely used. This is because it is very simple for people to collect fingerprints and fingerprint identification is highly accurate, only following iris identification by a gap of one millionth.</p> <p>In 2007-2012 Global Biometric Identification Market Report issued by IBG, scale of global biometric identification market in the next five years is estimated. And it's also estimated that it will exceed USD 3 billion in 2007, reach USD 3.8 billion in 2008 and exceed USD 7.4 billion in 2012.</p> <p>Meanwhile, market shares of global fingerprint identification technology in 2007 are also reported to reach 58.9% in the report (including AFIS and non-AFIS fingerprint application), being far more than that in 2006 and far exceeding that of other biometric identification technologies. Undoubtedly, it has showed that acceptance and application of fingerprint identification has stepped into a "fast lane".</p> <p>According to the statistics of the domestic sale and export of the domestic biological identification products, the sales revenue of China biological identification market amounted to about RMB 860 million in 2006, and more than 97% was from the biological identification products, the domestic equipment was in the main stream, as well as a large number of products were exported. Calculating by the sales volume, the export accounted for about 28%.</p> <p>From the prospective of the life cycle of market and industry, China biological identification and industry has finished the lead-in period and the most of the growth period, and going on the mature period gradually. In 2006, the domestic biological identification products not only dominated the domestic market, but also walked towards to the international market.</p>						

The fingerprint identification technology and product still situated the leading position in China biological identification industry, besides the palm identification, the other identification technologies all situated in the preliminary popularization period. While face identification and iris identification both have achieved the dramatic development and promotion, and they will have the very new market behavior in the following one to two years. According to the analysis, there was not much change of China biological identification market application in 2006 to previous years, the fingerprint lock, attendance and access control still played the leading role. The fingerprint door lock product was still the biological identification products with the largest export volume. While most of the fingerprint identification attendance and access control equipment were sold to overseas market with OEM due to lack of its own market channel now.

It is forecasted that China fingerprint identification market scale will remain the rapid increase in 2007. and the growth margin will reach 60% to RMB 960 million, and it will reach RMB 4.651 billion in 2011.

The fingerprint NB, fingerprint U disk, and fingerprint door lock became the best sellers in 2006, and their sales volume had increased dramatically, while the intelligence card with the good combination of biological identification technology had been wiped out basically. There were nearly 20 manufacturers that launched fingerprint NB successively in 2005, covering the mainstream NB manufacturers. The former PCD division of IBM issued the fingerprint NB was regarded as the most important event in the biological identification field by the large the biological identification manufacturers in the world, and in 2006, nearly all the NB brands had launched the fingerprint identification NB products, especially in the middle and high-end commercial computer field, while the desktop also started to focus on the fingerprint identification system. Tsinghua Tongfang issued the New Chaoyang series of PC with Microchip, which is the beginning of the fingerprint identification PC, and then more and more fingerprint identification PC and NB products will be launched. The fingerprint U disk was the fingerprint product with the largest change in the product shape in 2005, since the main-controlling chip manufacturers strengthened the R&D solution (there are 7 or 8 mature solutions in China now), it launched the virtual drive can install the main-controlling chip automatically, and then the usability of the product strengthened a lot. Meanwhile, the average price of the fingerprint sensor had dropped to USD 5 from USD 15, so the cost of the fingerprint U disk was just RMB 100 higher than the common U disk (with the same capacity), and it is possible to expand the large scale. In the aspect of the fingerprint door lock, although the technology of the domestic fingerprint door lock was comparatively backward, especially in the field of the combination of the fingerprint chip and control circuit, while the market recognition was improving and the export was improved rapidly.

List of Computer with Fingerprint Identification System, 2007

NB Brand	Model	Issuing Time	Main Chip Provider
Acer	TravelMate 6292	2007.5	Upek
	TravelMate 6492 & 6592		
Asustek	F3sv-A1	2007.6	Authentec
	F8S	2007.7	Authentec
IBM / Lenovo	Lenovo 3000 N200	2007.5	Authentec
	Lenovo 3000 V200	2007.5	Authentec
Tsinghua Tongfang	X300A	2007.6	symwave
Haier	A20	2007.5	---
Desktop Brand	Model	Issuing Time	Main Chip Provider
Shuttle	XPCs SG33G5M, SX38P3, SP35P3, SN68PTG6	2007.6	Atrua
LG	its first desktop PC	2007.6	---
Tsinghua Tongfang	New Chaoyang Series	2007.6	symwave

It is acknowledged that for the increasing demand for safety of personal data, information and capital, and improvement of size, cost, accuracy and technology of fingerprint identification sensor, fingerprint identification products have extended form traditional attendance, door lock and lockfast to consumer electronics field with large shipment such as mobile handset, desktop/notebook, and PC peripheral equipments, which have a large group of followers. So it is estimated that China fingerprint identification products will be increasingly applied.

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International Manufacturers

AuthenTec

www.authentec.com

Established in 1998, the delivery of fingerprint identification system of AUTHENTEC is 16 million sets till the end of 2006, among which 6 million sets are applied in mobile phone field. In Asia, there are more than 3 million sensors applied in mobile phone, PC and peripheral equipment, and control equipment. The delivery in 2006 reaches 6.9 million sets, up 122.6% on 2005. The sales revenue in 2006 is US \$33.2 million, rising 72.9% than 2005 which is US\$19.2 million. The delivery value in first quarter of 2007 is US \$1.9 million. In 2006, AUTHENTEC made a loss of US \$9.8 million. There are 99 employees till March 2007.

Sales Result of AUTHENTEC, 2002-2006

Year	2002	2003	2004	2005	2006
Sales income	3404	16879	13835	19243	33174
Net loss	-7341	-4882	-4847	-6142	-7872

Source: ResearchInChina

The main customers of AUTHENTEC are FUJITSU, COMPAL and ENVADA, whom bring income of 32.2%, 18.5% and 13.7% for AUTHENTEC respectively in 2006. In first quarter of 2007, the top four customers are FUJITSU, COMPAL, ENVADA and RICHPOWER, whom contribute income of 24.6%, 20.4%, 15.4% and 13.9% respectively. NTT DoCoMo, LGE and Pantech all provide mobile phone with integrated sensor. S.Korean mobile phone manufacturer LG Electronics has applied the Power of Touch of AuthenTec in its latest fingerprint identification mobile phone. LG-LP3550 is the third kind of LG mobile phone which adopts the swipe-type

fingerprint identification system of AuthenTec, and configures the EntréPad 2510 fingerprint identification system.

Delivery Statistics of Fingerprint Identification System of AUTHENTEC, 2001-2006

(Unit: million sets)

Year	2001	2002	2003	2004	2005	2006
Sales volume	<0.1	0.2	1.6	1.9	3.1	6.9

Source: ResearchInChina

Regional Sales Proportion of AUTHENTEC, 2004-2006

	Fiscal Year Ended					
	December 31,		December 31,		December 29,	
	2004	2005	2005	2006	2006	2006
	Revenue	% of Total Revenue	Revenue	% of Total Revenue	Revenue	% of Total Revenue
(In thousands, except percentages)						
Asia/Pacific (Excluding Japan)	\$ 3,734	27.0%	\$ 7,560	39.3%	\$ 17,127	51.6%
Japan	6,282	45.4%	7,427	38.6%	11,515	34.7%
Americas	3,396	24.6%	3,884	20.2%	4,107	12.4%
Europe	423	3.0%	372	1.9%	425	1.3%
Total	\$ 13,835	100%	\$ 19,243	100%	\$ 33,174	100%

Source: ResearchInChina

Other customers of AUTHENTEC also include ASUSTeK, HP, High Tech, Hitachi, Lenovo, LG Electronics, Samsung Electronics, and Toshiba, etc. AUTHENTEC's targeted markets include: PC market, including laptop, desktop computer, portable hard disk, keyboard and mouse; wireless handset market, including mobile phone and PDA; and access control system market, such as door access control.

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Output and Output Value of China Fingerprint Identification Market

Compared to the foreign countries, China biological identification industry started about 10 years later. The foreign biological identification industry began in the early of 1980s, while it started in the early of 1990s in China. The first entry was about from 1992 to 1996, and it was about 10. As the pioneer of the industry, there were two types of input: core technology holder and new technology application enthusiast. In addition, their direction is the police AFIS system, security defense field (access control) etc. The market behavior of these pioneers broadcasted the biological identification technology and developed the application market. While, the main problems of the pioneers existing in the period are the lack of market-orientated, weak market operation, and no products to meet the market really.

The first large-scale investment of China biological identification industry was from 1998 to 2001, during the period, the core software and hardware technology had obtained the adequate development in the world, and more and more investors had realized the potential of the biological identification technology application on the basis of the examples of the former pioneers. Meanwhile, the industry entry barrier had declined, and a large number of investors have started to enter the field in China. The investors amounted to more than 100 in the period, consisting of the main body of China biological identification industry in China. During the investors in the period, besides a large number of the application integrators, a few of the investors started to specialize in the combination of the core software and hardware technology, produced the self-independent knowledge property products to be the real product supplier. During the period, the biological identification technology had developed dramatically, and the consumers' recognition to the biological identification technology improved quickly, which laid the basis for the further development. The foreign biological identification technology leading enterprises also entered China market during the period, they either established the branches, or carried out the product distribution via the domestic enterprises. In addition, China biological identification technology started the rapid growth period, and the biological identification products became mature as well, and received the customers' recognition. The third flow of the China biological identification investment started in 2003, and the characteristic of the period is not much quantity, however, after the serious analysis, observation and research, the core resource is also the rational investment. Meanwhile, the strength of the investors is higher than the former two, and the starting point is

comparatively higher, most of them went to the core technology and terminal application product design manufacturing.

There are about 200 biological identification enterprises in China so far, and about 30 of which are with the independent product research and development capability. The market scale of China biological identification industry amounted to RMB 350 million (excluding the foreign sale, and the foreign sale is mainly the fingerprint lock) in 2005, and the most mature fingerprint identification application has accounted for more than 95%, about RMB 332 million. Due to the fingerprint identification system had the wide application in NB and computer periphery in 2006, the market scale increased about 80% to about RMB 600 million. Besides, the fingerprint identification also received the deep application in government, finance, aviation, telecommunications, manufacturing, e-commerce, education etc. Currently, the leading enterprises of the biological identification in China include Microchip, Beijing Zhongkong Science Development Co., Ltd, Shenzhen Ideal, etc, while the single sales of these companies is not large.