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**TSMC 2013 BUSINESS OVERVIEW**



TSE: 2330  
NYSE: TSM



# TSMC Vision, Mission & Core Values

## TSMC's Vision

Our vision is to be the most advanced and largest technology and foundry services provider to fabless companies and IDMs, and in partnership with them, to forge a powerful competitive force in the semiconductor industry.

To realize our vision, we must have a trinity of strengths:

- (1) be a technology leader, competitive with the leading IDMs
- (2) be the manufacturing leader
- (3) be the most reputable, service-oriented and maximum-total-benefits silicon foundry

## TSMC's Mission

Our mission is to be the trusted technology and capacity provider of the global logic IC industry for years to come.

## TSMC's Core Values

### Integrity

Integrity is our most basic and most important core value. We tell the truth. We believe the record of our accomplishments is the best proof of our merit. Hence, we do not brag. We do not make commitments lightly. Once we make a commitment, we devote ourselves completely to meeting that commitment. We compete to our fullest within the law, but we do not slander our competitors and we respect the intellectual property rights of others. With vendors, we maintain an objective, consistent, and impartial attitude. We do not tolerate any form of corrupt behavior or politicking. When selecting new employees, we place emphasis on the candidates' qualifications and character, not connections or access.

### Commitment

TSMC is committed to the welfare of customers, suppliers, employees, shareholders, and society. These stakeholders all contribute to TSMC's success, and TSMC is dedicated to serving their best interests. In return, TSMC hopes all these stakeholders will make a mutual commitment to the Company.

### Innovation

Innovation is the wellspring of TSMC's growth, and is a part of all aspects of our business, from strategic planning, marketing and management, to technology and manufacturing. At TSMC, innovation means more than new ideas, it means putting ideas into practice.

### Customer Trust

At TSMC, customers come first. Their success is our success, and we value their ability to compete as we value our own. We strive to build deep and enduring relationships with our customers, who trust and rely on us to be part of their success over the long term.

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# 1. Letter to Shareholders

TSMC achieved record revenue in 2013, and will continuously invest in R&D and capacity to help customers win market opportunities.

## Dear Shareholders,

In 2013, TSMC enjoyed another year of record revenue and profit as we continued to harvest the benefits of a shift in our strategy that began in 2009. Four years ago, we began to invest heavily in research and development as well as capital expenditure when we saw signs that the arrival of mobile computing devices such as smartphones and tablets could present promising opportunities to the semiconductor industry. Today, mobile products are indeed driving a new wave of growth and the most successful ICs in mobile computing come from TSMC customers, enabled by our process technologies and capacity buildup. TSMC's investments in R&D helped our customers to realize their design innovations, and TSMC's capacity buildup paved the way for our customers to maximize their market opportunities. We are now better positioned than any company engaging in the IC foundry business to help IC designers benefit from the worldwide growth in demand for mobile products.

Rapid adoption of TSMC's 28-nanometer process by IC designers seeking superior performance, lower power consumption, and smaller die size for their mobile products drove a nearly threefold increase in shipments and revenue for our 28-nanometer wafers in 2013. Thanks to our differentiated technologies and manufacturing excellence, we enjoyed a segment share of more than 80 percent in the served-available market for 28-nanometer technologies. Other achievements in 2013 include:

- Total wafer shipments reached 15.67 million 8-inch equivalent wafers versus 14.04 million in 2012.
- Advanced technologies (40/45-nanometer and beyond) accounted for 50 percent of total wafer revenue.
- TSMC's market share in the total semiconductor foundry segment rose successively during the last four years and reached 49 percent.

## 2013 Financial Performance

Consolidated revenue totaled NT\$597.02 billion, an increase of 17.8 percent over NT\$506.75 billion in 2012. Net income was NT\$188.15 billion and diluted earnings per share were NT\$7.26. Both increased 13.1 percent from the 2012 level of NT\$166.32 billion net income and NT\$6.41 diluted EPS.

In US dollars, TSMC generated net income of US\$6.34 billion on consolidated revenue of US\$20.11 billion, compared with net income of US\$5.62 billion on consolidated revenue of US\$17.12 billion for 2012.

Gross profit margin was 47.1 percent compared with 48.2 percent in 2012, and operating profit margin was 35.1 percent compared with 35.8 percent a year earlier. Net profit margin was 31.5 percent, a decrease of 1.3 percentage points from the previous year's 32.8 percent.

## Technological Developments

Following the ongoing success of our 28-nanometer technology, our 20-nanometer System-on-Chip (20-SoC) has entered volume production in 2014 after we began accepting customers' product tape-outs in 2013. TSMC's 20-SoC technology possesses the highest gate density of any 20-/22-nanometer process in volume production, and we have received an enthusiastic response from customers with dozens of product tape-outs scheduled in 2014. We expect our 20-nanometer production ramp to be faster than our 28-nanometer, becoming a significant growth driver for TSMC in both 2014 and 2015.

Next in the pipeline is our 16-nanometer process, which features a FinFET transistor structure for better performance. TSMC's 16-nanometer (16-FinFET) entered risk production in November 2013 and is firmly on track to complete manufacturing qualification in early 2014 and to meet our target of volume production in 2015, just one year after 20-nanometer. TSMC's 16-nanometer technology has captured the vast portion of 16-/14-nanometer products in the semiconductor foundry segment. More than 20 product tape-outs already have been scheduled throughout 2014 from multiple customers across a wide range of applications. Meanwhile, we are developing an enhanced transistor version of this technology, 16-FinFET+, that will offer an additional 15% performance improvement and which we believe will be the highest performance technology among all available 16-/14-nanometer technologies in 2014.

In 2013, we also began the development work of our 10-nanometer technology, which is scheduled to enter risk production in 2015 and volume production in 2016. This will be our third generation of FinFET technology, following 16-FinFET and 16-FinFET+, and is expected to deliver the industry's leading performance and density.

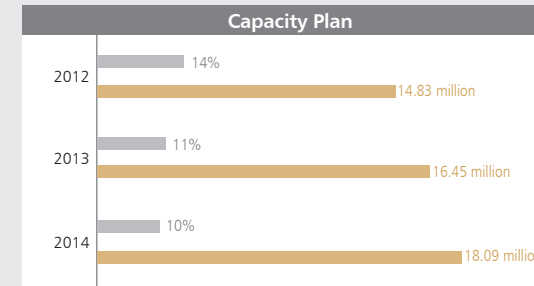
TSMC's design ecosystem, the Open Innovation Platform® (OIP) continues to help our customers to rapidly adopt these advanced technologies and shorten their time-to-market. This ecosystem offers an increasingly important advantage to our customers as technologies grow more complex and the need for first-time silicon success and early time-to-market become more critical. In 2013, the libraries and silicon IP portfolio available on TSMC's OIP were expanded to contain more than 6,300 items, representing the world's largest IP portfolio of its kind. Over 60% of new tape-outs by our customers at TSMC adopted one or more libraries or IPs from this platform.

## Corporate Developments

The Board of Directors appointed Dr. Mark Liu and Dr. C.C. Wei as President and Co-Chief Executive Officer of TSMC on November 12. Dr. Liu and Dr. Wei joined TSMC in 1993 and 1998 respectively, and have served TSMC in managerial positions including Operations, R&D, Worldwide Sales and Marketing, and Business Development. They have also demonstrated seamless teamwork in the best traditions of TSMC's corporate culture.

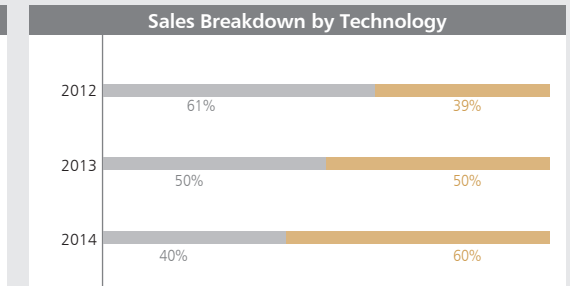
Dr. S.Y. Chiang, formerly Executive Vice President and Co-Chief Operating Officer, retired in October 2013 after 16 years of distinguished service to the Company. Dr. Chiang continues to serve the Company as Adviser to the Chairman of the Board.

I will continue to dedicate my full time and effort to the Company as Chairman of the Board and maintain the ultimate responsibility for the Company.



■ Annual Growth Rate  
■ Capacity: 8-inch equivalent wafers

Note: Starting 2013, TSMC no longer includes SSMC's capacity in this capacity tables.



■ > 40/45nm | 2014 wafer shipment is expected to be approximately 18 million 8-inch equivalent wafers.  
■ ≤ 40/45nm

## Honors and Awards

In 2013, TSMC was honored for our achievements in sustainability, corporate governance, management, investor relations and innovation by organizations including *Barron's*, *FinanceAsia*, *Institutional Investor*, *IR Magazine*, *GlobalViews Magazine*, *CommonWealth Magazine*, and *Thomson Reuters*.

The Dow Jones Sustainability Indexes (DJSI) recognized TSMC as the Semiconductors and Semiconductor Equipment Industry Group Leader in 2013, highlighting our leadership and continued progress in sustainability and corporate social responsibility. TSMC is the first Taiwan company, and one of only four Asian companies, to win the highest score among its industry peers in the DJSI's 24 industry groups, made up of 59 industries. In addition, TSMC is one of just two semiconductor companies chosen as index components for 13 consecutive years, and was also named semiconductor industry leader in 2010 and 2012.

## Outlook

While world semiconductor market is expected to grow at only 3-5% annually in the next five years, we expect to significantly out-grow the semiconductor market during that period as we have done in 25 of the last 27 years since our founding. We have become the basic technology and capacity supplier to the world semiconductor industry, particularly the strong-growth part of that industry. Our success has continued to contribute to the growth of the information technology industry.

We are well on our way to a very competitive 10-nanometer technology, and have started 7-nanometer development. The future world of ubiquitous connectivity will require us to integrate our advanced logic technology with many specialty technologies.

We have therefore been working on imaging and MEMS (micro-electro-mechanical system) sensors, power management, radio-frequency, embedded-flash, advanced packaging, and ultra-low-power technologies. We have the experience and ability to integrate all these technologies together to provide SoC (system on chip) or SiP (system in package) solutions which will be key to our future success.

Moreover, as TSMC forges ahead in technology leadership, we play a central role of a Grand Alliance with key suppliers, customers, and our design ecosystem partners, forming the main open technology platform for the widest range of product innovations in the semiconductor industry today. Together with our Grand Alliance, we believe TSMC will continue to capture the opportunities presented by a world that values and rewards innovation.



*Morris Chang*  
Morris Chang  
Chairman

## 2. Introduction

### Company Profile

TSMC pioneered the dedicated IC foundry business model in 1987 by focusing solely on manufacturing customers' semiconductor designs. TSMC has since built its reputation by offering industry-leading process technologies and unparalleled manufacturing efficiency. Today, as a foundry leader, TSMC has the broadest range of technologies in the dedicated IC foundry segment and delivers the largest portfolio of process-proven IPs and libraries, and the IC industry's most comprehensive design ecosystem.

With a diverse global customer base, TSMC commanded a 49% share of the global foundry market in 2013, with capacity of 16.4 million eight-inch equivalent wafers from its facilities across the world, the largest logic IC capacity in the semiconductor industry.

- In Taiwan, TSMC operates three advanced 12-inch wafer GIGAFABs™, four eight-inch wafer fabs, and one six-inch wafer fab.
- Additional capacity comes from two 8-inch wafer fabs at wholly-owned subsidiaries: WaferTech in the United States and TSMC China Company Limited.
- In addition, TSMC obtains 8-inch wafer capacity from other companies in which the Company has an equity interest.

Headquartered in the Hsinchu Science Park of Taiwan, TSMC also provides customer service through its account management and engineering services offices in North America, Europe, Japan, China, South Korea, and India. Currently the Company has more than 40,000 employees worldwide.

### Innovation

To meet our customer's needs in today's dynamic and fast-changing marketplace, TSMC has been accelerating the pace of its innovation by offering many versions of leading-edge processes to best match performance requirements from customers. Many of our technology breakthroughs in materials, processing and advanced lithography continuously make devices better, faster and smaller and carry the industry beyond Moore's Law.

- TSMC is the first foundry to introduce 28-nanometer gate-last High-K/Metal Gate (HKMG) technology that significantly reduces gate leakage and enhances strain effects on transistor performance.
- TSMC implements double-patterning mask technology on its 20-nanometer System-on-Chip (20-SoC) process, utilizing two photo masks, each with half of a pattern, to enable printing of images below the node's minimum spacing design rules.
- The introduction of TSMC's 16-nanometer FinFET (16-FinFET) process heralds a new era in transistor performance and design as the FinFET process promises better speed and power improvements than the traditional planar structure, paving the way for further scaling of advanced SoC technology. Several novel patterning techniques were developed for 48nm pitch Fin patterning. These techniques overcame the challenge of high aspect ratio topography of 3D device structures.
- At the 16nm node, a novel dielectric scheme has been developed that reduces the capacitance between copper lines. For the 10nm node and beyond, we have developed a new spacer-patterning scheme that allows copper line width and spacing to be reduced and minimizes signal delay. The effective resistivity of copper lines developed with these advanced processes is highly competitive and is lower than that projected by the International Technology Roadmap for Semiconductors (ITRS).
- In addition to front-end CMOS logic, TSMC pioneered the CoWoS™ (Chip on Wafer on Substrate) 3D packaging technology that produces significant silicon scaling, power and performance benefits by integrating multiple components on a single device. For lead-free flip chip packaging technology, TSMC has qualified for manufacture at 20nm an innovative Bump-on-Trace (BoT) packaging technology with an ultra-fine pitch (80μm) copper (Cu) bump that is suitable for mobile and handheld devices.

### Corporate Recognition

Awards honoring TSMC in 2013 included:

- Dow Jones Sustainability Index (DJSI): First Taiwan company to be recognized as the DJSI Semiconductors and Semiconductor Equipment "Industry Group Leader"; RobecoSAM Sustainability Award "Gold Class"; Membership in the Dow Jones Sustainability World Index for a 13<sup>th</sup> consecutive year
- FinanceAsia: Asia's Best Managed Companies in Hong Kong, Korea and Taiwan; Best Managed Company – Ranked No.1 in Taiwan; Best Corporate Governance Company – Ranked No.1 in Taiwan; Most Committed to a strong Dividend Policy – Ranked No.1 in Taiwan; Best Investor Relations – Ranked No.1 in Taiwan
- EUROMONEY: Asia Best Managed Companies – IT/software/technology
- IR Magazine: 2013 Greater China Awards – Best corporate governance and disclosure; Best overall IR by a Taiwanese company
- BARRON'S: Top 100 World's Most Respected Companies
- CommonWealth Magazine: Most Admired Company – Ranked No.1 in Taiwan; Excellence in Corporate Social Responsibility Award
- Institutional Investor: Best IR team (Technology/Semiconductors) – 1<sup>st</sup> Place (buy-side); Best IR team (Technology/Semiconductors) – 1<sup>st</sup> Place (sell-side)

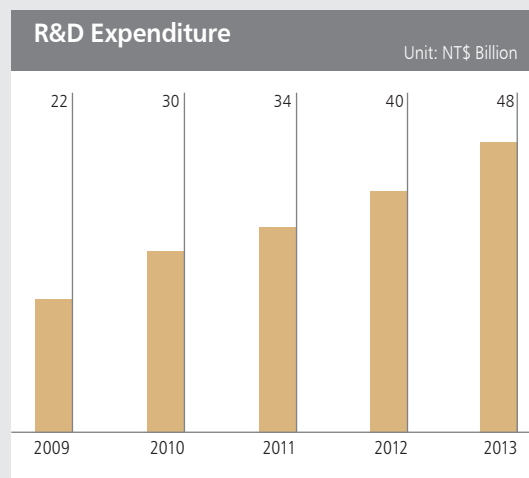
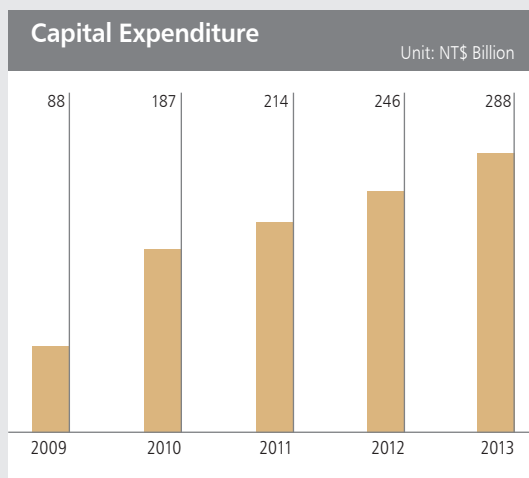
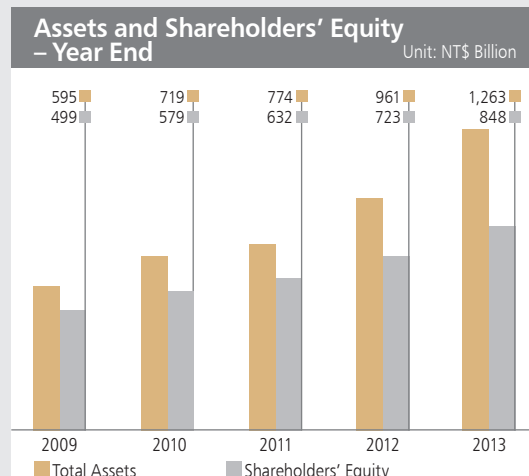
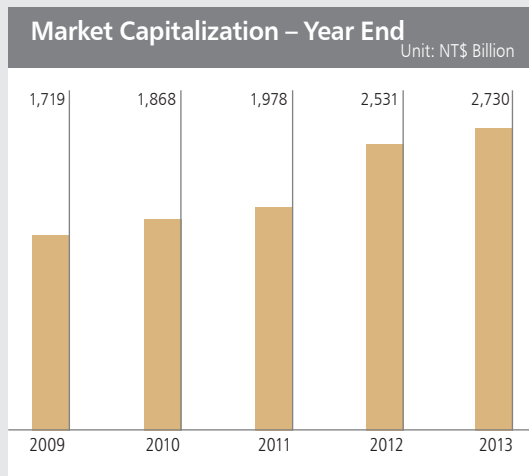
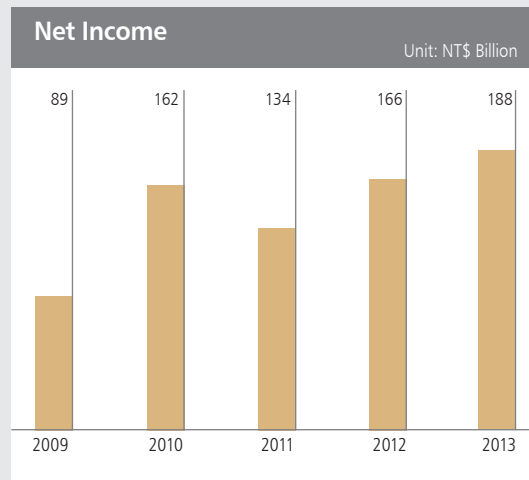
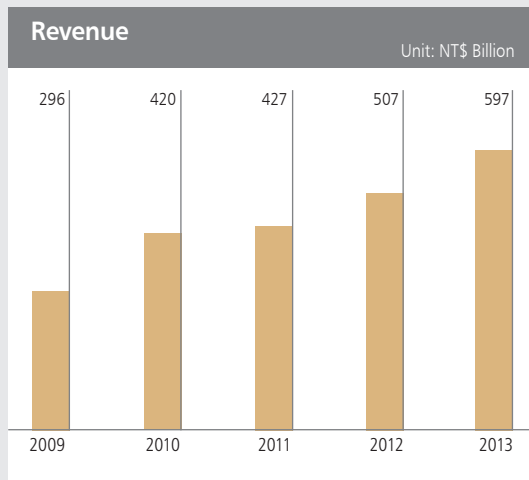
### Financial Highlights

TSMC has consistently enjoyed strong growth by building solid partnerships with its customers who trust TSMC's cutting-edge process technologies, pioneering design services, manufacturing productivity, and product quality.

TSMC also provides our customers with advanced technology platforms that include the comprehensive design infrastructure required to optimize design productivity and cycle time. These include: design flows for electronic design automation (EDA); silicon-proven IP building blocks, such as libraries; and simulation and verification design kits, i.e., process design kits (PDK) and technology files.

Since becoming a publicly listed company in 1994, TSMC has consistently delivered value to shareholders, maintained a strong balance sheet, and keeping one of the highest credit ratings among global semiconductor companies and Taiwan companies.

Here are TSMC's financials for the past five years at a glance.



## 3. Market Overview

### Market Analysis

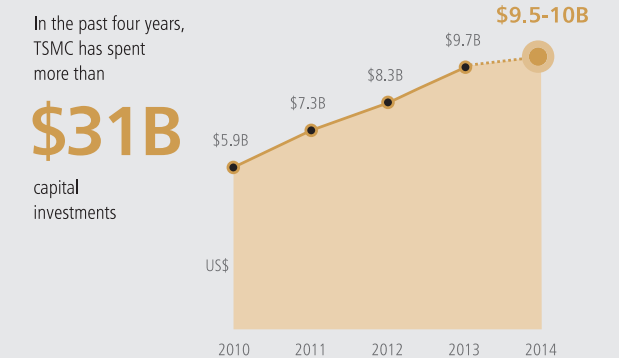
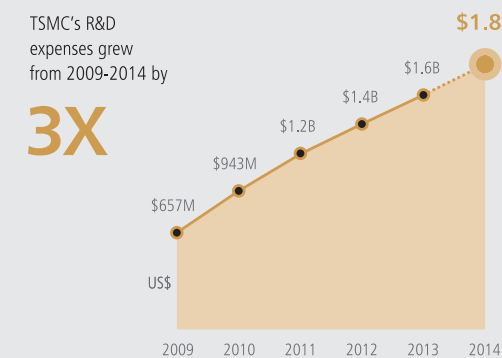
After a 4% decline in 2012, global IC revenue staged a 6% rebound to reach US\$269 billion in 2013, according to market researcher IC Insights. Total revenue from fabless IC suppliers increased 7% to US\$78 billion from a year earlier, and total IC foundry revenue grew 14% to US\$42.8 billion in 2013. TSMC outperformed that sharp rise with an 18% increase in its 2013 revenue, capturing a 49% share in the global foundry market.

Looking into 2014, IC Insights forecasts that total IC market revenues will grow 7%, in pace with the worldwide semiconductor market. Given TSMC's strength in advanced technologies, we expect to strongly outgrow the overall semiconductor industry this year.

Mobile computing has driven growth in the semiconductor industry for the past several years while the pace of innovation continues to accelerate today. These innovations have come to benefit our everyday lives. From mobile convergence and cloud computing to ubiquitous connectivity, bringing these innovations to reality is the job of the semiconductor industry. To that end, TSMC is in a uniquely strong and leading position in the foundry segment to supply technology to meet market requirements.

### Our Mission as the Trusted Technology and Capacity Provider

TSMC offers the foundry segment's widest technology portfolio including both advanced logic and specialty technologies. As a foundry leader, TSMC is committed to technology development and capacity buildup based on a trinity of differentiating strengths – technology leadership, manufacturing excellence, and customer trust. For years, TSMC has devoted massive R&D and capital investment to develop robust and useful process technologies and deliver flexible capacity to customers with high and stable yields. TSMC's R&D expenditure is set to reach US\$1.8 billion in 2014, tripling from 2009, while combined R&D expenses from TSMC and its top 10 fabless customers are larger than any single IDM. On top of US\$31 billion allocated for the past four years, TSMC now plans to spend approximately US\$9.5-10 billion in capital investments in 2014 for capacity expansion.



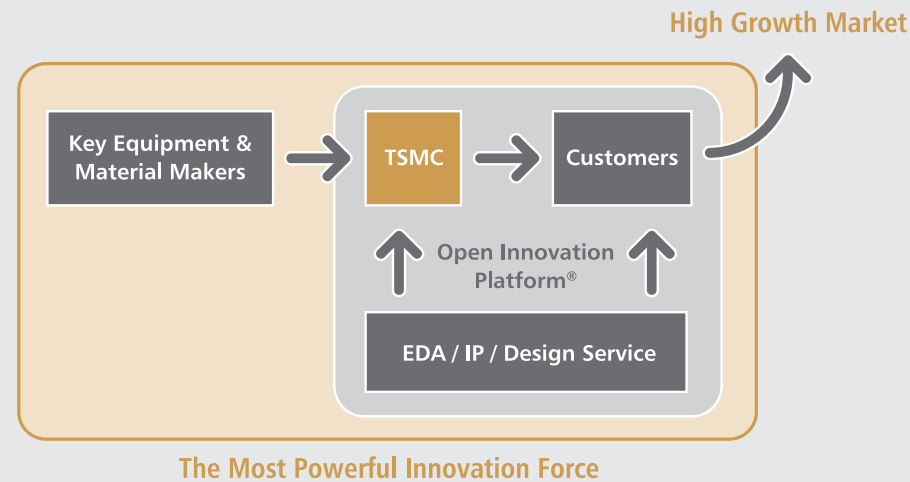
It is TSMC's mission to be the trusted technology and capacity provider of the global logic IC industry for years to come, and we will continue to ensure customer products achieve maximum value and performance whether their designs are built on mainstream or highly advanced processes. TSMC believes it will play a key role in the supply chain to keep up with customer needs for innovative products and continue to enjoy robust growth and strong market share for a long time.

## 4. Formula for Success

From TSMC's founding, we have sought to partner with every customer and supplier who was willing to build a relationship of trust. Since then TSMC has been working hard to forge a Grand Alliance and make it stronger and bigger every year. Today, the Grand Alliance is succeeding and has become a major contributing factor to TSMC's success.

TSMC's Grand Alliance is the most powerful force for innovation in the semiconductor industry, bringing together our customers, electronic design automation (EDA) partners, intellectual property (IP) partners, and key equipment and materials suppliers to achieve new levels of collaboration. We recognize that our success depends on the success of the Grand Alliance, and that TSMC, our customers, and our supplier partners all must grow together to maintain a long-term relationship. Together, as a collaborative force, we can push the envelope of technology and profit together. This is the way TSMC expands high-yield capacity, embraces future process nodes, and broadens the applications of our technologies to outcompete other foundry rivals.

### TSMC's Grand Alliance



As the world's largest pure-play foundry, it is our goal to help customers make the most of market opportunities by leveraging TSMC's Trinity of Strengths. They form the foundation for how we do business with our customers and earn their trust.

### Technology Leadership

In a highly competitive semiconductor industry, TSMC has overcome numerous technical challenges in the past when dealing with chip performance, power, area, and systems issues such as connectivity and integration. As a consequence, TSMC considers every aspect and ramification of the decision to develop a new technology node so that we make the right technology available to customers at the right time to implement their product innovation.

Building on this proven track record, we will keep plowing forward to migrate to newer nodes and win more customer tape-outs further down the road.

TSMC has more than 100 28HPM tape-outs scheduled from about 60 customers in 2014. In addition, TSMC has developed 28HPC, a compact version of the 28HPM, to meet customers' demand to compete in both low-end and mid-end mobile and consumer markets. There are more than 80 28HPC tape-outs scheduled from about 30 customers in 2014.

The 20-SoC process entered volume production in early 2014, offering the industry's highest densities and greatest integration capabilities. This year, the technologies that fuel our growth are mainly 20-SoC and 28nm high-k metal gate, and we have strong market share in both.

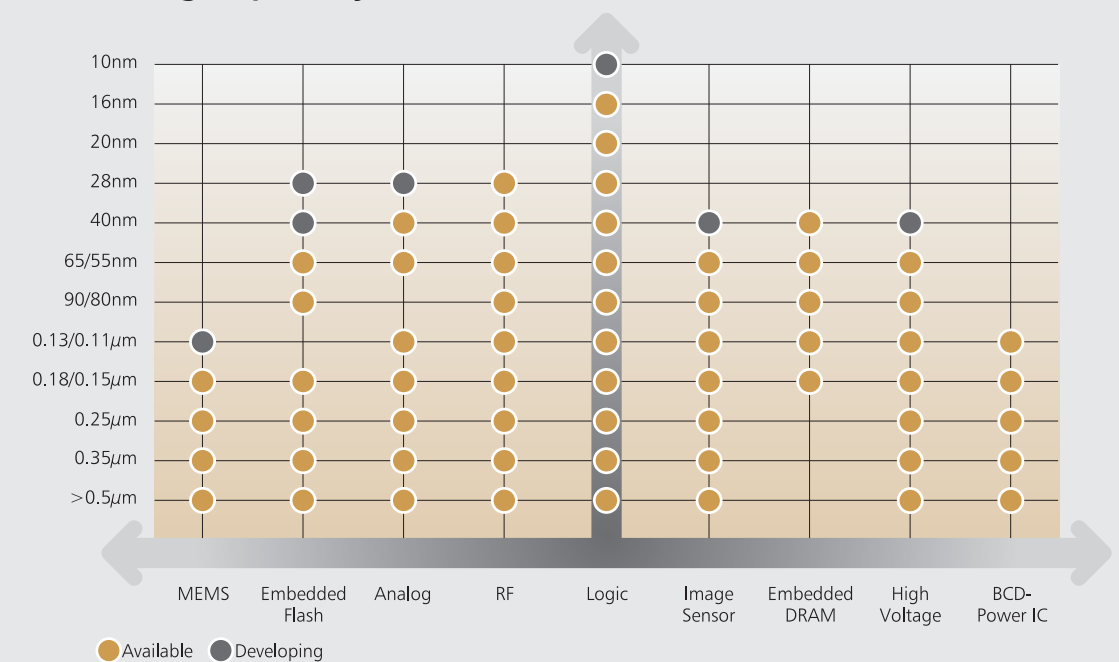
In addition, we currently have more than 10 customer tape-outs planned for 16-FinFET and 16-FinFET+ in 2014, with volume production starting in 2015. Moving forward to 10nm node, we expect to have customer tape-outs by the end of 2015.

But advanced technology is not the only requirement for the mobile space and for emerging applications. Enhanced requirements for human-machine interfaces are set to fuel the growth of TSMC's specialty technology businesses in Embedded Flash, high voltage, MEMS, CIS, and RF. Most of these technologies are now embedded in our mainstream technologies, 40nm, 65nm, 90nm, 0.18 $\mu$ m, 0.15 $\mu$ m, etc.

TSMC is rolling out 30-50 new specialty technologies each and every year to serve customer needs. Our 55nm Embedded Flash technology is now available and is at least one generation ahead of any other foundry. TSMC will also provide the foundry segment's first gallium-nitride-on-silicon technology for HV soon.

What differentiates TSMC in the specialty technology foundry arena, besides possessing the largest capacity in the broadest scope of technology nodes, is our superior ability to integrate specialty devices. We integrate those specialty devices into our strong CMOS baseline while maintaining our CMOS IP compatibility. We will become the first foundry to offer monolithic CMOS+MEMS in late 2014. Other new integrated specialty solutions featuring low power and small form factor include: MCU+RF; MEMS+Motion Processor; RF/PMIC+Integrated Passives; Analog+DSP; CIS+Image Signal Processor; and Display Driver+Touch Controller.

### TSMC's Logic/Specialty Platforms



A further demonstration of our technology leadership is our system integration solutions. The CoWoS™ solution is integrated with TSMC's advanced silicon technologies to provide customers with alternatives for system level integration compared to the traditional SoC approach. CoWoS™ development continues and we expect to have a few 20nm CoWoS™ customer tape-outs by the end of 2014. CoWoS™ is suitable for high-performance applications while we have also developed InFO (Integrated Fan-Out) packaging solution for mobile devices which has significantly lower cost than CoWoS with same capability to connect multiple dies.

## Manufacturing Excellence

Our successes in both logic and specialty products require more than TSMC's technology processes. Our manufacturing capabilities also play an important role.

Today, TSMC builds the best manufacturing infrastructure tailored for the diverse product mix that characterizes the foundry environment, providing on-time delivery and best-in-class cycle time.

Economic and technology efficiencies are the direct product of our manufacturing excellence. Clean rooms, equipment, software, materials, and highly trained individuals all come together with impeccable precision to help customers achieve volume production as soon as possible.

Vital to our manufacturing success are the economies of scale and flexibility provided by our GIGAFABs. Currently TSMC operates three state-of-the-art 12-inch GIGAFABs – Fab 12, Fab 14, and Fab 15. Our 28nm capacity at Fab 15 alone nearly doubled in 2013, boosting the combined capacity to over four million 12-inch wafers at the end of the year. Production within these three facilities supports 0.13μm, 90nm, 65nm, 40nm, 28nm, and 20nm process technologies and their sub-nodes. Part of our capacity is reserved for research and development work and currently supports 16nm and 10nm technology development and beyond. These facilities work as a virtual single fab thanks to fab manufacturing management that provides the customer with consistent quality and reliability performance, greater flexibility to meet demand fluctuations, faster yield learning and time-to-volume, and minimized time spent in costly product re-qualification.

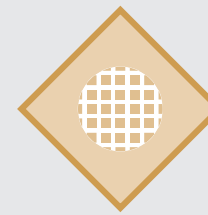
Highly sophisticated information technology (IT) solutions, such as advanced equipment control, fault detection and diagnosis, engineering big data mining, and centralized operation platforms, are implemented to optimize TSMC equipment, process and yield performance. They also improve production efficiency, effectiveness, and engineering capability via information integration, workflow optimization and automation.

Following its commitment to manufacturing excellence, TSMC has equipped a sophisticated scheduling and dispatching system, implemented industry-leading automated materials handling systems, and employed Lean Manufacturing approaches to provide customers with on-time-delivery and best-in-class cycle time. Real-time equipment performance and productivity monitoring, analysis, diagnosis and control minimize production interruption and maximize cost effectiveness.

Although process time is increasing, our ramping time is decreasing. 20-SoC is in volume production in two of our 12-inch fabs now and its ramp is the fastest in TSMC's history.

TSMC's manufacturing efficiency is what differentiates us from every other foundry. The results speak for themselves – in 2013 TSMC manufactured more than 8,600 different products, using more than 200 different technologies for over 440 customers. The company's capacity is expected to be about 8 million 12-inch equivalent wafers in 2014, representing a 10% increase from 2013 and similar to the rise in 2012.

### 8" Equivalent Wafers



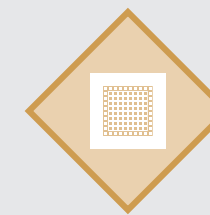
16M+

### Customers



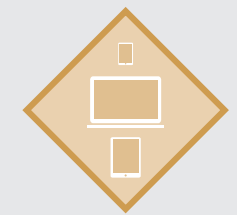
440+

### Different Technologies



200+

### Different Products



8600+

## Customer Trust

Customer trust is one of our four major corporate core values. We are a 100% dedicated foundry and have no internal products to compete with our customers. We strive to build deep and enduring relationships with our customers, who trust and rely on TSMC to be part of their success over the long term. The success of TSMC's business is manifested in the success of our customers.

All major IC design companies in the world are TSMC's customers. This demonstrates that we have earned their trust by bringing their product roadmap to reality through successful and timely product launches, so they can enjoy fast time-to-market advantage and better cost structure to seize market opportunities.

To serve our customers right, TSMC has strong teams in design platform technology, product engineering, and quality assurance, which have accumulated a wealth of experience over the past 27 years to serve as a trusted technology and capacity provider. TSMC not only bears the responsibility to accommodate each technology generation, but also provides early availability for design support so partners develop and design their products with all of the design ecosystem elements to complete their designs, cost-effectively executed to a required level of quality assurance.

Meanwhile, TSMC believes that providing superior customer service is critical to enhancing customer satisfaction and loyalty, which is very important to retaining existing customers, attracting new customers, and strengthening customer relationships. With a dedicated customer service team as a main contact window for coordination and facilitation, TSMC strives to provide world-class, high-quality, efficient and professional services in design support, mask making, manufacturing, and backend to achieve optimum experience for our customers and, in return, to gain customer's trust and sustain Company profitability.

We see many new and exciting technology process and packaging developments on the horizon, and bringing them to fruition for our customers will give us the opportunity to work together in new and exciting ways. It will be increasingly important for us to collaborate early and often.

In short, TSMC's trinity of strengths – technology leadership, manufacturing excellence, and customer trust – permeates every facet of our company. They lay the foundation for TSMC to be the backbone of the semiconductor industry. TSMC's continued leadership in technology and manufacturing, ongoing support of a comprehensive design ecosystem, combined with our dedication to customers' needs, means that whatever the future brings, TSMC is prepared.





## 5. Corporate Governance

TSMC advocates and acts upon the principles of operational transparency and respect for shareholder rights. We believe that one basis for successful corporate governance is a sound and effective Board of Directors. In line with this principle, the TSMC Board delegates various responsibilities and authority to two Board Committees: the Audit Committee and Compensation Committee.

Each Committee has a written charter approved by the Board. Each Committee's chairperson regularly reports to the Board on the activities and actions of the relevant committee. The Audit Committee and Compensation Committee consist solely of independent directors.

### Board Structure

TSMC's Board of Directors consists of nine distinguished members with a great breadth of experience as world-class business leaders or scholars. TSMC relies on them for their diverse knowledge, personal perspectives, and solid business judgment. Five of the nine members are independent directors: former British Telecommunications Chief Executive Officer, Sir Peter Bonfield; Acer Inc. Chairman, Mr. Stan Shih; former Texas Instruments Inc. Chairman of the Board, Mr. Thomas J. Engibous; Professor of Princeton University, Gregory C. Chow; and advisor to the Taiwan Executive Yuan and the Taipei City Government, Ms. Kok-Choo Chen. The number of Independent Directors is more than 50% of the total number of Directors.

The Board should supervise the Company's: compliance with relevant laws and regulations; financial transparency; timely disclosure of material information, and maintaining of the highest integrity within the Company. TSMC's Board of Directors strives to perform these responsibilities through the Audit Committee and the Compensation Committee.

### Audit Committee and Compensation Committee

The Audit Committee assists the Board in fulfilling its oversight of the quality and integrity of the accounting, auditing, reporting, and financial control practices of the Company. The Audit Committee is responsible for reviewing the Company's: financial reports; auditing and accounting policies and procedures; internal control systems; material asset or derivatives transactions; material lending funds, endorsements or guarantees; offering or issuance of any equity-type securities; legal compliance; related-party transactions and potential conflicts of interests involving executive officers and directors; Ombudsman reports; fraud investigation reports; corporate risk management; hiring or dismissal of an attesting CPA, or the compensation given thereto; and appointment or discharge of financial, accounting, or internal auditing officers.

The Compensation Committee assists the Board in discharging its responsibilities related to TSMC's compensation and benefits policies, plans and programs, and in the evaluation and compensation of TSMC's directors of the Board and executives.

Currently, the Compensation Committee is comprised of all five independent directors; the Chairman of the Board, Dr. Morris Chang, is invited by the Committee to attend all meetings and is excused from the Committee's discussion of his own compensation.



## 6. Corporate Social Responsibility

*TSMC teams up with customers to bring waves of semiconductor innovations to make our daily life more enjoyable and work more productive.*

TSMC believes a company's corporate social responsibility is to uplift society. As an important part of the technology industry, we not only aim to maintain our leadership in worldwide competition, but also continue to carry out our corporate social responsibility and do our utmost to be good corporate citizens.

TSMC fulfills its social responsibilities to all stakeholders. It is our firm belief that customers will trust us more because of our honesty and integrity, respect for the law, and good corporate governance. Investors will be more willing to invest over the long term because of our clear core values, and employees will feel closer to the Company as they identify with those values. Carrying out TSMC's social responsibilities brings us greater competitive advantage, creates greater value for shareholders, and benefits all of our stakeholders.

### **TSMC Volunteer Program & Education and Culture Foundation**

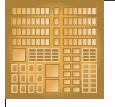
The TSMC Volunteer Program and TSMC Education and Culture Foundation bring together the Company's resources and our employees' passion to perform a diverse range of in-depth charity work in the areas of aesthetic education, arts and culture, science education, environmental protection, power conservation, community building, and caring for the disadvantaged.

In 2013, the number of TSMC volunteers grew 35% and the number of service hours increased significantly to reach 105,430. Meanwhile, the TSMC Education and Culture Foundation contributed over NT\$73.5 million in 2013 to its long-term projects of promoting education, culture, and arts.

### **TSMC i-Charity Platform**

"TSMC i-Charity" is an interactive online platform created with the support of the CSR Committee using company resources and made possible with cross-organizational support. It opens a channel for colleagues to report service projects, share results and suggest new ideas for doing good.

To provide a more convenient way to help others, the platform's donation system is linked with the Company's compensation system and allows employees to set monthly deductions of no greater than NT\$1,000 for projects of their choice. Employees can also participate by donating their time and labor with volunteer service through this platform.



## 7. Financial Statements



In 2013, TSMC's net income registered a record level of NT\$188.1 billion with EPS of NT\$7.26.



## Taiwan Semiconductor Manufacturing Company, Limited and Subsidiaries

### Consolidated Balance Sheets

December 31, 2012 and 2013

(In Thousands of New Taiwan Dollars)

	2013	2012
<b>ASSETS</b>		
<b>CURRENT ASSETS</b>		
Cash and cash equivalents	\$ 242,695,447	\$ 143,410,588
Financial assets at fair value through profit or loss	90,353	39,554
Available-for-sale financial assets	760,793	2,410,635
Held-to-maturity financial assets	1,795,949	5,056,973
Notes and accounts receivable, net	71,649,926	57,777,586
Receivables from related parties	291,708	353,811
Other receivables from related parties	221,576	185,550
Inventories	37,494,893	37,830,498
Other financial assets	501,785	473,833
Other current assets	2,984,224	2,786,408
Total current assets	<u>358,486,654</u>	<u>250,325,436</u>
<b>NONCURRENT ASSETS</b>		
Available-for-sale financial assets	58,721,959	38,751,245
Financial assets carried at cost	2,145,591	3,605,077
Investments accounted for using equity method	28,316,260	23,360,918
Property, plant and equipment	792,665,913	617,562,188
Intangible assets	11,490,383	10,959,569
Deferred income tax assets	7,239,609	13,128,219
Refundable deposits	2,519,031	2,426,712
Other noncurrent assets	1,469,577	1,235,144
Total noncurrent assets	<u>904,568,323</u>	<u>711,029,072</u>
<b>TOTAL</b>	<u>\$ 1,263,054,977</u>	<u>\$ 961,354,508</u>
<b>LIABILITIES AND EQUITY</b>		
<b>CURRENT LIABILITIES</b>		
Short-term loans	\$ 15,645,000	\$ 34,714,929
Financial liabilities at fair value through profit or loss	33,750	15,625
Accounts payable	14,670,260	14,490,429
Payables to related parties	1,688,456	748,613
Salary and bonus payable	8,330,956	7,535,296
Accrued profit sharing to employees and bonus to directors and supervisors	12,738,801	11,186,591
Payables to contractors and equipment suppliers	89,810,160	44,831,798
Income tax payable	22,563,286	15,635,594
Provisions	7,603,781	6,038,003
Accrued expenses and other current liabilities	16,693,484	13,148,944
Current portion of bonds payable and long-term bank loans	0	128,125
Total current liabilities	<u>189,777,934</u>	<u>148,473,947</u>
<b>NONCURRENT LIABILITIES</b>		
Hedging derivative financial liabilities	5,481,616	0
Bonds payable	210,767,625	80,000,000
Long-term bank loans	40,000	1,359,375
Provisions	10,452	4,891
Other long-term payables	36,000	54,000
Obligations under finance leases	776,230	748,115
Accrued pension cost	7,589,926	6,921,234
Guarantee deposits	151,660	203,890
Others	648,449	495,150
Total noncurrent liabilities	<u>225,501,958</u>	<u>89,786,655</u>
Total liabilities	<u>415,279,892</u>	<u>238,260,602</u>
<b>EQUITY ATTRIBUTABLE TO SHAREHOLDERS OF THE PARENT</b>		
Capital stock	259,286,171	259,244,357
Capital surplus	55,858,626	55,675,340

(Continued)

	2013	2012
Retained earnings		
Appropriated as legal capital reserve	\$ 132,436,003	\$ 115,820,123
Appropriated as special capital reserve	2,785,741	7,606,224
Unappropriated earnings	<u>382,971,408</u>	<u>284,985,121</u>
	518,193,152	408,411,468
Others	14,170,306	(2,780,485)
Equity attributable to shareholders of the parent	<u>847,508,255</u>	<u>720,550,680</u>
<b>NONCONTROLLING INTERESTS</b>	<u>266,830</u>	<u>2,543,226</u>
Total equity	<u>847,775,085</u>	<u>723,093,906</u>
<b>TOTAL</b>	<u>\$ 1,263,054,977</u>	<u>\$ 961,354,508</u>

(Continued)

## Taiwan Semiconductor Manufacturing Company, Limited and Subsidiaries

### Consolidated Statements of Comprehensive Income

For the Years Ended December 31, 2012 and 2013

(In Thousands of New Taiwan Dollars, Except for Earnings Per Share)

	2013	2012
<b>NET REVENUE</b>	\$ 597,024,197	\$ 506,745,234
<b>COST OF REVENUE</b>	<u>316,057,820</u>	<u>262,583,098</u>
<b>GROSS PROFIT BEFORE UNREALIZED GROSS PROFIT ON SALES TO ASSOCIATES</b>	280,966,377	244,162,136
<b>UNREALIZED GROSS PROFIT ON SALES TO ASSOCIATES</b>	<u>(20,870)</u>	<u>(25,029)</u>
<b>GROSS PROFIT</b>	<u>280,945,507</u>	<u>244,137,107</u>
<b>OPERATING EXPENSES</b>		
Research and development	48,118,165	40,383,195
General and administrative	18,928,544	17,631,694
Marketing	4,516,525	4,495,986
Total operating expenses	<u>71,563,234</u>	<u>62,510,875</u>
<b>OTHER OPERATING INCOME AND EXPENSES, NET</b>	<u>47,090</u>	<u>(449,364)</u>
<b>INCOME FROM OPERATIONS</b>	<u>209,429,363</u>	<u>181,176,868</u>
<b>NON-OPERATING INCOME AND EXPENSES</b>		
Share of profits of associates and joint venture	3,972,031	2,073,729
Other income	2,342,123	1,716,093
Foreign exchange gain, net	285,460	582,498
Finance costs	(2,646,776)	(1,020,422)
Other gains and losses	2,104,921	(2,852,310)
Total non-operating income and expenses	<u>6,057,759</u>	<u>499,588</u>
<b>INCOME BEFORE INCOME TAX</b>	215,487,122	181,676,456
<b>INCOME TAX EXPENSE</b>	<u>27,468,185</u>	<u>15,552,654</u>
<b>NET INCOME</b>	<u>188,018,937</u>	<u>166,123,802</u>
<b>OTHER COMPREHENSIVE INCOME (LOSS)</b>		
Exchange differences arising on translation of foreign operations	3,668,509	(4,322,697)
Changes in fair value of available-for-sale financial assets	13,290,385	9,534,269
Cash flow hedges	0	232
Share of other comprehensive income (loss) of associates and joint venture	(59,740)	53,748

(Continued)

	2013	2012
Actuarial loss from defined benefit plans	\$ (662,074)	\$ (685,978)
Income tax benefit (expense) related to components of other comprehensive income	115,168	(326,942)
Other comprehensive income for the year, net of income tax	16,352,248	4,252,632
<b>TOTAL COMPREHENSIVE INCOME FOR THE YEAR</b>	<b>\$ 204,371,185</b>	<b>\$ 170,376,434</b>
<b>NET INCOME (LOSS) ATTRIBUTABLE TO:</b>		
Shareholders of the parent	\$ 188,146,790	\$ 166,318,286
Noncontrolling interests	(127,853)	(194,484)
	<b>\$ 188,018,937</b>	<b>\$ 166,123,802</b>
<b>TOTAL COMPREHENSIVE INCOME (LOSS) ATTRIBUTABLE TO:</b>		
Shareholders of the parent	\$ 204,505,782	\$ 170,521,543
Noncontrolling interests	(134,597)	(145,109)
	<b>\$ 204,371,185</b>	<b>\$ 170,376,434</b>
<b>EARNINGS PER SHARE</b>		
Basic earnings per share	\$ 7.26	\$ 6.42
Diluted earnings per share	\$ 7.26	\$ 6.41

(Concluded)

## Taiwan Semiconductor Manufacturing Company, Limited and Subsidiaries

### Consolidated Statements of Cash Flows

For the Years Ended December 31, 2012 and 2013

(In Thousands of New Taiwan Dollars)

	2013	2012
<b>CASH FLOWS FROM OPERATING ACTIVITIES</b>		
Income before income tax	\$ 215,487,122	\$ 181,676,456
Adjustments for:		
Depreciation expense	153,979,847	129,168,514
Amortization expense	2,202,022	2,180,775
Stock option compensation cost of subsidiary	5,312	6,219
Finance costs	2,646,776	1,020,422
Share of profits of associates and joint venture	(3,972,031)	(2,073,729)
Interest income	(1,835,980)	(1,645,036)
Gain on disposal of property, plant and equipment and intangible assets, net	(48,848)	(103)
Impairment loss on property, plant and equipment	0	444,505
Impairment loss of financial assets	352,214	4,231,602
Gain on disposal of available-for-sale financial assets, net	(1,267,086)	(399,598)
Gain on disposal of financial assets carried at cost, net	(44,721)	(141,491)
Loss (gain) on disposal of investments in associates	733	(4,977)
Gain on deconsolidation of subsidiary	(293,578)	0
Unrealized gross profit on sales to associates	20,870	25,029
Loss (gain) on foreign exchange, net	317,547	(3,219,144)
Dividend income	(506,143)	(71,057)
Income from receipt of equity securities in settlement of trade receivables	(9,977)	(886)
Loss on hedging instruments	5,602,779	0
Gain on arising from changes in fair value of available-for-sale financial assets in hedge effective portion	(5,071,118)	0
Changes in operating assets and liabilities:		
Derivative financial instruments	(32,189)	(22,311)
Notes and accounts receivable, net	(14,131,066)	(11,947,191)
Receivables from related parties	(204,278)	(168,047)
Other receivables from related parties	50,589	(63,258)
Inventories	122,472	(12,989,916)
Other financial assets	18,578	53,182
Other current assets	(312,251)	648,051
Accounts payable	346,401	3,656,358
Payables to related parties	850,094	(605,182)
Salary and bonus payable	883,925	1,386,797
Accrued profit sharing to employees and bonus to directors and supervisors	1,552,210	2,105,298
Accrued expenses and other current liabilities	3,531,017	2,051,785
Provisions	1,595,810	977,901
Accrued pension cost	9,554	(5,769)

(Continued)

	2013	2012
Cash generated from operations	\$ 361,846,606	\$ 296,275,199
Income taxes paid	(14,463,069)	(11,312,039)
Net cash generated by operating activities	347,383,537	284,963,160
<b>CASH FLOWS FROM INVESTING ACTIVITIES</b>		
Acquisitions of:		
Available-for-sale financial assets	(21,303)	(31,525,876)
Held-to-maturity financial assets	(1,795,949)	0
Financial assets carried at cost	(27,165)	(56,512)
Property, plant and equipment	(287,594,773)	(246,137,361)
Intangible assets	(2,750,361)	(1,782,299)
Proceeds from disposal or redemption of:		
Available-for-sale financial assets	2,418,578	964,367
Held-to-maturity financial assets	5,145,850	2,711,440
Financial assets carried at cost	67,986	353,656
Property, plant and equipment	173,554	157,484
Other assets	0	26,688
Costs from entering into hedging transactions	(143,982)	0
Interest received	1,790,725	1,719,026
Other dividends received	506,143	71,057
Dividends received from associates	2,141,881	2,088,472
Refundable deposits paid	(98,888)	(517,162)
Refundable deposits refunded	113,399	2,609,313
Net cash outflow from deconsolidation of subsidiary	(979,910)	0
Net cash used in investing activities	(281,054,215)	(269,317,707)
<b>CASH FLOWS FROM FINANCING ACTIVITIES</b>		
Proceeds from issuance of bonds	130,844,821	62,000,000
Repayment of bonds	0	(4,500,000)
Increase (decrease) in short-term loans	(19,636,240)	9,747,094
Increase in long-term bank loans	690,000	50,000
Repayment of long-term bank loans	(62,500)	(212,500)
Repayment of other long-term payables	(853,788)	(2,367,866)
Interest paid	(1,330,886)	(736,607)
Guarantee deposits received	41,519	15,671
Guarantee deposits refunded	(113,087)	(255,764)
Decrease in obligations under finance leases	(27,796)	(108,863)
Proceeds from exercise of employee stock options	124,570	242,488
Cash dividends	(77,773,307)	(77,748,668)
Increase in noncontrolling interests	202,619	286,200
Net cash generated by (used in) financing activities	32,105,925	(13,588,815)
<b>EFFECT OF EXCHANGE RATE CHANGES ON CASH AND CASH EQUIVALENTS</b>	<b>849,612</b>	<b>(2,118,327)</b>
<b>NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS</b>	<b>99,284,859</b>	<b>(61,689)</b>
<b>CASH AND CASH EQUIVALENTS, BEGINNING OF YEAR</b>	<b>143,410,588</b>	<b>143,472,277</b>
<b>CASH AND CASH EQUIVALENTS, END OF YEAR</b>	<b>\$ 242,695,447</b>	<b>\$ 143,410,588</b>

(Concluded)

Starting from 2013, TSMC prepares financial statements in accordance with TIFRS (International Financial Reporting Standards as endorsed in R.O.C.). TSMC no longer provides R.O.C. GAAP and U.S. GAAP-based financial statements.

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## Deputy Spokesperson/Corporate Communications

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Auditors: Yi-Hsin Kao, Hung-Wen Huang  
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Tel: +886-2-25459988 Fax: +886-2-25459966  
Website: <http://www.deloitte.com.tw>

## Common Share Transfer Agent and Registrar

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Commercial Bank  
Address: 5F, 83, Sec. 1, Chung-Ching S. Rd., Taipei 10008  
Taiwan, R.O.C.  
Tel: +886-2-21811911 Fax: +886-2-23116723  
Website: <http://www.chinatrust.com.tw>

## ADR Depository Bank

Company: Citibank, N.A.  
Depository Receipts Services  
Address: 388 Greenwich Street, New York, NY 10013, U.S.A.  
Website: <http://www.citi.com/dr>  
Tel: +1-877-2484237 (toll free)  
Tel: +1-781-5754555 (out of US)  
Fax: +1-201-3243284  
E-mail: [citibank@shareholders-online.com](mailto:citibank@shareholders-online.com)  
TSMC's depository receipts of the common shares are listed on New York Stock Exchange (NYSE) under the symbol TSM.  
The information relating to TSM is available at <http://www.nyse.com> and <http://mops.twse.com.tw>

### Safe Harbor Notice:

The statements included in this business overview that are not historical in nature are "forward-looking statements" within the meaning of the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995. TSMC cautions readers that forward-looking statements are subject to significant risks and uncertainties and are based on TSMC's current expectations. Actual results may differ materially from those contained in such forward-looking statements for a variety of reasons including, among others, risks associated with cyclical and market conditions in the semiconductor industry; demand and supply for TSMC's foundry manufacturing capacity in particular and for foundry manufacturing capacity in general; intense competition; the failure of one or more significant customers to continue to place the same level of orders with us; TSMC's ability to remain a technological leader in the semiconductor industry; TSMC's ability to manage its capacity; TSMC's ability to obtain, preserve and defend its intellectual property rights; natural disasters and other unexpected events which may disrupt production; and exchange rate fluctuations. Additional information as to these and other risk factors that may cause TSMC's actual results to differ materially from TSMC's forward-looking statements may be found in TSMC's Annual Report on Form 20-F, filed with the United States Securities and Exchange Commission (the "SEC") on April 14, 2014, and such other documents as TSMC may file with, or submit to, the SEC from time to time. Except as required by law, we undertake no obligation to update any forward-looking statement, whether as a result of new information, future events, or otherwise.