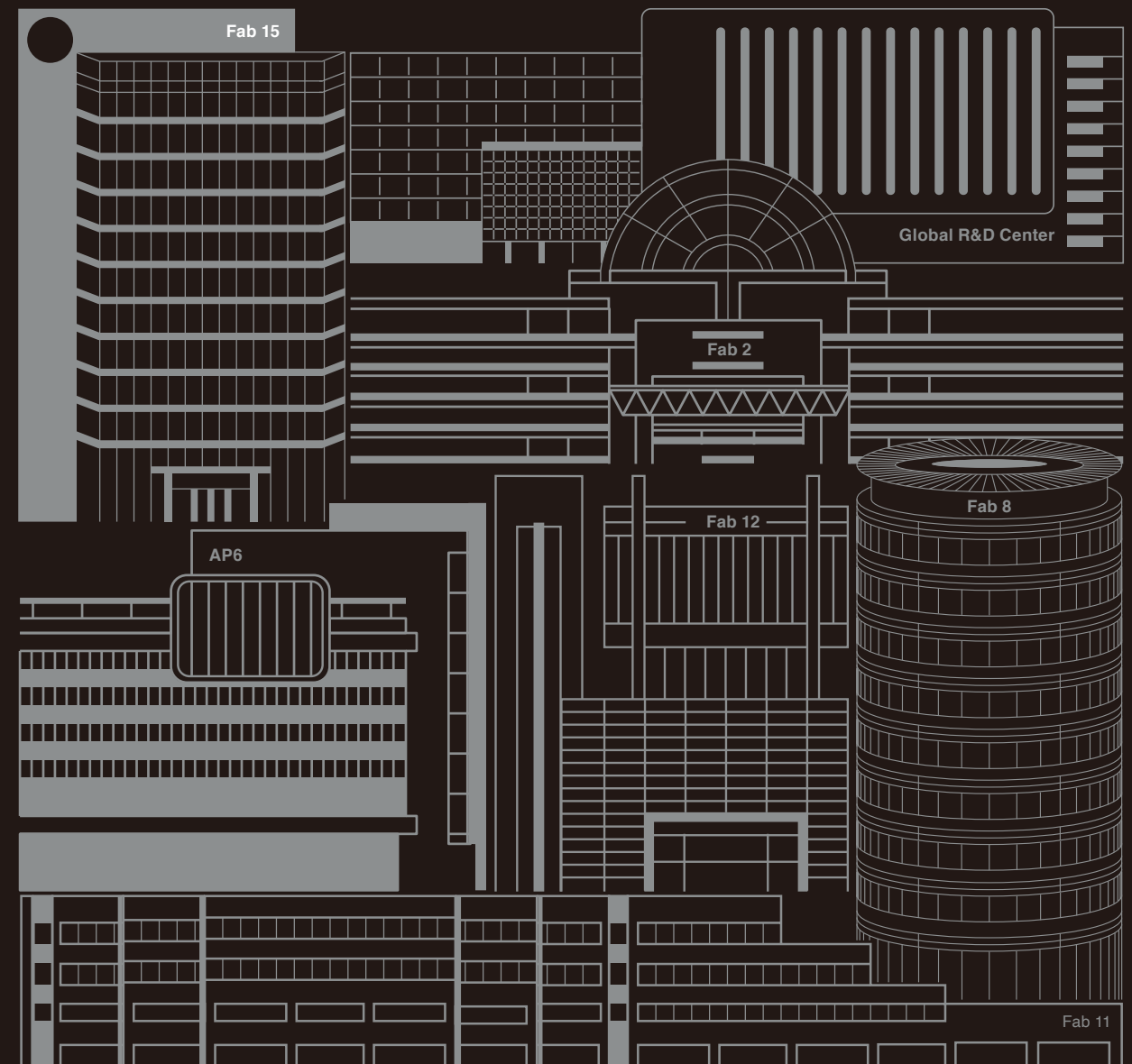
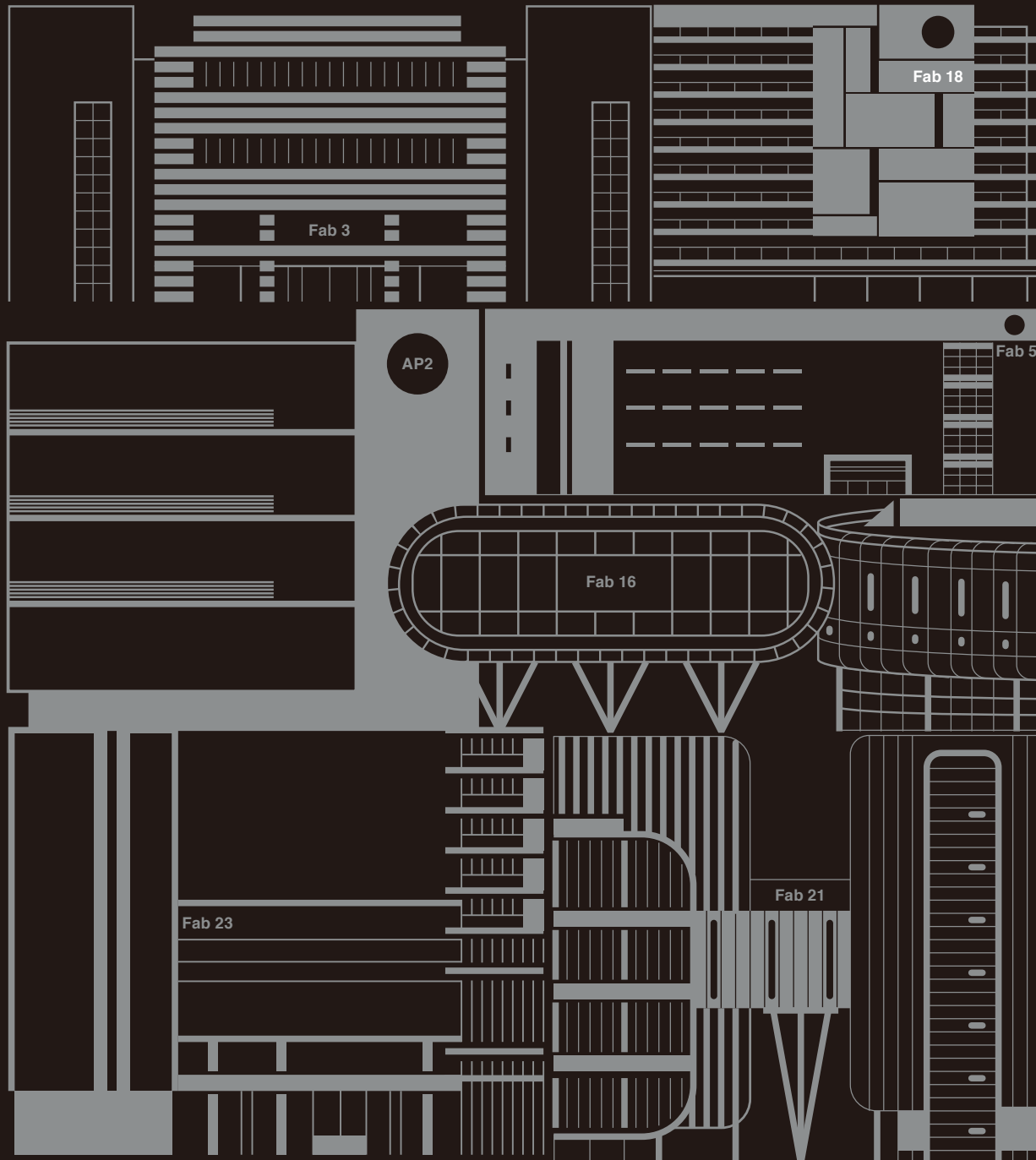




TSMC

2023 BUSINESS OVERVIEW

TSE: 2330 | NYSE: TSM



**Taiwan Semiconductor
Manufacturing Company, Ltd.**

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Vision, Mission & Core Values

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

Mission

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

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

Dear Shareholders,

2023 was a challenging year for the global semiconductor industry, but we also witnessed the rising emergence of generative AI-related applications, with TSMC as a key enabler. As the world re-emerged from more than two years of pandemic-induced slowdown, weakening global macroeconomic conditions and higher inflation and interest rates prolonged the semiconductor inventory adjustment cycle. Despite the near-term challenges, our technology leadership enabled TSMC to outperform the foundry industry in 2023. We are well-positioned to capture the future AI and high-performance computing (HPC)-related growth opportunities.

In 2023, Generative AI took the world by storm, with ChatGPT gaining over 100m active users in just two months, becoming the world's fastest growing consumer application. Generative AI requires high computing power and interconnect bandwidth, which drives semiconductor content increase. TSMC is a key enabler of AI applications. Today, the AI application is only in its nascent stage, and no matter which AI approach is taken, AI chips require the use of leading edge technologies and advanced packaging solutions, a strong foundry design ecosystem, and high yield to support larger die sizes. All of these are to TSMC's strengths, and thus all roads lead to working with TSMC.

The surge in AI-related demand in 2023 supports our already-strong conviction on energy-efficient computing. Thus, the value of our technology position is increasing.

To address the insatiable demand for energy-efficient computing power in a highly competitive market, customers rely on TSMC to provide a dependable and predictable cadence of technology offering and high quality manufacturing service.

For TSMC, today around ~70% of our total revenue is 16nm and more advanced nodes. With rising contribution from 3nm and 2nm technologies in the next several years, this number will only increase. Thus, our mature node exposure is around ~20% of our total revenue.

Our focus on mature nodes is to build high yield capacity for specialized technologies, rather than just nominal capacity. In 2023, we worked closely with our customers to introduce specialty technologies such as N6RF+ for smartphones, CMOS Image Sensors for cameras, and 22nm MRAM for automotive and industrial applications. Our mature node strategies will continue to focus on working closely with strategic customers to develop specialty technology solutions to meet their requirement, and create differentiated and long-lasting value to customers.

In 2023, we inaugurated our new R&D center in Taiwan, and further enhanced our R&D intensity and technology development. Our industry-leading 3-nanometer technology entered high volume production with a strong ramp in the second half of 2023. We are also providing continuous enhancements of our N3 technology, including N3E, N3P and N3X, and expect an even greater contribution in 2024 and the years beyond, supported by robust demand from multiple customers.

Our 2-nanometer is on track for volume production in 2025. It will be the most advanced technology in the semiconductor industry in both density and energy efficiency when it is introduced. N2 will adopt nanosheet transistor structure, and deliver full-node performance and power benefits, to address the increasing need for energy-efficient computing. As part of N2 technology platform, we also

developed N2 with backside power rail solution, which is better-suited for specific HPC applications, to be available in the second half of 2025 to customers, with production in 2026.

We are observing a strong level of customer interest and engagement at our N2, higher than N3 at a similar stage, from both HPC and smartphone applications. With our strategy of continuous enhancements, N2 and its derivatives will further extend our technology leadership well into the future.

The insatiable demand for energy-efficient computing power not only requires leading edge process technologies, but also advanced packaging technologies to enable large-scale interconnectivity for lower power consumption, at affordable costs. TSMC's industry-leading 3DFabric® backend technologies include the CoWoS® and InFO family of advanced packaging technologies, with CoWoS® technology seeing robust demand from multiple customers' AI chips in 2023. Our frontend 3DIC technologies, TSMC-SolC® (System on Integrated Chips), also entered mass production in 2023 to enable customers' next generation flagship AI products.

We are working closely with our customers in a disciplined manner to plan our capacity, based on the long-term market demand profile, and investing in leading edge and specialty technologies, to support their structural growth.

Part of this strategy is to expand our global manufacturing footprint to increase customer trust, expand our future growth potential, and reach for more global talents. Our overseas decisions are based on our customers' needs, and a necessary level of government support. This is to maximize the value for our shareholders.

In the U.S., we are making good progress on our first fab in Arizona in terms of the fab infrastructure, utilities and equipment installation. We are on track for volume production of N4 technology in the first half of 2025, with the same level of manufacturing quality and reliability in Arizona as from our fabs in Taiwan.

We are also building a 12-inch specialty technology fab in Kumamoto, Japan, which is on track for volume production in the fourth quarter of 2024. We also announced plans to build an automotive and industrial specialty fab in Dresden, Germany, with construction starting in the fourth quarter of 2024.

While the initial costs of overseas fabs are higher than TSMC's fabs in Taiwan, we are confident to manage and minimize the cost gap, so that we can continue to maximize the value for our shareholders.

We are also placing a strong focus on our digital excellence initiatives, which includes leveraging big data and AI to increase our fab productivity and operational efficiency and quality. By driving digital excellence at TSMC, our fabs are transforming to become engineer-centric rather than operator-centric. As we expand globally, we will continuously enhance the intelligence of our fabs, so that we can control and manage fab operations from anywhere in the world, and deepen our service to support our customers.

Highlights of TSMC's accomplishments in 2023:

- Total wafer shipments were 12.0 million 12-inch equivalent wafers as compared to 15.3 million 12-inch equivalent wafers in 2022.
- Advanced technologies (7-nanometer and beyond) accounted for 58 percent of total wafer revenue, up from 53 percent in 2022.
- We deployed 288 distinct process technologies, and manufactured 11,895 products for 528 customers.

- TSMC produced 28 percent of the world semiconductor excluding memory output value in 2023, as compared to 30 percent in the previous year, mainly due to the semiconductor industry inventory correction.

2023 Financial Performance

Consolidated revenue reached NT\$2,161.74 billion, a decrease of 4.5 percent over NT\$2,263.89 billion in 2022. Net income was NT\$838.50 billion and diluted earnings per share were NT\$32.34. Both decreased 17.5 percent from the 2022 level of NT\$1,016.53 billion net income and NT\$39.20 diluted EPS.

TSMC generated net income of US\$26.88 billion on consolidated revenue of US\$69.30 billion, which decreased 21.1 percent and 8.7 percent respectively from the 2022 level of US\$34.07 billion net income and US\$75.88 billion consolidated revenue.

Gross profit margin was 54.4 percent as compared with 59.6 percent in 2022, while operating profit margin was 42.6 percent compared with 49.5 percent a year earlier. Net profit margin was 38.8 percent, a decrease of 6.1 percentage points from 2022’s 44.9 percent.

In 2023, the Company further raised its total cash dividend payments to NT\$11.25 per share, up from NT\$11.0 a year ago.

Environmental, Social and Governance

In addition to driving profitable growth in our core business, TSMC continues to cultivate green manufacturing, build a responsible supply chain, create an inclusive workplace, attract and develop talent, and care for the underprivileged, fulfilling the Company’s responsibilities as a corporate citizen.

Maintaining the highest standard of corporate governance is an essential part of our core values. In February 2023, TSMC’s Board of Directors approved the establishment of the “Nominating, Corporate Governance and Sustainability Committee.” The Committee is actively involved in developing TSMC’s sustainability strategies, to lay the foundation for our future sustainable development. In addition, the Committee focuses on reviewing and improving TSMC’s corporate governance structure, including recommending independent director candidates to the Board.

In 2023, we also announced an acceleration of our RE100 sustainability timetable, pulling forward our target for 100% renewable energy consumption for all global operations from 2050 to 2040. We also raised our 2030 target for company-wide renewable energy consumption from 40% to 60%, demonstrating our determination to achieve our environmental sustainability goals at a faster pace.

Corporate Developments

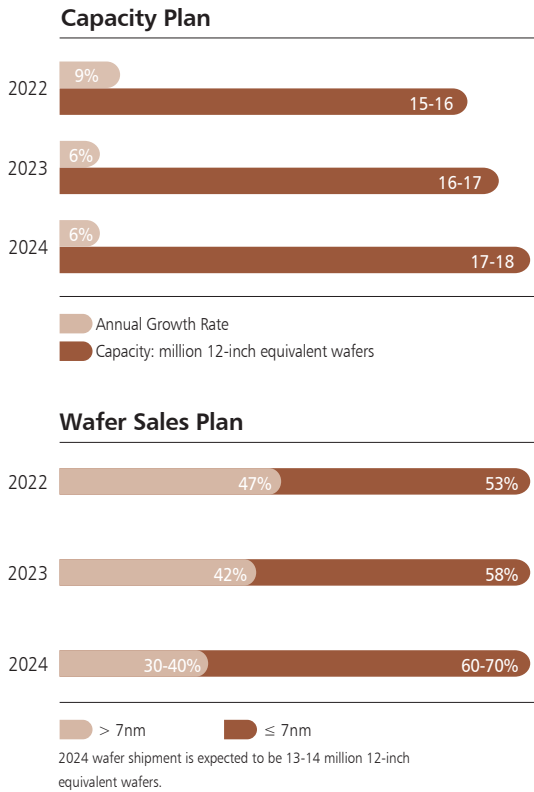
In August 2023, TSMC announced its plan to invest in European Semiconductor Manufacturing Company (ESMC) GmbH, in Dresden, Germany, along with Robert Bosch GmbH, Infineon Technologies AG, and NXP Semiconductors N.V., to build a specialty technology fab focusing on automotive and industrial applications. ESMC is expected to have a monthly capacity of 40,000 wafers on TSMC’s 28/22 nanometer planar CMOS and 16/12 nanometer FinFET process technology.

In December 2023, TSMC announced that Dr. Mark Liu plans to retire from TSMC in June 2024, and will not seek re-election to the board of directors. During his tenure, Dr. Liu has reaffirmed the Company’s commitment to its mission and focused on enhancing corporate governance and competitiveness particularly in technology leadership, digital excellence, and global footprint. TSMC’s Nominating,

Corporate Governance and Sustainability Committee recommends Dr. C.C. Wei, while remaining as CEO, to succeed as TSMC’s next Chairman, subject to the election of the incoming board in June 2024.

Honors and Awards

TSMC received recognition for achievements in innovation, corporate governance, sustainability, investor relations and overall excellence in management from organizations including *Forbes*, *Fortune Magazine*, *CommonWealth Magazine*, Taiwan Stock Exchange, and Taiwan Institute for Sustainable Energy. For innovation, TSMC was recognized as 3rd in IFI Claims Patent Services’ “2023 Top 50 U.S. Patent Assignees.” TSMC was also recognized by *Fortune Magazine* as “2023 World’s Most Admired Companies.” In sustainability, we were chosen once again as a component of the Dow Jones Sustainability Indices, becoming the only semiconductor company to be selected for 23 consecutive years. We also received MSCI ESG Research’s AAA Rating, CDP’s “2022 CDP Supplier Engagement Leader,” Morningstar’s “The Best Sustainable Companies to Own in 2024,” S&P Global’s Corporate Sustainability Assessment – Top 10% S&P Global ESG Score, ISS-oekom Corporate Rating’s “Prime” status, *Financial Times* and Statista’s “Asia-Pacific Climate Leaders 2023,” and *Forbes’* “World’s Best Employers 2023.” Meanwhile, we remained a major component in various MSCI ESG and FTSE4Good indices. In investor relations, TSMC continued to receive multiple awards from *Institutional Investor Magazine*.



Outlook

Entering 2024, macroeconomic weakness and geopolitical uncertainties persist, potentially further weighing on consumer sentiment and end market demand. Against that backdrop, our business is expected to be supported by the continued strong ramp of our industry-leading 3nm technologies and robust AI-related demand, and we expect 2024 to be a healthy growth year for TSMC.

Recent developments, such as growing national security concerns, the reshaping of global supply chains, and the intensifying competition in the quest for AI supremacy, have deepened geopolitical uncertainties.

At the same time, as AI technology evolves to use more complex AI models, the amount of computation required for training and inference continues to increase. As a result, AI models need to be supported by more powerful semiconductor hardware, which use the most advanced semiconductor process technologies.

TSMC’s success is predicated on providing the industry’s most leading edge process technologies at scale, in the most efficient and cost-effective manner, to enable innovators to successfully offer the best products to the world.

As we become a technology leader in the semiconductor industry, we are shouldering a greater responsibility of R&D and investment in the industry. With our strong technology leadership in leading edge process technologies and advanced packaging solutions, we are able to capture a greater portion of the industry's growth opportunities.

We focus on the fundamentals of our business, and will execute our global manufacturing footprint strategy purposefully, to support our customers' growth and increase their trust. We will continue to drive digital excellence across all our fabs globally and work towards fully intelligent and automated manufacturing. We are determined to be the most efficient and cost-effective manufacturer, no matter where we operate.

As the world grows more complex, semiconductor technology is the foundational technology for the modern digital economy. The semiconductor value in the global supply chain continues to increase, providing greater value for our customers, and greater value opportunities for TSMC.

We do not take our role and responsibility in the global semiconductor industry lightly. We will not deviate from our pure-play foundry business model, which has demonstrated time and again to be a win-win model for TSMC and our customers. We will continue to uphold our Trinity of Strengths of Technology Leadership, Manufacturing Excellence, and Customer Trust, to enable our customers to unleash their innovations in their end markets.

We will hold ourselves to the highest standards of corporate governance, and will adhere to our core values of Integrity, Commitment, Innovation and Customer Trust, no matter where we operate, while pursuing a sustainable future. We deeply value your trust in TSMC through the challenges of 2023. We are very excited about our future, and will work hard to run our business well, deliver good results and continue to maximize the value for our shareholders in the years to come.



A handwritten signature in black ink, appearing to read 'Mark Liu'.

Mark Liu
Chairman

A handwritten signature in black ink, appearing to read 'C.C. Wei'.

C.C. Wei
Chief Executive Officer

2 Introduction

Company Profile

Established in 1987 and headquartered in Hsinchu Science Park, Taiwan, TSMC pioneered the pure-play foundry business model with an exclusive focus on manufacturing its customers' products. By choosing not to design, manufacture or market any semiconductor products under its own name, the Company ensures that it never competes with its customers. Based on this founding principle, the key to TSMC's success has always been to enable its customers' success. TSMC's foundry business model has led to the rise of the global fabless industry and, since its inception, TSMC has been one of the world-leading semiconductor foundries. In 2023, the Company manufactured 11,895 different products using 288 distinct technologies for 528 different customers.

TSMC-made semiconductors serve a global customer base that is large and diverse entailing a wide range of applications. These products are used in a variety of end markets including high performance computing, smartphones, the Internet of Things (IoT), automotive, and digital consumer electronics. Such strong diversification helps to smooth fluctuations in demand, which in turn allows TSMC to maintain high levels of capacity utilization and profitability, and generate healthy returns for future investment.

The annual capacity of the manufacturing facilities managed by TSMC and its subsidiaries exceeded 16 million 12-inch equivalent wafers in 2023. These facilities include four 12-inch wafer GIGAFAB® fabs, four 8-inch wafer fabs, and one 6-inch wafer fab – all in Taiwan – as well as one 12-inch wafer fab at a wholly owned subsidiary, TSMC Nanjing Company Limited, and two 8-inch wafer fabs at wholly owned subsidiaries, TSMC Washington (previously called WaferTech) in the United States and TSMC China Company Limited.

In August 2023, TSMC announced its plan to jointly invest in European Semiconductor Manufacturing Company (ESMC) GmbH, in Dresden, Germany, to build a specialty technology fab focusing on automotive and industrial applications. 70% of ESMC's equity stake is owned by TSMC, with Robert Bosch GmbH, Infineon Technologies AG, and NXP Semiconductors N.V. each holding 10% equity stake. Total investments are expected to exceed 10 billion Euros. The planned fab is expected to have a monthly capacity of 40,000 300mm (12-inch) wafers on TSMC's 28nm/22nm planar complementary metal oxide semiconductor (CMOS) and 16nm/12nm FinFET process technology. ESMC aims to begin construction of the fab in the second half of 2024 with production targeted to begin by the end of 2027.

The Company continues to execute its plan to construct and operate three fabs in Arizona, the United States. Production of the first fab is targeted for the first half of 2025 and construction of the second fab is ongoing. TSMC is also building a new fab in Kumamoto, Japan, with production projected for late 2024. The Company plans to begin construction on a second fab on Kumamoto in 2024. TSMC provides customer support, account management and engineering services through offices in North America, Europe, Japan, China, and South Korea. At the end of 2023, the Company and its subsidiaries employed more than 76,000 people worldwide.

The Company is listed on the Taiwan Stock Exchange (TWSE) under ticker number 2330, and its American Depositary Shares (ADSs) are traded on the New York Stock Exchange (NYSE) under the symbol TSM.

R&D Highlights in 2023

Advanced Technology Highlights

● 2nm Technology

In 2023, TSMC's 2nm technological development focused on baseline setup, yield enhancement, transistor and interconnect R/C performance improvement, and reliability evaluation. During the year, major customers completed IP design and started silicon validation. The Company also developed low resistance RDL (redistribution layer), super high performance metal-insulator-metal (MiM) capacitors and backside power delivery network to further boost performance.

● A14 Technology

Development of the 14 Angstrom (A14) platform technology, targeting both SoC and HPC applications, made good progress in 2023. 14 Angstrom platform technology is expected to offer excellent improvement in speed, power, density and cost over 2nm technology.

● Lithography Technology

In 2023, TSMC R&D demonstrated high performance and expected wafer yield for the development of 2nm technology. The Company's R&D efforts in lithography have been focused on improving patterning and material quality, controlling variations, reducing defects, and lowering costs to support 2nm technology. Looking ahead to A14 and beyond, TSMC R&D will continue to explore next-generation EUV (extreme ultraviolet) lithography scanners, conduct research on mask pellicles and blanks to support leading-edge technology and extend Moore's Law. Furthermore, TSMC R&D will continuously evaluate new process technologies and materials to enhance lithography capabilities in the future.

Specialty Technology Highlights

● Mixed Signal/Radio Frequency (MS/RF)

While global consumer electronics were impacted by the aftermath of economic uncertainty triggered by COVID-19, in 2023 TSMC introduced N6RF+ technology to provide an alternative, cost-effective option to solve the excess inventory in smartphone markets and also provided N4RF for more high-end RF applications. To address the market in mmWave and RF frontend modules, the Company made continuous enhancements in N28HPC+ and N40SOI RF technologies by value-added design technology co-optimization (DTCO) as verified by many win-win solutions with customers. TSMC provided services for other RF technologies aimed at new emerging markets, such as low earth orbit (LEO) satellites and autonomous vehicles, in the form of RF process design kits (PDKs) with the most powerful ecosystem and time-to-market advantages from circuit design to product verification.

● Emerging Memory/Memory WoW Stacking Technology

The Company reached several major milestones in emerging memory technologies in 2023. TSMC offered RRAM as a low-cost embedded NVM (Non-Volatile Memory) solution for the price sensitive IoT market. The Company's 40nm, 28nm and 22nm nodes entered volume production, while 12nm and the next generation also entered development stage. TSMC has achieved the world's first mass production of 22nm consumer-grade MRAM. Moreover, the Company has taken steps to enhance its properties to meet automotive grade applications on the 22nm node. In 2023, TSMC successfully completed the technical qualification of the 16nm consumer-grade MRAM. Going forward, TSMC will collaborate closely with customers to develop an automotive grade 16nm MRAM, as well as explore the next generation of 16nm embedded MRAM technology and focus on reducing the bit cell size for cost efficiency to accelerate the deployment of future technologies for software-defined vehicles (SDVs), smart sensor and edge-AI applications.

TSMC developed 55nm node logic wafer and dynamic RAM heterogeneous wafer stacking processes, not only increasing data transfer bandwidth but also significantly reducing power consumption, with mass production already underway in 2023. TSMC also verified the wafer stacking technology of 28nm node RRAM. The electrical performance and reliability passed the test, providing a solution for high performance computing. In addition, TSMC demonstrated the wafer stacking technology of 22nm node MRAM, which is expected to meet the high speed and low power requirements of AI computing.

● Complementary Metal-Oxide-Semiconductor (CMOS) Image Sensors

TSMC achieved several accomplishments in CMOS Image Sensor technology in 2023, including (1) risk production of the worldwide first 3D-MiM embedded LOFIC pixel with a high dynamic range (DR>100dB) for high-end smartphones or ADAS automotive imaging applications; (2) technology transfer of an enhanced 3D-MiM (2.5X capacitance boost) embedded voltage domain global shutter (VDGS) CMOS image sensor to a manufacturing fab; (3) demonstration of TSMC's next generation Si SPAD (single photon avalanche diode) technology with 55% pixel area shrinkage and 2X PDE improvement for more advanced and powerful 3D depth sensing applications; and (4) demonstration of new generation Ge/Si heterogeneous photodetector with 90% dark current reduction for SWIR (short-wave infrared radiation) 3D depth and bio signal sensing applications.

Advanced Packaging Technology Highlights

● 3DIC and TSMC-SolC®

TSMC-SolC® wafer product is an innovative wafer-level frontend 3DIC chip stacking platform with outstanding bonding density, interconnect bandwidth, power efficiency, and thin profile. It extends Moore's Law through system-level scaling with sustainable performance gains and corresponding cost benefits. SolC integrated chips can be subsequently assembled by using conventional packages or TSMC's new 3DFabric® technology service, such as CoWoS® or InFO, for next generation HPC, AI and mobile applications. The SolC CoW Face-to-Back Gen-1 process is in production and the SolC CoW Face-to-Back Gen-2 process, with significant thermal performance improvement, is under product qualification and will enter production phase in 2024. The SolC CoW Face-to-Face Gen-1 process is under development and will provide an ultrahigh density connection solution in 2025. TSMC will continue to pursue SolC technological improvements and co-optimize with the Company's advanced silicon technologies for further gains in transistor density, system power/performance/area and cost.

● CoWoS®

CoWoS® advanced packaging service is the leading 2.5D technology to make ultra-high-performance AI and HPC packages by integrating most advanced logic and memory dies on an interposer. Market demands became even greater with the advent of generative AI in late 2022. TSMC qualified the CoWoS®-S Si interposer up to 3.3-reticle size (1 reticle size ~830mm²), with volume production launched in 2023. Beyond 3.3-reticle size, CoWoS®-L with reconstituted interposer of multiple LSIs (local silicon interconnects) increases the momentum for continuous interposer scaling. After its successful development in 2023, the first generation CoWoS®-L technology will enter volume production in 2024. HBM3E, the newest generation of high bandwidth memory, is ready now for production on both CoWoS®-S and CoWoS®-L, while the next generation of stacked memory of HBM4 and process upgrades in CoWoS® advanced packaging service are being planned to meet new performance requirements.

● InFO

In 2023, TSMC continued its industry leadership in high-volume manufacturing of InFO_PoP Gen-8 packaging for mobile applications. InFO_PoP Gen-9 was also successfully qualified for mobile applications, as was InFO_oS Gen-5, offering larger application-specific integrated circuits (ASIC) area, larger package size and higher bandwidth. InFO_M_PoP Gen-1, which integrates different functional chips suitable for wearable applications, started volume production in 2023, while the next-generation InFO_PoP with backside RDL for integrated low power DDR DRAM technology (LPDDR) was qualified in 2023 and is ready for volume production in 2024.

3 Market Overview

TSMC estimates that the worldwide semiconductor market excluding memory reached US\$481 billion in revenue in 2023, representing a 2% decline from 2022. In the foundry segment of the semiconductor industry, total revenue fell to US\$114 billion in 2023, a 13% year-over-year decrease.

In 2023, TSMC's revenues in the foundry segment declined, primarily due to the weak electronic equipment (EE) end demand and supply-chain inventory corrections. Although industry megatrends, such as 5G, artificial intelligence (AI), and accelerating digital transformation remained intact, macro-economic uncertainties dampened both consumer and business spending, resulting in reduced demand for many EE devices, such as smartphones and personal computers (PCs). In addition, the electronics supply chain experienced severe inventory corrections throughout 2023 to digest the excess inventory that had accumulated over the past two years due to supply uncertainties, impacting the growth of foundry segment and TSMC.

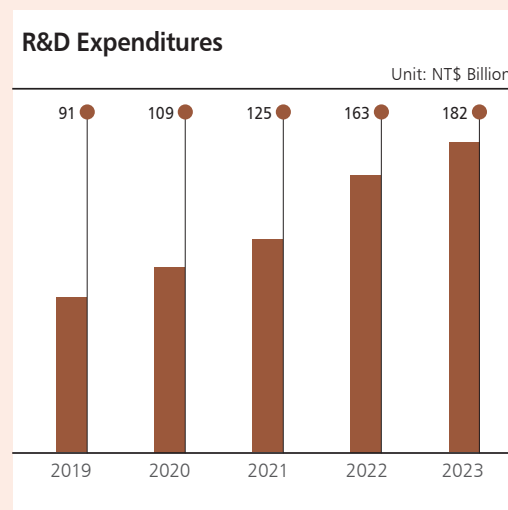
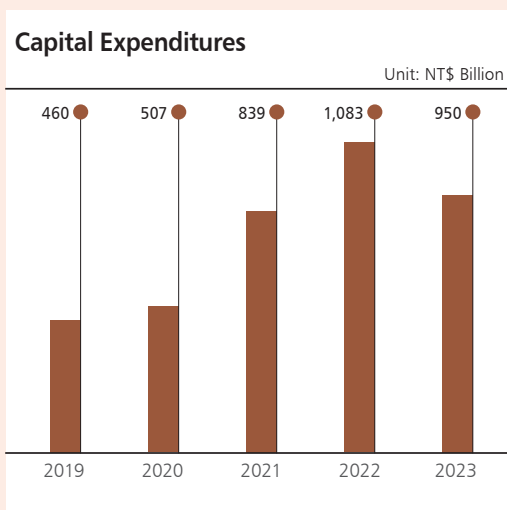
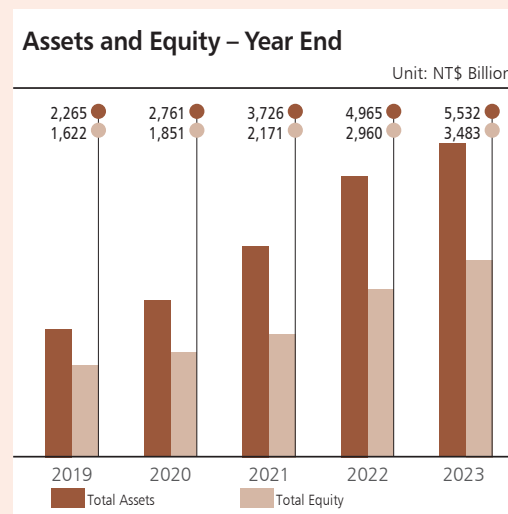
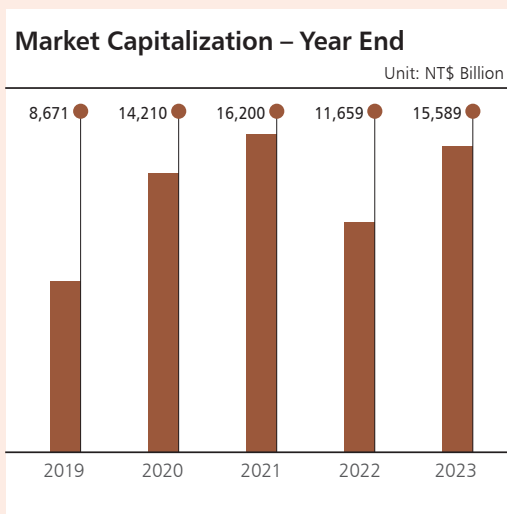
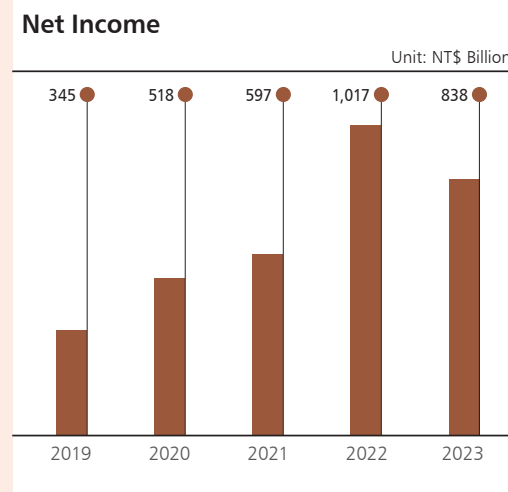
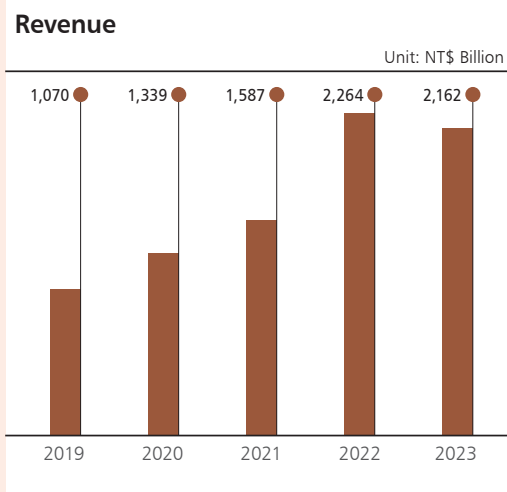
Looking ahead to 2024, macro-economic and geopolitical uncertainties remain high. However, TSMC expects end demand for many EE products such as smartphones and PCs to gradually recover with mild growth spurred in part by the pent-up demand after consecutive declines in the past two years. In addition, the acceleration of AI related adoptions will also fuel demand for semiconductors. The Company also expects the overall excess inventory in the system and IC companies to be largely digested and back to healthy levels by the first half of 2024, establishing a solid base for growth in 2024. For the longer term, driven by the above-mentioned megatrends and increasing semiconductor content in most EE devices, TSMC projects a high single-digit compound annual growth rate for the worldwide semiconductor market excluding memory from 2023 through 2028. Furthermore, the Company expects foundry segment revenue growth to outpace the growth of semiconductors excluding memory, fueled by continuing market share gains by fabless companies, increases in integrated device manufacturer (IDM) outsourcing, and the expanding use of in-house application-specific integrated circuits (ASIC) by systems companies.

As an upstream supplier in the semiconductor supply chain, the foundry segment is tightly correlated with the market health of all major platforms including high performance computing (HPC), smartphones, Internet of Things (IoT), automotive, and digital consumer electronics (DCE).

• High Performance Computing (HPC)

The HPC platform includes PCs, tablets, game consoles, servers, base stations and more. Major HPC unit shipments declined 14% in 2023 due to prolonged high inflation, macro-economic uncertainty and continued inventory correction, all resulting in weak demand on the consumer side. Meanwhile, demand for servers and data centers equipped with accelerators was relatively healthy, to fulfill the rapidly expanding types and needs of AI applications, especially generative AI, and continued 5G base station deployment.

Moving into 2024, despite lingering macro-economic uncertainty, TSMC projects low-single-digit growth in HPC unit shipments driven by normalized inventory levels, pent-up demand resulting from declines in the past two years, and the ongoing AI arms race. Longer term, an increasingly intelligent and more connected 5G world will demand massive computing power as well as increasingly energy-efficient computing. Both of these require higher performance and more power-efficient central processing units (CPUs), graphics processor units (GPUs), Network Processing Units (NPUs), AI accelerators, and related ASICs, which will drive the overall HPC platform towards richer silicon content,



more advanced process technologies and advanced 3D packaging. These trends are all favorable to TSMC given TSMC's technology leadership in these areas.

• Smartphones

Due to higher inflation, a soft global economy and the ongoing Russo-Ukrainian war, smartphone unit shipments declined 6% in 2023, reflecting a slowdown in the pace of 5G commercialization as well, thus prolonging the replacement cycle of 4G. The long supply chain inventory correction having subsided, smartphone growth is expected to return due to greater demand from emerging countries as well as cyclical recovery. TSMC therefore projects a low-single-digit growth for the smartphone market in 2024. Over the longer term, however, the inevitable migration to 5G, together with improved performance, longer battery life, biosensors and more edge AI features, will all continue to propel smartphone sales growth going forward.

High performance and power efficient IC technologies are essential requirements among handset manufacturers, and highly integrated chips and advanced 3D packaging designs are the preferred solutions to optimize cost, power and form factor (IC footprint and thickness). The migration to advanced process technologies will certainly continue, spurred by the need for higher performance chips to run edge AI applications and various complex software computations as well as higher resolution images and video. TSMC is an acknowledged leader in process technology for manufacturing highly integrated chips and advanced 3D packaging designs and, as such, is very well positioned to serve the evolving smartphone market.

• Internet of Things (IoT)

The IoT platform includes various types of smart connected devices ranging from wearables and health monitors to home and industrial automation devices. After the pandemic, digital transformation has resumed, refueling IoT growth momentum. Consumer and enterprise spending, however, was also held back by global inflation and economic slowdown. The end result was a modest 3% growth rate in IoT device shipments in 2023, with smart health and smart retail devices as the major drivers.

As IoT devices incorporate more AI features, the IoT industry is expected to maintain long-term growth. The first half of 2024 is projected to remain somewhat depressed, with growth momentum expected to recover in the second half. Overall, TSMC projects IoT unit shipments will enjoy a high-single-digit growth in 2024. Additionally, as more AI functions to be incorporated, IoT devices will require chips with higher performance and lower power consumption. TSMC offers various manufacturing processes that supports the need of IoT industry, including advanced technology, ultra-low power (ULP), and various special process technologies, to support customers in providing differentiated, innovative and competitive products, and fulfill requirements of sustainability development.

• Automotive

The global automotive market continues to recover from the supply constraints of the past couple of years. Worldwide car unit production grew 9% in 2023, supported by pent-up consumer demand and OEM inventory restocking as supply chains normalized. The ongoing headwinds of high inflation and macro-economic uncertainty, however, are expected to hold global car unit production to low-single-digit decline in 2024.

The megatrend in the automotive industry today is moving toward "greener, safer and smarter," which will accelerate the adoption of electric vehicles (EVs), advanced driver assistance systems (ADAS) and smart cockpit/infotainment systems, along with new electrical/electronic (E/E) architecture. All these will lead to further boost demand for Application Processor (AP)/Microcontroller Unit (MCU)/

ASIC processors, in-car networking, sensors, and power management ICs (PMICs), thus continuously increasing the silicon content per car. TSMC is well-positioned to support the automotive industry's megatrend transition, by providing advanced process technologies and manufacturing solutions that enable customers to develop competitive products for the automotive market. In addition, TSMC also offers a range of automotive-grade manufacturing processes, including those with AEC-Q100 and ISO 26262 certification, to ensure the highest levels of quality and reliability for automotive applications.

• Digital Consumer Electronics (DCE)

The global DCE market declined 3% in 2023 as overall demand was sluggish for TVs, set-top boxes (STB) and other consumer products that sold well during pandemic. Fighting longer replacement cycles, as well as high inflation squeezing consumer budgets, the TV market had a modest upswing of shipments in the U.S. due to restocking of low channel inventory but it was offset by weak demand in China, where economic growth has slowed and consumer spending fell due to a variety of factors including a weakened housing market, low marriage rates, and the US-China decoupling.

In 2024, the DCE market is expected to have gradual recovery in Europe and emerging regions. Therefore, TSMC forecasts shipments to show a low-single-digit annual growth rate. Potential growth drivers of the DCE market include large screens, 120Hz/165Hz high frame rate Gaming TVs, voice AI control, and WiFi 6 connectivity. Regardless of the timing of the recovery, TSMC's advanced technologies will continue to enable DCE customers to create and differentiate their innovative products.

4 TSMC's Trinity of Strengths

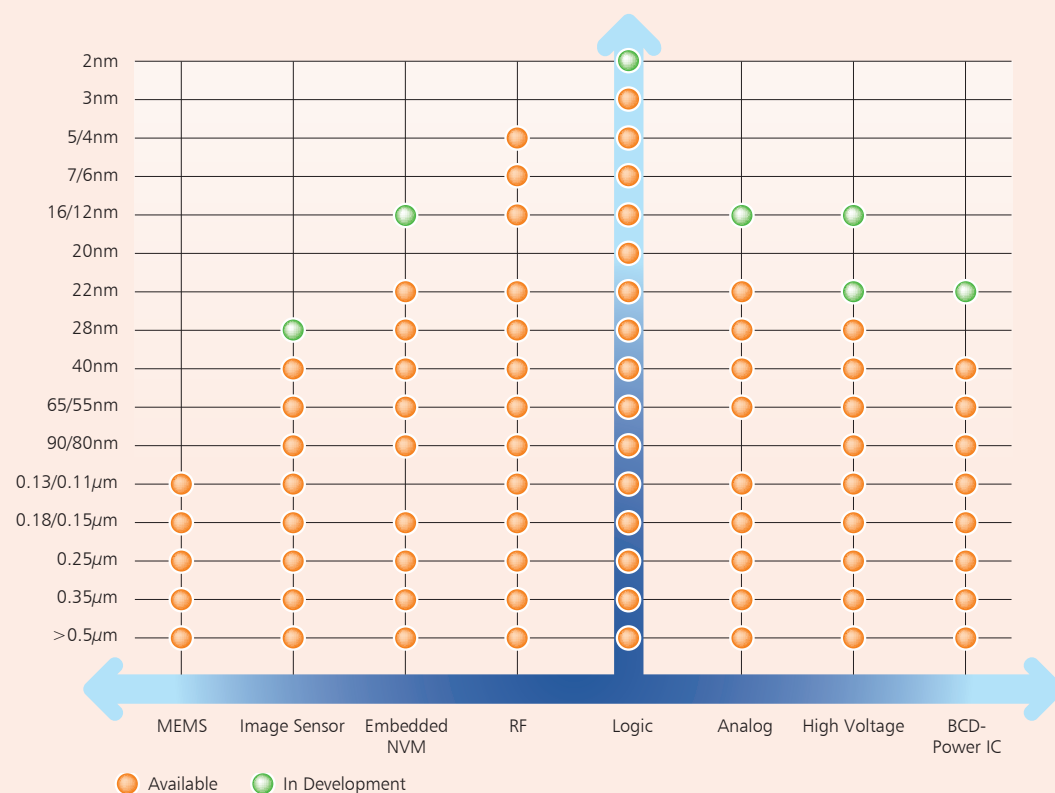
TSMC's has been able to achieve its outstanding track record by unleashing the innovation of our customers. We do not compete with our customers but support them as they grow, and participate in their success as they flourish. Our ability to unleash innovation is rooted in our trinity of strengths: Technology Leadership, Manufacturing Excellence, and Customer Trust.

Each component of the trinity plays a critical part. Our Technology Leadership allows us to provide leading-edge technologies to serve the most advanced product designs, and also enables a broad portfolio of specialty processes offerings for a diverse spectrum of IC designers. Our Manufacturing Excellence offers customers the fastest time-to-volume for their products and gives us the flexible capacity to not only manufacture for the foundry segment's largest customer base, but also to provide more capacity when their products succeed and begin to generate high demand. Finally, Customer Trust keeps the goals of TSMC and its customers aligned, because we do not believe long-term success is possible if our customers do not succeed.

Technology Leadership

As a semiconductor industry leader, TSMC provides the broadest range of advanced, specialty and advanced packaging technology services. Our technology offerings possess the breadth of specialty technologies to suit the needs of a broad array of customers, and our leading-edge technology development has the depth to give customers a head start in the next wave of fast-growing product segments. We commit considerable resources to maintain this competitive advantage in technology. In 2023, TSMC continued to invest in research and development, with total R&D expenditures amounting to 8.5% of revenue.

Comprehensive Technology Portfolio



Faced with the continuous challenge of significantly scaling up semiconductor computing power every two years, thereby extending Moore's Law, the Company has focused its R&D efforts on contributing to customers' product success by offering leading-edge technologies and design solutions. In 2023, while the development of 2nm technology continued baseline setup and moved into yield enhancement stage, TSMC started development and made good progress on 14 Angstrom (A14) technology, which aims to further improve speed, power, density and cost. Furthermore, the Company's research efforts continued pushing forward with exploratory studies for nodes beyond 14 Angstrom technology.

In addition to complementary metal oxide semiconductor (CMOS) logic, TSMC conducts R&D on a wide range of other semiconductor technologies that provide the functionality required by customers for high-performance computing, mobile SoC, and other applications. Highlights in 2023 included:

- The Company's integrated interconnect and packaging solution, the 3DFabric® technology service, showed further progress in supporting the newest generation of high bandwidth memory, HBM3E, on both CoWoS®-S and CoWoS®-L. While TSMC continued its industry leadership in high-volume manufacturing of InFO_PoP Gen-8 packaging, InFO_PoP Gen-9 was also fully qualified for mobile applications. In addition, InFO_oS Gen-5 was successfully qualified, offering larger application-specific integrated circuits (ASIC) area, more chip-partition integration, larger package size and higher bandwidth.
- In specialty technologies, examples of progress included: 0.13μm and 90nm BCD (Bipolar-CMOS-DMOS) technologies were expanded to meet the demand of the automotive market; TSMC's industry leading GaN (Gallium Nitride) power device technology, the second generation of 650V and 100V E-HEMT, entered the reliability verification stage with production expected in 2024; the worldwide first CMOS image sensor technology with 3D-MiM embedded LOFIC (lateral overflow integration capacitor) pixel with a high dynamic range (DR>100dB) for high-end smart phone or advanced driver-assistance systems (ADAS) automotive imaging applications entered risk production; and the world's first mass-production of 22nm consumer-grade magnetoresistive random access memory (MRAM) was achieved.

TSMC's design enablement team also provides customers with comprehensive support to optimize design productivity and reduce cycle time, enabling their products to go from the designer's desk to the marketplace is as short a time as possible. Our design support includes design flows for electronic design automation (EDA); silicon-proven IP building blocks, process design kits (PDKs), and technology files. As of 2023, the Company had expanded its library and silicon IP portfolio to contain more than 73,000 items, a 33% increase over 2022, and has provided customers more than 48,000 technology files and 3,400 PDKs.

Manufacturing Excellence

TSMC deployed 288 distinct process technologies, and manufactured 11,895 products for 528 customers in 2023, making it the world's most diversified and largest provider of logic IC capacity. TSMC's unique manufacturing system is tailored to manage the diverse manufacturing requirements of each customer, product, and technology without compromising speed, precision, and flexibility to adapt to changing circumstances. At the same time, our people and systems deliver these results in the leanest and most efficient way possible to support TSMC's profitability.

The Company's sophisticated, agile and intelligent operating system drives manufacturing excellence. TSMC has integrated process experience, machine tuning, manufacturing know-how, and AI technologies to create an intelligent manufacturing environment. Intelligent manufacturing

technologies are widely applied to lean manufacturing, employee productivity, equipment productivity, process and equipment control, quality defense, and robotic control to optimize quality, productivity, efficiency, and flexibility. The end result is real-time information analysis, improved forecast capability, maximum cost effectiveness, and accelerated innovation.

TSMC has also integrated new applications such as intelligent mobile devices, IoT, edge computing, and mobile robot, with intelligent automated material handling systems (AMHS) to consolidate wafer manufacturing data collection and analysis, utilize manufacturing resources efficiently, and maximize manufacturing effectiveness. TSMC continues to improve semiconductor production through AI that uses massive amounts of production data to achieve agile and intelligent operations.

TSMC Trinity of Strengths Enables Us to be Everyone's Foundry



Customer Trust

Customer Trust is deeply ingrained as one of TSMC's four core values and is our keystone to unleashing innovation. It ensures that we win together with our customers in long-term relationships that last from one generation of technology to another. A critical foundation stone for customer trust is a commitment TSMC made when it first opened for business: to never compete with customers. As a result, TSMC does not design IC products, but chooses to focus all of its resources on serving as the trusted foundry partner for its customers.

The dedicated foundry business model gives TSMC a distinct advantage over IDM foundries which give priority to manufacturing its own IC products over those of its customers. Customers that work with TSMC will not need to be concerned that their products will compete with their foundry's products in the marketplace. Nor will they need to worry that their capacity needs will take a back seat to the capacity needs of the IDM's products.

TSMC's engagement with customers begins at the earliest stages of R&D to understand their technology needs, and continues through to design support, mask making, manufacturing, and packaging and testing. Along the way, customers can call on the support of a dedicated customer service team, as well as 24-hour a day, seven-day-a-week access to real-time information through TSMC-Online, a suite of web-based applications that facilitates design, engineering, and logistics collaboration. From the fundamental tenets of TSMC's business model to the fine-grained details of doing business together, customers can be assured that TSMC is committed to winning together with them.

5 Corporate Governance

TSMC advocates and acts upon the principles of operational transparency and respect for shareholder rights. We believe that the basis for successful corporate governance is a sound and effective Board of Directors. In line with this principle, TSMC Board of Directors delegates various responsibilities and authority to three Board Committees, Audit and Risk Committee, Compensation and People Development Committee, and Nominating, Corporate Governance and Sustainability Committee. Each Committee's chairperson regularly reports to the Board on its activities and recommendations.

Board of Directors

TSMC's Board of Directors consists of ten distinguished members with a great breadth of experience as world-class business leaders or professionals. We deeply rely on them for their diverse knowledge, personal perspectives, and solid business judgment. Seven of those ten members are Independent Directors: Sir Peter Leahy Bonfield, Mr. Michael R. Splinter, Mr. Moshe N. Gavrielov, Dr. L. Rafael Reif, Ms. Ursula M. Burns, Ms. Lynn L. Elsenhans, and Dr. Chuan Lin.

TSMC's Board is comprised of a diverse group of professionals from different backgrounds in industries, academia, law, etc. These professionals include citizens from Taiwan, Europe and the U.S. with world-class business operating experience, two of whom is female. Independent Directors constitute 70% of the Board.

In December 2023, TSMC announced that Dr. Mark Liu plans to retire from TSMC in June 2024, and will not seek re-election to the board of directors. During his tenure, Dr. Liu reaffirmed the Company's commitment to its mission and focused on enhancing corporate governance and competitiveness particularly in technology leadership, digital excellence, and global footprint. TSMC's Nominating, Corporate Governance and Sustainability Committee recommended Dr. C.C. Wei to succeed as TSMC's next Chairman, and he was elected to the incoming board in June 2024.

Inheriting the spirit of TSMC's Founder, Dr. Morris Chang's philosophy on corporate governance, under the leadership of Chairman and CEO Dr. C.C. Wei, TSMC's Board of Directors takes a serious and forthright approach to its duties and is a dedicated, competent and independent Board.

The Board's primary duty is to supervise the Company's compliance with relevant laws and regulations, financial transparency, timely disclosure of material information, and maintaining of the highest integrity. TSMC's Board of Directors strives to perform these responsibilities through its Audit and Risk Committee, Compensation and People Development Committee, Nominating, Corporate Governance and Sustainability Committee, the hiring of a financial expert consultant for the Audit and Risk Committee, and coordination with our Internal Audit department.

The second duty of the Board of Directors is to appoint and dismiss officers of the Company when necessary, to evaluate management performance and to review the succession plan for senior executives. TSMC's management has maintained a healthy and functional communication with the Board of Directors, has been devoted in executing guidance of the Board, and is dedicated in running the business operations, all to achieve the best interests for TSMC shareholders.



6 Environmental, Social, and Governance

The third duty of the Board of Directors is to resolve critical matters, such as capital appropriations, investment activities, dividends, etc.

The fourth duty of the Board of Directors is to provide guidance to the Company's management team and risk management. In each quarter, TSMC's management reports to the Board on various subjects (including ESG programs) and strategies, and spends substantial time and effort to communicate with the Board. The Board would comment on the risk and probabilities for success of the proposed corporate strategies. The Board also periodically oversees those strategies' implementation and outcomes, and may suggest the management team to make adjustments to the strategic goals and objectives if necessary.

TSMC actively implements ESG management following three missions: Acting with Integrity, Strengthening Environmental Protection, and Caring for the Disadvantaged. In so doing, the Company seeks maximum achievements as the leading technology and capacity provider of the global logic IC industry and strives to establish mutually beneficial interaction with all stakeholders – employees, shareholders/investors, customers, suppliers/contractors, governments/associations and society as a whole – aiming to create sustainable value and to be a force for positive change.

TSMC's ESG Management

TSMC has established the ESG Steering Committee as the highest level of ESG decision-making, chaired by the Company's Chairman, while the Chairperson of the ESG Committee serves as executive secretary, and other members are senior executives from a wide variety of functions. All work together to examine material ESG issues in relation to the Company's operations, set the short-, medium- and long-term strategic directions that link to the UN's Sustainable Development Goals (SDGs).

The ESG Committee functions to coordinate and integrate resources, and facilitate communication among various divisions, implementing the resolutions of the Company's ESG Steering Committee. The ESG Department, on behalf of the ESG Committee, works together with cross-organizational representatives to identify key sustainability issues in relation to the Company's operations and stakeholders' concerns. Task forces are formed to address various issues and frame adaptive strategies, goals and action plans. The ESG Committee holds quarterly meetings to track progress and ensure the strategies are implemented effectively in daily operations. At the same time, every quarter the chairperson of the ESG Committee reports on the implementation of plans and results to the Board of Directors/Nominating, Corporate Governance and Sustainability Committee, under whose supervision the ESG Committee continues to improve TSMC's sustainability management policies, strategies, and goal setting and deepen sustainable development.

In 2023, TSMC focused primarily on green manufacturing and supply chain management (including net zero emissions, renewable energy access and use, biodiversity strategy, and low-carbon value chain management), diverse and inclusive workplace, and talent development (including a series of activities promoting diversity and inclusion, conducting human rights due diligence, deepening high school students' science, technology, engineering, and mathematics (STEM) programs), and public welfare investments such as the Public Welfare Green Energy Project. TSMC also planned and oversaw ESG budgets for 2023 and 2024. The Company uses sustainability reports as an ESG management tool and updates themed reports such as the Climate and Nature Report, the UN's SDG Action Report, and the Materiality Analysis Report. In June 2024, TSMC will release its first Sustainability Impact Valuation Report, which includes social impact and environmental profit and loss analysis, and Human Rights Report to further expand sustainability transparency and drive towards a better future.

ESG Highlights in 2023

TSMC Accelerates Timetable for Renewable Energy Target

In September 2023, TSMC announced an acceleration of its RE100 sustainability timetable, moving its target for 100% renewable energy consumption for all global operations forward to 2040 from 2050. TSMC also raised its 2030 target for company-wide renewable energy consumption to 60% from 40%. TSMC committed to net zero emissions by 2050 two years ago on the International Day for the Preservation of the Ozone Layer, and now this new timetable demonstrates TSMC's determination

to commit to its aspirations as the company actively pursues more opportunities and possibilities to meet environmental sustainability goals at a faster pace.

TSMC Fabs Mark Industry First in Jointly Obtaining Platinum Rating for UL 2799 Waste Recycling Standard

In line with TSMC's principle of "minimizing waste, maximizing recycling, and optimizing management", TSMC has continued to advance its recycling and reuse methodologies and increased the waste recycling rate for fabs in Taiwan from 96% to 97% in 2023. As a result, TSMC's Taiwan fabs became the first semiconductor facilities in the world to jointly obtain the highest platinum rating for UL 2799 certification in October. This achievement builds on the success of Phase one and two of TSMC's Fab 12 in gaining the UL 2799 platinum certification in 2021. TSMC will continue to strive towards its goal of net-zero emission in 2050 and reaffirm its commitment to the United Nations Sustainable Development Goal 12.

Renewable Energy Joint Procurement Program

In April 2023, TSMC announced the first joint procurement renewable energy program in Taiwan, and signed a long-term renewable energy PPA (Power Purchase Agreement) with ARK Power with a total 1 TWh annually or a total of 20 TWh for 20 years, of which 500GWh was subscribed by TSMC every year, and another 500GWh was opened to joint subscription by TSMC's local supply chain partners. It is expected that 500,000 metric tons of CO₂ emissions will be reduced annually in the future, strengthening the carbon reduction action of local supply chains.

7 Financial Statements

Taiwan Semiconductor Manufacturing Company Limited and Subsidiaries Consolidated Condensed Balance Sheets

December 31, 2019 - 2023

(In Millions of New Taiwan Dollars (NTD) and U.S. Dollars (USD))

	2023		2022	2021	2020	2019
	USD	NTD	NTD	NTD	NTD	NTD
ASSETS						
Current Assets						
Cash and Cash Equivalents	\$ 47,661	\$ 1,465,428	\$ 1,342,814	\$ 1,064,990	\$ 660,171	\$ 455,399
Investments in Marketable Financial Instruments	7,227	222,217	218,672	123,465	131,306	128,049
Accounts Receivable	6,568		231,340	198,302	146,038	139,771
Inventories	8,163	250,997	221,149	193,102	137,353	82,981
Other Current Assets	1,739	53,453	38,922	27,214	17,317	16,414
Total Current Assets	71,358	2,194,033	2,052,897	1,607,073	1,092,185	822,614
Non-current Assets						
Long-term Investments	4,210	129,442	68,928	29,384	27,728	30,172
Property, Plant and Equipment	99,667	3,064,475	2,693,837	1,975,119	1,555,589	1,352,377
Right-of-use, Intangible and Other Non-current Assets	4,697	144,421	149,117	113,927	85,209	59,642
Total Non-current Assets	108,574	3,338,338	2,911,882	2,118,430	1,668,526	1,442,191
Total Assets	\$ 179,932	\$ 5,532,371	\$ 4,964,779	\$ 3,725,503	\$ 2,760,711	\$ 2,264,805
LIABILITIES AND SHAREHOLDERS' EQUITY						
Current Liabilities						
Short-term Loans	\$ -	\$ -	\$ -	\$ 114,921	\$ 88,559	\$ 118,522
Accounts Payable	1,864	57,293	56,522	48,723	41,095	40,206
Payables to Contractors and Equipment Suppliers	5,577	171,485	213,500	145,742	157,805	140,811
Cash Dividends Payable	5,482	168,558	142,617	142,617	129,652	129,652
Accrued Expenses and Other Current Liabilities	16,488	506,954	512,274	282,933	197,440	129,745
Current Portion of Bonds Payable and Bank Loans	302	9,293	19,314	4,567	2,600	31,800
Total Current Liabilities	29,713	913,583	944,227	739,503	617,151	590,736
Non-current Liabilities						
Bonds Payable	29,723	913,900	834,336	610,071	254,105	25,100
Other Non-current Liabilities	7,208	221,625	225,727	205,196	38,833	26,874
Total Non-current Liabilities	36,931	1,135,525	1,060,063	815,267	292,938	51,974
Total Liabilities	66,644	2,049,108	2,004,290	1,554,770	910,089	642,710
Equity Attributable to Shareholders of the Parent						
Capital Stock at Par Value	8,434	259,321	259,304	259,304	259,304	259,304
Capital Surplus	2,273	69,876	69,330	64,762	56,347	56,340
Legal Capital Reserve	10,119	311,147	311,147	311,147	311,147	311,147
Special Capital Reserve	-	-	3,154	59,304	42,259	10,675
Unappropriated Earnings	92,591	2,846,884	2,323,224	1,536,378	1,235,280	1,011,513
Others	(921)	(28,314)	(20,506)	(62,609)	(54,680)	(27,569)
Equity Attributable to Shareholders of the Parent	112,496	3,458,914	2,945,653	2,168,286	1,849,657	1,621,410
Noncontrolling Interests	792	24,349	14,836	2,447	965	685
Total Shareholders' Equity	113,288	3,483,263	2,960,489	2,170,733	1,850,622	1,622,095
Total Liabilities & Shareholders' Equity	\$ 179,932	\$ 5,532,371	\$ 4,964,779	\$ 3,725,503	\$ 2,760,711	\$ 2,264,805

Note: Amounts in New Taiwan dollars have been translated into U.S. dollars at the rate of NT\$30.747 for the year ended December 31, 2023.

Taiwan Semiconductor Manufacturing Company Limited and Subsidiaries

Consolidated Condensed Statements of Comprehensive Income

For the Years Ended December 31, 2019 - 2023

(In Millions of New Taiwan Dollars (NTD) and U.S. Dollars (USD), Except for Earnings Per Share)

	2023		2022	2021	2020	2019
	USD	NTD	NTD	NTD	NTD	NTD
Net Revenue	\$ 69,298	\$ 2,161,736	\$ 2,263,891	\$ 1,587,415	\$ 1,339,255	\$ 1,069,985
Cost of Revenue	(31,628)	(986,625)	(915,536)	(767,878)	(628,125)	(577,283)
Gross Profit	37,670	1,175,111	1,348,355	819,537	711,130	492,702
Operating Expenses						
Research and Development Expenses	(5,846)	(182,370)	(163,262)	(124,735)	(109,486)	(91,419)
Sales, General and Administrative Expenses	(2,291)	(71,464)	(63,446)	(44,488)	(35,570)	(28,086)
Total Operating Expenses	(8,137)	(253,834)	(226,708)	(169,223)	(145,056)	(119,505)
Other Operating Income and Expenses	6	189	(368)	(333)	710	(496)
Income from Operations	29,539	921,466	1,121,279	649,981	566,784	372,701
Non-operating Income and Expenses						
Share of Profits of Associates	149	4,655	7,799	5,603	3,593	2,844
Net Interest Income (Expenses)	1,548	48,294	10,672	294	6,937	12,939
Other Gains and Losses	153	4,756	4,441	7,248	7,463	1,361
Total Non-operating Income and Expenses	1,850	57,705	22,912	13,145	17,993	17,144
Income before Income Tax	31,389	979,171	1,144,191	663,126	584,777	389,845
Income Tax Expenses	(4,533)	(141,403)	(127,290)	(66,053)	(66,619)	(44,501)
Net Income	26,856	837,768	1,016,901	597,073	518,158	345,344
Other Comprehensive Income (Losses)	(283)	(8,814)	42,430	(7,619)	(30,322)	(11,824)
Comprehensive Income	\$ 26,573	\$ 828,954	\$ 1,059,331	\$ 589,454	\$ 487,836	\$ 333,520
Net Income Attributable to:						
Shareholders of the Parent	\$ 26,879	\$ 838,498	\$ 1,016,530	\$ 596,540	\$ 517,885	\$ 345,264
Noncontrolling Interests	(23)	(730)	371	533	273	80
	\$ 26,856	\$ 837,768	\$ 1,016,901	\$ 597,073	\$ 518,158	\$ 345,344
Earnings per Share - Diluted (NT\$)	\$ 1.04	\$ 32.34	\$ 39.20	\$ 23.01	\$ 19.97	\$ 13.32
Earnings per ADR - Diluted (US\$)	\$ 5.18	\$ 161.69	\$ 6.57	\$ 4.12	\$ 3.39	\$ 2.15

Note: Amounts in New Taiwan dollars have been translated into U.S. dollars at the weighted average rate of NT\$31.195 for the year ended December 31, 2023.

Taiwan Semiconductor Manufacturing Company Limited and Subsidiaries

Consolidated Condensed Cash Flow Statements

For the Years Ended December 31, 2019 - 2023

(In Millions of New Taiwan Dollars (NTD) and U.S. Dollars (USD))

	2023		2022	2021	2020	2019
	USD	NTD	NTD	NTD	NTD	NTD
Cash Flows from Operating Activities:						
Income Before Income Tax	\$ 31,389	\$ 979,171	\$ 1,144,191	\$ 663,126	\$ 584,777	\$ 389,845
Depreciation & Amortization	17,060	532,191	437,254	422,395	331,725	286,884
Share of Profits of Associates	(149)	(4,655)	(7,799)	(5,603)	(3,593)	(2,844)
Income Taxes Paid	(5,125)	(159,875)	(86,561)	(83,498)	(51,362)	(52,044)
Changes in Working Capital & Others	(3,362)	(104,865)	123,514	115,741	(38,880)	(6,702)
Net Cash Generated by Operating Activities	39,813	1,241,967	1,610,599	1,112,161	822,667	615,139
Cash Flows from Investing Activities:						
Interest Received	1,791	55,887	18,084	5,991	9,775	16,875
Cash Dividend Received	113	3,522	3,016	2,499	3,487	2,039
Acquisitions of:						
Property, Plant and Equipment	(30,448)	(949,817)	(1,082,672)	(839,196)	(507,239)	(460,422)
Marketable Financial Instruments	(7,254)	(226,282)	(237,818)	(259,688)	(266,940)	(257,997)
Proceeds from Disposal or Redemption of:						
Property, Plant and Equipment	23	704	983	390	607	287
Marketable Financial Instruments	5,460	170,305	107,293	263,973	267,247	247,212
Others	1,268	39,561	186	(10,335)	(12,719)	(6,796)
Net Cash Used In Investing Activities	(29,047)	(906,120)	(1,190,928)	(836,366)	(505,782)	(458,802)
Cash Flows from Financing Activities:						
Increase in Hedging Financial Liabilities - Bank Loans	895	27,909	-	-	-	-
Increase (Decrease) in Short-term Loans	-	-	(111,960)	35,668	(31,572)	31,804
Proceeds from Issuance of Bonds	2,747	85,700	198,293	364,593	236,726	-
Repayment of Bonds	(580)	(18,100)	(4,400)	(2,600)	(31,800)	(34,900)
Repayment of Long-term Bank Loans	(56)	(1,757)	(167)	-	-	-
Interest Paid	(556)	(17,359)	(12,219)	(3,834)	(1,781)	(3,597)
Cash Dividends Paid for Common Stock	(9,352)	(291,722)	(285,234)	(265,786)	(259,304)	(259,304)
Repurchase of Treasury Stock	-	-	(872)	-	-	-
Others	334	10,435	16,315	8,567	(884)	(3,642)
Net Cash Used in Financing Activities	(6,568)	(204,894)	(200,244)	136,608	(88,615)	(269,639)
Effect of Exchange Rate Changes on Cash and Cash Equivalents and Others	(268)	(8,339)	58,397	(7,584)	(23,498)	(9,114)
Net Increase (Decrease) in Cash and Cash Equivalents	3,930	122,614	277,824	404,819	204,772	(122,416)
Cash and Cash Equivalents at Beginning of Period	43,046	1,342,814	1,064,990	660,171	455,399	577,815
Cash and Cash Equivalents at End of Period	\$ 46,976	\$ 1,465,428	\$ 1,342,814	\$ 1,064,990	\$ 660,171	\$ 455,399

Note: Amounts in New Taiwan dollars have been translated into U.S. dollars at the weighted average rate of NT\$31.195 for the year ended December 31, 2023.

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