



**Taiwan Semiconductor Manufacturing Company, Ltd.  
Annual Report 1999**

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## ADR DEPOSITARY BANK

Company: Citibank, N.A.  
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<http://www.tsmc.com.tw>

# Table of Contents

## **LETTER TO OUR SHAREHOLDERS**

### **A BRIEF INTRODUCTION TO TSMC**

1. Company Profile
2. Organization
3. Common Shares, Corporate Bonds and ADR Issuance

### **OPERATIONAL HIGHLIGHTS**

1. Business Activities
2. Marketing and Sales
3. Market Outlook
4. Labor Relations
5. Personnel Growth over the Last Two Years
6. Environmental Protection Measures
7. Major Contracts
8. Litigation Proceedings

### **BUSINESS AND FINANCIAL PLANS**

1. Production and Sales Plans for 2000
2. Year 2000 Plans for Disposition or Acquisition of Real Estate or Long-Term Investment
3. Research and Development Plans
4. Financing Plans
5. TSMC Education and Culture Foundation

### **FINANCIAL STATEMENTS**

1. Brief Balance Sheet
2. Brief Statements of Income
3. Financial Analysis
4. Net Worth, Earning, Dividends and Market Price Per Share
5. Auditor's Opinion
6. Supervisors' Report
7. Review and Analysis of Financial Status and Operating Result
8. Financial Statements and Independent Auditors' Report
9. Consolidated Financial Statements

### **SPECIFIC NOTES**

1. Affiliates Information
2. Dividend Policy
3. Statement of Internal Control
4. Other Necessary Supplement

## Business Philosophy

TSMC is committed to:

Integrity

Focus on Our Core Business - IC Foundry

Globalization

Long-term Vision and Strategies

Treating Customers as Partners

Building Quality into all Aspects of Our Business

Unceasing Innovation

Fostering a Dynamic and Fun Work Environment

Keeping Communication Channels Open

Caring for Employees and Shareholders, and  
Being a Good Corporate Citizen

# Letter to Our Shareholders

Dear Shareholders,

1999 was a year of upturn for the global semiconductor industry. In 1999, TSMC reached another record high both in revenues and profits. Sales revenues for 1999 reached NT\$73.13 billion, a 45.6 percent increase over 1998 revenues. Net income totaled NT\$24.56 billion, an increase of 60 percent over NT\$15.3 billion in 1998. Diluted earnings per common share were NT\$3.24 versus NT\$2.00 a year ago.

The past year was memorable in several ways. TSMC survived the most devastating earthquake to strike Taiwan in nearly 100 years. Fortunately, our operations returned to normal in less than 10 days, due largely to a well-prepared disaster recovery plan and the untiring efforts of our dedicated employees. Our recovery efforts were focused on minimizing the impact of the earthquake on customers' businesses and securing Taiwan's reputation in the global electronics industry. As a result of our quick recovery, customer confidence in TSMC has increased and the partnership between TSMC and our customers has deepened. In addition, our speedy restoration to full production has earned TSMC international acclaim and received wide recognition by the global media. Out of this disaster, TSMC has further built a solid reputation as our customers' "Virtual Fab", providing the best available services and maintaining our leadership position in the dedicated IC foundry industry.

Our meticulous Y2K preparations enabled us to successfully transit into year 2000 without interruption to our operations. Given that TSMC has numerous individual pieces of highly automated semiconductor manufacturing equipment and computer-based systems, this represented a well-executed plan instated well in advance. In this endeavor, we again won recognition from the global community in demonstrating our strong ability to meet the challenges of a fast-changing environment.



Morris Chang  
Chairman

### Advanced Technology

Continuous aggressive advancement in process technology is yet another major competitive advantage for TSMC. Our focused commitment to new technology development and increased production capacity has kept us in the lead position in the foundry industry, and propelled us into an elite position in the global IC industry.

In 1999, TSMC achieved many milestones in technology, including volume availability of leading-edge 0.18 $\mu$ m process technology, which provides the performance and density necessary for true system-on-chip (SOC) design. In addition, TSMC was the first dedicated foundry to deliver high-yield copper interconnects for increased performance and flexibility. Moreover, our research and development team has made tremendous advances in developing 0.15 and 0.13 $\mu$ m technology. Our 0.15 $\mu$ m process technology will be available in the beginning of 2000, and the development of 0.13 $\mu$ m technology will be completed in the first quarter of 2001. These accomplishments are evidence of our commitment to provide customers with the most advanced and reliable technology available.

### Increased Capacity

After a slow period in the IC industry, customer orders took a strong upward turn in the second quarter of 1999. To meet this sudden increase in demand, TSMC focused first on expanding the available capacity of our existing fabs, including Fabs III, IV, and V, and on increasing the percentage of manufacturing volume devoted to advanced 0.25 $\mu$ m and 0.18 $\mu$ m process technology. In addition, we added capacity from our affiliates at WaferTech, Vanguard International Semiconductor Corporation, and TSMC-Acer Semiconductor Manufacturing Corporation (TASMC) to provide our customers with critically needed wafers. Overall, our total wafer shipments increased to approximately 1.8 million eight-inch equivalent wafers in 1999, a 50% increase from 1.2 million wafers in 1998.

In the meantime, TSMC has taken aggressive action in the area of new fab construction. TSMC's Fab VI, located in the new Tainan Science-Based Industrial Park, began pilot production at the end of 1999, fully one quarter ahead of schedule. Also in December, TSMC broke ground for fab XII, our first 12-inch fab, in the Hsin-Chu Science-Based Industrial Park. Construction continued at Systems on Silicon Manufacturing Company, our joint venture with Philips in



F.C. Tseng  
President

Singapore, with a plan to begin volume production by the end of 2000. In addition, we secured merger agreements with TSMC at the end of 1999 and with Worldwide Semiconductor Manufacturing Corporation at the beginning of 2000, both of which are expected to close in June of 2000. By the end of 2000, TSMC expects to increase its total wafer capacity to 3.4 million wafers. All of these actions should help satisfy our customers' most urgent needs in this strong semiconductor market, creating significant benefit for TSMC and our shareholders.

### Vision and Future Outlook

TSMC's vision is to be the most reputable, service-oriented and maximum-total-benefits silicon foundry in the world, thereby earning the reward of also being the largest and most profitable foundry. To fulfill this vision, we maintain a consistent focus on our foundry business and concentrate on our commitment to being our customers' "Virtual Fab".

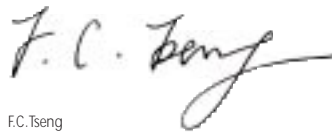
Looking forward into 2000, the IC industry is expected to continue the steep climb which began in 1999 and is expected to end with yet another outstanding performance. From a broader perspective, foundry services will play an increasingly important role in IC manufacturing worldwide. Fabless IC companies already depend on foundries, and integrated device manufacturers (IDMs) are expected to cement stronger business relationships with foundries for their IC manufacturing. We believe that our "Virtual Fab" strategy enables us to capitalize on all of these trends. This strategy will also generate a positive impact on our financial performance in the coming year, and will further consolidate our leadership in the IC foundry industry.

In closing, 1999 was a fine and memorable year. We would like to thank all of our customers, shareholders and employees for your continued support and dedication in the future.



Morris Chang

Chairman



F.C. Tseng

President



Believing in Synergism, TSMC treats all other semiconductor companies as partners.



# A Brief Introduction to TSMC

## 1. Company Profile

Founded in 1987, Taiwan Semiconductor Manufacturing Company (TSMC) is a dedicated independent semiconductor foundry based in Taiwan's "Silicon Valley," Hsin-Chu Science-Based Industrial Park. We are listed on the Taiwan Stock Exchange (TSE) and the New York Stock Exchange (NYSE) under the symbol TSM.

TSMC was the first pure integrated circuit (IC) foundry in the world. Since the beginning, we have been dedicated to providing manufacturing services for advanced ICs. Our company's charter prevents us from designing or making our own brand-name IC products. TSMC therefore is a partner, not a competitor, to other semiconductor companies. TSMC's success in the foundry business has served as a model for many new entrants to the market. With TSMC as the engine of change, what was once only a concept—a pure foundry—is today a multi-billion dollar industry. As the semiconductor industry faces greater consolidation and spiraling IC fab construction costs, dedicated foundry companies like TSMC stand to become the primary sources to meet the growing worldwide IC demand.

TSMC is the largest IC foundry in the world. At the end of 1999, we operated two 6-inch wafer fabs (Fab I & II), six 8-inch fabs (Fab III, IV, V, VI and Fabs I and II of TSMC), with annual capacity of 1.9 million top-quality, high-yield 8-inch equivalent wafers. To further expand our capacity, TSMC has broken ground for the company's first 12-inch fab in the Hsin-Chu Science Park in December 1999. TSMC's Fab VI, located in the new Tainan Science-Based Industrial Park will begin volume production from the first quarter of 2000. In addition, the merger with TSMC-Acer Semiconductor Manufacturing Corporation and Worldwide Semiconductor Manufacturing Corporation have been proceeding as scheduled and are expected to close in June of 2000.

TSMC is an international company that serves the worldwide IC market. Consequently, we have established facilities in locations other than Taiwan, including marketing and engineering support offices in the United States, Europe and Japan. WaferTech, TSMC's first joint venture foundry in the United States, was established in an alliance with several long-standing customers and began volume production in mid-1998. A joint venture fab with Philips Semiconductor and Singapore EDB Investments - Systems on Silicon Manufacturing Company - is scheduled to start operation in Singapore in the year 2000.

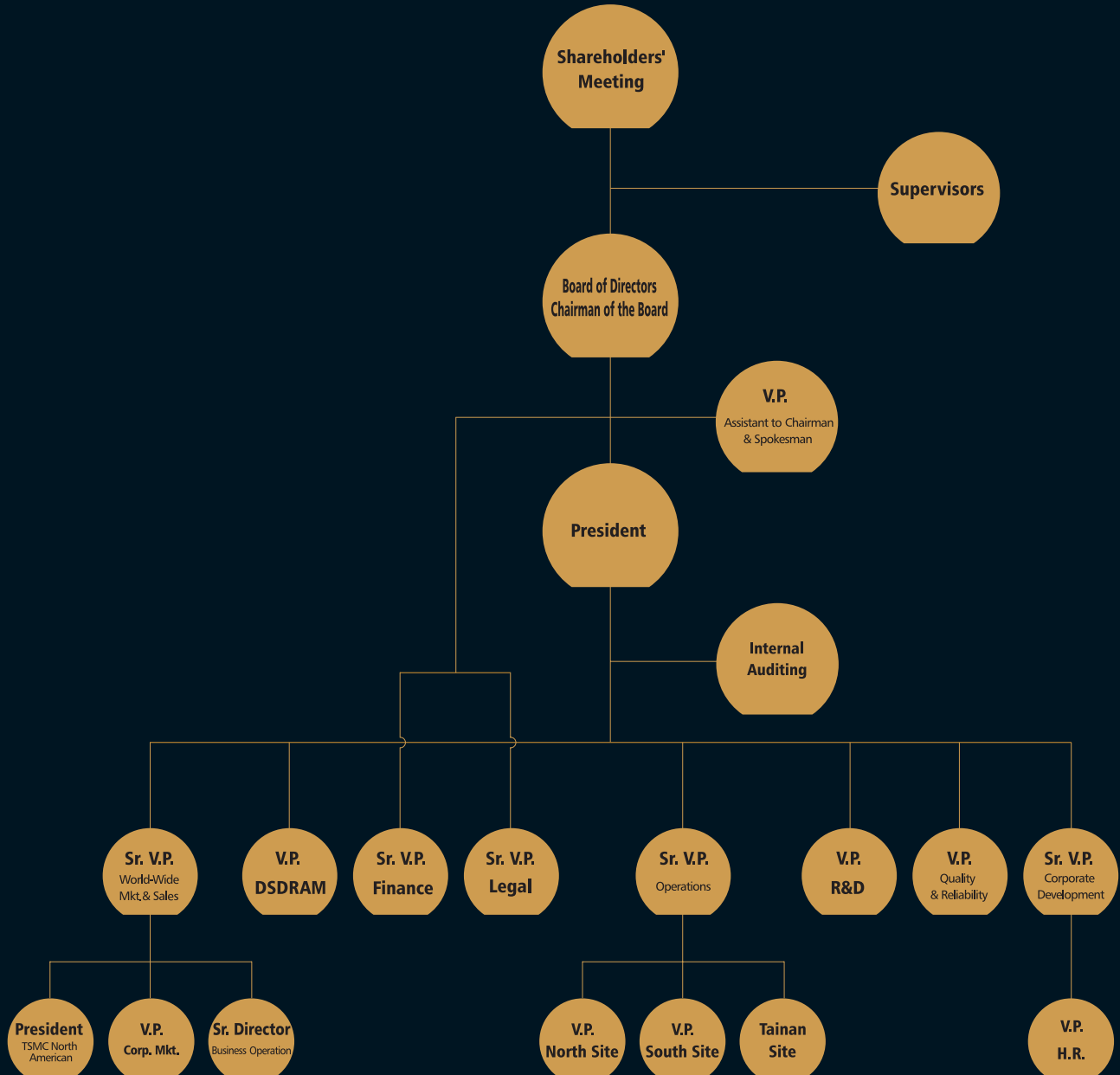
In addition to maintaining a competitive edge through steadily increasing capacity, TSMC also provides consistent volume production levels of new generation technologies. TSMC offers a comprehensive set of technology processes, including process to manufacture CMOS logic, mixed-signal, volatile and non-volatile memory, embedded memory, BiCMOS ICs and copper technology. Our firm commitment to the continued pursuit of advanced technology ensures that TSMC will provide the best possible value-added services and become true partners to our customers.

TSMC's objective is to become our customers' "Virtual Fab." That is, to provide customers with the benefits of an in-house fabrication plant without the associated expense or organizational complexities. Our intent is to make our foundry services as transparent to customers as possible, so that they can run their operations as if they have their own dedicated fabs. TSMC is committed to continued improvement of its services, developing a long-term competitive advantage by strengthening the bond between ourselves and our customers through continued leadership in the global IC foundry business.

As a good corporate citizen, TSMC takes the job of community service and employee relations seriously. For example, the TSMC Culture and Education Foundation was formed in 1998 to support activities in Taiwan that promote education, technology, art and culture. The Foundation aims toward creating a better quality of life for our society through our long-term community development efforts. TSMC's concerned efforts have been recognized by many distinguished entities, ranging from the Taiwan government (for environmental protection, health and safety, arts sponsorship, employee benefits, employee training and social welfare) to leading media in Taiwan and around the world.

In addition, our Chairman Dr. Morris Chang has also received many honors worldwide. In 1999, for example, Dr. Chang was honored by the Fabless Semiconductor Association (FSA) with its first-ever "Exemplary Leadership award", which will be permanently named "The Dr. Morris Chang Award for Exemplary Leadership" in recognition of his outstanding contribution to the fabless semiconductor industry.

2. Organization  
2-1 Organization Chart



## 2-2 Directors, Supervisors, & Major Officers (As of December 31, 1999)

Title Name	Date Elected	Term (Year)	Shareholding*	Spouse & Minor Shareholding*	Education & Experience	Remarks
Chairman & CEO Morris Chang	1997.05.13	3	45,109,604	0	Ph.D., Electrical Engineering, Stanford University Chairman, Vanguard International Semiconductor Corp. Chairman, WYSE Technology Inc.	
Director A.P.M. van der Poel	1997.05.13	3	1,295,885,897	0	B.S., Electronic Engineering, Eindhoven Technical University Chairman and CEO, Philips Semiconductors International B.V.	Philips Electronics N.V. Representative of Legal Entity
Director J.C. Lobbezoo	1997.05.13	3	1,295,885,897	0	B.A., Business Economics, Erasmus University Chief Financial Officer, Philips Semiconductors International B.V.	Philips Electronics N.V. Representative of Legal Entity
Director L.P. Hsu	1997.05.13	3	1,295,885,897	0	B.S., Physics, National Cheng-Kung University Executive Vice President, Philips Taiwan	Philips Electronics N.V. Representative of Legal Entity
Director Ching - Chang Yen	1997.05.13	3	1,158,545,600	0	Master of Comparative Law, University of Michigan Deputy Minister, Ministry of Finance, R.O.C.	Development Fund, Executive Yuan Representative of Legal Entity
Director Chintay Shih	1997.05.13	3	1,158,545,600	0	Ph.D., Electrical Engineering, Princeton University President, Industrial Technology Research Institute	Development Fund, Executive Yuan Representative of Legal Entity
Director & President F.C. Tseng	1997.05.13	3	12,132,090	49,828	Ph.D., Electrical Engineering, National Cheng-Kung University Senior Vice President of Operations, TSMC President, Vanguard International Semiconductor Corp.	
Supervisor Jan Kees van Vliet	1997.05.13	3	1,295,885,897	0	MBA, Business School of Erasmus University / Delft University of Technology Executive Vice President, Philips Taiwan	Philips Electronics N.V. Representative of Legal Entity
Supervisor George Shiu	1997.05.13	3	1,158,545,600	0	Master degree in Economics, John Hopkins University Deputy Executive Secretary Development Fund, Executive Yuan	Development Fund, Executive Yuan Representative of Legal Entity
Supervisor Jerome S.N. Hu	1997.05.13	3	10,812	0	M.S., Chemical Engineering, University of Michigan Chairman, Chao Ting-Chen Cultural Education Foundation	

\* As per the actual reported number of shares on December 31, 1999

### 3. Common Shares, Corporate Bonds and ADR Issuance

#### 3-1 Capital & Shares

Unit: Share

Type of Stock	Authorized Capital					Total
	Issued Shares			Un-issued Shares	Reserved Shares for Bond Conversion	
	Listed	Non-listed	Total			
Common Stock	7,670,881,717	-	7,670,881,717	51,516,965	1,377,601,318	9,100,000,000

#### 3-2 Status of Bond and Preferred Stock Issuance

Issuance	Issuing Date	Tenor	Coupon Rate (or YTM)	Outstanding	Use of Proceeds	Status Description
US\$350 million Eurodollar Convertible Bond	July 3, 1997	5 years	YTM=6.28% p.a. (Zero-coupon, 136.23% payable at maturity, if not converted or redeemed)			TSMC exercised the right to redeem this bond on November 5, 1999. US\$341,821,000 was converted into common shares and US\$8,179,000 was repaid.
NT\$4 billion Corporate Bond	March 4, 1998	5 years	7.71% p.a.	NT\$4 billion	Repay long-term bank loan	Completed
NT\$6 billion Corporate Bond	November 18, 1998 - December 1, 1998	5 years	7.12% p.a.	NT\$6 billion	Upgrade of Fab III and Fab IV equipment	Completed
NT\$10 billion Corporate Bond	October 21, 1999	Tranche A: 3 years Tranche B: 5 years	Tranche A: 5.67% p.a. Tranche B: 5.95% p.a.	Tranche A: NT\$5 billion Tranche B: NT\$5 billion	Procure equity securities of TSMC as long-term investment and Fab V equipment	Completed

### 3-3 Status of American Depositary Shares (ADSs) Issuance

Issuance & Listing: New York Stock Exchange (NYSE)

Symbol: TSM

1 ADS = 5 TSMC common shares

Depository Bank: Citibank, N.A. - New York Branch

Custodian Bank: Citibank, N.A. - Taipei Branch

As of December 31, 1999, total number of issued ADSs is 77,356,859, and total number of outstanding ADSs is 76,893,859.

Date	Issuing Units*	Total Amount	Underlying Securities
October 8, 1997	24,000,000 ADSs	US\$ 594,720,000	TSMC common shares from Selling Shareholders
November 20, 1998	12,094,000 ADSs	US\$ 184,554,440	TSMC common shares from Selling Shareholders
January 12, 1999, January 14, 1999	2,000,000 ADSs	US\$ 35,125,000	TSMC common shares from Selling Shareholders
July 15, 1999	12,094,000 ADSs	US\$ 296,499,640	TSMC common shares from Selling Shareholders
August 17, 1999 - September 16, 1999	5,486,000 ADSs	US\$158,897,088.5	TSMC common shares from Selling Shareholders pursuant to ADR conversion sale program

\* The difference between total number of issued ADSs and total number of each issuing unit is resulted from 45% and 23% stock dividend distribution in 1998 and 1999, respectively.



Over the past 13 years, customers have utilized TSMC's advanced IC manufacturing services for a diverse range of end-product applications.



# OPERATIONAL HIGHLIGHTS

## 1. Business Activities

### (1) Business Scope

TSMC is dedicated to high integrity in business and has a single-minded focus on the foundry industry. The company provides advanced IC manufacturing services of the highest quality to the worldwide semiconductor industry. Building on our core competencies of excellent manufacturing and attentive customer support, we offer a full range of manufacturing services, including ULSI and VLSI wafer manufacturing, wafer probing, IC assembly and test, mask production, and design services. Wafer manufacturing accounted for approximately 88 percent of total revenue in 1999.

Over the past 13 years, customers have utilized TSMC's manufacturing services in virtually every product and end market segment across the entire semiconductor application spectrum. We estimate that in 1999 TSMC produced approximately 5 percent of the world's supply of wafers.

### (2) Customer Applications

The advanced ICs produced by TSMC for customers are used in a diverse range of the end-product applications, including PCs, network servers, computer peripherals, Internet appliances, wired and wireless communication systems, consumer electronics, automotive and industrial equipment.

## 2. Marketing and Sales

The recovery in the worldwide IC market coupled with the exceptional growth of the fabless IC companies, pushed TSMC's sales up 45.6 percent to NT\$73.13 billion.

The company's superior performance can be attributed to three major factors. First, we maintained close relationships with a large customer base. TSMC has served over 400 customers in the past 13 years and approximately 280 customers in 1999 alone. Second, anticipating the steady long term growth of the IC industry and responding to strong immediate demand from key customers, TSMC expanded advanced manufacturing capacity aggressively at seven internal or affiliated 8-inch fabs. The company also broke ground for one of the industry's first production scale 12-inch facilities. Third, we have approached our business as a service business from day one. We continue to re-engineer this approach with a strong commitment to e-Commerce as a new tool in realizing TSMC's vision — to become our customers' "Virtual Fab" for semiconductor manufacturing.

These factors extended our leading market position and when combined with our ability to produce the latest generation technologies, allowed the company to maintain excellent results through a turbulent year.

## 3. Market Outlook

After a slow period, strong recovery emerged in the worldwide IC market with 19 percent growth in 1999. Although the overall logic market grew at a rate of 14 percent, demand for foundry wafers grew at a rate of over 40 percent driven by accelerated growth of the fabless IC companies and expanded outsourcing from the IDMs. In 2000, the overall IC market is predicted to register yet stronger growth in the range of 20 percent over 1999, which should sustain a continuation of robust demand for foundry services. The growth rate for the logic component market will increase to about 15 percent, with the foundry-dependent fabless IC companies expected to grow at nearly twice that rate due to the higher value added applications that their chips address.

Responding to strong demand from customers and anticipating the continuing recovery of the worldwide IC industry, TSMC quickly adopted the strategic actions necessary to expand capacity aggressively in support of our customer base. In the area of capacity expansion the company added capacity in its 8-inch fabs (Fabs 3,4,5) while at the same time running the fully equipped 6-inch fabs (Fabs 1, 2A, 2B) at greater than 100 percent of rated output. To further bolster deliveries to customers, the company secured additional 8-inch capacity through co-operation arrangements with TSMC-Acer Semiconductor Manufacturing Corporation and Vanguard International Semiconductor Corporation, as well as continuing to ramp capacity at its affiliate 8-inch fab in WaferTech, LLC at Camas, Washington. At the same time the company accelerated initial output at its newest 8-inch fab (Fab 6) in Tainan, continued construction of its joint venture fab with Phillips in Systems on Silicon Manufacturing Company in Singapore and broke ground for its first 12-inch facility (Fab12) in Hsin-Chu.

While supporting record breaking growth for the fabless IC companies, TSMC continues to diversify its customer base. Major, long-term, customer opportunities have begun to emerge from the ranks of the Integrated Device Manufacturers (IDMs). These companies, with their large established customer bases and rich product portfolios, can give significant acceleration to the foundry industry as their outsourcing activities increase.

Over the years, TSMC has strategically managed its exposure to the memory market by limiting the commitment of our memory manufacturing services to a certain percentage of sales revenue. Considering the current shortage of logic production capability and the historically high volatility of memory markets, TSMC will maintain the same policy in 2000 even as we work to expand our share of the emerging market for embedded memory products.

In 1999, TSMC's customer base increased in the graphics, broadband communications, digital consumer electronics, and wireless communication markets. All of these markets are high growth segments and demand advanced manufacturing technologies. New customers in these markets utilized large volumes of wafers in 1999 and are expected to benefit TSMC increasingly over the next several years as these markets continue to grow. End market leaders such as Altera, Broadcom and Qualcomm drive TSMC's demand from the fabless segment while leading IDMs such as Philips and Motorola are also significant customers. Through 2000, TSMC will continue targeted marketing efforts, engaging customers in similar high growth segments of the logic component markets.

In the long run, we at TSMC believe that foundry services will play an increasingly important role in the manufacturing sector of the worldwide IC industry. Fabless companies already depend on foundries, and IDMs are expected to evolve stronger business connections with foundries for IC manufacturing. Industry forecasts predict that by the year 2000, more than 15 percent of world-wide IC production will come from foundries, increasing to about 30 percent by the year 2008. As better design automation and IP integration tools emerge, product development risks will continue to decrease and facilitate system companies ability to shift part of their IC needs directly to foundries. TSMC will continue to be a leader in reducing the barriers to entry to the IC business.

At the supply chain level, TSMC believes that it is in an ideal position to benefit from the current trend toward "dis-integration," whereby fabless and systems companies and IDMs focus on their core competencies, shifting manufacturing and other services to partners with expertise in those areas. The frictionless business processes enabled by the Internet will add to the speed at which this trend continues. As TSMC continues to grow it will be able to positively influence other supply chain partners to expand support for the foundry model. Leading equipment and material suppliers such as Applied Material, ASML, Tokyo Electron, Taisil, Komatsu and Shinetsu continue to expand technology and service programs targeted at foundries.

At the technological level, consumer demand for lower cost and higher functionality of products is expected to compel our customers to increasingly integrated chip design, creating a need for the higher density of our advanced technologies. TSMC hopes to be able to maintain high average selling prices for wafers as the company's production capacity evolves through more and more advanced technologies.

#### Production over the Last Two Years

Year	Wafers		
	Capacity	Quantity	Amount
1998	1,617,231	1,202,922	28,169,217
1999	1,685,112	1,681,007	43,759,960

Unit: Capacity/Quantity (8"wafer) /Amount (NT\$K)

TSMC fully understands that we will face serious competition in the future. Therefore, to ensure TSMC's continuing leadership and profitability in 2000 and beyond, we are determined to establish closer partnerships with customers and to provide the most advanced technologies and the most comprehensive services.

#### Net Sales over the Last Two Years

Year	Wafers		Package		Other		Total	
	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount
1998	1,131,512	44,871,574	44,891	3,566,003	-	1,795,431	1,176,403	50,233,008
1999	1,686,433	64,428,905	67,832	5,131,796	-	3,570,505	1,754,265	73,131,206

Unit: Quantity (8"wafer) /Amount (NT\$K)



For primary technologies, TSMC will focus on the following offerings:

#### **(1) Advanced CMOS Logic Process**

TSMC began mass-production of 0.22 and 0.18 $\mu$ m CMOS Logic processes in the beginning of 1999 and 0.18 $\mu$ m low-voltage process by the end of the same year. The company is expected to enter volume production of a 0.15 $\mu$ m generic and low-voltage CMOS Logic process in the second quarter of 2000. In addition, TSMC plans to introduce 0.18 and 0.15 $\mu$ m low-power processes in the second and fourth quarters of 2000, respectively, for customers in the portable electronic device markets. The 0.13 $\mu$ m CMOS Logic process is expected to be available in early 2001. The move into those advanced technologies will help TSMC's customers develop higher-density and higher-performance chips that will be competitive in world markets.

#### **(2) Advanced Mixed-Signal Process**

In the mixed digital-and-analog market, TSMC has successfully developed the 0.25 $\mu$ m 1-layer-poly, 6-layer-metal mixed-signal and radio frequency (RF) processes to meet the demands of communication and consumer ICs in the second half of 1999. This process also makes it easier for TSMC's customers to integrate digital-signal processors and/or data-compression chips with analog circuitry for the fast-growing multimedia market. The 0.18 $\mu$ m mixed-signal and RF processes will be available in early 2000.

#### **(3) Advanced SRAM/Embedded SRAM Processes**

TSMC's 0.18 $\mu$ m high-speed SRAM process became available to customers in late 1999. The 0.18 $\mu$ m low-power SRAM process should begin mass-production in the first quarter of 2000. The 0.15 $\mu$ m high-speed and low-power processes are expected to be available in the fourth quarter of 2000. On the embedded SRAM front, the company completed the development of a 0.18 $\mu$ m 1-layer-poly, 6-layer-metal process in early 1999. The 0.15 $\mu$ m Embedded SRAM process should be ready at the same time as the 0.15 $\mu$ m Logic process in the second quarter of 2000. These processes will enable TSMC customers to further reduce their costs and enhance performance.

#### **(4) Advanced DRAM/Embedded DRAM Processes**

In 1999, TSMC completed development of the 0.22 and 0.21 $\mu$ m DRAM processes and began mass-production. TSMC finished the development of our 0.25 $\mu$ m embedded DRAM process for production, followed by a formal release to customers in the third quarter of 1999. The embedded DRAM solution offers great opportunities for TSMC's customers in the notebook graphics, disk storage, communications, and digital consumer electronics markets. The 0.19 $\mu$ m DRAM and 0.18 $\mu$ m embedded DRAM processes will be introduced in the first and fourth quarters of 2000, respectively.

#### **(5) Advanced Flash/Embedded Flash Processes**

In non-volatile memory, TSMC finished development of a 0.25 $\mu$ m logic based 2-layer-poly, 2-layer-metal, split-gate Flash process in the third quarter of 1999 and a 0.25 $\mu$ m mixed-signal 2-layer-poly, 5-layer-metal, split-gate embedded Flash process in the fourth quarter of 1999. The embedded Flash process will help customers integrate Flash with logic, especially in microcontroller, digital signal processor and other system-on-chip applications requiring a high degree of integration. The 0.18 $\mu$ m Flash/embedded Flash development is expected to be completed and available for volume production by the end of 2000.

#### **(6) Special Logic Processes**

In addition to these advanced processes, TSMC began to develop the special logic processes in 1998, including CMOS image sensor, color filter, and high voltage processes, for our customers to target unique markets. The 0.5 $\mu$ m CMOS image

sensor processes were available in early 1999 and the 0.35 $\mu$ m processes were ready in late 1999. The 0.25 $\mu$ m development is expected to be finished and available for production by the end of 2000. The 6- and 8-inch versions of CMOS color filter processes were available in 1999. The development of 0.6 $\mu$ m 2-layer-poly, 3-layer-metal and 1.0 $\mu$ m 2-layer-poly, 2-layer-metal high-voltage processes were completed and ready for production in 1999. By the end of the same year, TSMC began to develop 0.5 $\mu$ m 2-layer-poly, 3-layer-metal high-voltage processes and should enter production in early 2000.

#### (7) Design Services

1999 has been a prosperous year for TSMC in design services, which includes libraries, intellectual property cores (IP) and design engineering services. TSMC rolled out 0.18 $\mu$ m libraries with third-party library partners, introduced a broad network of providers of key IP blocks, and expanded its network of engineering service partners to cover customers' design implementation needs. In 2000, TSMC is expected to present the high-performance 0.15 $\mu$ m libraries and key IP as well as a productized design reference flow – to further strengthen our design services capability. Greatly expanded use of the Internet will aid customer access to all levels of design service information.

## 4. Labor Relations

TSMC's labor relations record is one of outstanding harmony. For the past two years, there was not a single company- or division-wide labor dispute or labor-related work disruption. On the contrary, TSMC has been nominated by the Executive Yuan (the Cabinet) for several years running as an organization whose employee welfare, labor training, employee housing, public health conditions and working environments are among the best in Taiwan. Forecasting the future, we are confident that the possibility of loss resulting from labor dispute is extremely low. In fact, TSMC anticipates outstanding recruitment and retention prospects for the foreseeable future, for a number of reasons. These include:

#### (1) Industry Leadership Status

TSMC's unassailable position as the foundry industry leader attracts excellently skilled and qualified engineering talent. As an example, in 1999 alone, 38,000 candidates applied for work at TSMC, 9,144 interviews took place and 2,049 of these were hired.

#### (2) Employee Development Programs

Persistently developing people, in terms of both TSMC's short-term productivity and long-term skill development, TSMC's Performance Management and Development system was enacted companywide in 1999, with a focus on helping people improve their performance and develop their talents to maximum potential. Also in 1999, 492 training courses were offered and some 36,913 employees were enrolled. On average, every TSMC employee receives about 32 hours of training per year.

#### (3) Excellent Employee Benefits

Our harmonious employee relations can be attributed in part to well-planned employee benefits, provided without the requirement for labor unions or group-hire contracts. TSMC employees receive a variety of amenities for working here, including a free shuttle bus system, a discount restaurant, convenience store, dormitories, health care and insurance.

#### (4) Coordinated Employee Activities

TSMC's Employee Welfare Committee operates a variety of social clubs and employee welfare activities designed to maintain a continuously improving work environment for all TSMC employees. In 1999, NT\$67million was allocated to sponsorship of employee-welfare-related activities.

### (5) Profit-Sharing System

All TSMC employees join in TSMC's profit-sharing system, a move which inspired the concept that "employees are the owners of TSMC."

### (6) Protected Intellectual Property

TSMC's sound Proprietary Information Protection (PIP) policy shields valuable information, and protects employees from unnecessary entanglements.

## 5. Personnel Growth over the Last Two Years

Year	Number of Employees				Average Age	Average Years of Service	Percentage by Education					
	Direct Labor	Engineer	Manager	Total			Ph.D.	MS/MA	BS/BA	High School	Others	Total
1998	2,711	2,467	730	5,908	29	3.9	2.2%	22.2%	37.7%	37.8%	0.1%	100.0%
1999	3,675	2,716	1,069	7,460	29	3.8	2.3%	23.1%	38.5%	36.1%	0.1%	100.0%

## 6. Environmental Protection Measures

TSMC has been ISO14001 certified since 1996. This certification has been successfully renewed and is effective until August, 2002. This renewed certification comes from the cooperative endeavors and hard work of every TSMC employee.

The major spirit of ISO 14001, i.e. pollution prevention and constant improvement in that area, has been fully fulfilled at each fab during daily operation. Beginning with its handling of raw materials, TSMC merges cost-reduction programs with industrial waste reduction concepts by optimizing manufacturing processes, automating and improving the use of equipment and facilities and recycling. These are used to continually undertake waste reduction and more efficient management practices to ultimately decrease consumption. The programs conducted in 1999 include evaluating greener packaging materials by working with raw material suppliers, encouraging vendors/supplier's EP performance by site visits, studying to replace C<sub>2</sub>F<sub>6</sub> with C<sub>3</sub>F<sub>8</sub> to reduce PFC emission, and recycling of plastic wafer carriers by encouraging the supplier to adapt to these changes.

The results of these improvements are manifested in TSMC's receipt of numerous awards and citations, including "Enterprise Environmental Protection", "National Industrial Waste Reduction Outstanding Factory" and "Energy Conservation" awards. Also, recommended by the Hsinchu County EPA, TSMC was honored by an "Special Award of Outstanding Environmental Performance" by the ex-director of the Taiwan Department of Environmental Protection, Mr. Long-Chi Chen.

In the aspect of the compliance of EP regulations, on January 6, 1999, the EPA has promulgated the "Semiconductor Industry Air Emissions Standards" which regulate the emission of VOCs (Volatile Organic Compounds) and mineral acids. TSMC had already established VOC abatement systems a few years before this regulation was announced. We believe this is a good demonstration of a proactive attitude of not only compliance but also to go beyond current regulatory standards. In the past two years TSMC has completely complied with EPA regulations, and did not receive any penalties for incidences or non-compliance. In the future we expect to invest another NT\$2.05 billion on the improvement of pollution control equipment throughout TSMC's fab facilities.

## 7. Important Contracts

### (1) Technology Cooperation Agreement

Term of Agreement: 7/9/1997 - 7/8/2007

Summary: Under this agreement, TSMC is obliged to pay to Philips Electronics N.V. royalty at a fixed percentage of net sales for certain products.

Contracting Party: Philips Electronics N.V.

### (2) Submicron Technology Licensing Agreement

Term of Agreement: 11/20/1990 - 12/31/2000

Summary: Under this agreement, TSMC is obliged to pay a licensing fee of NT\$129.4 million to the Industrial Technology Research Institute over a five-year period, plus royalty fees at fixed percentages of net sales for certain products. The entire licensing fee had been paid by December 31, 1995.

Contracting Party: Industrial Technology Research Institute

### (3) Building and Equipment Leasing Agreement (FAB I)

Term of Agreement: 4/1/1997 - 3/31/2002

Summary: Under this agreement, TSMC leases certain buildings and equipment from the Ministry of Economic Affairs.

Contracting Party: Ministry of Economic Affairs

### (4) Land and Public Facility Leasing Agreement (FAB I)

Term of Agreement: 4/1/1997 - 3/31/2002

Summary: Under this agreement, TSMC leases certain land and public facilities from the Industrial Technology Research Institute.

Contracting Party: Industrial Technology Research Institute

### (5) Foundry Related Agreements

Term of Agreement: 1995 - 2006

Summary: Under these agreements, TSMC guarantees a pre-determined capacity for a set number of years to customers in the United States, Europe, and Asia. In return, customers deposit fees with TSMC. As of the end of 1999, more than ten companies had signed foundry related agreements with TSMC.

Contracting Parties: More than 10 companies in the U.S.A., Europe, and Asia.

### (6) Manufacturing Agreement

Term of Agreement: three years, upon commencement of production at WaferTech, LLC

Summary: Under this agreement, TSMC is obliged for three years, upon commencement of production at WaferTech, LLC, to purchase a minimum of eighty-five percent of calculated installed capacity of WaferTech, LLC. TSMC has the option to purchase up to one hundred percent of the calculated installed capacity of WaferTech, LLC.

Contracting Party: WaferTech, LLC

### (7) Purchase Agreement

Term of Agreement: three years upon commencement of production at WaferTech, LLC.

Summary: Under this agreement, TSMC is obliged to supply, and the three customers are obliged to purchase, a certain portion of wafers produced by WaferTech, LLC.

Contracting Parties: Analog Devices, Inc., Altera Corporation and Integrated Silicon Solutions, Inc.

### (8) Shareholders Agreement

Term of Agreement: May be terminated as provided in the Agreement

Summary: Under this agreement, TSMC, Philips and EDBI agreed to form a joint venture "Systems on Silicon

Manufacturing Company Pte Ltd." ("SSMC") to build an IC foundry in Singapore. TSMC holds 32 % of the shares. Philips and TSMC committed to purchase a certain percentage of SSMC's capacity.

Contracting Party: Philips Electronics N. V. ("Philips") and EDB Investments Pte Ltd. ("EDBI")

#### **(9) Technology Cooperation Agreement**

Term of Agreement: 3/30/1999 - 3/29/2008

Summary: Under this agreement, TSMC shall transfer its process technologies to SSMC and SSMC shall pay TSMC remuneration at a certain percentage of net selling prices of its products.

Contracting Party: Systems on Silicon Manufacturing Company Pte Ltd. ("SSMC")

#### **(10) Technology Cooperation Agreement**

Term of Agreement: 7/21/1999 - 7/20/2008

Summary: Under this agreement, TSMC shall transfer its process technologies to TSMC and TSMC shall pay TSMC remuneration by way of giving discount to the selling prices of products sold to TSMC.

Contracting Party: TSMC-Acer Semiconductor Manufacturing Corporation ("TASMC")

#### **(11) Merger Agreement**

Term of Agreement: Nil

Summary: Under this agreement, TSMC will acquire and merge with TASMC. TSMC shall be the surviving company and TASMC shall be dissolved after the merger. The consolidation date is tentatively scheduled for June 30, 2000.

Contracting Party: TSMC-Acer Semiconductor Manufacturing Corporation ("TASMC")

(Note: TSMC has signed a merger agreement with Worldwide Semiconductor Manufacturing Corporation on January 7, 2000.)

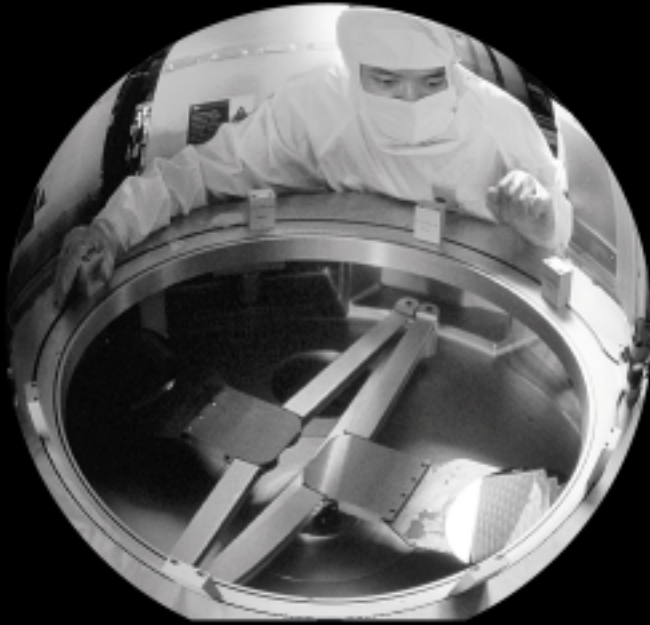
## **8. Litigation Proceedings**

#### **(1) Antidumping Investigation Against SRAMs**

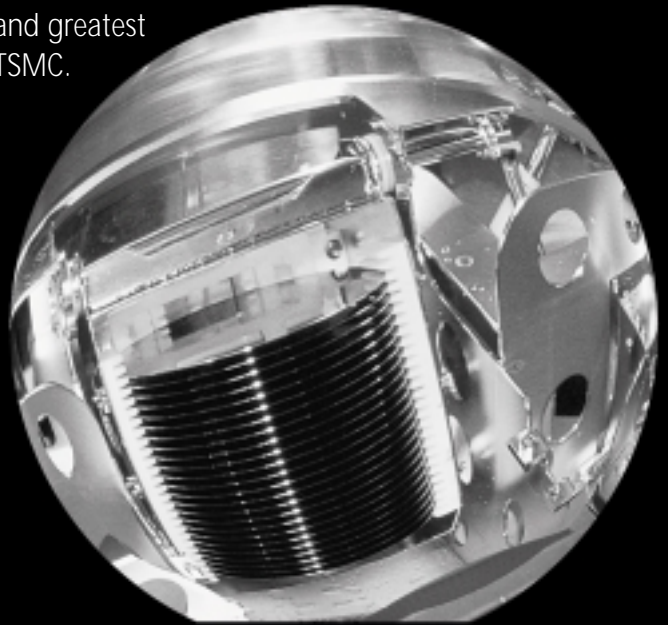
On February 25, 1997, Micron Technology Inc. filed a petition for the antidumping investigation against SRAMs from Korea and Taiwan. Following the U. S. International Trade Commission's final determination in April 1998 that U. S. industry is materially injured by imports from Taiwan, the U. S. Department of Commerce announced the antidumping duty order. Taiwan industry has appealed to the U. S. Court of International Trade. SRAMs account for a very small portion of TSMC's total sales and TSMC's direct sales to the U. S. is even less. Thus, the impact on TSMC's business is expected to be very limited.

#### **(2) Antidumping Investigation Against DRAMs**

On October 22, 1998, Micron Technology Inc. filed a petition for the antidumping investigation against DRAMs from Taiwan. U. S. International Trade Commission made the final determination in November 1999 that the U. S. industry is not materially injured or threatened with material injury by DRAM imports from Taiwan. U. S. Customs subsequently instructed all field offices to discontinue suspension of liquidation of all shipments of DRAMs from Taiwan and to release the collected bonds or deposits.



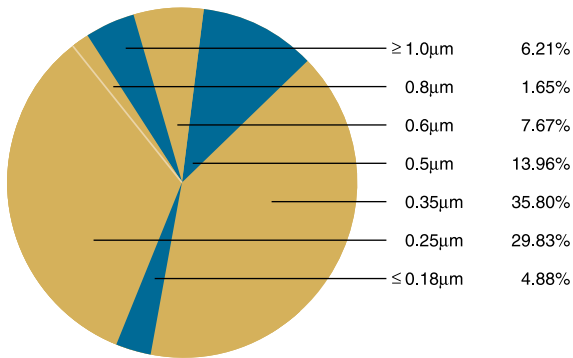
The intellectual capital of our employees is the most important asset and greatest wealth to TSMC.



# Business and Financial Plans

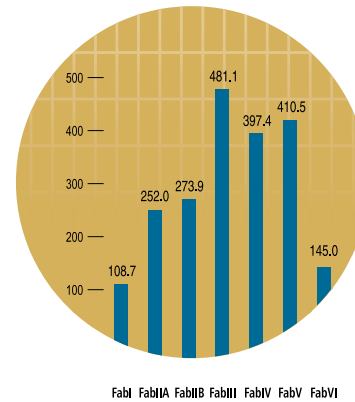
## 1. Production and Sales Plans for 2000

Sales Plan by Technology



Production Plan

Quantity: (Thousand pcs 8"wafer)



## 2. Year 2000 Plans for Disposition or Acquisition of Real Estate or Long-term Investment

Amount of disposing real estate / long-term investment up to NT\$ 300 million or 20% of paid in Capital

Company	Nature	Quantity	Location	Date	Price	Funding Source	Purpose
TSMC-Acer Semiconductor Manufacturing Corp.	Long-term investment	Common share: 348,936,000	Hsin Chu	June 30, 2000	-	-	Merger for increasing capacity to enhance competitiveness
		Preferred share B: 376,815,000		consolidation date			

Amount of acquiring real estate / long-term investment up to NT\$ 300 million or 20% of paid in Capital

Name of Real Estate or Company	Nature	Quantity	Location	Date	Price	Funding Source	Purpose
Buildings	Real estate	401,838m <sup>2</sup>	Hsin Chu & Tainan	Starting from Q1, 2000	NT\$12,912 million	Retained Earnings or Bank Borrowing	Increase capacity to enhance competitiveness
Systems on Silicon Manufacturing Company Pte. Ltd.	Long-term investment	Common share: 63,870	Singapore	Starting from Q1, 2000	NT\$958 million	Retained Earnings or Bank Borrowing	Increase capacity to enhance competitiveness

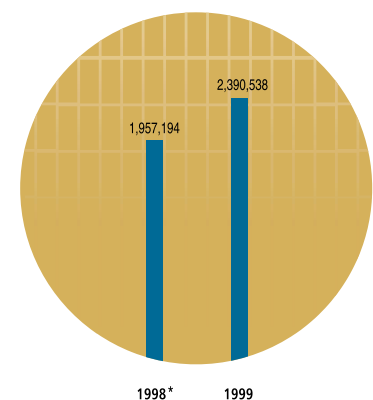
### 3. Research and Development Plans

TSMC's Research and Development develops a broad spectrum of leading-edge logic, mixed-signal/RF, embedded memory, color image sensor, and high-voltage process technologies for volume manufacturing. These state-of-the-art processes are then used by our customers to enable system-on-chip (SOC) designs for a wide range of applications, such as PC, communication (network, wireless), information/infotainment appliances, and consumer electronics. Through hard work, innovation, and long-term R&D investment, TSMC has established technology leadership not only in the dedicated foundry business but also in the semiconductor industry as a whole. Our research and development commitment is to continue to stay ahead of the ITRS (International Technology Roadmap for Semiconductors) roadmap.

TSMC's semiconductor R&D organization is generally regarded as one of the best in the world. The success of the dedicated foundry model pioneered by TSMC has attracted both overseas and domestic talents and skills, thereby increasing the relative strength of our R&D organization day by day. Our overall R&D investment and expenditure is over NT\$ 2.39 billion on R&D in 1999, approximately a 22 percent increase over the year 1998. Our R&D efforts continue to receive recognition, as well as harvest intellectual property rights (IPR), which enhances our strength in cross-license relationships with other IPR owners. TSMC was awarded 289 US patents and 169 ROC patents in 1999. We are the only Taiwan company among Top 50 US patent awardees in 1999. Over the years, TSMC received many awards, including the National Bureau of Standards' prestigious National Invention Award, First Prize Gold Medal, in 1998 and the Distinguished Award for Industrial Technology Advancement presented by Ministry of Economic Affairs, R.O.C. in 1999.

#### R&D Investment

Amount: (NT\$K)



\* The number of R&D expenditure has been reclassified to conform to 1999 classification.

Complimentary to its independent R&D capabilities, TSMC collaborates with international technology leaders. In addition to being the sole Taiwanese member of the International Sematech and 300 mm (I300I), we maintain a strong presence in various consortia dedicated to technology development in the areas of IC process, tool and materials.

Our R&D capability has earned TSMC the position of a technology forerunner in the IC industry. Our work in the development and introduction of low voltage, low power and high performance logic process technology is at the leading edge. In the core logic technology area, TSMC was among the first IC companies to release the state-of-the-art 0.18 $\mu$ m generation CMOS logic technology to production in 1999, consistent with the SIA technology roadmap. This 0.18 $\mu$ m logic process has the most aggressive design rules and geometry in the world, enabling world-class advanced low-voltage and high-performance transistors with gate lengths of less than 0.13 $\mu$ m. This technology is capable of supporting greater than 600MHz microprocessor and graphics chip performance levels. Our process also has the most advanced low-k (low dielectric constant) insulator integrated with conventional AlCu metallization scheme to reduce interconnect RC (resistance x capacitance) delay and improve customers' product performance. In addition, in 1999 TSMC R&D also released our advanced copper interconnect process as a fully design-rule-compatible option of our 0.18 $\mu$ m logic technology. This copper interconnect process has the world's tightest design rules and is the first to be commercially available from a dedicated foundry.

In early year 2000, TSMC will lead the world with the release and mass production of a 0.15 $\mu$ m generation logic technology. This technology is expected to cover the entire application spectrum with three product lines: A high-



performance, low-voltage technology for processor applications (e.g., microprocessors, network processors, media processors, etc.); A low-leakage technology for battery operation or wireless applications (e.g., cell phones); And a standard ASIC-logic technology. This industry-leading technology will have both aluminum/low-k as well as Cu/low-k interconnect options. Excellent yield has been achieved and qualification is under way.

In the rapidly growing CMOS mixed-signal/RF area, TSMC R&D released a 0.25 $\mu$ m mixed-signal/RF process in 1999. This process has a rich set of modular analog devices and passive components. For example, high-Q metal-insulator-metal capacitors can enable modem, audio, and other mixed-digital-analog SOC applications, while high-Q inductors enable RF and wireless/baseband applications. The development of a 0.18 $\mu$ m version is nearly complete with successful prototype production and is expected to be in production in early 2000. Next-generation 0.13 $\mu$ m mixed signal, baseband, and RF technology development is underway to provide further performance and density value for SOC applications.

During the past year, TSMC has also made great progress in the continuous scaling of Embedded Memory technology (Emb-SRAM, Emb-DRAM, Emb-Flash) that is an essential part of SOC integration. These value-added embedded memory technologies are fully compatible with their respective core Logic Technology platforms. They are also supported by a complete set of compilers, design kits, and test support, to enable SOC designs and product introduction.

Our Emb-SRAM technology has been an integral part of the TSMC high performance logic technology platform since the 0.25 $\mu$ m generation. TSMC offers a variety of competitive 6T SRAM cells in terms of density, performance, and standby leakage. For example, cell size less than 3.5 $\mu$ m<sup>2</sup> are available in the 0.15 $\mu$ m logic platform with compiler performance capable of reaching 1GHz. The same 6T SRAM platform also supports high density, high performance or low standby leakage stand-alone SRAM applications.

TSMC's 0.25 $\mu$ m embedded DRAM has been successfully demonstrated on customers' products. This technology offers a very small cell size of 0.78 $\mu$ m<sup>2</sup> and can incorporate 1 - 64 Mb memory sizes with different I/Os. This technology has been transferred to manufacturing for volume production. The 0.18 $\mu$ m Embedded DRAM technology is in development and is expected to be ready in 2000.

Our 0.35 $\mu$ m Embedded Flash technology was introduced in 1999. Technology qualification was completed and several products have been demonstrated with good yield. The development of 0.25 $\mu$ m Embedded Flash technology is nearly completed, with process qualification ongoing. Our 4Mb Flash test vehicle has been proven with respectable yield. A version utilizing 0.18 $\mu$ m technology has been started with the goal to scale the cell size aggressively. The expected date for risk production is fourth quarter of 2000.

In addition to advanced mixed-signal/RF and embedded memory processes, TSMC also offers color image sensors and high voltage technologies for system-on-chip (SOC) applications. The color image sensor is ideal for camera-on-a-chip applications. In 1999, we released 0.35 $\mu$ m color image sensor process to production, in addition to the existing production of 0.8, 0.6, 0.5 $\mu$ m color imager sensor processes. A 0.25 $\mu$ m imager process is under development for production by the end of 2000. These image sensors are further enhanced by color filters with micro-lens to double the sensitivity. A 6-inch TCF1 (TSMC Color Filter-1) with resolution down 5 $\mu$ m pixel size has been in production since 1998, and an 8-inch version (TCF3) will be released in early 2000. In the high voltage/power area, TSMC enriched the existing production of 1 $\mu$ m 16V and 40V processes by introducing 0.6 and 0.5 $\mu$ m versions of these processes, as well as a 0.8 $\mu$ m 40V BiCMOS version, in 1999. These processes are fully compatible with TSMC generic logic and mixed signal processes for mixed 5V and high voltage system integration.

TSMC has one of the largest in-house mask fabrication capabilities anywhere. Our mask shops are well known for excellent quality and cycle time to support fast prototyping, production, and mask technology R&D. Our facilities have all the key state-of-the-art Ebeam mask writer and inspection tools necessary to support both R&D and commercial use, including advanced optical-proximity-correction (OPC) and phase-shift mask (PSM) technology for use in the 0.15 $\mu$ m and 0.13 $\mu$ m logic processes and future technology generations.

TSMC R&D began 0.13 $\mu$ m development in full steam in 1999 as well as exploratory work on future 0.1 $\mu$ m generation and beyond, such as <0.07 $\mu$ m devices, unit processes, advanced high-k gate insulator, and extreme low-k ( $k < 2$ ) interconnect insulator materials. TSMC has the first 193nm step and scan photolithographic production equipment in Taiwan, capable of sub-0.13 $\mu$ m and 0.1 $\mu$ m production. We also participate in international next generation lithography (NGL) consortia to maintain leadership in sub-0.1 $\mu$ m lithography and process technology. TSMC has been building the first 12-inch fab in Taiwan with target volume production in early 2001. This 12-inch fab will also support future R&D of 0.10 m generation and beyond.

With the skilled, experienced, and dedicated R&D management and research/development staff, the significant investment in the most advanced process tools and materials, and the commitment to excellence, innovation, quality, and value, TSMC R&D strives to be the cornerstone of the "Virtual Fab" for semiconductor manufacturing. We will continue to deliver the world's best and most cost-effective system-on-a-chip technology for fabless, IDM, and system partners and customers in the future.

## 4. Financing Plans

### 4.1 Capital Increase for Expansion Plans for 2000

Item	Amount (NT\$M)	Objectives
FabXII - Construction	8,805	Scheduled to produce 12" wafers
FabVII - Construction	8,640	Scheduled to produce 12" wafers
FabVI	42,033	Increase 8" wafer output capacity to 40K pcs/month by the end of 2000
FabV	8,783	Increase 8" wafer output capacity to 38K pcs/month by the end of 2000
FabI - FabIV	3,208	Upgrade product mix
300MM pilot line	13,860	Exercise advanced module & integration
Replacement and Others	10,307	Maintain technology superiority and competitiveness
<b>Total</b>	<b>95,636</b>	

*Capital expenditures will be funded by internally generated cash flow or/and external funding activities.*

### 4.2 Previous Financing Plans and Implementation

#### (1) Financing Plan

On October 21, 1999, TSMC issued NT\$ 10 billion corporate bonds, the third time the Company tapped in the local debt market, to finance its procurement of machinery and equipment for Fab 5 and its long-term investment in TSMC. Out of the total fund raised in this issuance, NT\$8,169,634,000 was used to acquire equity interests of TSMC and NT\$1,830,366,000 was used to purchase equipment for Fab 5. The bonds was issued in two NT\$5 billion tranches with tenors of 3 years and 5 years and the coupon rates are 5.67%, and 5.95%, respectively.

#### (2) Status of Implementation

By the end of December 1999, TSMC has completed this plan of procurement of manufacturing equipment for Fab 5 and investment in TSMC.

## 5. TSMC Education and Culture Foundation

Fundamental to TSMC's business philosophy, TSMC is committed to its role as a corporate citizen and its care for Taiwan's social development through monetary grants as well as time and talents of its employees. To satisfy the rising diversity of societal needs through a formal vehicle, TSMC established the "TSMC Education and Culture Foundation" (TSMC Foundation) in 1998. TSMC Foundation's mission is guided by the following three principles:

### (1) Commitment to Education

To help develop university students' talents in high technology, management and intellectual property rights, TSMC Foundation established three educational grant programs - "TSMC Undergraduate International Exchange Program Scholarship", "TSMC Intellectual Property Scholarship" and "TSMC Visiting Chair Professorship" - with Tsing Hua University, Chiao Tung University and Cheng Kung University.

### (2) Contributions to the Community

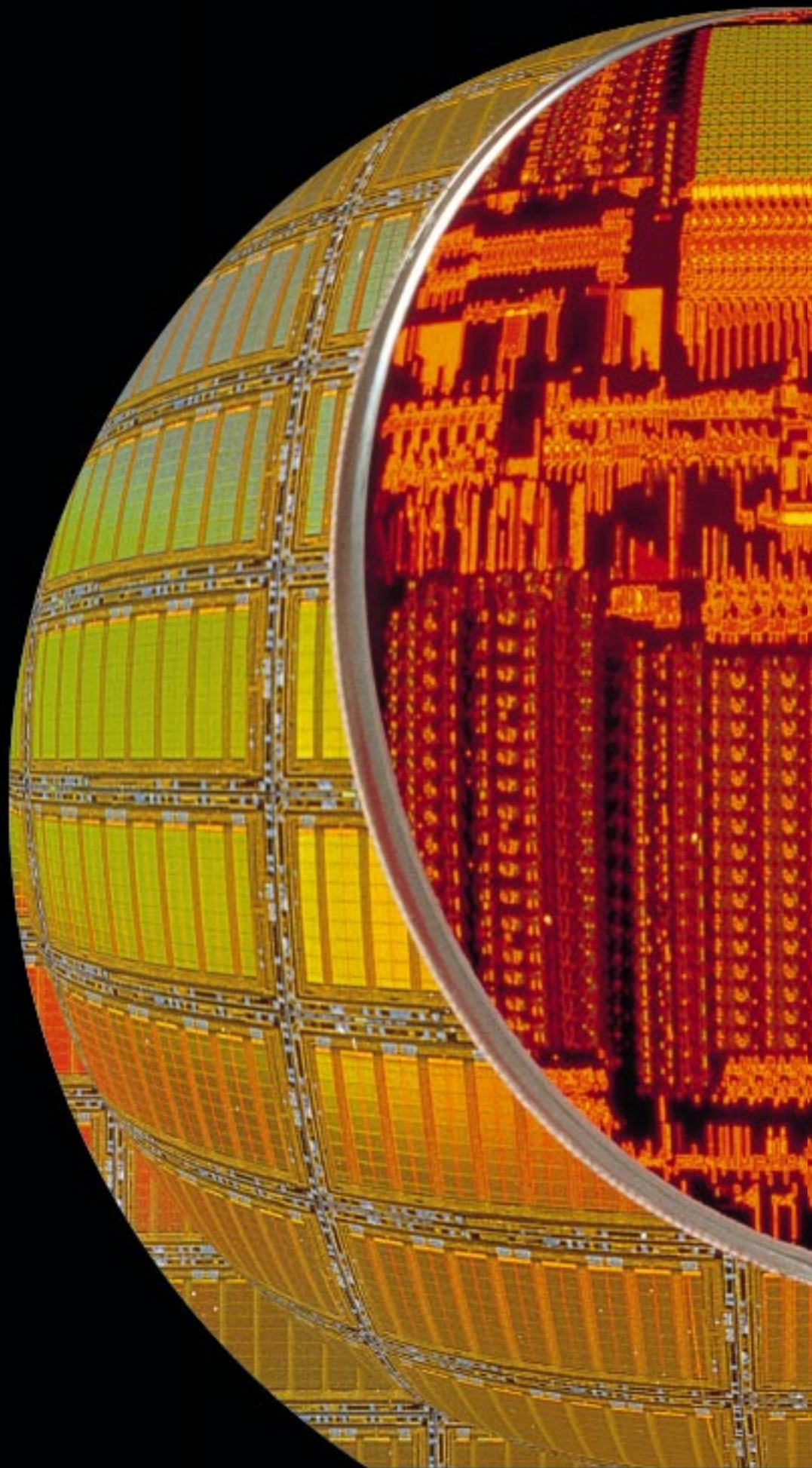
TSMC Foundation supports community services in Hsin-chu and Tainan, where TSMC has major facilities, with both funding and volunteers to build a sound environment for our employees and neighbors. TSMC Foundation directs its efforts at arts and cultural activities, environmental protection, health, athletics, and similar programs to enhance the quality of life in our communities.

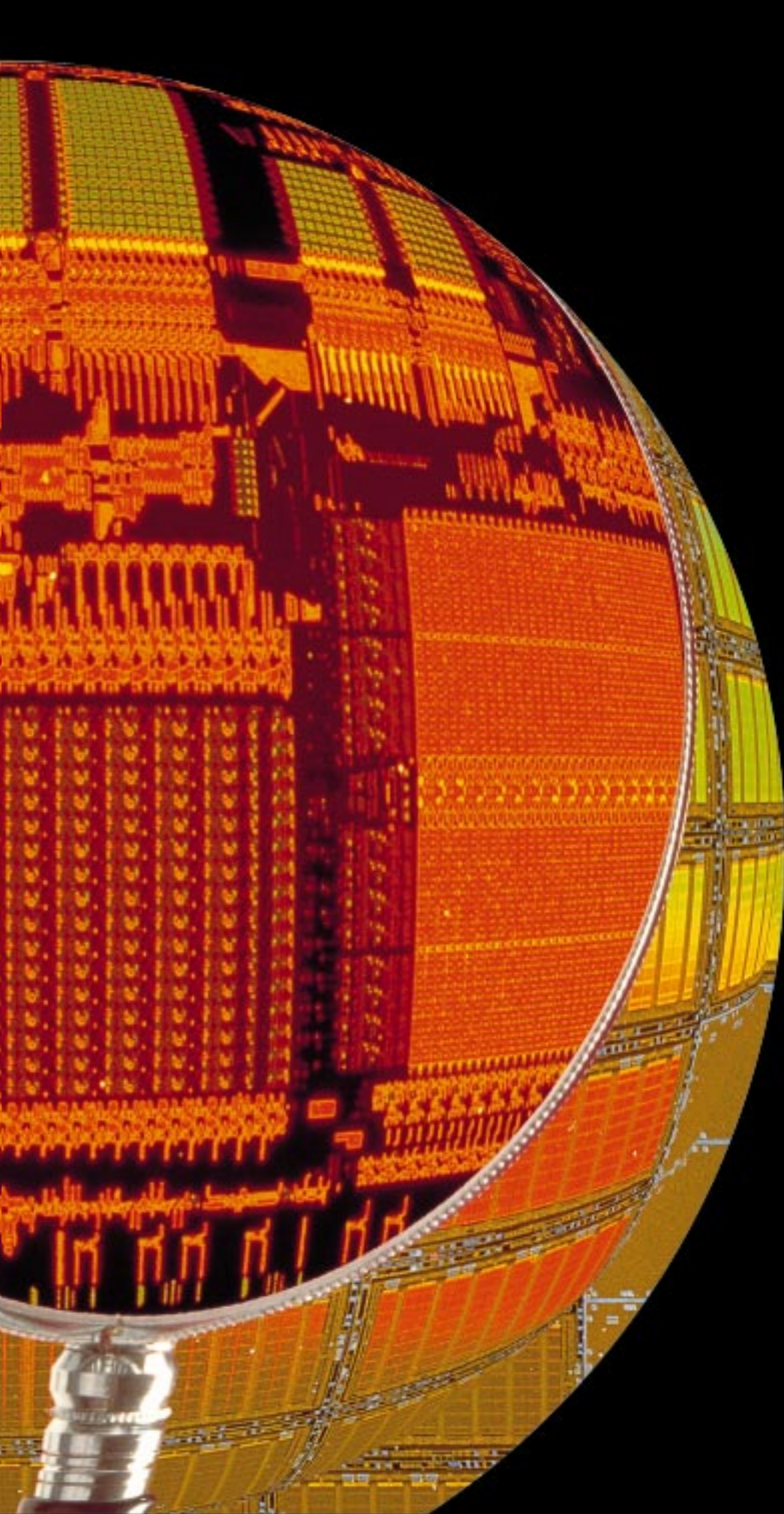
### (3) Sponsorship of National Arts and Cultural Activities

Without grants from industry or government, major national arts and cultural activities cannot take place. We hope to increase the popular pursuit of national arts and cultural activities through TSMC Foundation's sponsorship. Our sponsorship of the "Le Monde de Picasso exhibition" at the National Palace Museum and production of the TV series, "The people who made dreams for Taiwan", are striking examples of that effort.

Due to the devastating earthquake of September 21, 1999, TSMC's ongoing operations were substantially affected. However, the losses and misfortunes of the quake victims were clearly much more severe. After TSMC and its employees donated NT\$200 million to the earthquake victims, TSMC further committed itself to the continuing support of spiritual recovery through sponsorship of arts performances and cultural activities. For example, "The Jose Carreras 1999 Taipei Concert" exclusively sponsored by TSMC Foundation, joined the call to provide quake victims with a "Mobile Library" made up of container trucks.

In addition to annual activities, TSMC Foundation provides seed grants to selected arts and cultural organizations on a long-term basis, to support these organizations in developing themselves as cultural resources of Taiwanese society. One of the most significant examples was TSMC Foundation's endowment to the Cloud Gate Dance Theatre Foundation. Income from the endowment will be used to support long-term development of the dance group.





[Financial Statements >>>](#)

## 1. Brief Balance Sheets

Financial analysis from 1995 to 1999

Unit: NT\$K

Item	1995	1996	1997	1998	1999
Current assets	16,070,964	16,529,359	23,790,795	26,378,422	38,770,670
Long-term stock investments	4,989,037	12,608,506	19,220,371	17,537,765	28,208,643
Fixed assets	26,643,665	41,978,952	61,697,723	73,636,209	89,566,029
Other assets	599,369	2,018,827	3,804,923	6,554,817	4,877,392
Current liabilities					
Before distribution	5,075,481	5,357,895	10,088,672	8,138,796	14,469,329
After distribution	5,926,696	5,926,138	10,250,285	8,276,867	*
Long-term liabilities	5,556,381	5,720,000	20,009,357	25,025,206	20,000,000
Other liabilities	4,091,928	9,943,809	9,001,390	6,872,545	6,183,565
Capital stock	14,390,000	26,542,000	40,813,000	60,471,760	76,708,817
Capital surplus	19,428	59,086	62,082	164,219	11,831,411
Retained earnings					
Before distribution	19,165,640	25,523,456	28,641,292	24,162,113	33,320,615
After distribution	6,162,425	10,684,213	8,820,919	9,010,971	*
Total Assets	48,303,035	73,135,644	108,513,812	124,107,213	161,422,734
Total Liabilities					
Before distribution	14,723,790	21,021,704	39,099,419	40,036,547	40,652,894
After distribution	15,575,005	21,589,947	39,261,032	40,174,618	*
Total Equity					
Before distribution	33,579,245	52,113,940	69,414,393	84,070,666	120,769,840
After distribution	32,728,030	51,545,697	69,252,780	83,932,595	*

\* Subject to change after shareholders' meeting resolution

## 2. Brief Statements of Income

Financial analysis from 1995 to 1999

Unit: NT\$K(Except EPS: NT\$)

Item	1995	1996	1997	1998	1999
Net sales	28,765,991	39,400,179	43,935,627	50,233,008	73,131,206
Gross profit*	15,740,746	21,411,531	20,134,920	20,336,042	32,215,693
Income from operations	13,897,006	18,235,246	15,489,780	16,202,245	25,916,619
Interest revenue	367,986	653,462	501,434	566,020	808,616
Interest expense	258,000	277,161	546,490	981,388	1,415,527
Profit before tax	14,314,528	18,972,932	15,517,103	13,648,622	24,109,865
Net profit	15,081,273	19,400,689	17,960,075	15,344,203	24,559,884
Earnings per share	10.48 **	7.31 **	4.40 **	2.54 **	3.24 **
	2.00 ***	2.57 ***	2.38 ***	2.03 ***	-
Capitalized interest	102,926	181,168	255,054	661,414	305,312

\* Certain accounts of 1995 through 1998 have been reclassified to conform to 1999 classifications

\*\* Based on weighted average shares outstanding in each year

\*\*\* Retroactive adjustment for capitalizations of unappropriated earnings and bonus to employees

### 3. Financial Analysis

#### Financial analysis from 1995 to 1999

Item	1995	1996	1997	1998	1999
Capital Structure Analysis					
Debts ratio (%)	30.48	28.74	36.03	32.26	25.18
Long-term fund to fixed assets (%)	146.89	137.77	144.94	148.16	157.17
Liquidity Analysis					
Current ratio (%)	316.64	308.50	235.82	324.11	267.95
Quick ratio (%)	257.83	247.77	185.78	273.86	233.95
Times interest earned (times)	40.38	42.40	20.04	8.91	14.83
Operating Performance Analysis					
Average collection turnover (times)	8.12	8.80	6.22	5.90	7.18
Average collection days	44.95	41.00	58.68	61.85	50.82
Average inventory turnover (times)*	7.73	7.24	6.12	6.82	9.96
Average inventory turnover days*	47.22	50.43	59.69	53.49	36.66
Fixed assets turnover (times)	1.08	0.94	0.71	0.68	0.82
Total assets turnover (times)	0.60	0.54	0.41	0.40	0.45
Profitability Analysis					
Return on total assets (%)	41.23	32.40	20.35	14.04	18.19
Return ratio on stockholders' equity (%)	57.55	45.28	29.56	19.99	23.98
Operating income to capital stock (%)	96.57	68.70	37.95	26.79	33.79
Profit before tax to capital stock (%)	99.48	71.48	38.02	22.57	31.43
Profit after tax to net sales (%)	52.43	49.24	40.88	30.55	33.58
Net worth per share (NTD)	23.34	19.63	17.01	13.90	15.74
Earnings per share (NTD)	2.0**	2.57**	2.38**	2.03**	3.24
Dividends per share (NTD)	8.00	8.00	5.00	4.50	2.30
Cash dividends (NTD)	-	-	-	-	***
Stock dividends (NTD)	8.00	8.00	5.00	4.50	2.30
Cash Flow					
Cash flow ratio (%)	348.45	452.74	201.55	417.00	273.50
Cash flow adequacy ratio (%)	111.94	113.70	97.96	102.04	106.00
Cash flow reinvestment ratio (%)	31.94	28.21	16.28	21.65	19.31
Leverage					
Operating leverage	1.69	1.79	2.15	2.69	2.47
Financial leverage	1.02	1.02	1.04	1.06	1.06

\* Certain accounts of 1995 through 1998 have been reclassified to conform to 1999 classifications

\*\* Retroactive adjustment for capitalizations of unappropriated earnings and bonus to employees

\*\*\* Subject to change after shareholders' meeting resolution

#### 4. Net Worth, Earnings, Dividends and Market Price Per Share

	1997	1998	1999
Market price per share			
Highest market price	173.00	173.00	171.00
Lowest market price	55.50	56.50	68.00
Average market price	109.35	100.80	117.10
Net worth per share			
Before distribution	17.01	13.90	15.74
After distribution	11.45	11.12	-
Earnings per share			
Weighted average shares	4,081,300,000	6,047,176,000	7,572,598,000
Earnings per share	4.40	2.54	3.24
Earnings per share <sup>1</sup>	2.38	2.03	-
Dividends per share			
Cash dividends	-	-	*
Stock dividends			
Dividends from retained earnings	5.00	4.50	2.30
Dividends from capital surplus	-	-	*
Return on investment			
Price/Earning ratio <sup>2</sup>	24.85	39.69	36.14
Price/Dividend ratio <sup>3</sup>	-	-	*
Cash dividend yield rate <sup>4</sup>	0	0	*

*\*Subject to change after shareholders' meeting resolution*

*Note 1. Retroactive adjustment for capitalizations of unappropriated earnings and bonus to employees*

*Note 2. Price/Earning ratio = Average market price/Earnings per share*

*Note 3. Price/Dividend ratio = Average market price/Cash dividends per share*

*Note 4. Cash dividend yield rate = Cash dividends per share/Average market price*



## 5. Auditors' Opinion from 1995 to 1999

Year	CPA	Audit Opinion
1995	S.C. Huang, Edward Way	An Unqualified Opinion, except the adoption of Statement of Financial Accounting Standards No.22.
1996	S.C. Huang, Edward Way	An Unqualified Opinion
1997	S.C. Huang, Edward Way	An Unqualified Opinion
1998	S.C. Huang, Edward Way	An Unqualified Opinion
1999	S.C. Huang, Edward Way	An Unqualified Opinion

12F, No.156, Sec. 3, Min-Sheng E. Rd., Taipei, Taiwan, R.O.C.  
Tel: 886-2-2545-9988

## 6. Supervisors' Report

The Board of Directors have prepared and submitted to us the Company's 1999 business report, balance sheet, inventories of major assets, statement of profit and loss, statements of changes in shareholders' equity, statements of cash flows, and proposal for allocating profit. The CPAs of T. N. SOONG & CO. were retained to audit the balance sheet, inventories of major assets, statement of profit and loss, statements of changes in shareholders' equity and statements of cash flows and have submitted a report relating thereto. The above reports, statements and proposal have been further examined as being correct and accurate by the undersigned, the supervisors of Taiwan Semiconductor Manufacturing Company Limited. According to Article 219 of the Company Law, we hereby submit this report.

Taiwan Semiconductor Manufacturing Company Limited

Supervisor Jan Kees van Vliet



Supervisor George C. Shiu



Supervisor Jerome S. N. Hu



February 18, 2000

## 7. Review and Analysis of Financial Position and Operating Results

### (1) Liquidity Analysis

Item	December 31 1999	December 31 1998	Change %
Current ratio	267.95%	324.11%	(17.33%)
Quick ratio	233.95%	273.86%	(14.57%)

### (2) Analysis of Operating Result

Item	1999	1998	Change Amount	Unit: NT\$K Change %
GROSS SALES	\$74,036,935	\$51,441,572	22,595,363	43.92%
SALES RETURNS AND ALLOWANCES	<u>(905,729)</u>	<u>(1,208,564)</u>	302,835	(25.06%)
NET SALES	73,131,206	50,233,008	22,898,198	45.58%
COST OF SALES	<u>40,915,513</u>	<u>29,896,966</u>	11,018,547	36.86%
GROSS PROFIT	32,215,693	20,336,042	11,879,651	58.42%
OPERATING EXPENSES	<u>6,299,074</u>	<u>4,133,797</u>	2,165,277	52.38%
INCOME FROM OPERATIONS	<u>25,916,619</u>	<u>16,202,245</u>	9,714,374	59.96%
NON-OPERATING INCOME				
Interest	808,616	566,020	242,596	42.86%
Insurance compensation	184,607	-	184,607	-
Reversal of allowance for losses on short-term investments	120,766	-	120,766	-
Premium income	63,809	8,280	55,529	670.64%
Gain on sale of investments	29,041	756,522	(727,481)	(96.16%)
Foreign exchange gain - net	-	97,229	(97,229)	(100.00%)
Other	<u>42,867</u>	<u>66,607</u>	(23,740)	(35.64%)
Total Non-Operating Income	<u>1,249,706</u>	<u>1,494,658</u>	(244,952)	(16.39%)
NON-OPERATING EXPENSES				
Interest	1,415,527	981,388	434,139	44.24%
Investment loss - net	1,191,891	2,707,170	(1,515,279)	(55.97%)
Bond issue costs	114,839	143,644	(28,805)	(20.05%)
Loss on option contracts	86,746	-	86,746	-
Foreign exchange loss - net	81,436	-	81,436	-
Loss on disposal of short-term investments	75,366	-	75,366	-
Loss on disposal of properties	35,810	2,507	33,303	1328.40%
Provision for loss on short-term investments	-	121,926	(121,926)	(100.00%)
Other	<u>54,845</u>	<u>91,646</u>	(36,801)	(40.16%)
Total Non-Operating Expenses	<u>3,056,460</u>	<u>4,048,281</u>	(991,821)	(24.50%)
INCOME BEFORE INCOME TAX	24,109,865	13,648,622	10,461,243	76.65%
INCOME TAX BENEFIT	<u>450,019</u>	<u>1,695,581</u>	(1,245,562)	(73.46%)
NET INCOME	<u>\$24,559,884</u>	<u>\$15,344,203</u>	9,215,681	60.06%

## 8. Financial Statements & Independent Auditors' Report

We have audited the balance sheets of Taiwan Semiconductor Manufacturing Company Ltd. as of December 31, 1999 and 1998, and the related statements of income, changes in shareholders' equity and cash flows for the years then ended. These financial statements are the responsibility of the management of Taiwan Semiconductor Manufacturing Company Ltd. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Taiwan Semiconductor Manufacturing Company Ltd. as of December 31, 1999 and 1998, and the results of its operations and its cash flows for the years then ended, in conformity with the regulations governing the preparation of financial statements of public companies and generally accepted accounting principles.



January 24, 2000

### Notice to Readers

The accompanying financial statements are intended only to present the financial position, results of operations and cash flows in accordance with accounting principles and practices generally accepted in the Republic of China and not those of another jurisdictions. The standards, procedures and practices to audit such financial statements are those generally accepted and applied in the Republic of China.

**BALANCE SHEETS**  
**December 31, 1999 and 1998**  
(In Thousand New Taiwan Dollars Except Par Value)

ASSETS	1999		1998	
	Amount	%	Amount	%
<b>CURRENT ASSETS</b>				
Cash and cash equivalents (Notes 2 and 3)	\$16,650,017	10	\$8,292,152	7
Short-term investments(Notes 2 and 4)	236,250	-	5,661,327	5
Receivable from related parties (Note 13)	468,903	-	234,507	-
Notes receivable	164,134	-	34,868	-
Accounts receivable	13,380,253	8	7,936,255	6
Allowance for doubtful receivables (Note 2)	(422,202)	-	(283,090)	-
Allowance for sales returns and allowances (Note 2)	(706,886)	-	(441,973)	-
Inventories (Notes 2 and 5)	4,529,714	3	3,688,777	3
Deferred income tax assets (Notes 2 and 12)	2,329,000	1	406,739	-
Prepayments and others (Notes 2, 13 and 16)	<u>2,141,487</u>	<u>2</u>	<u>848,860</u>	<u>1</u>
Total Current Assets	<u>38,770,670</u>	<u>24</u>	<u>26,378,422</u>	<u>22</u>
LONG-TERM INVESTMENTS (Notes 2 and 6)	<u>28,208,643</u>	<u>17</u>	<u>17,537,765</u>	<u>14</u>
<b>PROPERTIES (Notes 2, 7 and 13)</b>				
Cost				
Buildings	21,337,655	13	20,037,080	17
Machinery and equipment	102,672,163	64	77,290,435	62
Office equipment	<u>1,939,392</u>	<u>1</u>	<u>1,657,981</u>	<u>1</u>
Total cost	125,949,210	78	98,985,496	80
Accumulated depreciation	(57,969,725)	(36)	(40,786,249)	(33)
Prepayments and construction in progress	<u>21,586,544</u>	<u>14</u>	<u>15,436,962</u>	<u>12</u>
Net Properties	<u>89,566,029</u>	<u>56</u>	<u>73,636,209</u>	<u>59</u>
<b>OTHER ASSETS</b>				
Deferred charges - net	578,544	-	711,822	-
Deferred income tax assets (Notes 2 and 12)	4,273,252	3	5,811,827	5
Refundable deposits	16,346	-	21,918	-
Miscellaneous	<u>9,250</u>	<u>-</u>	<u>9,250</u>	<u>-</u>
Total Other Assets	<u>4,877,392</u>	<u>3</u>	<u>6,554,817</u>	<u>5</u>
<b>TOTAL ASSETS</b>	<u>\$161,422,734</u>	<u>100</u>	<u>\$124,107,213</u>	<u>100</u>

*The accompanying notes are an integral part of the financial statements.*

LIABILITIES AND SHAREHOLDERS' EQUITY	1999		1998	
	Amount	%	Amount	%
<b>CURRENT LIABILITIES</b>				
Payable to related parties (Note 13)	\$1,916,526	1	\$359,097	-
Accounts payable	2,525,086	2	2,047,871	2
Other payable - construction and equipment	6,958,098	4	3,181,099	3
Income tax payable (Notes 2 and 12)	146,300	-	775,508	1
Current portion of long-term bank loans (Note 8)	-	-	299,449	-
Accrued expenses and others	<u>2,923,319</u>	<u>2</u>	<u>1,475,772</u>	<u>1</u>
Total Current Liabilities	14,469,329	9	8,138,796	7
<b>NON-CURRENT LIABILITIES</b>				
Bonds payables (Note 2 and 9)	20,000,000	12	22,631,717	18
Guarantee deposits	5,185,362	3	6,123,825	5
Accrued pension obligations (Notes 2 and 11)	998,203	1	748,720	-
Bank loans(Notes 7 and 8)	<u>-</u>	<u>-</u>	<u>2,393,489</u>	<u>2</u>
Total non-current liabilities	<u>26,183,565</u>	<u>16</u>	<u>31,897,751</u>	<u>25</u>
Total Liabilities	<u>40,652,894</u>	<u>25</u>	<u>40,036,547</u>	<u>32</u>
<b>SHAREHOLDERS' EQUITY (Notes 2 and 10)</b>				
Capital stock- \$10 par value				
Authorized - 9,100,000 thousand shares in 1999 and 8,500,000 thousand shares in 1998				
Issued - 7,670,882 thousand shares in 1999 and 6,047,176 thousand shares in 1998	76,708,817	47	60,471,760	49
Capital surplus	11,831,411	7	164,219	-
Legal reserve	8,258,359	5	6,724,240	5
Unappropriated earnings	25,062,256	16	17,437,873	14
Cumulative translation adjustment	<u>(1,091,003)</u>	<u>-</u>	<u>(727,426)</u>	<u>-</u>
Total Shareholders' Equity	<u>120,769,840</u>	<u>75</u>	<u>84,070,666</u>	<u>68</u>
<b>TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY</b>	<u>\$161,422,734</u>	<u>100</u>	<u>\$124,107,213</u>	<u>100</u>

The accompanying notes are an integral part of the financial statements.

**STATEMENTS OF INCOME**  
**For the Years Ended December 31, 1999 and 1998**  
**(In Thousand New Taiwan Dollars, Except Earnings Per Share)**

	1999		1998	
	Amount	%	Amount	%
GROSS SALES (Notes 2 and 13)	\$74,036,935		\$51,441,572	
SALES RETURNS AND ALLOWANCES	<u>(905,729)</u>		<u>(1,208,564)</u>	
NET SALES	73,131,206	100	50,233,008	100
COST OF SALES (Note 13)	<u>40,915,513</u>	<u>56</u>	<u>29,896,966</u>	<u>60</u>
GROSS PROFIT	<u>32,215,693</u>	<u>44</u>	<u>20,336,042</u>	<u>40</u>
OPERATING EXPENSES (Note 13)				
General and administrative	2,097,835	3	1,367,301	3
Marketing	1,810,701	2	809,302	1
Research and development	<u>2,390,538</u>	<u>4</u>	<u>1,957,194</u>	<u>4</u>
Total Operating Expenses	<u>6,299,074</u>	<u>9</u>	<u>4,133,797</u>	<u>8</u>
INCOME FROM OPERATIONS	<u>25,916,619</u>	<u>35</u>	<u>16,202,245</u>	<u>32</u>
NON-OPERATING INCOME				
Interest	808,616	1	566,020	1
Insurance compensation	184,607	1	-	-
Reversal of allowance for losses on short-term investments	120,766	-	-	-
Premium income (Notes 2 and 17)	63,809	-	8,280	-
Gain on sale of investments	29,041	-	756,522	2
Foreign exchange gain - net (Note 2)	-	-	97,229	-
Other	<u>42,867</u>	<u>-</u>	<u>66,607</u>	<u>-</u>
Total Non-Operating Income	<u>1,249,706</u>	<u>2</u>	<u>1,494,658</u>	<u>3</u>
NON-OPERATING EXPENSES				
Interest (Notes 7 and 17)	1,415,527	2	981,388	3
Investment loss - net (Notes 2 and 6)	1,191,891	2	2,707,170	5
Bond issue costs	114,839	-	143,644	-
Loss on option contracts (Notes 2 and 17)	86,746	-	-	-
Foreign exchange loss - net (Note 2)	81,436	-	-	-
Loss on disposal of short-term investments	75,366	-	-	-
Loss on disposal of properties	35,810	-	2,507	-
Provision for loss on short-term investments	-	-	121,926	-
Other	<u>54,845</u>	<u>-</u>	<u>91,646</u>	<u>-</u>
Total Non-Operating Expenses	<u>3,056,460</u>	<u>4</u>	<u>4,048,281</u>	<u>8</u>
INCOME BEFORE INCOME TAX	24,109,865	33	13,648,622	27
INCOME TAX BENEFIT (Notes 2 and 12)	<u>450,019</u>	<u>1</u>	<u>1,695,581</u>	<u>3</u>
NET INCOME	<u>\$24,559,884</u>	<u>34</u>	<u>\$15,344,203</u>	<u>30</u>
EARNINGS PER SHARE				
Based on weighted-average number of				
shares outstanding - 7,572,598 thousand in 1999				
and 6,047,176 thousand in 1998	<u>\$ 3.24</u>		<u>\$ 2.54</u>	
Based on 7,548,483 thousand shares			<u>\$ 2.03</u>	

*The accompanying notes are an integral part of the financial statements.*

**STATEMENTS OF CHANGES IN SHAREHOLDERS EQUITY**  
**For the Years Ended December 31, 1999 and 1998**  
**(In Thousand New Taiwan Dollars)**

	CAPITAL STOCK ISSUED		CAPITAL SURPLUS (Note 2)					RETAINED EARNINGS (Note 10)			CUMULATIVE	TOTAL
	Shares (Thousand)	Amount	From Long-Term Investments	Excess On Foreign Bond Investments	Gain on Disposal of Properties	Donation	Total	Legal Reserve	Unappropriated Earnings	Total	(Note 2)	SHAREHOLDERS' EQUITY
BALANCE, JANUARY 1, 1998	4,081,300	\$40,813,000	\$ -	\$ -	\$62,027	\$55	\$62,082	\$4,928,532	\$23,712,760	\$28,641,292	(\$101,981)	\$69,414,393
Appropriations of prior year's earnings (Note 10)												
Legal reserve	-	-	-	-	-	-	-	1,795,708	(1,795,708)	-	-	-
Bonus to employees - Stock	129,291	1,292,910	-	-	-	-	-	-	(1,292,910)	(1,292,910)	-	-
Stock dividends - 45%	1,836,585	18,365,850	-	-	-	-	-	-	(18,365,850)	(18,365,850)	-	-
Bonus to directors and supervisors	-	-	-	-	-	-	-	-	(161,613)	(161,613)	-	(161,613)
Net income in 1998	-	-	-	-	-	-	-	-	15,344,203	15,344,203	-	15,344,203
Gain on disposal of properties	-	-	-	-	3,009	-	3,009	-	(3,009)	(3,009)	-	-
Adjusting arising from changes in												
ownership percentage in investees	-	-	99,128	-	-	-	99,128	-	-	-	-	99,128
Translation adjustment	-	-	-	-	-	-	-	-	-	-	(625,445)	(625,445)
BALANCE, DECEMBER 31, 1998	6,047,176	60,471,760	99,128	-	65,036	55	164,219	6,724,240	17,437,873	24,162,113	(727,426)	84,070,666
Appropriations of prior year's earnings (Note 10)												
Legal reserve	-	-	-	-	-	-	-	1,534,119	(1,534,119)	-	-	-
Bonus to employees - Stock	110,457	1,104,566	-	-	-	-	-	-	(1,104,566)	(1,104,566)	-	-
Stock dividends - 23%	1,390,850	13,908,505	-	-	-	-	-	-	(13,908,505)	(13,908,505)	-	-
Bonus to directors and supervisors	-	-	-	-	-	-	-	-	(138,071)	(138,071)	-	(138,071)
Net income in 1999	-	-	-	-	-	-	-	-	24,559,884	24,559,884	-	24,559,884
Conversion of foreign bonds	122,399	1,223,986	-	11,289,998	-	-	11,289,998	-	-	-	-	12,513,984
Gain on disposal of properties	-	-	-	-	4,022	-	4,022	-	(4,022)	(4,022)	-	-
Gain on disposal of properties of investees	-	-	246,218	-	-	-	246,218	-	(246,218)	(246,218)	-	-
Adjusting arising from changes in												
ownership percentage in investees	-	-	126,954	-	-	-	126,954	-	-	-	-	126,954
Translation adjustment	-	-	-	-	-	-	-	-	-	-	(363,577)	(363,577)
BALANCE, DECEMBER 31, 1999	<u>7,670,882</u>	<u>\$76,708,817</u>	<u>\$472,300</u>	<u>\$11,289,998</u>	<u>\$69,058</u>	<u>\$55</u>	<u>\$11,831,411</u>	<u>\$8,258,359</u>	<u>\$25,062,256</u>	<u>\$33,320,615</u>	<u>(\$1,091,003)</u>	<u>\$120,769,840</u>

The accompanying notes are an integral part of the financial statements.

**STATEMENTS OF CASH FLOWS**  
**For the Years Ended December 31, 1999 and 1998**  
**(In Thousand New Taiwan Dollars)**

	1999	1998
<b>CASH FLOWS FROM OPERATING ACTIVITIES</b>		
Net income	\$24,559,884	\$15,344,203
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	18,041,320	14,592,897
Deferred income tax	(383,686)	(2,471,239)
Investment loss recognized by equity method - net	1,191,891	2,707,170
Accretion in redemption value of bonds	585,614	875,760
Accrued pension liabilities	249,483	261,015
Provisions for:		
Sales returns and allowances	264,913	(93,241)
Doubtful receivables	139,112	(9,997)
Loss (gain) on disposal of properties - net	31,854	(371)
Gain on disposal of long-term investments	(9,881)	(756,522)
Changes in operating assets and liabilities		
Receivable from related parties	(234,396)	268,533
Notes receivable	(129,266)	200,044
Accounts receivable	(5,443,998)	1,697,948
Inventories	(840,937)	1,031,254
Prepayments and others	(1,292,627)	505,748
Payable to related parties	1,557,429	(435,216)
Accounts payable	477,215	(612,275)
Income tax payable	(629,208)	775,508
Accrued expenses and others	<u>1,439,372</u>	<u>57,544</u>
Net Cash Provided by Operating Activities	<u>39,574,088</u>	<u>33,938,763</u>
<b>CASH FLOWS FROM INVESTING ACTIVITIES</b>		
Acquisitions:		
Properties	(29,842,159)	(28,066,471)
Long-term investments	(12,105,618)	(1,676,239)
Proceeds from sales of:		
Properties	36,824	3,476
Long-term investments	16,106	1,466,879
Decrease (increase) in short-term investments	5,425,077	(690,495)
Increase in deferred charges	(433,187)	(322,735)
Decrease in refundable deposits	<u>5,572</u>	<u>51,667</u>
Net Cash Used in Investing Activities	<u>(36,897,385)</u>	<u>(29,233,918)</u>



	1999	1998
<b>CASH FLOWS FROM FINANCING ACTIVITIES</b>		
Proceeds from issuance of long-term bonds payable	9,450,634	9,772,500
Payments of:		
Long-term bank loans	(2,692,938)	(5,332,962)
Commercial papers payable	-	(250,000)
Decrease in guarantee deposits	(938,463)	(2,389,860)
Bonus paid to directors and supervisors	(138,071)	(161,613)
Adjustment of forward contract payable	-	(585,000)
Net Cash Provided by Financing Activities	<u>5,681,162</u>	<u>1,053,065</u>
NET INCREASE IN CASH AND CASH EQUIVALENTS	8,357,865	5,757,910
CASH AND CASH EQUIVALENTS, BEGINNING OF YEAR	<u>8,292,152</u>	<u>2,534,242</u>
CASH AND CASH EQUIVALENTS, END OF YEAR	<u>\$16,650,017</u>	<u>\$8,292,152</u>
 <b>SUPPLEMENTAL INFORMATION</b>		
Interest paid (excluding capitalized amounts)	<u>\$1,300,591</u>	<u>\$850,661</u>
Income tax paid	<u>\$540,873</u>	<u>\$17,457</u>
Noncash investing and financing activities		
Effect of exchange rate changes on cash and cash equivalents	<u>(\$66,376)</u>	<u>(\$150,518)</u>
Current portion of long-term bank loans	<u>\$ -</u>	<u>\$299,449</u>
Cash paid for acquisition of properties		
Total acquisitions	\$33,619,158	\$26,281,585
Other payable - construction and equipment	<u>(3,776,999)</u>	<u>1,784,886</u>
	<u>\$29,842,159</u>	<u>\$28,066,471</u>
Conversion of foreign bonds into common stocks and capital surplus	<u>\$12,513,984</u>	<u>\$ -</u>

The accompanying notes are an integral part of the financial statements.

## NOTES TO FINANCIAL STATEMENTS

(Amounts in Thousand New Taiwan Dollars, Unless Specified Otherwise)

### (1) GENERAL

The Company is engaged mainly in the: (a) manufacture, sale, packaging, testing and computer-aided design of integrated circuits and other semiconductor devices; and, (b) manufacture and design of masks.

The Company's shares are listed and traded in the Taiwan Stock Exchange.

On October 8, 1997, the Company offered shares of stock in the New York Stock Exchange in the form of American Depositary Receipts (ADRs).

### (2) SIGNIFICANT ACCOUNTING POLICIES

#### Basis of presentation

The financial statements have been prepared in conformity with regulations governing the preparation of financial statements of public companies, and generally accepted accounting principles in the Republic of China.

#### Cash equivalents

Government bonds acquired under repurchase agreements and commercial papers with original maturities of less than three months are classified as cash equivalents.

#### Short-term investments

Short-term investments are carried at the lower of cost or market value. The costs of investments sold are determined by the specific identification method.

#### Allowance for doubtful receivables

Allowance for doubtful receivables is provided based on a review of the collectibility of individual receivables.

#### Sales and allowance for sales returns and others

Sales are recognized when products are shipped to customers. Allowances for sales returns and others are provided based on experience; such provisions are deducted from sales and the related costs are deducted from cost of sales.

#### Inventories

Inventories are stated at the lower of standard cost (adjusted to approximate weighted average cost) or market value. Market value represents net realizable value for finished goods and work in process, and replacement value for raw materials, supplies and spare parts.

#### Long-term investments

Investments in shares of stock for which the Company exercises significant influence on the investees are accounted for by equity method. The difference between the investment cost and the Company's proportionate share in the net asset of the investee at the date of acquisition is amortized on a straight-line method over five years. Such amortization and the Company's proportionate share in the earnings or losses of investee companies are recognized as part of "Investment income or loss" account in the Statement of Income. The increase or decrease in the Company's share in the net assets of the investee companies because of the changes in its equity interest resulting from the issuance of additional new shares by the investee companies, on which the Company did not subscribe according to the original percentage of ownership, are accounted for as adjustment to the investment carrying value and capital surplus.

Other stock investments are accounted for by cost method. These investments are stated at cost less decline in market

value of listed stocks or decline in value of unlisted stocks which is considered irrecoverable; such reductions are charged to shareholders' equity or current income, respectively. Stock dividends received are recognized only as increase in the number of stocks held on the ex-dividend date.

Investments in foreign mutual funds are stated at the lower of cost or net asset value (NAV). Writedowns of cost and write-ups to original acquisition cost resulting from subsequent recovery in NAV are debited or credited to shareholders' equity.

The costs of investments sold are determined by the weighted average method.

If an investee company's net income or net loss includes gains from the disposal of properties, the after-tax amount of such gains or losses shall be recognized as investment gains or losses in the year of occurrence in proportion to the Company's equity interest and transferred in to capital surplus from retained earnings. When the Company subsequently disposed such investment in shares of stock, such capital surplus shall be transferred back to retained earnings.

Gains or losses on transactions with investee companies wherein the Company owned at least 20% of the outstanding common stock but less than a controlling interest are deferred in proportion to ownership percentage until realized through a subsequent transaction with a third party. If the unrealized gains or losses stated above are due to a sale by the subsidiary to the parent, an adjustment should be made in accordance with ownership percentage.

#### Properties

Properties are stated at cost less accumulated depreciation. Major additions, renewals and betterment, and interest expense incurred during the construction period are capitalized while maintenance and repairs are expensed currently.

Depreciation is provided on the straight-line method over estimated service lives which range as follows: buildings - 10 to 20 years; machinery and equipment - 5 to 10 years; office equipment - 3 to 5 years.

Upon sale or disposal of properties, the related cost and accumulated depreciation are removed from the accounts, and any gain or loss is credited or charged to income. Any such gain, less applicable income tax, is transferred to capital surplus at the end of the year.

#### Deferred charges

Deferred charges, consisting of software and system design costs, issuance costs of bonds, and short-term credit instruments, are amortized over three years, five years, and the contract period of credit instruments, respectively.

#### Convertible bonds

The excess of the stated redemption price over the face value of the bond is amortized and recognized as interest expense over a period starting from the issue date to the last day of the redemption period or the actual redemption date, whichever is earlier, using the effective interest method.

Capital stock account is credited for the face value of the bond converted into the Company's shares of stock and the excess of the carrying value of the bond as of the date of its conversion over its face value is credited to capital surplus account.

#### Pension costs

Net periodic pension costs are recorded based on actuarial calculations. Unrecognized net transition obligation is amortized over 25 years.

### Income tax

The Company adopted interperiod tax allocation. Deferred income taxes are recognized for the tax effects of temporary differences, unused tax credits, and operating loss carryforwards. Valuation allowance is provided for deferred income tax assets that are not certain to be realized. A deferred tax asset or liability should, according to the classification of its related asset or liability, be classified as current or non-current. However, if a deferred asset or liability cannot be related to a asset or liability in the financial statements, then it should be classified as current or non-current based on the expected length of time before it is recovered.

Adjustments of prior years' tax liabilities are added to or deducted from the current year's tax provision.

Income taxes (10%) on undistributed earnings are recorded as expense in the year when the shareholders have resolved that the earnings shall be retained.

### Derivative financial instruments

Foreign currency forward exchange contracts (forward contracts), entered into for purpose other than trading, are recorded in New Taiwan dollars as assets or liabilities using the spot rates at the inception dates of the contracts. The differences in the New Taiwan dollar amounts translated using the spot rates and the amounts translated using the contracted forward rates are also recognized as premiums or discounts at the inception dates of the forward contracts. Such premiums or discounts are amortized over the terms of the forward contracts using the straight-line method and the amortizations are either deferred or recognized in income.

At the balance sheet dates, the receivables or payables arising from forward contracts are restated using the prevailing spot rates and the resulting differences are recognized consistent with the recognition of the amortization of the premiums or discounts described above. Also, the receivables and payable related to the forward contracts are netted out and the resulting net amount is presented as either an asset or liability.

Interest rate swap transactions entered into to manage liabilities are accounted for on an accrual basis, in which cash settlement receivable or payable is recorded as an adjustment to interest income or expense.

The notional amounts of the foreign currency option contracts entered into for hedging purposes are not recognized as either asset or liability on the contract dates. However, amounts received on call options written are recognized as assets and amounts paid on put options bought are recognized as liabilities. Such amounts are amortized using the straight-line method over the period of the contracts and charged to current income. Gains or losses on the exercise of the options are also recognized in current income.

### Foreign-currency transactions

Foreign-currency transactions, except derivative financial instruments, are recorded in New Taiwan dollars at the rates of exchange in effect when the transactions occur. Gains or losses resulting from the application of different foreign exchange rates when cash in foreign currency is converted into New Taiwan dollar, or when foreign-currency receivables and payables are settled, are credited or charged to income in the year of conversion or settlement. At year-end, the balances of foreign-currency assets and liabilities are restated at prevailing exchange rates, and the resulting differences are recorded as follows:

- a. Long-term investments accounted for by equity method - as cumulative translation adjustment under shareholders' equity.
- b. Long-term investments accounted for by cost method - as translation adjustment (same as above) if the translated New Taiwan dollar amount is lower than cost; otherwise, no adjustment is made.
- c. Other assets and liabilities - credited or charged to current income.

Reclassifications

Certain accounts in 1998 have been reclassified to conform to 1999 classifications.

**(3) CASH AND CASH EQUIVALENTS**

	1999	1998
Cash and bank deposits	\$16,575,032	\$7,453,517
Government bonds acquired under repurchase agreements	74,985	804,564
Commercial papers	-	34,071
	<u>\$16,650,017</u>	<u>\$8,292,152</u>

**(4) SHORT-TERM INVESTMENTS**

	1999	1998
Marketable equity securities	\$236,250	\$530,640
U.S. Treasury bonds	-	4,625,769
Corporate bonds	-	626,844
	236,250	5,783,253
Allowance for losses	-	(121,926)
	<u>\$236,250</u>	<u>\$5,661,327</u>

**(5) INVENTORIES**

	1999	1998
Finished goods	\$653,347	\$467,368
Work in process	3,618,693	2,346,837
Raw materials	320,685	371,874
Supplies and spare parts	718,344	619,971
	5,311,069	3,806,050
Allowance for losses	(781,355)	(117,273)
	<u>\$ 4,529,714</u>	<u>\$ 3,688,777</u>

(6) LONG-TERM INVESTMENTS

	1999		1998	
	Carrying Value	% of Ownership	Carrying Value	% of Ownership
Shares of Stock				
Equity method				
TSMC International Investment	\$10,078,880	100	\$11,096,090	100
Vanguard International Semiconductor	5,010,897	25	4,723,014	26
TSMC-ACER Semiconductor	3,630,193	32	-	-
TSMC - North America	255,025	100	178,294	100
TSMC - Europe	25,956	100	25,077	100
TSMC - Japan	10,168	100	9,287	100
Systems on Silicon Manufacturing Company Pte Ltd. (SSMC)	360,177	32	-	-
Po Cherng Investment	103,017	25	100,657	25
Chi Hsin Investment	103,012	25	100,659	25
Kung Cherng Investment	102,773	25	100,680	25
Chi Cherng Investment	102,770	25	100,661	25
Hsin Ruey Investment	103,003	25	100,641	25
Cherng Huei Investment	103,005	25	100,643	25
TSMC Partners	9,968	100	9,653	100
	<u>19,998,844</u>		<u>16,645,356</u>	
Cost method				
Listed Stock - Taiwan Mask	32,129	2	32,129	2
Unlisted				
Taiwan - ACER Semiconductor - preferred stocks	4,854,742	28	-	-
Taiwan Semiconductor Technology	500,000	19	500,000	19
Lian Ya	146,250	11	146,250	11
Shin-Etsu Handotai Taiwan Company Ltd.	105,000	7	105,000	7
W.K. Technology Fund IV	50,000	4	50,000	4
Hon Tung Venture Capital	80,000	10	40,000	10
	<u>5,768,121</u>		<u>873,379</u>	
Fund				
Crimson Asia Capital	34,534	-	19,030	-
Horizon Ventures Fund	31,744	-	-	-
	<u>66,278</u>		<u>19,030</u>	
Stock paid in advance				
TSMC International Investment	2,375,400	-	-	-
	<u>\$28,208,643</u>		<u>\$17,537,765</u>	

Net investment loss recognized by equity method in 1999 and 1998 were as follows:

	1999	1998
TSMC International Investment	(\$1,007,218)	(\$1,356,890)
Vanguard International Semiconductor	(527,823)	(1,400,026)
Others	343,150	49,746
	<u>(\$1,191,891)</u>	<u>(\$2,707,170)</u>

The carrying values of investments accounted for by equity method and the related investment income and loss for the years ended December 31, 1999 and 1998 were based on audited financial statements of the investees, except for TSMC - Japan.

Information on the investments is as follows:

	1999	1998
Market value of listed stocks	\$ 19,753,642	\$10,196,822
Equity in the net assets of unlisted stocks	20,177,278	12,718,756
Net asset value of fund	66,278	18,504

### (7) PROPERTIES

Accumulated depreciation consisted of the following:

	1999	1998
Buildings	\$7,441,342	\$5,475,083
Machinery and equipment	49,369,894	34,390,645
Office equipment	<u>1,158,489</u>	<u>920,521</u>
	<u>\$57,969,725</u>	<u>\$40,786,249</u>

Information on the manufacturing plant construction as of December 31, 1999 are as follows:

Manufacturing Plant	Estimated cost	Accumulated Expenditures	Expected date of start of operations
Sixth	\$66,846,000	\$40,238,232	March 2000
Seventh	9,711,000	266,063	June 2002
Twelfth	9,392,000	252,415	June 2002

Interest expense capitalized for the twelve months ended December 31, 1999 and 1998 were \$305,312 and \$661,414, respectively.

As of December 31, 1999, properties with an aggregate net book value of \$4,488,327 are mortgaged as collateral for long-term bank loans (Note 8).

### (8) LONG-TERM BANK LOANS

	1998
<u>N.T. dollar loans</u>	
Bank acceptance - 6.95% interest; repayable by December 1999 but was prepaid in January 1999	\$299,449
Commercial paper - 7.00%-7.08% interest repayable by May 2003 but was prepaid in October 1999	<u>2,393,489</u>
	2,692,938
Current portion	<u>(299,449)</u>
	<u>\$2,393,489</u>

Unused credit lines as of December 31, 1999 aggregate about \$10,610,290.

## (9) LONG-TERM BONDS PAYABLE

	1999	1998
Foreign convertible bonds - US\$350,000 thousands, non-interest bearing, repayable in July 2002	\$11,322,500	\$11,322,500
Accretion in redemption value of bonds	<u>1,894,831</u>	<u>1,309,217</u>
	13,217,331	12,631,717
Converted into common stocks	(12,914,338)	-
Redeemed before maturity	<u>(302,993)</u>	<u>-</u>
	-	12,631,717
Domestic unsecured bonds:		
Repayable in March 2003, 7.71% annual interest payable semi-annually	4,000,000	4,000,000
Repayable in November 2003, 7.12% annual interest payable annually	6,000,000	6,000,000
Repayable in October 2002 and 2004, 5.67% and 5.95% annual interest payable annually, respectively	<u>10,000,000</u>	<u>-</u>
	<u>\$20,000,000</u>	<u>\$22,631,717</u>

The foreign convertible bonds can be converted into common stocks of the Company prior to its maturity at a price per share determined using an agreed formula. The Company may redeem the bonds prior to its maturity when certain conditions are met. As of December 31, 1999, \$1,223,986 bonds with face value totaling to \$1,223,986 were converted into 122,399 thousand shares of common stocks. The Company has redeemed the unconverted part prior to the maturity, on November 1999.

The holders of the bonds with an aggregate face value of \$6,000,000 and the Company can exercise resale agreements or repurchase agreements, respectively, thirty days before the second and third anniversaries of the issuance date, which range from November 18 to December 1, 1998.

## (10) SHAREHOLDERS' EQUITY

According to Company Law, capital surplus can only be used to offset a deficit or transferred to capital.

The Company's Articles of Incorporation provides that the following shall be appropriated from the annual net income (less any deficit):

- a) 10% legal reserve;
- b) Bonus to directors and supervisors and to employees equal to 1% and at least 1% of the remainder, respectively.

These appropriations and the disposition of the remaining net income shall be resolved by the shareholders in the following year and given effect to in the financial statements of that year.

The aforementioned appropriation for legal reserve shall be made until the reserve equals the Company's capital. Such reserve can only be used to offset a deficit; or, when it has reached 50% of the paid-in capital, up to 50% thereof can be transferred to capital.

Under the Integrated Income Tax System which became effective on January 1, 1998, non-corporate shareholders are allowed a tax credit for the income tax paid or payable by the Company on earnings generated in 1998 and onwards. An Imputation Credit Account (ICA) is maintained by the Company for such income tax and the tax credit allocated to each shareholder. The maximum credit available for allocation to each shareholder cannot exceed the balance shown in the ICA on the date of distribution of dividends.



**(11) PENSION PLAN**

The Company has a pension plan for all regular employees, which provides benefits based on length of service and average monthly salary for the last six months prior to retirement.

The Company makes monthly contributions, equal to 2% of salaries, to a pension fund which is administered by a pension fund monitoring committee and deposited in the committee's name in the Central Trust of China.

The changes in the fund and accrued pension cost are summarized as follows:

	1999	1998
<b>a. Components of pension cost</b>		
Service cost	\$248,378	\$212,398
Interest cost	78,961	69,390
Projected return on plan assets	(22,317)	(16,992)
Amortization of prior period service cost	<u>8,300</u>	<u>8,300</u>
	<u>\$313,322</u>	<u>\$273,096</u>
<b>b. Reconciliation of the fund status of the plan and accrued pension liabilities</b>		
Benefit obligation		
Vested benefit obligation	\$ -	\$579
Nonvested benefit obligation	<u>428,257</u>	<u>310,430</u>
Accumulated benefit obligation	428,257	311,009
Additional benefits based on future salaries	<u>975,345</u>	<u>817,006</u>
Projected benefit obligation	1,403,602	1,128,015
Fair value of plan assets	<u>(364,994)</u>	<u>(287,493)</u>
Funded status	1,038,608	840,522
Unrecognized prior service cost	-	-
Unrecognized net transitional obligation	(174,291)	(182,591)
Unrecognized net gain	135,448	91,059
Additional liability	<u>-</u>	<u>-</u>
Accrued pension liabilities	<u>\$999,765</u>	<u>\$748,990</u>
Vested benefit	<u>\$ -</u>	<u>\$677</u>
<b>c. Actuarial assumptions</b>		
Discount rated used in determining present values	6.5%	7.0%
Future salary increase rate	6.0%	6.5%
Expected rate of return plan on assets	6.5%	7.0%
<b>d. Contributions to pension fund</b>		
	<u>\$67,227</u>	<u>\$51,055</u>
<b>e. Payments from pension fund</b>		
	<u>\$3,591</u>	<u>\$ -</u>

## (12) INCOME TAX BENEFIT

A reconciliation of income tax current payable before tax credits is shown below:

	1999	1998
Income tax on pretax income at statutory rate (20%)	\$4,821,973	\$2,729,724
The tax effects of adjustments:		
Tax-exempt income	(3,434,802)	(1,413,371)
Temporary differences	<u>221,129</u>	<u>(19,353)</u>
Income tax current payable	<u>\$1,608,300</u>	<u>\$1,297,000</u>

Income tax benefit as of December 31, 1999 and 1998 consist of :

	1999	1998
Income tax current payable before tax credits	\$1,608,300	\$1,297,000
Tax credits	<u>(1,587,000)</u>	<u>(751,492)</u>
	21,300	545,508
Adjustment of prior years' taxes	(87,633)	230,000
Net change in deferred income tax for the year Investment tax credits	(1,798,325)	(2,590,089)
Temporary differences	111,139	119,000
Valuation allowance	<u>1,303,500</u>	<u>-</u>
	<u>(\$450,019)</u>	<u>(\$1,695,581)</u>

Deferred income tax assets and liabilities as of December 31, 1999 and 1998 consist of:

	1999	1998
Current :		
Investment tax credits	<u>\$2,329,000</u>	<u>\$406,739</u>
Noncurrent:		
Investment tax credits	\$5,806,891	\$5,930,827
Valuation allowance	(1,303,500)	-
Temporary differences	197,268	247,844
Depreciation	<u>(427,407)</u>	<u>(366,844)</u>
	<u>\$4,273,252</u>	<u>\$5,811,827</u>

Integrated income tax information:

	1999	1998
Ending balances of imputation Credit account	<u>\$1,497</u>	<u>\$22,633</u>

The expected and actual creditable ratio for 1999 and 1998 are 0.006% and 3.51%, respectively.

The imputation credit allocated to each shareholder shall be based on the balance in the ICA on the date of distribution of dividends, thus the expected creditable ratio for 1999 may be adjusted according to the difference between the expected and actual imputation credit allowed under the regulation.

The unappropriated retained earnings as of December 31, 1999 and 1998 included the earnings prior to 1997 of \$752,612 and \$2,096,679, respectively.

The effective tax rates for deferred income tax in 1999 and 1998 are 5.9% and 9.5%.

Unused investment tax credits arising from investments in machinery and equipment, and research and development expenditures as of December 31, 1999 will expire as follows:

Year of Expiry	Amount
2000	\$1,588,644
2001	3,250,623
2002	2,222,961
2003	1,073,663

The income from the following projects and services are exempt from income tax:

	Tax-Exemption Period
Expansion of second manufacturing plant and computer-aided design services, and third manufacturing plant	1996 to 1999
Expansion of first manufacturing plant, second manufacturing plant - modules A and B and third manufacturing plant, and fourth manufacturing plant	1997 to 2000
Expansion of first manufacturing plant, second manufacturing plants - modules A and B, third manufacturing plant and fourth manufacturing plant, and fifth manufacturing plant	1999 to 2002

Income tax returns through 1996 have been examined by the tax authorities.

### (13) RELATED PARTY TRANSACTIONS

The Company engages in business transactions with the following related parties:

- a. Industrial Technology Research Institute (ITRI); its director is the Company's chairman
- b. Philips Electronics N.V., a major shareholder
- c. Subsidiaries
  - TSMC International Investment (TSMC-BVI)
  - TSMC North America
  - TSMC Europe
  - TSMC Japan
- d. Vanguard International Semiconductor Corporation (VIS), an investee
- e. TSMC-Acer Semiconductor Manufacturing Corporation (TASMC), an investee
- f. Systems on Silicon Manufacturing Company Pte Ltd. (SSMC), an investee
- g. WaferTech, LLC, an indirect investee of TSMC-BVI
- h. TSMC Technology, an investee of TSMC-BVI.

The transactions with the foregoing parties in addition to those disclosed in other notes, are summarized as follows:

	1999		1998	
	Amount	%	Amount	%
For the year				
Sales				
ITRI	\$ 132,507	-	\$173,375	-
Philips and its affiliates	2,864,149	4	3,422,090	7
VIS	48,473	-	65,301	-
TSMC	22,246	-	-	-
WaferTech	59,438	-	38,452	-
	<u>\$3,126,813</u>	<u>4</u>	<u>\$3,699,218</u>	<u>7</u>
Purchase				
WaferTech	\$4,636,780	40	\$ -	-
TSMC	808,926	7	-	-
VIS	381,989	3	-	-
	<u>\$5,827,695</u>	<u>50</u>	<u>\$ -</u>	<u>-</u>
Rental expense - ITRI	<u>\$161,488</u>	<u>54</u>	<u>\$161,477</u>	<u>67</u>
Manufacturing expenses Technical assistance fee - Philips	<u>\$862,398</u>	<u>100</u>	<u>\$637,136</u>	<u>100</u>
General and administrative expenses Consulting fee - VIS	<u>\$20,400</u>	<u>-</u>	<u>\$ -</u>	<u>-</u>
Marketing expenses				
TSMC - North America (commissions)	\$ 692,927	38	\$388,513	48
TSMC - North America (service charges)	99,087	5	78,448	10
TSMC - Europe (commissions)	87,414	5	25,975	3
TSMC - Japan (commissions)	81,951	4	51,665	6
	<u>\$961,379</u>	<u>52</u>	<u>\$544,601</u>	<u>67</u>
Sale of Property - WaferTech	<u>\$350,969</u>	<u>100</u>	<u>\$ -</u>	<u>-</u>
At end of year				
Receivable				
ITRI	\$ 18,458	4	\$30,668	13
Philips and its affiliates	133,245	28	162,750	69
TSMC - Japan	17,550	4	17,550	8
VIS	25,674	6	7,884	3
WaferTech	198,163	42	6,405	3
TSMC Technology	47,343	10	9,250	4
SSMC	5,353	1	-	-
TSMC	23,117	5	-	-
	<u>\$468,903</u>	<u>100</u>	<u>\$234,507</u>	<u>100</u>
Prepayments and other current assets				
Prepayment - Rental to ITRI	\$42,541	2	\$42,462	5
Payable				
Philips and its affiliates	\$305,756	16	\$155,086	43
TSMC - North America	125,637	6	60,746	17
TSMC - Europe	13,422	1	10,713	3
TSMC - Japan	13,189	1	9,603	3
VIS	184,741	10	-	-
WaferTech	730,483	38	122,949	34
TSMC Technology	3,832	-	-	-
TSMC	539,466	28	-	-
	<u>\$1,916,526</u>	<u>100</u>	<u>\$359,097</u>	<u>100</u>

Sales to related parties are based on normal selling prices and collection terms.

Payable to WaferTech includes purchases of finished goods and compensation for violation of manufacturing agreement. As there is no comparable sales of properties and purchases, they were in accordance with contracts.

**(14) LONG-TERM OPERATING LEASES**

The Company leases the land, building and certain machinery and equipment of its first manufacturing plant from ITRI under agreements which will expire in March 2002, at annual rentals and other charges aggregating \$170,166. The agreements are renewable upon expiration.

The Company leases the land sites of its second through tenth manufacturing plants from the Science-Based Industrial Park Administration under agreements which will expire on various dates from March 2008 to April 2018 with annual rentals aggregating \$42,149. The agreements are also renewable upon expiration.

Future annual minimum rentals under the aforementioned leases are as follows:

Year	Amount
2000	\$212,315
2001	212,315
2002	84,690
2003	42,149
2004	42,149
2005-2018	<u>313,250</u>
	<u>\$906,868</u>

**(15) COMMITMENTS AS OF DECEMBER 31, 1999**

- a. Under a technical cooperation agreement with Philips, as amended on May 12, 1997, the Company shall pay technical assistance fee at a percentage of net sales of certain products, less specified deductions. The agreement shall remain in force up to July 9, 2007 and thereafter automatically renewed for successive periods of three years. Under the amended agreement, the fee is subject to reduction by the amounts the Company pays to any third party for settling any licensing/ infringement issue after the first five-year periods of the amended agreement, provided that the fee after reduction will not be below a certain percentage of the net selling price.
- b. Subject to certain equity ownership and notification requirements, Philips and its affiliates can avail each year up to 30% of the Company's production capacity.
- c. Under a submicron technology license agreement with ITRI, the Company shall pay license fees of \$129,400 (including 5% value-added tax) to ITRI plus royalty fee at an agreed percentage of net sales of certain products through December 31, 1998. As of December 31, 1995, the Company has paid the entire license fee.
- d. Under a technical cooperation agreement with ITRI, the Company shall reserve and allocate up to 35% of its production capacity for use by the Ministry of Economic Affairs (MOEA) or any other party designated by the MOEA.

- e. Under a manufacturing agreement, the Company shall buy at least 85% of the calculated installed capacity of the wafer-fabrication plant ("WaferTech, LLC") constructed by TSMC Development, Inc. for three years from start of production. If the Company is unable or unwilling to buy the minimum purchase allocation, it shall compensate TSMC Development, Inc. at the selling price of the products less certain variable costs. Later, TSMC Development, Inc. transferred its rights under the agreement to WaferTech, LLC.
- f. Under a purchase agreement with three customers, the Company shall supply them with, and the three customers shall buy, a certain portion of wafers produced by WaferTech, LLC. If the Company or any of the customers is unable or unwilling to supply or buy the minimum purchase allocation, the defaulting party shall compensate the other party at the selling price of the products, less certain variable costs.
- g. Under several foundry agreements, the Company shall allocate a portion of its production output for sale to certain major customers from whom guarantee deposits of US\$164,765 thousand had been received as of December 31, 1999.
- h. On February 27, 1998, the Tax Bureau assessed the Company additional income taxes of about \$105,000 and \$125,000 for 1994 and 1995, respectively, arising from the contention by the Bureau that the Company's first manufacturing plant was not a science-based industry under the Science-Based Industrial Park Regulations. The Company is contesting the assessment, but has already accrued the amount of tax assessment. The additional income tax for 1994 has been reassessed to be \$21,887.
- i. Under a Shareholders Agreement entered into by Philips and EDB Investments Pte Ltd. dated March 30, 1999, the parties agreed to: (a) form a joint venture company to be called Systems on Silicon Manufacturing Company Pte Ltd. (SSMC) for the purpose of building an integrated circuit foundry in Singapore, (b) set SSMC's total authorized capital at about S\$1.2 billion (about NT\$22,800,000), and, (c) allow the Company to invest 32% of SSMC's capital. The Company and Philips committed to buy a certain percentage of the production capacity of SSMC. If any party is unable or unwilling to buy the committed purchase allocation and the capacity utilization of SSMC falls below a certain percentage of total available capacity, such party shall compensate SSMC for all related unavoidable costs.
- j. Under a Technical Cooperation Agreement with SSMC signed on May 12, 1999, SSMC shall pay TSMC remuneration for the technology service provided by SSMC at a certain percentage of net selling prices of its products. The agreement shall remain in force for ten years, and thereafter automatically continue for successive periods of five years unless and until terminated by either party under certain conditions.
- k. The Company provides collateral for loans of US\$68,000 thousand obtained by TSMC Development, Inc.
- l. Under a Technical Cooperation Agreement with TSMC-Acer Semiconductor Manufacturing Corporation ("TASMC") signed on July 21, 1999, TASMC shall pay TSMC remuneration by way of giving discount to the selling price of products sold to TSMC. The agreement shall remain in force for 10 years, unless and until terminated by either party under certain conditions prior to its expiration, the parties shall meet 6 months prior to the expiration date to decide whether the Agreement shall be renewed.
- m. Unused credit lines as of December 31, 1999 are approximately \$138,738.

## (16) OTHER SIGNIFICANT EVENTS

TSMC has two merger agreements signed on December 30, 1999 and January 7, 2000, with TASMIC and WSMC, respectively. TSMC will acquire and merge TASMIC and WSMC. TSMC shall be the surviving company, and TASMIC and WSMC shall be dissolved after the merger. The consolidation date is tentatively scheduled for June 30, 2000. The agreed exchange ratio is five shares of TASMIC to one share of TSMC, (The exchange ratio will be adjusted again based on the same proportion of TSMC's stock dividends once such dividends are declared by the consolidation date.), and two shares of WSMC to one share of TSMC. The Agreement shall be further granted approval by the shareholders from both companies and the governing regulator. The capital of TSMC will be expected to increase by 1,488,684 thousand shares of common stock (such number will be adjusted after declaration of TSMC's 1999 stock dividend.)

## (17) FINANCIAL INSTRUMENTS

The Company entered into derivative financial instrument transactions for the twelve months ended December 31, 1999 and 1998 to hedge foreign-currency denominated receivables or payables, and interest rate fluctuations. The strategy is to hedge most of the market price risks. Certain information on these contracts is as follows:

a. Outstanding forward exchange contracts as of December 31, 1999 and 1998:

Year	Currency	Contract Amount (Thousands)	Fair Value (Thousands)	Maturity	Maturity Amount (Thousands)
1999					
Buy	US\$	US\$ 25,000	JPY 2,472,080	Jul 2000	NTD 879,154
Sell	US\$	US\$ 81,367	JPY 8,303,350	Jan to July 2000	NTD 2,564,297
Sell	US\$	US\$ 16,000	NLG 34,926	Jan 2000	NTD 497,159
Sell	US\$	US\$ 30,000	NTD 941,847	Jan 2000	NTD 947,880
1998					
Buy	US\$	US\$ 110,000	NTD 3,574,885	Jan. 1999	NTD 3,580,421
Sell	US\$	US\$ 40,000	NTD 1,296,959	Jan. to Feb. 1999	NTD 1,262,120

Receivables and payables from forward exchange contracts (shown in the balance sheets as part of "Other current assets" or "Other current liabilities" accounts) as of December 31, 1999 aggregate about \$19,144 and \$102,784, respectively; and receivables (shown in the balance sheets as part of "Other current assets" account) as of December 31, 1998 aggregate about \$21,572.

Net exchange gains for the years ended December 31, 1999 and 1998 were \$105,859 and \$336,807, respectively.

The net assets or liabilities that have been hedged by the above forward exchange contracts are as follows:

	1999	Thousands 1998
Accounts receivable	US\$375,749	US\$206,926
Accounts payable and other payable - construction and equipment	151,392	66,397
Guarantee deposits	764,765	189,058

b. Interest rate swaps

The Company has entered into interest rate swap transactions to hedge exposure to rise interest rates on its floating rate long-term bank loans. These transactions are summarized as follows:

Contract Date	Period	Amount
April 28, 1998	May 21, 1998 to May 21, 2003	\$2,000,000
April 29, 1998	May 21, 1998 to May 21, 2003	1,000,000
June 26, 1998	June 26, 1998 to June 26, 2003	1,000,000
June 26, 1998	July 6, 1998 to July 6, 2003	1,000,000

Interest expense on these loans for the twelve months ended December 31, 1999 and 1998 were \$112,213 and \$13,367, respectively.

c. Option

The Company has entered into foreign currency option contracts to hedge risks of exchange rate fluctuations arising from its anticipated U.S. dollar cash receipts from its export sales or Japanese Yen obligations related to its importation of materials and machinery and equipment.

Outstanding option contracts as of December 31, 1999 were as follows:

Contract	Currency	Contract Amount (Thousands)	Carrying Value	Fair Value	Strike Price	Maturity
Call option sell	US\$	US\$100,000	\$3,911	\$3,911	\$0.9785~0.9940 (US\$/EUR)	Jan 2000
Call option sell	US\$	US\$ 60,000	3,035	3,035	106.6 (US\$/JPY)	Jan 2000

The Company has no outstanding option contracts as of December 31, 1998.

For the twelve months ended December 31, 1999 and 1998, the Company realized premium income of \$63,809 and \$8,280, respectively, on foreign currency put options written and incurred losses of \$86,746 on foreign currency call options bought for 1999.

d. Transaction risk

1) Credit risk: the banks with which the Company has entered into the above contracts are reputable and, therefore, the Company is not expected to be exposed to significant credit risks.

2) Market price risk: All derivative financial instruments are for hedging receivables or payables denominated in foreign currencies and interest rate fluctuations. Gains or losses from forward exchange contracts are likely to be offset by gains or losses realized from the settlement of the related receivables and payables. Interest rate risks are also controlled as the expected cost of capital is fixed. Thus, market price risks from exchange rate and interest rate fluctuations are minimal.

3) Liquidity and cash flow: The purpose of forward exchange contracts is to limit the Company's exposure to loss resulting from adverse fluctuations in assets and liabilities denominated in foreign currency. Interest rate swap transactions result in adjustments for interest only. Therefore, no significant extra cash requirement is expected.



e. Fair value of financial instruments

	1999		1998	
	Carrying Amount	Fair Value	Carrying Amount	Fair Value
Non-derivative financial instruments				
Assets				
Cash and cash equivalents	\$16,650,017	\$16,650,017	\$8,292,152	\$8,292,152
Short-term investments	236,250	241,850	5,661,327	5,691,566
Receivable from related parties	468,903	468,903	234,507	234,507
Accounts and notes receivable	13,544,387	13,544,387	7,971,123	7,971,123
Long-term investments	28,208,643	39,997,198	17,537,765	22,934,082
Refundable deposits	16,346	16,346	21,918	21,918
Liabilities				
Payable to related parties	1,916,526	1,916,526	359,097	359,097
Accounts payable	2,525,086	2,525,086	2,047,871	2,047,871
Other payable - construction and equipment	6,958,098	6,958,098	3,181,099	3,181,099
Long-term bank loans	-	-	2,692,938	2,692,938
Long-term bonds payable	20,000,000	20,013,774	22,631,717	21,948,204
Guarantee deposits	5,185,362	5,185,362	6,123,825	6,123,825
Derivative financial instruments				
Forward exchange contracts (buy)	784,875	760,906	3,590,850	3,574,885
Forward exchange contracts (sell)	3,998,698	3,998,108	1,294,000	1,296,959
Interest rate swaps	7,488	7,488	7,423	7,423
Option	6,946	6,946	-	-

Fair values of financial instruments were determined as follows:

- (1) Short-term financial instruments -- carrying values.
- (2) Short-term investments -- market values.
- (3) Long-term investments - market value for listed companies and net equity value for the others.
- (4) Refundable deposits -- carrying values.
- (5) Long-term bank loans are forecasted using cash flows discounted at present value, using discount rates which are interest rates of similar long-term liabilities. Long-term bonds payable are discounted at present values. Fair values of other long-term liabilities are also their carrying values as they use floating interest rates.
- (6) Derivative financial instruments -- based on outright forward rates and interest rate in each contract.
- (7) Financial instruments or non-financial instruments are not necessarily all disclosed at fair values; accordingly, the sum of the fair values of the financial instruments listed above does not equal to the fair value of the company.

**(18) SEGMENT FINANCIAL INFORMATION**

a. Export sales

Area	1999	1998
America	\$38,084,870	\$26,438,864
Asia	16,493,721	9,667,353
Europe	<u>4,778,646</u>	<u>3,595,809</u>
	<u>\$59,357,237</u>	<u>\$39,702,026</u>

The export sales information is presented by billed regions.

b. No single customer accounts for more than 10% of total sales.

## 9. Consolidated Financial Statements

(1) CONSOLIDATED BALANCE SHEETS  
December 31, 1999 and 1998  
(In Thousand New Taiwan Dollars, Except Par Value)

ASSETS	1999		1998	
	Amount	%	Amount	%
<b>CURRENT ASSETS</b>				
Cash and cash equivalents	\$17,643,762	10	\$9,679,273	7
Short-term investments	927,216	1	5,906,339	4
Receivable from related parties	205,847	-	201,301	-
Notes receivable	164,134	-	34,868	-
Accounts receivable	13,380,253	7	7,940,062	6
Allowance for doubtful receivables	(422,202)	-	(283,090)	-
Allowance for sales returns and allowances	(706,886)	-	(441,973)	-
Inventories	5,841,965	3	4,056,508	3
Deferred income tax assets	2,447,163	1	411,350	-
Prepayments and other current assets	<u>2,202,895</u>	<u>1</u>	<u>1,035,862</u>	<u>1</u>
Total Current Assets	<u>41,684,147</u>	<u>23</u>	<u>28,540,500</u>	<u>21</u>
LONG-TERM INVESTMENTS	<u>16,164,676</u>	<u>9</u>	<u>6,659,117</u>	<u>5</u>
<b>PROPERTIES</b>				
Cost				
Land and land improvements	783,809	-	807,087	-
Buildings	28,421,769	16	27,010,514	19
Machinery and equipment	123,940,807	68	88,466,784	63
Office equipment	<u>2,728,204</u>	<u>1</u>	<u>2,312,238</u>	<u>2</u>
Total cost	155,874,589	85	118,596,623	84
Accumulated depreciation	(61,879,509)	(34)	(41,489,543)	(29)
Prepayments and construction in progress	<u>26,684,587</u>	<u>15</u>	<u>21,594,489</u>	<u>15</u>
Net Properties	<u>120,679,667</u>	<u>66</u>	<u>98,701,569</u>	<u>70</u>
<b>OTHER ASSETS</b>				
Deferred charges - net	642,091	-	773,637	-
Deferred income tax assets	4,485,340	2	6,039,395	4
Refundable deposits	20,814	-	23,755	-
Miscellaneous	<u>10,039</u>	<u>-</u>	<u>23,509</u>	<u>-</u>
Total Other Assets	<u>5,158,284</u>	<u>2</u>	<u>6,860,296</u>	<u>4</u>
TOTAL ASSETS	<u>\$183,686,774</u>	<u>100</u>	<u>\$140,761,482</u>	<u>100</u>

LIABILITIES AND SHAREHOLDERS' EQUITY	1999		1998	
	Amount	%	Amount	%
<b>CURRENT LIABILITIES</b>				
Payable to related parties	\$1,029,964	-	\$155,086	-
Accounts payable	2,927,915	2	2,176,023	2
Other payable - construction and equipment	8,663,286	5	3,601,832	3
Income tax payable	155,127	-	777,424	-
Current portion of long term bank borrowings	-	-	299,449	-
Accrued expenses and other current liabilities	<u>3,470,914</u>	<u>2</u>	<u>1,773,804</u>	<u>1</u>
Total Current Liabilities	<u>16,247,206</u>	<u>9</u>	<u>8,783,618</u>	<u>6</u>
<b>NON-CURRENT LIABILITIES</b>				
Bonds payables	20,000,000	11	22,631,717	17
Guarantee deposits	5,185,362	3	6,123,825	4
Accrued pension obligations	999,998	-	750,222	-
Bank loans	12,952,462	7	8,620,864	6
Other	<u>7,738</u>	<u>-</u>	<u>79,689</u>	<u>-</u>
Total Non-current Liabilities	<u>39,145,560</u>	<u>21</u>	<u>38,206,317</u>	<u>27</u>
MINORITY INTEREST IN SUBSIDIARIES	<u>7,524,168</u>	<u>4</u>	<u>9,700,881</u>	<u>7</u>
Total Liabilities	<u>62,916,934</u>	<u>34</u>	<u>56,690,816</u>	<u>40</u>
<b>SHAREHOLDERS' EQUITY</b>				
Capital stock, \$10 par value; authorized - 9,100,000 thousand shares in 1999 and 8,500,000 thousand shares in 1998, issued - 7,670,882 thousand shares in 1999 and 6,047,176 thousand shares in 1998	76,708,817	42	60,471,760	43
Capital surplus	11,831,411	6	164,219	-
Legal reserve	8,258,359	5	6,724,240	5
Unappropriated earnings	25,062,256	14	17,437,873	12
Cumulative translation adjustment	<u>(1,091,003)</u>	<u>(1)</u>	<u>(727,426)</u>	<u>-</u>
Total Shareholders' Equity	<u>120,769,840</u>	<u>66</u>	<u>84,070,666</u>	<u>60</u>
<b>TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY</b>	<u>\$183,686,774</u>	<u>100</u>	<u>\$140,761,482</u>	<u>100</u>

(2) CONSOLIDATED STATEMENTS OF INCOME  
For the Years Ended December 31, 1999 and 1998  
(In Thousand New Taiwan Dollars, Except Earnings Per Share)

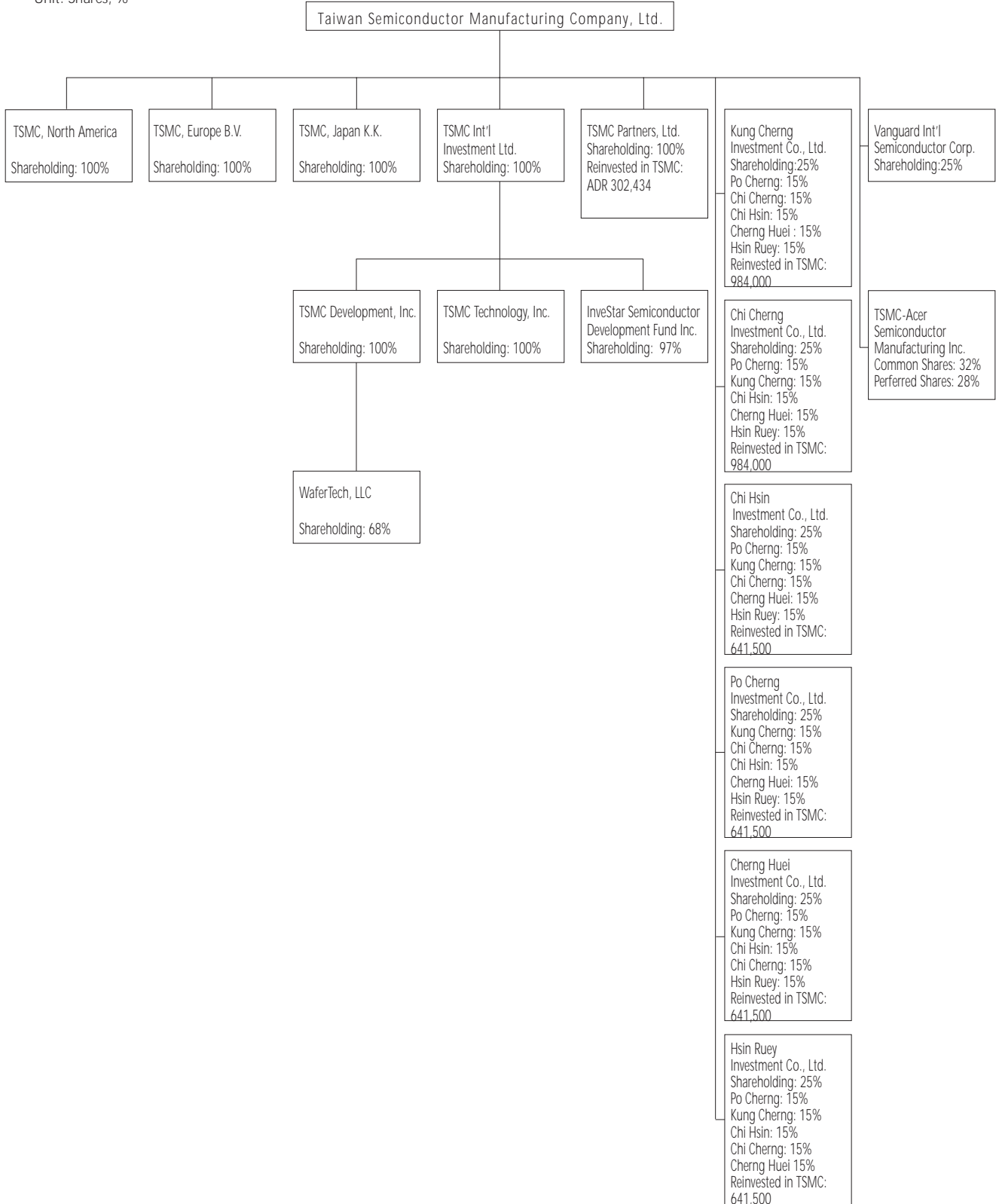
	1999		1998	
	Amount	%	Amount	%
GROSS SALES	\$74,060,145		\$51,645,934	
SALES RETURNS AND ALLOWANCES	<u>(993,624)</u>		<u>(1,223,521)</u>	
NET SALES	73,066,521	100	50,422,413	100
COST OF SALES	<u>41,560,169</u>	<u>57</u>	<u>32,282,644</u>	<u>62</u>
GROSS PROFIT	<u>31,506,352</u>	<u>43</u>	<u>18,139,769</u>	<u>38</u>
OPERATING EXPENSES				
General and administrative	2,616,518	4	1,638,379	3
Marketing	1,669,399	2	736,834	2
Research and development	<u>2,390,538</u>	<u>3</u>	<u>1,957,194</u>	<u>6</u>
Total Operating Expenses	<u>6,676,455</u>	<u>9</u>	<u>4,332,407</u>	<u>11</u>
INCOME FROM OPERATIONS	<u>24,829,897</u>	<u>34</u>	<u>13,807,362</u>	<u>27</u>
NON-OPERATING INCOME				
Interest	896,223	1	704,928	1
Insurance compensation	184,607	-	-	-
Gain on disposal of short-term investments - net	48,575	-	-	-
Reversal of allowance for losses on short-term investments	140,137	-	-	-
Gain on disposal of long-term investments	67,772	-	781,647	2
Premium Income	63,809	-	8,280	-
Foreign exchange gain - net	-	-	105,509	-
Other	<u>43,025</u>	<u>-</u>	<u>58,400</u>	<u>-</u>
Total Non-Operating Income	<u>1,444,148</u>	<u>1</u>	<u>1,658,764</u>	<u>3</u>
NON-OPERATING EXPENSES				
Interest	1,878,182	3	1,026,936	2
Investment loss recognized by equity method - net	288,500	-	1,400,026	3
Issuance costs of bonds	114,839	-	143,644	-
Loss on option contracts	86,746	-	-	-
Foreign exchange loss - net	81,436	-	-	-
Loss on disposal of properties	35,843	-	4,421	-
Loss on decline in value of long-term investments	31,568	-	5,862	-
Other	99,576	-	99,568	-
Provision for loss on short-term investments	<u>-</u>	<u>-</u>	<u>121,926</u>	<u>-</u>
Total Non-Operating Expenses	<u>2,616,690</u>	<u>3</u>	<u>2,802,383</u>	<u>5</u>
INCOME BEFORE INCOME TAX	23,657,355	32	12,663,743	25
INCOME TAX CREDIT	<u>386,631</u>	<u>1</u>	<u>1,664,852</u>	<u>3</u>
INCOME BEFORE MINORITY INTEREST	24,043,986	33	14,328,595	28
MINORITY INTEREST IN LOSS OF SUBSIDIARIES	<u>515,898</u>	<u>1</u>	<u>1,015,608</u>	<u>2</u>
NET INCOME	<u>\$24,559,884</u>	<u>34</u>	<u>\$15,344,203</u>	<u>30</u>
EARNINGS PER SHARE				
Based on weighted-average shares outstanding of 7,572,598 thousand in 1999 and 6,047,176 thousand in 1998	<u>\$3.24</u>		<u>\$2.54</u>	
Based on 7,548,483 thousand shares			<u>\$2.03</u>	

## Specific Notes

### 1. Affiliates Information

#### (1) TSMC Affiliated Companies Chart

Unit: Shares, %



(2) TSMC Affiliated Companies  
December 31, 1999

Unit: NT(US, NLG, JPY) \$K

Company	Date of Incorporation	Place of Registration	Paid-in Capital	Business Activities
TSMC North America	Jan. 18, 1988	San Jose, California, USA	US\$ 1,000	Marketing & Engineering support
TSMC Europe B.V.	Mar. 4, 1994	Amsterdam, The Netherlands	NLG 200	Marketing & Engineering support
TSMC Japan K.K.	Sep. 10, 1997	Yokohama, Japan	JPY 30,000	Marketing & Engineering support
TSMC Int'l Investment Ltd.	Apr. 9, 1996	Tortola, British Virgin Islands	US\$ 389,788	Investment
TSMC Partners, Ltd.	Mar. 26, 1998	Tortola, British Virgin Islands	US\$ 300	Investment
TSMC Development, Inc.	Feb. 16, 1996	Delaware, USA	US\$ 168,601	Investment
TSMC Technology, Inc.	Feb. 20, 1996	Delaware, USA	US\$ 0.001	Investment
InveStar Semiconductor Development Fund Inc.	Sep. 10, 1996	Cayman Island	US\$ 46,350	Investment
WaferTech, LLC	Jun. 3, 1996	Washington, USA	US\$ 768,828	Wafer Manufacturing
Po Cherng Investment Co., Ltd.	Jul. 6, 1998	Taipei, Taiwan	NT\$ 400,000	Investment
Chi Hsin Investment Co., Ltd.	Jul. 6, 1998	Taipei, Taiwan	NT\$ 400,000	Investment
Cherng Huei Investment Co., Ltd.	Jul. 10, 1998	Taipei, Taiwan	NT\$ 400,000	Investment
Hsin Ruey Investment Co., Ltd.	Jul. 13, 1998	Taipei, Taiwan	NT\$ 400,000	Investment
Kung Cherng Investment Co., Ltd.	Jul. 14, 1998	Taipei, Taiwan	NT\$ 400,000	Investment
Chi Cherng Investment Co., Ltd.	Jul. 15, 1998	Taipei, Taiwan	NT\$ 400,000	Investment
Vanguard Int'l Semiconductor Corp.	Dec. 5, 1994	Hsin-Chu, Taiwan	NT\$22,000,000	IC Design & Manufacturing
TSMC-Acer Semiconductor Manufacturing Inc.	Mar. 31, 1990	Hsin-Chu, Taiwan	NT\$24,191,696	IC Design & Manufacturing

NOTE: Foreign exchange rate on the reporting date is shown below:

US\$1 = NT\$31.395

NLG1 = NT\$14.33

JPY1 = NT\$0.3078

**(3) Business Scope of TSMC and its Affiliated Companies**

TSMC and its affiliates work together to provide dedicated foundry services to our customers around the world. In addition, few of TSMC’s affiliate companies are focused on conducting investment businesses. In general, TSMC and its affiliates give each other support in technology, capacity, marketing and services with an aim to create the maximum synergy, enabling TSMC to provide our worldwide customers with the best dedicated foundry services worldwide. The ultimate goal of this strategy is to ensure TSMC’s leading position in the global IC market.

**(4) TSMC Shareholders Representing Both Holding Companies and Subordinates**

December 31, 1999

Unit: NT\$K, except Shareholding

Reasoning	Name (Note 1)	Shareholding (Note 2)		Date of Incorporation	Place of Registration	Paid-in Capital	Business Activities
		Shares	Holding %				
				<i>None</i>			

The presumed interested parties representing both holding companies and subordinates include the company’s Director, the shareholders conducting business on behavior of the company, and the shareholde

**(5) Rosters of Directors, Supervisors, and Presidents of TSMC's Affiliated Companies  
December 31, 1999**

Unit: NT\$, except Shareholding

Company	Title	Name	Shareholding	
			Amount	%
TSMC North America	Director	F.C.Tseng	-	-
	Director	Ronald C. Norris	-	-
			(TSMC holds 1,000,000 shares )	(100%)
TSMC Europe B.V.	Director	Morris Chang	-	-
	Director	Steve Tso	-	-
	Director	Quincy Lin	-	-
	Director	Andrew Shen	-	-
	President	Hans Rohrer	-	-
		(TSMC holds 200 shares )	(100%)	
TSMC Japan K.K.	Chairman	Morris Chang	-	-
	Director	F.C.Tseng	-	-
	Director	Ronald C. Norris	-	-
	Director	Makoto Onodera	-	-
	Supervisor	Harvey Chang	-	-
		(TSMC holds 600 shares )	(100%)	
TSMC Int'l Investment Ltd.	Director	Morris Chang	-	-
	President	F.C.Tseng	-	-
			(TSMC holds 464,788,244 shares )	(100%)
TSMC Partners, Ltd.	Director	F.C.Tseng	-	-
	Director	Rick Tsai	-	-
	Director	Quincy Lin	-	-
	Director	Steve Tso	-	-
	Director	K.C. Chen	-	-
	Director	Harvey Chang	-	-
		(TSMC holds 300,000 shares )	(100%)	
TSMC Development, Inc.	Chairman	Morris Chang	-	-
	President	Morris Chang	-	-
		(TSMC International Investment Ltd. holds 168,600,800,000 shares)	(100%)	
TSMC Technology, Inc.	Chairman	Morris Chang	-	-
	President	Morris Chang	-	-
		(TSMC International Investment Ltd. holds 1,000 shares)	(100%)	
InveStar Semiconductor Development Fund Inc.	Director	Kenneth Tai	-	-
			(TSMC International Investment Ltd. holds 46,350,000 shares)	(97%)



Unit: NT\$, except Shareholding

Company	Title	Name	Shareholding		
			Amount	%	
WaferTech, LLC	Director	Morris Chang	Common Share	262,500	0.10%
			Preferred Share	324,820	0.13%
	Director	Ronald C. Norris	-	-	
	Director	Ken Smith	Common Share	525,000	0.21%
			Preferred Share	32,581	0.01%
	Director	Rick Tsai	-	-	
	Director	Gerald Fishman	Common Share	33,334	0.01%
	Director	Rodney Smith	Common Share	33,334	0.01%
	Director	Jimmy Lee	Common Share	33,334	0.01%
	President	Ken Smith	(TSMC Development, Ltd holds 171,539,960 Preferred Shares)		(67.27%)
Po Cherng Investment Co., Ltd.	Director	K.C. Chen (Representative of Chi Hsin Investment Co., Ltd.)	(Chi Hsin's investment NT\$60,000,000)	(15%)	
			(TSMC's investment NT\$99,999,960)	(25%)	
Chi Hsin Investment Co., Ltd.	Director	Harvey Chang (Representative of Po Cherng Investment Co., Ltd.)	(Po Cherng's investment NT\$60,000,040)	(15%)	
			(TSMC's investment NT\$99,999,960)	(25%)	
Cherng Huei Investment Co., Ltd.	Director	Rick Tsai (Representative of Hsin Ruey Investment Co., Ltd.)	(Hsin Ruey's investment NT\$60,000,040)	(15%)	
			(TSMC's investment NT\$99,999,960)	(25%)	
Hsin Ruey Investment Co., Ltd.	Director	Rick Tsai (Representative of Cherng Huei Investment Co., Ltd.)	(Cherng Huei's investment NT\$60,000,000)	(15%)	
			(TSMC's investment NT\$99,999,960)	(25%)	
Kung Cherng Investment Co., Ltd.	Director	F.C. Tseng (Representative of Chi Cherng Investment Co., Ltd.)	(Chi Cherng's investment NT\$60,000,040)	(15%)	
			(TSMC's investment NT\$99,999,960)	(25%)	
Chi Cherng Investment Co., Ltd.	Director	F.C. Tseng (Representative of Kung Cherng Investment Co., Ltd.)	(Kung Cherng's investment NT\$60,000,000)	(15%)	
			(TSMC's investment NT\$99,999,960)	(25%)	
Vanguard Int'l Semiconductor Corp.	Chairman	Morris Chang	3,240,448 shares	0.15%	
	Director	Liu, Bor-Hong (Representative of The Development Fund, Executive Yuan, R.O.C.)	(The Development Fund holds 639,713,750 shares)	(29.08%)	
			Director	Liou, Ming-Jong (Representative of The Development Fund, Executive Yuan, R.O.C.)	
	Director	Shih, Chin-Tay (Representative of The Development Fund, Executive Yuan, R.O.C.)			
	Director	Wu, Quintin Y.G (Representative of USI Far East Corp.)	(USI Far East Corp. holds 155,978,533 shares)	(7.09%)	
	Director	Rick Tsai (Representative of TSMC)	(TSMC holds 556,133,496 shares)	(25.28%)	

Unit: NT\$, except Shareholding

Company	Title	Name	Shareholding	
			Amount	%
Vanguard Int'l Semiconductor Corp.	Director	F.C.Tseng (Representative of TSMC)		
	Director	Chiao, Yu-Heng (Representative of Walsin Lihwa Corp.)	(Walsin Lihwa Corp. holds 58,827,741 shares)	(2.67%)
	Director	Du, Eugene C.Y. (Representative of Orient Semiconductor Ltd.)	(Orient Semiconductor Ltd. holds 57,203,580 shares)	(2.60%)
	Director	Miau, Matthew F.C. (Representative of Union Petrochemical Corp.)	(Union Petrochemical Corp. holds 27,384,827 shares)	(1.24%)
	Supervisor	Yeh, Huey-Ching (Representative of The Development Fund, Executive Yuan, R.O.C.)		
	Supervisor	Chow, Sidney H. (Representative of Maw Chong Investment Co.,Ltd.)	(Maw Chong Investment Co.,Ltd. holds 43,092,356 shares)	(1.96%)
	Supervisor	Hu, Benny T. (Representative of China Development Industrial Bank Inc.)	(China Development Industrial Bank Inc. holds 42,709,252 shares)	(1.94%)
	President	Rick Tsai	2,095,353 shares	0.10%
TSMC-Acer Semiconductor Manufacturing Inc.	Chairman	F.C.Tseng (Representative of TSMC)	(TSMC holds : Common Share 348,936,000 Preferred B 376,815,000)	32.00% 28.36%
	Director	Morris Chang (Representative of TSMC)		
	Director	K.C. Chen (Representative of TSMC)		
	Director	J.B. Chen (Representative of TSMC)		
	Director	Stan Shin (Representative of Acer Inc.)	(Acer holds : Common Share 312,784,872 Preferred B 298,342,580)	28.68% 22.45%
	Director	Simon Lin (Representative of Acer Inc.)		
	Director	Ronald Chwang (Representative of Acer Inc.)		
	Director	Hui-Ming Cheng (Representative of China Development Industrial Bank Inc.)	(China Development Industrial Bank Inc. holds : Common Share 48,431,563 Preferred B 137,059,612)	4.44% 10.31%
	Director	Tieh-Min Soong (Representative of Kuang-Hwa Investment Holding Co., Ltd)	(Kuang-Hwa Investment Holding Co., Ltd holds : Common Share 71,396,368 Preferred B -)	6.55% -
	Supervisor	Harvey Chang (Representative of TSMC)		
	Supervisor	George Huang (Representative of Acer Inc.)		
	Supervisor	Raymond Soong	Common Share 1,000 Preferred B 216	0.00% 0.00%
	President	J.B. Chen	Common Share 300,000 Preferred B 500,000	0.03% 0.04%

**(6) Operational Highlights for TSMC's Affiliated Companies  
December 31, 1999**

Unit: NT\$K, except EPS(\$)

Company	Paid-in Capital	Assets	Liabilities	Net Worth	Net Sales*	Income from Operation*	Net Income* (net of tax)	EPS* (net of tax)
TSMC North America	31,395	339,066	84,044	255,022	792,648	128,857	84,345	84.34
TSMC Europe B.V.	2,866	35,280	9,329	25,952	87,918	7,995	5,572	27,862.29
TSMC Japan K.K.	9,234	24,868	14,699	10,168	81,527	4,205	150	249.76
TSMC Int'l Investment Ltd.	12,237,394	12,768,566	345	12,768,221	(1,662,062)	(1,661,707)	(1,007,218)	(2.20)
TSMC Partners, Ltd.	9,419	125,894	116,005	9,889	1,905	549	121	0.40
TSMC Development, Inc.	5,293,228	13,018,596	11,699,441	1,319,155	(1,002,566)	(1,005,505)	(1,798,379)	N.A.
TSMC Technology, Inc	0.031	176,879	513,120	(336,240)	91,459	11,562	(14,953)	N.A.
InveStar Semiconductor Development Fund Inc.	1,455,158	1,577,599	283	1,577,316	336,385	109,028	125,369	2.70
WaferTech, LLC	24,137,355	33,565,682	13,482,740	20,082,942	5,065,535	(1,224,303)	(1,522,128)	N.A.
Po Cherng Investment Co., Ltd.	400,000	413,083	1,016	412,067	6,767	6,530	9,438	0.24
Chi Hsin Investment Co., Ltd.	400,000	413,054	1,004	412,050	6,771	6,514	9,415	0.24
Cherng Huei Investment Co., Ltd.	400,000	413,030	1,011	412,019	6,766	6,529	9,446	0.24
Hsin Ruey Investment Co., Ltd.	400,000	413,021	1,010	412,011	6,766	6,529	9,448	0.24
Kung Cherng Investment Co., Ltd.	400,000	411,710	619	411,091	6,927	6,621	8,371	0.21
Chi Cherng Investment Co., Ltd.	400,000	411,715	634	411,081	6,918	6,682	8,436	0.21
Vanguard Int'l Semiconductor Corp.	22,000,000	37,038,554	17,585,292	19,453,262	13,026,814	(2,007,016)	(1,849,186)	(0.90)
TSMC-Acer Semiconductor Manufacturing Inc.	24,191,696	36,755,710	20,533,582	16,222,128	10,655,995	(5,794,994)	(6,127,604)	(5.62)

\* For the year ended December 31, 1999

**Taiwan Semiconductor Manufacturing Company Ltd.,  
TSMC-Acer Semiconductor Manufacturing Inc. and Vanguard  
International Semiconductor Corporation**

**Combined Financial Statements as of December 31, 1999**

Representation Letter

The combined financial statements of Taiwan Semiconductor Manufacturing Company Ltd., TSMC-Acer Semiconductor Manufacturing Inc. and Vanguard International Semiconductor Corporation for the period January 1, 1999 to December 31, 1999 were prepared in conformity with the requirements on public companies and their affiliates, taken as a whole, of Securities and Futures Committee (SFC) in the Republic of China (ROC), the ROC regulations governing the preparation of financial statements of public companies and ROC generally accepted accounting principles.

The accounting records underlying the financial statements accurately and fairly reflect, in reasonable detail, the transactions of the company and affiliates. There are no plans or intentions that may materially affect the carrying values or classifications of assets and liabilities.

Very truly yours,

Taiwan Semiconductor Manufacturing Company Ltd.

By  
Morris Chang  
Chairman

**The Board of Directors and Shareholders  
Taiwan Semiconductor Manufacturing Company Ltd.**

We have reviewed the combined financial statements of Taiwan Semiconductor Manufacturing Company Ltd., TSMC-Acer Semiconductor Manufacturing Inc. and Vanguard International Semiconductor Corporation for the year then ended. Our reviews were made in accordance with the guidelines for the review of combined financial statements of affiliates. It is substantially less in scope than an examination in accordance with generally accepted auditing standards, the objective of which is the expression of an opinion regarding the combined financial statements taken as a whole. Accordingly, we do not express such an opinion.

Based on our review, we are not aware of any material modifications that should be made to the combined financial statements referred to above in order for them to be in conformity with "Regulations Governing the Preparation of Affiliates' Combined Operating Report, Combined Financial Statements and Relationship Report" in the Republic of China.



T N SOONG & CO

Taiwan, ROC

A member firm of Andersen Worldwide S.C.

January 24, 2000

Notice to Readers

The combined financial statements were not prepared with a view to complying with the published guidelines of the United States Securities and Exchange Commission or the American Institute of Certified Public Accountants ("AICPA") and have not been examined or otherwise reported upon under AICPA guidelines. They are not presented in accordance with generally accepted accounting principles in the United States of America for consolidated financial statements.

Taiwan Semiconductor Manufacturing Company Ltd.,  
TSMC-Acer Semiconductor Manufacturing Inc. and Vanguard  
International Semiconductor Corporation

COMBINED BALANCE SHEETS  
December 31, 1999  
(In Thousand New Taiwan Dollars, Except Par Value)

ASSETS	Amount	%
CURRENT ASSETS		
Cash and cash equivalents (Notes 2 and 4)	\$23,235,699	9
Short-term investments (Notes 2 and 5)	927,216	-
Receivable from related parties (Note 17)	1,114,259	1
Notes receivable	164,134	-
Accounts receivable	15,157,187	6
Allowance for doubtful receivables (Note 2)	(460,111)	-
Allowance for sales returns and allowances (Note 2)	(919,925)	-
Inventories (Notes 2 and 6)	9,967,233	4
Prepayments and other current assets (Notes 17 and 22)	4,748,520	2
Deferred income tax assets (Notes 2 and 16)	<u>2,547,130</u>	<u>1</u>
Total Current Assets	<u>56,481,342</u>	<u>23</u>
LONG-TERM INVESTMENTS (Notes 2 and 7)	<u>7,130,226</u>	<u>3</u>
PROPERTIES (Notes 2, 8, 17 and 19)		
Cost		
Land and land improvements	783,809	-
Buildings	41,987,989	17
Machinery and equipment	185,754,339	76
Office equipment	4,683,233	2
Leased assets	<u>562,039</u>	<u>-</u>
Total cost	233,771,409	95
Accumulated depreciation	(95,900,299)	(39)
Allowance for valuation loss	(2,534,642)	(1)
Prepayments and construction in progress	<u>28,746,476</u>	<u>12</u>
Net Properties	<u>164,082,944</u>	<u>67</u>
COMBINED DEBIT (Note 2)	<u>2,784,765</u>	<u>1</u>
OTHER ASSETS		
Deferred charges - net (Notes 2 and 9)	5,942,748	2
Deferred income tax assets (Notes 2 and 16)	9,126,737	4
Refundable deposits	37,596	-
Pledged or mortgaged assets (Note 19)	357,530	-
Miscellaneous	<u>22,558</u>	<u>-</u>
Total Other Assets	<u>15,487,169</u>	<u>6</u>
TOTAL ASSETS	<u>\$245,966,446</u>	<u>100</u>

LIABILITIES AND SHAREHOLDERS' EQUITY	Amount	%
CURRENT LIABILITIES		
Short-term loans (Note 10)	\$795,581	-
Notes and accounts payable	4,473,284	2
Payable to related parties (Note 17)	468,628	-
Other payable - construction and equipment	10,728,272	4
Income tax payable (Notes 2 and 16)	160,977	-
Current portion of non-current liabilities (Notes 11,12,13 and 19)	6,118,311	3
Accrued expenses and other current liabilities (Note 22)	<u>6,747,606</u>	<u>3</u>
Total Current Liabilities	<u>29,492,659</u>	<u>12</u>
NON-CURRENT LIABILITIES		
Bank loans (Notes 11,17 and 19)	33,644,085	14
Bonds payables (Notes 2 and 12)	22,250,000	9
Lease obligation payable (Notes 2 and 13)	138,757	-
Guarantee deposits (Note 20)	5,185,362	2
Accrued pension obligations (Notes 2 and 15)	1,342,115	1
Unrealized gain on sale - leaseback (Notes 2 and 8)	652,682	-
Other	<u>3,370</u>	<u>-</u>
Total Other Liabilities	<u>63,216,371</u>	<u>26</u>
MINORITY INTEREST IN AFFILIATES (Note 2)	<u>33,573,999</u>	<u>13</u>
Total Liabilities	<u>126,283,029</u>	<u>51</u>
SHAREHOLDER'S EQUITY (Notes 2 and 14)		
Capital stock, \$10 par value; authorized - 9,100,000 thousand shares; issued - 7,670,882 thousand shares	76,708,817	31
Capital surplus	10,744,988	5
Legal reserve	8,258,359	3
Unappropriated earnings	25,062,256	10
Cumulative translation adjustment	<u>(1,091,003)</u>	<u>-</u>
Total Shareholders' Equity	<u>119,683,417</u>	<u>49</u>
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	<u>\$245,966,446</u>	<u>100</u>

The accompanying notes are an integral part of the combined financial statements.

Taiwan Semiconductor Manufacturing Company Ltd.,  
TSMC-Acer Semiconductor Manufacturing Inc. and Vanguard  
International Semiconductor Corporation

COMBINED STATEMENTS OF INCOME  
For the Year Ended December 31, 1999  
(In Thousand New Taiwan Dollars, Except Earnings Per Share)

	Amount	%
GROSS SALES (Note 17)	\$97,094,224	
SALES RETURNS AND ALLOWANCES	<u>(1,606,528)</u>	
NET SALES	95,487,696	100
COST OF SALES (Note 17)	<u>65,568,467</u>	<u>.69</u>
GROSS PROFIT	<u>29,919,229</u>	<u>.31</u>
OPERATING EXPENSES (Note 17)		
General and administrative	3,829,366	4
Marketing	1,975,913	2
Research and development	<u>4,968,149</u>	<u>.5</u>
Total Operating Expenses	<u>10,773,428</u>	<u>.11</u>
INCOME FROM OPERATIONS	<u>19,145,801</u>	<u>.20</u>
NON-OPERATING INCOME		
Interest (Note 22)	1,758,935	2
Gain on disposal of properties	783,515	1
Insurance compensation	415,202	-
Reversal of allowance for losses on short-term investments	140,137	-
Rental revenue	216,004	-
Gain on disposal of short-term investments - net	48,575	-
Premium Income (Notes 2 and 22)	63,809	-
Gain on disposal of long-term investments	53,491	-
Foreign exchange gain - net (Note 2)	50,041	-
Other	<u>105,278</u>	<u>-</u>
Total Non-Operating Income	<u>3,634,987</u>	<u>.3</u>
NON-OPERATING EXPENSES		
Interest (Notes 2, 8, and 22)	4,747,624	5
Provision for loss on properties (Note 8)	2,534,642	3
Issuance costs of bonds	114,839	-
Loss on disposal of properties	95,805	-
Loss on option contracts (Notes 2 and 22)	86,746	-
Investment loss recognized by equity method - net (Notes 2 and 7)	68,670	-
Other	<u>215,614</u>	<u>-</u>
Total Non-Operating Expenses	<u>7,863,940</u>	<u>.8</u>
INCOME BEFORE INCOME TAX	14,916,848	15
INCOME TAX BENEFIT (Notes 2 and 16)	<u>1,065,391</u>	<u>.1</u>
INCOME BEFORE MINORITY INTEREST	15,982,239	16
MINORITY INTEREST IN LOSS OF AFFILIATES	<u>8,577,645</u>	<u>.9</u>
COMBINED NET INCOME	<u>\$24,559,884</u>	<u>.25</u>
COMBINED EARNINGS PER SHARE		
Based on weighted-average shares outstanding of 7,572,598 thousand	<u>\$3.24</u>	

The accompanying notes are an integral part of the combined financial statements.



**Taiwan Semiconductor Manufacturing Company Ltd.,  
TSMC-Acer Semiconductor Manufacturing Inc. and Vanguard  
International Semiconductor Corporation**

**NOTES TO COMBINED FINANCIAL STATEMENTS  
(Amounts in Thousand New Taiwan Dollars, Except Per Share)**

**(1) GENERAL**

Taiwan Semiconductor Manufacturing Company Ltd. (TSMC), a Republic of China corporation, and its affiliates - Vanguard International Semiconductor Corporation (VIS) and TSMC-Acer Semiconductor Manufacturing Inc. (TASMC), are engaged mainly in the manufacture, sale, packaging, testing and computer-aided design of integrated circuits and other semiconductor devices, and the manufacture and design of masks.

Notice to Readers:

*The combined financial statements include the consolidated accounts of TSMC plus the accounts of VIS and TASMC, neither of which are consolidated subsidiaries of TSMC. TSMC's consolidated financial statements prepared in accordance with U.S. generally accepted accounting principles, would not include the assets, liabilities, revenues or expenses of VIS and TASMC.*

In September 1994, its shares were listed on the Taiwan Stock Exchange. In 1997, TSMC offered shares of stock in the New York Stock Exchange in the form of American Depositary Receipts. VIS's shares are traded on the Republic of China (ROC) Over-the-Counter Securities Exchange starting March 25, 1998.

TSMC has thirteen affiliates including eleven wholly-owned subsidiaries, namely, TSMC North America, Taiwan Semiconductor Manufacturing Company Europe B.V (TSMC Europe), TSMC Japan, TSMC International Investment, TSMC Partners, and 25%-owned affiliates - Po Cherng Investment, Chi Hsin Investment, Kung Cherng Investment, Chi Cherng Investment, Hsin Ruey Investment, and Cherng Huei Investment, and two which TSMC exercises significant influence - VIS (25%-owned) and TASMC (32%-owned).

The presence of significant influence of TSMC on VIS results from the fact that the chairman of VIS is also the chairman of TSMC, whereas presence of significant influence of TSMC on TASMC results from the fact that the chairman of TASMC is the CEO of TSMC and that the CEO of TASMC is assigned by TSMC. Therefore, the combined financial statements include all of the aforementioned affiliates. However, the total assets or revenues of Vanguard's Affiliates Inc., which is an affiliate of VIS, and its subsidiaries are less than 10% of those of TSMC and, therefore, the combined financial statements did not include the information of these affiliates.

TSMC North America, TSMC Europe and TSMC Japan are engaged mainly in marketing & engineering support. All of the other affiliates are engaged in investments. As of December 31, 1999, TSMC International Investment has two wholly-owned subsidiaries -- TSMC Development, Inc. and TSMC Technology Inc., -- and a 97%-owned subsidiary -- InveStar Semiconductor Development Fund, Inc. TSMC Development Inc. in turn has a 68%-owned subsidiary, namely, WaferTech, LLC.

## **(2) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES**

### Consolidation

The combined financial statements include the accounts of TSMC and the aforementioned affiliates (hereinafter, referred to individually or collectively as "Company"). All significant intercompany accounts and transactions have been eliminated. Minority interests in the affiliates, including InveStar, WaferTech, VIS and TSMC are presented separately in the financial statements.

### Cash equivalents

Government bonds acquired under repurchase agreements, commercial paper, and mutual fund acquired under repurchase agreements with original maturities of less than three months are classified as cash equivalents.

### Short-term investments

Short-term investments are stated at the lower cost or market value. The costs of investments sold are determined by the specific identification method.

### Allowance for doubtful receivables

Allowance for doubtful receivables is provided on the basis of a review of the collectibility of individual receivables.

### Sales and allowance for sales returns and others

Sales are recognized when products are shipped to customers. Allowance for sales returns and others are provided based on experience; such provisions are deducted from sales and the related costs are deducted from cost of sales.

### Inventories

Inventories are stated at the lower of standard cost (adjusted to approximate weighted average cost) or market value. Market value represents net realizable value for finished goods and work in process, and replacement value for raw materials, supplies and spare parts.

### Long-term investments

Investments in shares of stock for which the Company exercises significant influences on the investee companies are accounted for by equity method. The difference between the investment cost and the Company's proportionate share in the net asset of the investee companies at the date of acquisition is amortized on a straight - line method over five years. Such amortization and the Company's proportionate share in the earnings or losses of investee companies are recognized as part of "Investment income or loss" account in the Statement of Income.

Other investments in shares of stocks are stated at cost less decline in market value of listed stocks or decline in value of unlisted stocks which is considered irrecoverable; such reductions are charged to shareholders' equity or current income, respectively. Stock dividends received are recognized only as increase in the number of stocks held on the ex-dividend date.

Investments in foreign mutual funds are stated at the lower of cost or net asset value (NAV). Write-downs of cost and write-ups to original acquisition cost resulting from subsequent recovery in NAV are debited or credited to shareholders' equity.

Convertible notes and stock purchase warrants are carried at cost.

The costs of investments sold are determined by the weighted average method.

Gains or losses on transactions with investee companies wherein the Company owned at least 20% of the outstanding common stock but less than a controlling interest are deferred in proportion to ownership percentage until realized through a subsequent transaction with a third party. If the gains or losses stated above are arisen from transactions involving sales by the subsidiary to the parent, an adjustment should be made in accordance with ownership percentage.

#### Properties

Properties are stated at cost less accumulated depreciation. Major additions, renewals and betterment, and interest expense incurred during the construction period are capitalized, while maintenance and repairs are expensed currently.

Depreciation is provided on the straight-line method over estimated service lives which range as follows: buildings - 5 to 55 years; machinery and equipment - 5 to 10 years; office equipment - 2 to 7 years; leased assets - 2 to 3 years.

Upon sale or disposal of properties, the related cost and accumulated depreciation are removed from the accounts, and any gain or loss is credited or charged to income. Any such gain, less applicable income tax, is transferred to capital surplus at the end of the year.

Properties covered by agreements qualifying as capital leases are carried at the lower of the present value of all minimum future rental payments, or its market value at the inception date of the lease. The lessee's periodic rental payment includes the purchase price of the leased property, and the interest expense.

#### Combined debit

Combined debit is the excess amount of the acquisition cost of a parent over the net equity of the affiliates.

#### Deferred charges

Deferred charges are amortized on the straight-line method over the following periods: patents - 5 to 10 years; software design costs - 3 to 5 years; bonds issuance costs - 7 years and short-term credit instruments - contract period of credit instruments.

#### Convertible bonds

The excess of the contracted redemption price over the face value of the bond is amortized and recognized as interest expense over a period starting from the issue date to the last day of the redemption period or the actual redemption date, whichever is earlier, using the effective interest method.

Capital stock account is credited for the face value of the bond converted into the Company's shares of stock and the excess of the carrying value of the bond as of the date of its conversion over its face value is credited to capital surplus account.

#### Pension benefits

Net periodic pension costs are recorded on the basis of actuarial calculations. Unrecognized net transition obligation is amortized over 15 to 25 years, and unrecognized net transaction asset is amortized over 26 years.

#### Unrealized gain or loss on sale-leaseback

The gain or loss resulting from the sale of leased property is deferred as unearned gain or loss on sales-leaseback. The unearned gain or loss on sales-leaseback is amortized depending on the nature of the lease. For operating leases, the unearned gain or loss is amortized over the lease term. For capital leases, however, the unearned gain or loss on sales-leaseback is amortized over the estimated service life of the leased property and the amount of amortization is accounted for as adjustment to depreciation.

#### Income tax

The company adopted interperiod tax allocation. Deferred income tax assets are recognized for the tax effects of temporary differences, unused tax credits, and operating loss carryforwards. Valuation allowance is provided for deferred income tax assets that are not certain to be realized. A deferred tax asset or liability should, according to the classification of its related asset or liability, be classified as current or non-current. However, if a deferred asset or liability cannot be related to an asset or liability in the financial statements, then it should be classified as current or non-current based on the expected length of time before it is recovered.

Income taxes (10%) on undistributed earnings are recorded as expenses in the year when the shareholders have resolved that the earnings shall be retained.

Adjustments of prior years' tax liabilities are added to or deducted from the current year's tax provision.

#### Derivative financial instruments

Foreign currency forward exchange contracts (forward contracts), entered into for purpose other than trading, are recorded in New Taiwan dollars as assets or liabilities using the spot rates at the inception dates of the contracts. The differences in the New Taiwan dollar amounts translated using the spot rates and the amounts translated using the contracted forward rates are also recognized as premiums or discounts at the inception dates of the forward contracts. Such premiums or discounts are amortized over the terms of the forward contracts using the straight-line method and the amortizations are either deferred or recognized in income.

At the balance sheet dates, the receivables or payables arising from forward contracts are restated using the prevailing spot rates and the resulting differences are recognized consistent with the recognition of the amortization of the premiums or discounts described above. The receivables and payable related to the forward contracts are netted out and the resulting net amount is presented as either an asset or liability. Also, the balances of forward exchange receivables or payables are translated on the basis of prevailing exchange rates and the resulting exchange gains or losses are credited or charged to current income. However, any premium or discount, and exchange gain or loss from hedging an identifiable foreign currency commitment is deferred to the actual transaction date and recorded as an adjustment to the transaction price.

Interest rate swap transactions entered into to manage liabilities are accounted for on an accrual basis, in which cash settlement receivable or payable is recorded as an adjustment to interest income or expense.

The notional amounts of the foreign currency option contracts entered into for hedging purposes are not recognized as either assets or liabilities on the contract dates. However, amounts received on call options written are recognized as

assets and amounts paid on put options bought are recognized as liabilities. Such amounts are amortized using the straight-line method over the period of the contracts and charged to current income. Gains or losses on the exercise of the options are also recognized in current income.

#### Foreign-currency transactions

Foreign-currency transactions, except derivative financial instruments, are recorded in New Taiwan dollars at the rates of exchange in effect when the transactions occur. Gains or losses resulting from the application of different foreign exchange rates when cash in foreign currency is converted into New Taiwan dollar, or when foreign-currency receivables and payables are settled, are credited or charged to income in the year of conversion or settlement. At year-end, the balances of foreign-currency assets and liabilities are restated at prevailing exchange rates, and the resulting differences are credited or charged to current income.

#### Translation of financial statements of foreign companies

When the financial statements of a foreign company, accounted for by the equity method, are translated into the reporting currency, the exchange gains or losses resulting from such translation process are recorded as "cumulative translation adjustments" which are included as a separate component of stockholders' equity. Such cumulative translation adjustments are transferred into current income or loss when the foreign investee dissolved or when share in the foreign company no longer held.

**(3) SIGNIFICANT ELIMINATING ENTRIES**

Company	Account	Amount	Transaction Entity	
TSMC	Payable to related parties	\$125,637	TSMC North America	
		13,422	TSMC Europe	
		13,189	TSMC Japan	
		3,832	TSMC Technology	
		730,483	WaferTech, LLC	
		539,466	TASMC	
		184,741	VIS	
		Receivable from related parties	47,343	TSMC Technology
			198,163	WaferTech, LLC
			17,550	TSMC Japan
	23,117		TASMC	
	25,674		VIS	
	Sales		59,438	WaferTech, LLC
			22,246	TASMC
	Purchase	48,473	VIS	
		4,636,780	WaferTech, LLC	
		808,926	TASMC	
		381,989	VIS	
		Marketing expenses(commissions)	692,927	TSMC North America
		Marketing expenses (service charges)	99,087	TSMC North America
		Marketing expenses (commissions)	87,414	TSMC Europe
		Marketing expenses (commissions)	81,951	TSMC Japan
		General and administrative expenses (consulting fee)	20,400	VIS
	Deferred revenue	8,175	WaferTech, LLC	
TSMC	Interest receivable	1,672,552	TSMC Development	
International		97,717	TSMC Technology	
Investment	Notes Receivable	7,873,941	TSMC Development	
		313,950	TSMC Technology	
	Interest revenue	627,724	TSMC Development	
		25,029	TSMC Technology	
TSMC	Deferred revenue	142,957	WaferTech, LLC	
Technology	Licensing Fee	13,790	WaferTech, LLC	
	Sales	64,055	WaferTech, LLC	
	Receivable	63,050	WaferTech, LLC	

#### (4) CASH AND CASH EQUIVALENTS

	1999
Bank deposits	\$22,100,501
Commercial papers	74,985
Mutual funds	7,541
Government bonds acquired under repurchase agreements	<u>1,052,672</u>
	<u>\$23,235,699</u>

#### (5) SHORT-TERM INVESTMENTS

Short-term investments aggregating \$927,216 are marketable equity securities.

#### (6) INVENTORIES

	1999
Finished goods	\$1,313,523
Work in process	7,659,840
Raw materials	997,004
Supplies and spare parts	<u>1,124,240</u>
	11,094,607
Allowance for losses	<u>(1,127,374)</u>
	<u>\$9,967,233</u>

**(7) LONG-TERM INVESTMENTS**

	1999	
	Carrying Value	% of Ownership
Common Stocks		
Accounted for by equity method		
VIS Affiliates Inc.	\$765,530	100
Systems on Silicon Manufacturing Company Pte Ltd. ( SSMC )	<u>360,177</u>	<u>32</u>
	<u>1,125,707</u>	
Accounted for by cost method		
Taiwan Mask (Listed stock)	32,129	2
Powerchip Semiconductor Corp.	2,651,216	9
Etron Technology Inc.	386,545	5
Taiwan Semiconductor Technology	500,000	19
Lian Ya	175,500	13
Shin-Etsu Handotai Taiwan	105,000	7
W.K. Technology Fund IV	50,000	4
Hong Tung Venture Capital	80,000	10
Global Test	71,613	5
ChipStrate Technology	32,927	2
Ritch Technology	7,407	1
Scenix Semiconductor	5,407	-
Walson Advanced Electronics	414,481	10
Megic	150,000	15
Form Factor Inc.	<u>64,360</u>	<u>1</u>
	<u>4,726,585</u>	
Preferred Stocks		
Programmable Microelectronics	47,092	3
Marvell Technology	139,055	10
Integrated Memory Logic	23,546	2
Divio	15,698	1
Integrated Micromachines	4,709	-
SIRF Technology	41,860	3
Rise Technology	47,092	3
Capella Microsystems	12,040	1
Sensory	39,244	3
Flow Wise Networks	15,697	1
Equator Technologies	42,011	3
Light Speed Semiconductor	68,562	5
Centillum Technology	23,546	2
Scenix Semiconductor	66,277	5
Lara Technology	83,197	6
Rapid Stream	32,965	2



	1999	
	Carrying Value	% of Ownership
Premier R. F.	31,395	2
Krypton Isolation	39,244	3
Pico Turbo	39,244	3
Sonics	31,395	2
3Dfx Interactive	9,326	-
Nanoamp Solutions	26,537	2
T-Span System	15,698	1
Memsic	47,088	3
Menolithie Power System	62,790	4
Formfactor	62,790	4
Reflectivity	62,790	4
Signia	<u>47,090</u>	3
	<u>1,177,978</u>	
Convertible Note		
Integrated Memory Logic	31,395	2
Sonics	23,546	2
Rise	<u>9,419</u>	1
	<u>64,360</u>	
Funds		
Crimson Asia Capital	34,534	-
Horizon Ventures Fund	<u>31,744</u>	-
	<u>66,278</u>	
Warrant		
Flow Wise Networks	<u>6</u>	-
Allowance for loss	<u>(30,688)</u>	
	<u>\$7,130,226</u>	

The carrying values of investments accounted for by equity method and the related investment income and loss for the year ended December 31, 1999 were based on audited financial statements of the investees in the same year as follows:

	1999
SSMC	(\$75,977)
Others	<u>7,307</u>
	<u>(\$68,670)</u>

Information on the investments is as follows:

	1999
Market value of listed stocks	\$8,031,082
Equity in unlisted stocks	4,134,917
Net assets value of fund	66,278

As of December 31, 1999, the Company has unexercised stock warrants for purchase of shares, as follows:

Stock(Maximum)	Shares Share (US\$)	Exercise Price Per Exercise Period	
Equator Technologies Preferred	6,082	5.610	03/27/98-03/27/00
Equator Technologies Common	63,525	0.650	03/27/98-03/27/03
Equator Technologies Common	69,642	0.700	08/11/98-08/11/04
Flow Wise Networks Common	190,177	0.001	04/25/97-03/25/02
Marvell Technology Preferred	34,616	4.333	12/10/97-06/27/00
Capella Microsystems Common	41,746	0.250	-
SiRF Technology Preferred	5,556	6.000	01/16/98-01/16/03
Sonics Preferred	450,000	1.000	09/25/98-09/25/01
Formfactor Preferred	66,666	7.500	07/30/99-07/30/04
Lara Common	317,307	1.625	01/29/99-01/29/09
Scenix Semiconductor Preferred	45,490	2.000	12/23/98-12/23/03
Scenix Semiconductor Common	90,980	0.200	03/22/99-12/23/03

#### (8) PROPERTIES

Accumulated depreciation consists of the following:

	1999
Land improvements	\$33,691
Buildings	10,786,435
Machinery and equipment	82,337,897
Office equipment	2,594,122
Leased assets and leasehold improvement	<u>148,154</u>
	<u>\$95,900,299</u>

The status of the expansion plans as of December 31, 1999, is as follows:

Expansion Plan	Estimated Total Cost	Accumulated Expenditures	Date of Start of Operations
TSMC's sixth manufacturing plant	\$66,846,000	\$40,238,232	March 2000
TSMC's seventh manufacturing plant	9,711,000	266,063	June 2002
TSMC's twelfth manufacturing plant	9,392,000	252,415	June 2002
VIS's second manufacturing plant	6,912,000	555,700	January 2003

Interest expense capitalized in 1999 was \$443,254.

According to TSMC's transformation project, in original manufacturing process of 0.25-micron logic IC technology related factory facilities, including machinery and equipment need to be rearranged and reinstalled in. The rearrangement, reinstallation and testing cost were totaling to \$2,151,329 and were deferred and recorded as machinery and equipment cost in 1998. During the rearrangement and reinstallation period, the machinery equipment was not ready for use. As a result, the above machinery and equipment are ceased to be depreciated in accordance was the original schedule. The impact of depreciation totaled \$2,168,661 in 1998.

The management of TSMC evaluates the aforementioned machinery equipment and recognizes \$2,534,642 of loss on value reduction on these assets in 1999.

#### (9) DEFERRED CHARGES - NET

	1999
Technical assistant fee	\$3,793,947
Technology	912,254
Patent	388,794
Software design costs	670,130
Cost of issuance of bonds	47,559
Others	<u>130,064</u>
	<u>\$5,942,748</u>

#### (10) SHORT-TERM LOANS

	1999
Bank loans: total of US\$13,650 thousand, repayable by June 2000, interest 6.275%-6.83%	\$427,694
Short-term notes and bills payable - repayable by March 2000, interest 4.40%-5.51%	370,000
Discount on short-term notes and bills payable	<u>(2,113)</u>
	<u>\$795,581</u>

Unused credit lines as of December 31, 1999 aggregate about \$12,908,627 thousand.

**(11) LONG - TERM BANK LOANS**

1999

Loans (thousands)	
US\$345,000 repayable by May 2001, interest at 6.408% in 1999	\$10,831,275
US\$67,565, repayable by October 2002, interest at 6.83%	2,121,187
Repayable in semi-annual installments through June 2004, interest at 6.35%-6.80%	7,020,000
Repayable in semi-annual installments through October 2005, interest at 6.42%-6.89%	3,680,000
Repayable in semi-annual installments through February 2005, interest at 6.515%-6.795%	400,000
Repayable in semi-annual installments through July 2004, interest at 6.765%-6.795%	364,000
Repayable in semi-annual installments through February 2003, interest at 6.765%-6.795%	256,000
Repayable in semi-annual installments through May 2002, interest at 6.765%-6.795%	184,000
Repayable in 16 semi-annual installments commencing April 22,1994, interest at floating rate 6.12%~7.24%	486,623
Repayable in 21 consecutive quarterly installments commencing June 27, 1998, interest at floating rate 8.07%~8.10%	1,199,800
Repayable in 11 semi-annual installments commencing May 29, 1999 , interest at floating rate 6.04%~7.10%	3,275,440
Repayable in 21 consecutive quarterly installments commencing September 23, 2000 , interest at floating rate 6.82%~6.85%	400,000
Repayable in 20 consecutive quarterly installments commencing October 15, 2000 , interest at floating rate 6.19%~6.22%	497,000
Repayable in 4 semi-annual installments commencing September 23, 2000 , interest at floating rate 8.73%	4,000,000
Repayable once at December 23, 1999 and repayable In 4 semi-annual installments commencing September 18, 2000 , interest at floating rate 6.34%~6.94%	2,072,070
Repayable in 15 consecutive quarterly installments commencing April 18, 2001, interest at floating rate 6.35%~7.52%	<u>2,000,000</u>
	38,787,395
Current portion	<u>(5,143,310)</u>
	<u>\$33,644,085</u>

The loan agreements require, among other things, the maintenance of specific financial ratios. As of December 31, 1999, only TASM has not complied to maintain the specific financial ratios for its loans, and the management of TASM expected TSMC to negotiate with the banks as merging with TSMC is forthcoming. However, there is no final conclusion yet.

Unused credit lines as of December 31, 1999 aggregate about \$10,930,290 and US\$5,000 thousand.

**(12) BONDS PAYABLE**

	1999
Foreign convertible bonds - US\$350,000 thousands, non-interest bearing, repayable in July 2002	\$11,322,500
Accretion in redemption value of bonds	1,894,831
	13,217,331
Converted into common stocks	(12,914,338)
Redeemed before maturity	(302,993)
	-
Domestic unsecured bonds	
Repayable in March 2003, 7.71% annual interest payable semi-annually	4,000,000
Repayable in November 2003, 7.12% annual interest payable annually	6,000,000
Repayable in October 2002 and 2004, 5.67% and 5.95% annual interest payable annually, respectively	10,000,000
Repayable in annual installments from November 6, 2000 to November 6, 2003, interest at 6.59% guaranteed by financial institution	3,000,000
	23,000,000
Current portion	(750,000)
	<u>\$22,250,000</u>

The foreign convertible bonds can be converted into common stocks of the Company prior to its maturity at a price per share determined using an agreed formula. The Company may redeem the bonds prior to its maturity when certain conditions are met. As of December 31, 1999, \$1,223,986 bonds with face value totaling to \$1,223,986 were converted into 122,399 thousand shares of common stocks. The Company has redeemed the unconverted part prior to the maturity, on November 1999.

The holders of the bonds with an aggregate face value of \$6,000,000 and the Company can exercise resale agreements or repurchase agreements, respectively, thirty days before the second and third anniversaries of the issuance date, which range from November 18 to December 1, 1998.

**(13) LEASE OBLIGATION PAYABLE**

	1999
Lease obligations payable	\$363,758
Current portion	<u>(225,001)</u>
	<u>\$138,757</u>

**(14) SHAREHOLDERS' EQUITY**

According to the ROC Company Law, capital surplus can only be used to offset a deficit or transferred to capital.

The Articles of Incorporation of TSMC provide that the following shall be appropriated from the annual net income (less any deficit):

- a) 10% legal reserve;
- b) Bonus to directors and supervisors and to employees equal to 1% and at least 1% of the remainder, respectively.

These appropriations and the disposition of the remaining net income shall be resolved by the shareholders in the following year and given effect to in the financial statements of that year.

Under the Integrated Income Tax System which became effective on January 1, 1998, non-corporate resident shareholders are allowed a tax credit for the income tax paid or payable by TSMC on earnings generated in 1998 and onwards. An Imputation Credit Account (ICA) is maintained by the Company for such income tax and the tax credit allocated to each shareholder. The maximum credit available for allocation to each shareholder cannot exceed the balance shown in the ICA on the date of distribution of dividends.

The aforementioned appropriation for legal reserve shall be made until the reserve equals the Company's capital. Such reserve can only be used to offset a deficit; or, when it has reached 50% thereof the paid-in capital, up to 50% thereof can be transferred to capital.

**(15) PENSION PLAN**

TSMC, VIS and TASMIC each has a pension plan covering all regular employees, which provides benefits based on length of service and average monthly salary at the time of retirement. The company makes monthly contributions, equal to 2% of salaries to a pension fund which is administered by the employees pension fund monitoring committee and deposited in the committee's name in the Central Trust of China. Pension cost is accrued at 3%-6% of salaries and wages.

Pension information are summarized as follows:

	1999
<hr/>	
a. Components of pension cost	
Service cost	\$341,559
Interest cost	104,391
Projected return on plan assets	(34,821)
Amortization of prior period service cost	<u>7,335</u>
	<u>\$418,464</u>
b. Reconciliation of the fund status of the plan and accrued pension liabilities	
Benefit obligation	
Vested benefit obligation	\$ -
Nonvested benefit obligation	<u>559,680</u>
Accumulated benefit obligation	559,680
Additional benefits based on future salaries	<u>1,249,944</u>
Projected benefit obligation	1,809,624
Fair value of plan assets	<u>(578,265)</u>
Funded status	1,231,359
Unrecognized prior service cost	-
Unrecognized net transitional obligation	(166,754)
Unrecognized net gain	277,277
Additional liability	<u>-</u>
Accrued pension liabilities	<u>\$1,341,882</u>
Vested benefit	<u>\$ -</u>
c. Actuarial assumptions	
Discount rate used in determining present values	6.5%
Future salary increase rate	5%-6.5%
Expected rate of return on plan assets	6.5%
d. Contributions to pension fund	<u>\$99,514</u>
e. Payments from pension fund	<u>\$3,591</u>

**(16) INCOME TAX**

	1999
Current	
Domestic	(\$21,379)
Foreign	<u>(63,388)</u>
	<u>(84,767)</u>
Deferred	
Domestic	2,379,368
Valuation allowance	<u>(1,303,500)</u>
	1,075,868
Foreign	<u>7,818</u>
	<u>1,083,686</u>
Adjustment of prior year's income taxes	<u>66,472</u>
Income tax benefit	<u><u>\$1,065,391</u></u>

Deferred income tax assets consist of the following:

	1999
Current	
Investment tax credit	\$2,981,076
Accrued liabilities and others	212,054
Valuation allowance	<u>(646,000)</u>
	<u>\$2,547,130</u>
Non-current	
Investment tax credit	\$11,545,027
Operating loss carryforwards	2,427,765
Interest expense	201,798
Differences in depreciation for tax and financial purposes	(451,207)
Deferred revenue	43,753
Others	<u>(180,431)</u>
	<u>13,586,705</u>
Valuation allowance	<u>(4,459,968)</u>
	<u><u>\$9,126,737</u></u>

Integrated income tax information of TSMC:

	1999
Ending balances of imputation credit account	<u><u>\$1,497</u></u>



The expected creditable ratio for 1999 was 0.006%.

The imputation credit of TSMC allocated to each shareholder shall be based on the balance in the ICA on the date of distribution of dividends, thus the expected creditable ratio for 1999 may be adjusted according to the difference between the expected and actual imputation credit allowed under the regulation.

The unappropriated retained earnings of TSMC and VIS as of December 31, 1999 included the earnings prior to 1997 of \$752,612 and \$743,888, respectively.

The effective tax rates for deferred income tax applied were: TSMC- 5.9%; VIS- 20%; and TASM -5%.

Unused investment tax credits arising from investments in machinery and equipment, and research and development expenditures as of December 31, 1999 will expire as follows:

Year of Expiry	Amount
2000	\$2,921,989
2001	5,168,052
2002	4,362,890
2003	2,073,172

The income from the following projects and services are exempt from income tax:

	Tax-Exemption Period
Expansion of second manufacturing plant and computer-aided design services, and third manufacturing plant	1996 to 1999
Expansion of first manufacturing plant, second manufacturing plant - modules A and B and third manufacturing plant, and fourth manufacturing plant	1997 to 2000
Expansion of first manufacturing plant, second manufacturing plants-modules A and B, third manufacturing plant and fourth manufacturing plant, and fifth manufacturing plant	1999 to 2002

TASMC is entitled to an income tax exemption for a period of four years for the income generated as a result of the capital increase effected in 1995. TASMC decided to commence such tax exemption from January 1, 1998.

Income tax returns of TSMC through 1996 and income tax returns of VIS and TASMC through 1997 have been examined by the tax authorities. However, TASMC is contesting the assessment of tax authority for 1995 and 1996.

## (17) RELATED PARTY TRANSACTIONS

The Company engages in business transactions with the following related parties:

- a. Industrial Technology Research Institute (ITRI); its director is TSMC's chairman.
- b. Philips Electronics N.V., (Philips), a major shareholder of TSMC.
- c. Systems on Silicon Manufacturing Company Pte Ltd. (SSMC), an investee of TSMC
- d. VIS America: an investee of VIS's subsidiary (VIS Affiliates Inc.)
- e. VIS Micro: an investee of VIS's subsidiary (VIS Affiliates Inc.)
- f. Orient Semiconductor Electronics Ltd. (OSE): a director of VIS
- g. Walsin Lihwa Corporation (WLC): a director of VIS
- h. WYSE Technology Taiwan LTD. (WYSE): of the same chairman with TSMC
- i. Acer Inc. (AI), TSMC's supervisor and a member of board of directors of TSMC
- j. China Development Corporation (CDC), supervisor and a member of board of directors of TSMC
- k. Chiao Tung Bank (BOT), supervisor and major shareholder of TSMC before August 11, 1999.
- l. Investee of AI:
  - Apacer Technology Inc. (APT)
  - Acer Sertek Inc. (ASI)
  - Addonics Technology Corp. (AT)
  - AOpen Inc. (AOI)
  - Taiwan Semiconductor (TSI)
  - Acer Labs. Inc. (ALI)
  - Acer Twp Corporation (ATC)
- m. Acer Testing Inc. (ATI): TSMC is a member of its board of directors and supervisor before March 31, 1998.
- n. Acer Semiconductor America Inc. (ASA), TSMC's subsidiary.

The transactions with the foregoing parties in addition to those disclosed in other notes, are summarized as follows:

	1999	
	Amount	%
<u>During the year</u>		
Sales		
ITRI	\$132,507	-
Philips and its affiliates	2,864,149	3
WYSE	26,436	-
APT	3,673,798	4
ASI	839,568	1
AT	459,969	-
AOI	317,301	-
TSI	<u>211,357</u>	<u>-</u>
	<u>\$8,525,085</u>	<u>8</u>
Purchase		
APT	\$7,476	-
ASI	20,186	-
TSI	<u>25,291</u>	<u>-</u>
	<u>\$52,953</u>	<u>-</u>
Rental expense		
ITRI	<u>\$161,488</u>	<u>-</u>
Cost of Sales		
OSE	\$82,836	-
ITRI	3,484	-
Philips (technical assistance fee)	862,398	8
ATI	170,053	-
TSI	<u>37,935</u>	<u>-</u>
	<u>\$1,156,706</u>	<u>8</u>
General and administrative expenses		
ITRI	\$115	-
VIS Micro	99	-
AI	<u>13,821</u>	<u>-</u>
	<u>\$14,035</u>	<u>-</u>
Marketing expenses		
VIS Micro	\$30,575	2
ASA	13,043	1
ITRI	<u>143</u>	<u>-</u>
	<u>\$43,761</u>	<u>3</u>
Research and development expenses		
VIS America	\$355,246	7
ITRI	<u>514</u>	<u>-</u>
	<u>\$355,760</u>	<u>7</u>
Interest expenses		
CDC	\$81,010	-
BOT	<u>77,732</u>	<u>-</u>
	<u>\$158,742</u>	<u>-</u>

	1999	
	Amount	%
Purchase of machinery and equipment		
WLC	\$ 938	-
ASI	<u>22,083</u>	<u>-</u>
	<u>\$23,021</u>	<u>-</u>
<u>At end of year</u>		
Receivable		
ITRI	\$18,458	2
Philips and its affiliates	133,245	12
SSMC	5,353	-
WYSE	6,327	-
APT	632,380	57
ASI	166,765	15
AOI	120,020	11
TSI	<u>31,711</u>	<u>3</u>
	<u>\$1,114,259</u>	<u>100</u>
Prepayments and other current assets		
Prepaid rental - ITRI	<u>\$42,541</u>	<u>1</u>
Payable		
Philips and its affiliates	\$305,756	65
VIS America	34,855	8
OSE	12,574	3
VIS Micro	3,532	1
ITRI	2,001	-
WLC	938	-
ASI	8,717	2
TSI	37,182	8
ATI	62,155	13
Others	<u>918</u>	<u>-</u>
	<u>\$468,628</u>	<u>100</u>
Long-term bank loans		
CDC	\$1,600,000	5
BOT	<u>897,000</u>	<u>2</u>
	<u>\$2,497,000</u>	<u>7</u>

Transactions with related parties are based on normal prices and collection or payment terms except for that VIS America and VIS Micro perform research and development and marketing activities for VIS, respectively and VIS pays actual expenses incurred related to such undertakings plus a 5% mark-up.

**(18) LONG-TERM LEASES**

TSMC leases the land, building and certain machinery and equipment of its first manufacturing plant from ITRI under agreements which will expire in March 2002, at annual rentals and other charges aggregating \$170,166. The agreements are renewable upon expiration.

TSMC leases the land sites of its second through tenth manufacturing plants from the Science-Based Industrial Park Administration under agreements which will expire on various dates from March 2008 to April 2018 with annual rentals aggregating \$42,149. The agreements are also renewable upon expiration.

TSMC North America leases its office premises and certain equipment under non-cancelable operating agreement which will expire in June 2003. TSMC Europe entered into a lease agreement for its office premises which will expire in 2001, annual rent currently is totaled to \$ 37,328.

VIS leases the sites of its manufacturing plant and parking lot from the Hsinchu Science-Based Industrial Park Administration under agreements which will expire on April 2010, June 2015 and March 2018, but renewable upon expiration. Annual rentals aggregate to \$32,668.

VIS also leases machinery and equipment from Condisco Trade Inc. in terms of operating lease through December 2002. Annual rentals aggregate to \$263,218 (US\$8,409 thousand).

TASMC entered into a twenty-year land lease agreement with Science-Based Industrial Park Administration to lease its plant site. The annual lease payment was \$32,343. To renew the lease, TASMC must submit a written application three months before the lease expires.

Future minimum rentals under the aforementioned leases are as follows:

Year	Amount
2000	\$585,873
2001	533,965
2002	389,199
2003	115,161
2004	115,161
2005-2018	<u>1,225,077</u>
	<u>\$2,964,436</u>

**(19) PLEDGED OR MORTGAGED ASSETS**

Certain assets have been pledged or mortgaged as collateral as follows:

	1999
Time deposit	\$357,530
Properties (net) - for bank loans	<u>60,074,850</u>
	<u>\$60,432,380</u>

**(20) COMMITMENTS AS OF DECEMBER 31, 1999**

- a. Under a technical cooperation agreement entered into by TSMC and Philips, as amended on May 12, 1997, TSMC shall pay technical assistance fee at a percentage of net sales of certain products, less specified deductions. The agreement shall remain in force up to July 9, 2007 and thereafter automatically renewed for successive periods of three years. Under the amended agreement, the fee is subject to reduction by the amounts TSMC pays to any third party for settling any licensing/ infringement issue after the first five-year periods of the amended agreement, provided that the fee after reduction will not be below a certain percentage of the net selling price.
- b. Subject to certain equity ownership and notice requirements, Philips and its affiliates can avail each year up to 30% of TSMC's production capacity.
- c. Under a submicron technology license agreement entered into by TSMC and ITRI, TSMC shall pay ITRI with license fees of \$129,400 (including 5% value-added tax) plus royalty fee at an agreed percentage of net sales of certain products through December 31, 1998. As of December 31, 1995, TSMC has paid the entire license fee.
- d. Under a technical cooperation agreement entered into by TSMC and ITRI, TSMC shall reserve and allocate up to 35% of its production capacity, for use by the Ministry of Economic Affairs (MOEA) or any other party as designated by the MOEA.
- e. Under a purchase agreement with three customers, TSMC shall supply them with, and the three customers shall buy, a certain portion of wafers produced by WaferTech, LLC. If TSMC or any of the customers is unable or unwilling to supply or buy the minimum purchase allocation, the defaulting party shall compensate the other party at the full price of the products, less certain costs.
- f. Under several foundry agreements entered into by TSMC, TSMC shall allocate a portion of its production output for sale to certain major customers from whom guarantee deposits of US\$164,765 thousand had been received as of December 31, 1999.
- g. On February 27, 1998, the Tax Bureau assessed TSMC additional income taxes of about \$105,000 and \$125,000 for 1994 and 1995, respectively, arising from the contention by the Bureau that TSMC's first manufacturing plant was not a science-based industry under the Science-Based Industrial Park Regulations. TSMC is contesting the assessment, but has already accrued the amount of tax assessment. The additional income tax for 1994 has been reassessed to be \$21,887.
- h. Under a Shareholders Agreement entered into by TSMC, Philips and EDB Investments Pte Ltd. dated March 30, 1999, the parties agreed to: (a) form a joint venture company to be called Systems on Silicon Manufacturing Company Pte Ltd. (SSMC) for the purpose of building an integrated circuit foundry in Singapore, (b) set SSMC's total authorized capital at about S\$1.2 billion (about NT\$22,800,000), and, (c) allow the Company to invest 32% of SSMC's capital. TSMC and Philips committed to buy a certain percentage of the production capacity of SSMC. If any party is unable or unwilling to buy the committed purchase allocation and the capacity utilization of SSMC falls below a certain percentage of total available capacity, such party shall compensate SSMC for all related unavoidable costs.
- i. Under a Technical Cooperation Agreement with SSMC signed on May 12, 1999, SSMC shall pay TSMC remuneration for the technology service provided by SSMC at a certain percentage of net selling prices of its products. The agreement shall remain in force for ten years, and thereafter automatically continue for successive periods of five years unless and until terminated by either party under certain conditions.
- j. VIS shall pay royalties under various patent/license agreements as follows:
  - 1) ITRI - at a specific percentage of sales of certain products for five years from November 11, 1994.
  - 2) LUCENT Technologies, Inc. - a) at a specific percentage of net sales of certain products for five years from January 1996; b) at a specific amount for product and technology development, within a certain period from January 1998; c) at a specific amount in three installments within three years and a percentage of net sales of certain products for three years from January 1998; d) at a specific amount and a specific percentage of net sales of certain products within two years from January 1998.

- 3) Texas Instruments Incorporated- at a specific percentage of net sales of certain products for ten years from January 1997.
  - 4) HITACHI Corporation - at a specific amount in semi-annual installments within five years from May 1997.
  - 5) Motorola Corporation - at a specific amount in four installments from September 1997 to December 2000.
  - 6) Sun Microsystems - at a specific amount and a specific percentage of net sales of certain products before March 2003.
  - 7) NEC Corporation - at a specific amount in six installments from February 1999 to 2003.
  - 8) Mitsubishi Corporation - at a specific amount from August 1999.
- k. Under a new product development agreement between VIS and VIS America (an investee of VIS Affiliates Inc.), VIS shall pay a design fee covering the related expenses with a 5% mark-up.
  - l. Under a product and technology development agreement entered into by VIS and Etron Technology Inc., VIS shall pay a specific amount of development fee within seven years and a specific percentage of net sales of certain product from September 1998.
  - m. VIS provides guarantee of borrowings of VIS America for US\$1,500 thousand
  - n. Under a management agreement entered into by TSMC and InveStar Capital Inc. (ISC) of the Cayman Islands provides investment and administrative services to TSMC for which ISC shall receive quarterly, commencing from October 1, 1996, a management fee of 2% each year of total weighted average paid-in capital and capital surplus of TSMC excluding retained earnings and losses.
  - o. WaferTech has recorded a reserve of USD 16,000 thousand for the litigation. The litigation alleges that the Company caused the contractors to incur additional labor and material costs outside the contracts. The reserve is reflected in accrued construction and equipment payables with the offset to construction in progress. On January 19, 2000, WaferTech entered into a settlement agreement with one of the construction contractors in the amount of USD \$10,750 thousand. Payment of the settlement amount will be made in four installments throughout fiscal year 2000.
  - p. In 1996, WaferTech adopted an Executive Incentive Plan, which was amended in 1997. Under the 1997 amendment, the Board of Directors approved the Senior Executive Incentive Plan and the Employee Incentive Plan ("Plan") under which officers, key employees and nonemployee directors may be granted option rights. As WaferTech is a limited liability company and does not have shares of stock, each option right granted pursuant to the Plans provides grantees rights to purchase ownership interests in WaferTech. The Plans provide for approximately 6% of the total ownership interests to be available for grant, represented by 13.5 million option rights. For option rights granted to date, the option purchase price exceeded fair value at the date of grant. While WaferTech may grant option rights to employees which become exercisable at different times or within different periods, it has generally granted option rights to employees which are exercisable on a cumulative basis in annual installments of 33-1/3% each on the third, fourth and fifth anniversaries of the date of grant.

The following table summarizes information about the Plans:

	Option Rights Available For Grant	Outstanding Option Rights	
		Number of Option Rights	Exercise Price
Balance, January 1, 1999	6,400,252	7,099,748	0.74
Options granted			
Option price > fair market value	(3,084,305)	3,084,305	0.86
Options exercised	1,119,323	(1,119,323)	0.74
Options canceled	<u>838,650</u>	<u>(838,650)</u>	0.74
Balance, December 31, 1999	<u>5,273,920</u>	<u>8,226,080</u>	0.78

These options will expire if not exercised at specific dates from May 2006 to December 2009.

WaferTech has elected to follow U. S. APB Opinion No. 25, "Accounting for Stock Issued to Employees," in accounting for its option plan. Under APB No. 25, because the exercise price of WaferTech's option rights exceeds the market value of the underlying ownership interests on the date of grant, no compensation expense is recognized in WaferTech's financial statements. WaferTech has computed for pro forma disclosure purposes the fair value of each option grant, as defined by U.S. Statement of Financial Accounting Standards No. 123, "Stock-Based Compensation" (SFAS 123), using the Black-Scholes option pricing model with the following assumptions:

	1999
Risk free interest rate	7.00%
Expected dividend yield	0
Expected lives	5 years

As WaferTech is not publicly traded, a volatility factor was not utilized in the pricing computation.

q. TSMC provides collateral for loans of US\$68,000 thousand obtained by TSMC Development, Inc.

r. TSMC has unused credit lines as of December 31, 1999 aggregating about \$138,738.

s. VIS has unused letters of credit aggregating about US\$3,576 thousand and JPY601,375 thousand.

t. TASMIC has unused credit lines as of December 31, 1999 aggregating about \$1,030,451.

u. TASMIC has entered into a technology licensing agreement with other companies in June 1998. According to the agreement, TASMIC would pay certain technical service fees in several installments to obtain logic IC manufacturing technologies.



**(21) OTHER SIGNIFICANT EVENTS**

TSMC has two merger agreements signed on December 30, 1999 and January 7, 2000, with TASMIC and WSMC, respectively. TSMC will acquire and merge TASMIC and WSMC. TSMC shall be the surviving company, and TASMIC and WSMC shall be dissolved after the merger. The consolidation date is tentatively scheduled for June 30, 2000. The agreed exchange ratio is five shares of TASMIC to one share of TSMC, (The exchange ratio will be adjusted again based on the same proportion of TSMC's stock dividends once such dividends are declared by the consolidation date.), and two shares of WSMC to one share of TSMC. The Agreement shall be further granted approval by the shareholders from both companies and the governing regulator. The capital of TSMC will be expected to increase by 1,488,684 thousand shares of common stock (such number will be adjusted after declaration of TSMC's 1999 stock dividend.)

**(22) FINANCIAL INSTRUMENTS**

The Company entered into derivative financial instrument transactions for the twelve months ended December 31, 1999 to hedge foreign-currency denominated receivables or payables, interest rate fluctuations and identifiable foreign currency commitments. The strategy is to hedge most of the market price risks. Certain information on these contracts is as follows:

a. Outstanding forward exchange contracts as of December 31, 1999:

1999	Currency	Contract Amount (Thousands)	Fair Value (Thousands)	Maturity	Maturity Amount (Thousands)
Buy	US\$	US\$ 25,000	JPY2,472,080	Jul. 2000	NTD 879,154
Buy	JPY	JPY1,916,783	US\$ 19,050	Feb. to Aug. 2000	USD 18,957
Buy	NLG	NLG 65,133	US\$ 30,185	Mar. to Sep. 2000	USD 31,604
Sell	US\$	US\$ 81,367	JPY8,303,350	Jan. to Jul. 2000	NTD 2,564,297
Sell	US\$	US\$ 16,000	NLG 34,926	Jan. 2000	NTD 497,159
Sell	US\$	US\$ 30,000	NTD 941,847	Jan. 2000	NTD 947,880
Sell	US\$	US\$ 23,000	NTD 721,769	Jan. to Jun. 2000	NTD 725,426

Receivables and payables from forward exchange contracts (shown in the balance sheets as part of "Other current assets" or "Other current liabilities" accounts) as of December 31, 1999 aggregate about \$29,797 and \$147,314, respectively.

Net exchange gains for the year ended December 31, 1999 was \$108,695.

The net assets or liabilities hedged by the above forward exchange contracts are as follows:

	<u>Thousands</u>
	<u>1999</u>
Accounts receivable	US\$ 415,537
Accounts payable and other payable - construction and equipment	151,392
Guarantee deposits	764,765
Commitments for purchase of properties	JPY1,916,783
	NLG 65,133

b. Interest rate swaps

Interest rate swap transactions entered into to hedge exposure to rising interest rates on its floating rate for long-term bank loans. These transactions are summarized as follows:

Contract Date	Period	Amount(Thousands)
April 28, 1998	May 21, 1998 to May 21, 2003	NTD2,000,000
April 29, 1998	May 21, 1998 to May 21, 2003	NTD1,000,000
June 26, 1998	June 26, 1998 to June 26, 2003	NTD1,000,000
June 26, 1998	July 6, 1998 to July 6, 2003	NTD1,000,000
October 13, 1997	October 15, 1997 to October 15, 2000	USD 100,000
April 27, 1998	April 29, 1998 to October 29, 2000	USD 50,000
October 26, 1997	October 28, 1997 to October 28, 2000	USD 50,000
December 9, 1997	December 11, 1997 to December 11, 2000	USD 50,000
January 14, 1998	January 16, 1998 to January 16, 2003	USD 5,000

Interest revenue and expense on these loans for the twelve months ended December 31, 1999 were \$2,927 and \$112,213, respectively.

c. Option contracts

Foreign currency option contracts are entered into by TSMC to hedge risks of exchange rate fluctuations arising from its anticipated U.S. dollar cash receipts from its export sales or Japanese Yen obligations related to its importation of materials and machinery and equipment.

Outstanding option contracts as of December 31, 1999 were as follows:

Contract	Currency	Contract Amount (Thousands)	Carrying Value	Fair Value	Strike Price	Maturity
Call option sell	US\$	US\$100,000	\$3,911	\$3,911	\$0.9785–0.9940 (US\$/EUR)	Jan 2000
Call option sell	US\$	US\$60,000	3,035	3,035	106.6 (US\$/JPY)	Jan 2000

For the twelve months ended December 31, 1999, the Company realized premium income of \$63,809 on foreign currency put options written and incurred losses of \$86,746 on foreign currency call options bought.

d. Exchange and interest rate swap

Exchange and interest rate swap are entered into by TASMCO to hedge foreign currency needs arising from transactions of imports, exports and the financing arrangement of foreign currency. These transactions are summarized as follows:

December 31, 1999				
National Amount	Maturity date	Interest rate range - Paid	Interest rate range - Received	
USD 13,333	September 23, 2000	90 day NTD rate plus 0.28%	Six month USD LIBOR	
USD 14,286	May 29, 2002	90 day NTD rate plus 0.28%	Six month USD LIBOR	
USD 14,286	May 29, 2002	90 day NTD rate plus 0.28%	Six month USD LIBOR	
USD 7,143	May 29, 2002	90 day NTD rate plus 0.25%	Six month USD LIBOR	
USD 10,000	April 19, 2000	90 day NTD rate plus 0.1%	Three month USD LIBOR	
USD 5,000	April 19, 2000	90 day NTD rate plus 0.1%	Three month USD LIBOR	
USD 8,333	April 22, 2002	90 day NTD rate plus 0.14%	Six month USD LIBOR	

As of December 31, 1999, payables from exchange and interest rate swap aggregate about \$53,330 (shown in the balance sheets as part of "Other current liabilities" account). Foreign exchange loss and interest expense arising from these contracts for the twelve months ended December 31, 1999 were \$77,786 and \$39,556, respectively.

e. Transaction risk

- 1) Credit risk: the banks with which the Company has entered into the above contracts are reputable and, therefore, the Company is not expected to be exposed to significant credit risks.
- 2) Market price risk: All derivative financial instruments are for hedging receivables or payables denominated in foreign currencies, interest rate fluctuations and foreign currency commitments. Gains or losses from forward exchange contracts for hedging foreign currency denominated assets or liabilities are likely to be offset by gains or losses realized. Gain or loss from hedging an identifiable foreign currency commitment is deferred to the actual transaction date and recorded as an adjustment to the transaction price. Interest rate risks are also controlled as the expected cost of capital is fixed. Thus, market price risks from exchange rate and interest rate fluctuations are minimal.
- 3) Liquidity and cash flow: The purpose of forward exchange contracts and option contracts is to limit the Company's exposure to loss resulting from adverse fluctuations in assets and liabilities denominated in foreign currency and foreign currency purchase commitments. Interest rate swap transactions result in adjustments for interest only. Therefore, no significant extra cash requirement is expected.

f. The estimated fair values of the company's financial instruments are as follows:

	December 31, 1999	
	Carrying/Notional Amount	Fair Value
<u>Non-derivative financial instruments</u>		
<u>Assets</u>		
Cash and cash equivalents	\$23,235,699	\$23,235,699
Short-term investments	927,216	2,554,428
Receivables from related parties	1,114,259	1,114,259
Accounts and notes receivable	15,321,321	15,321,321
Long-term investments	7,130,226	12,232,277
Refundable deposits	37,596	37,596
<u>Liabilities</u>		
Payable to related parties	468,628	468,628
Notes and Accounts payable	4,473,284	4,473,284
Other payable - construction and equipment	10,728,272	10,728,272
Bank loans (includes current portion)	62,151,153	62,219,503
Guarantee deposits	5,185,362	5,185,362
<u>Derivative financial instruments</u>		
Forward exchange contracts (buy)	2,372,219	2,306,638
Forward exchange contracts (sell)	4,718,598	4,719,877
Interest rate swaps	9,898	8,750
Option	6,946	6,946

Fair values of financial instruments were determined as follows:

- 1) Short-term financial instruments -- carrying values.
- 2) Short-term investments -- market values.
- 3) Long-term investments - market value for listed companies and net equity value for the others.
- 4) Refundable deposits -- carrying values.
- 5) Long-term bank loans are forecasted using cash flows discounted at present value, using discount rates which are interest rates of similar long-term liabilities. Long-term bonds payable are discounted at present values. Fair values of other long-term liabilities are also their carrying values as they use floating interest rates.
- 6) Derivative financial instruments -- based on outright forward rates and interest rate in each contract.
- 7) Financial instruments or non-financial instruments are not necessarily all disclosed at fair values; accordingly, the sum of the fair values of the financial instruments listed above does not equal to the fair value of TSMC and its affiliates.

**(23) SEGMENT FINANCIAL INFORMATION**

a. Geographic information

1999	Overseas	Domestic	Adjustments and Elimination	Combined
Sales to unaffiliated customers	\$12,059,737	\$83,427,959	\$ -	\$95,487,696
Transfers between geographic areas	<u>975,431</u>	<u>4,696,218</u>	<u>(5,671,649)</u>	<u>-</u>
Total sales	<u>\$13,035,168</u>	<u>\$88,124,177</u>	<u>(\$5,671,649)</u>	<u>\$95,487,696</u>
Gross profit	<u>\$4,962,308</u>	<u>\$30,628,570</u>	<u>(\$5,671,649)</u>	<u>\$29,919,229</u>
Operating expenses				(10,773,428)
Non-operating income				3,634,987
Non-operating expenses				<u>(7,863,940)</u>
Income before income tax				<u>\$14,916,848</u>
Minority interest				<u>(\$8,577,645)</u>
Identifiable assets	<u>\$34,807,935</u>	<u>\$204,829,696</u>	<u>(\$801,411)</u>	\$238,836,220
Long-term investments				<u>7,130,226</u>
Total assets				<u>\$245,966,446</u>

b. Gross Export sales

Area	1999
America	\$42,591,567
Asia	17,445,429
Europe	6,769,052
Others	<u>2,603</u>
	<u>\$66,808,651</u>

The export sales information of TSMC is presented by billed regions.

c. No single customer accounts for more than 10% of total sales.

**(24) ADDITIONAL DISCLOSURES REQUIRED FOR PUBLIC COMPANIES**

According to the requirements of SFC as announced on March 31, 1999, TSMC and affiliates should make additional disclosures as follows:

- a. Financing provided to related parties: please see table 1 attached.
- b. Collateral provided to related parties: please see table 2 attached.
- c. Marketable Securities held at the end of the year: please see table 3 attached.
- d. Balance of Marketable securities acquired, disposed of and held, exceeding 100 million or 20% of the issued capital: please see table 4 attached.
- e. Acquisition of long-term equity investment, properties exceeding 100 million or 20% of issued capital: please see table 5 attached.
- f. Transaction of purchase or sales with related parties amounting to more than 100 million or 20% of the issued capital: please see table 6 attached.
- g. Receivable from related parties amounting to more than 100 million or 20% of the issued capital : please see table 7 attached.
- h. Financial instruments of the investees: none
- i. Information on investees on which the Company exercises significant influences: please see table 8 attached.

Taiwan Semiconductor Manufacturing Company Ltd.,  
TSMC-Acer Semiconductor Manufacturing Inc. and Vanguard  
International Semiconductor Corporation

Financing provided to related parties  
For the twelve months ended December 31, 1999

Table 1

(Amounts in Thousand New Taiwan Dollars, unless otherwise specified)

Financing provider	Accounts	Transaction entity	Limit on	Maximum balance for the period	Ending balance (thousand)	Interest	Issue	Allowance for bad debt per book	Mortgage Item Value	Transaction amount	Financing limit (Note2)
0	TSMC	Receivables from related parties	SSMC (Note1) WaferTech, LLC TSMC Japan K.K. TSMC Technology VIS TASMC	\$ 5,597 350,969 184,877 17,550 47,753 2,750 9,777	\$ 5,353 - 184,877 17,550 47,343 1,608 4,159	-	Payments for others Sale of Equipment Excess on payment made Payments for others Payments for others Payments for others Payments for others	\$ - - - - - - -	- - - - - - -	\$ 5,597 350,969 184,877 17,550 47,753 2,750 9,777	\$ 15,341,763
		Prepaid rents	ITRI	80,985	42,541	-	Rental expenditure	-	-	161,488	
		Prepayments to Suppliers	WaferTech, LLC	662,029	-	-	Sales receipts	-	-	4,636,780	
1	BVI	Other receivables	TSMC Development TSMC Technology	USD 304,077 USD 13,112	USD 304,077 USD 13,112	7.75% 7.75%	Operating capital Operating capital	- -	- -	- -	- -
2	VIS	Receivables from related parties	TSMC (Note 1) ITRI	20,400 50	20,400 -	-	Rental income and technology revenue Return on royalty	408 -	- -	407,538 -	
		Prepaid expenses	VIS-America	78,510	-	-	Prepayments for product development	-	-	355,246	

Note 1: not exceeding 10% of the issued capital of the Company for each transaction entity, but also limiting to 30% of the issued capital of each transaction entity

Note 2: not exceeding 20% of the issued capital of the Company

Taiwan Semiconductor Manufacturing Company Ltd.,  
TSMC-Acer Semiconductor Manufacturing Inc. and Vanguard  
International Semiconductor Corporation

Collateral provided to related parties  
For the twelve months ended December 31, 1999

Table 2 (Amounts in Thousand New Taiwan Dollars, unless otherwise specified)

Collateral provider No.	Transaction Entity Name	Nature of the relationship	Limitation on amount of collateral	Maximum outstanding amount (Thousands)	Ending balance (Thousands)	Amount of collateral guaranteed by properties	% of accumulated amount of collateral on net equity of the latest financial statement	Limit on amount of collateral provided(Note 1)	
0	TSMC	TSMC Development	Affiliate of TSMC	(Note 2 )with the exception of approval by BOD	\$ 4,608,276 (USD 145,500)	\$ 2,134,860 (USD 68,000)	-	1.77%	\$ 23,012,645
1	VIS	VIS- America	Subsidiary of VIS Affiliates Inc.	(Note 2)	46,950 (USD1,500)	46,950 (USD1,500)	-	0.24%	6,600,000

Note 1: 30% of the issued capital of the Company

Note 2: not exceeding 10% of the issued capital of the Company, but limiting to the issued capital of the collateral provider.



**Taiwan Semiconductor Manufacturing Company Ltd.,  
TSMC-Acer Semiconductor Manufacturing Inc. and Vanguard  
International Semiconductor Corporation**

**Marketable Securities held as of December 31, 1999**

Table 3

(Amounts in Thousand New Taiwan Dollars, unless otherwise specified)

TSMC:

Type	Marketable securities	Relation with the issuer	Account	December 31, 1999			
				Shares (thousand)	Carrying value	% of ownership	Market value or net asset value
Stock	Taipei Bank	-	Short-term investment	8,750	\$ 236,250	N/A	\$ 241,850
	TSMC North America	Subsidiary	Long-term investment	1,000	255,025	100	255,025
	TSMC Europe B.V.	Subsidiary	Long-term investment	-	25,956	100	25,956
	TSMC Japan K.K.	Subsidiary	Long-term investment	1	10,168	100	10,168
	VIS	Investee	Long-term investment	556,133	5,010,897	25	19,575,899
	TSMC International Investment, Ltd.	Subsidiary	Long-term investment	389,788	12,454,280	100	12,454,280
	Po Cherng Investment Co., Ltd.	Investee	Long-term investment	-	103,017	25	103,017
	Chi Hsin Investment Co., Ltd.	Investee	Long-term investment	-	103,012	25	103,012
	Kung Cherng Investment Co., Ltd.	Investee	Long-term investment	-	102,773	25	102,773
	Chi Cherng Investment Co., Ltd.	Investee	Long-term investment	-	102,770	25	102,770
	Hsin Ruey Investment Co., Ltd.	Investee	Long-term investment	-	103,003	25	103,003
	Cherng Huei Investment Co., Ltd.	Investee	Long-term investment	-	103,005	25	103,005
	TSMC Partners, Ltd.	Subsidiary	Long-term investment	300	9,968	100	9,968
	SSMC	Investee	Long-term investment	26	360,177	32	360,177
	TASMC (Common)	Investee	Long-term investment	348,936	3,630,193	32	1,841,747
	TASMC (Preferred)	Investee	Long-term investment	376,815	4,854,742	28	3,768,150
	Taiwan Mask Corp.	-	Long-term investment	6,261	32,129	2	177,743
	United Industrial Gases Co., Ltd.	-	Long-term investment	10,058	146,250	11	154,477
	Shin-Etsu Handotai Taiwan Co., Ltd.	-	Long-term investment	10,500	105,000	7	74,290
	W.K. Technology Fund IV	-	Long-term investment	5,000	50,000	4	67,040
Taiwan Semiconductor Technology Corp.	-	Long-term investment	50,000	500,000	19	458,340	
Hon Tung Ventures Capital	-	Long-term investment	8,000	80,000	10	80,157	
Fund	Crimson Asia Capital	-	Long-term investment	N/A	34,534	N/A	34,534
	Horizon Ventures Fund	-	Long-term investment	N/A	31,744	N/A	31,744

TSMC International Investment, Inc.:

Stock	InveStar Semiconductor Development Fund Inc.	Subsidiary	Long-term investment	45,000	USD 48,778	97	USD 48,778
	TSMC Development	Subsidiary	Long-term investment	1	USD 42,018	100	USD 42,018
	TSMC Technology	Subsidiary	Long-term investment	1	(USD 2,020)	100	(USD 2,020)
	3DFX, Interactive	-	Long-term investment	68	USD 297	-	USD 625

## VIS:

Type	Marketable securities	Relation with the issuer	Account	December 31, 1999			Market value or net asset value
				Shares (thousand)	Carrying value	% of ownership	
Stock	VIS Associates Inc.	Investee	Long-term investment	23,570	765,530	100	Note
	Powerchip Semiconductor Corp.	Investee	Long-term investment	151,110	2,651,216	9	7,238,856
	Walson Advanced Electronics Ltd.	Investee	Long-term investment	31,410	414,481	10	Note
	Etron Technology, Inc.	Investee	Long-term investment	5,775	386,545	5	614,483
	MEGIC Corporation	Investee	Long-term investment	15,000	150,000	15	Note
	Form Factor Inc.	Investee	Long-term investment	267	64,360	1	Note
	United Industrial Gases Co., Ltd.	Investee	Long-term investment	2,011	29,250	2	Note

## TSMC Development:

## Equity

Interest	WaferTech, LLC	Subsidiary	Long-term investment	-	USD 401,464	68	USD 401,464
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## InveStar Semiconductor Development Fund Inc.:

## Stock

Common	Global Test Corp.		Long-term investment		71,613	5	74,738
	Chipstrate Technology, Inc.		Long-term investment		32,927	2	35,874
	Rictech Technology, Inc.		Long-term investment		7,407	1	7,587
	Sage, Inc		Short-term investment		45,523	-	251,663
	Silicon Image		Short-term investment		47,093	-	942,692
	Scenix Semiconductor, Inc		Long-term investment		5,407	-	5,407
	Vtesse Semiconductor		Short-term investment		21,617	-	110,004
Preferred	Programmable Microelectronics Corp.		Long-term investment		47,092	3	62,162
	Marvell Technology Group, Ltd.		Long-term investment		139,055	10	150,985
	Integrated Memory Logic, Inc.		Long-term investment		23,546	2	23,546
	Divio, Inc. (Next Wave Technology, Inc.)		Long-term investment		15,698	1	45,000
	Integrated Micromachines, Inc.		Long-term investment		4,709	-	5,651
	SIRF Technology, Inc.		Long-term investment		41,860	3	54,418
	Rise Technology Company		Long-term investment		47,092	3	47,093
	Capella Microsystems, Inc.		Long-term investment		12,040	1	9,368
	Sensory, Inc.		Long-term investment		39,244	3	39,244
	Flow Wise Networks, Inc.		Long-term investment		15,697	1	11,228
	Equator Technologies, Inc.		Long-term investment		42,011	3	42,011
	Light Speed Semiconductor, Corp.		Long-term investment		68,562	5	101,238
	Centillum Technology, Corp.		Long-term investment		23,546	2	28,256
	Scenix Semiconductor, Inc.		Long-term investment		66,277	5	42,731
	Lara Technology, Inc.		Long-term investment		83,197	6	117,446
	Rapid Stream, Inc.		Long-term investment		32,965	2	70,152
	Troopian, Inc. (Premier R.F. Inc.)		Long-term investment		31,395	2	61,824
	Krypton Isolation, Inc.		Long-term investment		39,244	3	39,244

InveStar Semiconductor Development Fund Inc.:

Type	Marketable securities	Relation with the issuer	Account	December 31, 1999			
				Shares (thousand)	Carrying value	% of ownership	Market value or net asset value
	Menolithi Power System, Inc.		Long-term investment		62,790	4	62,790
	Formfactor, Inc.		Long-term investment		62,790	4	62,790
	Reflectivity, Inc.		Long-term investment		62,790	4	62,790
	Signia, Inc.		Long-term investment		47,090	3	47,093
Warrant	Flow Wise Networks, Inc.		Long-term investment		6	-	6
Convertible notes	Rise, Inc		Long-term investment		9,419	1	9,419
	Integrated Memory Logic, Inc.		Long-term investment		31,395	2	31,395
	Sonics, Inc.		Long-term investment		23,546	2	23,546

Note: No market value available for unlisted stocks.

**Taiwan Semiconductor Manufacturing Company Ltd.,  
TSMC-Acer Semiconductor Manufacturing Inc. and Vanguard  
International Semiconductor Corporation**

**Balance of Marketable securities acquired, disposed of and held exceeding 100 million or 20% of the issued capital  
For the twelve months ended December 31, 1999**

Table 4 (Amounts in Thousand New Taiwan Dollars, unless otherwise specified)

TSMC:

Marketable Securities	Balance. as of January 1, 1999		Acquisition		Disposal		Balance as of December 31, 1999		Gain(loss) on disposal
	No. of shares (thousands)	Amount (thousands)	No. of shares (thousands)	Amount (thousands)	No. of shares (thousands)	Amount (thousands)	No. of shares (thousands)	Amount (thousands) (Note 1)	
International Commercial Bank of China- stock	4,117	\$ 144,095	-	\$ -	4,117	\$ 114,095	-	\$ -	\$ 9,025
The Wan Pao Securities Investment Trust Fund	-	-	13,385	164,000	13,385	164,000	-	-	873
China Money Mgm't Securities Investment Trust Fund	-	-	8,829	110,000	8,829	110,000	-	-	760
Kwang Hua Bond Fund	-	-	13,574	170,000	13,574	170,000	-	-	1,227
Jin-sun Bond Fund	-	-	15,113	170,000	15,113	170,000	-	-	1,227
Capital Safe Income Securities Investment Trust Fund	-	-	14,015	170,000	14,015	170,000	-	-	1,212
First Global Investment Trust Wan Tai Bond Fund	-	-	15,443	180,000	15,443	180,000	-	-	1,192
President Home run Bond Fund	-	-	13,814	160,000	13,814	160,000	-	-	1,061
Grand Cathay Bond Fund	-	-	18,612	200,000	18,612	200,000	-	-	1,292
TASMC- common stock	-	-	348,936	3,314,892	-	-	348,936	3,630,193	-
TASMC- preferred stock	-	-	376,815	4,854,742	-	-	376,815	4,854,742	-
Systems on Silicon Manufacturing Company(SSMC) - stock	-	-	26	442,792	-	-	26	360,177	-
Etron Technology, Inc. - stock	5,156	386,545	-	-	5,156	386,545	-	-	(1,160)
TSMC International Investment Ltd. - stock	379,788	11,096,090	85,000	2,705,400	-	-	464,788	12,454,280	-
TSMC North America - stock	1,000	178,294	-	-	-	-	1,000	255,025	-
VIS - stock	521,418	4,723,014	34,716	694,320	-	-	556,133	5,010,897	-
Po Cherng Investment Co, Ltd. - stock	-	100,657	-	-	-	-	-	103,017	-
Chi Hsin Investment Co, Ltd. - stock	-	100,659	-	-	-	-	-	103,012	-
Kung Cherng Investment Co, Ltd. - stock	-	100,680	-	-	-	-	-	102,773	-
Chi Cherng Investment Co, Ltd. - stock	-	100,661	-	-	-	-	-	102,770	-
Hsin Ruey Investment Co, Ltd. - stock	-	100,641	-	-	-	-	-	103,003	-
Cherng Huei Investment Co, Ltd. - stock	-	100,643	-	-	-	-	-	103,005	-
Taiwan Semiconductor Technology Corp. - stock	50,000	500,000	-	-	-	-	50,000	500,000	-
United Industrial Gases Co., Ltd. - stock	8,746	146,250	-	-	-	-	10,058	146,250	-
Shin-Etsu Handotai Taiwan Co., Ltd. - stock	10,500	105,000	-	-	-	-	10,500	105,000	-
Taipei Bank - stock	-	-	10,000	270,000	1,250	33,750	8,750	236,250	613
U.S. TREASURY NOTES	-	2,820,718	-	-	-	2,820,718	-	-	-
U.S.AGENCY BACKED BONDS	-	864,202	-	988,405	-	1,852,607	-	-	-
FEDERAL HOME LN MTG CORP	-	612,422	-	-	-	612,422	-	-	-
FNMA	-	240,753	-	-	-	240,753	-	-	-
NATIONS BANK CORP NOTE	-	103,977	-	-	-	103,977	-	-	-
NORWEST CORP MTN	-	67,427	-	63,010	-	130,437	-	-	-
ABN AMRO BK GLOBAL SUB-NOTE	-	66,599	-	52,523	-	119,122	-	-	-

Marketable Securities	Balance as of January 1, 1999		Acquisition		Disposal		Balance as of December 31, 1999		Gain(loss) on disposal
	No. of shares (thousands)	Amount (thousands)	No. of shares (thousands)	Amount (thousands)	No. of shares (thousands)	Amount (thousands)	No. of shares (thousands)	Amount (thousands) (Note 1)	
DISCOVERY CARD MASTER TIER I SERIAL 98-4	-	-	-	128,373	-	128,373	-	-	-
CITI CORP MTN	-	50,172	-	114,902	-	165,074	-	-	-
<b>TSMC International Investment Ltd.:</b>									
InveStar Semiconductor Development Fund Inc. - stock	45,000	USD 45,009	-	-	-	-	45,000	USD 48,778	-
TSMC Development Inc. - stock	1	USD 12,705	-	USD 85,000	-	-	1	USD 42,018	-
<b>VIS:</b>									
Etron Technology, Inc. - stock	-	-	5,156	386,545	-	-	5,775	386,545	-
Powerchip Semiconductor Corp. - stock	-	-	151,110	2,651,216	-	-	151,110	2,651,216	-
MEGIC Corporation - stock	-	-	15,000	150,000	-	-	15,000	150,000	-
VIS Associates, Inc. - stock	23,570	780,247	-	-	-	-	23,570	765,530	-
Walsin Advanced Electronics Ltd. - stock	31,410	414,481	-	-	-	-	31,410	414,481	-
<b>TSMC Development:</b>									
WaferTech, LLC - equity interest	-	USD 287,468	-	USD 145,065	-	-	-	-USD 401,464	-
<b>TASMC:</b>									
Grand Cathay Bond Fund	-	-	27,012	288,900	27,012	288,900	-	-	313
The GP ROC Bond Fund	3,340	40,000	32,420	396,500	35,760	436,500	-	-	1,116
Money Mgmt Fund	-	-	47,692	576,500	47,692	576,500	-	-	826
Money Mgmt II Fund	890	10,079	266,111	3,114,500	267,001	3,124,579	-	-	5,254
The First Global Fixed Income II Fund	-	-	8,182	100,000	8,182	100,000	-	-	128
Kwang Hua Bond Fund	-	-	150,394	1,874,700	150,394	1,874,700	-	-	3,289
Taiwan Bond Fund	-	-	16,732	192,500	16,732	192,500	-	-	291
Bond Fund	-	-	1,234	166,100	1,234	166,100	-	-	368
Increment Securities Investment Trust Fund	-	-	25,007	304,000	25,007	304,000	-	-	333
Sheng Hua 1699 Bond Fund	-	-	252,236	2,559,500	252,236	2,559,500	-	-	5,477
Truswell Bond Fund	-	-	18,886	199,500	18,886	199,500	-	-	285

Note 1: Balance as of December 31, 1999 includes investment gain or loss recognized by equity method and accumulated translation adjustment.

**Taiwan Semiconductor Manufacturing Company Ltd.,  
TSMC-Acer Semiconductor Manufacturing Inc. and Vanguard  
International Semiconductor Corporation**

**Acquisition of long-term equity investment, properties exceeding 100 million or 20% of issued capital  
For the twelve months ended December 31, 1999**

Table 5 (Amounts in Thousand New Taiwan Dollars, unless otherwise specified)

TSMC:

Property	Transaction Date	Transaction amount	Payment term	Transaction entity	Nature of relationship	Former transaction detail when transacting with related parties				Reference of price determined	Purpose of acquisition	Other commitments
						Owner	Relationship	Transfer date	Amount			
TSMC International Investment Ltd. - stock	88/04/21	\$ 330,000	Lump-sum payment	TSMC International Investment Ltd.	-	N/A	N/A	N/A	N/A	Approval of board of directors	Long-term investment	None
	88/12/29	2,375,400	Lump-sum payment									
SSMC-Stock	88/04/14	30,496	Lump-sum payment	SSMC	-	N/A	N/A	N/A	N/A	Issuance price of the cash subscription	Long-term investment	None
	88/07/19	158,080	Lump-sum payment									
	88/10/21	254,216	Lump-sum payment									
TASMC-Stock	88/07/21	5,469,634	Lump-sum payment	Acer Inc. and China Development Corporation	-	N/A	N/A	N/A	N/A	Expert opinion	Long-term investment	None
	88/09/14	2,700,000	Lump-sum payment	TASMC	-	N/A	N/A	N/A	N/A	Issuance price of the cash subscription	Long-term investment	None
VIS-Stock	88/09/30	694,320	Lump-sum payment	VIS	-	N/A	N/A	N/A	N/A	Issuance price of the cash subscription	Long-term investment	None

TSMC International Investment Ltd.:

TSMC Development - stock	88/04/21	USD 10,000	Lump-sum payment	TSMC Development	-	N/A	N/A	N/A	N/A	Approval of board of directors	Long-term investment	None
	88/12/29	USD 75,000	Lump-sum payment									

TSMC Development:

WaferTech, LLC - equity interest	88/01/28	USD 77,501	Lump-sum payment	Analog Devices, Inc (ADI) Integrated Silicon Solution, Inc. (ISSI)	Customer of TSMC	N/A	N/A	N/A	N/A	Contract price	Long-term investment	None
	88/10/13	67,564	Lump-sum payment	WaferTech, LLC	-	N/A	N/A	N/A	N/A	Approval of board of directors	Long-term investment	None

VIS:

MEGIC Corporation - stock	88/05/18	\$ 150,000	Lump-sum payment	MEGIC Corporation	-	N/A	N/A	N/A	N/A	Par value of new stock issuance	Long-term investment	None
Etron Technology, Inc. - stock	88/08/10	386,515	Lump-sum payment	TSMC	Shareholder of the company	Kingwell Investment Corp. & Wellta Investment Corp. etc.	N/A	87/11/25	386,545	Contract price approved by board of director	Long-term investment	None
Powerchip Semiconductor Corp. - stock	88/08/10	2,651,216	Installments	Mitsubishi Electric Corp. & Kanematsu Corp. etc.	-	N/A	N/A	N/A	N/A	Contract price approved by board of director	Long-term investment	None

**Taiwan Semiconductor Manufacturing Company Ltd.,  
TSMC-Acer Semiconductor Manufacturing Inc. and Vanguard  
International Semiconductor Corporation**

**Transaction of purchase or sales with related parties amounting to more than 100 million or 20% of the issued capital  
For the twelve months ended December 31, 1999**

Table 6

(Amounts in Thousand New Taiwan Dollars, unless otherwise specified)

TSMC:

Transaction party	Nature of relationship	Transaction Detail				Abnormal transaction		Notes, accounts payable or receivables	
		Purchase (Sales)	Amount	%	Collection terms	Unit price	Collection terms	Ending Balance	%
Phillips and its affiliates	Major shareholder	Sales	\$ 2,864,149	4	Net 30 days from monthly closing date	None	None	\$ 133,245	28
WaferTech, LLC	Indirect investee of the subsidiary (TSMC International Investment, Ltd.)	Purchase	4,636,780	40	Net 30 days from monthly closing date	None	None	(730,483)	(38)
ITRI	It's director is TSMC's chairman	Sales	132,507	-	Net 45 days from monthly closing date	None	None	18,458	4
TASMC	Investee	Purchase	808,926	7	Net 30 days from monthly closing date	None	None	(539,466)	(28)
VIS	Investee	Purchase	381,989	3	Net 30 days from monthly closing date	None	None	(184,741)	(10)

VIS:

TSMC	Major shareholder	Sales	378,754	3	Net 45 days from monthly closing date	None	None	170,533	
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WaferTech, LLC:

TSMC	Major shareholder	Sales	4,636,780	98	Net 30 days from monthly closing date	None	None	730,483	100
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TASMC:

Apacer Technology, Inc.	Investee of AI	Sales	3,673,798	34	Net 30 days from monthly closing date	None	None	632,380	42
Acer Inc.	Investee of AI	Sales	839,568	8	Net 30 days from monthly closing date	None	None	166,765	11
TSMC	Major shareholder	Sales	780,808	8	Net 30 days from monthly closing date	None	None	568,055	37
Addonics Technology Corp.	Investee of AI	Sales	459,969	4	14 days	None	None	-	-
Aopen Inc.	Investee of AI	Sales	317,301	3	14 days	None	None	120,020	8
Taiwan Semiconductor Technology Corp.	Investee of AI	Sales	211,357	2	14 days	None	None	31,711	2

**Taiwan Semiconductor Manufacturing Company Ltd.,  
TSMC-Acer Semiconductor Manufacturing Inc. and Vanguard  
International Semiconductor Corporation**

**Receivable from related parties amounting to more than 100 million or 20% of the issued capital  
For the twelve months ended December 31, 1999**

Table 7

(Amounts in Thousand New Taiwan Dollars, unless otherwise specified)

TSMC:

Transaction party	Nature of relationship	Ending balance	Turnover	Overdue		Amounts received from December 31, 1999 up-to-date	Allowance for bad debts accrued
				Amount	Management		
Phillips and its affiliates	Major shareholder	\$ 133,245	19 days	\$ 4,055	-	\$ 6,362	-
WaferTech, LLC	Indirect investee of TSMC International Investment Ltd.	( account receivables ) 13,286 ( account receivables )	60 days  N/A	225  -	-  -	213  -	-  -
		184,877 (excess on payment made )					

VIS:

TSMC	Major shareholder	190,933	89 days	-	-	-	3,819
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TSMC International Investment Ltd.:

TSMC Development	Subsidiary	1,672,552 (interest receivable )	N/A	-	-	-	-
		7,873,941 (notes receivable )	N/A	-	-	-	-
TSMC Technology	Subsidiary	97,717 (interest receivable )	N/A	-	-	-	-
		313,950 (notes receivable )	N/A	-	-	-	-

TASMC:

Apacer Technology Inc.	Investee of AI	632,380	42 days	81,872	-	-	-
TSMC	Major shareholder	568,055	133 days	8,063	-	-	-
Acer Inc.	Investee of AI	166,765	36 days	-	-	-	-
Addonics Technology Corp.	Investee of AI	120,020	69 days	109,078	-	-	-



**Taiwan Semiconductor Manufacturing Company Ltd.,  
TSMC-Acer Semiconductor Manufacturing Inc. and Vanguard  
International Semiconductor Corporation**

**Information on investee on which the Company exercises significant influences  
For the twelve months ended December 31, 1999**

Table 8 (Amounts in Thousand New Taiwan Dollars, unless otherwise specified)

Investee	Location	Business Activity	Owned by the company			Net Income(loss) of the investee	Investment income(loss) recognized	Note
			No. of shares (thousand)	%	Carrying value			
TSMC International Investment Ltd.	Tortola, British Virgin Islands	Investment	389,788	100	\$ 12,454,280	(\$ 1,007,218)	(\$ 1,007,218)	Subsidiary
VIS	Hsin-Chu, Taiwan	IC Design & manufacturing	556,133	25	5,010,897	(1,849,186)	(527,823)	Investee
TSMC North America	San Jose, California, USA	Marketing & Engineering Support	1,000	100	255,025	84,345	84,345	Subsidiary
TSMC Europe B.V.	Amsterdam, The Netherlands	Marketing & Engineering Support	-	100	25,956	5,572	5,572	Subsidiary
TSMC Japan K.K.	Yokohama, Japan	Marketing & Engineering Support	1	100	10,168	150	150	Subsidiary
Po Cherng Investment Co., Ltd.	Taipei, Taiwan	Investment	-	25	103,017	9,438	2,360	Investee
Chi Hsin Investment Co., Ltd.	Taipei, Taiwan	Investment	-	25	103,012	9,415	2,354	Investee
Kung Cherng Investment Co., Ltd.	Taipei, Taiwan	Investment	-	25	102,773	8,371	2,093	Investee
Chi Cherng Investment Co., Ltd.	Taipei, Taiwan	Investment	-	25	102,770	8,436	2,109	Investee
Hsin Ruey Investment Co., Ltd.	Taipei, Taiwan	Investment	-	25	103,003	9,448	2,362	Investee
Cherng Huei Investment Co., Ltd.	Taipei, Taiwan	Investment	-	25	103,005	9,446	2,362	Investee
TSMC Partners, Ltd.	Tortola, British Virgin Islands	Investment	300	100	9,968	121	121	Subsidiary
Systems on Silicon Manufacturing Company Pte Ltd. (SSMC)	Singapore	Wafer Manufacturing	26	32	360,177	(236,923)	(75,977)	Investee
TASMC - common	Hsin-Chu, Taiwan	IC Design & manufacturing	348,936	32	3,630,193	(6,127,604)	315,301	Investee
TASMC - preferred	Hsin-Chu, Taiwan	IC Design & manufacturing	376,815	28	4,854,742	-	-	Investee

## 2. Dividend Policy and Implementation Status

### (1) Dividend Policy (approved by the Board of Director; to be resolved in shareholders' meeting)

The dividend shall be allocated according to the following principles per resolution of the meeting of shareholders:

- 1) Except distribution of reserve in accordance with item 2) below, this Corporation shall not pay dividends or bonuses when there is no profit; however, where the legal capital reserve reaches over 50% of the authorized capital or the sums set aside as capital reserve in profitable years have exceeded 20% of such profits, this Corporation may, for the purpose of stabilization of market prices of this Corporation's shares, distribute the amount in excess as dividends and bonuses. Profits of this Corporation may be distributed by way of cash dividend and/or stock dividend. Since this Corporation is in a capital-intensive industry, distribution of profits shall be made preferably by way of stock dividend. Distribution of profits may also be made by way of cash dividend. Profits may be distributed in total after taking into consideration financial, business and operational factors.
- 2) In case there is no profit for distribution in a certain year, or the profit of a certain year is far less than the profit actually distributed by this Corporation in the previous year, or considering the financial, business or operational factors of this Corporation, this Corporation may allocate a portion or all of its reserves for distribution in accordance with relevant laws or regulations or the orders of the authorities in charge.

The dividend policy for the coming 3 years shall follow the principles above. This Corporation is in a growth stage and retained earning is to be re-invested. Distribution of profits for the coming 3 years is expected to be mostly in the form of stock dividend.

**(2) Implementation Status: Impact on Business Performance, EPS and return on investment for shareholders resulted from stock dividend distribution over the past two years.**

Unit: New Taiwan Dollars for earning per share; Thousand New Taiwan Dollars for other items

Item		Year	1998	1999
Paid in Capital (beginning of year)			40,813,000	60,471,760
Dividend Payment	Cash Dividend (per share)		-	-
	Stock Dividend from Retained Earnings (share/per share)		0.45	0.23
	Stock Dividend from Capital Surplus(share/per share)		-	-
Business Performance	Income from Operations		16,202,245	25,916,619
	% Change of Income from Operation (YOY)		4.60	59.96
	Net Income		15,344,203	24,559,884
	% Change of Net Income (YOY)		(14.56)	60.06
	Earnings Per Share		2.54	3.24
	% Change of EPS (YOY) (Note)		(14.48)	59.61
	Average Return on Investment (%)		2.52	2.77
	(Reciprocal of Average P/E Ratio)			
Pro Forma EPS & P/E Ratio	If Retained Earnings Distributed in Cash Dividend	Pro Forma Earnings Per Share	3.43	3.81
		Pro Forma Average Return on Investment (%)	3.40	3.25
	If Capital Surplus not Distributed in Stock Dividend	Pro Forma Earning Per Share	-	-
		Pro Forma Average Return on Investment (%)	-	-
	If Retained Earnings Distributed in Cash Dividend & Capital Surplus not Distributed in Stock Dividend	Pro Forma Earnings Per Share	-	-
		Pro Forma Average Return on Investment (%)	-	-

Note: Based on weighted average shares adjusted from stock dividend and employee stock bonus.

Financial data adopted in the table is as follows:

1. Financial statement as of December 31, 1999 and 1998 together with independent auditors' report at 24 January, 2000; and
2. Tax rates applied as effective tax rates, 5.9% for 1999 and 9.5% for 1998; and the annual rate based on Bank of Taiwan - 7.5%.

We have reviewed the historical financial information and underlying assumptions used in obtaining the pro forma data in the table. Based on our review, we are not aware of any material modification that should be made.

TN Soong & Co  
A Member Firm of Andersen Worldwide, SC  
Taipei, Taiwan  
The Republic of China

February 18, 2000

Note:

1. Pro Forma EPS if retained earnings are all distributed in cash dividend =  $[\text{Net Income} - \text{Pro Forma Interest Expenses on retained earnings if distributed in cash} \times (1 - \text{tax rate})] / (\text{number of shares at the end of year} - \text{number of shares from retained earning distributed in stock})$

Pro Forma Interest Expenses on retained earnings if distributed in cash = Retained earning distributed in stock x one-year prime rate

Number of shares from retained earning distributed in stock: The number of shares increased from previous year's retained earning distributed in stock

2. Avg. P/E ratio = Avg. share price / EPS

### 3. Statement of Internal Control

**Taiwan Semiconductor Manufacturing Co., Ltd.  
Statement of Internal Control  
(Translation)**

Date: February 18, 2000

TSMC has conducted a self-assessment of internal controls for the period of January 1, 1999 to December 31, 1999, based on TSMC's internal control system. The results are as follows:

1. TSMC acknowledges that the Board of Directors and management personnel are responsible for establishing, performing, and maintaining an internal control system, which has already been established. The purpose of the internal control system is to provide a reasonable assurance for achieving the company's goals: efficient and effective operations (including profit, efficiency and the safeguard of assets, etc.), reliability of financial reports, and compliance with applicable laws and regulations.
2. The internal control system has an inherent constraint. No matter how impeccable the system is, it can only provide a reasonable assurance of achieving the three goals abovementioned. Due to the changes in the environment and changing circumstances, the effectiveness of the internal control system may vary accordingly. However, TSMC's internal control system has self-monitoring functions with which once a shortcoming is found, action will be taken to cure.
3. TSMC evaluates the effectiveness in the design and performance of its internal control system in accordance with the items for evaluating the effectiveness of internal control system as indicated in the Points Governing the Establishment of Internal Control Systems by Public Companies (the "Points") announced by the Securities and Futures Commission of the Ministry of Finance. Based on management control process, the items for assessing the internal control system specified in the Points divide internal control into five components: 1. Control Environment; 2. Risk Assessments; 3. Control Activities; 4. Information and Communication; 5. Monitoring. Each component comprises certain factors. For the said factors please refer to the Points.
4. TSMC has evaluated the effectiveness in the design and performance of its internal control system in accordance with the aforesaid factors.
5. Based upon the results of evaluation abovementioned, TSMC is of the opinion that the design and performance of its internal control, including the efficiency and effectiveness of operations, reliability of financial reports, and compliance with applicable laws and regulations, during the period of January 1, 1999 to December 31, 1999 is effective and provide a reasonable assurance of achieving the abovementioned goals.
6. This Statement of Internal Control will be a prominent feature of TSMC's annual report and prospectus, and will be released to the public. Should any statement herein involve forgery, concealment or any other illegality, Articles 20, 32, 171 and 174 of the Security Transaction Law shall apply.
7. This Statement of Internal Control has been approved by TSMC's Board of Directors at the meeting of February 18, 2000 with 10 directors present at the meeting and 0 director disagreeing with this Statement of Internal Control.

Morris Chang  
Chairman of the Board

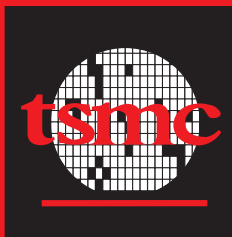
F.C. Tseng  
President

Taiwan Semiconductor Manufacturing Company, Ltd.

## 4. Other Necessary Supplement

### **Any Events in 1999 which had significant impact on shareholders' rights or the prices for the securities as stated in Item 2 Paragraph 2 of Article 36 of Securities and Exchange Law:**

The Board of Directors of TSMC has approved the merger of the Company with TSMC-Acer Semiconductor Manufacturing Corp. ([TASMC]) and Worldwide Semiconductor Manufacturing Corp. ([WSMC]) on the meetings dated Dec.30,1999 and Jan.7,2000 respectively. TSMC shall be the surviving company after the merger, while TASMC and WSMC shall be dissolved after the merger. The consolidation date of the merger is targeted on Jun.30,2000. The exchange ratio for TASMC to TSMC was originally set at 6 to 1; however, this ratio was later adjusted to 5 to 1. The exchange ratio for TASMC to TSMC is to be adjusted proportionately should the paid-in capital of TSMC is increased due to distribution of stock dividend. The exchange ratio for WSMC to TSMC was set at 2 to 1, and this ratio shall remain unchanged should the paid-in capital of TSMC is increased due to distribution of stock dividend.



**Taiwan Semiconductor Manufacturing Company, Ltd.**

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TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY, LTD.



Morris Chang, Chairman

