

1997

# The Electronics Industry in China

**M**otorola reportedly had sales of \$3.4 billion in China/Hong Kong in 1996, constituting 12 percent of its worldwide revenue. It was also reported that Intel Asia sales accounted for 21 percent of the company's total revenue, compared with 11 percent a year ago. This growth came primarily from the China market. Considering this short time frame,

in 1994, fell to 6 percent in 1996. According to the March 1996 issue of *Fortune*, over 60 million people in China have per capita incomes of \$1,000 per year or more.

It is expected that the economic growth rate will be 10 to 11 percent in 1997. Overall, China has met its goal five years ahead of schedule. On another front, foreign reserves have swelled to over \$100 billion, and foreign invest-

workers employed in deficient state-run firms. On the other hand, the nation recognizes the need for foreign instruments and new technologies to ignite further economic growth. According to a report in *Business Week* from April 12, 1997, President Jiang Zemin has made state-enterprise reform a top priority. His plan is to save the top 1,000 large state-enterprises, while letting smaller, money-losing companies be merged, dissolved or taken over by private sectors (which may be an opportunity to foreign investors).



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these are impressive results.

In May 1997, I had the opportunity to personally meet with the officials and in-residence experts of the Ministry of Electronic Industry — The People's Republic of China at the Ministry quarters in Beijing. I also took the time to visit electronics assembly operations in China and attend the concurrently held Microelectronics 1997 and NEPCON-Shanghai Conferences and Exhibitions in Shanghai. As a result, my real understanding and comprehension of China's economy, commercial development and the status of the electronics industry finally seemed to crystallize.

#### **General Economic Record**

China's State Statistical Bureau reported that the gross domestic product (GDP) grew an estimated 9.7 percent in 1996. Inflation, which peaked at 21.4 percent

in 1994, reached a record high, over \$40 billion in 1996 (compared with \$10 billion in 1992). This stunning economic growth rate put China in a unique market position, separating it from the United States and other well-developed countries.

While the overall numbers show continued economic growth, much of the country's state-owned sectors are in recession. Reportedly, three-fourths of the state-owned firms are not profitable. Private and small enterprises as well as foreign-funded operations are making up for the losses from the state-sectors, fueling growth and exports. Concerned about the welfare needs of the laid-off workers, the government is reluctant to close unprofitable state-owned factories. On one hand, China has a deep concern with market-opening, which may bring economic dislocation for a huge number of

#### **Electronics Industry Outlook**

Another splendid number, China's market for electronics products is expected to top \$120 billion by 2000 and a potential \$720 billion by 2010. The electronics industry is one of several industries, including auto, chemical, aviation and banking services, designated by the government as "pillar" sectors. Beijing-based *Securities Daily* reported that the production value of the electronics industry surged 21 percent in 1996.

The personal computer — one of the end-use products — is an example. Its growth in the last 15 years mirrors the establishment of surface mount technology in PCB manufacturing. By the year 2000, worldwide PC shipment is estimated to reach 90 million units (approximately 70 million were shipped in 1996). For the first time the unit of PC sales exceeded that of TV sales in the U.S. market during the first quarter of 1996. With respect to China's PC market, the Ministry of Electronics Industry indicated that current PC owners in metropolitan regions is about 1 percent (6 percent in Shanghai and 3 percent in Beijing

areas), in contrast to the United States' 29 percent. Considering the sheer population of 1.21 billion, the number of units in potential demand is "music to the ears" of PC manufacturers and producers of related components, parts and associated materials and equipment. *The Wall Street Journal* from February 21, 1997 reported that China's TV distribution amounted to 232 million units in 1996. This is 20 percent of the total population.

Geographically, industrialization has apparently been concentrated in the provinces along China's East Coast. However, there are indications that the Central Coast region around the radius of Shanghai will eventually be the focal area of the electronics industry. The high-technology industry is another sector on the government's "encouraged" list for foreign investments.

**Microelectronics 1997 and NEPCON-Shanghai 1997**

These concurrent events, sponsored by the Ministry of Electronics Industry with co-organizers, the China Council for The

Promotion of International Trade-Electronics Chamber of Commerce and Reed Exhibition Companies were held May 6 through 8 at the Shanghai International Exhibition Centre.

After the ribbon-cutting opening ceremony, conferences and exhibitions were open to attendees. Technical sessions included: Development Strategy of Electronics Industry Information, Multimedia and Related IC Design, Back-end Semiconductor Production Technology, and Technology Related to SMT and PCB.

With approximately 400 exhibitors, the exhibit floor consisted of companies from the United States, France, Germany, Thailand, Hong Kong, Taiwan and Canada, along with others represented by principals, agents or distributors. A technology demonstration line (a moderate SMT line to fit the local current needs) was up and running. Differentiating from other conferences and exhibitions, the scope of the conference blended government and industry participation. The program integrated upstream and downstream sectors of the electronics hierarchy.

**Challenges and Demands**

For the electronics industry, opportunities in this burgeoning market are abundant. However, with opportunities come challenges.

For instance, China's import duties are relatively high, particularly considering the many duty-free goods in developed countries (they remain four times as those of Japan). How is importing vs. foreign companies manufacturing locally? To manufacture locally, how are partnerships vs. going-it-alone? What is the cost (monetary and mental) to do business in China? What is the good timing vs. Pioneer/follower/laggard syndrome? What are consistent policies for a healthy China-U.S. relationship? Many successful businesses have been established, yet some not-so-successful business endeavors existed.

After July 1, China's biggest trading partner, Hong Kong, becomes its own. Japan will move up to first place, followed by the United States, Germany and Russia (in descending order of dollars). In 1996, U.S. exports to China were in the neighborhood of \$12 billion and imports from China amounted to \$51.5 billion. At this time of annual debate on reviewing China's "most favored nation" status, what are the trade and political implications? Pressures and rationales came from both directions — positive and negative.

Vice minister of the Ministry of Electronics Industry — China, Lu Xinkui said, "...the development of the electronics industry has gathered momentum...welcome counterparts from electronics circles all over the world to work hand-in-hand in fostering the development of the electronics industry...The experience of others can be served to enrich our own."

Now China is poised for the speedy development of the electronics industry. The Ministry of Electronics Industry is a leader in the future establishment of the industry. With all the challenges and evolutions, one thing that cannot be ignored is the market power of our world's most populous country. SMT

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