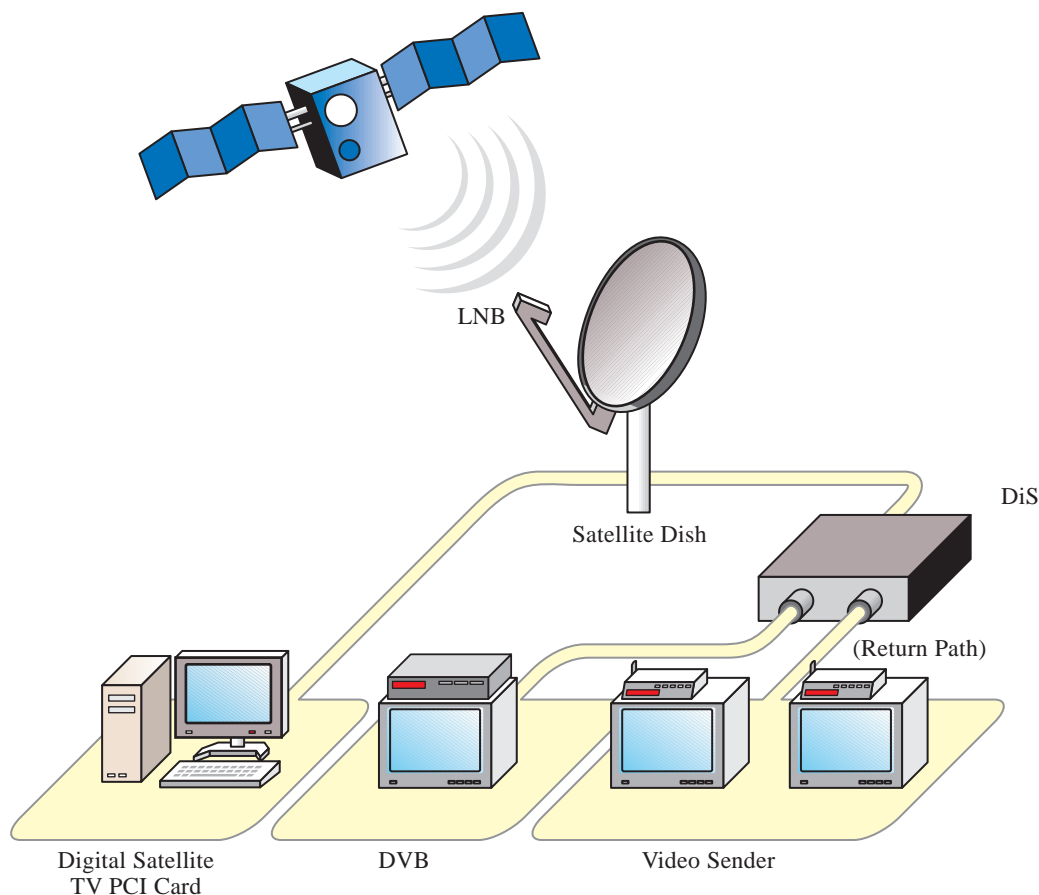


**THE SATELLITE TV INDUSTRY****Satellite TV reception system**

Satellite TV system mainly comprises the satellite dish and three compulsory modules, namely LNB, DVB and DiS. Satellite TV services are normally transmitted via satellites orbiting the earth and satellite TV reception system will receive TV signals using specialised antennas called satellite dishes. The LNB detects the TV signals relayed from the satellite dish and convert the TV signals to an electrical current. During the reception process, TV signals are amplified, filtered and then passed via coaxial cables to the DVB, which is a satellite receiver to decode an encrypted satellite TV signal to enable TV viewers for satellite TV services. If there is more than one LNB, a DiS has to be used to provide extensive switching capabilities by controlling several LNBs at the same time. In other words, a DiS is designed primarily to meet the problem of two or more satellite TV systems with ease.

**Overview of the worldwide satellite TV market**

The Group operates in an industry characterised by rapid changes led by the emergence of new technologies, two of which being: telecommunication signals changing from the basis of analogue to digital and media broadcasting platform evolving from cable TV to satellite TV. Regardless of which broadcasting platforms, images and sounds in the digital TV (“DTV”) transmission, as compared to that in the conventional analogue transmission, are captured and transmitted by digital signals which will not only improve the quality and clarity of the television pictures, but also make possible the over-the-air delivery of several simultaneous services, such as the interactive television, to viewers.

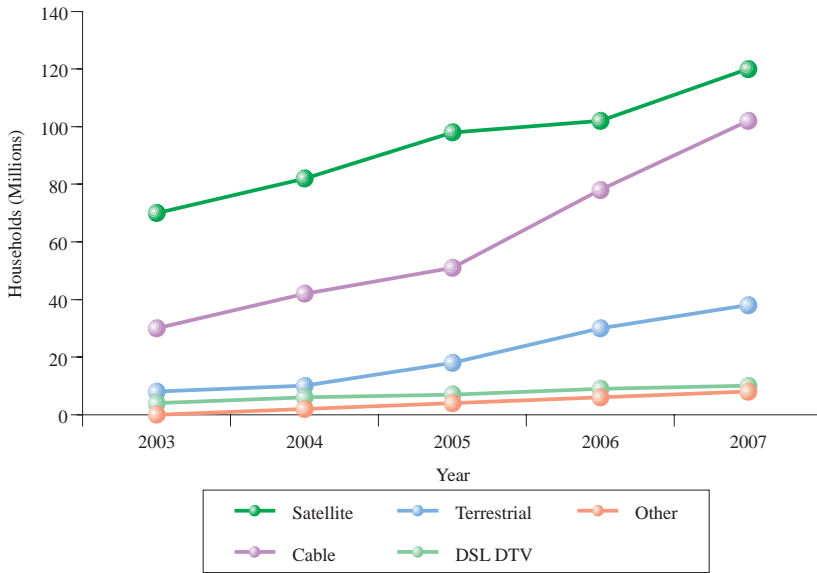
# INDUSTRY OVERVIEW

The DTV delivery platforms, by which the DTV service reaches the television receivers, comprise mainly of Digital Cable, Digital Satellite, Video over DSL (“DSL DTV”) and Digital Terrestrial (“DVB-T”).

Digital Cable is a cable broadcasting standard for television, sound and data services using standard cable TV distribution frequencies. Digital Satellite uses satellite to transmit TV signals as aforementioned above. DSL DTV allows the transmission of high quality broadband TV signals into homes. DVB-T transmits large quantities of information to the consumer via a standard television aerial.

The diagram below presents a forecast on the worldwide application of DTV delivery platforms from 2003 to 2007. As estimated by Strategy Analytics, approximately 120 million households in the world will adopt Digital Satellite platform in 2007, making it the most popular DTV delivery platform in the near future.

**Worldwide DTV Set Top Box market forecast (2003 to 2007)**

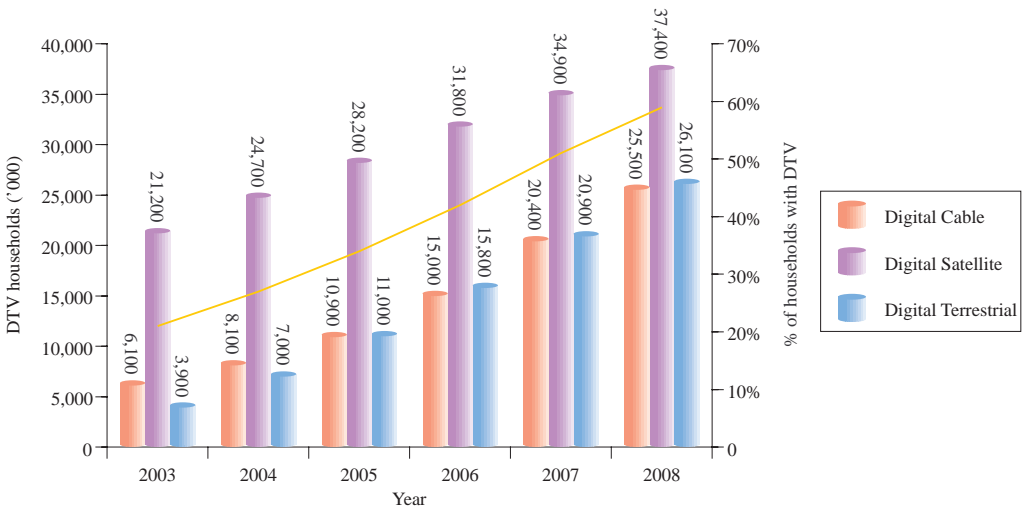


Source: Strategy Analytics

**Satellite TV market in Europe**

The Directors believe that Europe is a market that has experienced rapid growth in the DTV industry. The European DTV market has exhibited renewed subscriber growth since 2003. Together with the success of DVB-T in the UK, Finland and Sweden, the continuing growth of digital satellite services has led to advancement in this sector. According to Datamonitor, the European DTV market will grow from approximately 31 million households at the end of 2003 to approximately 89 million households at the end of 2008, the growth of which will mostly come from Digital Cable and DVB-T platforms. By the end of 2008, approximately 59% of European households will have converted to digital, which represents a sharp increase from that of approximately 21% in 2003. The diagram below depicts the penetration rate of different DTV delivery platforms in Europe from 2003 to 2008:

**DTV in Europe (2003 to 2008)**



Source: Datamonitor

The table below sets out the population size and TV households size of some of the European countries. The table further proves that satellite TV has room to expand in Europe.

**Estimated population and TV households sizes in European countries (2003)**

Country	UK	France	Germany	Spain	Italy
Population (million)	59.2	60.1	82.5	41	57.4
TV households (million)	24.8 (in 2003)	22.3 (in 2000)	33.4 (in 2000)	11.8 (in 2000)	21.2 (in 2000)

Source: DVB Project

**Satellite TV market in the Middle East**

In the Middle East, users can access free satellite TV programs whose broadcast signals are not encrypted. IMS Research, a market research provider to the global electronics industry, estimates that approximately 7.4 million households in the Middle East and Africa received free-to-air analogue and

digital broadcasts in 2003. The research firm also predicts that the number would rise to over approximately 7.7 million in 2004. A high proportion of demand growth is mainly attributable to the digital free-to-air services as the amount of analogue free-to-air programming has been declining throughout the world.

### Satellite TV market in the US

The US is in the forefront of digital revolution. In 1996, the FCC approved plan of DTV conversion which is to be completed by 2006 in accordance with its conversion schedule. The FCC also reported that as of October 2003, approximately 95% of eligible US television stations had been granted a digital construction permit.

eMarketer reports that in January 2004, approximately 68.1% of the households in the US received TV through cable. However, cable TV is facing strong competition from satellite TV, which currently accounts for approximately 20.8% of the US TV market.

eMarketer also forecasts that the number of US households receiving DTV services will reach approximately 70 million in 2007, rising from approximately 44 million at the end of 2003. This translates into a rise in DTV penetration from approximately 40% of the households in 2003 to approximately 60% in 2007.

### Total number of DTV Households in the US (2003 to 2007)



*Note:* Based on 105.5 million households reported by the US Census Bureau in 2000 and a 1.4% yearly growth rate

*Source:* eMarketer

### Satellite TV market in the PRC

The PRC is developing its own DVB-T TV system and has yet to decide on which system to use. The PRC plans to switch approximately 360 million households to DTV by 2015, and the transition will take place in two stages with an initial target to introduce DTV to approximately 100 million urban households by 2008.

## INDUSTRY OVERVIEW

Moreover, the PRC's State Administration of Radio, Film and Television ("SARFT") targeted to launch 30 pay digital broadcasting channels in 2004, and to have 80 channels, 150 DTV programs and 30 million pay users by 2005. It is expected that all cities in eastern China and most of the cities in central and western China will have access to digital programming initially. In 2008, the PRC will also launch the Olympic Games digital programs broadcasting platform. Driven by this development, IMS Research forecasts that shipment of DVBs to the PRC market will grow from approximately 3.9 million in 2003 to over 20 million in 2008, representing a market worth of approximately US\$1.4 billion.

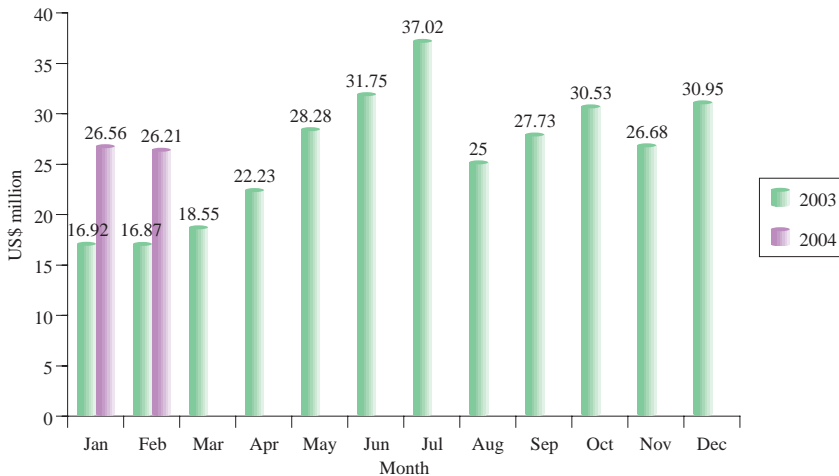
### Satellite TV market in Hong Kong

The China Peoples Daily commented that Hong Kong will adopt the DVB-T system if a Chinese standard is not promulgated in the PRC before the end of 2006. Terrestrial television is expected to broadcast throughout the area by 2007.

### Satellite receiver manufacturers in the PRC

The PRC has become a major production base of satellite receivers. The following graph tabulates the total value of exports of satellite receivers from the PRC for the period from January 2003 to February 2004. As shown by the diagram below, the total value of exports of satellite receivers from the PRC was showing a gradual increasing trend during the corresponding period.

#### The PRC's total value of exports of satellite receivers (January 2003 to February 2004)



Source: China Customs Statistics

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## INDUSTRY OVERVIEW

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The Directors expect that the growth in production of satellite receivers in the PRC will prevail. International manufacturers, in particular, will continue to set up manufacturing facilities in the PRC in order to benefit from cost efficiency resulting from stringent cost control by way of utilising the newly acquired technical know-how of the local workers. The Directors also believe that the presence of international manufacturers in the PRC will inevitably bring competition to new heights, and may as well put pressure on the price of satellite receivers which has recently stabilised. However, market competition will at the same time have a knock-on effect on the quality of satellite receivers produced in the PRC.

In general, satellite receiver manufacturers in the PRC can be divided into three types: the first type is the professional DVB receiver makers. The second consists of traditional TV makers who diversified into the satellite receiver line while the third type mainly comprises electronic components makers who also produce satellite receivers. Usually, they have standardised the features and functions of their products.

### **Overview of the worldwide LNB market**

Demand for LNBs is derived from two markets, namely the personal Direct Broadcast Satellite (“DBS”) household user market and the commercial business satellite market. In view of the robust demand for DBS home entertainment, demand for LNBs is expected to increase as the LNB is part of the satellite dish package which is sold directly to the home end-users.

In addition, it is also expected that demand for LNBs from the commercial business satellite market will also increase since satellite technology will continue to be in need to drive new business solutions to meet the requirements of the business commuters and a host of other business categories.

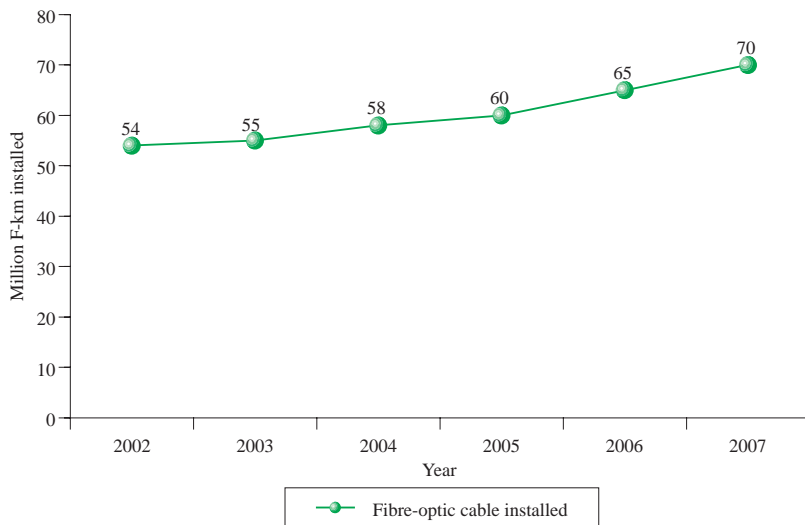
The Directors believe that the potential growth in the DTV and satellite receiver markets will explicitly benefit the Group’s other satellite related products, namely LNB and DiS. It is because LNB and DiS are the necessary components of the household satellite TV system and the sales of the Group’s DVB, LNB and DiS share the same client base, mainly electronic chain retailers and distributors.

## THE CABLE INDUSTRY

### Overview of the worldwide cable market

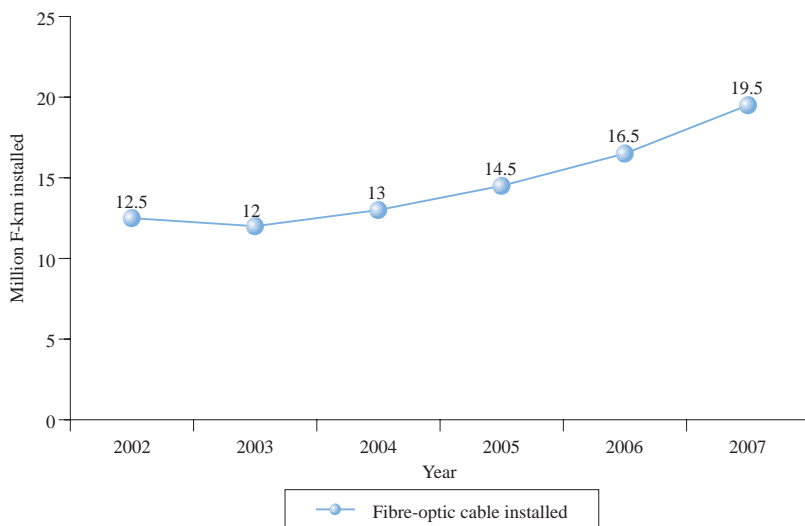
Fibre-optic cable is expected to have a prosperous market demand as it continues to extend beyond long distance communication applications and into new markets, such as multimedia. The following diagrams demonstrate the expected growth in the worldwide and the US fibre-optic cable market from 2002 to 2007:

**The worldwide market of fibre-optic cables (2002 to 2007)**



Source: KMI Research

**The US market of fibre-optic cables (2002 to 2007)**



Source: KMI Research

### **Cable manufacturers in the PRC**

The majority of fibre-optic manufacturers in the PRC focus on the low-end and mid-range product lines, triggering intense competition in these particular market segments; while the high-end products, such as special fibre-optic cables, are mainly produced overseas.

Besides fibre-optic cables, production of a traditional kind of cables, such as coaxial cable, is also significant in the PRC. Product development of coaxial cables is relatively active due to persistent demand from telecom and mobile basestations, cable TV networks and computer networks. The main advantages of the PRC coaxial cable manufacturers are low selling price and high product quality.

In the PRC coaxial cables market, the cable TV coaxial cables account for the largest portion of the total production. The strong demand in cable TV coaxial cables is resulted from the fact that cable TV networks provide a less expensive way of not only broadcasting TV services but also accessing broadband services. As the coaxial cable industry begins to mature, the fourth-generation foam production techniques will become more popular in the PRC, which in turn may lead to an increase in demand for foam-insulated cable TV coaxial cables.

### **Key applications**

#### *Audio cables for use in the Home Theatre System*

The Directors believe that two major trends affect the price of the production of audio cables. The first trend is the increasing use of environmental-friendly materials due to the fact that clients for cables in the US and Europe are becoming more environmental conscious. Another trend is the move towards the high-end segment of the market. In an effort to differentiate themselves in an industry characterised by mature technology, Asian makers of audio cables are spending additional resources on research and development (“R&D”) to develop quality, durable and more attractive models. Both of these trends have added to the manufacturers’ burden of increasing production costs.

#### *USB cables for use in the Computer System*

Production of Universal Serial Bus (“USB”) cables which are applicable in the computer system is very popular around the world. There are many manufacturers of USB cables in the PRC and most of them are located in Guangdong Province due to the proximity of suppliers, particularly in Shenzhen City and Dongguan City, which can facilitate the manufacturers to mitigate their production cost.

For Taiwan-based USB cables manufacturers, North America and Europe are their major export markets whereas for the PRC manufacturers, Europe and Asia, in particular Germany and Singapore are their main target markets for exports.

As USB cables’ technical design and production skills are considered to be mature, the focus of R&D efforts by most of the USB cable manufacturers are on software and industrial designs.

#### *Cords for use in the Telephone System*

The Directors believe that production and the price of telephone cords in the PRC and Taiwan remained steady in 2004. However, market growth will be stagnant in the near term as demand for telephone cords has been well-developed and saturated. Demand for telephone cords is closely related to the cord and cordless phone markets, which have been facing heavy competition from mobile phones in recent years. Due to the decrease in fixed line subscription, demand for telephone cords also decreased.



## INDUSTRY OVERVIEW

In view of the limited market opportunities, telephone cord manufacturers in both the PRC and Taiwan consider telephone cords production as a secondary business, and are likely to maintain their production scale stagnant in the near future.

### THE CONNECTOR INDUSTRY

#### Overview of the worldwide connector market

The connector industry achieved a turnaround in 2003, with a growth rate of approximately 11.2% following two consecutive years of declining sales in 2001 and 2002. The following table shows the results of the world connector industry by geographic region:

#### The world connector market by region

Region	2002 (US\$ m)	2003 (US\$ m)	% change
North America	8,284.0	8,239.0	(0.5)
Europe	6,198.2	7,239.7	16.8
Japan	4,304.0	4,913.3	14.2
The PRC	2,340.6	3,055.3	30.5
Asia Pacific	2,911.8	3,312.7	13.8
Others	<u>1,454.0</u>	<u>1,591.9</u>	9.5
Total	<u><u>25,492.6</u></u>	<u><u>28,351.9</u></u>	11.2

Source: Bishop Report

The total value of sales of connectors in the PRC was approximately US\$3.1 billion in 2003, representing approximately 48% of the total demand for connectors in Asia. As estimated by the Bishop Report, demand for connectors in the PRC will represent approximately 59.4% of that in Asia, and approximately 17.3% of that in the world by 2008. As for other regions, except for North America where the total value of sales of connectors was showing a slight decrease, the value of sales of connectors increased from 2002 to 2003.

According to the Bishop Report, the year-to-date of connector orders of the world in November 2004 were increased by approximately 22.2%, as compared to an increase of only 14.4% the world's order over the same period in 2003. As for 2005, the Bishop Report forecasts that any growth in sales of connector will begin in the second half of the year and the extent of the growth will largely depend on demand from electronic products.

#### Connector market in the PRC

In 2003, the PRC was enjoying a faster rate of expansion in connector sales than the rest of the world. The PRC's connector industry is dominated by consumer electronics and it caters to almost the whole consumer electronic fields. The Directors believe that strong growth of the PRC's connector industry was attributed to strong demand for AV products and home appliances:

- DVD players: The PRC has been dominant in producing connectors for DVD players, with majority of sales coming from Jiangsu, Guangdong, Fujian and Zhejiang Provinces;

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## INDUSTRY OVERVIEW

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- MP3, CD players and personal portable radio cassette players: Joint ventures and foreign companies dominate the production of connectors applying to these products. Factories are located in Zhejiang, Jiangsu, Fujian and Guangdong Provinces and they have begun to offer miniature, low-profile, high precision connectors, which also emphasise on reliability and durability;
- LCD TV, plasma TV and projection TV receivers: These are the main drivers for connector demand, along with the increasing popularity of the Set Top Box. The PRC has become the largest global connector supplier for these applications in terms of both the sales value and the production volume.

Exports of connectors in the PRC were mainly triggered by both OEM and ODM orders. The major markets for exports included North and South America, Europe and Southeast Asia. At present, approximately 10,000 models of connectors are available, including AV, insulation displacement, rectangular, coaxial and fibre-optic connectors, as well as terminal blocks and other plugs, sockets and jacks.

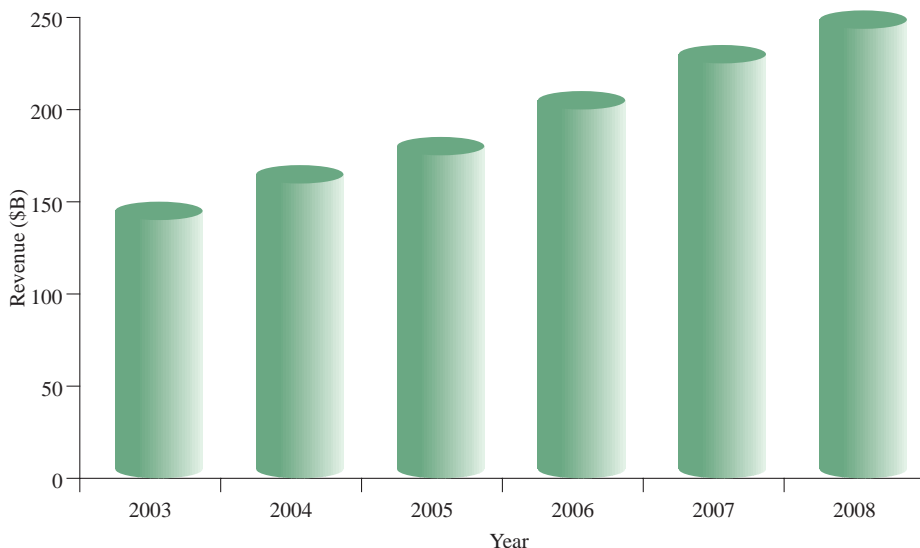
### THE ELECTRONIC MANUFACTURING SERVICES INDUSTRY

#### Overview of the worldwide EMS market

The Electronic Manufacturing Services (“EMS”) industry comprises manufacturers for various types of electronic products and components for use in different applications, like audio, video, networking, telecommunications and consumer electronics.

According to Electronic Trend Publications (“ETP”), the worldwide EMS market returned to its growth momentum in 2003 as the electronics market worldwide had undergone a broad-based recovery. The EMS market is expected to enjoy a solid growth in the upcoming years. As ETP forecasts that total electronic assembly value was approximately US\$648 billion in 2003 and is expected to grow to approximately US\$875 billion in 2008, it is believed that EMS industry will grow from approximately US\$140 billion in 2003 to US\$244 billion in 2008.

## The Worldwide EMS Market (2003 to 2008)



Source: ETP

### EMS market in the PRC

As presented by the China Semiconductor Industry Association, the PRC's total sales volume of electronic components was approximately 782.8 billion units in 2002, representing an approximate growth of 18% from that of 2001.

### Key Products

#### *DVD players*

Manufacturers of DVD players in the PRC are mainly located in Guangdong Province. Other major bases of production are Jiangsu, Zhejiang, Fujian Provinces and Tianjin. The Directors expect that increasing popularity of DVD player will lead to further production expansion for DVD players in the PRC. Competition in DVD players' production has been keen, and this has indirectly driven quality advancement within the industry: in late 2003, market players were more mechanised and competitive. Their production space was highly ordered and segregated, with many online quality control stations and the major processes were handled in-house.

#### *MP3 players*

The PRC is the production base for manufacturers and assemblers of MP3 players. Most production takes place in the southern part of the PRC, especially in Guangdong Province, where there is an abundant supply of engineering talent and components. Other small scale production activity can also be found in the northern and eastern parts of the PRC, particularly in Beijing and Xiamen.

Although MP3 players appeared only a few years ago, its development has grown rapidly since then. According to the statistics released by the China Centre for Information Industry Development ("CCID"), approximately 1.8 million MP3 players were sold in the PRC in 2003, representing a growth of approximately 235.8% from that of 2002. Domestic sales of MP3 players is expected to reach approximately 4 millions in 2004, representing a projected growth of approximately 200% from that of 2003.

### *Wireless LAN*

According to CCID, the domestic market for WiFi was valued at approximately US\$54 million in 2003 and the prospect of WiFi products in the next five years is optimistic.

The manufacturers of WiFi products can be divided into three categories. The first category is composed of traditional IT manufacturers which have established subsidiaries specialising in WiFi products. The second category of suppliers consists of manufacturers that wholly concentrate in WiFi product development. The third category is composed of companies which are small in scale and have no solid cooperative relationships with any telecom operator in the retail market. The principal strength of these companies is their ability to set the price of their products to a low level but the average product quality from these third category suppliers is lower than that from the first two categories. These three tiers of manufacturers altogether offer a wide range of low-end and mid-range WiFi products, including WiFi PCI cards, access points and routers etc.