

## BUSINESS REVIEW

2004 was a year marked with significant achievements for SMIC. In January 2004, we completed the acquisition of our Fab 7, an 8-inch wafer fab located in Tianjin, China, and commenced mass production in May 2004. In March 2004, we successfully completed our initial public offering on the New York Stock Exchange and The Stock Exchange of Hong Kong Limited ("SEHK"), raising approximately US\$1 billion for the Company (the "Global Offering"). We commenced pilot production at our Fab 4, which is China's first 12-inch fab, in July 2004. By December 31, 2004, approximately four years after commencing construction of our Fab 1, we reached sales revenue nearing US\$1 billion and achieved our first year of profitability.

## OVERVIEW OF BUSINESS DEVELOPMENTS

Our success in 2004 has been characterized by our commitment to increasing our capacity and expanding our portfolio of leading edge process technology. The speed of our capacity ramp-up represents one of the fastest in the semiconductor industry. Our wafers shipped and sales increased from 476,451 wafers and US\$365.8 million in 2003 to 943,463 wafers and US\$974.7 million in 2004, representing a 98.0% and 166.4% increase respectively. Our monthly wafer capacity reached 120,417 8-inch wafer equivalents as of the end of 2004. As a result of our rapid expansion and growth, particularly as IDMs continued to outsource their chip fabrication for complex and high performance devices, we have become the third largest foundry in the world. According to *IC Insights*, a leading IC industry market research company, we increased our market share by approximately 3%, the largest increase among all foundries in the world.

In addition to our rapidly increasing capacity, we also have the most advanced process technology among foundries in China by providing semiconductor fabrication services using 0.35 micron down to 0.10 micron process technology. We are the first fab in China to

introduce copper technology on a 0.13 micron production line, and in 2004, 68.5% of our wafer sales were from products that utilized advanced technology of 0.18 micron and below. Some of the highlights from this year include our offering of 0.13 micron wafer fabrication process technology, our pilot production of 0.11 micron DRAM at our 12-inch fab in Beijing, and our internal development of a 90 nanometer prototype SRAM chip. We are scheduling to begin to offer 90 nanometer process technology for logic devices by the end of 2005.

With our gross profit reaching US\$253.3 million this year, a key factor influencing our profit margins has been our capacity utilization. Because a high percentage of our cost of sales is of a fixed nature, operations at or near full capacity has a significant positive effect on output and profitability. In both 2002 and 2003, our wafer fabs had an average annual utilization rate of 94% and in 2004, our wafer fabs had an average annual utilization rate of 98%. Factors affecting utilization rates are our ability to manage the production facilities and product flows efficiently, the percentage line yield of wafers during the fabrication process, the complexity of the wafer produced, and the actual product mix.

## OUR FABs

In January 2004, we acquired our Tianjin fab, which we refer to as Fab 7, from Motorola (China) Electronics Limited ("MCEL"), a wholly-owned subsidiary of Motorola, Inc. ("Motorola"). Fab 7, located in the Xiqing Economic Development Area, has a total floor space of 73,182 square meters, including approximately 8,492 square meters of production clean room area. As of December 31, 2004, Fab 7 had increased its capacity to 14,182 wafers per month. We are scheduling to have wafer fabrication capacity of 15,000 wafers by the end of 2005.

Our Fab 4 is the first 12-inch fab in production in China. We recently completed construction at our Fab 5 and Fab 6C which will also be 12-inch fabs. All of these fabs are located in the Beijing Economic and Technological Development Area.

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12-inch wafers have a surface area that is 2.25 times larger than the current industry standard 8-inch wafers, thereby enabling us to manufacture more integrated circuits on each wafer with lower per die costs. Fab 6C is being situated between the two wafer fabs, Fab 4 and Fab 5, and will provide copper interconnects for the 0.13 micron and below logic wafers produced by both these fabs. This design is intended to prevent metal line contamination to the wafer fabrication processes while achieving greater flexibility in production. Our Beijing fabs have a total floor space of 179,858 square meters, 17,998 square meters of which will consist of production clean room area. We commenced pilot production in Fab 4 in July 2004 and commercial production in the first half of 2005. Fab 4 will initially produce advanced high-speed low power 512Mb DDR2 DRAM using 0.11 micron and 0.10 micron manufacturing processes and then commence production for 90 nanometer logic devices. As of December 31, 2004, Fab 4 had a capacity of 7,027 8-inch wafer equivalents per month, and we plan to have wafer fabrication capacity of 29,000 8-inch wafer equivalents by the end of 2005.

## CUSTOMERS AND MARKETS

Our goal has been to establish our position as one of the leading semiconductor foundries in the world, and to maintain our leadership position in China. We believe that by establishing our company as a key foundry partner to local semiconductor companies at an early stage of their development, we will be well positioned to take advantage of the potential semiconductor growth in China. According to the China Center for Information Industry Development (CCID), the Chinese integrated circuit industry in terms of overall sales will increase to US\$76.3 billion in 2008 from US\$25.1 billion in 2003, representing a compound annual growth rate of 24.9%. As a result, China's share of the worldwide integrated circuit market is expected to increase from 15.4% in 2003 to 29.2% in 2008. However, China's domestic integrated circuit manufacturing capacity would represent only approximately 5% of the estimated worldwide integrated circuit market of US\$311 billion in 2008.

With over 463 fabless semiconductor companies and design centers in China, and the majority of these potential customers located around the Greater Shanghai and Beijing metropolitan areas, both of which are in the vicinity of our existing fabs, we are committed to offering them best-in-class services and solutions that are customized for their particular technological capabilities. We have already established foundry relationships with approximately 50 leading local fabless semiconductor companies in China, five of which are among the ten largest fabless companies in China based on their revenues in 2004, according to CCID. While many of them are still using more mature technologies, we are cultivating our relationships with them by helping them migrate from 0.35 micron technology down to 0.18 micron technology and below. For example, in August 2004, we successfully developed 0.18 micron high voltage devices and process technology specifically targeted for these customers. We are working closely with our customers to implement this technology within their product offerings, which will enable them to reap economies of scale at the lower technology nodes.

As a result of our domestic efforts, the Asia Pacific region (excluding Japan) accounted for 43.5% of our revenue during the fourth quarter of 2004, surpassing North America for the first time as our largest region of revenue. The Greater China region alone grew and accounted for over 10% of our total revenues during the fourth quarter of 2004. As the Chinese IC industry continues to develop and work on more advanced technologies, our plan is to engage more domestic companies by providing them with advanced technology and manufacturing solutions at home.

We also have a strong global customer base consisting of leading IDMs, fabless semiconductor companies, and systems and other companies. For 2004, our revenue by region was led by North America at 40.2%, then Asia Pacific (excluding Japan) at 33.2%, then Japan at 13.9%, and Europe at 12.7%. We believe these customers have high growth potential and business plans that are directed

towards utilizing our manufacturing services and solutions. We intend to maintain a diversified customer mix in terms of end-market applications, processes, and geographical focus in order to manage our exposure to each market segment.

We generate our sales primarily from fabricating semiconductors. We also derive a relatively small portion of our sales from the mask-making and wafer probing services that we perform for third parties separately from our foundry services.

## CAPACITY EXPANSION PLANS

We intend to maintain our strategy of expanding capacity and improving our process technology to meet both the capacity requirements and the technological needs of our customers.

The semiconductor industry is characterized by substantial capital expenditures. This is particularly true for our company as we have recently constructed and equipped fabs and are continuing to construct and equip new fabs. Our capital expenditures in 2004 were US\$2,000 million, and we recorded depreciation and amortization costs of US\$457.0 million. We currently expect that our capital expenditures in 2005 will be approximately US\$1,000 million.

We plan to use this capital expenditure mainly to ramp up our fabs in Beijing, Shanghai, and Tianjin. We are scheduling that by the end of 2005, our monthly capacity will be 147,000 8-inch wafer equivalents.

## RESEARCH AND DEVELOPMENT

The semiconductor industry is also characterized by rapid changes in technology, frequently resulting in obsolescence of process technologies and products. As a result, our research and development efforts are essential to our overall success. We spent approximately US\$78.2 million in 2004 on research and development expenses, which represented 8.0% of our sales. Our research and

development costs in 2004 include non-recurring engineering costs associated with the ramp-up of Fab 4 and Fab 7. We employ over 600 research and development personnel, combining experienced semiconductor engineers with advanced degrees from leading universities around the world with top graduates from the leading universities in China. We believe this combination has enabled us to quickly bring our technology in line with the semiconductor industry roadmap and ensures that we will have skilled personnel to lead our technology advancement in the future. We are also developing our 90 nanometer technology in house and successfully produced our first prototype SRAM device in 2004. We are scheduling to begin to offer 90 nanometer process technology for logic devices by the end of 2005.

## JOINT VENTURES

We also will seek to participate in strategic partnerships to meet the demands of our customers. In July 2004, we entered into an agreement with Toppan Printing Co., Ltd., to establish Toppan SMIC Electronics (Shanghai) Co., Ltd., a joint venture in Shanghai for the manufacture of color filters and micro-lenses for CMOS image sensors. We hold a 30% equity interest in Toppan SMIC Electronics (Shanghai) Co., Ltd. These products are increasingly being used in consumer products such as mobile phone cameras, digital-still cameras, and automobile and home security applications. In 2004, we commenced construction of Fab 9, which we will lease to Toppan SMIC Electronics (Shanghai) Co., Ltd. We understand that Toppan SMIC Electronics (Shanghai) Co., Ltd. plans to commence pilot production by the end of 2005.

Also in July 2004, we entered into an agreement to establish an assembly and testing facility in Chengdu, China. We are scheduling that this assembly and testing facility will serve as an

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additional assembly and testing partner to us. We believe that this facility will commence pilot production in the second half of 2005.

## MATERIAL LITIGATION

On January 30, 2005 we resolved pending patent and trade secret litigation with Taiwan Semiconductor Manufacturing Company Limited ("TSMC"). Under the terms of the settlement, the two parties will cross license to each other's patent portfolio through December 2010 and we will pay TSMC US\$175 million, payable in installments over six years (US\$30 million in each of the first five years and US\$25 million in the sixth year). The agreement also provides for the dismissal of all pending legal actions without prejudice between the two companies in the U.S. Federal District Court, the California State Superior Court, the U.S. International Trade Commission, and the Taiwan District Court. In the settlement agreement, TSMC covenants not to sue SMIC for itemized acts of trade secret misappropriation as alleged in the complaints, although the settlement does not grant a license to use any of TSMC's trade secrets. The patent cross license and settlement agreement are terminable upon a breach by SMIC, which may result in the reinstatement of the legal proceedings and acceleration of the outstanding payments under the settlement agreement.

## OUTLOOK FOR 2005

Our strategy for 2005 will remain in line with the business goals that we have held thus far:

- Capitalize on our early mover advantage to capture semiconductor growth opportunities in China
- Target a diversified global customer base
- Maintain leading edge technology and innovation through internal research and development and strategic alliances and partnerships

- Provide high quality customer service
- Shift product mix to logic wafers while maintaining expertise in DRAM technology

While 2005 looks to be a year of flat growth for the semiconductor industry with demand improving as the year progresses, we will continue to aggressively pursue new customers both globally and domestically by offering them leading edge foundry services. During the last quarter of 2004, we increased our number of domestic clients to account for over 10% of our revenues. We believe that the Greater China region will continue to exhibit strong demand and growth. As a result, we aim to have the Greater China region account for approximately 15% of our total sales by the end of 2005.

We will also continue to expand technology offerings to attract even more global customers. During the first half of 2005, we will expect to see 0.11 micron and 0.10 micron DRAM in commercial production at our 12-inch fab in Beijing. By the second half of 2005, we will expect to use 90 nanometer process technology to manufacture logic wafers for a leading U.S. IDM. Meanwhile, we will also be supporting our customers as they migrate to more advanced technologies, with a particular emphasis on our domestic customers as they migrate from 0.35 micron down to 0.18 micron process technology.

We will also continue to consider other strategic alliances and partnerships that will enable us to leverage our unique position in China to maximize shareholder return.

We believe that 2005 will be another milestone year for SMIC as we continue to broaden our customer base and expand our technology offerings.