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MACRONIX
INTERNATIONAL Co., LTD.

Year 2020 Annual Report

Printed on March 30, 2021

This Annual Report is available at the following Websites :

Taiwan Stock Exchange Market Observation Post System :
<http://mops.twse.com.tw>

Corporate Website : <http://www.macronix.com>

-----Disclaimer-----

THIS IS A TRANSLATION OF THE YEAR 2020 ANNUAL REPORT OF MACRONIX INTERNATIONAL CO., LTD. THE TRANSLATION IS FOR REFERENCE ONLY. IF THERE IS ANY DISCREPANCY BETWEEN THE ENGLISH VERSION AND CHINESE VERSION, THE CHINESE VERSION SHALL PREVAIL.

I. Company Spokesperson and Deputy

Spokesperson: Miin Chyou Wu

Tel: 03-5786688

Deputy Spokesperson: Pei-Fu Yeh

Tel: 03-5786688

Title: Chairman and CEO

E-mail: ir@mxic.com.tw

Title: Vice President

E-mail: ir@mxic.com.tw

II. Headquarters and Factories

Headquarters and FAB 2: No. 16, Li-Hsin Road, Science Park, Hsin-chu, Taiwan, R.O.C.

Tel: 03-5786688

FAB 1: No. 3, Creation Road III, Science Park, Hsin-chu, Taiwan, R.O.C.

Tel: 03-5788888

FAB 5: No. 19, Li-Hsin Road, Science Park, Hsin-chu, Taiwan, R.O.C.

Tel: 03-6668999

Product Testing: No. 8, Creation Road IV, Science Park, Hsin-chu, Taiwan, R.O.C.

Tel: 03-5783333

Taipei Office: 19F, No. 4, Min-Chuan E. Road, Sec. 3, Taipei, Taiwan, R.O.C.

Tel: 02-25093300

III. Stock Transfer Agency

Stock Affairs Office of Macronix International Co., Ltd.

Address: 2F, No. 162-1, Songjiang Road, Taipei, Taiwan, R.O.C.

Website: <http://www.macronix.com>

Tel: 02-25638128

IV. Auditors

Accounting Firm: Deloitte & Touche

Accountant: Tung Hui Yeh, Kuo Tyan Hong

Address: 6F, No. 2, Prosperity Road I, Science Park, Hsin-chu, Taiwan, R.O.C.

Website: <http://www.deloitte.com.tw>

Tel: 03-5780899

V. Overseas Securities Exchanges: None

VI. Company Website: <http://www.macronix.com>

Macronix's Philosophy

Honesty

Macronix's Values

Innovation, Quality, Efficiency, Service, Team Work

Table of Contents

Chapter I. Letter to Shareholders	1
Chapter II. Company Overview	3
I. Date of Establishment	3
II. Company History	3
Chapter III. Corporate Governance Report	7
I. Organization.....	7
II. Profile of Directors, Supervisors, the President, Vice Presidents, Assistant Managers, and Department Directors	9
III. Remuneration of Directors, Supervisors, President, and Vice Presidents in the Most Recent Fiscal Year	19
IV. Implementation of Corporate Governance	24
V. CPA Fees	68
VI. CPA Information.....	69
VII. If Chairman, President, or Chief Financial Officer Holding Positions at the Independent Audit Firm or its Affiliated Company within the Most Recent Fiscal Year.....	70
VIII. Equity Transfer and Pledge by Directors, Supervisors, Managers and/or Shareholders, Who Hold More Than 10% of the outstanding Shares, in the Most Recent Fiscal Year and Up to the Printing Date of this Annual Report.....	70
IX. Relationship Among the Top Ten Shareholders	72
X. The Total and Combined Shareholding in A Single Enterprise by the Company, its Directors,Supervisors, Managers, and the Directly or Indirectly Controlled Entities.....	73
Chapter IV Capital Overview	74
I. Capital and Shares	74
II. Corporate Bonds	82
III. Preferred Shares	82
IV. Global Depository Receipts	82
V. Employee Stock Options	82
VI. New Shares of Employee Restricted Stock Awards.....	83
VII. Mergers, Acquisitions or Issuance of New Shares for Acquisition of Shares of other Companies.	85
VIII. Financing Plans and Implementation.....	85
Chapter V. Operation Summary	86
I. Business Activities.....	86
II. Market and Sales Overview	90
III. Employees Information.....	94
IV. Environmental Protection Expenditures	95
V. Labor Relations.....	96
VI. Important Contracts	102
Chapter VI. Financial Summary	104
I. Condensed Balance Sheet and Comprehensive Income Statement in the Last Five Fiscal Years.....	104
II. Financial Analysis for the Last Five Fiscal Years	108
III. Audit Committee’s Report for the Most Recent Year	111
IV. Financial Statements for the Most Recent Year	112

V.	Stand-Alone Financial Statements for the Most Recent Year Certified By the Accountant	112
VI.	Financial Difficulties Encountered by the Company and Its Affiliated Companies in the Most Recent Fiscal Year and Up to the Printing Date of this Annual Report.....	112
	Chapter VII. Review, Analysis, and Risks of Financial Position and Performance.....	113
I.	Analysis of Financial Status	113
II.	Analysis of Financial Performance	114
III.	Analysis of Cash Flow	115
IV.	Recent Years Major Capital Expenditures and Impact on Financial and Business.....	115
V.	Reinvestment Policy for the Most Recent Fiscal Year, the Main Reasons for the Profits/Losses Generated Thereby, the Plan for Improving Re-Investment Profitability, and Investment Plans for the Coming Year	116
VI.	Analysis of Risk Management in the Most Recent Fiscal Year and Up to the Printing Date of this Annual Report	116
VII.	Other Significant Events.....	119
	Chapter VIII. Special Disclosure.....	120
I.	Summary of Affiliated Companies	120
II.	Private Placement Securities of the Most Recent Year and Up to the Printing Date of this Annual Report:.....	123
III.	Subsidiaries' Holding or Disposing the Company's Shares in the Most Recent Fiscal Year and Up to the Printing Date of this Annual Report.....	124
IV.	Other Necessary Supplement.....	124
V.	The Events Resulting in Significant Impact to Shareholders' Equity or Stock Prices Under Article 36(3) (ii) of Securities and Exchange Act in the Most Recent Fiscal Year and Up to the Printing Date of this Annual Report.....	124

Chapter I. Letter to Shareholders

The COVID-19 pandemic in 2020 resulted in a series of crises, including exchange rate fluctuations, trade conflicts, and broken supply chains, which further affected the international political and economic situation. The pandemic also changed how many people work and their way of life, creating business opportunities in a stay-at-home economy, which has driven increased demand on high capacity NOR Flash in the server, 5G base station, and medical device markets. Macronix is already a leader in high capacity and high quality applications thanks to its long-term efforts and strategies. As such, we have earned the trust of international customers. Combined with the strong demand of gaming console customers on ROM products, Macronix continued to operate at full capacity despite the severe economic environment, and its 2020 revenue was still able to grow despite all headwinds. Our consolidated net operating revenue increased 14% compared with the previous year (2019) and reached a record high, gross margin was up 6 percentage points compared with the previous year (2019), and net income before tax doubled compared with the previous year (2019). These results show Macronix's ability to create even greater investment value for shareholders.

The operating performance of 2020 is as follows: consolidated net operating revenue for the year was NT\$39.801 billion, annual consolidated gross profit was NT\$13.409 billion, while annual gross margin was 33.7%, net income after tax was NT\$5.326 billion, and earnings per share jumped to NT\$2.9. Cash generated from operating activities was NT\$9.855 billion, cash expenditures for investment activities was NT\$6.043 billion, with NT\$11.879 billion in cash at the end of the period, debt ratio was 45.1%, book value per share rose to NT\$19.52, and return on equity increased to 16%. Financial ratios were all better than the previous year (2019) and show that Macronix's financial structure is robust and healthy.

Macronix was established over 30 years ago, but our spirit of "Innovation and R&D" has remained unchanged. We insist on innovation and actively apply for patents, and this is why Macronix has become a global leader in the non-volatile memory market. In recent years, we published numerous papers on NAND and 3D stacking technology with both academic and commercial value and obtained related patents. We are also developing next generation technologies for the memory industry. Investment expenses for R&D were equivalent to about 10% of our revenue last year (2020), and were mainly on advanced technology R&D and production process improvement. As of the end of last year (2020), Macronix has a total of 8,320 patents worldwide. Our strong R&D capabilities and abundant intellectual property lays the foundation for our long-term development.

Regarding the development of processes and products, in terms of ROM, products with capacity over 64Gb accounted for 58% of ROM revenue in the fourth quarter of last year (2020), and ROM products accounted for approximately 40% of overall revenue. With regard to NOR Flash, 55 nm advanced products accounted for 23% of NOR Flash revenue in Q4 2020, and we will continue to develop towards a 45 nm process. 256Mb and above high density products are accounting for an increasing percentage of NOR Flash revenue each year, and has reached 36% as of last year (2020). High quality applications in automobile, industry, healthcare, and aerospace account for 27% of NOR Flash revenue, and can be expected to become the main source of revenue growth for NOR Flash products. With regard to NAND Flash products, 19 nm SLC NAND Flash products have excellent yield, and new products and new applications are now entering the verification phase with high expectations from customers. As for 3D NAND, we have completed the development of 48-layer products in phase one. The products will begin to contribute to revenue after mass production begins, and we will continue to sprint towards our goal of 192-layer stacking technology for next generation memory products.

Following new applications of AI, 5G, and IoT, as well as the rapid development of automobile electronics, industrial applications, and mobile devices, memory chips will be applied in even more fields. Macronix has both excellent product design and manufacturing technologies, and is able to continue providing customers with high performance and highly reliable memory solutions, creating even greater added value for our products. For example, we were the first to make the innovative proposal to have the main chip of 19 nm Serial NAND Flash process ECC, and this has become a paradigm for the best quality and cost effectiveness. We have gained an important cost advantage in NAND Flash via the 19 nm Serial NAND Flash, and have

fully transitioned to industry-leading processes. Furthermore, due to the growing importance of information security in IoT and smart devices, the level of integration and complexity of automobile electronic systems have also increased. Macronix's ArmorFlash™ already has a key secure element design and is expected to play a key role in high-end secure memory products. Hence, we will use our advanced technologies, highest quality, and reliable services to provide long-term support, and will work together with our customers to welcome new growth opportunities.

ESG (Environmental, Social, and Governance) issues have attracted growing attention in recent years. We firmly believe that healthy corporate governance is the core of ESG sustainable development. Hence, Macronix keeps pace with the times in disclosing its implementation of corporate governance and issues of concern to stakeholders. We have not only gained excellent results in the domestic Corporate Governance Evaluation, but was also recognized with the CSR Annual Sustainable Elite Award at the SGS CSR Awards for two consecutive years. We have received numerous awards from government agencies for our environmental protection and employee safety and health. Also, we have gained excellent results from the promotion of science education through the Macronix Education Foundation over the years. The Board of Directors approved a donation to National Cheng Kung University for an interdisciplinary innovative talent cultivation project in 2020. All of these show that Macronix takes action to give back to society. Facing volatile global industrial trends, we will disclose climate change-related risks and opportunities according to the FSC's "Corporate Governance 3.0 – Sustainable Development Blueprint," and will fulfill our CSR to make Macronix a sustainable enterprise.

Looking towards the future, Macronix will maintain the business strategies of "honesty" and "focus", and will strive to develop and manufacture advanced non-volatile memory with excellent quality. At the same time, we will maximize the production capacity of our 8" and 12" fabs to maximize output, and will utilize a performance-oriented salary policy to retain professional talent. This will allow all employees to work towards the same goals and jointly increase the Company's value, creating a win-win situation for shareholders, customers, and employees, so that the Company's business performance will reach new heights!

Chairman: Miin Chyou Wu

President: Chih-Yuan Lu

Chapter II. Company Overview

I. Date of Establishment

Macronix International Co., Ltd. was founded on December 9, 1989.

II. Company History

(I) Overview

Macronix was founded in Hsinchu Science Park, Taiwan, in 1989, and was the first company to be listed as a Category C technology stock in Taiwan in 1995. Macronix is a leading integrated device manufacturer in the global non-volatile memory (NVM) market that provides a full range of NOR flash, NAND flash, and ROM products.

With its world-class R&D and manufacturing capabilities, Macronix continues to deliver the highest-quality, innovative and performance-driven products to its customers in the consumer, communications, computing, automotive, networking and other market segments. We provide high-end application clients with superior products of the highest quality.

Macronix currently owns one 12-inch wafer fab (Fab 5), one 8-inch wafer fab (Fab 2), and one 6-inch wafer fab (Fab 1). Fab 5 and Fab 2 are for Macronix own products, and Fab 1 is focusing on strategic foundry businesses for niche analog and logic products. Macronix will continue to develop technology and accelerate the implementation of its own product's competitive advantage, continue to develop new products, strengthen technology, quality and service, and strive for Macronix's sustainable management and Taiwan's global competitiveness. Please refer to the company's website for Milestones (URL: <http://www.macronix.com>).

(II) The Company's Mergers and Acquisitions, Reinvestment in Affiliated Enterprises, and Restructuring

1. Implementation of Major Mergers and Acquisitions: None.
2. Reinvestment in Affiliated Companies: Please refer to page 120 to 124 of this Annual Report for the "Summary of Affiliated Companies".
3. Reorganization: None.

(III) Mass Transfer of Equity by or Change of Directors, Supervisors, or Major Shareholders Holding More than 10% of Outstanding Shares: None.

(IV) Major Changes of Ownership, Business Management or Operation: None.

(V) Other Matters Sufficient to Affect Shareholders' Equity and Impacts on the Company: None.

(VI) Milestones

Month/Year	Milestones
Dec. 1989	• Establishment of the Company.
Dec. 1990	• Joint development of Mask ROM with NKK Corp., Japan.
Jan. 1991 Dec.	• Successfully developed the 256Kb and 512Kb EPROM. • Revenue exceeded NT\$ 100 million.
May. 1992 Jun. Oct.	• Macronix's Flat Cell patent was granted by USPTO. • Mass production of FAB 1 with monthly production exceeding 5,000 wafers. • Launched the world first 4Mb Flash Memory.
Jun. 1993 Oct.	• Process technology migrated to 0.6 um. • Signed manufacturing cooperation agreement with TSMC.
Jan. 1994 Feb.	• Announced the new product of R3000 RISC CPU. • Grand opening of the Creation Building.
Mar. 1995 Dec.	• First listed High-Tech company under Category C in Taiwan Stock Exchange ("TSE") • Grand opening of the Testing Plant and Recreation Hall.
Mar. 1996 May. Dec.	• Completion of the world first 10/100M bps Ethernet and high-speed Ethernet BRIDGE CONTROLLER development. • First Taiwanese company listed in Nasdaq, USA. • Yearly sales revenue exceeded NT\$10 billion.
Feb. 1997 Mar. May. Sep. Oct.	• Issued the first ECB for approximately US\$ 210 million. • Mass production of FAB 2. • Company shares listed at TSE changed from Category C to Category A. • Establishment of Stock Affair Office. • Signed cooperation memorandum with Matsushita Electronics, Japan.
Aug. 1998 Dec.	• Joint development of 16Mb XA microcontroller with Philips Semiconductor. • Completion of new organization structure for Y2000 challenges.
Mar. 1999	• Grand opening of the new Headquarters Building.
Feb. 2000 Aug. Dec.	• Jointly developing the world's first single chip solution for 32Mbyte Mask ROM with Infineon. • Cooperated with Mitsubishi in mobile memory IC manufacturing. • Strategic alliance with Tower Semiconductor, Israel.
Aug. 2001 Dec.	• Establishment of the Macronix Education Foundation. • NT\$300 million donation to Tsing Hua University for its construction of "Learning Resource Center Building" .
Jul. 2002 Oct.	• Grand opening of FAB 3. • Grand opening of Employee Dormitory with Recreation Facilities.
May 2003	• Ruling in favor of Macronix against Atmel's US 4419747 patent.
Apr. 2004 Jul.	• US\$170 million GDR offering listed at Luxembourg. • Joint development of the Phase Change Memory Technology with IBM.
Mar. 2005 Jun. Nov.	• Mr. Miin Wu was elected as the Chairman of Macronix. • Mass production of 150 nm 3V Serial Flash products. • Capital reduction resolved by the provisional shareholders meeting.
Jan. 2006 May. Dec.	• FAB 3 Disposal documents signed. • New shares listed at TSE after capital reduction. • Five technical papers selected by 2006 International Electron Devices Meeting (IEDM), among which the paper with IBM and Qimonda regarding Phase Change Memory was highlighted by IEDM and ISSCC. • Mass production of 100 nm XtraROM®.

Month/Year	Milestones
Jan. 2007 Jul. Aug. Oct.	<ul style="list-style-type: none"> • Spined off four subsidiaries. • Dr. Chih-Yuan Lu was appointed as the President of Macronix. • Mass production of 75 nm XtraROM[®]. • Mass production of 130 nm 3V Serial Flash products. • Macronix's ADR delisted from Nasdaq. • Frost & Sullivan awarded Macronix with its 2007 Excellence in Research of the Year Award in the Asia Pacific Phase Change Memory Technologies Market.
Oct. 2008	<ul style="list-style-type: none"> • Foundation-Laying Ceremony of Macronix's affiliated company in SuZhou Industrial Park, China was held. • Mass production of 65 nm XtraROM[®].
May. 2009 Dec.	<ul style="list-style-type: none"> • Mass production of 110 nm 3V Serial Flash products. • Macronix was awarded of National Industrial Safety & Health Awards.
Apr. 2010 Jun. Nov. Dec.	<ul style="list-style-type: none"> • FAB 5 Acquisition. • Two technical papers were selected by the Symposium on VLSI Technology, and among those the paper regarding 3D VG NAND Flash was selected as one of the 8 highlighted papers. • Mass production of 75 nm 3V Parallel Flash products. • FAB 5 unveiling ceremony.
Feb. 2011 Mar. July. Sep. Nov. Dec.	<ul style="list-style-type: none"> • Mass production of 110nm 1.8V Parallel Flash products. • Mr. Miin Chyou Wu, Chairman & CEO of Macronix, was awarded with Honorary Doctorate by National Tsing Hua University. • Mr. Chih-Yuan Lu, President of Macronix, was awarded with 2012 IEEE Frederik Philips Award. • Macronix honored with 2011 National Invention and Creation Award. • Macronix ranked number one in patent strength in Taiwan's semiconductor industry, and 18th worldwide. • Mass production of 75 nm 1.8V Serial Flash products. • Mass production of 75 nm 3V NAND Flash products.
Jan. 2012 Feb. Sep. Oct.	<ul style="list-style-type: none"> • Mr. Chih-Yuan Lu, President of Macronix was awarded with Special Distinguished Award of Physical Society of Republic of China. • Mass production of 45 nm XtraROM[®]. • Mass production of 75 nm 1.8V Parallel Flash products. • Mass production of 75 nm 3V Serial Flash products. • Macronix Received the 13th National Standardization Forward-looking Contribution Award.
Apr. 2013 Jul. Dec.	<ul style="list-style-type: none"> • Opening ceremony of the Macronix Building at National Tsing Hua University. • Mr. Chih-Yuan Lu, President of Macronix was awarded with Honorary Doctorate by National Chiao Tung University. • Mr. Chih-Yuan Lu, President of Macronix was awarded with ITRI Laureate. • Mr. Chih-Yuan Lu, President of Macronix was awarded with Presidential Science Prize. • Macronix Education Foundation was awarded by the Ministry of Education with Outstanding Educational Foundation Award.
Feb. 2014 May. Jun.	<ul style="list-style-type: none"> • Mass production of 55 nm 3V Parallel Flash products. • Mass production of 55 nm 3V Serial Flash products. • Mass production of 36 nm 1.8V/3V NAND Flash products. • Mass production of 32 nm XtraROM[®] products.

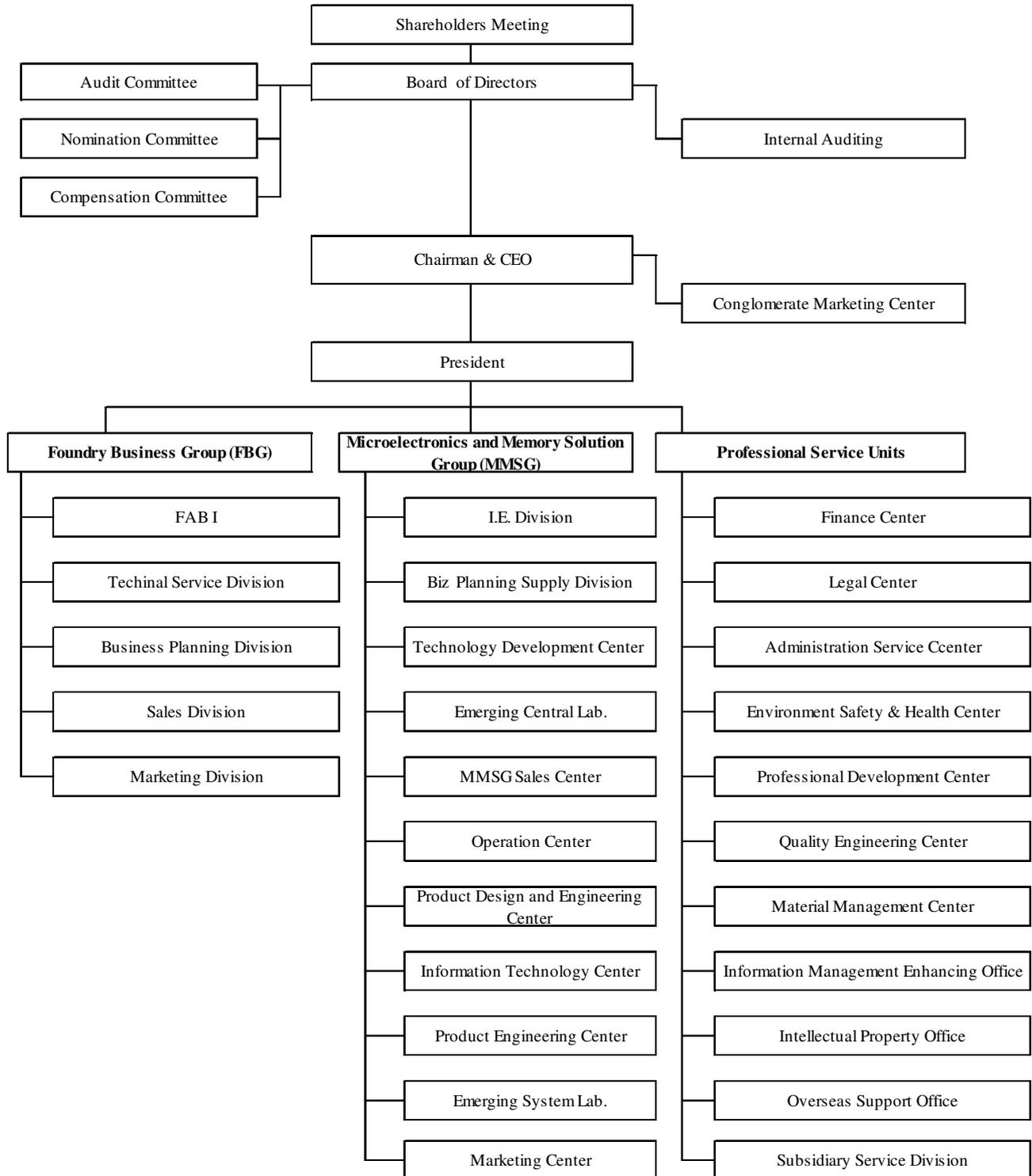
Month/Year	Milestones
Jun. 2015	<ul style="list-style-type: none"> • Macronix ranked among the top 5% excellent companies in the first corporate governance evaluation of Listed Companies.
Sep.	<ul style="list-style-type: none"> • 55 nm 1.8V Serial Flash products delivered samples.
Nov.	<ul style="list-style-type: none"> • Mr. Chih-Yuan Lu, President of Macronix was awarded with The World Academy of Sciences (TWAS) Prize in Engineering Sciences.
Feb. 2016	<ul style="list-style-type: none"> • Mass production of 55 nm 1.8V Serial Flash products.
Dec.	<ul style="list-style-type: none"> • Mr. Miin Chyou Wu, Chairman & CEO of Macronix was awarded with Honorary Doctorate by National Cheng Kung University.
May. 2017	<ul style="list-style-type: none"> • Capital reduction plan resolved by the annual shareholders meeting.
Dec.	<ul style="list-style-type: none"> • Mr. Chih-Yuan Lu, President of Macronix, was awarded with the 19th "Outstanding Performance Award in the Field of Management of Technology" of Chinese Society for Management of Technology. • Mr. Miin Chyou Wu, Chairman & CEO of Macronix, was awarded of Social Education Contribution Awards of the Ministry of Education.
Apr. 2018	<ul style="list-style-type: none"> • Mr. Chih-Yuan Lu, President of Macronix was elected as Fellow of the US National Academy of Inventors.
Jul.	<ul style="list-style-type: none"> • Mr. Chih-Yuan Lu, President of Macronix was elected as Academician of Academia Sinica.
Nov.	<ul style="list-style-type: none"> • Mr. Chih-Yuan Lu, President of Macronix was awarded with Materials Technology Contribution Award of Materials Research Society Taiwan. • Mr. Miin Chyou Wu, Chairman & CEO of Macronix was awarded with "Country Winner" and "Business Paradigm Entrepreneur" of EY Entrepreneur Of The Year.
Feb. 2019	<ul style="list-style-type: none"> • Mass production of 19 nm 3V NAND Flash products.
Mar.	<ul style="list-style-type: none"> • Donation of NT\$420 million to National Cheng Kung University for its construction of "Cheng Kung Innovation Center-MACRONIX Hall".
Dec.	<ul style="list-style-type: none"> • Mr. Chih-Yuan Lu, President of Macronix was elected as Fellow of The World Academy of Sciences (TWAS) of 2020.
May. 2020	<ul style="list-style-type: none"> • Mr. Miin Chyou Wu, Chairman & CEO of Macronix was awarded with Honorary Doctorate by National Chiao Tung University.
Jun.	<ul style="list-style-type: none"> • Donation of NT\$100 million to National Cheng Kung University per year for the next ten years to establish the "School of Computing".
Aug.	<ul style="list-style-type: none"> • Sample delivery of 75 nm 1.2V Serial Flash products
Nov.	<ul style="list-style-type: none"> • Sample delivery of 19 nm 1.8V NAND Flash products

(VII) CSR Milestones and Other Awards: Please refer to page 49 of this annual report.

Chapter III. Corporate Governance Report

I. Organization

(I) Organizational Structure



(II) Responsibilities and Functions of Major Departments

Unit	Functions
Internal Auditing	Audit in accordance with the annual audit plan and responsible for integrating internal control assessments and recommendations.
Conglomerate Marketing Center	Responsible for developing and planning marketing strategies for Macronix and its affiliated companies.
Microelectronics and Memory Solution Group (MMSG)	Responsible for the market analysis and planning for memory and microelectronics in line with the Macronix's development strategy, as well as the planning and leading related products' operation. It's also responsible for developing and/or control critical advanced technologies for the manufacture of high-quality products to be provided to Macronix's customers.
Foundry Business Group (FBG)	A business unit with marketing, manufacturing, and sales capacity to provide professional wafer foundry services to Macronix or third party.
Professional Service Units	Responsible for finance, legal, administration, environmental safety & health, human resource, quality engineering and/or procurement as well as related services.

II. Profile of Directors, Supervisors, the President, Vice Presidents, Assistant Managers, and Department Directors

(I) Directors and Supervisors

1. Profile of Directors and Supervisors

March 30, 2021

Title	Nationality or Place of registration	Name	Gender	Date Elected	Term (yrs)	Date First Elected	Shareholding When Elected		Shares currently held		Shares held by spouse and underage children		Shares held in the name of others		Education/ work experience	Other positions at the Company or elsewhere	Other officer, director or supervisor who is the spouse or a relative within second degree		
							Shares	%	Shares	%	Shares	%	Shares	%			Title	Name	Relation
Chairman	R.O.C	Miin Chyou Wu (Note 1)	Male	2019.06.18	3	1989.11.25	12,371,859	0.67%	13,060,809	0.70%	None	None	None	None	M.S. degree in Material Science and Engineering from Stanford University	Chairman & CEO of Macronix International Co., Ltd. Director of Macronix America, Inc. Director of Macronix (BVI) Co., Ltd. Representative (Director) of Hui Ying Investment Ltd. Representative (Director) of Run Hong Investment Ltd. Chairman of Mxtran Inc. Director of Macronix Europe N.V. Director of Macronix (Hong Kong) Co., Ltd. Chairman of Macronix Microelectronics (Suzhou) Co., Ltd. Director of Macronix (Asia) Limited Managing Director of Eastern Electronics Co., Ltd.	None	None	None
Director	R.O.C	Chien Hsu Investment Corporation (Note 2)	-	2019.06.18	3	2016.06.16	811,421	0.04%	811,421	0.04%	None	None	None	None	None	Director of ZOWIE Technology Corporation Director / supervisor of Homey Consulting Corp.	None	None	None
	R.O.C	Representative: Ching-Yun Li	Female	Omitted	Omitted	2019.07.26	Omitted	Omitted	1,441,799	0.08%	None	None	None	None	Public relations from Shih Hsin School of Journalism	Chairman of Champion Investment Corporation Chairman of Chien Hsu Investment Corporation Representative (Chairman) of Homey Consulting Corp.	None	None	None
Director	R.O.C	Chih-Yuan Lu	Male	2019.06.18	3	2003.04.18	2,300,395	0.12%	2,689,766	0.14%	None	None	None	None	Ph.D. degree in Physics from Columbia University	President of Macronix International Co., Ltd. Chairman of Macronix America, Inc. Director of Macronix Europe N.V. Director of Macronix (Hong Kong) Co., Ltd. Chairman & CEO of Ardentec Corporation Director of Ardentec Korea Co., Ltd. Director of Ardentec Singapore Pte. Ltd. Representative (Chairman) of Sheng Tang Investment Co., Ltd. Representative (Chairman) of Ardentec Semiconductor Co. Ltd. Representative (Chairman) of Giga Solution Tech. Co., Ltd. Independent Director of Hong Tai Electric Industrial Co. Ltd. Director of ValuTest Incorporated Director of Valucom Investment Inc. Director of Feng Chia University	None	None	None

Title	Nationality or Place of registration	Name	Gender	Date Elected	Term (yrs)	Date First Elected	Shareholding When Elected		Shares currently held		Shares held by spouse and underage children		Shares held in the name of others		Education/ work experience	Other positions at the Company or elsewhere	Other officer, director or supervisor who is the spouse or a relative within second degree		
							Shares	%	Shares	%	Shares	%	Shares	%			Title	Name	Relation
Director	R.O.C	Shun Yin Investment Ltd.	-	2019.06.18	3	2004.06.18	22,587,265	1.22%	22,587,265	1.22%	None	None	None	None	None	None	None	None	None
	Japan	Representative: Shigeki Matsuoka	Male	2019.06.18	3	2011.08.08	None	None	None	None	None	None	None	None	M.S. degree in electronics engineering from Kyoto University	Adviser of MegaChips Corporation	None	None	None
Director	R.O.C	Cheng-Yi Fang	Male	2019.06.18	3	2001.04.19	353,026	0.02%	353,026	0.02%	129,047	0.01%	None	None	B.B.A. degree in Business Administration Department from National Taiwan University	None	None	None	None
Director	R.O.C	Chung-Laung Liu (Note3)	Male	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted
Director	R.O.C	Achi Capital Limited (Note4)	-	2019.06.18	3	2010.06.09	902,456	0.05%	902,456	0.05%	None	None	None	None	None	Director of Mxtran Inc.	None	None	None
	R.O.C	Representative: Guei-Min Lee	Female	Omitted	Omitted	2007.06.29	Omitted	Omitted	19,446	0.00%	None	None	None	None	Ph.D. degree in Law, University of the Pacific	Representative (Director) of Mxtran Inc. Adjunct Professor of National Chiao Tung University Adjunct Associate Professor of Soochow University	None	None	None
Director	R.O.C	Che-Ho Wei	Male	2019.06.18	3	2016.06.16	None	None	None	None	None	None	None	None	Ph. D. degree in electronic engineering from the University of Washington, Seattle, USA.	Director of Taipei Medical University Director of Arcadyan Technology Corporation Director of Unizyx Holding Corporation Independent Director of Sunplus Technology Co., Ltd. Independent Director of Genesis Photonics Inc.	None	None	None
Director	R.O.C	Dang-Hsing Yiu	Male	2019.06.18	3	1995.06.05	6,557,048	0.35%	6,633,322	0.36%	1,272,084	0.07%	None	None	M.S. degree in Electronic Engineering from University of California, Berkeley	Senior V.P. & Chief Marketing Officer of Macronix International Co., Ltd. Director of Macronix America, Inc. Representative (Director) of Mxtran Inc. Director of SiTime Corporation Independent Director of Chipbond Technology Corporation	None	None	None
Director	R.O.C	Ful-Long Ni	Male	2019.06.18	3	2007.06.29	1,647,732	0.09%	1,899,933	0.10%	340,333	0.02%	None	None	M.S. degree in Electronic Engineering from University of Michigan	Vice President of Macronix International Co., Ltd. Chairman of Macronix Europe N.V. Director of Macronix Pte Ltd. Director of Macronix (Hong Kong) Co., Ltd.	None	None	None

Title	Nationality or Place of registration	Name	Gender	Date Elected	Term (yrs)	Date First Elected	Shareholding When Elected		Shares currently held		Shares held by spouse and underage children		Shares held in the name of others		Education/ work experience	Other positions at the Company or elsewhere	Other officer, director or supervisor who is the spouse or a relative within second degree		
							Shares	%	Shares	%	Shares	%	Shares	%			Title	Name	Relation
Director	R.O.C	Hui Ying Investment Ltd. (Note5)	-	2019.06.18	3	2001.04.19	1,956,619	0.11%	1,956,619	0.11%	None	None	None	None	None	None	None	None	None
	R.O.C	Representative: Pei-Fu Yeh	Male	Omitted	Omitted	2007.07.18	Omitted	Omitted	2,622,174	0.14%	4,985	0.00%	None	None	MBA, degree in Business Administration, of National Chengchi University	Vice President of Macronix International Co., Ltd. Director of New Trend Technology Inc. Director of Macronix Europe N.V. Director of Macronix (Hong Kong) Co., Ltd. Representative (supervisor) of Mxtran Inc.	None	None	None
Independent Director	R.O.C	Tyzz-Jiun Duh	Male	2019.06.18	3	2019.06.18	None	None	None	None	None	None	None	None	Ph.D., Institute of Forestry, National Taiwan University	Adjunct Associate Professor of Soochow University Independent Director of USI Corporation Independent Director of CHINA DEVELOPMENT FINANCIAL HOLDING CORP. Independent Director of CDIB Capital Group Director of Shinfox Energy Co., Ltd.	None	None	None
Independent Director	R.O.C	Chiang Kao	Male	2019.06.18	3	2007.06.29	None	None	None	None	None	None	None	None	Ph.D. degree in Forest Management from Oregon State University	Chair Professor of Department of Industrial and Information Management of National Cheng Kung University	None	None	None
Independent Director	R.O.C	Yan-Kuin Su	Male	2019.06.18	3	2007.06.29	None	None	None	None	None	None	None	None	Ph.D. degree in electrical engineering from National Cheng Kung University	Independent Director of Himax Technologies, Inc Independent Director of Epileds Technologies, Inc Independent Director of Universal Cement Corporation Honorary Professor of National Cheng Kung University Professor of Kun Shan University Chief Director of Kun Shan University Green Energy Technology Research Center	None	None	None
Independent Director	R.O.C	John C.F. Chen	Male	2019.06.18	3	2007.06.29	None	None	None	None	None	None	None	None	B.S. degree in Accounting & Statistics from National Cheng Kung University	Chairman of Chen Chow Investment Inc. Representative (Director) of Chan Chun Investment Inc. Representative (Director) of ReaLy Development & Construction Corp. Director of Diwan Investment Inc.	None	None	None

Note 1: Where the chairman and president or equivalent position (the highest level managerial officer) is the same person, the reasonableness, necessity, and response measures must be disclosed:

Mr. Miin Chyou Wu founded Macronix in 1989 and served as its President, who has been elected as the Chairman since 2005 and successfully had Macronix become the global leader in non-volatile memory (NVM) with his forward-looking perspective and innovative business strategy. In 2019, he was elected as the chairman and CEO of the 11th-term Board of Directors. Considering that Macronix has four independent directors, and more than half of its directors are non-employees nor managers of Macronix, the independence of the Board of Directors can be ensured. Also, to continue the forward-looking and innovative business philosophy, and Macronix's worldwide reputation, image and competitiveness, it is necessary to have Chairman Miin Chyou Wu concurrently serving as Macronix's highest level manager (CEO) to improve operational efficiency and decision-making, and further enhance its value, which is therefore reasonable and necessary.

Note 2: Chien Hsu Investment Co., Ltd. appointed Ms. Ching-Yun Li on July 26, 2019, to attend the 11th Term of the Board of Directors and exercised any and all Director's rights thereof.

Note 3: Mr. Chung-Laung Liu passed away on November 7, 2020.

Note 4: Ms. Guei-Min Lee was appointed to represent it to attend the 11th Term of the Board of Directors and exercised any and all Director's rights thereof.

Note 5: Mr. Pei-Fu Yeh was appointed to represent it to attend the 11th Term of the Board of Directors and exercised any and all Director's rights thereof.

Major Shareholders of Institutional Shareholders

March 30, 2021

Name of institutional shareholder	Major shareholders of institutional shareholders
Chien Hsu Investment Corporation	Ching-Yun Li (46.08%) Champion Investment Corporation (16.56%) Jui-Wen Hu (13.34%) Ting-Chen Hu (13.34%) Chih-To Lee (4.04%) Pao-Yueh Chang (1.94%) Chih-Te Yeh (1.83%) Guang-Hui Chu (1.75%) Hsiu-Chu Lin (0.60%) Mei-Chih Chen (0.52%)
Shun Yin Investment Ltd.	MegaChips Corporation (Japan) (100%)
Achi Capital Limited	Top Harvest Investment Ltd. (Samoa) (100%)
Hui Ying Investment Ltd.	Macronix International Co., Ltd. (100%)

Major Shareholders Who are Institutional Investors and Their Major Shareholders

March 30, 2021

Name of institutional shareholder	Major shareholders of institutional shareholders
Champion Investment Corporation	Ching-Yun Li (21.48%) Jui-Wen Hu (13.09%) Ting-Chen Hu (13.09%) Lin-Fang Li Hu (9.77%) Tsung-Tsan Su (5.98%) Bands Technology Co., Ltd. (5.67%) Hsiu-Tzu Chen (4.71%) Tsung-Shen Chen (4.71%) Chiu-Hua Tsai (4.12%) Chih-Hua Li (2.85%)
MegaChips Corporation (Japan)	State Street Bank and Trust Company 505253 (6.12%) Shindo Kogyo Corporation (5.70%) Megachips Corporation and Associates (5.70%) Japan Trustee Services Bank, Ltd. (Trust Location No.) (4.09%) The Bank of New York Mellon 140051 (3.37%) Shigeki Matsuoka (2.76%) Akihiro Shindo (2.53%) Ritsuko Shindo (2.51%) Noriko Matsui (2.38%) Mika Aoki (2.32%)
Top Harvest Investment Ltd. (Samoa).	Guemin Lee (100%)
Macronix International Co., Ltd.	New Labor Pension Fund (2.66%) Cathay Life Insurance (2.37%) Public Service Pension Fund Management Board (1.57%) Vanguard Emerging Markets Stock Index Fund a Series of Vanguard International Equity Index Funds (1.34%) JPMorgan Chase Bank N.A. Taipei Branch in custody for Vanguard Total International Stock Index Fund a series of Vanguard Star Funds (1.23%) Shun Yin Investment Ltd. (1.22%) Syue-Rong Shen (1.17%) Allianz Gbl Inv Taiwan Tech (1.13%) Old Labor Pension Fund (1.10%) Miin Chyou Wu (0.70%)

2. Professional Expertise and Independence of directors and supervisors

March 30, 2021

Name	Meets One of the Following Professional Qualification Requirements, Together with at Least Five Years' Work Experience			Independence Criteria (Note4)												Number of Other Public Companies in which Serves Concurrently as an Independent director	
	Criteria	An instructor or higher position in a department of commerce, law, finance, accounting, or other academic department related to the business needs of the Company in a public or private junior college, college or university	A judge, public prosecutor, attorney, Certified Public Accountant, or other professional or technical specialist who has passed a national examination and been awarded a certificate in a profession necessary for the business of the Company	Has work experience in the areas of commerce, law, finance, or accounting, or otherwise necessary for the business of the Company	1	2	3	4	5	6	7	8	9	10	11		12
Miin Chyou Wu			✓						✓		✓	✓	✓	✓	✓	✓	0
Chien Hsu Investment Corporation (Note 1) Representative: Ching-Yun Li				✓		✓	✓		✓	✓	✓	✓	✓	✓	✓		0
Chih-Yuan Lu	✓		✓			✓		✓	✓		✓	✓	✓	✓	✓	✓	1
Shun Yin Investment Ltd. Representative : Shigeki Matsuoka			✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		0
Cheng-Yi Fang			✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0
Chung-Laung Liu (Note 2)	Omitted		Omitted	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted
Achi Capital Limited Representative : Guei-Min Lee (Note 3)	✓	✓	✓	✓		✓	✓	✓	✓		✓		✓	✓			0
Che-Ho Wei	✓		✓	✓		✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	2
Dang-Hsing Yiu			✓			✓		✓	✓		✓	✓	✓	✓	✓	✓	1
Ful-Long Ni			✓			✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	0
Hui Ying Investment Ltd. Representative : Pei-Fu Yeh (Note 4)			✓			✓		✓	✓		✓	✓	✓	✓	✓		0
Tyzz-Jiun Duh	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	3
Chiang Kao	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0
Yan-Kuin Su	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	1
John C.F. Chen		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0

Note 1: Chien Hsu Investment Co., Ltd. appointed Ms. Ching-Yun Li on July 26, 2019, to attend the 11th Term of the Board of Directors and exercised any and all Director's rights thereof.

Note 2: Mr. Chung-Laung Liu passed away on November 7, 2020

Note 3: Ms. Guei-Min Lee was appointed to represent it to attend the 11th Term of the Board of Directors and exercised any and all Director's rights thereof.

Note 4: Mr. Yeh-Pei Fu was appointed to represent it to attend the 11th Term of the Board of Directors and exercised any and all Director's rights thereof.

Note 5: Please tick the corresponding boxes that apply to the directors or supervisors during the two years prior to being elected or during the term of office.

- (1) Not an employee of the Company or any of its affiliates.
- (2) Not a director or supervisor of the Company or an affiliated enterprise (does not apply to independent directors concurrently appointed by the Company or its parent company, subsidiary, or the subsidiary of the parent company pursuant to the Regulations Governing Appointment of Independent Directors and Compliance Matters for Public Companies or local laws and regulations).
- (3) Not a natural-person shareholder who holds shares, together with those held by the person's spouse, minor children, or held by the person under others' names, in an aggregate amount of 1% or more of the total number of outstanding shares of the Company or ranking in the top 10 in holdings.
- (4) Not a manager listed in (1) or a spouse, relative within the second degree of kinship, or lineal relative within the third degree of kinship of any of the above persons listed in (2) and (3).
- (5) Not a director, supervisor, or employee of a corporate shareholder that directly holds 5% of the Company's total outstanding shares, is a top 5 shareholder, or appointed a representative to serve as the Company's director or supervisor in accordance with Article 27, Paragraph 1 or 2 of the Company Act (does not apply to independent directors concurrently appointed by the Company or its parent company, subsidiary, or the subsidiary of the parent company pursuant to the Regulations Governing Appointment of Independent Directors and Compliance Matters for Public Companies or local laws and regulations).
- (6) Not a director, supervisor, or employee of a company controlled by a single person with over half of the Company's director seats or shares with voting rights (does not apply to independent directors concurrently appointed by the Company or its parent company, subsidiary, or the subsidiary of the parent company pursuant to the Regulations Governing Appointment of Independent Directors and Compliance Matters for Public Companies or local laws and regulations).
- (7) Not a director, supervisor, or employee of another company or institution that is the same person or the spouse of the Company's chairperson, president, or equivalent position (does not apply to independent directors concurrently appointed by the Company or its parent company, subsidiary, or the subsidiary of the parent company pursuant to the Regulations Governing Appointment of Independent Directors and Compliance Matters for Public Companies or local laws and regulations).
- (8) Not a director, supervisor, manager, or shareholder with 5% or more shares of a specific company or institution with financial or business dealings with the Company (does not apply to independent directors concurrently appointed by a specific company or institution that holds 20% or more but not more than 50% of the Company's outstanding shares, and the Company or its parent company, subsidiary, or the subsidiary of the parent company pursuant to the Regulations Governing Appointment of Independent Directors and Compliance Matters for Public Companies or local laws and regulations).
- (9) Not a professional individual who, or an owner, partner, director, supervisor, or manager of a sole proprietorship, partnership, company or institution that provides commercial, legal, financial, accounting services or consultation with cumulative remuneration in the most recent two years not exceeding NT\$500,000 to the Company or to any affiliate of the company, or a spouse thereof. This does not apply to members of the compensation committee, public tender offer review committee, or merger and acquisition special committee that performs duties in accordance with the Securities Exchange Act or Business Mergers and Acquisitions Act.
- (10) Not having a marital relationship, or a relative within the second degree of kinship to any other director of the Company.
- (11) Not been a person of any conditions defined in Article 30 of the Company Law.
- (12) Not a governmental, juridical person or its representative as defined in Article 27 of the Company Law.

(II) President, Vice Presidents, Assistant Managers, and Department Directors

March 30, 2021

Title	Nationality	Name	Gender	Date appointed	Shares currently held		Shares held by spouse and underage children		Shares held in the name of others		Education/work experience	Other positions at the Company or elsewhere	Other officer, director or supervisor who is the spouse or a relative within second degree		
					Shares	%	Shares	%	Shares	%			Title	Name	Relation
CEO	R.O.C	Miin Chyou Wu (Note 1)	Male	2007.07.30	13,060,809	0.70%	None	None	None	None	M.S. degree in Material Science and Engineering from Stanford University	Director of Macronix America, Inc. Director of Macronix (BVI) Co., Ltd. Representative (Director) of Hui Ying Investment Ltd. Representative (Director) of Run Hong Investment Ltd. Chairman of Mxtran Inc. Director of Macronix Europe N.V. Director of Macronix (Hong Kong) Co., Ltd. Chairman of Macronix Microelectronics (Suzhou) Co., Ltd. Director of Macronix (Asia) Limited Managing Director of Eastern Electronics Co., Ltd.	None	None	None
President	R.O.C	Chih-Yuan Lu	Male	2007.07.30	2,689,766	0.14%	None	None	None	None	Ph.D. degree in Physics from Columbia University	Chairman of Macronix America, Inc. Director of Macronix Europe N.V. Director of Macronix (Hong Kong) Co., Ltd. Chairman & CEO of Ardentec Corporation Director of Ardentec Korea Co., Ltd. Director of Ardentec Singapore Pte. Ltd. Representative (Chairman) of Sheng Tang Investment Co., Ltd. Representative (Chairman) of Ardentec Semiconductor Co. Ltd. Representative (Chairman) of Giga Solution Tech. Co., Ltd. Independent Director of Hong Tai Electric Industrial Co., Ltd. Director of ValuTest Incorporated Director of Valucom Investment Inc. Director of Feng Chia University	None	None	None
Senior Vice President & Chief Marketing Officer	R.O.C	Dang-Hsing Yiu	Male	2007.01.01	6,633,322	0.36%	1,272,084	0.07%	None	None	M.S. degree in Electronic Engineering from University of California, Berkeley	Director of Macronix America, Inc. Representative (Director) of Mxtran Inc. Director of SiTime Corporation Independent Director of Chipbond Technology Corporation	None	None	None
Vice President	R.O.C	Ful-Long Ni	Male	2006.06.27	1,899,933	0.10%	340,333	0.02%	None	None	M.S. degree in Electronic Engineering from University of Michigan	Chairman of Macronix Europe N.V. Director of Macronix Pte Ltd. Director of Macronix (Hong Kong) Co., Ltd.	None	None	None
Vice President	R.O.C	Pei-Fu Yeh	Male	2007.10.30	2,622,174	0.14%	4,985	0.00%	None	None	MBA degree in Business Administration, of National Chengchi University	Director of New Trend Technology Inc. Director of Macronix Europe N.V. Director of Macronix (Hong Kong) Co., Ltd. Representative (supervisor) of Mxtran Inc.	None	None	None

Title	Nationality	Name	Gender	Date appointed	Shares currently held		Shares held by spouse and underage children		Shares held in the name of others		Education/work experience	Other positions at the Company or elsewhere	Other officer, director or supervisor who is the spouse or a relative within second degree		
					Shares	%	Shares	%	Shares	%			Title	Name	Relation
Vice President	R.O.C	Yen-Hie Chao	Male	2013.05.02	1,496,541	0.08%	35,108	0.00%	None	None	B.S. degree in Materials Science and Engineering of National Tsing Hua University	Representative (Director) of Ardentec Corporation	None	None	None
Vice President	R.O.C	Chun-Hsiung Hung	Male	2015.10.28	442,593	0.02%	2,833	0.00%	None	None	M.S. degree in Electronics Engineering of National Chiao Tung University	None	None	None	None
Vice President	R.O.C	Jui-Kun Chen	Male	2016.12.20	398,040	0.02%	None	None	None	None	M.S. degree in Accounting of National Taiwan University	None	None	None	None
Vice President	R.O.C	Jon-Ten Chung	Male	2018.02.01	601,774	0.03%	158,059	0.01%	None	None	M.S. degree in Economics of University of Arizona	Director of Macronix Pte Ltd. Director of Macronix Europe N.V. Director of Macronix (Hong Kong) Co., Ltd.	None	None	None
Associate V.P.	R.O.C	Kuang-Chao Chen	Male	2015.10.28	732,448	0.04%	1,511	0.00%	None	None	M.S. degree in Chemistry of National Sun Yat-sen University	None	None	None	None
Executive Director	R.O.C	Wen-Pin Lu	Male	2015.10.28	320,037	0.02%	None	None	None	None	M.S. degree in Electronic Engineering of National Taiwan University	None	None	None	None
Executive Director	R.O.C	Hsin-Cheng Liu (Note 2)	Male	2020.04.28	40,442	0.00%	None	None	None	None	M.S. degree in Chemical Engineering of National Tsing Hua University	None	None	None	None
Executive Director	R.O.C	Kai-Wen Tu (Note 2)	Male	2020.04.28	44,577	0.00%	None	None	None	None	Ph.D. degree in statistics of National Chiao Tung University	None	None	None	None
Executive Director	R.O.C	Ting-Chang Lin (Note 2)	Male	2020.04.28	82,378	0.00%	None	None	None	None	M.S. degree in Astronomy of National Central University	None	None	None	None
Executive Director	R.O.C	Kun-Lung Chang (Note 2)	Male	2020.04.28	42,253	0.00%	None	None	None	None	M.S. degree in Electronics Engineering of National Chiao Tung University	None	None	None	None

Title	Nationality	Name	Gender	Date appointed	Shares currently held		Shares held by spouse and underage children		Shares held in the name of others		Education/work experience	Other positions at the Company or elsewhere	Other officer, director or supervisor who is the spouse or a relative within second degree		
					Shares	%	Shares	%	Shares	%			Title	Name	Relation
Project Executive Director	R.O.C	Chuan-Hsien Wen (Note 3)	Male	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted
Project Executive Director	R.O.C	Hui-Chi Li	Male	2017.10.11	310,182	0.02%	3,066	0.00%	None	None	M.S. degree in Ceramic Engineering of Alfred University	None	None	None	

Note 1: Where the chairman and president or equivalent position (the highest level managerial officer) is the same person, the reasonableness, necessity, and response measures must be disclosed:

Mr. Miin Chyou Wu founded Macronix in 1989 and served as its President, who has been elected as the Chairman since 2005 and successfully had Macronix become the global leader in non-volatile memory (NVM) with his forward-looking perspective and innovative business strategy. In 2019, he was elected as the chairman and CEO of the 11th-term Board of Directors. Considering that Macronix has four independent directors, and more than half of its directors are non-employees nor managers of Macronix, the independence of the Board of Directors can be ensured. Also, to continue the forward-looking and innovative business philosophy, and Macronix's worldwide reputation, image and competitiveness, it is necessary to have Chairman Miin Chyou Wu concurrently serving as Macronix's highest level manager (CEO) to improve operational efficiency and decision-making, and further enhance its value, which is therefore reasonable and necessary.

Note 2: Promoted to Executive Director on April 28, 2020.

Note 3: Retired on March 5, 2021.

III Remuneration of Directors, Supervisors, President, and Vice Presidents in the Most Recent Fiscal Year

(I) Remuneration of Directors and Independent Directors

December 31, 2020

Unit: NT\$ thousands

Title	Name	Remuneration								Ratio of Total Remuneration (A+B+C+D) to Net Income (%)		Relevant Remuneration Received by Directors Who are Also Employees						Ratio of Total Compensation (A+B+C+D+E+F+G) to Net Income (%)		Remuneration received from invested companies other than subsidiaries or the parent company		
		Base Compensation (A)		Severance Pay (B) (Note 1)		Directors Compensation(C) (Note 2)		Allowances (D)				Salary, Bonuses, and Allowances (E)		Severance Pay (F) (Note 1)		Employee Compensation (G) (Note 2)						
		The Company	Companies in the consolidated financial statements	The Company	Companies in the consolidated financial statements	The Company	Companies in the consolidated financial statements	The Company	Companies in the consolidated financial statements	The Company	Companies in the consolidated financial statements	The Company	Companies in the consolidated financial statements	The Company	Companies in the consolidated financial statements	Cash	Stock	Cash	Stock		The Company	Companies in the consolidated financial statements
Chairman	Miin Chyou Wu	0	0	0	0	36,589	36,589	120	120	0.69%	0.69%	38,284	38,284	760	760	57,000	0	57,000	0	2.49%	2.49%	0
Director	Chien Hsu Investment Corporation	0	0	0	0	16,919	16,919	120	120	0.32%	0.32%	0	0	0	0	0	0	0	0	0.32%	0.32%	0
Director	Chih-Yuan Lu	0	0	0	0	19,670	19,670	120	120	0.37%	0.37%	25,571	25,571	760	760	34,200	0	34,200	0	1.51%	1.51%	39,680
Director	Shun Yin Investment Ltd. Representative: Shigeki Matsuoka	0	0	0	0	16,919	16,919	120	120	0.32%	0.32%	0	0	0	0	0	0	0	0	0.32%	0.32%	0
Director	Cheng-Yi Fang	0	0	0	0	5,640	5,640	120	120	0.11%	0.11%	0	0	0	0	0	0	0	0	0.11%	0.11%	0
Director	Chung-Laung Liu (Note 3)	0	0	0	0	4,808	4,808	120	120	0.09%	0.09%	0	0	0	0	0	0	0	0	0.09%	0.09%	0
Director	Achi Capital Limited	0	0	0	0	16,919	16,919	120	120	0.32%	0.32%	0	0	0	0	0	0	0	0	0.32%	0.32%	0
Director	Dang-Hsing Yiu	0	0	0	0	5,640	5,640	120	120	0.11%	0.11%	11,152	11,152	760	760	7,600	0	7,600	0	0.47%	0.47%	0
Director	Ful-Long Ni	0	0	0	0	5,640	5,640	120	120	0.11%	0.11%	17,189	17,189	760	760	19,000	0	19,000	0	0.80%	0.80%	0
Director	Hui Ying Investment Ltd.	0	0	0	0	5,640	5,640	120	120	0.11%	0.11%	0	0	0	0	0	0	0	0	0.11%	0.11%	0
Director	Che-Ho Wei	0	0	0	0	5,640	5,640	120	120	0.11%	0.11%	0	0	0	0	0	0	0	0	0.11%	0.11%	0
Independent Director	Tyzz-Jiun Duh	3,600	3,600	0	0	0	0	120	120	0.07%	0.07%	0	0	0	0	0	0	0	0	0.07%	0.07%	0
Independent Director	Chiang Kao	3,600	3,600	0	0	0	0	120	120	0.07%	0.07%	0	0	0	0	0	0	0	0	0.07%	0.07%	0
Independent Director	Yan-Kuin Su	3,600	3,600	0	0	0	0	120	120	0.07%	0.07%	0	0	0	0	0	0	0	0	0.07%	0.07%	0
Independent Director	John C.F. Chen	3,600	3,600	0	0	0	0	120	120	0.07%	0.07%	0	0	0	0	0	0	0	0	0.07%	0.07%	0

1. Please describe the policy, system, standard, and structure of remuneration to independent directors, and the correlation between duties, risk, and time input with the amount of remuneration:

The Board of Directors is authorized to determine the remuneration of independent directors based on participation in the Company's operations, value of contributions, and domestic and overseas industry standards in accordance with the Articles of Incorporation. The independent director's remuneration is a fixed monthly remuneration and does not participate in the company's earnings distribution

2. Other than as disclosed in the above table, the remuneration earned by Directors providing services (e.g. providing consulting services as a non-employee) to the Company and all consolidated entities in the latest fiscal year: None.

Note 1: Estimated amount.

Note 2: Proposed amount.

Note 3: Mr. Chung-Laung Liu passed away on November 7, 2020.

Note 4: Explanation of the correlation and rationality of changes in the after tax profit and loss and remuneration.

(1)The Company's 2019 net profit after tax was NT\$3,011,960,000. The net profit for 2020 was NT\$5,326,083,000. According to the Articles of Incorporation, bonuses are distributed to Directors and employees as incentive (proposed amount). The Company's net profit after tax for 2020 increase from 2019, which was in line with the increase in the "Remuneration of Directors" and "Relevant Remuneration Received by Directors Who are Also Employees."

(2)The Company's shares distribution is calculated while taking the industry standard, duration of employment for directors (and representatives), and actual participation and contributions into consideration. The remuneration is reasonable.

(II) Remuneration of the President and Vice Presidents

December 31, 2020

Unit: NT\$ thousands

Title	Name	Salary (A)		Severance Pay (B) (Note 1)		Bonuses and Allowances (C)		Emploensatiyee Comon (D) (Note 2)				Ratio of total compensation (A+B+C+D) to net income (%)		Remuneration received from invested companies other than subsidiaries or the parent company
		The Company	Companies in the consolidated financial statements	The Company	Companies in the consolidated financial statements	The Company	Companies in the consolidated financial statements	The Company		Companies in the consolidated financial statements		The Company	Companies in the consolidated financial statements	
								Cash	Stock	Cash	Stock			
CEO	Miin Chyou Wu	63,286	63,286	6,835	6,835	99,432	99,432	188,860	0	188,860	0	6.73%	6.73%	39,680
President	Chih-Yuan Lu													
Senior Vice President & Chief Marketing Officer	Dang-Hsing Yiu													
Vice President	Ful-Long Ni													
Vice President	Pei-Fu Yeh													
Vice President	Yen-Hie Chao													
Vice President	Chun-Hsiung Hung													
Vice President	Jui-Kun Chen													
Vice President	Jon-Ten Chung													

Note 1: Estimated amount.

Note 2: Proposed amount

Range of Remuneration for Presidents and Vice Presidents

Range of Remuneration Paid to Each President and Vice President	Name of President and Vice Presidents	
	The Company	Companies in the consolidated financial statements (Note)
Under NT\$ 1,000,000		
NT\$1,000,000 (inclusive) – NT\$2,000,000 (exclusive)		
NT\$2,000,000 (inclusive) – NT\$3,500,000 (exclusive)		
NT\$3,500,000 (inclusive) – NT\$5,000,000 (exclusive)		
NT\$5,000,000 (inclusive) – NT\$10,000,000 (exclusive)		
NT\$10,000,000 (inclusive) – NT\$ 15,000,000 (exclusive)		
NT\$15,000,000 (inclusive) – NT\$ 30,000,000 (exclusive)	Dang-Hsing Yiu / Pei-Fu Yeh / Yen-Hie Chao / Jon-Ten Chung	Dang-Hsing Yiu / Pei-Fu Yeh / Yen-Hie Chao / Jon-Ten Chung
NT\$30,000,000 (inclusive) – NT\$ 50,000,000 (exclusive)	Ful-Long Ni / Chun-Hsiung Hung / Jui-Kun Chen	Ful-Long Ni / Chun-Hsiung Hung / Jui-Kun Chen
NT\$50,000,000 (inclusive) – NT\$ 100,000,000 (exclusive)	Miin Chyou Wu / Chih-Yuan Lu	Miin Chyou Wu
Over NT\$100,000,000		Chih-Yuan Lu
Total	9	9

Note: The total amount of A+B+C+D and remuneration received from subsidiaries or the parent company other than invested companies.

(III). Employees Compensation Distributed to Management Team

December 31, 2020
Unit: NT\$ thousands

	Title	Name	Stock (Fair Market Value)	Cash (Note 1)	Total	Ratio of Total Amount to Net Income (%)
Managers	CEO	Miin Chyou Wu	0	237,500	237,500	4.46%
	President	Chih-Yuan Lu				
	Senior Vice President & Chief Marketing Officer	Dang-Hsing Yiu				
	Vice President	Ful-Long Ni				
	Vice President	Pei-Fu Yeh				
	Vice President	Yen-Hie Chao				
	Vice President	Chun-Hsiung Hung				
	Vice President	Jui-Kun Chen				
	Vice President	Jon-Ten Chung				
	Associate V.P.	Guang-Chao Chen				
	Executive Director	Wen-Bin Lu				
	Executive Director	Hsin-Cheng Liu (Note 2)				
	Executive Director	Kai-Wen Tu (Note 2)				
	Executive Director	Ting-Chang Lin (Note 2)				
	Executive Director	Kun-Lung Chang (Note 2)				
	Project Executive Director	Hui-Ji Li				

Note 1: Proposed amount

Note 2: Promoted to Executive Director on April 28, 2020

(IV) The Ratio of Total Remuneration Paid by the Company and by All Companies Included in the Consolidated Financial Statements for the Two Most Recent Fiscal Years to Directors, Supervisors, President and Vice Presidents of the Company, to the Net Income as Well as the Policies, Standards, and Portfolios for the Payment of Remuneration, the Procedures for Determining Remuneration, and the Correlation with Risks and Business Performance

1. The ratio of the total remuneration paid by the Company and by all companies included in the consolidated financial statements for the two most recent fiscal years to directors, supervisors, president and vice presidents of the Company, to the net income.

	2019		2020	
	The Company	Companies in the consolidated financial statements	The Company	Companies in the consolidated financial statements
Directors	2.89%	2.89%	2.93%	2.93%
Presidents and Vice Presidents	6.35%	6.35%	6.73%	6.73%

2. The policy, standards and packages of remunerations, the procedures for such decisions and relation to business performance and future risks.

(1) Remuneration to the Company's directors and managers are distributed in accordance with the Articles of Incorporation and the law, after referring to industry standards in Taiwan and overseas, the length of the tenure of related members, actual participation, and contributions. Remunerations are summarized below:

- Independent Director: Receives NT\$300,000 and travel allowance on a monthly basis regardless of the Company's profit or loss, but does not participate in earning distribution.
- Non-Independent Director: Calculated and distributed based on the director's (including representatives) performance evaluation items (e.g. attendance in Board meetings and shareholders' meetings and continuing education), length of tenure, actual participation, and contributions in accordance with the Company's Articles of Incorporation and the law, after referring to industry standards in Taiwan and overseas, provided that it does not exceed 2% of profits after deducting accumulated losses.

(2) Transportation allowance for directors: NT\$10,000 per month.

(3) Compensation for managers: Reviewed and approved by the Compensation Committee after referencing manager performance evaluation items, which include financial indicators (e.g. revenue and EPS) and non-financial indicators (e.g. decision-making ability and performance improvement), and submitted to the Board of Directors for resolution.

(4) Others: With consideration to future changes in the economic environment, remuneration paid to our management team will be carefully established in accordance with the law, based on business performance and future risks, as well as industry standards in Taiwan and overseas.

IV. Implementation of Corporate Governance

(I) Board of Directors

A total of 7 (A) meetings of the Board of Directors were held in the previous period. The attendance of director and supervisor were as follows:

Title	Name	Attendance in Person (B)	By Proxy	Attendance Rate (%) (B/A) (Note 1)	Remarks
Chairman	Miin Chyou Wu	7	0	100%	
Director	Chien Hsu Investment Corporation Representative: Ching-Yun Li (Note 2)	7	0	100%	
Director	Chih-Yuan Lu	7	0	100%	
Director	Shun Yin Investment Ltd. Representative: Shigeki Matsuoka	7	0	100%	
Director	Cheng-Yi Fang	5	2	71%	
Director	Chung-Laung Liu (Note 3)	5	1	83%	Passed away on November 7, 2020
Director	Achi Capital Limited Representative: Guei-Min Lee (Note 4)	6	0	86%	
Director	Che-Ho Wei	7	0	100%	
Director	Dang-Hsing Yiu	7	0	100%	
Director	Ful-Long Ni	7	0	100%	
Director	Hui Ying Investment Ltd. Representative: Pei-Fu Yeh (Note 5)	7	0	100%	
Independent Director	Tyzz-Jiun Duh	7	0	100%	
Independent Director	Chiang Kao	6	1	86%	
Independent Director	Yan-Kuin Su	7	0	100%	
Independent Director	John C.F. Chen	7	0	100%	

Other items that shall be recorded:

I. If any of the following circumstances occur to the operation of the Board of Directors, the date of the meeting, session, content of the motion, all independent directors' opinions, and the Company's response to independent directors' opinions should be specified:

(I) Matters referred to in Article 14-3 of the Securities and Exchange Act.

Board of Directors Date/ Term	Motion	Independent Directors' Opinions	The Company's Response to Independent Directors' Opinions
2020.02.17 The 4th meeting of the 11th Term of the Board of Directors	Submitted for approval of 2020 annual incentive bonus of the Company Managers.	Approved	Not applicable
2020.03.06 The 5th meeting of the 11th Term of the Board of Directors	Approval of fund raising by issuance of new shares, overseas depository receipts through cash capital increase, and/or the private placement of common shares and/or domestic or overseas convertible bonds.	Approved	Not applicable
2020.04.28 The 6th meeting of the 11th Term of the Board of Directors	Pursuant to the amendments of applicable regulations, it is hereby proposed to amend the Company's Internal Control System for Shareholders Services Process.	Approved	Not applicable
2020.07.28 The 8th meeting of the 11th Term of the Board of Directors	Submitted for approval of the 2019 employee bonus to be distributed to the managers as defined under Company Law and/or Securities and Exchange Act ("Company Managers").	Approved	Not applicable
	Submitted for approval of the 2020 salary adjustment of the Company Managers ("Adjustments").	Approved	Not applicable
	Submitted for approval of 2021 annual incentive bonus of the Company Managers.	Approved	Not applicable
2020.10.26 The 9th meeting of the 11th Term of the Board of Directors	Approval of the engagement of Tung Hui Yeh and Kuo Tyan Hong (with Deloitte & Touche) starting from Q3, 2020 as the Company's Independent Auditors for the financial and/or tax matters, in replacement of Tung Hui Yeh and Benjamin Shin of the same firm, as resolved and proposed by the Audit Committee.	Approved	Not applicable
2020.12.24 The 10th meeting of the 11th Term of the Board of Directors	Submitted for approval of the Company's financial and tax accountants for Year 2021 resolved by the Audit Committee.	Approved	Not applicable
	Submitted for approval of the fees and expenses of CPAs for Year 2021 resolved by the Audit Committee.	Approved	Not applicable

(II) In addition to the aforementioned matters, other motions resolved by the Board of Directors that are objected to by Independent Directors or expressed reservations and recorded or declared in writing: None.

II. If there is Directors' avoidance of motions in conflicts of interest, the Directors' names, content of the motion, causes of avoiding conflicts of interest, and the voting participation should be specified:

Name of Directors who avoid interest	Motion	Causes of avoiding conflicts of interest	Voting participation
Miin Chyou Wu, Chih-Yuan Lu, Dang-Hsing Yiu, Ful-Long Ni, the representative of Hui Ying Investment, Ltd., Pei-Fu Yeh	Submitted for the approval of 2019 Performance Assessments Report of the Managers.	Related persons	Recusal and no participation in the resolution by proxy
Miin Chyou Wu, Chih-Yuan Lu, Dang-Hsing Yiu, Ful-Long Ni, the representative of Hui Ying Investment, Ltd., Pei-Fu Yeh	Submitted for approval of 2020 annual incentive bonus of the Company Managers.	Related persons	Recusal and no participation in the resolution by proxy
Dang-Hsing Yiu, Ful-Long Ni, the representative of Hui Ying Investment, Ltd., Pei-Fu Yeh	Submitted for approval of the compensation package of new Executive Directors, Mr. H.C. Liu, Kevin Tu, D.J. Lin and K.L. Chang.	Related persons	Recusal and no participation in the resolution by proxy
Miin Chyou Wu, Chih-Yuan Lu, Dang-Hsing Yiu, Ful-Long Ni, the representative of Hui Ying Investment, Ltd., Pei-Fu Yeh	Submitted for approval of the 2019 employee bonus to be distributed to the managers as defined under Company Law and/or Securities and Exchange Act .	Related persons	Recusal and no participation in the resolution by proxy
Miin Chyou Wu, Chih-Yuan Lu, Dang-Hsing Yiu, Ful-Long Ni, the representative of Hui Ying Investment, Ltd., Pei-Fu Yeh	Submitted for approval of the 2020 salary adjustment of the Company Managers	Related persons	Recusal and no participation in the resolution by proxy
Miin Chyou Wu, Chih-Yuan Lu, Dang-Hsing Yiu, Ful-Long Ni, the representative of Hui Ying Investment, Ltd., Pei-Fu Yeh	Submitted for approval of the 2021 annual incentive bonus of the Company Managers.	Related persons	Recusal and no participation in the resolution by proxy

III. Evaluation of the board of directors:

Assessment cycle	Assessment period	Assessment scope	Assessment method	Assessment content	Evaluation result
Performed once per year	January 1, 2020 to December 31, 2020	Entire Board of Directors	Self-assessment of the board of directors	<ol style="list-style-type: none"> 1. Participation in the Company's Operations 2. Raising the Quality of the Board of Directors' Decisions 3. Composition and Structure of the Board of Directors 4. Election and Continuing Education of Directors 5. Internal controls 	Overall average 4.83 (out of 5)
Performed once per year	January 1, 2020 to December 31, 2020	each member of the board of directors	Self-assessment of each member of the board of directors	<ol style="list-style-type: none"> 1. Understanding of the Company's Objectives and Tasks 2. Directors' Responsibilities 3. Participation in the Company's Operations 4. Management and Communication of Internal Relations 5. Directors' Expertise and Continuing Education 6. Internal controls 	Overall average 4.83 (out of 5)
Performed once per year	January 1, 2020 to December 31, 2020	the Audit Committee	Self-assessment of the Audit Committee	<ol style="list-style-type: none"> 1. Participation in the Company's Operations 2. Audit Committee's Responsibilities 3. Raising the Quality of the Audit Committee's Decisions 4. Composition and Membership of the Audit Committee 5. Internal controls 	Overall average 4.97 (out of 5)
Performed once per year	January 1, 2020 to December 31, 2020	the Compensation Committee	Self-assessment of the Compensation Committee	<ol style="list-style-type: none"> 1. Participation in the Company's Operations 2. Compensation Committee's Responsibilities 3. Raising the Quality of the Compensation Committee's 	Overall average 5.00 (out of 5)

				4. Decisions Composition and Membership of the Compensation Committee	
Performed once per year	January 1, 2020 to December 31, 2020	the Nomination Committee	Self-assessment of the Nomination Committee	<ol style="list-style-type: none"> 1. Participation in the Company's Operations 2. Nomination Committee's Responsibilities 3. Raising the Quality of the Nomination Committee's Decisions 4. Composition and Membership of the Nomination Committee 	Overall average 4.91 (out of 5)
Performed once three year	January 1, 2020 to December 31, 2020	Overall Board of Directors	Evaluation by an External Professional Institution	<ol style="list-style-type: none"> 1. Composition of the Board of Directors 2. Guidance from the Board of Directors 3. Authorization of the Board of Directors 4. Supervision of the Board of Directors 5. Communication of the Board of Directors 6. Internal Controls and Risk Management 7. Self-discipline of the Board of Directors 8. Others, such as Board meetings and support system 	<p>The report for the 2020 External Board Performance Evaluation conducted by Taiwan Corporate Governance Association is summarized below:</p> <ol style="list-style-type: none"> 1. Director training is taken seriously and director continuing education plans are diverse and help new directors become familiar with the Company's business. 2. KPI for managers is set based on the annual plan, and the reward strategy is established based on industry levels

					and encourages senior executives to jointly pursue the Company's sustainable development.
					3. The Ethical Corporate Management Committee is functioning properly.
<p>IV. Measures taken to strengthen the functions of the Board (for example, establishing an Audit Committee and enhancing information transparency) for the current year and the most recent year and the implementation:</p> <p>The Company has functional committees, including the Audit Committees, Compensation Committees and Nomination Committees, to review and resolve proposals within its authority and to submit to the Board of Directors for decision to enhance supervision and strengthen management. Board members continue to participate in continuing education to enhance their professional knowledge as well as communication to improve the Board's performance. In order to encourage the Directors to continue studies, the Company regularly arranges corporate governance courses and provides course information from external institutions for the Directors' reference. Please refer to page 58 of this annual report for the Company's Director training in the most recent year.</p>					

Note 1: A total of 7 meetings were convened by the Board of Directors in the most recent year. Attendance rate (%) is calculated based on the number of meetings convened by the Board of Directors and attendance.

Note 2: Chien Hsu Investment Co., Ltd. appointed Ms. Ching-Yun Li on July 26, 2019, to attend the 11th Term of the Board of Directors and exercised any and all Director's rights thereof.

Note 3: Mr. Chung-Laung Liu passed away on November 7, 2020

Note 4: Ms. Guei-Min Lee was appointed to represent it to attend the 11th Term of the Board of Directors and exercised any and all Director's rights thereof.

Note 5: Mr. Pei-Fu Yeh was appointed to represent it to attend the 11th Term of the Board of Directors and exercised any and all Director's rights thereof.

(II) Audit Committee

The Company's Audit Committee is comprised of four independent directors to carry out supervision under applicable laws and regulations, including ensuring proper statements of the Company's financial reports, engaging or dismissal of auditing CPAs and their independence as well as performance, effective implementation of internal audit, compliance of applicable laws and regulations, and control of the Company's existing and potential risks. In the most recent year, the following have been duly reviewed and resolved by the Audit Committee:

1. Assessment of the internal control system and efficiency.
2. The offering, issuance, or private placement of equity securities.
3. Engaging and/or dismissal of auditing CPA and the compensation.
4. Annual financial reports.
5. Business report and earnings distribution

A total of 6 (A) Audit Committee meetings were held in the most recent year. The attendance of the independent directors was as follows:

Title	Name	Attendance in Person (B)	By Proxy	Attendance Rate (%) (B/A)	Remarks
Independent Director	Tyzz-Jiun Duh	6	0	100%	
Independent Director	Chiang Kao	6	0	100%	
Independent Director	Yan-Kuin Su	6	0	100%	
Independent Director	John C.F. Chen	6	0	100%	

Other items that shall be recorded:

- I. When one of the following situations has occurred to the operations of the Audit Committee, the date, term, and agenda of the Board of Directors, resolution of the Audit Committee, and the Company's response to the comments of the Audit Committee shall be stated:
(I) Items specified in Article 14-5 of the Securities and Exchange Act

Board of Directors Date/ Term	Motion	Resolution results of the Audit Committee	The Company's response to the comments of the Audit Committee
2020.02.17 The 4th meeting of the 11th Term of the Board of Directors	2019 Financial Statements	Unanimously approved by all members attending the meeting and will be submitted to the Board of Directors meeting for approval.	Not applicable
2020.03.06 The 5th meeting of the 11th Term of the Board of Directors	Approval of fund raising by issuance of new shares, overseas depositary receipts through cash capital increase, and/or the private placement of common shares and/or domestic or overseas convertible bonds.	Unanimously approved by all members attending the meeting and will be submitted to the Board of Directors meeting for approval.	Not applicable

Board of Directors Date/ Term	Motion	Resolution results of the Audit Committee	The Company's response to the comments of the Audit Committee
2020.04.28 The 6th meeting of the 11th Term of the Board of Directors	Pursuant to the amendments of applicable regulations, it is hereby proposed to amend the Company's Internal Control System for Shareholders Services Process.	Unanimously approved by all members attending the meeting and will be submitted to the Board of Directors meeting for approval.	Not applicable
2020.10.26 The 9th meeting of the 11th Term of the Board of Directors	Approval of the appointment of Tung Hui Yeh and Kuo Tyan Hong (from Deloitte & Touche) starting from Q3, 2020 as the Company's Independent Auditors for the financial and/or tax matters, in replacement of Tung Hui Yeh and Benjamin Shih of the same firm, according to the resolution of the Audit Committee.	Unanimously approved by all members attending the meeting and will be submitted to the Board of Directors meeting for approval.	Not applicable
2020.12.24 The 10th meeting of the 11th Term of the Board of Directors	Submitted for approval of the Company's financial and tax accountants for Year 2021, according to the resolution of the Audit Committee.	Unanimously approved by all members attending the meeting and will be submitted to the Board of Directors meeting for approval.	Not applicable
	Submitted for approval of the fees and expenses of CPAs for Year 2021, according to the resolution of the Audit Committee.	Unanimously approved by all members attending the meeting and will be submitted to the Board of Directors meeting for approval.	Not applicable

- (II) Except the items in the preceding issues, other resolutions approved by two-thirds of all Directors but yet to be approved by the Audit Committee: None.
- II. Names, content of the motion, cause of the conflict of interest, and participation in the voting of Independent Directors who have abstained from voting for proposals that are considered to present conflicts of interest: None.
- III. Communication between Directors and the head of internal audit and CPAs (including important issues, audit methods, and results related to the Company's finance and business):
1. The Company's head of internal audit, in addition to regularly sending various audit reports to independent directors, also attends and reports to the Audit Committee quarterly. The head of internal audit also responds at all times to any questions that the independent directors may have, and the interactions between them were good.
 2. CPAs appointed by the Company also attended the Audit Committee quarterly and the meeting of the Board of Directors, where they explained financial/accounting matters to the independent directors, and the interactions between them were good.
 3. The head of internal audit and CPAs also directly contact independent directors at all times and according to need, and the communication channel between them is unimpeded.

- Communications between independent directors and the head of internal audit are as follows:

Audit Committee date	Key points of communication	Results of communication
February 17, 2020	<ul style="list-style-type: none"> • Audit report for Q4 2019 • 2019 Statement on Internal Control 	Full attendance No objections from independent directors
April 28, 2020	<ul style="list-style-type: none"> • Audit report for Q1 2020 	
July 28, 2020	<ul style="list-style-type: none"> • Audit report for Q2 2020 	
October 26, 2020	<ul style="list-style-type: none"> • Audit report for Q3 2020 • 2021 Audit plan 	

- Summary of communications between independent directors and CPAs in recent years:

Audit Committee date	Key points of communication	Results of communication
February 17, 2020	<ul style="list-style-type: none"> • Review results and key review items for the 2019 stand-alone and consolidated financial statements 	Full attendance No objections from independent directors
April 28, 2020	<ul style="list-style-type: none"> • Results of review of the consolidated financial statements for Q1 2020 	
July 28, 2020	<ul style="list-style-type: none"> • Results of review of the consolidated financial statements for Q2 2020 	
October 26, 2020	<ul style="list-style-type: none"> • Results of review of the consolidated financial statements for Q3 2020 	

(III) Corporate Governance Implementation Status and Deviations from “the Corporate Governance Best-Practice Principles for TWSE/TPEX Listed Companies” and Reasons

The Company attaches great importance to corporate governance. Not only has it introduced the corporate governance systems in advance by taking overseas norms into consideration, but has also adopted the “Corporate Governance Best-Practice Principles for TWSE/TPEX Listed Companies” as its guideline. In 2003, the Company added two independent directors to the Board of Directors in accordance with the US Securities Laws and Regulations. The following year, three Independent Directors were elected. The Company also established an Audit Committee, which was later renamed the Auditing Committee. The Compensation Committee was set up in 2005, with internal auditing being directly subordinate to the Board.

In 2007, the Company adopted the candidate nomination system for the first time for the election of the Board and Supervisors (including three Independent Directors). In June 2009, the Company set up the Audit Committee to replace Supervisors in accordance with Article 14-4 of the Securities and Exchange Act. In January 2019, the "Compensation Committee" was set up in accordance with Article 14-6 of the Securities and Exchange Act. In January 2019, the Company voluntarily set up the "Nomination Committee" to assist the operation of Board.

In 2007 and 2011, the company passed the Taiwan Corporate Governance Association CG6002 and CG6006 evaluations in the corporate governance system respectively and was ranked in the top 5% of all listed companies in the first corporate governance evaluation in 2014. This reaffirms Macronix's implementation and active promotion of corporate governance.

Evaluation Item	Implementation Status			Deviations from “the Corporate Governance Best-Practice Principles for TWSE/TPEX Listed Companies” and Reasons
	Yes	No	Abstract Illustration	
I. Does the company establish and disclose the Corporate Governance Best-Practice Principles" based on “Corporate Governance Best-Practice Principles for TWSE/TPEX Listed Companies”?	✓		The Company has established the "Corporate Governance Principles" based on “Corporate Governance Best-Practice Principles for TWSE/TPEX Listed Companies” and disclosed them on the company website.	None
II. Shareholding structure & shareholders’ rights (I) Does the company establish an internal operating procedure to deal with shareholders’ suggestions, doubts, disputes, and litigations, and implement based on the procedure?	✓		(I) The Company has established an Investor Relations Office and a legal center. Dedicated personnel are assigned to address issues such as shareholder suggestions, inquiries, and disputes. The legal actions taken by the shareholders are also properly addressed through internal operating procedures, and records are kept for future reference.	None

Evaluation Item	Implementation Status			Deviations from “the Corporate Governance Best-Practice Principles for TWSE/TPEX Listed Companies” and Reasons
	Yes	No	Abstract Illustration	
(II) Does the company possess the list of its major shareholders as well as the ultimate owners of those shares?	✓		(II) The Company possesses the list of its directors, managers, and shareholders with more than 10% of the shares as well as their major shareholders. Relevant information is routinely disclosed.	None
(III) Does the company establish and execute the risk management and firewall system within its conglomerate structure?	✓		(III) The Company has established the "Relevant Financial and Business Operations Rules between Relation Parties" and "Regulations of the Supervision and Management of Subsidiaries" to clearly distinguish the assets, finance, and operations between the Company and its affiliated companies, as well as execute the risk management and firewall system.	None
(IV) Does the company establish internal rules against insiders trading with undisclosed information?	✓		(IV) The Company has established the "Code of Business Conduct and Ethics" and "Preventing Insider Trading" to clearly regulate matters regarding the staff purchasing the Company's securities.	None
III. Composition and Responsibilities of the Board of Directors				
(I) Does the Board develop and implement a diversified policy for the composition of its members?	✓		(I) The Company's corporate governance principles stipulate that the composition of the Board of directors shall take diversity into consideration. The authorized Nomination Committee shall also formulate criteria regarding the diversity and independence of the directors' professional knowledge, expertise, experience, and gender. These criteria will be adopted in the search, review, and nomination of director candidates. Please refer to page 63 of this Annual Report for the implementation of the Board diversity policy.	None

Evaluation Item	Implementation Status			Deviations from “the Corporate Governance Best-Practice Principles for TWSE/TPEX Listed Companies” and Reasons
	Yes	No	Abstract Illustration	
(II) Does the company voluntarily establish other functional committees in addition to the Compensation Committee and the Audit Committee?	✓		(II) The Company voluntarily set up the Nomination Committee on January 22, 2019, please refer to page 42 of this Annual Report for the members and operations.	None
(III) Does the Company establish standards and methods for evaluating board performance, conduct annual performance evaluations, submit performance evaluation results to the Board, and use the results as a basis for determining the remuneration and nomination renewal of individual directors?	✓		(III) The Company has established the “Rules for Board of Directors Performance Assessments” to clearly regulate the evaluation cycle, period, scope, execution unit, and procedures. The results were submitted to the Company's Nomination Committee and Board of Directors. Please refer to page 27 of this Annual Report for implementation status in 2020.	None
(IV) Does the company regularly evaluate the independence of CPAs?	✓		(IV) The company engaged a professional accounting firm to conduct financial and tax compliance audits. The Company evaluates the independence of CPAs by the following criteria every year. The engagement shall be duly reviewed by the Audit Committee and approved by the Board of Directors. The evaluation items of independence of CPAs are as follows: 1. Not appointing the same accountant to perform audits for more than seven consecutive years, 2. Obtaining a statement of independence, including but not limited to whether the accountant has direct or indirect significant financial interests in the Company; whether there is kinship or business relations that might have an impact on the independence with the Company's directors, supervisors and managers; whether they concurrently serve as the Company's directors and supervisors during the audit period or hold positions that have direct and significant influence on the audit.	None

Evaluation Item	Implementation Status			Deviations from “the Corporate Governance Best-Practice Principles for TWSE/TPEX Listed Companies” and Reasons
	Yes	No	Abstract Illustration	
IV. Does the TWSE listed company have a suitable number of competent corporate governance personnel, and has it appointed a corporate governance supervisor responsible for corporate governance matters (including but not limited to providing information for directors and supervisors to perform their duties, assisting directors and supervisors with regulatory compliance, handling matters related to Board meetings and shareholders' meetings, and preparing proceedings for Board meetings and shareholders' meetings)?	✓		<p>The Board of Directors has designated the Board Secretariat Department to handle administrative matters for the Board. On March 12th, 2019, the Corporate Governance Officer was also set up to handle corporate governance Officer as per the requests of the directors. The terms of reference are set out below:</p> <p>(1) Responsibilities:</p> <ol style="list-style-type: none"> 1. Matters related to the meetings of the Board of Directors and shareholders' meetings in accordance with the law; 2. Prepare the minutes of the Board and Shareholders' Meeting; 3. Assist the directors and supervisors in continuous education; 4. Provide information necessary for the Directors and Supervisors; 5. Assist Directors and Supervisors to comply with the laws and regulations; 6. Other matters stipulated in the Articles of Incorporation or the contract. <p>(2) Please refer to page 61 of this annual report for education of corporate governance supervisor within the most recent year.</p>	None
V. Does the company establish a communication channel and build a designated section on its website for stakeholders (including but not limited to shareholders, employees, customers, and suppliers), as well as handle all the issues they care for in terms of corporate social responsibilities?	✓		<p>The Company understands and responds to the stakeholders' reasonable expectations for the Company, needs, and topics of concern through a number of communication channels, and such communications with stakeholders are reported to the Board of Directors every year. All types of stakeholders can access the Company's contact information and communication channels through the “Contact Us” on the company website, and ask questions or express opinions. Please refer to the Company's Corporate Social Responsibility (CSR) Report for</p>	None

Evaluation Item	Implementation Status			Deviations from “the Corporate Governance Best-Practice Principles for TWSE/TPEX Listed Companies” and Reasons
	Yes	No	Abstract Illustration	
			the identification method and identity of stakeholders, topics of concern, and response method.	
VI. Does the company appoint a professional shareholder service agency to deal with shareholder affairs?		✓	The Company has set up an Investor Relations office since 1997 dedicated to handling matters related to the Company's shareholders. All shareholders' equity operations are carried out in accordance with the “Standards for the Internal Control System of the Stock Department”, and the same applies to shareholders' meetings.	Please refer to Implementation Status
VII. Information Disclosure				
(I) Does the company have a corporate website to disclose both financial standings and the status of corporate governance?	✓		(I) The Company has established a corporate website to disclose information on financial operations and corporate governance.	None
(II) Does the company have other information disclosure channels (e.g. building an English website, appointing designated people to handle information collection and disclosure, creating a spokesman system, webcasting investor conferences)?	✓		(II) The Company has established an English website to disclose relevant information and set up dedicated departments for collecting and disclosing company information. Furthermore, to implement the spokesperson system, the Company has designated a spokesperson and a deputy spokesperson for speaking on behalf of the Company. The briefing and procedures of investor conferences are available in the “Investor Relations/Financial Information/Quarterly Results” section of the company website.	None
(III) Does the company announce and report annual financial statements within two months after the end of each fiscal year, and announce and report Q1, Q2, and Q3 financial statements, as well as monthly operation results, before the prescribed time limit?	✓		(III) The Company announces and reports quarterly financial statements and monthly operation results within the prescribed time limit, and the financial statements were announced and reported within two months after the end of the fiscal year.	None

Evaluation Item	Implementation Status			Deviations from “the Corporate Governance Best-Practice Principles for TWSE/TPEX Listed Companies” and Reasons
	Yes	No	Abstract Illustration	
VIII. Is there any other important information to facilitate a better understanding of the company’s corporate governance practices (e.g., including but not limited to employee rights, employee wellness, investor relations, supplier relations, rights of stakeholders, directors’ and supervisors’ training records, the implementation of risk management policies and risk evaluation measures, the implementation of customer relations policies, and purchasing insurance for directors and supervisors)?	✓		<ol style="list-style-type: none"> 1. Status of employee rights and employee wellness: Please refer to the Company's "Corporate Social Responsibility Report." 2. Status of risk management policies and risk evaluation: Please refer to (IX) on Page 58 of this annual report for important information that can enhance the 3. Directors’ training: The Company arranges training courses for directors annually. Each director also participates in relevant courses organized by external institutions when necessary. In 2020, each director received 6 hours of training. Please refer to page 58 of this annual report for Directors’ training records. 4. Directors’ Liability Insurance: The Company has taken out liability insurance for Directors and Supervisors since October 15th, 1999. For the status of maintaining the insurance and submission to the Board of Directors, please refer to the Market Observation Post System (MOPS). 	None
<p>IX. Please describe the improvements your company has made based on the corporate governance evaluation results released by the Corporate Governance Center of Taiwan Stock Exchange in the most recent year, and list priorities and measures for matters that still require improvement.</p> <p>The Corporate Governance Center announced results of the 2019 (6th) Corporate Governance Evaluation in April 2020. Our score significantly improved compared with the previous year (2018), and ranked in the top 6-20% of public companies and top 11-20% of electronic companies with a market cap of NT\$10 billion or above. We revised the method for internal auditor appointment/dismissal, evaluation, and salary approval in 2020, and completed the annual general meeting before the end of May, in order to continue improving our corporate governance performance. Furthermore, we began uploading English versions of our meeting handbook and quarterly and annual financial statements to the Market Observation Post System before the regulatory requirement came into effect, so as to improve our information transparency.</p>				

(IV) Composition, Functional Authority, and Operations of the Compensation Committee

1. Information on committee members

Title	Name	Has at least 5 years of work experience and meets one of the following professional qualifications			Compliance of independence (Note)										Number of other public companies in which the member concurrently as a member of their Compensation Committee	Remarks
		An instructor or higher position in a department of commerce, law, finance, accounting, or other academic department related to the business needs of the Company in a public or private junior college, college or university	A judge, public prosecutor, attorney, certified public accountant, or other professional or technical specialist who has passed a national examination and been awarded a certificate in a profession related to the business needs of the Company	Has work experience in the areas of commerce, law, finance, or accounting, or otherwise necessary for the business of the Company	1	2	3	4	5	6	7	8	9	10		
Independent Director	Chiang Kao	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0	
Independent Director	Yan-Kuin Su	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	1	
Independent Director	John C. F. Chen		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0	

Note: If the committee member meets any of the following criteria in the two years before being appointed or during the term of office, please check "✓" in the corresponding boxes:

- (1) Not an employee of the Company or any of its affiliates.
- (2) Not a director or supervisor of the Company or an affiliated enterprise (does not apply to independent directors concurrently appointed by the Company or its parent company, subsidiary, or the subsidiary of the parent company pursuant to the Regulations Governing Appointment of Independent Directors and Compliance Matters for Public Companies or local laws and regulations).
- (3) Not a natural-person shareholder who holds shares, together with those held by the person's spouse, minor children, or held by the person under others' names, in an aggregate amount of 1% or more of the total number of outstanding shares of the Company or ranking in the top 10 in holdings.
- (4) Not a manager listed in (1) or a spouse, relative within the second degree of kinship, or lineal relative within the third degree of kinship of any of the above persons listed in (2) and (3).
- (5) Not a director, supervisor, or employee of a corporate shareholder that directly holds 5% of the Company's total outstanding shares, is a top 5 shareholder, or appointed a representative to serve as the Company's director or supervisor in accordance with Article 27, Paragraph 1 or 2 of the Company Act (does not apply to independent directors concurrently appointed by the Company or its parent company, subsidiary, or the subsidiary of the parent company pursuant to the Regulations Governing Appointment of Independent Directors and Compliance Matters for Public Companies or local laws and regulations).
- (6) Not a director, supervisor, or employee of a company controlled by a single person with over half of the Company's director seats or shares with voting rights (does not apply to independent directors concurrently appointed by the Company or its parent company, subsidiary, or the subsidiary of the parent company pursuant to the Regulations Governing Appointment of Independent Directors and Compliance Matters for Public Companies or local laws and regulations).
- (7) Not a director, supervisor, or employee of another company or institution that is the same person or the spouse of the Company's chairperson, president, or equivalent position (does not apply to independent directors concurrently appointed by the Company or its parent company, subsidiary, or the subsidiary of the parent company pursuant to the Regulations Governing Appointment of Independent Directors and Compliance Matters for Public Companies or local laws and regulations).
- (8) Not a director, supervisor, manager, or shareholder with 5% or more shares of a specific company or institution with financial or business dealings with the Company (does not apply to independent directors concurrently appointed by a specific company or institution that holds 20% or more but not more than 50% of the Company's outstanding shares, and the Company or its parent company, subsidiary, or the subsidiary of the parent company pursuant to the Regulations Governing Appointment of Independent Directors and Compliance Matters for Public Companies or local laws and regulations).
- (9) Not a professional individual who, or an owner, partner, director, supervisor, or manager of a sole proprietorship, partnership, company or institution that provides commercial, legal, financial, accounting services or consultation with cumulative remuneration in the most recent two years not exceeding NT\$500,000 to the Company or to any affiliate of the company, or a spouse thereof. This does not apply to members of the compensation committee, public tender offer review committee, or merger and acquisition special committee that performs duties in accordance with the Securities Exchange Act or Business Mergers and Acquisitions Act.
- (10) Not a governmental, juridical person or its representative as defined in Article 27 of the Company Law.

2. Responsibilities

- (1) Establishes and periodically reviews the performance evaluation and policies, system, standards, and structure of the compensations for Directors, supervisors, and managers.
- (2) Periodically evaluates and establishes compensations and benefits for Directors, supervisors, and managers.

3. Implementation status

- (1) The Company has a Compensation Committee composed of 3 members.
- (2) The term of the current member is from July 23, 2019 to June 17, 2022.
- (3) The Compensation Committee convened 4 times (A) in the last fiscal year. The qualifications of the members and attendance are as follows:

Title	Name	Attendance in Person (B)	By Proxy	Attendance Rate (%) (B/A)	Remarks
Convener	Chiang Kao	3	1	75%	
Committee Member	Yan-Kuin Su	4	0	100%	
Committee Member	John C. F. Chen	4	0	100%	
Other items that shall be recorded:					
I. The main items that discussion the conference of Compensation Committee in the recent years were as follows					
Board of Directors Date/ Term	Compensation Committee Date/ Term	Motion	Resolution results of the Compensation Committee	The Company's response to the comments of the Compensation Committee	
2020.02.17 The 4th meeting of the 11th Term of the Board of Directors	2020.02.17 The 3rd meeting of the 11th Term of the Compensation Committee	Submitted for approval of 2020 annual incentive bonus of the Company Managers.	Unanimously approved by all members attending the meeting and will be submitted to the Board of Directors meeting for approval.	Not applicable	
2020.04.28 The 6th meeting of the 11th Term of the Board of Directors	2020.04.28 The 4th meeting of the 11th Term of the Compensation Committee	Submitted for approval of the compensation package of new Executive Directors, Mr. H.C. Liu, Kevin Tu, D.J. Lin and K.L. Chang.	Unanimously approved by all members attending the meeting and will be submitted to the Board of Directors meeting for approval.	Not applicable	
2020.07.28 The 8th meeting of the 11th Term of the Board of Directors	2020.07.28 The 5th meeting of the 11th Term of the Compensation Committee	Submitted for approval of the 2019 employee bonus to be distributed to the managers as defined under Company Law and/or Securities and Exchanged Act.	Unanimously approved by all members attending the meeting and will be submitted to the Board of Directors meeting for approval.	Not applicable	

		Submitted for approval of the 2020 salary adjustment of the Company Managers.	Unanimously approved by all members attending the meeting and will be submitted to the Board of Directors meeting for approval.	Not applicable
		Submitted for approval of 2021 annual incentive bonus of the Company Managers.	Unanimously approved by all members attending the meeting and will be submitted to the Board of Directors meeting for approval.	Not applicable

II. If the Board of Directors chooses not to adopt or revise recommendations proposed by the Compensation Committee, the date of the meeting, term, agenda, resolution results, and - 46- the Company's response to the comments provided by the Salary and Compensation Committee shall be described: None.

III. For the decisions made by the Compensation Committee, if there are documented records of members who veto or withhold from expressing their opinions, the date, term, agenda, all members' comments, and the measures for handling these comments shall be elaborated: None.

(V) Composition, Functional Authority, and Operations of the Nomination Committee

1. Composition

The Nomination Committee is comprised of the chairman (Mr. Miin Chyou Wu) and two independent directors (Mr. Chiang Kao and Mr. Yan-Kuin Su), all of which have a professional background in industrial technology, who are capable of performing their duties

2. Responsibilities

- (1) Formulate the standards for directors and senior executives, such as specialized knowledge, skills, experience, and gender. As well as searching, reviewing, and nominating directors and senior executive candidates.
- (2) Establish and develop organizational structure of the Board of Directors and various committees. Evaluate the performance of the Board of Directors, various committees, directors, senior executives, and the independence of independent directors.
- (3) Establish and periodically review the continuing education plan of directors and succession plan of directors and senior executives.
- (4) Other matters entrusted to the committee by resolution of the Board of Directors.

3. Implementation status

- (1) The Company's decided to establish the Nomination Committee on January 22, 2019.
- (2) The term of the current member is from July 23, 2019 to June 17, 2022.
- (3) The Nomination Committee convened 3 times (A) in the most recent year. The attendance of members is as follows:

Title	Name	Attendance in Person (B)	By Proxy	Attendance Rate (%) (B/A)	Remarks
Convener	Miin Chyou Wu	3	0	100%	
Committee Member	Chiang Kao	3	0	100%	
Committee Member	Yan-Kuin Su	3	0	100%	

Other items that shall be recorded:

1. If the Board of Directors chooses not to adopt or revise recommendations proposed by the Nomination Committee, the date of the meeting, term, agenda, resolution results, and the Company's response to the comments provided by the Salary and Nomination Committee shall be described: None.
2. For the decisions made by the Nomination Committee, if there are documented records of members who veto or withhold from expressing their opinions, the date, term, agenda, all members' comments, and the measures for handling these comments shall be elaborated: None.

(VI) Fulfillment of corporate social responsibility and deviations from “the Corporate Social Responsibility Best-Practice Principles for TWSE/TPEX Listed Companies” and Reasons

Evaluation Item	Implementation Status			Deviations from “the Corporate Social Responsibility Best-Practice Principles for TWSE/TPEX Listed Companies” and Reasons
	Yes	No	Abstract Explanation	
I. Does the company assess ESG risks associated with its operations based on the principle of materiality, and establish related risk management policies or strategies?	✓		The Company plans and implements its CSR strategy based on the requirement of GRI (Global Reporting Initiative) Standards, assesses materiality based on the level of concern among stakeholders and the extent of impact on the Company's operations, and ranks and responds to issues based on their materiality.	None
II. Has the company established a fully (or partially) dedicated unit to promote CSR? Does the Board of Directors authorize the senior management to handle such matters and report its implementation to the Board of Directors?	✓		The Company promotes CSR operations through the Environment, Safety and Health Center, the Administration Service Center, and the Professional Development Center. The corporate social responsibility management system is continuous improvement by both internal and external audits. The audit results are reviewed by the management to ensure continuous effectiveness of the management system. CSR related issues and management performance are reported to the Board of Directors each year.	None
III. Environmental issues (I) Has the Company established a suitable environmental management system based on the characteristics of the industry?	✓		(I) The company established and passed the ISO 14001 Environmental Management System certification in 1997. In 2007, the IECQ QC 080000 Hazardous Substance Process Management System was established and passed to promote environmental management on both the operational and product aspects.	None

Evaluation Item	Implementation Status			Deviations from “the Corporate Social Responsibility Best-Practice Principles for TWSE/TPEX Listed Companies” and Reasons
	Yes	No	Abstract Explanation	
(II) Is the Company committed to improving the efficiency of various resources and utilizing renewable materials to reduce the environmental impact?	✓		(II) The Company continues to engage in energy conservation and carbon reduction by purchasing products with green and eco-friendly labels. The Company has spared no effort in improving resource efficiency and producing green products to reduce the environmental impact of its operations and enhance corporate competitiveness.	None
(III) Does the company evaluate potential risks and opportunities brought by climate change, and take response measures to climate-related issues?	✓		(III) We have conducted evaluations of the short-term, mid-term, and long-term based on our current capabilities and commitment to the environment. Semiconductor processes continue to emit greenhouse gas and use large amounts of power. Hence, we have begun to plan and manage green electricity management and greenhouse gas reduction mechanisms in response to short-term regulatory impact. We have evaluated the possibility of installing renewable energy devices and local scrubbers in order to reduce fluorinated greenhouse gas emissions. Despite there not being any external requirements, we made the devices mandatory for new production lines in hopes of lowering the main factor that causes climate change.	None
(IV) Does the company compile statistics of greenhouse gas emissions, water use, and total weight of waste in the past two years, and does it establish policies for energy conservation & carbon reduction, greenhouse gas emission reduction, water use reduction, and other waste management?	✓		(IV) Macronix cooperates with the Environmental Protection Administration's annual inspection of GHG emissions and files reports accordingly. The Company set the policy of energy conservation and carbon reduction in its ISO 14001 Environmental Management System, and promotes water conservation, waste reduction, and waste recycling and reuse based on the Macronix EHS policy and CSR management approach.	None

Evaluation Item	Implementation Status			Deviations from “the Corporate Social Responsibility Best-Practice Principles for TWSE/TPEX Listed Companies” and Reasons
	Yes	No	Abstract Explanation	
			<p>Macronix sets annual goals for water consumption and waste generation, and conducts quarterly reviews to verify that operations are on track to achieving the goals:</p> <p>The water consumption data and water balance chart submitted to the Science Park Bureau each month are used to regularly track and manage the usage data of water resources, and conduct risk assessment and management.</p> <p>Our internal units also monitor the process water recycling rate on a daily basis through wastewater recycling technology and the SCADA system. We set up a rainwater harvesting tank at our head office and store rainwater in the water tower. The water is then used to water plants and flush toilets. We are continuing to actively develop a water resource recycling strategy to achieve the water conservation and increase the efficiency of water use.</p> <p>As for waste reduction, we compile statistics of waste storage, generation, and clearance on a monthly basis to determine the generation of waste in our plants. We reduce waste by cutting down the consumption of materials through the joint efforts of engineering departments based on a feasible reduction plan.</p> <p>As for improving waste recycling and reuse, prior to waste disposal, we verify if the way contractors process the waste is appropriate, giving priority to reuse. We also audit waste treatment contractors on an annual basis with an emphasis on if waste is properly cleared in the treatment process. We set the goal in 2019 to maintain waste recycling and reuse rate $\geq 88\%$.</p>	

Evaluation Item	Implementation Status			Deviations from “the Corporate Social Responsibility Best-Practice Principles for TWSE/TPEX Listed Companies” and Reasons
	Yes	No	Abstract Explanation	
			We hope to reduce the environmental load caused by production through vendor selection, auditing, and self-management measures.	
IV. Social issues				
(I) Has the Company formulated management policies and procedures in accordance with relevant laws and regulations as well as the International Bill of Human Rights?	✓		(I) The Company's management rules are superior to the Labor Standards Act. Similarly, the international social responsibility standard SA 8000 and RBA Code of Conducts are the Company's basic requirements. The Company's corporate social responsibility policy, HR compilation and procedures not only satisfy the legal requirements but also take employee rights and interests into consideration. Regular reviews are conducted to achieve continuous improvement.	None
(II) Does the company have reasonable employee benefit measures (including salaries, leave, and other benefits), and do business performance or results reflect on employee salaries?	✓		(II) The Company has established and implemented reasonable employee benefit measures; please refer to V. Labor/Management Relations on page 96 of this Annual Report. The Company's performance is reflected by the employees' and directors' salaries; please refer to (VIII) Remuneration of employees, Directors and Supervisors on page 81 of this Annual Report.	None
(III) Has the Company provided employees with a safe and healthy working environment, and routinely implemented safety and health education for employees?	✓		(III) The Company has established a safety and healthy work environment that is better than other company in the same sector based on the ideal of providing a warm and happy environment for employee's growth. The Company provides comprehensive training for the employees, which has received recognition from the competent authority, including the National Work Safety Award from the Executive Yuan,	None

Evaluation Item	Implementation Status			Deviations from “the Corporate Social Responsibility Best-Practice Principles for TWSE/TPEX Listed Companies” and Reasons
	Yes	No	Abstract Explanation	
(IV) Has the Company established an effective career developmental plan for its employees?	✓		<p>Contribution to Work Opportunity Creation from the Ministry of Economic Affairs, and the Excellent Employee Assistance Program Award from the Ministry of Labor.</p> <p>(IV) The individual development plan of Macronix employees is closed connected to the performance management system. The Company conducts a performance review once every year to examine individual and organizational performance. Employees can have face-to-face discussions with their supervisor to develop their personalized development plan based on their performance and the needs for career development, in order to gradually develop various professional knowledge and skills.</p>	None
(V) Does the company comply with relevant regulations and international standards in customer health and safety, customer privacy, and marketing and labeling its goods and services, and has it established consumer rights protection policies and complaint procedures?	✓		<p>(V) The Company's products have green product. The products meet the requirements of the European Union's RoHS directive SVHC (Substances of Very High Concern) and ELV (End-of-Life Vehicle). We comply with NDAs with customers and the Personal Data Protection Act to maintain customer privacy, and we also established a personal data protection policy, which employees are required to comply with when performing work that may not be disclosed. Labeling on our products comply with the Commodity Labeling Act, this involves clearly labeling all necessary information, such as product datasheets, outer box and all necessary labels with product specifications and manufacturing information. The Company established a dedicated unit for customer complaint handling procedures,</p>	None

Evaluation Item	Implementation Status			Deviations from “the Corporate Social Responsibility Best-Practice Principles for TWSE/TPEX Listed Companies” and Reasons
	Yes	No	Abstract Explanation	
(VI) Does the company have a supplier management policy, require suppliers to comply with regulations on environmental protection, occupational safety and health, and labor rights, and what is its implementation status?	✓		and management process to properly handle customer complaints. (VI) We proposed due diligence for suppliers in our CSR policy for supplier management. We make suppliers aware of the importance of CSR during annual supplier meetings, and require suppliers to jointly achieve RBA Code of Conducts requirements together with us. We also transformed our expectations for suppliers into actual management requirements on the Code of Conducts Compliance Certificate, which suppliers must sign and submit to us. Responsible units conduct on-site audits or documentary audits of suppliers each year based on their risk, so as to verify whether or not suppliers met our requirements.	None
V. Does the company reference internationally accepted reporting standards or guidelines, and prepare reports that disclose non-financial information of the company, such as corporate social responsibility reports? Have the reports above obtained assurance from a third party verification unit?	✓		Macronix began structuring its CSR Report in accordance with the GRI Standards in 2014, and obtained a third party assurance report that there are no deviations in the CSR Report.	None
VI. If the Company has established corporate social responsibility principles based on "Corporate Social Responsibility Best Practice Principles for TWSE/TPEX Listed Companies", please describe any discrepancy between the principles and their implementation: There was no substantial difference.				
VII. Other important information helpful in understanding CSR operations: Relevant information is detailed in the Corporate Social Responsibility Report of the Company, the Company website, and the Macronix Education Foundation website (http://www.macronix.com).				

CSR Milestones for Macronix

Year	Milestones
2000	<ul style="list-style-type: none"> • Founded the first “Golden Silicon Award – Semiconductor Design and Application Contest”
2001	<ul style="list-style-type: none"> • Established the Macronix Education Foundation
2002	<ul style="list-style-type: none"> • Held The first “Macronix Science Award”
2004	<ul style="list-style-type: none"> • Awarded as an Excellent Energy Conservation Enterprise by the Bureau of Energy, Ministry of Economic Affairs • Became the first company in the science park to complete the greenhouse inventory and verification • Established the “Macronix Science Award Winners' Club”
2005	<ul style="list-style-type: none"> • Passed the BSI ISO 14001: 2004 Environmental Management System Certification • Won the 14th Enterprise Environmental Protection Award for four consecutive years
2006	<ul style="list-style-type: none"> • Achieved RoHS compliance and awarded green product certificates from internationally-renowned companies such as SONY, CANON, and LG
2007	<ul style="list-style-type: none"> • Obtained verification from the IECQ QC080000 Hazardous Substance Process Management System • Awarded as the “Excellent Enterprise for Voluntary Greenhouse Gas Reduction” by the Industrial Development Bureau, Ministry of Economic Affairs • Certified by the British Standards Institute (BSI) and obtained the "ISO 14064 Greenhouse Gas Inventory and Reduction Certificate” • Obtained the CG6002 Corporate Governance System Assessment Certification from the Corporate Governance Association of the Republic of China
2008	<ul style="list-style-type: none"> • Became the first semiconductor company in the science park certified by the “SA 8000 Enterprise Social Responsibility Management System” • Donated NT\$300 million to Tsinghua University for the new learning resource center, Macronix Hall • The Group donated RMB5 million for the Sichuan Earthquake. • Promoted the “Code of Conduct for Electronic Industry” for the upstream and downstream supply chain partners • Passed the new SGS OHSAS 18001: 2007 certification • Passed the TOSHMS (Taiwan Occupational Safety and Health Management System) certification • Awarded the Green Procurement Award by the Environmental Protection Administration
2009	<ul style="list-style-type: none"> • Won the 3rd National Work Safety Award • Became a semiconductor company that obtained a quality enterprise certificate • Donated NT\$100 million to relieve the damage caused by Typhoon Morakot to Taiwan • Won the "Role Model Award" from 5th Global Views Monthly's CSR Awards
2010	<ul style="list-style-type: none"> • Won the first prize "Five-Star Award" at the 6th Global Views Monthly's CSR Awards • Won the "Corporate Citizen Award" from the Common Wealth Magazine in 2010 • Increased the donation to the Macronix Hall, Tsinghua University by NT\$ 100 million • Awarded the “Contribution to Work Opportunity Creation Award” by the Executive Yuan
2011	<ul style="list-style-type: none"> • Donated NT\$30 million for the aftermath of the 2011 Tohoku earthquake and tsunami • Awarded the “Contribution to Work Opportunity Creation Award” by the Executive Yuan • Received the "Top 100 Brand in Taiwan" award from the Ministry of Economic Affairs • Won the Corporate Citizen Award from the Common Wealth Magazine again • Won the 2011 National Invention Award • Awarded the Corporate Governance System Assessment Certificate by CG 6006 • Awarded as the enterprise for offering an excellent "Employee Assistance Program" by the Council of Labor and Welfare, Executive Yuan

Year	Milestones
2012	<ul style="list-style-type: none"> • Won the 8th "Corporate Social Responsibility Award" from Global Views Monthly • Won the Corporate Citizen Award from the Common Wealth Magazine again
2013	<ul style="list-style-type: none"> • Macronix Hall, the new learning resource center of Tsinghua University, was officially put to use. • The Macronix Education Foundation was given the Award of Excellence by the Ministry of Education among education foundations.
2014	<ul style="list-style-type: none"> • Hong-chi Wang, the Deputy Head, was chosen as an "Excellent Internal Auditor" by the Internal Audit Committee of the Republic of China. • Won the "Balanced Lifestyle" and "Healthy Happy Life" awards from the first work-life balance competition held by the Ministry of Labor
2015	<ul style="list-style-type: none"> • Received the "Excellent Healthy Workplace" from the Health Promotion Administration, Ministry of Health and Welfare • Ranked in the top 5% in the first corporate governance evaluation of Taiwan Stock Exchange
2016	<ul style="list-style-type: none"> • The Water Conservation Plant V was awarded the 2016 Water Conservation Excellence Award by the National Water Conservation Agency, the Ministry of Economic Affairs.
2017	<ul style="list-style-type: none"> • Mr. Miin Chyou Wu, Chairman & CEO of Macronix was awarded of social Education Contribution Award from the Ministry of Education.
2018	<ul style="list-style-type: none"> • Mr. Miin Chyou Wu, Chairman & CEO of Macronix was awarded of "Country Winner" and "Business Paradigm Entrepreneur" of EY's Entrepreneur of the Year.
2019	<ul style="list-style-type: none"> • Company receives the CSR 1st Annual Sustainable Elite Award • Donation of NT\$420 million to National Cheng Kung University for its construction of "Cheng Kung Innovation Center-MACRONIX Hall"
2020	<ul style="list-style-type: none"> • Company receives the 2nd CSR Annual Sustainable Elite Award • Annual donation of NT\$100 million to National Cheng Kung University for the next ten years to establish the school of computing

(VII) Ethical corporate management, and departure from the Ethical Corporate Management Best Practice Principles for TWSE/TPEX Listed Companies, and reasons thereof

Evaluation Item	Implementation Status			Deviations from “Ethical Corporate Management Best Practice Principles for TWSE/TPEX Listed Companies” and Reasons
	Yes	No	Abstract Illustration	
I. Establishment of ethical corporate policies and programs				
(I) Does the Company establish a board-approved ethical corporate management policy and state in its regulations or external correspondence the policies and practices of the ethical corporate management policy? Are the board of directors and the managerial officers committed to fulfilling this commitment?	✓		(I) The Ethical Corporate Management Best Practice Principles and the Code of Conduct and Ethics of the Company are approved by the board of directors and published on the Company website and internal electronic bulletin board, and they require our employees and the employees of subsidiaries included in our consolidated financial statements to exhibit honest and ethical conduct when performing their duties.	None
(II) Does the Company establish mechanisms to assess the risks of unethical conduct and perform regular analysis and assessment of operating activities with higher risks of unethical conduct? Does the Company implement programs to prevent unethical conduct based on the above and ensure the programs cover at least precautionary measures described in Article 7, Paragraph 2 of the Ethical Corporate Management Best Practice Principles for TWSE/TPEX Listed Companies?	✓		(II) Macronix developed ethical and social responsibility risk assessments for each department, which are carried out on a regular basis and cover all departments of the Company. The Company has established the " Ethical Corporate Management Principles " and " Code of Business Conduct and Ethics " which prohibit giving and taking bribes, receiving unreasonable gifts, benefits, and other improper benefits (avoiding conflicts of interest); intellectual property rights, confidential information, and personal data infringement; and unfair competition and discrimination. The above regulations apply to all Macronix staff. The promotion is further strengthened for departments with a higher risk of integrity violation. The effectiveness is regularly	None

Evaluation Item	Implementation Status			Deviations from "Ethical Corporate Management Best Practice Principles for TWSE/TPEX Listed Companies" and Reasons
	Yes	No	Abstract Illustration	
(III) Does the Company establish procedures, guidelines of conduct, punishment for violation, and reporting system clearly stated in the mechanisms to prevent unethical conduct? Does the Company enforce the programs effectively and perform regular reviews of the preceding?	✓		<p>evaluated. Suppliers must sign the "Code of Conducts Compliance Certificate" which stipulates that suppliers shall not conduct any inappropriate commercial behavior such as bribery. Should any incidents occur, the Company can terminate the contract or transactions with the supplier as well as request compensation for any damages.</p> <p>(III) The Company has established the "Ethical Corporate Management Principles" and "Code of Business Conduct and Ethics". In addition to promoting these principles to the Directors and managers, the Company has also included relevant educational training and testing for employees as well as taking the employees' implementation status into consideration in the annual performance evaluation. The task force established under the Company's Committee for the Promotion of Ethical Corporate Management Best Practice Principles host regular meetings to establish and enhance relevant measures as well as follow-up procedures of the Ethical Corporate Management based on related laws and regulations, Macronix's Ethical Corporate Management Best Practice Principles, resolutions of the board of directors and functional committees, and procedures of the Committee for the Promotion of Ethical Corporate Management Best Practice Principles.</p>	None

Evaluation Item	Implementation Status			Deviations from “Ethical Corporate Management Best Practice Principles for TWSE/TPEX Listed Companies” and Reasons
	Yes	No	Abstract Illustration	
<p>II、Fulfill operations integrity policy</p> <p>(I) Does the company evaluate business partners’ ethical records and include ethics-related clauses in business contracts?</p>	✓		(I) Before engaging in business, the company conducts a credit investigation on the potential partner's records to avoid doing business with those who have records of illegal or unethical behavior. The Company has drafted the "Code of Conducts Compliance Certificate" to regulate supplier behavior. Should a supplier engage in improper business conduct such as bribery, the Company may terminate the contract or transaction at any time as well as request damages.	None
<p>(II) Does the Company have a unit under the board of directors to promote ethical corporate management on a full-time basis, report ethical corporate management, and regularly report on the programs for the prevention of unethical conduct (at least once a year) to the board of directors, and oversee the operations thereof?</p>	✓		(II) In addition to establishing functional committees under the board of directors, the Company also established the Committee for the Promotion of Ethical Corporate Management under the management executives that consists of the president as the chairperson and level-1 managers of all departments as committee members. The committee aims to establish an ethical corporate management policy that will be submitted for discussion during the meeting of the board of directors and report the implementation status of the policy to the board at least once a year. Macronix’s Committee for the Promotion of Ethical Corporate Management shall hold a meeting at least once a year. The task forces established under the committee should host regular meetings to establish and enhance relevant measures as well as follow-up procedure of the	None

Evaluation Item	Implementation Status			Deviations from “Ethical Corporate Management Best Practice Principles for TWSE/ TPEX Listed Companies” and Reasons
	Yes	No	Abstract Illustration	
(III) Does the company establish policies to prevent conflicts of interest and provide appropriate communication channels, and implement it?	✓		<p>Ethical Corporate Management based on related laws and regulations, Macronix’s Ethical Corporate Management Best Practice Principles, resolutions of the board of directors and functional committees, and procedures of the Committee for the Promotion of Ethical Corporate Management Best Practice Principles.</p> <p>(III) The Company has established the "Ethical Corporate Management Principles" and "Code of Business Conduct and Ethics" to prevent conflicts of interests. The Audit Committee has been set up to assist the Board in overseeing the Company's implementation status. Directors shall be excused from voting or discussions during the Board meeting when their interests as individuals or representatives of institutions are in potential conflicts.</p>	None
(IV) Does the Company have an effective accounting system and internal control system set up to facilitate ethical corporate management? Does the internal audit unit follow the results of unethical conduct risk assessments and devise audit plans to audit compliance to the prevention of unethical conduct? Or are the audits commissioned to a CPA?	✓		<p>(IV) The Company's accounting and internal control systems are approved by the Audit Committee and the Board. The internal auditing unit is responsible for auditing the actual operations as well as preparing the draft and report of the audit results for the Audit Committee. The goal is to effectively prevent malpractices and oversee the implementation of the Company's policies and ensure the effectiveness of the internal control system.</p>	None
(V) Does the company provide educational training on corporate social responsibility on a regular basis?	✓		<p>(V) The Company has established the "Ethical Corporate Management Principles " and " Code of</p>	None

Evaluation Item	Implementation Status			Deviations from “Ethical Corporate Management Best Practice Principles for TWSE/TPEX Listed Companies” and Reasons
	Yes	No	Abstract Illustration	
			<p>Business Conduct and Ethics " which are published on the Company's website and the internal e-bulletin system. The employees' implementation status is taken into consideration in the annual performance evaluation. To implement ethical corporate management and ethical behavior, the Company arranges courses for directors and online courses for employees every year and organizes educational courses on business secrets, domestic and international data privacy regulations, information security management, and the prevention of insider trading for the purpose of raising the awareness of corporate ethics and compliance. In 2020, there were a total of 18,468 participants, and the number of training hours amounted to 5,853. Suppliers were also invited to the courses to ensure that they understand the regulations of Macronix’s ethical corporate management. In 2020, there were a total of 102 supplier participations, and the number of training hours received amounted to 408.</p>	
<p>III、Operation of the integrity channel (I) Does the company establish both a reward/punishment system and an integrity hotline? Can the accused be reached by an appropriate person for a follow-up?</p>	✓		<p>(I) The Company has set up a "No Topic is Off Limits" suggestion box and a hotline. The staff can report any fraud they discover to prevent damages to the Company's image caused by dishonest behavior. The Company also enhanced internal and external reporting channels, and set up an audit office</p>	None

Evaluation Item	Implementation Status			Deviations from “Ethical Corporate Management Best Practice Principles for TWSE/TPEX Listed Companies” and Reasons
	Yes	No	Abstract Illustration	
(II) Does the Company establish standard operating procedures for investigating reported cases, the follow-up measures after investigations, and relevant confidentiality mechanisms?	✓		<p>hotline (03-5786688 ext. 78119). In addition, the Company established a process for reporting breaches of ethical corporate management. Once a case is reported and accepted for processing, a task force is established based on the nature and type of the case the case is sent to the relevant units for investigation. The board of directors will also be informed.</p> <p>(II) All cases reported through the “No Topic is Off Limits” suggestion box, the reporting hotline, and the audit office hotline will be given file numbers, documented, investigated, handled, and stored as required by the law.</p> <p>Once a case is reported and accepted for processing, a task force is established based on the nature and type of the case, the case is sent to relevant units for investigation. The board of directors will also be informed.</p> <p>Macronix takes measures to maintain the confidentiality of previous cases to guarantee the legal rights of members.</p>	None
(III) Does the company provide proper whistleblower protection?	✓		<p>(III) The management regulations of the “No Topic is Off Limits” suggestion box and the reporting hotline specify that the Company will strictly fulfill its responsibility to maintain the confidentiality of whistleblowers and prohibit retaliation against reports made with good intentions. The Company will impose an appropriate penalty for any violations thereof.</p>	None

Evaluation Item	Implementation Status			Deviations from "Ethical Corporate Management Best Practice Principles for TWSE/TPEX Listed Companies" and Reasons
	Yes	No	Abstract Illustration	
			Macronix takes measures to maintain the confidentiality of cases reported through the audit office hotline to guarantee the legal rights of members.	
IV. Strengthening information disclosure (I) Does the company disclose its ethical corporate management policies and the results of its implementation on the company's website and MOPS?	✓		The Company has disclosed the content and relevant effectiveness of the Company's "Code of Business Conduct and Ethics " on the Company's website and MOPS. The content of the "Ethical Corporate Management Principles " is disclosed on the Company's website. The education and training of all employees has completed, and there was no violation of the "the Ethical Corporate Management Best Practice Principles" in the year 2020.	None
V、If the company has established the ethical corporate management policies based on the Ethical Corporate Management Best-Practice Principles for TWSE/GTSM Listed Companies, please describe any discrepancy between the policies and their implementation: There was no substantial difference.				
VI、Other important information to facilitate a better understanding of the company's ethical corporate management policies (e.g., review and amend its policies) The Company believes that a corporate culture of integrity is a key factor for the sustainable and sound development of the Company. Therefore, the Company has actively complied with the Responsible Business Alliance (RBA) code of conduct. A supplier conference is held annually to announce and promote important policies and messages of the Company. The Company also conducts regular training courses for its suppliers to ensure their quality. In the future, the Company will continue to pay attention to the development of domestic regulations related to integrity and review relevant Company regulations accordingly in order to enhance the effectiveness of the Company's corporate governance.				

(VIII) The Method for Inquiry if the Company has Established Corporate Governance Principles and Relevant Regulations

The Company has set up the "Corporate Governance" section for investors to inquire about the Company's corporate governance information or regulations.

(IX) Other Important Information for Better Understanding of Implementation of Corporate Governance

1. Implementation of risk management policies and risk assessment standards:

To protect the Company's assets, the health of all employees and the interests of Stakeholder , the Company has implemented risk management in accordance with the "Risk Management Policy" and "Corporate Social Responsibility Policy", as well as taking out insurance to avoid risks. To ensure the quality of the Company's internal control system, the internal audit regularly and irregularly reviews the implementation status and reports to the Audit Committee and the Board of Directors.

2. Handling of Company's Internal Material Information

The Company has established the "Code of Business Conduct and Ethics" and "Preventing Insider Trading" and announced that the content on the company website for all directors, managers, and employees to avoid violation.

Material information disclosure shall be conducted in compliance with the provisions of Regulations Governing the Scope of Material Information and the Means of its Public Disclosure Under Article 157-1, Paragraphs 5 and 6 of the Securities and Exchange Act as well as Taiwan Stock Exchange Corporation Procedures for Verification and Disclosure of Listed Exchange Traded Notes by Securities Firms .The Company has three principles for public disclosure: (1) accurate, complete and timely, (2) information disclosure shall have a solid base, and (3) fair disclosure to ensure that the interests of the Company and all stakeholders are protected.

3. Directors' training records

The Directors' training records for the most recent year are set out in the table below. For further information, please refer to the Market Observation Post System (MOPS).

Title	Name	Date	Organizer	Course Name	Hours
Chairman	Miin Chyou Wu	2020/04/28	Taiwan Corporate Governance Association	Response Strategy for Company Changes	3
		2020/10/26	Taiwan Institute of Directors	Opportunities and challenges of companies under the US-China trade conflict	3
Director Representative of the Corporation	Ching-Yun Li	2020/04/28	Taiwan Corporate Governance Association	Response Strategy for Company Changes	3
		2020/10/26	Taiwan Institute of Directors	Opportunities and challenges of companies under the US-China trade conflict	3
Director	Chih-Yuan Lu	2020/04/28	Taiwan Corporate Governance Association	Response Strategy for Company Changes	3
		2020/07/30	Taiwan Corporate Governance Association	How companies make breakthroughs in their profitability through innovation in the digital economy era	3
		2020/10/26	Taiwan Institute of Directors	Opportunities and challenges of companies under the US-China trade conflict	3

Title	Name	Date	Organizer	Course Name	Hours
		2020/10/29	Taiwan Corporate Governance Association	Discussion of how companies use employee compensation strategies and tools	3
Director	Cheng-Yi Fang	2020/04/28	Taiwan Corporate Governance Association	Response Strategy for Company Changes	3
		2020/10/08	Taiwan Securities Association	AML and Latest Development	3
		2020/10/26	Taiwan Corporate Governance Association	Discussion of how companies use employee compensation strategies and tools	3
Director Representative of the Corporation	Shigeki Matsuoka	2020/04/28	Taiwan Corporate Governance Association	Response Strategy for Company Changes	3
		2020/10/26	Taiwan Institute of Directors	Opportunities and challenges of companies under the US-China trade conflict	3
Director Representative of the Corporation	Guei-Min Lee	2020/04/28	Taiwan Corporate Governance Association	Response Strategy for Company Changes	3
		2020/06/05	Taiwan Corporate Governance Association	Corporate governance and securities laws and regulations	3
		2020/06/09	Taiwan Corporate Governance Association	Criminal liability risks and responses of company directors and supervisors – From the perspective of corporate corruption and anti-money laundering	3
		2020/07/31	Taiwan Corporate Governance Association	Finding key information hidden in financial statements.	3
		2020/09/03	Independent Director Association Taiwan	Business strategies and transformation of Taiwanese businesses in the global economic and political situation	3
		2020/10/16	Taiwan Corporate Governance Association	Group tax management trends in the post-pandemic era	1
		2020/10/26	Taiwan Institute of Directors	Opportunities and challenges of companies under the US-China trade conflict	3
		2020/11/20	Taiwan Corporate Governance Association	Ethical corporate management and international practices for whistleblower protection in corruption and bribery cases	3
Director	Che-Ho Wei	2020/04/28	Taiwan Corporate Governance Association	Response Strategy for Company Changes	3
		2020/08/17	Securities & Futures Institute	Corporate governance and securities laws and regulations	3

Title	Name	Date	Organizer	Course Name	Hours
		2020/10/26	Taiwan Institute of Directors	Opportunities and challenges of companies under the US-China trade conflict	3
Director	Dang-Hsing Yiu	2020/04/28	Taiwan Corporate Governance Association	Response Strategy for Company Changes	3
		2020/10/26	Taiwan Institute of Directors	Opportunities and challenges of companies under the US-China trade conflict	3
Director	Ful-Long Ni	2020/04/28	Taiwan Corporate Governance Association	Response Strategy for Company Changes	3
		2020/10/26	Taiwan Institute of Directors	Opportunities and challenges of companies under the US-China trade conflict	3
Director Representative of the Corporation	Pei-Fu Yeh	2020/03/10	Taiwan Corporate Governance Association	Response Strategy for Company Changes	3
		2020/08/24~2020/08/25	Accounting Research and Development Foundation	Continuing Education Course for Chief Accounting Officers of Issuers, Securities Firms, and Securities Exchanges	12
		2020/09/21	Taiwan Stock Exchange	"Corporate Governance 3.0 – Sustainable Development Blueprint" Summit	3
		2020/10/26	Taiwan Institute of Directors	Opportunities and challenges of companies under the US-China trade conflict	3
Independent Director	Tyzz-Jiun Duh	2020/04/28	Taiwan Corporate Governance Association	Response Strategy for Company Changes	3
		2020/10/13	Securities & Futures Institute	Company upgrade and transformation strategies and management – M&A and alliance selection	3
		2020/10/27	Taiwan Corporate Governance Association	Risks and business opportunities of climate change	3
		2020/11/10	Securities & Futures Institute	Corporate governance and securities laws and regulations	3
Independent Director	Chiang Kao	2020/04/28	Taiwan Corporate Governance Association	Response Strategy for Company Changes	3
		2020/10/26	Taiwan Institute of Directors	Opportunities and challenges of companies under the US-China trade conflict	3
Independent Director	Yan-Kuin Su	2020/04/28	Taiwan Corporate Governance Association	Response Strategy for Company Changes	3
		2020/10/26	Taiwan Institute of Directors	Opportunities and challenges of companies under the US-China trade conflict	3
Independent Director	John C.F. Chen	2020/04/28	Taiwan Corporate Governance	Response Strategy for Company Changes	3

Title	Name	Date	Organizer	Course Name	Hours
			Association		
		2020/10/26	Taiwan Institute of Directors	Opportunities and challenges of companies under the US-China trade conflict	3

4. Education of corporate governance supervisor within the most recent year is shown in the table below:

Date	Organizer	Course Name	Hours
2020/03/10	Taiwan Corporate Governance Association	Response Strategy for Company Changes	3
2020/08/25	Accounting Research and Development Foundation	Corporate Practices in Response to the Impact of COVID-19 on Corporate Governance	3
2020/09/21	Taiwan Stock Exchange	"Corporate Governance 3.0 – Sustainable Development Blueprint" Summit	3
2020/10/26	Taiwan Institute of Directors	Opportunities and challenges of companies under the US-China trade conflict	3
Total Hours of Education within the most recent year of Appointment			12

5. Manager Training Records

Miin Chyou Wu, Chih-Yuan Lu, Dang-Hsing Yiu, Ful-Long Ni, and Pei-Fu Yeh are also managers of the Company. Please refer to the table above for the training records. Corporate governance training records for other managers and the audit supervisors of the Company in the most recent year are as follows:

Title	Name	Date	Organizer	Course Name	Hours
Vice President	Yen-Hai Chao	2020/04/28	Taiwan Corporate Governance Association	Response Strategy for Company Changes	3
		2020/07/30	Taiwan Corporate Governance Association	How companies make breakthroughs in their profitability through innovation in the digital economy era	3
		2020/10/26	Taiwan Institute of Directors	Opportunities and challenges of companies under the US-China trade conflict	3
		2020/10/29	Taiwan Corporate Governance Association	Discussion of how companies use employee compensation strategies and tools	3
Deputy Director of the Auditing Office	Hong-Chi Wang	2020/04/28	Taiwan Corporate Governance Association	Response Strategy for Company Changes	3
		2020/10/06	The Institute of Internal Auditors-Chinese Taiwan	How to detect and prevent fraud and case study	6
		2020/10/08	The Institute of Internal Auditors-Chinese Taiwan	Introduction to the Ethical Corporate Management Best Practice Principles and ISO 37001 practices	6
		2020/10/26	Taiwan Institute of Directors	Opportunities and challenges of companies under the US-China trade conflict	3

6. Implementation of Board Diversity Policy

Board diversity goals and implementation status are as follows:

(1)The Board of Directors is required to have members with professional knowledge, technology, or experience in, at a minimum, industrial technology, law, and accounting, in which more than half of all directors must have a background or experience in industrial technology, at least 1 director must be a legal expert, and at least 1 director must be an accounting expert.

(2)The Board of Directors is required to have members of different gender.

The abilities possessed by the Board of Directors as a whole meets the Company's needs for future development and comply with the Board diversity policy. Implementation of the Board diversity policy in 2020 is as follows:

(1)Over 90% of directors have a background or experience in industrial technology, in addition to that, 1 has a background in law, 4 have a background in accounting, 6 have a background in education, 5 have a background in marketing, and 1 has a background in public relations.

(2)2 of the 15 directors are female.

Name	Gender	Professional Background					
		Industrial Technology	Law	Financial Accounting	Education	Marketing	public relations
Miin Chyou Wu	Male	✓				✓	
Chien Hsu Investment Corporation Representative: Ching-Yun Li	Female						✓
Chih-Yuan Lu	Male	✓			✓	✓	
Shun Yin Investment Ltd. Representative: Shigeki Matsuoka	Male	✓				✓	
Cheng-Yi Fang	Male	✓		✓		✓	
Chung-Laung Liu (Note)	Male	✓			✓		
Achi Capital Limited Representative: Guei-Min Lee	Female	✓	✓		✓		
Che-Ho Wei	Male	✓					
Dang-Hsing Yiu	Male	✓				✓	
Ful-Long Ni	Male	✓					
Hui Ying Investment Ltd. Representative: Pei-Fu Yeh	Male	✓		✓			
Tyzz-Jiun Duh	Male	✓			✓		
Chiang Kao	Male	✓		✓	✓		
Yan-Kuin Su	Male	✓			✓		
John C.F. Chen	Male	✓		✓			

Note : Mr. Chung-Laung Liu passed away on November 7, 2020

7. Succession planning for Board members and management

(1) Succession planning for Board members

The Company's Articles of Incorporation clearly state that the candidate nomination system is used for director election. Board composition is planned in accordance with the Corporate Governance Principles, Regulations for Director/Supervisor Election, and Nomination Committee Charter, and professionals in industrial technology, law, and accounting are recruited in coordination with the Company's development blueprint and Board diversity policy. Besides irregularly providing directors with continuing education information, the Company regularly schedules directors to take continuing education courses; options include corporate governance, internal control system, and financial reporting responsibility courses. Completion of such courses will continue to improve directors' professional knowledge and skills, and director succession planning and candidates are arranged on this basis.

(2) Succession planning for management

Courses for supervisors are offered every year to train managers at all levels and cultivate sufficient managerial talent. Senior executives periodically participate in important cross-departmental business meetings and strategy planning meetings with the president. Discussions during the meetings serve as the basis for establishing the succession team. We also established a talent pool system to examine high-potential talent at any time, and accurately select a succession team.

(X) Implementation of Internal Control System

1. Internal Control System Statement

Macronix International Co., Ltd.
Internal Control System Statement

Date: 26 January 2021

The Company states the following with regard to its internal control system during the period from 1 January 2020 to 31 December 2020, based on the findings of a self-assessment:

1. The Company is fully aware that establishing, operating, and maintaining an internal control system are the responsibility of its Board of Directors and management. The Company has established such a system aimed at providing reasonable assurance of the achievement of objectives in the effectiveness and efficiency of operations (including profits, performance, and safeguard of asset security), reliability, timeliness, transparency and regulatory compliance of reporting, and compliance with applicable laws, regulation and bylaws.
2. An internal control system has inherent limitations. No matter how perfectly designed, an effective internal control system can provide only reasonable assurance of accomplishing the three goals mentioned above. Furthermore, the effectiveness of an internal control system may change along with changes in environment or circumstances. The internal control system of the Company contains self-monitoring mechanisms, however, and the Company takes corrective actions as soon as a deficiency is identified.
3. The Company judges the design and operating effectiveness of its internal control system based on the criteria provided in the Regulations Governing the Establishment of Internal Control Systems by Public Companies (herein below, the "Regulations"). The internal control system judgment criteria adopted by the Regulations divide internal control into five elements based on the process of management control: 1. control environment 2. risk assessment 3. control activities 4. information and communications 5. monitoring activities. Each element further contains several items. Please refer to the Regulations for details.
4. The Company has assessed the design and operating effectiveness of its internal control system according to the aforesaid criteria.
5. Based on the findings of the assessment mentioned in the preceding paragraph, the Company believes that as of December 31, 2020 its internal control system (including its supervision of subsidiaries), encompassing internal controls for understanding of the degree of achievement of operational effectiveness and efficiency objectives, reliability, timeliness, transparency and regulatory compliance of reporting, and compliance with applicable laws, regulation and bylaws, was effectively designed and operating, and reasonably assured the achievement of the above-stated objectives.
6. This Statement will become a major part of the content of the Company's Annual Report and Prospectus, and will be made public. Any falsehood, concealment, or other illegality in the content made public will entail legal liability under Articles 20, 32, 171, and 174 of the Securities and Exchange Law.
7. This statement has been passed by the Board of Directors Meeting of the Company held on 26 January 2021, with zero of the 14 attending directors expressing dissenting opinions, and the remainder all affirming the content of this Statement.

Macronix International Co., Ltd.

Chairman: Miin Wu

President: C.Y. Lu

2. If the company engages an accountant to examine its internal control system, disclose the CPA examination report: None.

(XI) Penalty against the company or its internal personnel, or any disciplinary penalty by the company against its internal personnel for violation of the internal control system, during the most recent fiscal year or during the current fiscal year up to the publication date of the annual report, where the result of such penalty could have a material effect on shareholder equity or securities prices, the annual report shall disclose the penalty, the main shortcomings, and condition of improvement: None

(XII) Major Resolutions of Shareholders' Meeting and Board Meetings during the Most Recent Fiscal Year and Up to the Printing Date of this Annual Report:

1. 2020 Major Resolutions of Shareholders' Meeting

Major resolutions	Review of implementation
1. Ratification of 2019 Business Report and Financial Statements	Resolution announced in accordance with Article 230 of the Company Act
2. Ratification of the Company's 2019 Distribution	August 1, 2021 was set as the Ex-dividend Record Date and cash dividends were paid on August 28, 2021. Due to the Company's outstanding common shares varied, the cash dividends per share to be distributed was adjusted from NT\$1.2, determined by the Shareholders' Meeting, to NT\$1.18940290.
3. Approval of fund raising by issuance of new shares, overseas depositary receipts through cash capital increase, and/or the private placement of common shares and/or domestic or overseas convertible bonds	The capital increase proposal was approved but was not carried out in 2020. The capital increase proposal was approved by the Board of Directors again on February 26, 2021 and submitted to the 2021 Annual Shareholders' Meeting.
4. Approval of releasing competition restrictions of the directors	Resolution and announcement according to law.

2. Major resolutions adopted by the Board of Directors in the Most Recent Year up to the Publication Date

Board of Directors	Date	Major Resolutions
The 4th meeting of the 11th term of the Board of Directors	2020.02.17	1. Approval of the record date of the capital reduction for the redeemed shares of employee Restricted Stock Awards
The 5th meeting of the 11th term of the Board of Directors	2020.03.06	1. Approval of the Company's 2019 Distribution Plan 2. Approval of fund raising by issuance of new shares, overseas depositary receipts through cash capital increase, and/or the private placement of common shares and/or domestic or overseas convertible bonds 3. Board of Directors resolved to convene the 2020 Annual Shareholders Meeting. 4. Board of Directors approved the proposal of "Terminating 6-inch Fab Operation".
The 7th meeting of the 11th Term of the Board of Directors	2020.06.02	1. Board of Directors approved the donation to National Cheng Kung University 2. Board of Directors approved the capital expenditure budget

Board of Directors	Date	Major Resolutions
The 8th meeting of the 11th Term of the Board of Directors	2020.07.28	1. Approval of the record date of the capital reduction for the redeemed shares of employee Restricted Stock Awards
The 10th meeting of the 11th Term of the Board of Directors	2020.12.24	1. Board of Directors approved the capital expenditure budget 2. Board of Directors approved the year 2021 donation to Macronix Education Foundation
The 11th meeting of the 11th Term of the Board of Directors	2021.01.26	1. Approval of the record date of the capital reduction for the redeemed shares of employee Restricted Stock Awards
The 12th meeting of the 11th Term of the Board of Directors	2021.02.26	1. Approval of the Company's 2020 Distribution Plan 2. Approval of fund raising by issuance of new shares, overseas depositary receipts through cash capital increase, and/or the private placement of common shares and/or domestic or overseas convertible bonds 3. Board of Directors resolved to convene the 2020 Annual Shareholders Meeting.

(XIII) Major Issues of Record or Written Statements Made by Any Director or Supervisor Dissenting to Important Resolutions Passed by the Board of Directors: None.

(XIV) In the Most Recent Fiscal Year and Up to the Printing Date of this Annual Report, A Summary of the Resignation and Dismissal of Chairman, President, and Heads of Accounting, Finance, Internal Audit, Corporate Governance and R&D: None.

V. CPA Fees

Unit: NT\$ thousands

Accounting Firm	Name of CPA	Audit Fee	Non-Audit Fee					Period Covered by CPA's Audit	Remarks
			System of Design	Company Registration	Human Resource	Others	Subtotal		
Deloitte & Touche	Tung Hui Yeh Ching Pin Shih	6,645	-	105	-	1,130	1,235	01/01/2020 ~06/30/2020	Other non-audit fees are mainly for the transfer pricing service fees and other services.
	Tung Hui Yeh Kuo Tyan Hong							07/01/2020 ~12/31/2020	

- (I) When the Non-Audit Fees Paid to the CPAs, their Firm, and the Affiliated Companies Account for 25% or more of the Audit Fees, the Sum of the Audit and Non-Audit Fees and the Content of Non-Audit Service Must be Disclosed: Not applicable.
- (II) Where The Accounting Firm Changed the Audit Partners and the Audit Fee Paid for the Year is Less than that of the Previous Year, the Sum, Proportion, and Cause of the Reduction Shall be Disclosed: Not applicable.
- (III) Where the Audit Fee Paid for the Year is Reduced by more than 10% Compared to that of the Previous Year, the Sum, Proportion, and Cause of the Reduction Shall be Disclosed: Not applicable.

VI. CPA Information:

(I) Regarding the former CPA

Replacement Date	2019.12.23		2020.10.26	
Replacement reasons and explanations	Macronix's accountants were originally Ming-Hui Chen and Benjamin Shih from Deloitte & Touche. To ensure the independence of appointed accountants, starting from 2020Q1, accountants Tung-Hui Yeh and Ching Pin Shih were appointed to audit Macronix's financial statements.		Macronix's accountants were originally Tung Hui Yeh and Ching Pin Shih from Deloitte & Touche. Starting in 2020Q3, accountants Tung-Hui Yeh and Kuo Tyan Hong were appointed to audit Macronix's financial statements in coordination with adjustments to internal operations by Deloitte & Touche.	
Describe whether the Company terminated or the CPA did not accept the appointment	Parties		CPA	The Company
	Status			
	Termination of appointment		—	—
	No longer accepted (continued) appointment		—	—
Other issues (except for unqualified issues) in the audit reports within the last two years	None			
Differences with the company	Yes	—	Accounting principles or practices	
		—	Disclosure of Financial Statements	
		—	Audit scope or steps	
		—	Others	
	None	✓		
	Remarks/specify details: : —			
Describe whether the Company terminated or the CPA did not accept the appointment	None			

(II) Regarding the successor CPA

Name of accounting firm	Deloitte & Touche	
Name of CPA	Tung Hui Yeh Ching Pin Shih	Tung Hui Yeh Kuo Tyan Hong
Date of appointment	2019.12.23	2020.10.26
Consultation results and opinions on accounting treatments or principles with respect to specified transactions and the company's financial reports that the CPA might issue prior to the engagement.	None	
Succeeding CPA's written opinion of disagreement toward the former CPA	None	

(III) Reply from the previous accountant to Items A and B, Subparagraph 5, Article 10 of the Regulations Governing Information to be Published in Annual Reports of Public Companies: Not applicable.

VII. If Chairman, President, or Chief Financial Officer Holding Positions at the Independent Audit Firm or its Affiliated Company within the Most Recent Fiscal Year: None.

VIII. Equity Transfer and Pledge by Directors, Supervisors, Managers and/or Shareholders, Who Hold More Than 10% of outstanding Shares, in the Most Recent Fiscal Year and Up to the Printing Date of this Annual Report

Title	Name	2020		up to March 30, 2021	
		Increase (decrease) in shares held	Increase (decrease) in shares pledged	Increase (decrease) in shares held	Increase (decrease) in shares pledged
Chairman / CEO	Miin Chyou Wu	320,000	0	0	0
Director	Chien Hsu Investment Corporation (Note 1)	0	0	0	0
	Representative : Ching-Yun Li	0	0	0	0
Director / President	Chih-Yuan Lu	168,000	0	0	0
Director	Shun Yin Investment Ltd.	0	0	0	0
	Representative : Shigeki Matsuoka	0	0	0	0
Director	Cheng-Yi Fang	0	0	0	0
Director	Chung-Laung Liu(Note 2)	Omitted	Omitted	Omitted	Omitted
Director	Achi Capital Limited	0	0	0	0
	Representative : Guei-Min Lee (Note 3)	0	0	19,446	0

Title	Name	2020		up to March 30, 2021	
		Increase (decrease) in shares held	Increase (decrease) in shares pledged	Increase (decrease) in shares held	Increase (decrease) in shares pledged
Director	Che-Ho Wei	0	0	0	0
Director / Senior Vice President & Chief Marketing Officer	Dang-Hsing Yiu	32,000	0	0	0
Director / Vice President	Ful-Long Ni	112,000	0	0	0
Director / Vice President	Hui Ying Investment Ltd. Representative : Pei-Fu Yeh (Note 4)	0	0	0	0
		(45,000)	0	0	0
Independent Director	Tyzz-Jiun Duh	0	0	0	0
Independent Director	Chiang Kao	0	0	0	0
Independent Director	Yan-Kuin Su	0	0	0	0
Independent Director	John C.F. Chen	0	0	0	0
Vice President	Yen-Hie Chao	80,000	0	0	0
Vice President	Chun-Hsiung Hung	48,000	0	0	0
Vice President	Jui-Kun Chen	100,000	0	0	0
Vice President	Jon-Ten Chung	100,000	0	0	0
Associate V.P.	Kuang-Chao Chen	80,000	0	0	0
Executive Director	Wen-Pin Lu	30,000	0	0	0
Executive Director	Hsin-Cheng Liu (Note 5)	29,000	0	0	0
Executive Director	Kai-Wen Tu (Note 5)	32,000	0	0	0
Executive Director	Ting-Chang Lin(Note 5)	18,000	0	0	0
Executive Director	Kun-Lung Chang (Note 5)	40,000	0	0	0
Project Executive Director	Chuan-Hsien Wen (Note 6)	0	0	Omitted	Omitted
Project Executive Director	Hui-Chi Li	6,400	0	0	0

Note 1: Chien Hsu Investment Co., Ltd. appointed Ms. Ching-Yun Li on July 26, 2019, to attend the 11th Term of the Board of Directors and exercised any and all Director's rights thereof.

Note 2: Mr. Chung-Laung Liu passed away on November 7, 2020

Note 3: Ms. Guei-Min Lee was appointed to represent it to attend the 11th Term of the Board of Directors and exercised any and all Director's rights thereof.

Note 4: Mr. Pei-Fu Yeh was appointed to represent it to attend the 11th Term of the Board of Directors and exercised any and all Director's rights thereof.

Note 5: Promoted to Executive Director on April 28, 2020

Note 6: Retired on March 5, 2021

Note 7: The counterparts of equity transfer or equity pledge in the table above are not related party.

IX. Relationship Among the Top Ten Shareholders

March 30 2021

Name	Current Shareholding		Spouse's/minor's Shareholding		Shareholding by Nominee Arrangement		Name and Relationship Between the Company's Top Ten Shareholders, or Spouses or Relatives Within Two Degrees		Remarks
	Shares	%	Shares	%	Shares	%	Name	Relationship	
New Labor Pension Fund	49,435,906	2.66%	None	None	None	None	None	None	
Cathay Life Insurance Representative: Tiao-Kuei Huang	44,084,000	2.37%	None	None	None	None	None	None	
Public Service Pension Fund Management Board	29,156,000	1.57%	None	None	None	None	None	None	
Vanguard Emerging Markets Stock Index Fund A Series Of Vanguard International Equity Index Funds	24,897,737	1.34%	None	None	None	None	None	None	
JPMorgan Chase Bank N.A. Taipei Branch in custody for Vanguard Total International Stock Index Fund a series of Vanguard Star Funds	22,849,546	1.23%	None	None	None	None	None	None	
Shun Yin Investment Ltd.	22,587,265	1.22%	None	None	None	None	None	None	
Representative: Shigeki Matsuoka	None	None	None	None	None	None	None	None	
Syue-Rong Shen	21,700,000	1.17%	None	None	None	None	None	None	
Allianz Gbl Inv Taiwan Tech	21,000,000	1.13%	None	None	None	None	None	None	
Old Labor Pension Fund	20,399,000	1.10%	None	None	None	None	None	None	
Miin Chyou Wu	13,060,809	0.70%	None	None	None	None	None	None	

Notes: There was no information on the person responsible for the investment account.

X. The Total and Combined Shareholding in A Single Enterprise by the Company, its Directors, Supervisors, Managers, and the Directly or Indirectly Controlled Entities

December 31, 2020
Unit: shares/ %

Affiliated Enterprises (Note)	Ownership by the Company		Direct or Indirect Ownership by Directors/Supervisors/ Managers		Total Ownership	
	Shares	%	Shares	%	Shares	%
Macronix America, Inc.	100,000	100.00%	0	0%	100,000	100.00%
Macronix (BVI) Co., Ltd.	212,048,000	100.00%	0	0%	212,048,000	100.00%
Hui Ying Investment Ltd.	None	100.00%	None	0%	None	100.00%
Run Hong Investment Ltd.	None	100.00%	None	0%	None	100.00%
Mxtran Inc.	69,627,323	90.43%	3,614,600	4.69%	73,241,923	95.12%

Note: Invested by the Company using the equity method.

Chapter IV Capital Overview

I. Capital and Shares

(I) Source of capital

Year/ month	Issue price	Authorized capital		Paid-up capital		Comments		
		Shares (1,000 shares)	Amount (NT\$1,000)	Shares (shares)	Amount (NTD)	Source of capital	Subscriptions paid with property other than cash	Other
1989.12	-	150,000	1,500,000	81,583,000	815,830,000	Established with a capital of NT\$815,830,000	5,200,000 technology shares	-
1990.12	10	300,000	3,000,000	209,717,000	2,097,170,000	Cash capital increase in the amount of NT\$1,281,340,000	-	Note 1
1992.06	10	300,000	3,000,000	239,717,000	2,397,170,000	Cash capital increase in the amount of NT\$300,000,000	-	Note 2
1993.05	10	300,000	3,000,000	300,000,000	3,000,000,000	Cash capital increase in the amount of NT\$602,830,000	-	Note 3
1995.02	28.5	500,000	5,000,000	350,000,000	3,500,000,000	Cash capital increase in the amount of NT\$500,000,000	-	Note 4
1995.08	-	500,000	5,000,000	433,218,172	4,332,181,720	Capital increase out of earnings in the amount of NT\$832,181,720	-	-
1995.12	40	500,000	5,000,000	500,000,000	5,000,000,000	Cash capital increase in the amount of NT\$667,818,280	-	Note 5
1996.05	48	850,000	8,500,000	600,000,000	6,000,000,000	Issuance of GDRs in the amount of NT\$1,000,000,000 for cash capital increase	-	Note 6
1996.08	-	1,160,000	11,600,000	941,676,940	9,416,769,400	Earnings and capital surplus in the amount of NT\$3,416,769,400 transferred to capital	-	-
1997.04	-	1,160,000	11,600,000	945,824,135	9,458,241,350	Corporate bonds conversion in the amount of NT\$41,471,950	-	-
1997.07	-	2,500,000	25,000,000	1,274,939,621	12,749,396,210	Earnings and capital surplus in the amount of NT\$3,291,154,860 transferred to capital	-	-
1997.08	-	2,500,000	25,000,000	1,415,586,910	14,155,869,100	Corporate bonds conversion in the amount of NT\$1,406,472,890	-	-
1997.12	-	2,500,000	25,000,000	1,441,815,433	14,418,154,330	Corporate bonds conversion in the amount of NT\$262,285,230	-	-
1998.03	-	2,500,000	25,000,000	1,442,334,998	14,423,349,980	Corporate bonds conversion in the amount of NT\$5,195,650	-	-
1998.08	-	2,500,000	25,000,000	1,785,823,693	17,858,236,930	Earnings and capital surplus in the amount of NT\$3,434,886,950 transferred to capital	-	-
1999.09	-	2,500,000	25,000,000	1,964,406,063	19,644,060,630	Capital surplus in the amount of NT\$1,785,823,700 transferred to capital	-	-
2000.03	30	2,500,000	25,000,000	2,099,996,063	20,999,960,630	Cash capital increase in the amount of NT\$1,355,900,000	-	Note 7
2000.03	-	2,500,000	25,000,000	2,126,074,584	21,260,745,840	Convertible bonds conversion in the amount of NT\$260,785,210	-	-
2000.03	-	2,500,000	25,000,000	2,127,526,851	21,275,268,510	Convertible bonds conversion in the amount of NT\$14,522,670	-	-
2000.07	-	3,500,000	35,000,000	2,404,105,343	24,041,053,430	Earnings and capital surplus in the amount of NT\$2,765,784,920 transferred to capital	-	-
2000.07	-	3,500,000	35,000,000	2,472,586,493	24,725,864,930	Corporate bonds conversion in the amount of NT\$684,811,500	-	-
2000.12	-	3,500,000	35,000,000	2,474,409,144	24,744,091,440	Corporate bonds conversion in the amount of NT\$18,226,510	-	-
2001.06	-	4,500,000	45,000,000	3,359,342,613	33,593,426,130	Earnings and capital surplus in the amount of NT\$8,849,334,690 transferred to capital	-	-

Year/ month	Issue price	Authorized capital		Paid-up capital		Comments		
		Shares (1,000 shares)	Amount (NT\$1,000)	Shares (shares)	Amount (NTD)	Source of capital	Subscriptions paid with property other than cash	Other
2002.08	-	5,350,000	53,500,000	3,691,276,875	36,912,768,750	Capital surplus in the amount of NT\$3,319,342,620 transferred to capital	-	-
2003.04	-	5,350,000	53,500,000	3,733,149,529	37,331,495,290	Corporate bonds conversion in the amount of NT\$418,726,540	-	-
2003.07	-	5,350,000	53,500,000	3,779,349,500	37,793,495,000	Corporate bonds conversion in the amount of NT\$461,999,710	-	-
2003.11	-	5,350,000	53,500,000	3,927,758,305	39,277,583,050	Corporate bonds conversion in the amount of NT\$1,484,088,050	-	-
2003.12	8.11	6,550,000	65,500,000	4,402,758,305	44,027,583,050	Cash capital increase in the amount of NT\$4,750,000,000	-	Note 8
2004.03	-	6,550,000	65,500,000	4,430,251,943	44,302,519,430	Corporate bonds conversion in the amount of NT\$274,936,380	-	-
2004.04	10.9	6,550,000	65,500,000	4,955,251,943	49,552,519,430	Issuance of GDRs in the amount of NT\$5,250,000,000 for cash capital increase	-	Note 9
2004.05	-	6,550,000	65,500,000	5,003,704,439	50,037,044,390	Corporate bonds conversion in the amount of NT\$484,524,960	-	-
2004.09	-	6,550,000	65,500,000	5,034,928,514	50,349,285,140	Corporate bonds conversion in the amount of NT\$312,240,750	-	-
2004.11	-	6,550,000	65,500,000	5,035,296,328	50,352,963,280	Corporate bonds conversion in the amount of NT\$3,678,140	-	-
2005.09	-	6,550,000	65,500,000	4,995,296,328	49,952,963,280	Decrease in treasury stock in the amount of NT\$400,000,000	-	-
2006.03	-	6,550,000	65,500,000	2,915,821,786	29,158,217,860	Capital reduction in the amount of NT\$20,794,745,420	-	Note 10
2006.03	8.07	6,550,000	65,500,000	2,915,921,786	29,159,217,860	Private placement in the amount of NT\$1,000,000	-	-
2007.02	-	6,550,000	65,500,000	2,916,157,808	29,161,578,080	Exercise of employee stock options in the amount of NT\$2,360,220	-	-
2007.04	-	6,550,000	65,500,000	2,916,415,946	29,164,159,460	Exercise of employee stock options in the amount of NT\$2,581,380	-	-
2007.09	-	6,550,000	65,500,000	2,917,058,354	29,170,583,540	Exercise of employee stock options in the amount of NT\$6,424,080	-	-
2007.10	-	6,550,000	65,500,000	2,978,817,751	29,788,177,510	Capital increase out of earnings in the amount of NT\$617,593,970	-	-
2007.11	-	6,550,000	65,500,000	3,050,653,298	30,506,532,980	Exercise of employee stock options in the amount of NT\$718,355,470	-	-
2008.02	-	6,550,000	65,500,000	3,060,226,622	30,602,266,220	Exercise of employee stock options in the amount of NT\$95,733,240	-	-
2008.05	-	6,550,000	65,500,000	3,062,751,980	30,627,519,800	Exercise of employee stock options in the amount of NT\$25,253,580	-	-
2008.08	-	6,550,000	65,500,000	3,063,677,465	30,636,774,650	Exercise of employee stock options in the amount of NT\$9,254,850	-	-
2008.09	-	6,550,000	65,500,000	3,124,019,472	31,240,194,720	Capital increase out of earnings in the amount of NT\$603,420,070	-	-
2008.11	-	6,550,000	65,500,000	3,126,296,368	31,262,963,680	Exercise of employee stock options in the amount of NT\$22,768,960	-	-
2009.02	-	6,550,000	65,500,000	3,126,775,749	31,267,757,490	Exercise of employee stock options in the amount of NT\$4,793,810	-	-
2009.02	-	6,550,000	65,500,000	3,123,962,749	31,239,627,490	Decrease in treasury stock in the amount of NT\$28,130,000	-	-

Year/ month	Issue price	Authorized capital		Paid-up capital		Comments		
		Shares (1,000 shares)	Amount (NT\$1,000)	Shares (shares)	Amount (NTD)	Source of capital	Subscriptions paid with property other than cash	Other
2009.05	-	6,550,000	65,500,000	3,135,134,847	31,351,348,470	Exercise of employee stock options in the amount of NT\$111,720,980	-	-
2009.08	-	6,550,000	65,500,000	3,147,538,945	31,475,389,450	Exercise of employee stock options in the amount of NT\$124,040,980	-	-
2009.09	-	6,550,000	65,500,000	3,272,552,230	32,725,522,300	Capital increase out of earnings in the amount of NT\$1,250,132,850	-	-
2009.11	-	6,550,000	65,500,000	3,289,772,530	32,897,725,300	Exercise of employee stock options in the amount of NT\$172,203,000	-	-
2010.02	-	6,550,000	65,500,000	3,303,027,880	33,030,278,800	Exercise of employee stock options in the amount of NT\$132,553,500	-	-
2010.05	-	6,550,000	65,500,000	3,330,319,836	33,303,198,360	Exercise of employee stock options in the amount of NT\$272,919,560	-	-
2010.08	-	6,550,000	65,500,000	3,350,388,992	33,503,889,920	Exercise of employee stock options in the amount of NT\$200,691,560	-	-
2010.11	-	6,550,000	65,500,000	3,355,417,899	33,554,178,990	Exercise of employee stock options in the amount of NT\$50,289,070	-	-
2011.02	-	6,550,000	65,500,000	3,362,301,642	33,623,016,420	Exercise of employee stock options in the amount of NT\$68,837,430	-	-
2011.05	-	6,550,000	65,500,000	3,378,174,280	33,781,742,800	Exercise of employee stock options in the amount of NT\$158,726,380	-	-
2011.08	-	6,550,000	65,500,000	3,381,545,259	33,815,452,590	Exercise of employee stock options in the amount of NT\$33,709,790	-	-
2011.11	-	6,550,000	65,500,000	3,382,456,382	33,824,563,820	Exercise of employee stock options in the amount of NT\$9,111,230	-	-
2012.02	-	6,550,000	65,500,000	3,384,748,566	33,847,485,660	Exercise of employee stock options in the amount of NT\$22,921,840	-	-
2012.05	-	6,550,000	65,500,000	3,392,196,696	33,921,966,960	Exercise of employee stock options in the amount of NT\$74,481,300	-	-
2012.08	-	6,550,000	65,500,000	3,392,302,064	33,923,020,640	Exercise of employee stock options in the amount of NT\$1,053,680	-	-
2012.08	-	6,550,000	65,500,000	3,521,142,831	35,211,428,310	Capital increase out of earnings in the amount of NT\$1,288,407,670	-	-
2012.11	-	6,550,000	65,500,000	3,521,369,314	35,213,693,140	Exercise of employee stock options in the amount of NT\$2,264,830	-	-
2013.02	-	6,550,000	65,500,000	3,521,462,303	35,214,623,030	Exercise of employee stock options in the amount of NT\$929,890	-	-
2014.02	-	6,550,000	65,500,000	3,521,473,020	35,214,730,200	Exercise of employee stock options in the amount of NT\$107,170	-	-
2015.01	-	6,550,000	65,500,000	3,558,773,970	35,587,739,700	New restricted employee shares in the amount of NT\$373,009,500	-	-
2015.08	-	6,550,000	65,500,000	3,620,052,730	36,200,527,300	New restricted employee shares in the amount of NT\$612,787,600	-	-
2015.08	-	6,550,000	65,500,000	3,618,598,730	36,185,987,300	Reduction of new restricted employee shares in the amount of NT\$14,540,000	-	-

Year/ month	Issue price	Authorized capital		Paid-up capital		Comments		
		Shares (1,000 shares)	Amount (NT\$1,000)	Shares (shares)	Amount (NTD)	Source of capital	Subscriptions paid with property other than cash	Other
2015.11	-	6,550,000	65,500,000	3,617,848,930	36,178,489,300	Reduction of new restricted employee shares in the amount of NT\$7,498,000	-	-
2016.02	-	6,550,000	65,500,000	3,617,159,130	36,171,591,300	Reduction of new restricted employee shares in the amount of NT\$6,898,000	-	-
2016.05	-	6,550,000	65,500,000	3,616,471,930	36,164,719,300	Reduction of new restricted employee shares in the amount of NT\$6,872,000	-	-
2016.08	-	6,550,000	65,500,000	3,615,716,830	36,157,168,300	Reduction of new restricted employee shares in the amount of NT\$7,551,000	-	-
2016.11	-	6,550,000	65,500,000	3,615,353,570	36,153,535,700	Reduction of new restricted employee shares in the amount of NT\$3,632,600	-	-
2017.01	-	6,550,000	65,500,000	3,672,829,150	36,728,291,500	New restricted employee shares in the amount of NT\$574,755,800	-	-
2017.02	-	6,550,000	65,500,000	3,672,063,730	36,720,637,300	Reduction of capital for new restricted employee shares in the amount of NT\$7,654,200	-	-
2017.05	-	6,550,000	65,500,000	3,671,002,330	36,710,023,300	Reduction of capital for new restricted employee shares in the amount of NT\$10,614,000	-	-
2017.07	-	6,550,000	65,500,000	1,805,895,303	18,058,953,030	Capital reduction in the amount of NT\$18,651,070,270	-	Note 11
2017.09	-	6,550,000	65,500,000	1,805,028,142	18,050,281,420	Reduction of capital for new restricted employee shares in the amount of NT\$8,671,610	-	-
2017.11	-	6,550,000	65,500,000	1,804,938,491	18,049,384,910	Reduction of capital for new restricted employee shares in the amount of NT\$896,510	-	-
2018.02	-	6,550,000	65,500,000	1,804,775,803	18,047,758,030	Reduction of capital for new restricted employee shares in the amount of NT\$1,626,880	-	-
2018.05	-	6,550,000	65,500,000	1,804,478,493	18,044,784,930	Reduction of capital for new restricted employee shares in the amount of NT\$2,973,100	-	-
2018.09	-	6,550,000	65,500,000	1,840,574,009	18,405,740,090	Capital increase out of earnings in the amount of NT\$360,955,160	-	-
2018.11	-	6,550,000	65,500,000	1,840,291,935	18,402,919,350	Reduction of capital for new restricted employee shares in the amount of NT\$2,820,740	-	-
2019.02	-	6,550,000	65,500,000	1,840,166,993	18,401,669,930	Reduction of capital for new restricted employee shares in the amount of NT\$1,249,420	-	-
2019.05	-	6,550,000	65,500,000	1,840,144,856	18,401,448,560	Reduction of capital for new restricted employee shares in the amount of NT\$221,370	-	-
2019.08	-	6,550,000	65,500,000	1,840,013,422	18,400,134,220	Reduction of capital for new restricted employee shares in the amount of NT\$1,314,340	-	-
2019.11	-	6,550,000	65,500,000	1,839,927,014	18,399,270,140	Reduction of capital for new restricted employee shares in the amount of NT\$864,080	-	-
2020.03	-	6,550,000	65,500,000	1,839,908,862	18,399,088,620	Reduction of capital for new restricted employee shares in the amount of NT\$181,520	-	-
2020.07	-	6,550,000	65,500,000	1,856,309,082	18,563,090,820	New restricted employee shares in the amount of NT\$164,002,200	-	-
2020.08	-	6,550,000	65,500,000	1,856,301,702	18,563,017,020	Reduction of capital for new restricted employee shares in the amount of NT\$73,800	-	-

Year/ month	Issue price	Authorized capital		Paid-up capital		Comments		
		Shares (1,000 shares)	Amount (NT\$1,000)	Shares (shares)	Amount (NTD)	Source of capital	Subscriptions paid with property other than cash	Other
2021.02	-	6,550,000	65,500,000	1,856,186,402	18,561,864,020	Reduction of capital for new restricted employee shares in the amount of NT\$1,153,000	-	-

Note 1: Letter Tai-Cai-Zheng (1)-Zi No. 03305 dated December 7, 1990
Note 2: Letter Tai-Cai-Zheng (1)-Zi No. 03489 dated December 24, 1991
Note 3: Letter Tai-Cai-Zheng (1)-Zi No. 00335 dated February 15, 1993
Note 4: Letter Tai-Cai-Zheng (1)-Zi No. 43729 dated November 5, 1994
Note 5: Letter Tai-Cai-Zheng (1)-Zi No. 49345 dated September 25, 1995
Note 6: Letter Tai-Cai-Zheng (1)-Zi No. 18164 dated March 26, 1996
Note 7: Letter Tai-Cai-Zheng (1)-Zi No. 95699 dated November, 1999
Note 8: Letter Tai-Cai-Zheng-1-Zi No. 0920139445 dated October 15, 2003
Note 9: Letter Tai-Cai-Zheng-1-Zi No. 0920161647 dated January 30, 2004
Note 10: Letter Jin-Guan-Zheng-1-Zi No. 0940156791 dated February 3, 2006
Note 11: Letter Jin-Guan-Zheng-Fa-Zi No. 1060022715 dated June 26, 2017

March 30, 2021
Unit: shares

Type of stock	Authorized capital			Remarks
	Shares issued and outstanding (Note 1)	Un-issued shares	Total	
Common stocks	1,856,186,402	4,693,813,598	6,550,000,000	Note 2

Note 1: 1,856,130,751 shares are public shares; 55,651 shares are private placement shares.

Note 2: Retained 650,000,000 shares of authorized capital for employee stock option certificates, and authorized the Board of Directors to issue the certificates in batches as needed. Retained 864,703,672 for conversion to corporate bonds, which may be adjusted by resolution of the Board of Directors in view of the market situation and business needs.

(II) Composition of Shareholders

March 30, 2021

Type of Shareholders	Government Agencies	Financial Institutions	Other legal Persons	Domestic Natural Persons	Foreign Institutions and Natural Persons	Total
Number of Shareholders	12	70	459	311,482	663	312,686
Shareholding	102,279,361	90,770,723	148,029,242	1,226,289,697	288,817,379	1,856,186,402
Shareholding percentage (%)	5.51%	4.89%	7.97%	66.07%	15.56%	100.00%

(III) Distribution profile of Share Ownership

March 30, 2021

Class of Shareholding (Unit: Share)	Number of Shareholders	Shareholding	Shareholding percentage (%)
1 ~ 999	148,069	33,580,254	1.81%
1,000 ~ 5,000	126,214	262,270,942	14.13%
5,001 ~ 10,000	20,438	153,819,603	8.29%
10,001 ~ 15,000	6,096	74,309,415	4.00%
15,001 ~ 20,000	3,614	66,000,562	3.56%
20,001 ~ 30,000	3,138	78,822,354	4.25%
30,001 ~ 50,000	2,254	89,159,551	4.80%
50,001 ~ 100,000	1,532	108,646,974	5.85%
100,001 ~ 200,000	689	96,047,808	5.17%
200,001 ~ 400,000	324	91,716,648	4.94%
400,001 ~ 600,000	91	44,316,199	2.39%
600,001 ~ 800,000	51	35,128,131	1.89%
800,001 ~ 1,000,000	35	31,350,212	1.69%
1,000,001 or over	141	691,017,749	37.23%
Total	312,686	1,856,186,402	100.00%

(IV) Major Shareholders

March 30, 2021

Name of Shareholders	Shareholding	Shareholding percentage (%)
New Labor Pension Fund	49,435,906	2.66%
Cathay Life Insurance	44,084,000	2.37%
Public Service Pension Fund Management Board	29,156,000	1.57%
Vanguard Emerging Markets Stock Index Fund a Series of Vanguard International Equity Index Funds	24,897,737	1.34%
JPMorgan Chase Bank N.A. Taipei Branch in custody for Vanguard Total International Stock Index Fund a series of Vanguard Star Funds	22,849,546	1.23%
Shun Yin Investment Ltd.	22,587,265	1.22%
Syue-Rong Shen	21,700,000	1.17%
Allianz Gbl Inv Taiwan Tech	21,000,000	1.13%
Old Labor Pension Fund	20,399,000	1.10%
Miin Chyou Wu	13,060,809	0.70%

(V) Market Price, Net Worth, Earnings, and Dividends Per Share

Unit: NT\$

Item		Year	2019	2020	up to March 30,2021
Market Price per Share (Note 1)	Highest Market Price		39.1	46.9	50
	Lowest Market Price		16.85	22.05	37.25
	Average Market Price		28.03	34.59	43.10
Net Worth per Share	Before Distribution		17.68	19.52	
	After Distribution		16.49	(Note 5)	
Earnings per Share	Weighted Average Shares (thousand shares)		1,831,825	1,839,322	
	Earnings per Share		1.64	2.90	
Dividends per Share	Cash Dividends		1.18940290	1.2	
	Stock Dividends	Dividends from Retained Earnings	-	-	
		Dividends from Capital Surplus	-	-	
	Accumulated Undistributed Dividends		-	-	
Return on Investment	Price / Earnings Ratio (Note 2)		16.12	11.54	
	Price / Dividend Ratio (Note 3)		22.22	27.88	
	Cash Dividend Yield Rate (Note 4)		4.50%	3.59%	

Note 1: Source of data: Taiwan Stock Exchange.

Note 2: Price / Earnings Ratio = Average Market Price / Earnings per Share

Note 3: Price / Dividend Ratio = Average Market Price / Cash Dividends per Share

Note 4: Cash Dividend Yield Rate = Cash Dividends per Share / Average Market Price

Note 5: The distribution of earnings for 2020 will be resolved at the 2021 Shareholders' Meeting.

(VI) Dividend Policy and Implementation

1. Dividend policy in the articles of incorporation

If there is a surplus in the Company's annual final accounts, it will first be used to pay taxes and make up for accumulated losses before the next 10% is taken for legal capital reserve (except when the legal capital reserve has reached the amount of the total capital). A special capital reserve is listed or reversed in accordance with relevant regulations. The remaining balance and the undistributed surplus of the previous year are the shareholder dividends.

The Company belongs to a capital-intensive industry. In line with the long-term financial planning, all or part of the shareholder dividends in the preceding paragraph may be reserved as undistributed earnings depending on the resolution by the shareholders' meeting. The dividends will then be distributed in the following year, together or separately.

The Company prioritizes cash dividends for surplus distribution. However, the Company shall still be able to distribute the surplus as shares depending on the financial, business, or operational status. The ratio follows the principle of not exceeding 50% of the total distributable surplus for the year.

2. Distribution of dividend proposed at the shareholders' meeting: NT\$2,227,423,682 (NT\$1.2 per share).
3. Expected material changes to the dividend policy: None.

(VII) Effect to Business Performance and EPS of the Proposed Stock Dividends

Distribution: not applicable.

(VIII) Compensation for Employees, Directors, and Supervisors

1. Percentage or scope of compensation for employees, directors and supervisors provided in the Company's Articles of Incorporation

According to the Articles of Incorporation, if there is profit for the year, 15% and 2% (or below) of the remaining balance should be allocated as employee and director compensation after accumulated losses have been deducted from the profit. Employee compensation should also be distributed to employees of subordinate companies that meet certain conditions.

2. The basis for estimating the amount of employee, director, and supervisor compensation, for calculating the number of shares to be distributed as employee compensation, and the accounting treatment of the discrepancy, if any, between the actual distributed amount and the estimated figure, for the current period

The Company's employee and director compensation in 2020, as stipulated by the Articles of Incorporation, were NT\$1,050,180,445 and NT\$140,024,059 respectively. The basis of the above estimate is the balance after deducting accumulated losses from the profit of the previous year. If the actual distribution amount differs from the estimated figure, accounting treatment will be given to the changes. The amount will be adjusted in the following year.

3. Distribution of compensation approved in the board of directors meeting

On February 26 2021, the Board of Directors approved NT\$1,050,180,445 for employee compensation and NT\$140,024,059 for Director compensation.

4. Information of distribution of compensation of employees, directors, and supervisors for the previous year, and, if there are any discrepancies between the actual distribution and the recognized employee, director, or supervisor compensation, and the discrepancy, cause, and its treatment: None.

(IX) Redemption of Common Stock : None.

II. Corporate Bonds : None.

III. Preferred Shares : None.

IV. Global Depository Receipts : None.

V. Employee Stock Options : None.

VI. New Shares of Employee Restricted Stock Awards

(I) New Shares of Employee Restricted Stock Awards

March 30, 2021

Types of new shares of employee Restricted Stock Awards	1st issuance of 2019 New shares of employee Restricted Stock Awards Plan
Effective date	October 8, 2019
Distribution date	October 21, 2019
Issue date	June 16, 2020
New Shares of employee Restricted Stock Awards issued	16,400,220 shares
Issued price	NT\$0
Ratio of New shares of employee Restricted Stock Awards to total issued	0.89%
The vesting conditions of new shares of employee Restricted Stock Awards	<p>(1) Remain employed by the Company within one year after the grant date; and has a current year's performance rating of A0 or A1 : 40% of restricted shares will be vested.</p> <p>(2) Remain employed by the Company within two years after the grant date; and has a current year's performance rating of A0 or A1 : 30% of restricted shares will be vested.</p> <p>(3) Remain employed by the Company within three years after the grant date; and has a current year's performance rating of A0 or A1 : 30% of restricted shares will be vested.</p>
Restricted rights of new shares of employee Restricted Stock Awards	<p>(1) Except for being inherited, the new shares of employee Restricted Stock Awards not be sold, transferred, pledged, or gifted to others or disposed of using any other methods.</p> <p>(2) The new shares of employee Restricted Stock Awards shall be kept in a stock trust.</p> <p>(3) When a new share is returned in cash due to the Company's capital reduction, the refund of the vested capital loss shall be under custodian trust. In accordance with the issuance method, such capital and shares shall be granted if the vesting conditions for new shares of employee restricted stock awards are met. The vested shares are granted to employees without interests; if the vested conditions are not met, such cash will be recovered by the Company.</p>
Custody status of new shares of employee Restricted Stock Awards	Exercise of shareholder rights while the new shares of employee Restricted Stock Awards restricted are held during trust period shall be in accordance with the custodial agreement.
Measures to handling employees that do not meet the vesting conditions for receiving or subscribing to new shares	The Company will redeem and cancel the granted but not yet vested shares
Number of new shares of employee Restricted Stock Awards taken back or bought back	174,700 shares
Number of released new shares of employee Restricted Stock Awards	6,453,888 shares
Number of unreleased new shares of employee Restricted Stock Awards	9,771,632 shares
Ratio of unreleased new shares of employee Restricted Stock Awards to total issued (%)	0.53%
Impact on shareholder's equity	Dilution of the Company's EPS during the vesting period is limited and should not have a significant impact on shareholders' equity.

(II) New Shares of Employee Restricted Stock Awards received by Managers and the Top Ten Employees

March 30, 2021

	Title	Name	No. of New Restricted Shares	New Restricted Shares as a Percentage of Shares Issued	Released				Unreleased			
					No. of Shares	Issued Price (NT\$)	Amount (NT\$ thousands)	Released Restricted Shares as a Percentage of Shares Issued	No. of Shares	Strike Price (NT\$)	Amount (NT\$ thousands)	Unreleased Restricted Shares as a Percentage of Shares Issued
Managers	CEO	Miin Chyou Wu	3,437,000	0.185%	1,374,800	0	0	0.074%	2,062,000	0	0	0.111%
	President	Chih-Yuan Lu										
	Senior Vice President & Chief Marketing Officer	Dang-Hsing Yiu										
	Vice President	Ful-Long Ni										
	Vice President	Pei-Fu Yeh										
	Vice President	Yen-Hie Chao										
	Vice President	Chun-Hsiung Hung										
	Vice President	Jui-Kun Chen										
	Vice President	Jon-Ten Chung										
	Associate V.P.	Kuang-Chao Chen										
	Executive Director	Wen-Pin Lu										
	Executive Director	Hsin-Cheng Liu (Note 1)										
	Executive Director	Kai-Wen Tu (Note 1)										
	Executive Director	Ting-Chang Lin (Note 1)										
Executive Director	Kun-Lung Chang (Note 1)											
Project Executive Director	Hui-Chi Li											
Employees	Chief Scientist	Ke-Zhong Wang	1,132,000	0.061%	452,800	0	0	0.024%	679,200	0	0	0.037%
	Senior Director	Han-Song Chen										
	Senior Director	Ta-Hung Yang										
	Senior Director	Shuo-Nan Hung										
	Senior Director	Tao-Cheng Lu										
	Senior Director	Yen-Hao Shih										
	Division Director	Keng-Hui Chen										
	Project Director	Ming-Xiang Chen										
	Project Director	Suzuki Junhiro										
	Project Director	Ling-Wu Yang										
	Project Director	Nan-Tzu Lien										
Project Director	Tien-Chu Yang											
Project Deputy Director	Hung-Chih Li											

Note : Promoted to Executive Director on April 28, 2020

VII. Mergers, Acquisitions or Issuance of New Shares for Acquisition of Shares of other Companies : None.

VIII. Financing Plans and Implementation

As of one quarter before the printing date of this annual report, the Company has not experienced any previous issuance or private placement of marketable securities that have not been completed, or that have been completed but any benefits are yet to be recorded within the past three fiscal years.

Chapter V. Operation Summary

I. Business Activities

(I) Scope of Business:

1. Main Business:

The Company's main business concentrates on the design, manufacture, sales, and foundry services of integrated circuits and memory chips, as well as the commissioned design, development, and consultancy of relevant products. The Company concurrently engages in the import and export of relevant affairs. For the main businesses of the consolidated company, please refer to the main section regarding the Consolidated Financial Report on page 153 of this annual report.

2. Business Proportion

Unit: NT\$ thousands

Products	2019		2020	
	Net Revenue	%	Net Revenue	%
Flash	19,481,027	55.67%	20,953,865	52.65%
ROM	13,290,888	37.98%	16,022,159	40.26%
Foundry	2,196,564	6.28%	2,794,731	7.02%
Others	26,932	0.07%	30,192	0.07%
Total	34,995,411	100.00%	39,800,947	100.00%

3. Current Products of the Company

Product Category	Main Products
Non-Volatile Memory IC	Flash Memory (NOR Flash, NAND Flash)
	Read-Only Memory (ROM)
Wafer Foundry Services	Sub-micron logic process / high voltage CMOS and BCD process
	Embedded ROM/MTP/OTP process

Currently, most of Macronix's flash memory products are NOR Flash. With excellent technology and quality, the product range covers various storage capacities, including 3V or 1.8V operating voltage, Serial or Parallel interfaces, and mainstream or niche specifications. Macronix has all products ready, and they are widely adopted by customers around the world.

In addition to NOR Flash, the independently-developed NAND Flash product line has stable quality and mass production, making Macronix one of the few suppliers of both NOR Flash and NAND Flash in the world.

Macronix has also passed the IATF 16949 certification of the quality management system in the fast-growing automotive electronics industry. The Company has equally managed to win the reliability standard AEC-Q100 certification for the two main product categories, namely NOR Flash and NAND Flash. Passing the two most important standards in the electronic IC supply chain makes Macronix an important partner of the first-class automotive electronics manufacturers.

Macronix's read-only memory products adopt world-class technologies with a complete lineup of storage capacity and a high level of security. With rich manufacturing experience and a comprehensive management system, Macronix has reached the highest level in the world in terms of delivery speed and shipment volume.

4. Plans for New Product Development

(1) Non-Volatile Memory Product Line

The Company makes good use of the advantages of the new equipment in the 12-inch wafer lab to create a higher-level R&D environment, and continues to develop the following three core technologies of the new generation. The Company will create the innovative memory product series and combinations based on this foundation.

※ 3D NAND Flash: The first generation project

※ 2D NAND Flash: 19 nanometer plan

※ NOR Flash: 48 nanometer plan

(2) Wafer Foundry Service

※ Integrating Macronix's own embedded non-volatile memory logic platform technology into MCU and IoT markets

※ Embedded ROM and OTP are applied to voice ICs.

※ BCD (Bipolar-CMOS-DMOS) technology and integrating Macronix's own embedded non-volatile memory for analog and smart power management ICs.

(II) State of the Industry

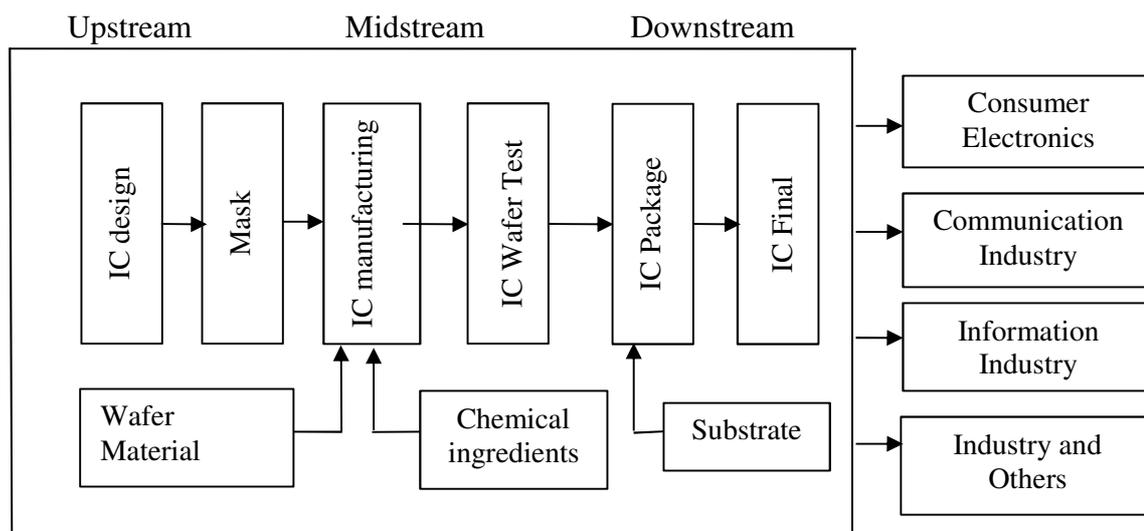
1. Industry Development and Competition

Memory IC can be divided into two types according to their functions. Volatile memory refers to the memory that loses data when the power has been switched off, such as DRAM and SRAM. On the other hand, non-volatile memory retains the memory even when the power is switched off. The Company specializes in non-volatile memory, especially Flash Memory and ROM (read-only memory).

Flash Memory can be read and written repeatedly, and is widely used in consumer electronics, communications, information, mobile phones, automotive, and industrial fields. Macronix is the world's leading supplier of NOR Flash and SLC NAND Flash. It has the advantages of sound finance, stable supply, a 12-inch wafer lab, and production capacity. It will grow with the development of emerging applications in the future.

The special feature of ROM is that the data cannot be modified after storage. The main advantage is large storage capacity with low cost. Its application focuses on electronic gaming cards, electronic toys, and game consoles. The industry has become application-oriented. Macronix has long been ranked as the largest ROM supplier in the world, with more than half of the market share.

2. Correlation with Upstream, Midstream, and Downstream Sections of the Industry



Source: ITRI Industrial Economics and Knowledge Center

The Company provides customers with a complete range of flexible solutions from R&D, manufacturing to backend package testing and is one of the few professional suppliers in the world that specialize in non-volatile memory.

(III) Overview of Technology and Research & Development

1. R&D Expenses

Item	Year	
	2019	2020
R&D expenses	3,555,919	4,115,844
Operating Revenue	34,995,411	39,800,947
% of R&D expenses to Operating Revenue	10%	10%

Unit: NT\$ thousands

2. Successfully Developed Technologies or Products

In 2020, Macronix successfully implemented product and technology innovations to extend its superior product competitiveness.

(1) Technology Innovation

※ The innovation and demonstration of the 3D NAND flash IC and control technology.

(2) Product Innovation

※ Suitable for automotive electronic applications, the innovation and mass production of the new-generation, ultra-fast NOR Flash.

※ Macronix's mature proprietary 0.11 μm embedded non-volatile memory technology and 0.18 μm BCD (Bipolar-CMOS-DMOS) technology are integrated to provide foundry services in MCU and analog IC related markets.

(3) Intellectual Rights Achievements

Macronix is persistent in its pursuit of innovation and invention. It is proactive in its application for patents and in the deployment of its international patent strategy network. The Company regularly reports on issues related to intellectual property in each quarterly meeting of the board of directors. Intellectual Property Strategy: In today's international industrial environment, intellectual property rights are gradually becoming the weapons used in the competition for strategic technologies. For Macronix, a company that strives to become a mainstream leader and a global provider of comprehensive solutions, the key strategy to sustainable operations is in the planning, deployment, production, and accumulation of equal amounts of quality and quantity in its patent rights strategy network, which entails the creation of high-quality innovative technology and intellectual property that can protect high-value-added products.

Intellectual Property Management: To encourage employees to pro-actively submit their inventions, Macronix has established the Patent Management and Incentive Guidelines, and has also introduced the Intellectual Property Rights and Patent Service Network, which incorporates patent engineers, developers, and the patent office and offers real-time control of each step in the intellectual property process.

Intellectual Property Risk and Countermeasures: The Company values R&D and innovation, and actively applies for patents as a form of intellectual property rights. As of 2020, the Company has obtained 3,111 patents in the U.S., 2,922 patents in Taiwan, 1,990 patents in China, and 297 patents in other countries. More than 1,200 patents are pending in the patent offices of different countries. The Company will continue to seek the protection of patent and intellectual property rights for the innovative technologies it has developed.

The Company will continue to seek the protection of patent and intellectual property rights for the innovative technologies it has developed.

(IV) Short- and Long-Term Business Development Plans

1. Short-term

- ※ Develop XtraROM[®] and NAND Flash product solutions for video games and entertainment to enhance the business growth of niche-based applications.
- ※ Provide customized services and promote the compact nature of NOR Flash in order to increase adoption in consumer electronics, information applications, and IoT.
- ※ Make good use of the high quality of the Company's products and the excellent production management to develop high value-added business in automotive electronics and medical electronics.
- ※ Macronix's mature proprietary embedded non-volatile memory logical platform and BCD (Bipolar-CMOS-DMOS) technology are integrated to provide foundry services in MCU, IoT, and analog and smart power management IC related markets.

2. Long-term

- ※ Develop high-capacity 2D and 3D NAND Flash technologies and products to provide solutions for niche applications.

II. Market and Sales Overview

(I) Market Analysis

1. Net Revenue by Geography

Unit: NT\$ thousands

Year		2019		2020	
		Net revenue	%	Net revenue	%
Domestic		6,320,298	18.06	6,867,071	17.25
Export	Japan	15,197,890	43.43	17,745,042	44.59
	USA	1,443,461	4.12	1,441,766	3.62
	Europe	2,493,995	7.13	2,527,467	6.35
	Asia	9,539,767	27.26	11,219,601	28.19
	Subtotal	28,675,113	81.94	32,933,876	82.75
Total		34,995,411	100.00	39,800,947	100.00

2. Market Share

(1) ROM

The Company's ROM products account for more than 50% of the global market and has been firmly established as the market leader.

(2) NOR Flash

We remain a global leader in non-volatile memory devices with the market share of our NOR flash product line exceeding 24% in 2020, slightly higher than the previous year.

3. Competitive Niches

The Company has been developing ROM and Flash technology and products for more than 30 years. The continuous innovation enhances competitiveness while maintaining stable product quality and supply. Recently, IoT and automotive electronics applications are in the ascendant. One of the trends is the need to integrate NOR Flash into compact wafer products. Macronix's emphasis on quality and supply is its competitive advantage.

4. Favorable and Unfavorable Factors Affecting the Company's Development Prospects and Corresponding Countermeasures

The Company's operations and finance are currently sound and stable. The independent technologies and production of Flash Memory and ROM, and stable supply has won customers' trust as Macronix's competitive advantage.

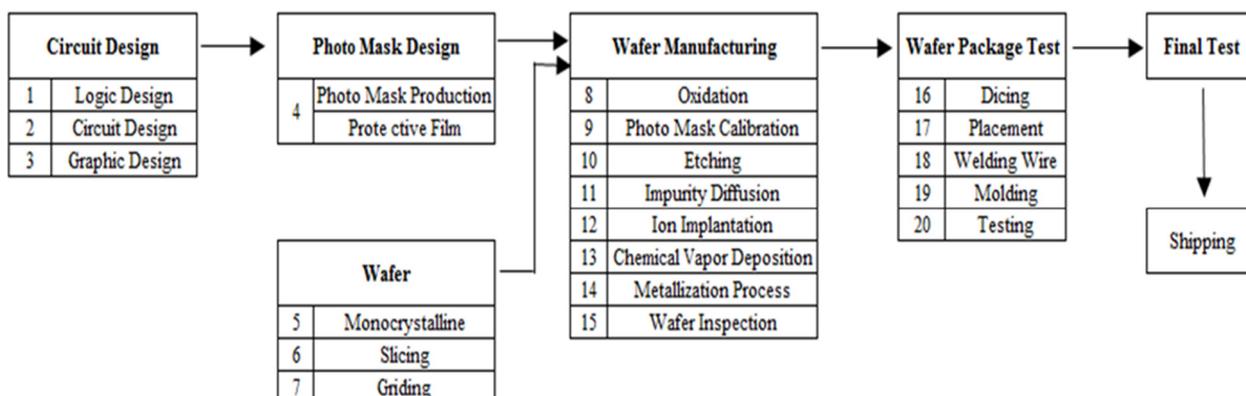
In order to achieve sustainable development, the Company will continue to develop advanced non-volatile memory technology and update the 12-inch fab equipment to create an advanced R&D environment and production base. Our goal is to provide customers with superior products and services in order to gain a stable foothold in the industry.

(II) Important Applications and Production Processes of the Primary Products

1. Major Uses of the Primary Products

Product Category	Primary Products	Use and Function
Non-Volatile Memory IC	Flash Memory	Used in mobile phones, set-top boxes, IoT, personal computers, digital cameras, automotive electronics, CD players, printers, hard drives, network devices, tablets, wireless communications (Bluetooth, WLAN), and large entertainment equipment.
	ROM	Mainly used in TV game cards, electronic entertainment equipment, electronic toys and so on.
Wafer Foundry Services	Sub-micron logic process / high voltage CMOS and BCD process	Providing high-voltage CMOS manufacturing technology in order to serve analog IC design customers.
	Embedded ROM/MTP/OTP Process	Providing embedded ROM/MTP/OTP integration technology to serve microcontroller IC design customers.

2. Production Process



(III) Supply of Primary Raw Materials

The ICs manufactured by our fabs are mainly made of silicon wafers, photoresist chemicals, and special gases. The suppliers are well-known large factories at home and abroad, with stable supply and excellent quality.

(IV) Suppliers/Customers Accounted for at Least 10% of Purchase/Sales and Respective Amount and Percentage

1. Information on Major Suppliers in the Last Two Fiscal Years

Unit: NT\$ thousands

Item	2019				2020			
	Name	Amount	Percentage of Annual Net Purchase (%)	Relationship with the Issuer	Name	Amount	Percentage of Annual Net Purchase (%)	Relationship with the Issuer
1	Supplier A	2,800,371	34.10	Related party	Supplier A	6,209,245	52.25	Related party
	Others	5,411,428	65.90		Others	5,674,686	47.75	
	Net Purchase	8,211,799	100.00		Net Purchase	11,883,931	100.00	

Note 1: In line with regulations regarding IFRSs since 2013, the figures in this chart are based on the consolidated financial statements.

Note 2: Names of suppliers taking up more than 10% of the total purchase for the last two years and the amount as well as percentage are listed. However, because the contract stipulates that the name of the supplier should not be disclosed, or the counterparty is an individual but not a related party, it can be represented by a code instead.

Note 3: The increase/decrease is caused by changes in market trends and customer demands.

2. Information on Major Customers in the Last Two Fiscal Years

Unit: NT\$ thousands

Item	2019				2020			
	Name	Amount	Percentage of Annual Net Sales (%)	Relationship with the Issuer	Name	Amount	Percentage of Annual Net Sales (%)	Relationship with the Issuer
1	Customer A	13,236,202	37.82	Related party	Customer A	16,101,433	40.45	Related party
	Others	21,759,209	62.18		Others	23,699,514	59.55	
	Net Sales	34,995,411	100.00		Net Sales	39,800,947	100.00	

Note 1: Names of customers taking up more than 10% of the total sales for the last two years and the amount as well as percentage are listed. However, because the contract stipulates that the name of the customer should not be disclosed, or the counterparty is an individual but not a related party, it can be represented by a code instead.

Note 2: The increase/decrease is caused by fluctuating customer needs.

(V) Table of Production Volume and Value in the Most Recent Two Years

Capacity/Output Unit: Kea or PC
Revenue Unit: NT\$ thousands

Produce Amount Main Products	Year	2019			2020		
		Capacity	Output	Amount	Capacity	Output	Amount
Flash			2,105,506	11,040,634		2,286,843	12,373,011
ROM			100,688	8,954,454		139,839	10,800,102
Subtotal (Kea)			2,206,194	19,995,088		2,426,682	23,173,113
Foundry (PC)			255,366	1,607,755		323,317	2,214,175
Capacity (PC)		1,260,775			1,167,500		

Note 1: Capacity refers to the quantity that can be produced under normal operations using existing production equipment after the company has taken factors such as necessary downtime, holidays, etc. into consideration.

Note 2: If the product is substitutable, capacity can be jointly calculated and explained in the note.

Note 3: Capacity and Foundry output are estimated in 8-inch equivalent wafers.

Note 4: Amount refers to the manufacturing cost of the finish goods that are available for sale in the year.

(VI) Sales & Shipments in the Most Recent Two Years

Unit: Shipments (Kea or PC)
Revenue Unit: NT\$ thousands

Sales & Shipments Products	Year	2019				2020			
		Domestic		Export		Domestic		Export	
		Shipments	Net revenue						
Flash		708,077	4,574,945	1,192,730	14,906,082	679,862	4,721,667	1,411,679	16,232,198
ROM		21	182	102,938	13,290,706	-	-	137,720	16,022,159
Foundry (Note)		196,513	1,744,740	56,421	451,824	242,692	2,143,117	80,836	651,614
Others		-	431	-	26,501	-	2,287	-	27,905
Total		708,098	6,320,298	1,295,668	28,675,113	679,862	6,867,071	1,549,399	32,933,876

Note1: Unit of Foundry shipments is 8-inch equivalent wafers.

Note2: The total amount of sales does not include Foundry (PC).

III. Employees Information

(I) Company Employees Information

Year		2019	2020	As of March 30, 2021
Number of employees	Management Personnel	686	787	777
	R&D and Technical Personnel	1,718	1,662	1,650
	Operators	1,430	1,443	1,445
	Total	3,834	3,892	3,872
Average age		38.3 years old	38.4 years old	39.3 years old
Average Length of Service		11 years and 8 months	11 years and 9 months	11 years and 11 months
Education Level (%)	Ph.D.	1.9	2	1.9
	Master's Degree	30	30.6	30.5
	Bachelor's	49.7	50.1	50.4
	High School	18.2	17.1	17
	Below High School	0.2	0.2	0.2

(II) Consolidated Employees information

Year		2019	2020	As of March 30,2021
Number of employees	Management Personnel	117	118	118
	R&D and Technical Personnel	158	155	155
	Operators	0	0	0
	Total	275	273	273
Average age		39.2 years old	39.3 years old	40 years old
Average Length of Service		8 years and 4 months	8 years and 7 months	8 years and 10 months
Educational Level (%)	Ph.D.	0.0	0.0	0.0
	Master's Degree	37.1	38.5	38.8
	Bachelor's	61.1	59.7	59.4
	High School	1.8	1.8	1.8
	Below High School	0.0	0.0	0.0

IV. Environmental Protection Expenditures

- (I) Any losses suffered by the company in the most recent fiscal year and up to the annual report publication date due to environmental pollution incidents (including any compensation paid and any violations of environmental protection laws or regulations found in environmental inspection, specifying the disposition dates, disposition reference numbers, the articles of law violated, and the content of the dispositions), and disclosing an estimate of possible expenses that could be incurred currently and in the future and measures being or to be taken. If a reasonable estimate cannot be made, an explanation of the facts of why it cannot be made shall be provided.

The Company has not been penalized for polluting the environment in the most recent fiscal year and up to the printing date of this annual report. The Company will continue to keep up with equipment maintenance and the implementation of an environmental management system in the future.

(II) Countermeasures and Expenditures

1. The Company's investment and improvement fees in environmental protection engineering, equipment operation maintenance fee, depreciation expenses for environmental protection equipment, clearance and disposal fees, and detection, project research, and training expenses amounted to NT\$152,191,000 in 2020.
2. Impact on competitive position and capital expenditures:
 - (1) The Company promotes energy-saving, water-saving, and waste reduction by investing in and maintaining various pollution prevention equipment. The Company continues to work toward the goal of establishing a green wafer plant that is high in efficiency and low in pollution.
 - (2) The Company has established the "ISO 14001 Environmental Management System", "ISO 14064-1 Guidelines for quantification and reporting of greenhouse gas emissions and removals at the organization level", "IECQ-QC080000 Hazardous Substance Process Management System", etc., and continues to invest manpower in the promotion and maintenance of strengthening its competitive edge on the international stage.
 - (3) The Company has received the Green Partner certificate from customers in meeting their requirements for "Green Products".
 - (4) The Company has received multiple awards from the competent authority in recent years. In 2020, the Company won awards including the "Outstanding Recognition of Environmental Preservation and Landscape", the "Outstanding Enterprise Award of Distinction in Group A for Waste Reduction and Circular Economy", etc.
 - (5) The Company purchases products with the "Green Mark" from the Environmental Protection Administration or ones with the Ministry of Economic Affairs' "Energy Saving" and "Water Saving" labels, such as energy-saving lamps, water dispensers, personal computers, cleaner supplies, and peripheral equipment, etc., to fulfill its corporate social responsibilities.
 - (6) We adopted a bicycle path in Hsinchu City and became responsible for its cleaning and maintenance. We also assisted the Environmental Protection Administration in organizing environmental protection public welfare events, such as eco-friendly walking events, and gained the recognition of the competent authority and citizens.
 - (7) Based on respect and care toward social responsibility, the Company will continue to engage and invest in environmental protection in order to achieve the goal of sustainable development.

(III) The Company's Measures in Response to Restriction of Hazardous Substances (RoHS)

With the trend of green consumption awareness and the increasingly strict international environmental protection regulations, the Company strives to manage chemical substances in product components in addition to efforts of reducing environmental pollution caused by the production process.

1. Green Products

- (1) The products comply with the requirements of the European Union's Restriction of Hazardous Substances (RoHS).
- (2) The products meet the requirements of the European Union's Substance of Very High Concern (SVHC) and ELV (End-of-Life Vehicle).
- (3) No "conflict minerals" are used in the products (conflict minerals refer to minerals such as gold, tin, tungsten, tantalum and those related to labor exploitation in the Democratic Republic of the Congo and its adjoining countries).
- (4) The products have obtained green product certificates from internationally renowned customers such as Sony.

2. Management System

- (1) In September 2007, the Company passed the certification of the IECQ QC 080000 Hazardous Substance Process Management System. It obtained the certification once again in 2020, which ensured the effectiveness of green products management.
- (2) The Company Implements Risk Assessment of Suppliers (RAS) to ensure that the EU RoHS Directive and the requirements of SVHC are implemented both for the upstream and downstream of the supply chain, in compliance with international regulations and customer specifications.

V. Labor Relations

(I) Employee Benefits

1. Labor insurance and national health insurance: Employees' insurance and national health insurance coverage is handled according to laws and regulations. The employees enjoy the protection of both labor insurance and national health insurance from the first day of work.
2. Group insurance: Employees are covered by the Company's group insurance policies since the first day of work. The premiums are paid by the Company according to their positions. Group insurance is also open to the employees' family members provided that the employees pay the premiums, which provides extra protection and care for their families.
3. Cancer insurance: The employees receive cancer insurance coverage from the first day of work with the premiums borne by the Company. The employees can opt to pay for the same coverage for their spouses and children.
4. Travel insurance for business trips abroad: Employees' travel insurance is provided by the Company during business trips, covering incidents such as accidental death, injuries, and medical care.
5. Restaurants, accommodation, transportation, free parking space, and healthcare services.
6. Bonuses and employee benefits
7. Employee recreation and fitness center: The center is equipped with a 50-meter heated swimming pool, a hydrotherapy SPA, a children's swimming pool, an aerobics classroom, a fitness room, a massage room, karaoke, courses for billiard, table tennis, badminton, and squash, a family reading room, a children's play room, a video game room, and a common room.
8. Employee Welfare Committee: In order to promote employee welfare, the Company has set up the Employee Welfare Committee in accordance with the provisions of the Employee Welfare Fund

Act. The Company sets aside employee welfare fund to organize various welfare measures, activities, and the operation and management of employee clubs.

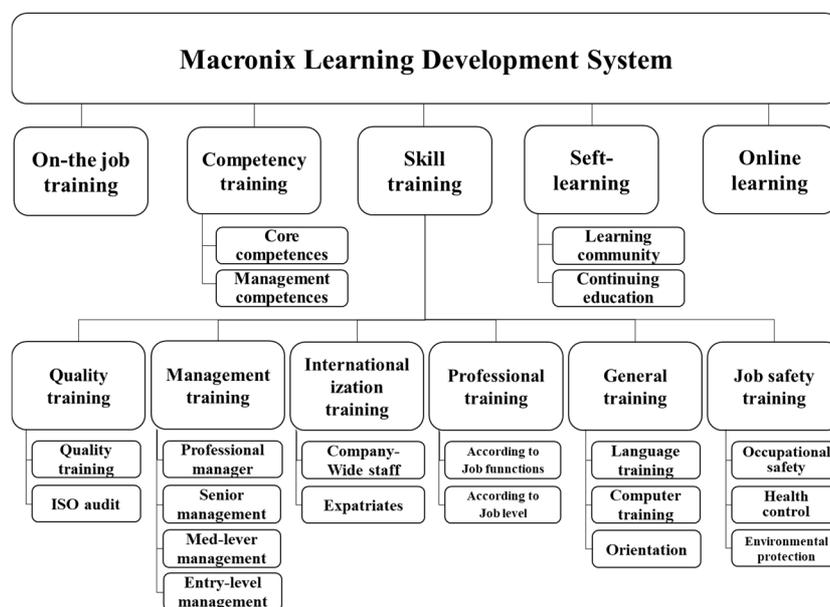
(II) Staff Training and Development

The Company held a total of 1,749 internal and external training courses in 2020. The average number of training hours was 47.36 hours. The total number of trainees was 44,902, and the total number of training hours was 189,047 hours. The total training cost was NT\$8,055,510.

Macronix's performance management system is closely integrated with individual development plans. Performance interviews are conducted twice a year to examine the setting of individual performance goals and the achievement of individual performance goals and organizational goals. Employees can communicate and discuss with supervisors face-to-face based on the individual job performance and career development needs. A personal development plan is customized to develop various professional knowledge and skills in a step-by-step manner.

※ Comprehensive Learning Development System

The learning development system of the Company is planned according to its strategies, job requirements, and individual development.



The Company's training is designed based on the principles of advancement, function, planning, and continuity. Through a clear and strategically oriented system structure, the Company provides clear and detailed learning maps for the employees to understand their learning path.

(1) The Company's learning roadmap system consists of four categories:

1. A newcomer roadmap is designed for new recruits to shorten the adjustment period and quickly integrate into corporate culture.
2. A competency roadmap is developed in accordance with the Company's values, in the hope that employees can demonstrate behavior in line with the Company's expectations.
3. The management roadmap is developed for different management levels in order to strengthen their management capacity step-by-step.
4. Professional roadmaps are developed according to professional competences required in different fields of work; internal and external lecturers are employed to carry out professional training courses to strengthen employees' professional capacity.

(2) Other training courses:

1. Providing language learning in line with individual needs to strengthen employees' language skills and competitiveness; organizing computer application software courses to improve work efficiency.
2. Offering opportunities for employees to participate in foreign academic seminars to understand the latest development trends of technology and industry abroad; providing opportunities of working overseas which can increase international vision and personal competitiveness

※ Diverse Learning Channels

The Company offers different learning channels to meet different employee learning needs.



1. Internal training:
The Company hires internal and external lecturers to hold various training courses in the Company.
2. External training:
The employees can participate in external training courses and seminars that are closely related to work.
3. On-the-job training:
Through professional learning in the workplace, the employees can "learn by doing" and acquire the knowledge and skills necessary for work.
4. Online learning:
The employees can use the Internet to learn without the limits of time and space and learn according to their individual learning speed.
5. Self-learning:
The employees can engage in cross-disciplinary learning of knowledge, skills, etc. according to their personal career plan. They can also advance individual learning through reading or participating in on-the-job training courses.

※ Comprehensive Training Facilities

Macronix Academy's comprehensive facilities and professional equipment enable each employee to study in a good environment.

1. Audio-visual study room: With multimedia computers, books, CDs, video tapes, and audio tapes, the rich learning channel allows employees to learn without boundaries.
2. Training classroom: Several lecture halls and group discussion rooms provide appropriate learning environment according to the curriculum design.
3. Computer classroom: One person is equipped with one computer to maximize learning efficiency.
4. International lecture hall: The hall can accommodate 250 people, and it is the ideal venue for large-scale training, seminars, and lectures.
5. Library: There are a large number of books, periodicals, and audio-visual materials to meet diverse reading needs.

(III) Retirement system

The Company's retirement policy is set according to the relevant provisions of the Labor Standards Act, and the "Retirement Reserve Supervision Committee" has been set up to supervise and manage the retirement reserve. In addition, pension is withheld according to the relevant provisions of the Labor Pension Act.

(IV) Employee Working Environment and Personal Safety Protection Measures

In order to achieve sustainable management, the Company implements Environmental Safety and Health Policy and lays emphasis on corporate social responsibility. It has obtained outstanding achievements in protecting the environment as well as the safety and health of employees. It has won many awards from the government and recognition from customers. The specific management measures include:

1. Management System

- (1) Passed verification from ISO 14001 Environmental Management System, ISO 45001 Occupational Safety and Health Management System, and TOSHMS Taiwan Occupational Safety and Health Management System.
- (2) Verified by the IECQ QC080000 Hazardous Substance Process Management System. The products meet the requirements of EU RoHS and have obtained the Green Product (GP) certificates from international customers.
- (3) Passed the verification "IOS 14064-1 Guidelines for quantification and reporting of greenhouse gas emissions and removals at the organization level".

2. Environmental Protection and Safety Management

- (1) Implementing strict and comprehensive monitoring of the work environment and monitoring air quality on site 24 hours a day to ensure the health and safety of employees.
- (2) Complying with laws and regulations as well as customer requirements to regularly identify and review environmental safety management measures.
- (3) Setting up various environmental pollution prevention measures (water, air, waste, toxic waste, and noise) and strictly monitoring the quality of the environment.
- (4) Implementing "Green Procurement" to purchase equipment or product with the domestic and foreign Environmental Protection Label, such as "Environmental Protection Label" from the Environmental Protection Administration or the "Energy Conservation Label" and "Water Conservation Label" from the Ministry of Economic Affairs, which include energy-saving lamps, water dispensers, personal computers and their peripheral equipment, etc. to realize corporate social responsibility; recognized as an Excellent Green Procurement Unit in the private sector by the Hsinchu Municipal Government in 2020.
- (5) Fully providing employees with personal protective equipment (PPE) and comprehensive safety, health, and environmental protection training.
- (6) Establishing an Emergency Response Team (ERT) with dedicated staff on call 24 hours a day and establishing a Business Continuity Plan (BCP), implementing training, to ensure the safety of all employees and the Company's factory buildings.
- (7) Regularly inspecting the fire safety equipment and complying with the buildings' public safety; regularly holding evacuation drills to improve staff resilience.
- (8) Regularly improving and reviewing human factors in the work environment to provide employees with a comfortable work environment.

- (9) Assisting the Hsinchu Science Park Administration Bureau to organize the work safety and environmental protection promotion month.
- (10) Adopting the Hsinchu "Environmental Bikeway", implementing environmental protection public welfare events.

3. Health Management

- (1) Regularly holding employee health promotion activities and providing quality health management services. Macronix won the "National Excellent Healthy Workplace – Paradigm in Health Award" from the Ministry of Health and Welfare in 2019.
- (2) Regularly bringing doctors on site to provide employee health consultation and health promotion activities, as well as conducting health risk assessment and graded health management.
- (3) The responsible unit collects the latest epidemic prevention information to strengthen the epidemic prevention management, provides vaccination services and gives "anti-epidemic packages" for employees on business trips abroad to protect their health.
- (4) In response to the COVID-19 outbreak the "Epidemic Prevention Office" was established to carry out overall planning of the matters related to epidemic prevention, and to conduct rolling review and adjustment of emergency response plans based on the situation in Taiwan and overseas, thereby preventing the pandemic from affecting our operations, while protecting the health of our employees and visitors.
- (5) Improving the employee assistance program and providing the best psychological counseling services.
- (6) Implementing maternal health protection measures to take care of pregnant employees and implementing the principle of three noes (no night shifts, no carrying heavy loads, and no engaging in free radiation operations) to build a friendly workplace.
- (7) Regularly monitoring the work environment to ensure a good working environment and protect employee health.
- (8) Conducting spot checks of food ingredients such as meat, oil, and flour products in the Company's kitchen; entrusting government-accredited institution to inspect and ensure the safety of employees' food.
- (9) Setting up a "breastfeeding room" for employees, which has gained employee satisfaction with its lovely environment and comprehensive equipment and received the triennial "Excellence Award" from the Hsinchu City Public Health Bureau in 2020.

(V) Measures for Safeguarding Labor Agreements and Employees' Rights and Interests

1. The Company regularly organizes various meetings as channels of communication, including orientation, departmental meetings and labor-management meetings, etc. The goal is to facilitate communication and ensure all opinions are heard.
2. The Company has set up the "No Topic is Off Limits" suggestion box for the employees to communicate and express their opinions. Employees can make inquiries, suggestions, and complaints through the suggestion box.
3. The Company has set up a paper and digital bulletin board to facilitate timely delivery of information that is relevant to the employees' rights and interests.
4. "Regulations Governing Sexual Harassment" has been developed to prevent sexual harassment and maintain gender equality at work, detailing the prevention, complaint filing, and punishment of sexual harassment.

5. The Company has set up the "Our Family Employee Relationship Portal Website" as a channel of communication with features including an interface for communicating employee needs directly with the management team, information sharing, lifestyle tips sharing, passing on culture, and employee assistance. Positive behavior is encouraged to enhance motivation and maintain a harmonious labor-management relationship.

(VI) List any losses suffered by the company in the most recent fiscal years and up to the annual report publication date due to labor disputes (including any violations of the Labor Standards Act found in labor inspection, specifying the disposition dates, disposition reference numbers, the articles of law violated, the substance of the legal violations, and the content of the dispositions), and disclosing an estimate of possible expenses that could be incurred currently and in the future and measures being or to be taken. If a reasonable estimate cannot be made, an explanation of the facts of why it cannot be made shall be provided.

Since its establishment in 1989, the Company has maintained harmonious labor-management relations. There have not been and will not be losses due to labor disputes. The Company has received recognition of the highest level from the competent authority. The awards regarding labor-management relations received in the past five years are as follows:

Year	Awards	Issued by
2016	Awarded with Top Honor for an Accredited Healthy Workplace	Health Promotion Administration, Ministry of Health and Welfare
2016	Third Place in the Breastfeeding Room Competition, Workplace Category	Public Health Bureau, Hsinchu City
2017	Sports Enterprise Certification	Sports Administration, Ministry of Education
2017	Awarded Excellence in Workplace Equality Promotion	Hsinchu Science Park Bureau
2017	Award of Excellence for Breastfeeding Room Certification	Public Health Bureau, Hsinchu City
2018	Sports Enterprise Certification	Sports Administration, Ministry of Education
2018	Gold Level	Responsible Business Alliance
2018	Health Promotion Seal	Health Promotion Administration, Ministry of Health and Welfare
2018	Healthy Workplace Creative Gold Award	Health Promotion Administration, Ministry of Health and Welfare
2019	CSR Annual Sustainable Elite	SGS Taiwan Ltd. (SGS)
2019	【Paradigm in Health Award】 from the National Excellent Healthy Workplace	Health Promotion Administration, Ministry of Health and Welfare
2019	【Award for Workplace Innovation】 from the Creativity Gold Award for Healthy Workplace	Health Promotion Administration, Ministry of Health and Welfare
2019	Healthy Workplace Certification	Health Promotion Administration, Ministry of Health and Welfare
2020	Sports Enterprise Certification	Sports Administration, Ministry of Education
2020	【Award of Excellence】 for Workplace Equality Promotion	Hsinchu Science Park Bureau
2020	Platinum Level	Responsible Business Alliance
2020	CSR Annual Sustainable Elite	SGS Taiwan Ltd. (SGS)
2020	Award of Excellence for Breastfeeding Room Certification	Public Health Bureau, Hsinchu City

VI. Important Contracts

Number	Contract	Party	Dates	Main Content	Restriction terms
1	Technology Transfer	Industrial Technology Research Institute	From February 1997	Technology transfer of MPEG-2 Audio Decoder	Intellectual property rights, use, confidentiality and other restrictions
2	License Agreement	Cybernetics, USA	From April 2000	Low Rate Coder technology license	Use, confidentiality and other restrictions
3	License Agreement	Saifun Semiconductors, Israel	From May 2000 until Saifun NROM patent validity period ends	“NROM” technology license	Intellectual property rights, use, confidentiality and other restrictions
4	License Agreement	Zoran, USA	From June 2000	Technology license of TV decoder/TV signal decoder+3Dimensional color signal enhancement function	Intellectual property rights, use, confidentiality and other restrictions
5	License Agreement	ARM, England	From August 2002	Obtained ARM technology license	Intellectual property rights, use, confidentiality and other restrictions
6	License Agreement	Saifun Semiconductors, Israel	From April 2004	MLC Flash technology license	Intellectual property rights, use, confidentiality and other restrictions
7	License Agreement	Mentor Graphics, Ireland	From July 2005	Work system technology license	Intellectual property rights, use, confidentiality and other restrictions
8	Strategic Alliance	Tower Semiconductor, Israel	From December 2000	Strategic alliance investment in Tower Semiconductor	Confidentiality and other obligations
9	License Agreement	Qimonda	From March 2011	Obtained a specific flash memory design related license	Use, confidentiality and other restrictions
10	Joint Development	IBM, USA	January 22, 2019- January 21, 2022	Joint research on phase-change non-volatile memory	Intellectual property rights, use, confidentiality and other restrictions
11	License Agreement	Creative Integrated Systems, Inc., USA	From April 2014	U.S. Patent 5,241,497 and 5,812,461 and related licensing	License, guarantee, exemption, confidentiality and other terms
12	Settlement Agreement	Spanion, USA	From January 2015	Reached a settlement for both parties’ litigation and disputes over global patents, and was granted cross-licensing of disputed patents.	Special patent license, settlement fee, confidentiality and other terms
13	License Agreement	RPX Corporation, USA	December 15, 2019- December 14, 2022	RPX and Round Rock technology license	License, use, confidentiality and other terms
14	Distribution Agreement	Avnet, Inc.	From September 2017	Expanded product sales on the international market	Confidentiality, license, liability and other terms

Number	Contract	Party	Dates	Main Content	Restriction terms
15	Purchase agreement	SUMCO CORPORATION, Japan	October 1, 2019- June 30, 2021	Raw materials purchasing	Confidentiality terms and other arrangements
16	Syndicated loan	Seven financial institutions including Taiwan Cooperative Bank	November 24, 2017- December 18, 2022	NT\$7.7 billion syndicated loan	Annual financial statements' liability ratio, current ratio, interest coverage multiples and others are subject to restrictions.
17	Settlement and License Agreement	Toshiba Corporation/ Toshiba Memory Corporation	From October 9, 2018	Settlement of patent litigation in the United States, Japan and Taiwan and cross-licensing patents	Special patent license, settlement fee, confidentiality and other terms
18	Syndicated loan	Nine financial institutions including Taiwan Cooperative Bank	February 25, 2019- February 24, 2024	NT\$8 billion syndicated loan	Annual financial statements' liability ratio, current ratio, interest coverage multiples and others are subject to restrictions.
19	Joint research	Tsing Hua University	March 1, 2018- October 31, 2020	Joint research on smart non-volatile memory circuit design	Intellectual property rights, use, confidentiality and other restrictions
20	Joint research	Tsing Hua University	September 1, 2020- December 31, 2021	Research on Low Power 4KB LDDC Code design and application to NAND Controller	Intellectual property rights, confidentiality terms and other terms

Chapter VI. Financial Summary

I. Condensed Balance Sheet and Comprehensive Income Statement in the Last Five Fiscal Years

(I) Condensed Balance Sheets

1. Condensed Consolidated Balance Sheets

Unit: NT\$ thousands

Item		Financial Information for the Last Five Fiscal Years				
		2016	2017	2018	2019	2020
Current Assets		17,468,115	24,532,556	36,677,290	26,886,695	30,161,824
Property, Plant, and Equipment		15,500,459	16,258,622	19,308,675	29,365,507	31,462,800
Intangible Assets		29,824	45,808	45,223	47,022	57,280
Other Assets		2,546,117	3,356,913	3,017,633	4,357,554	4,210,314
Total Assets		35,544,515	44,193,899	59,048,821	60,656,778	65,892,218
Current Liabilities	Before Distribution	10,053,390	13,059,869	20,152,229	15,794,226	16,568,758
	After Distribution	10,053,390	14,864,645	22,360,429	18,002,117	Note
Non-current Liabilities		7,171,725	6,477,683	7,536,235	12,369,884	13,129,068
Total Liabilities	Before Distribution	17,225,115	19,537,552	27,688,464	28,164,110	29,697,826
	After Distribution	17,225,115	21,342,328	29,896,664	30,372,001	Note
Equity Attributable to Shareholders of the Parent		18,317,714	24,655,662	31,360,023	32,491,392	36,193,592
Share Capital		36,145,881	18,047,758	18,401,670	18,399,089	18,561,864
Capital Surplus		340,713	(207,088)	(56,241)	543,920	384,772
Retained Earnings	Before Distribution	(18,651,070)	5,413,602	14,077,527	14,685,430	17,771,636
	After Distribution	(18,651,070)	3,247,871	11,869,327	12,477,539	Note
Other Equity		641,251	1,560,451	(903,872)	(977,986)	(365,619)
Treasury Shares		(159,061)	(159,061)	(159,061)	(159,061)	(159,061)
Non-controlling Interests		1,686	685	334	1,276	800
Total Equity	Before Distribution	18,319,400	24,656,347	31,360,357	32,492,668	36,194,392
	After Distribution	18,319,400	22,851,571	29,152,157	30,284,777	Note

Note: Pending approval from the shareholders' meeting.

2. Parent Company Only Balance Sheet

Unit: NT\$ thousands

Year		Financial Information for the Last Five Fiscal Years				
		2016	2017	2018	2019	2020
Item						
Current Assets		16,562,886	23,575,557	35,483,232	25,503,411	28,628,546
Property, Plant, and Equipment		14,974,723	15,781,321	18,829,669	28,904,312	31,016,511
Intangible Assets		21,945	44,149	42,755	43,559	54,629
Other Assets		3,949,425	4,809,653	4,689,353	6,075,266	6,059,348
Total Assets		35,508,979	44,210,680	59,045,009	60,526,548	65,759,034
Current Liabilities	Before Distribution	10,022,158	13,078,633	20,149,508	15,733,930	16,504,303
	After Distribution	10,022,158	14,883,409	22,357,708	17,941,821	Note
Non-current Liabilities		7,169,107	6,476,385	7,535,478	12,301,226	13,061,139
Total Liabilities	Before Distribution	17,191,265	19,555,018	27,684,986	28,035,156	29,565,442
	After Distribution	17,191,265	21,359,794	29,893,186	30,243,047	Note
Equity Attributable to Owners of the Company		18,317,714	24,655,662	31,360,023	32,491,392	36,193,592
Share Capital		36,145,881	18,047,758	18,401,670	18,399,089	18,561,864
Capital Surplus		340,713	(207,088)	(56,241)	543,920	384,772
Retained Earnings	Before Distribution	(18,651,070)	5,413,602	14,077,527	14,685,430	17,771,636
	After Distribution	(18,651,070)	3,247,871	11,869,327	12,477,539	Note
Other Equity		641,251	1,560,451	(903,872)	(977,986)	(365,619)
Treasury Shares		(159,061)	(159,061)	(159,061)	(159,061)	(159,061)
Non-controlling Interests		-	-	-	-	-
Total Equity	Before Distribution	18,317,714	24,655,662	31,360,023	32,491,392	36,193,592
	After Distribution	18,317,714	22,850,886	29,151,823	30,283,501	Note

Note: Pending approval from the shareholders' meeting.

(II) Statement of Comprehensive Income

1. Consolidated Statements of Comprehensive Income

Unit: NT\$ thousands

Item \ Year	Financial Information for the Last Five Fiscal Years				
	2016	2017	2018	2019	2020
Net Operating Revenue	24,124,973	34,196,916	36,953,032	34,995,411	39,800,947
Gross Profit	5,836,120	12,634,711	13,926,319	9,615,494	13,409,355
Income from Operations	(357,623)	5,753,206	6,509,338	3,098,877	5,866,477
Non-operating Income and Expenses	(113,431)	(216,729)	2,755,049	(72,551)	(25,431)
Income (loss) before Income Tax	(471,054)	5,536,477	9,264,387	3,026,326	5,841,046
Net Income (Loss) from Continuing Operations	(246,795)	5,517,309	8,992,849	3,012,901	5,325,612
Income from Discontinued Operations	-	-	-	-	-
Net Income (Loss)	(246,795)	5,517,309	8,992,849	3,012,901	5,325,612
Other Comprehensive Income, net of income tax	(76,995)	606,648	(943,048)	240,854	288,014
Total Comprehensive Income	(323,790)	6,123,957	8,049,801	3,253,755	5,613,626
Net Income (loss) Attributable to Shareholders of the parent	(243,013)	5,517,847	8,993,006	3,011,960	5,326,083
Net Income (loss) Attributable to Non-controlling interest	(3,782)	(538)	(157)	941	(471)
Comprehensive Income Attributable to Shareholders of the parent	(318,879)	6,124,501	8,049,958	3,252,814	5,614,102
Comprehensive Income Attributable to Non-controlling interest	(4,911)	(544)	(157)	941	(476)
Earnings (Loss) Per Share	(0.14)	3.06	4.94	1.64	2.90

2. Parent Company Only Statements of Comprehensive Income

Unit: NT\$ thousands

Item \ Year	Financial Information for the Last Five Fiscal Years				
	2016	2017	2018	2019	2020
Net Operating Revenue	23,733,107	33,500,949	36,280,727	34,235,969	38,995,968
Gross Profit	5,376,827	11,937,095	13,297,451	8,872,210	12,631,084
Income from Operations	(123,382)	5,530,009	6,391,270	2,966,762	5,691,103
Non-operating Income and Expenses	(351,554)	(12,162)	2,847,107	45,198	119,895
Income (Loss) before income tax	(474,936)	5,517,847	9,238,377	3,011,960	5,810,998
Net Income (Loss) from Continuing Operations	(474,936)	5,517,847	8,993,006	3,011,960	5,810,998
Income from Discontinued Operations	-	-	-	-	-
Net Income (Loss)	(243,013)	5,517,847	8,993,006	3,011,960	5,326,083
Other Comprehensive Income, net of income tax	(75,866)	606,654	(943,048)	240,854	288,019
Total Comprehensive Income	(318,879)	6,124,501	8,049,958	3,252,814	5,614,102
Net Income (Loss) Attributable to Shareholders of the parent	(243,013)	5,517,847	8,993,006	3,011,960	5,326,083
Net Income Attributable to Non-controlling interest	-	-	-	-	-
Comprehensive Income Attributable to Shareholders of the parent	(318,879)	6,124,501	8,049,958	3,252,814	5,614,102
Comprehensive Income Attributable to Non-controlling interest	-	-	-	-	-
Earnings (Loss) Per Share	(0.14)	3.06	4.94	1.64	2.90

(III) Independent Auditors' Opinions Over Last Five Fiscal Years

Year	Name of CPA	Audit opinions
2020	Tung Hui Yeh, Kuo Tyan Hong	An Unmodified Opinion
2019	Ming Hui Chen, Ching Pin Shih	An Unmodified Opinion
2018	Ming Hui Chen, Ching Pin Shih	An Unmodified Opinion
2017	Ming Hui Chen, Ching Pin Shih	An Unmodified Opinion
2016	Ming Hui Chen, Ching Pin Shih	An Unmodified Opinion

Note: The new auditing standard of the Republic of China requires "An unqualified opinion" be replaced by "An unmodified opinion" from 2016.

II. Financial Analysis for the Last Five Fiscal Years

1. Consolidated Financial Analysis - IFRS

Items analyzed (Note 1)		Year	Financial analysis for the last Five fiscal years				
			2016	2017	2018	2019	2020
Financial Structure Analysis (%)	Debt ratio		48.46	44.21	46.89	46.43	45.07
	Long-term capital to property, plant and equipment ratio		164.45	191.49	201.45	152.77	156.77
Liquidity Analysis (%)	Current ratio		173.75	187.85	182.00	170.23	182.04
	Quick ratio		100.98	110.85	90.76	87.52	103.20
	Interest coverage multiples		(0.55)	26.68	65.63	16.37	24.65
Operating performance Analysis	Accounts receivable turnover (times)		6.95	7.30	7.25	7.44	7.94
	Days Sales Outstanding		52.51	50.00	50.34	49.05	45.96
	Inventory turnover (times)		2.22	2.54	1.65	1.65	2.04
	Average payable turnover (times)		6.67	4.34	2.60	2.76	3.78
	Average Inventory turnover days		164.41	143.70	221.21	221.21	178.92
	Property, plant and equipment turnover (times)		1.50	2.15	2.08	1.44	1.31
	Total assets turnover (times)		0.66	0.86	0.72	0.58	0.63
Profitability Analysis	Return on total assets (%)		0.02	14.29	17.64	5.30	8.73
	Return on equity (%)		(1.34)	25.68	32.11	9.44	15.51
	Pre-tax income to paid-in capital ratio (%)		(1.30)	30.67	50.34	16.45	31.47
	Net income ratio (%)		(1.02)	16.13	24.34	8.61	13.38
	Basic Earnings per share (NT\$)		(0.14)	3.06	4.94	1.64	2.90
Cash flow	Cash flow ratio (%)		53.93	53.86	50.08	28.76	59.48
	Cash flow adequacy ratio (%)		56.89	87.65	100.94	77.63	83.96
	Cash reinvestment ratio (%)		4.30	5.30	5.83	1.58	4.91
Leverage	Operating leverage		(4.71)	1.34	1.33	1.88	1.64
	Financial leverage		0.54	1.04	1.02	1.07	1.04
<p>Analysis of deviation over 20% for the last two years:</p> <ul style="list-style-type: none"> • An increase in interest coverage multiples: Mainly due to the increase in Pre-tax income in 2020. • An increase in accounts payable turnover: Mainly due to the decrease in average accounts payable in 2020. • An increase in inventory turnover: Mainly due to the decrease in average net inventory in 2020. • An increase in return on total assets: Mainly due to the increase in net Income in 2020. • An increase in return on equity: Mainly due to the increase in net Income in 2020 • An increase in pre-tax income to paid-in capital ratio: Mainly due to the increase in Pre-tax income in 2020. • An increase in net income ratio: Mainly due to the increase in net income in 2020. • An increase in basic Earnings per share: Mainly due to the increase in net income in 2020. • An increase in cash flow ratio: Mainly due to the increase in Net cash flow from operating activities in 2020. • An increase in cash reinvestment ratio: Mainly due to the increase in Net cash flow from operating activities in 2020. 							

Note1: Please refer to page 109to 110 of this annual report for the calculation formula.

2. Parent Company Only Statements of Financial Analysis - IFRS

Year		Financial analysis for the last Five fiscal years				
		2016	2017	2018	2019	2020
Items analyzed (Note 2)						
Financial Structure Analysis (%)	Debt ratio	48.41	44.23	46.89	46.32	44.96
	Long-term capital to property, plant and equipment ratio	170.20	197.27	206.56	154.97	158.80
Liquidity Analysis (%)	Current ratio	165.26	180.26	176.10	162.09	173.46
	Quick ratio	93.71	103.95	85.16	79.50	94.62
	Interest coverage multiples	(0.56)	26.59	65.44	16.46	24.94
Operating Performance Analysis	Accounts receivable turnover (times)	6.47	6.71	7.02	7.56	7.83
	Days Sales Outstanding	56.41	54.39	51.99	48.28	46.61
	Inventory turnover (times)	2.25	2.56	1.66	1.65	2.05
	Average payable turnover (times)	6.69	4.34	2.59	2.76	3.78
	Average inventory turnover days	162.22	142.57	219.87	221.21	178.04
	Property, plant and equipment turnover (times)	1.53	2.18	2.10	1.43	1.30
	Total assets turnover (times)	0.65	0.84	0.70	0.57	0.62
Profitability Analysis	Return on total assets (%)	0.03	14.29	17.64	5.30	8.74
	Return on equity (%)	(1.32)	25.68	32.11	9.43	15.51
	Pre-tax income to paid-in capital ratio (%)	(1.31)	30.57	50.20	16.37	31.30
	Net income ratio (%)	(1.02)	16.47	24.79	8.80	13.66
	Basic Earnings per share (NT\$)	(0.14)	3.06	4.94	1.64	2.90
Cash Flow	Cash flow ratio (%)	54.99	52.50	51.59	27.54	56.68
	Cash flow adequacy ratio (%)	65.72	88.36	104.79	78.34	82.83
	Cash reinvestment ratio (%)	4.40	5.19	6.07	1.44	4.60
Leverage	Operating leverage	(15.21)	1.36	1.33	1.90	1.65
	Financial leverage	0.29	1.04	1.02	1.07	1.04
<p>Analysis of deviation over 20% for the last two years.:</p> <ul style="list-style-type: none"> • An increase in interest coverage multiples: Mainly due to the increase in Pre-tax income in 2020. • An increase in accounts payable turnover: Mainly due to the decrease in average payable in 2020. • An increase in inventory turnover: Mainly due to the decrease in average net inventory in 2020. • An increase in return on total assets: Mainly due to the increase in net Income in 2020. • An increase in return on equity: Mainly due to the increase in net Income in 2020 • An increase in pre-tax income to paid-in capital ratio: Mainly due to the increase in Pre-tax income in 2020. • An increase in net income ratio: Mainly due to the increase in net income in 2020. • An increase in basic Earnings per share: Mainly due to the increase in net income in 2020. • An increase in cash flow ratio: Mainly due to the increase in Net cash flow from operating activities in 2020. • An increase in cash reinvestment ratio: Mainly due to the increase in Net cash flow from operating activities in 2020. 						

Note 1: The formula for calculation of the preceding table are as follows:

- Financial structure
 - Debt-asset Ratio = Total Liabilities / Total Assets.
 - Long-term Capital to Property, Plant, and Equipment ratio = (Total Equity + Non-current Liabilities) / Net Property, Plant, and Equipment.
- Solvency
 - Current Ratio = Current Assets / Current Liabilities.
 - Quick Ratio = (Current Assets - Inventories - Prepaid Expenses) / Current Liabilities.
 - Interest coverage multiples = Net income before Tax and Interest / Interest Expenses.
- Operating Performance

- (1) Receivables turnover rate (including bills receivable resulting from accounts receivable and business operations) = Net sales / Average accounts receivable in various periods (including bills receivable resulting from accounts receivable and business operations).
 - (2) Days Sales Outstanding = 365 / Receivables Turnover Rate.
 - (3) Inventory Turnover Rate = Cost of Sales / Average Inventory.
 - (4) Payables turnover rate (including bills payable resulting from accounts payable and business operations) = Cost of sales / Average accounts payable in various periods (including bills payable resulting from accounts payable and business operations).
 - (5) Average Inventory Turnover Days = 365 / Inventory Turnover Rate.
 - (6) Property, Plant, and Equipment Turnover Rate = Net Sales / Average Net Property, Plant, and Equipment.
 - (7) Total Asset Turnover Rate = Net Sales / Average Total Assets.
4. Profitability
 - (1) Return on assets (ROA) = [Net income + Interest expenses x (1 - interest rates)] / Average total asset.
 - (2) Return on Equity = Net Income / Average Total Equity.
 - (3) Net Income ratio = Net Income / Net Sales.
 - (4) Basic Earnings per Share = (Income Attributable to Owners of Parent Company – Dividends on Preferred Stock) / Weighted Average Number of Shares Issued. (Note 2)
 5. Cash flow
 - (1) Cash Flow Ratio = Net Cash Flow from Operating Activities / Current Liabilities.
 - (2) Cash Flow Adequacy Ratio = Net cash flow from operating activities for the most recent five years / (capital expenditures + inventory increase + cash dividend) for the most recent five years.
 - (3) Cash Reinvestment Ratio = (Net cash flow from operating activities – cash dividend) / (gross property, plant, and equipment + long-term investment + other non-current assets + working capital). (Note 3)
 6. Leverage
 - (1) Operating Leverage = (Net Operating Revenue - Variable Operating Costs and Expenses) / Operating Income (Note 4).
 - (2) Financial Leverage = Operating Income / (Operating Income - Interest Expenses).
- Note 2: Special attention shall be paid to the following matters when using the calculation formula of earning per share above:
1. The calculation should be based on the weighted average shares of common stock, rather than the number of issued shares at the end of the year.
 2. For any cash capital increase or transaction of treasury stock, the circulation period should be taken into consideration when calculating the weighted average number of shares.
 3. For capital increase by retained earnings or capital surplus, the Company shall retrospectively adjust the earnings per share for the past fiscal year and the semi-annual earnings according to the ratio of the capital increase, without considering the issuance period of the capital increase.
 4. If the preferred share is a non-convertible cumulative preferred share, the dividend of the year (whether it is issued or not) shall be deducted from net income after tax (NIAT), or net loss after tax. If the preferred stock is non-cumulative, the dividend of the preferred stock should be deducted from the net profit after tax if the Company has net profit after tax. If the Company has a deficit, no adjustment is necessary.
- Note 3: Special attention should be paid to the following matters when measuring cash flow analysis:
1. Net cash flow from operating activities is the net cash inflow from operating activities in the cash flow statement.
 2. Capital expenditure is the annual cash outflow of capital investment.
 3. The increase in inventory is calculated only when the balance at the end of the period is greater than the balance at the beginning of the period. If the inventory decreases at the end of the year, it is counted as zero.
 4. Cash dividends include cash dividends from ordinary shares and preferred stocks.
 5. The gross property, plant, and equipment refer to the total value of PP&E prior to accumulated depreciation.
- Note 4: The issuer shall classify the operating costs and operating expenses as fixed or variable in accordance with their nature. If it involves estimation or subjective judgment, the classification shall remain reasonable and consistent.
- Note 5: If the Company's shares have no par value or a par value other than NT\$10, this value shall be replaced in any calculations that involve the paid-in capital ratio with the equity ratio attributable to owners of parent Company as shown in the balance sheet.

III. Audit Committee's Report for the Most Recent Year

Audit Committee's Report

To: 2021 Annual Shareholders' Meeting of Macronix International Co., Ltd.

The 2020 Financial Statements of the Company (including the parent company only financial statements), the 2020 Business Report, and the proposed 2020 Distribution Plan have been duly reviewed and concluded by the undersigned as accurate. According to Article 14-4 of Securities and Exchange Act and Article 219 of the Company Act, it is hereby reported as above.

Independent director: Yan-Kuin Su

Independent director: Tyzz-Jiun Duh

Independent director: Chiang Kao

Independent director: John C.F. Chen

Dated: February 26, 2021

- IV. Financial Statements for the Most Recent Year:** Please refer to pages 125 to 193 of this annual report.
- V. Stand-Alone Financial Statements for the Most Recent Year Certified By the Accountant:** Please refer to pages 194 to 258 of this annual report.
- VI. Financial Difficulties Encountered by the Company and Its Affiliated Companies in the Most Recent Fiscal Year and Up to the Printing Date of this Annual Report:** None.

Chapter VII. Review, Analysis, and Risks of Financial Position and Performance

I. Analysis of Financial Status

Unit: NT\$ thousands

Item	2020	2019	Difference	%
Current Assets	30,161,824	26,886,695	3,275,129	12.18%
Non-current Assets	35,730,394	33,770,083	1,960,311	5.80%
Total Assets	65,892,218	60,656,778	5,235,440	8.63%
Current Liabilities	16,568,758	15,794,226	774,532	4.90%
Non-current Liabilities	13,129,068	12,369,884	759,184	6.14%
Total Liabilities	29,697,826	28,164,110	1,533,716	5.45%
Equity Attributed to Shareholders of the Parent	36,193,592	32,491,392	3,702,200	11.39%
Non-controlling Interest	800	1,276	(476)	(37.30%)
Total Equity	36,194,392	32,492,668	3,701,724	11.39%

If the difference in comparison with the previous period exceeds 20%, and the main reason and the impact are analyzed as follows:

- Non-controlling interests: The Non-100% equity holdings in subsidiaries caused a decrease from 2019.

II. Analysis of Financial Performance

Unit: NT\$ thousands

Item	2020	2019	Difference	%
Net Operating Revenue	\$39,800,947	\$34,995,411	\$4,805,536	13.73%
Operating Costs	26,391,592	25,379,917	1,011,675	3.99%
Gross Profit	13,409,355	9,615,494	3,793,861	39.46%
Realized (Unrealized) Gains from the Affiliated Companies	-	-	-	-
Realized Gross Profit	13,409,355	9,615,494	3,793,861	39.46%
Operating Expenses	7,542,878	6,516,617	1,026,261	15.75%
Income from Operations	5,866,477	3,098,877	2,767,600	89.31%
Non-operating Income and Expenses	(25,431)	(72,551)	47,120	64.95%
Net Income before Tax	5,841,046	3,026,326	2,814,720	93.01%
Income Tax Expenses	515,434	13,425	502,009	3739.36%
Net Income for the Year	5,325,612	3,012,901	2,312,711	76.76%
Other Comprehensive Income (Loss)	288,014	240,854	47,160	19.58%
Total Comprehensive Income for the Year	\$5,613,626	\$3,253,755	\$2,359,871	72.53%

Analysis of any increase/decrease in ratio exceeding 20%:

- Gross Profit: The increase compared to 2019 was mainly due to higher operating revenue in 2020, and gain from price recovery of inventory in 2020 after listing inventory losses in 2019.
- Income from Operations: The increase compared to 2019 was mainly due to higher gross profit in 2020.
- Non-operating Income and Expenses: The decrease in non-operating expenses compared to 2019 was mainly due to an increase in foreign exchange gain in 2020.
- Net Income before Tax: The increase compared to 2019 was mainly due to higher gross profit in 2020.
- Income Tax Expenses: The increase compared to 2019 was mainly due the increase in profits and decrease in deferred income tax assets in 2020.
- Net Income for the Year : The increase compared to 2019 was mainly due to higher gross profit in 2020.
- Total Comprehensive Income for the Year: The increase compared to 2019 was mainly due to higher gross profit in 2020.

III. Analysis of Cash Flow

(I) Cash Flow Analysis and Remedy for Liquidity Shortfall

Unit: NT\$ thousands

Cash Balance 12/31/2019 ^①	Net Cash Provided by Operating Activities in 2020 ^②	Net Cash used in Investing and Financing Activities in 2020 ^③	Cash Balance 12/31/2020 ①+② -③	Remedy for Liquidity shortfall	
				Investing plan	Financing plan
8,725,089	9,855,219	(6,701,009)	11,879,299	None	None

Note 1: Analysis of net cash change in 2020

- (1) NT\$9,855.2 million net cash generated by operating activities : mainly from net income and depreciation expenses.
- (2) NT\$6,042.9 million net cash used in investing activities : primarily for capital expenditures.
- (3) NT\$579.3 million net cash used in financing activities : primarily for long-term loans and cash dividend payment.
- (4) NT\$78.7 million net decrease was effect of exchange rate changes

Note 2: Remedial Actions for Liquidity shortfall: Not applicable.

(II) Cash flow Projection for Next Year:

The Company plan to paying capital expenditures and cash dividends by bank financing and cash on hand.

IV. Recent Years Major Capital Expenditures and Impact on Financial and Business

(I) Capital Expenditure and Source of Funds

Unit: NT\$ thousands

Project	Actual or Planned Source of Capital	Actual use of Capital			Total Amount
		2018	2019	2020	
Production equipment and advanced process equipment	Self-owned funds, bank borrowings	4,861,806	12,752,517	6,036,935	23,651,258

(II) Expected Benefits

The capital expenditure mentioned above is for expanding capacity of high-end production and accelerating the development of advanced processes (including 3D NAND); its aim is lowering unit costs and enhancing product competitiveness.

V. Reinvestment Policy for the Most Recent Fiscal Year, the Main Reasons for the Profits/Losses Generated Thereby, the Plan for Improving Re-Investment Profitability, and Investment Plans for the Coming Year

The Company's reinvestment policy is in line with its operating policies and long-term strategic purposes. Most of the investee companies are consolidated financial statements entities. The value of non-consolidated entities accounts for 3.5% of the total assets. The dividend income for fiscal year 2020 was NT\$101,174 thousand on a consolidated basis.

VI. Analysis of Risk Management in the Most Recent Fiscal Year and Up to the Printing Date of this Annual Report

(I) Effects of Changes in Interest Rates, Foreign Exchange Rates and Inflation on Corporate Finance, and Future Response Measures

1. Interest rate

As countries continue to be vaccinated, the impact of COVID-19 will gradually decline and the global economy is expected to return to growth. However, major economies have all maintained monetary easing and continue roll out large scale stimulus due to several uncertainties, including the coverage and effectiveness of vaccines, as well as the development in US-China relations. Domestic prices and inflation are expected to mild, the economy is expected to grow steadily, and the Central Bank decided to maintain interest rates and continue monetary easing during the joint meeting of directors and supervisors on March 18, 2021, so the domestic financial market will still remain in a low interest environment.

The Company regularly assesses the changes in bank loan rates and actively negotiates with banks to reduce interest rates or take relevant measures to reduce the impact of interest rate fluctuations on the Company's overall operations.

2. Foreign exchange rate

As more than 90% of the Company's revenue is denominated in US dollars and Japanese Yen, and about 40% of manufacturing cost as well as 60% of capital expenditure are paid in US dollars and Japanese Yen, exchange rate fluctuations in New Taiwan Dollar against the US Dollar (and Japanese Yen) will have a certain impact on the Company's financial position. The Company takes hedging actions such as disposing US dollars (Japanese Yen) and pre-selling forward foreign exchange based on the account exchange rate, and will continue to implement these measures in the future in the hope of reducing the impact of exchange rate fluctuations on the Company's profit and loss. The Company's net profit on foreign exchange in 2020 was NT\$95,298 thousand.

3. Inflation

Major economies will recover at a faster pace this year (2021), and there is still high demand from emerging technology applications around the world, as well as business opportunities from remote work. Hence, Taiwan's export momentum is expected to strengthen and drive an increase in private sector investments. As the domestic economy begins to pick up, private consumptions will show mild growth, and the Central Bank estimates Taiwan's economic growth rate at 4.53% this year (2021). Due to the rebound in global raw material prices, such as crude oil, and the rising cost of international shipping, the prices of imported goods will trend upwards. Combine with the growth in consumption, inflation is expected to rise this year (2021) and estimated at 1.07%. However, the projections are mild and will have a limited effect on the Company.

(II) Policies, Main Causes of Gain or Loss and Future Response Measures with Respect to High-risk, High-leveraged Investments, Loans of funds to Others or Endorsement Guarantees, and Derivatives Transactions

1. As of the beginning of 2020 to the printing date of this Annual Report, the Company has not engaged in high-risk and leveraged financial investments. Neither did the Company loan any funds or provide any endorsements/guarantees to other parties.

2. The Company's derivative trading transactions are mainly hedged. The choice of the option for commodity trading is aimed at avoiding risks arising from the Company's business operations and hedging for the expected foreign exchange net position. In addition, the transaction and settlement difference contributed to the profit and loss of the transaction.
3. The Company has established the Procedures for Loaning of Funds to Others, the Operating Procedures for Endorsements and Guarantees, the Procedures for Handling Derivatives Transactions, and the Procedures for Acquisition and Disposal of Assets. All processes adhere strictly to these procedures in order to keep operation and financial risks under control.

(III) Future R&D Projects and the Expected Expenditure

※ Four Domains of the R&D Plan:

1. Advanced technology

- (1) The core technology and patents of the new-generation memory PCM (Phase Change Memory).
- (2) The core technology and patents of the new-generation memory ReRAM.

2. Manufacturing process

- (1) The manufacturing process of the 3D NAND Flash and subsequent derivative developments.
- (2) The manufacturing process of the 19 nm 2D NAND Flash and subsequent micrographic technology development.
- (3) The manufacturing process of the 48 nm NOR Flash and subsequent derivative developments.

3. Product

- (1) High capacity 3D NAND Flash.
- (2) High storage capacity 2D NAND Flash.
- (3) High speed and automotive NOR Flash.

4. Quality and Testing

- (1) Development of quality certification and production processes for automobiles.

※ Expected Expenditure for R&D:

The estimated R&D expenditure for 2021 is approximately NT\$5.3 billion. (The expenditure includes personnel costs, equipment royalty, patent rights, trademark application fee, etc.)

(IV) Changes in Domestic and Overseas Policies and Laws That Have an Impact on the Company's Financial and Business and the Countermeasures:

The Company has always complied with policies and laws and keeps a close eye on significant changes in policies and laws that may affect the Company's financial position and business performance, and makes adjustments accordingly. There were no changes to policies and laws that had a material impact on the Company's financial position and business performance in 2020 and up to the date of report.

(V) Impact of Changes in Technology and Industry to the Company's Finance and Business and the Countermeasures

The electronics industry and semiconductor market have always been deeply influenced by the business cycle and rapid changes in product demand. However, in recent years, Macronix has successfully deployed in high-capacity and high-quality markets, and thus it can continue to provide high-end application clients with superior products of the highest quality. This has mitigated the impact of technology and industry changes.

We understand that technological breakthroughs and innovations are the key to maintaining international competitiveness, and have thus began preparing for next generation technologies in the memory industry. R&D expenses accounted for approximately 10% of our revenue last year (2020), and were mainly on advanced technology R&D and production process improvement. As of the end of last

year (2020), Macronix has a total of 8,320 patents worldwide. We published numerous papers with both academic and commercial value, and obtained related patents for NAND and 3D stacking technology. Our strong R&D capabilities and abundant intellectual property lay the foundation for our long-term development.

Following new applications of AI, 5G, and IoT, as well as the rapid development of automobile electronics industrial applications, and mobile devices, memory chips will be applied in even more fields. Macronix has both excellent product design and manufacturing technologies, and is able to continue providing customers with high performance and highly reliable memory solutions, creating even greater added value for our products. For example, we were the first to make the innovative proposal to have the main chip of 19 nm Serial NAND Flash process ECC, and this has become a paradigm for the best quality and cost effectiveness. We have gained an important cost advantage in NAND Flash via the 19 nm Serial NAND Flash, and have fully transitioned to industry-leading processes. Furthermore, due to the growing importance of information security in IoT and smart devices, the level of integration and complexity of automobile electronic systems have also increased. Macronix's ArmorFlash™ already has a key secure element design and is expected to play a key role in high-end secure memory products. Hence, we will use our advanced technologies, highest quality, and reliable services to provide long-term support, and will work together with our customers to welcome new growth opportunities.

(VI) Impact of Corporate Image Change on Risk Management and Response Measures: NA.

(VII) Expected Benefits and Potential Risks of Merger and Acquisition: NA.

(VIII) Expected Benefits, Potential Risks, and Countermeasures of Factory Expansion

Macronix plans its production capacity based on the market situation, customer demands, and product and technology development requirements. We have dedicated our recent efforts to the development of advanced process 19 nm NAND Flash, 55 nm NOR Flash product manufacturing, and development of 48-layer 3D NAND products, and continue to work towards our goal of 192-layer stacking technology for next generation memory products. We continue to strive for excellent product design, advanced process manufacturing technologies, and providing customers with high performance, high reliability, and high quality memory solutions, in hopes of becoming the major supplier in our respective fields. We will continue to monitor changes in product applications, market, and customer demand, and will use the forecast and production and sales management mechanisms we established to make adjustments in response to our business situation and possible changes, so as to lower our operating risks.

(IX) Risks Relating to the Concentration of Purchasing or Sales and the Countermeasures

The Company's primary raw materials are silicon wafers, raw chemicals, and gases used for processing. To gain the recognition and trust of customers, the Company's procurement policy builds excellent long-term partnerships with suppliers based on smooth supply chain information. We adopt the strategy of buying from multiple stable sources, and attach great importance to quality. Furthermore, we are now selecting qualified suppliers based on stricter social responsibility and environmental protection requirements. Furthermore, we continue to search for new suppliers to enhance our cost competitiveness and reduce unforeseeable risks in our supply chain.

Our main customers are all world-class. Our sales strategy has been focused on working closely with customers and fostering long-term partnerships, which helps to reduce the risks resulting from changes in customer demand. Furthermore, we stay up-to-date on the rapid changes in the electronics industry and are actively expanding into new markets. We utilize forward-looking product design, process technologies, and the highest quality to lower the risk of sales concentration and demand changes.

(X) The Impact of Mass Transfer or Change of Equity by Directors, Supervisors, or Shareholders Holding More than 10% of Shares on the Company, Associated Risks and Response Measures: NA.

(XI) The Impact of Change of Operating Rights on the Company, Associated Risk and Response Measures: NA.

(XII) Litigious or Non-litigious Events

In 2020 the most important disputes are as follows:

1. Case of the theft at FAB 5:
 - (1) Criminal part: The defendant was found guilty by the Hsinchu District Court, and the defendant has appealed to the Taiwan High Court.
 - (2) Criminal and civil part: The Company has filed a criminal and civil lawsuit with the Hsinchu District Court, which is being at the Hsinchu District Court.
2. The Company's previous employee David Lin's breach of contract: the employee has been sued for compensation and the final judgement certificate has been obtained and enforced.

(XIII) Other Important Risks and Countermeasures:

1. Information Security Risk Assessment

The rapid technological development of mobile devices and the Internet in recent years has brought great convenience and efficiency to individuals and corporations. However, threats to information security have also become commonplace. Should a major information security breach occur, the Company's information assets could face intentional/accidental internal/external threats and damage, causing confidential information to lose its confidentiality, usability, and integrity. This could have a major impact on the Company's competitiveness, business operations, and even financial performance and reputation.

Macronix set up the "Information Security Committee" and "Information Security Core Team" to establish an information security policy as well as promote various information security management measures to reduce the risk of a breach of information security. The committee is also dedicated to lowering the risks of any potential management incident to an acceptable degree to ensure the Company's normal operations.

The Company continues to strengthen information security and business secret management, and reviews and revises its information security policy and management regulations in response to management requirements. The preventative measures include establishing appropriate safety control mechanisms for the use of computers, regulatory information devices, and network resources. Confidential information and business secrets are protected by measures such as classification, labeling, and external delivery control. Information security event reporting and handling procedures were established, so that information security events can be immediately handled when they occur. The Company has purchased information security insurance to reduce the damages and impact. In the worst-case scenario, threats can be addressed in a timely manner to contain the damage and impact. Since expensive or complicated management measures and tools can't play their roles if the staff lack adequate awareness of information security and business secrets protection, it is strengthened through annual education and training. The e-newsletter is also in place to promote information security so that all employees can do their parts in the Company's information security.

2. Tax risks

Tax Policy : Macronix seeks to best manage its tax risks, and devotes itself to information transparency and compliance. We also support government tax policy to drive economic development and sustainability, Macronix's 6 guidelines for tax management are as follows:

- (1) All operations comply with tax laws and regulations of Taiwan.
- (2) Transactions between affiliated enterprises comply with the internationally recognized pricing principles announced by the OECD, and BEPS related regulations, so that the pricing policy of related parties complies with the arm's length principle.
- (3) In response to the global trend of anti-tax evasion, avoid using countries with low tax rates in tax planning with the purpose of tax evasion.
- (4) Make information in tax reports transparent, submit the Country-by-Country Report, Master File, and Local File to the tax authority, so that tax disclosure complies with laws, regulations, and guidelines.
- (5) The Company's tax planning and decisions all take into consideration the effect of tax risks.
- (6) Establish a good interaction with the tax authority based on the principles of mutual trust and information transparency.

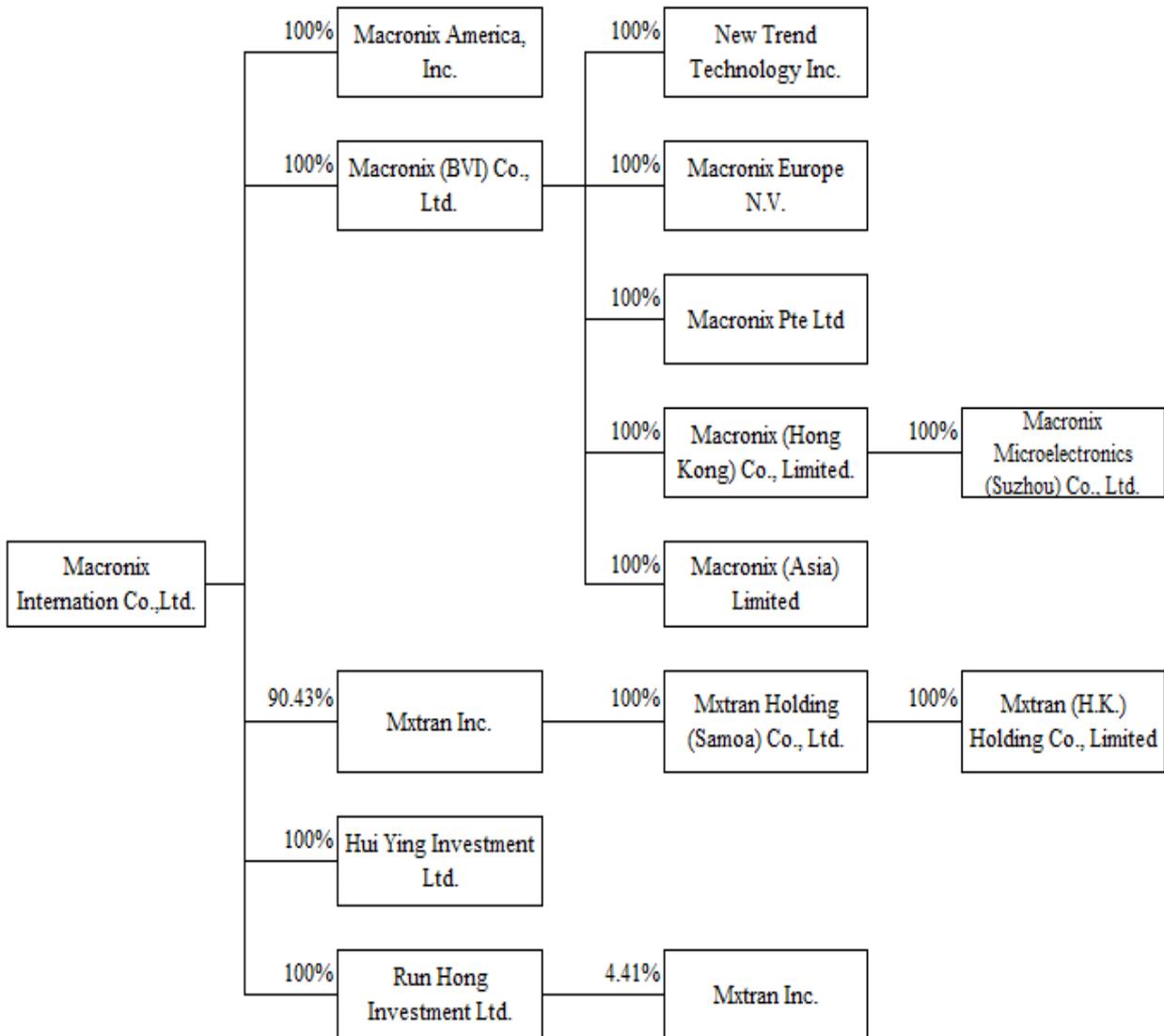
VII. Other Significant Events: None.

Chapter VIII. Special Disclosure

I. Summary of Affiliated Companies (Ended on December 31, 2020)

(I) Consolidated Business Report

1. Corporate Affiliation Chart



2. Basic Information of Affiliated Companies

Unit: NT\$ thousands

Company Name	Establishment Date	Address	Paid-in Capital	Primary Business or Production
Macronix America, Inc.	March,1994	680 N. McCarthy Blvd Suite 200, Milpitas, CA 95035	2,640	Sales and marketing
Macronix (BVI) Co., Ltd.	February,1997	Vistra Corporate Services Centre, Wickhams Cay II, Road Town, Tortola, VG1110,British Virgin Islands	6,977,791	Investment holding company
Hui Ying Investment Ltd.	May,1998	20F, 4, Min-Chuan E. Road, Sec.3, Taipei, Taiwan, R.O.C	500,000	Investment
Run Hong Investment Ltd.	October,2001	19F, 4, Min-Chuan E. Road, Sec. 3, Taipei, Taiwan, R.O.C	984,432	Investment
Mxtran Inc.	August.2006	9F, 16, Li-Hsin Road, Science Park, Hsinchu, Taiwan, R.O.C	770,000	IC design
Mxtran Holding (Samoa) Co., Ltd.	May,2009	Portcullis Chambers, P.O. Box 1225, Apia, Samoa	35,979	Investment holding company
Mxtran (H.K.) Holding Co., Limited	June,2009	Rm 1702, Sino Centre 582-592 Nathan Road, Mongkok, Hong Kong	23,880	Investment holding company
New Trend Technology Inc.	January,1999	680 N. McCarthy Blvd Suite 200, Milpitas, CA95035	899,931	IC design
Macronix Europe N.V.	July,1999	Koningin Astridlaan 49 Bus 6 1780 Wommel, Belgium	2,106	After-sales services
Macronix Pte Ltd	August,2000	133 Cecil Street #05-02 Keck Seng Tower Singapore (069535)	3,291	After-sales services
Macronix (Hong Kong) Co., Limited.	March,2003	702-703, 7/F, Building 9, Hong Kong Science Park, 5 Science Park West Avenue, Sha Tin, N.T.	378,427	Sales and marketing
Macronix Microelectronics (Suzhou) Co., Ltd.	September,2005	No.55, Su Hong Xi Street, Suzhou Industrial Park, SuZhou City, Jiangsu, China	296,160	development of integrated circuit system and software
Macronix (Asia) Limited	October,2004	P.O. Box 31119 Grand Pavilion, Hibiscus Way, 802 West Bay Road, Grand Cayman, KY1-1205, Cayman Islands	23,035	Investment holding company

3.Presumed to be in Effective Control of the Same Shareholder Information with the Affiliate: None.

4.Overall Business Scope of Affiliated Companies

The business scope of the Company and its affiliated companies include the research and development, design, manufacture, testing, sales, consultancy of integrated circuits, various semiconductor components, and their system applications, and general investment.

5. Directors, Supervisors, and President in all Affiliated Companies:

Company Name	Directors, Supervisors, and President		Shares Held	
	Title	Name or Representative	Number of Shares	Percentage of Shares
Macronix America, Inc.	Chairman of the Board	Chih-Yuan Lu	0	0%
	Director	Miin Chyou Wu	0	0%
	Director	Dang-Hsing Yiu	0	0%
	President	Ya-Sheng Yang	0	0%
Macronix (BVI) Co., Ltd.	Director	Miin Chyou Wu	0	0%
Hui Ying Investment Ltd.	Director	Macronix International Co., Ltd. Representative: Miin Chyou Wu	-	100%
Run Hong Investment Ltd.	Director	Macronix International Co., Ltd. Representative: Miin Chyou Wu	-	100%
Mxtran Inc.	Chairman of the Board	Miin Chyou Wu	120,000	0.16%
	Director	Macronix International Co., Ltd. Representative: Dang-Hsing Yiu	69,627,323	90.43%
	Director/President	Macronix International Co., Ltd. Representative: Showen Huang	69,627,323	90.43%
	Director	Achi Capital Limited	90,000	0.12%
	Supervisor	Run Hong Investment Ltd. Representative: Pei-Fu Yeh	3,393,200	4.41%
Mxtran Holding (Samoa) Co., Ltd.	Director	Showen Huang	0	0%
Mxtran (H.K.) Holding Co., Limited	Director	Showen Huang	0	0%
New Trend Technology Inc.	Director	Pei-Fu Yeh	0	0%
Macronix Europe N.V.	Chairman of the Board	Ful-Long Ni	0	0%
	Director	Miin Chyou Wu	1	0%
	Director	Chih-Yuan Lu	0	0%
	Director	Pei-Fu Yeh	0	0%
	Director	Jon-Ten Chung	0	0%
	President	Timothy Pusey	0	0%
Macronix Pte Ltd	Director	Jon-Ten Chung	0	0%
	Director	Ful-Long Ni	0	0%
	Director/President	Tan Siah Cheae	0	0%
Macronix (Hong Kong) Co., Limited.	Director	Miin Chyou Wu	0	0%
	Director	Chih-Yuan Lu	0	0%
	Director	Ful-Long Ni	0	0%
	Director	Pei-Fu Yeh	0	0%
	Director	Jon-Ten Chung	0	0%
	President	Hao-Wei Hsieh	0	0%
Macronix Microelectronics (Suzhou) Co., Ltd.	Executive Director	Miin Chyou Wu	0	0%
	President	Hsieng-Hung Chang	0	0%
	Supervisor	Hsiu-Mei Lin	0	0%
Macronix (Asia) Limited	Director	Miin Chyou Wu	0	0%

6. Operational Highlights of Affiliated Companies

Unit: NT\$ thousands

Company Name	Capital	Total Assets	Total Liabilities	Net Value	Operating Revenue	Operating Profit	Net Profit (Loss) (after tax)	Earnings per Share (NT\$) (after tax)
Macronix America, Inc.	2,640	369,810	191,992	177,818	1,647,893	24,168	15,552	155.52
Macronix (BVI) Co., Ltd.	6,977,791	2,244,384	125	2,244,259	-	(205)	142,922	0.67
Hui Ying Investment Ltd.	500,000	166,647	100	166,547	-	(200)	7,014	NA
Run Hong Investment Ltd.	984,432	14,213	100	14,113	-	(150)	(483)	NA
Mxtran Inc.	770,000	19,751	4,256	15,495	45	(9,370)	(9,138)	(0.12)
Mxtran Holding (Samoa) Co., Ltd.	35,979	984	-	984	-	-	1	-
Mxtran (H.K.) Holding Co., Limited	23,880	419	-	419	-	-	-	-
New Trend Technology Inc.	899,931	278,367	-	278,367	-	(8,789)	(8,812)	(0.32)
Macronix Europe N.V.	2,106	156,435	22,930	133,505	133,800	9,186	7,429	7,429
Macronix Pte Ltd	3,291	24,357	2,425	21,932	22,699	1,081	2,308	13.26
Macronix (Hong Kong) Co., Limited.	378,427	1,652,887	735,188	917,699	6,393,784	108,924	130,729	1.46
Macronix Microelectronics (Suzhou) Co., Ltd.	296,160	490,576	90,101	400,475	317,991	10,286	11,040	NA
Macronix (Asia) Limited	23,035	89,888	17,439	72,449	100,553	6,151	4,016	5.74

(II) Consolidated Financial Statements: please refer to page 126 of this annual report.

(III) Affiliation Report: None.

II. Private Placement Securities of the Most Recent Year and Up to the Printing Date of this Annual Report: None.

III. Subsidiaries' Holding or Disposing the Company's Shares in the Most Recent Fiscal Year and Up to the Printing Date of this Annual Report

Unit: NT\$ thousands; Shares; %

Name of Subsidiary	Stock Capital Collected	Fund Source	Shareholding Ratio of the Company	Date of Acquisition or Disposition	Shares and Amount Acquired	Shares and Amount Disposed of	Investment Gain (Loss)	Shareholdings and Amount Up to the Printing Date of this Annual Report	Mortgage	Endorsement Amount Made for the Subsidiary	Amount Loaned to the Subsidiary
Hui Ying Investment Ltd.	NT\$500,000	Parent company	100%	2020	None	None	None	1,956,619 shares NT\$87,363 (Note)	None	None	None
				This fiscal year up to the date of publication of the annual report	None	None	None		None	None	None

Note: The amount is calculated based on the closing price of the common shares at NT\$44.65 per share on March 30, 2021.

IV. Other Necessary Supplement: None

V. The Events Resulting in Significant Impact to Shareholders' Equity or Stock Prices Under Article 36(3) (ii) of Securities and Exchange Act in the Most Recent Fiscal Year and Up to the Printing Date of this Annual Report.: None.

**Macronix International Co., Ltd. and
Subsidiaries**

**Consolidated Financial Statements for the
Years Ended December 31, 2020 and 2019 and
Independent Auditors' Report**

DECLARATION OF CONSOLIDATION OF FINANCIAL STATEMENTS OF AFFILIATES

The entities that are required to be included in the consolidated financial statements of Macronix International Co., Ltd. as of and for the year ended December 31, 2020 under the “Criteria Governing Preparation of Affiliation Reports, Consolidated Business Reports and Consolidated Financial Statements of Affiliated Enterprises” are all the same as those included in the consolidated financial statements prepared in conformity with International Financial Reporting Standard 10 “Consolidated Financial Statements”. In addition, all the relevant information required to be disclosed in the consolidated financial statements have been disclosed. Hence, we do not prepare a separate set of consolidated financial statements.

Very truly yours,

Macronix International Co., Ltd.

By

Miin Wu
Chairman

February 26, 2021

INDEPENDENT AUDITORS' REPORT

The Board of Directors and the Shareholders
Macronix International Co., Ltd.

Opinion

We have audited the accompanying consolidated financial statements of Macronix International Co., Ltd. (the “Company”) and its subsidiaries (collectively referred to as the “Group”), which comprise the consolidated balance sheets as of December 31, 2020 and 2019, and the consolidated statements of comprehensive income, changes in equity and cash flows for the years then ended, and the notes to the consolidated financial statements, including a summary of significant accounting policies (collectively referred to as the “consolidated financial statements”).

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as of December 31, 2020 and 2019, and its consolidated financial performance and its consolidated cash flows for the years then ended in accordance with the Regulations Governing the Preparation of Financial Reports by Securities Issuers, and International Financial Reporting Standards (IFRS), International Accounting Standards (IAS), IFRIC Interpretations (IFRIC), and SIC Interpretations (SIC) endorsed and issued into effect by the Financial Supervisory Commission of the Republic of China.

Basis for Opinion

We conducted our audits in accordance with the Regulations Governing Auditing and Attestation of Financial Statements by Certified Public Accountants and auditing standards generally accepted in the Republic of China. Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Consolidated Financial Statements section of our report. We are independent of the Group in accordance with The Norm of Professional Ethics for Certified Public Accountant of the Republic of China, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements for the year ended December 31, 2020. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Key audit matters for the Company's consolidated financial statements for the year ended December 31, 2020 are stated as follows:

Valuation of inventory

The Group manufactures and sells ROM products, NOR Flash, and NAND Flash, which are widely used in consumer electronics. As of December 31, 2020, inventory was NT\$12,945,267 thousand, accounting for 20% of the total assets in the consolidated balance sheet. With the current rapid changes in technology and the improvements in manufacturing technologies, market demand for memory chip could change significantly and result in inventory obsolescence. Since inventory valuation and estimates of net realizable value of inventory are subject to management's judgment, they are considered as accounting estimates with relatively high uncertainty. Therefore, valuation of inventory has been identified as a key audit matter. Refer to notes 4 (f), 5 (a), and 10 to the consolidated financial statements for the details of accounting policy, accounting judgment, key sources of estimation uncertainty and the related information about the valuation of inventory.

Our key audit procedures performed in respect of the above area included the following:

1. We understood and assessed the adequacy of the policy and procedures for the inventory valuation adopted by the management.
2. We obtained data on the assessment of inventory at the lower of cost or net realizable value and selected sample data, and we tested the reasonableness of net realizable value by comparing inventory carrying amounts to recent selling prices; we tested the accuracy of allowance for inventory loss by comparing net realizable value with carrying amounts. We obtained the inventory aging report, and we tested the accuracy and completeness of the report by agreeing the age interval, quantity, and amount to the supporting documents of inbound inventory. We assessed the reasonableness of allowance for inventory loss by recalculating the amount in accordance with the stated valuation policy for the inventory.
3. We performed a retrospective review of inventory movements to evaluate the reasonableness of inventory obsolescence reserve policy and policy on scrapping of inventories.

Other Matter

We have also audited the parent company only financial statements of the Company as of and for the years ended December 31, 2020 and 2019 on which we have issued an unmodified opinion.

Responsibilities of Management and Those Charged with Governance for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with the Regulations Governing the Preparation of Financial Reports by Securities Issuers, and International Financial Reporting Standards (IFRS), International Accounting Standards (IAS), IFRIC Interpretations (IFRIC), and SIC Interpretations (SIC) endorsed and issued into effect by the Financial Supervisory Commission of the Republic of China and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Those charged with governance, including the audit committee, are responsible for overseeing the Group's financial reporting process.

Auditors' Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the auditing standards generally accepted in the Republic of China will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with the auditing standards generally accepted in the Republic of China, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

1. Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
2. Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
3. Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
4. Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the Group to cease to continue as a going concern.
5. Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
6. Obtain sufficient and appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision, and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements for the year ended December 31, 2020 and are therefore the key audit matters. We describe these matters in our auditors' report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

The engagement partners on the audit resulting in this independent auditors' report are Tung Hui Yeh and Kuo Tyan Hong.

Deloitte & Touche
Taipei, Taiwan
Republic of China

February 26, 2021

Notice to Readers

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

For the convenience of readers, the independent auditors' report and the accompanying consolidated financial statements have been translated into English from the original Chinese version prepared and used in the Republic of China. If there is any conflict between the English version and the original Chinese version or any difference in the interpretation of the two versions, the Chinese-language independent auditors' report and consolidated financial statements shall prevail.

MACRONIX INTERNATIONAL CO., LTD. AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS DECEMBER 31, 2020 AND 2019 (In Thousands of New Taiwan Dollars)

ASSETS	2020		2019	
	Amount	%	Amount	%
CURRENT ASSETS				
Cash and cash equivalents (Notes 4, 6 and 30)	\$ 11,879,299	18	\$ 8,725,089	14
Notes receivable and trade receivables, net (Notes 4, 9 and 30)	3,454,719	5	3,947,729	7
Receivables from related parties, net (Notes 4, 30 and 31)	1,647,427	3	973,076	2
Other receivables (Notes 4, 9, 26 and 30)	116,930	-	156,080	-
Inventories (Notes 4, 5 and 10)	12,945,267	20	12,810,437	21
Financial assets measured at amortized cost - current (Notes 4, 8 and 30)	-	-	21,525	-
Other current assets (Note 16)	118,182	-	252,759	-
Total current assets	30,161,824	46	26,886,695	44
NON-CURRENT ASSETS				
Financial assets at fair value through other comprehensive income (FVTOCI) - non-current (Notes 4, 7 and 30)	2,336,074	3	2,001,130	3
Property, plant and equipment (Notes 4, 12, 32 and 33)	31,462,800	48	29,365,507	49
Right-of-use assets (Notes 4 and 13)	1,042,394	2	1,077,468	2
Intangible assets (Notes 4 and 14)	57,280	-	47,022	-
Deferred tax assets (Notes 4 and 26)	660,294	1	1,107,366	2
Other financial assets - non-current (Notes 4, 15, 30 and 32)	171,552	-	171,590	-
Total non-current assets	35,730,394	54	33,770,083	56
TOTAL	\$ 65,892,218	100	\$ 60,656,778	100
LIABILITIES AND EQUITY				
CURRENT LIABILITIES				
Short-term borrowings (Notes 17 and 30)	\$ -	-	\$ 1,550,000	3
Contract liabilities (Note 24)	92,195	-	98,557	-
Notes payable and trade payables (Notes 18 and 30)	2,940,531	5	2,141,510	4
Payables to related parties (Notes 30 and 31)	4,161,427	6	4,720,212	8
Accrued employees' compensation and remuneration of directors (Notes 25 and 31)	1,403,624	2	1,285,774	2
Payables for purchases of equipment (Note 30)	554,266	1	878,536	1
Other payables (Notes 19 and 30)	1,481,794	2	1,496,387	3
Current tax liabilities (Notes 4 and 26)	63,359	-	11,231	-
Provisions - current (Notes 4 and 21)	22,687	-	20,460	-
Lease liabilities - current (Notes 4 and 13)	104,598	-	93,919	-
Current portion of long-term borrowings (Notes 17, 30 and 32)	5,412,007	8	3,267,200	5
Other current liabilities (Note 20)	332,270	1	230,440	-
Total current liabilities	16,568,758	25	15,794,226	26
NON-CURRENT LIABILITIES				
Long-term borrowings (Notes 17, 30 and 32)	10,736,875	16	9,774,330	16
Lease liabilities - non-current (Notes 4 and 13)	940,302	2	973,712	1
Net defined benefit liabilities (Notes 4 and 22)	1,432,473	2	1,611,562	3
Other non-current liabilities (Note 20)	19,418	-	10,280	-
Total non-current liabilities	13,129,068	20	12,369,884	20
Total liabilities	29,697,826	45	28,164,110	46
EQUITY ATTRIBUTABLE TO SHAREHOLDERS OF THE PARENT (Notes 4, 23 and 28)				
Share capital				
Ordinary shares	18,563,017	28	18,399,271	30
Share capital to be cancelled	(1,153)	-	(182)	-
Total share capital	18,561,864	28	18,399,089	30
Capital surplus	384,772	1	543,920	1
Retained earnings				
Legal reserve	1,741,857	3	1,440,661	2
Special reserve	621,195	1	1,007,052	2
Unappropriated earnings	15,408,584	23	12,237,717	20
Total retained earnings	17,771,636	27	14,685,430	24
Other equity	(365,619)	(1)	(977,986)	(1)
Treasury shares	(159,061)	-	(159,061)	-
Equity attributable to shareholders of the parent	36,193,592	55	32,491,392	54
NON-CONTROLLING INTERESTS (Note 23)	800	-	1,276	-
Total equity	36,194,392	55	32,492,668	54
TOTAL	\$ 65,892,218	100	\$ 60,656,778	100

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

MACRONIX INTERNATIONAL CO., LTD. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME FOR THE YEARS ENDED DECEMBER 31, 2020 AND 2019 (In Thousands of New Taiwan Dollars, Except Earnings Per Share)

	2020		2019	
	Amount	%	Amount	%
NET OPERATING REVENUE (Notes 4, 24, 31 and 36)	\$ 39,800,947	100	\$ 34,995,411	100
OPERATING COSTS (Notes 4, 10, 22, 25 and 31)	<u>26,391,592</u>	<u>66</u>	<u>25,379,917</u>	<u>72</u>
GROSS PROFIT	<u>13,409,355</u>	<u>34</u>	<u>9,615,494</u>	<u>28</u>
OPERATING EXPENSES (Notes 4, 22, 25 and 31)				
Selling and marketing expenses	1,538,615	4	1,518,621	5
General and administrative expenses	1,888,419	5	1,442,077	4
Research and development expenses	<u>4,115,844</u>	<u>10</u>	<u>3,555,919</u>	<u>10</u>
Total operating expenses	<u>7,542,878</u>	<u>19</u>	<u>6,516,617</u>	<u>19</u>
INCOME FROM OPERATIONS	<u>5,866,477</u>	<u>15</u>	<u>3,098,877</u>	<u>9</u>
NON-OPERATING INCOME AND EXPENSES				
Interest income (Note 25)	30,858	-	38,387	-
Other income (Notes 4, 7, 13 and 25)	130,386	-	152,207	-
Other gains and losses (Note 25)	60,281	-	(66,202)	-
Finance costs (Notes 4 and 25)	<u>(246,956)</u>	<u>(1)</u>	<u>(196,943)</u>	<u>(1)</u>
Total non-operating income and expenses	<u>(25,431)</u>	<u>(1)</u>	<u>(72,551)</u>	<u>(1)</u>
INCOME BEFORE INCOME TAX FROM CONTINUING OPERATIONS	5,841,046	14	3,026,326	8
INCOME TAX EXPENSE (Notes 4 and 26)	<u>(515,434)</u>	<u>(1)</u>	<u>(13,425)</u>	<u>-</u>
NET INCOME FOR THE YEAR	<u>5,325,612</u>	<u>13</u>	<u>3,012,901</u>	<u>8</u>
OTHER COMPREHENSIVE INCOME (LOSS)				
Items that will not be reclassified subsequently to profit or loss:				
Remeasurement of defined benefit plans	(2,737)	-	(108,120)	-
Unrealized gain on investments in equity instruments at FVTOCI (Notes 23 and 30)	440,966	1	447,722	1
Items that may be reclassified subsequently to profit or loss:				
Exchange differences on translating foreign operations (Note 23)	<u>(150,215)</u>	<u>-</u>	<u>(98,748)</u>	<u>-</u>
Other comprehensive income (loss) for the year, net of income tax	<u>288,014</u>	<u>1</u>	<u>240,854</u>	<u>1</u>
TOTAL COMPREHENSIVE INCOME FOR THE YEAR	<u>\$ 5,613,626</u>	<u>14</u>	<u>\$ 3,253,755</u>	<u>9</u>

(Continued)

MACRONIX INTERNATIONAL CO., LTD. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME FOR THE YEARS ENDED DECEMBER 31, 2020 AND 2019 (In Thousands of New Taiwan Dollars, Except Earnings Per Share)

	2020		2019	
	Amount	%	Amount	%
NET INCOME (LOSS) ATTRIBUTABLE TO:				
Shareholders of the parent	\$ 5,326,083	13	\$ 3,011,960	9
Non-controlling interests	<u>(471)</u>	<u>-</u>	<u>941</u>	<u>-</u>
	<u>\$ 5,325,612</u>	<u>13</u>	<u>\$ 3,012,901</u>	<u>9</u>
TOTAL COMPREHENSIVE INCOME (LOSS) ATTRIBUTABLE TO:				
Shareholders of the parent	\$ 5,614,102	14	\$ 3,252,814	9
Non-controlling interests	<u>(476)</u>	<u>-</u>	<u>941</u>	<u>-</u>
	<u>\$ 5,613,626</u>	<u>14</u>	<u>\$ 3,253,755</u>	<u>9</u>
EARNINGS PER SHARE (Note 27)				
Basic	<u>\$ 2.90</u>		<u>\$ 1.64</u>	
Diluted	<u>\$ 2.84</u>		<u>\$ 1.61</u>	

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

(Concluded)

MACRONIX INTERNATIONAL CO., LTD. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY
FOR THE YEARS ENDED DECEMBER 31, 2020 AND 2019
(In Thousands of New Taiwan Dollars)

	Equity Attributable to Shareholders of the Parent											Non-controlling Interests	Total Equity	
	Share Capital			Retained Earnings			Other Equity		Treasury Shares	Total	Total Equity			
	Shares (Thousands)	Ordinary Shares	Share Capital to be Cancelled	Capital Surplus	Legal Reserve	Special Reserve	Unappropriated Earnings	Exchange Differences on Translating Foreign Operations						Unrealized Gain (Loss) on Financial Assets at FV/OCI
BALANCE AT JANUARY 1, 2019	1,840,292	\$ 18,402,919	\$ (1,249)	\$ (56,241)	\$ 541,360	\$ 74,275	\$ 13,461,892	\$ (137,132)	\$ (746,762)	\$ (19,978)	\$ (159,061)	\$ 31,360,023	\$ 334	\$ 31,360,357
Legal reserve	-	-	-	-	899,301	-	(899,301)	-	-	-	-	-	-	-
Special reserve	-	-	-	-	-	932,777	(932,777)	-	-	-	-	-	-	-
Cash dividends distributed by the Company - \$1.20 per share	-	-	-	-	-	-	(2,208,200)	-	-	-	-	(2,208,200)	-	(2,208,200)
Net income (loss) for the year ended December 31, 2019	-	-	-	-	-	3,011,960	-	-	-	-	-	3,011,960	941	3,012,901
Other comprehensive income (loss) for the year ended December 31, 2019, net of income tax	-	-	-	-	-	-	(108,120)	(98,748)	447,722	-	-	240,854	-	240,854
Total comprehensive income (loss) for the year ended December 31, 2019	-	-	-	-	-	2,903,840	(98,748)	447,722	-	-	-	3,252,814	941	3,253,755
Issuance of restricted shares for employees	-	-	-	508,772	-	-	-	-	-	(508,772)	-	-	-	-
Compensation cost of restricted shares for employees	-	-	-	86,460	-	-	(87,737)	-	-	85,684	-	84,407	-	84,407
Retirement of restricted shares for employees	(365)	(3,648)	1,067	2,581	-	-	-	-	-	-	-	-	-	-
Dividends paid to subsidiaries to adjust capital surplus	-	-	-	2,348	-	-	-	-	-	-	-	2,348	-	2,348
Increase in non-controlling interests	-	-	-	-	-	-	-	-	-	-	-	-	1	1
BALANCE AT DECEMBER 31, 2019	1,839,927	18,399,271	(182)	543,920	1,440,661	1,007,052	12,237,717	(235,880)	(299,040)	(443,066)	(159,061)	32,491,392	1,276	32,492,668
Legal reserve	-	-	-	-	301,196	-	(301,196)	-	-	-	-	-	-	-
Special reserve	-	-	-	-	-	(385,857)	385,857	-	-	-	-	-	-	-
Cash dividends distributed by the Company - \$1.20 per share	-	-	-	-	-	-	(2,207,891)	-	-	-	-	(2,207,891)	-	(2,207,891)
Net income (loss) for the year ended December 31, 2020	-	-	-	-	-	-	5,326,083	-	-	-	-	5,326,083	(471)	5,325,612
Other comprehensive income (loss) for the year ended December 31, 2020, net of income tax	-	-	-	-	-	-	(2,732)	(150,210)	440,966	-	-	288,019	(5)	288,014
Total comprehensive income (loss) for the year ended December 31, 2020	-	-	-	-	-	5,323,346	(2,732)	(150,210)	440,966	-	-	5,614,102	(476)	5,613,626
Disposal of investments in equity instruments designated as at fair value through other comprehensive income	-	-	-	-	-	(29,100)	-	-	29,100	-	-	-	-	-
Issuance of restricted shares for employees	16,400	164,002	-	(164,002)	-	-	-	-	-	-	-	-	-	-
Compensation cost of restricted shares for employees	-	-	-	1,300	-	-	(149)	-	-	292,511	-	293,662	-	293,662
Retirement of restricted shares for employees	(25)	(256)	(971)	1,227	-	-	-	-	-	-	-	-	-	-
Dividends paid to subsidiaries to adjust capital surplus	-	-	-	2,327	-	-	-	-	-	-	-	2,327	-	2,327
BALANCE AT DECEMBER 31, 2020	1,856,302	18,563,017	(1,153)	384,772	1,741,857	621,195	15,408,584	(386,090)	171,026	(150,555)	(159,061)	36,193,592	800	36,194,392

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

MACRONIX INTERNATIONAL CO., LTD. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS FOR THE YEARS ENDED DECEMBER 31, 2020 AND 2019 (In Thousands of New Taiwan Dollars)

	2020	2019
CASH FLOWS FROM OPERATING ACTIVITIES		
Income before income tax	\$ 5,841,046	\$ 3,026,326
Adjustments for:		
Depreciation expense	3,713,338	2,697,467
Amortization expense	32,989	33,554
Expected credit loss recognized	223	-
Finance costs	246,956	196,943
Interest income	(30,858)	(38,387)
Dividend income	(101,174)	(109,016)
Compensation cost of employee restricted shares	293,662	84,407
Gain on disposal of property, plant and equipment	(6,822)	(319,027)
Gain on disposal of investments	-	(7,404)
Net loss (gain) on foreign currency exchange	8,608	(63,592)
Changes in operating assets and liabilities		
Notes receivable and trade receivables	519,076	(206,363)
Receivables from related parties	(637,329)	(310,035)
Other receivables	21,095	20,258
Inventories	(134,830)	5,138,797
Other current assets	130,401	185,806
Contract liabilities	(6,362)	83,644
Notes payable and trade payables	795,312	(463,983)
Payables to related parties	(582,175)	(4,060,942)
Payables for employees' compensation and director's remuneration	117,850	(1,006,661)
Other payables	7,663	89,114
Other payables to related parties	(3,098)	1,242
Provisions	2,227	(8,057)
Other current liabilities	(58,591)	(105,526)
Net defined benefit liabilities	(181,826)	(137,375)
Cash generated from operations	9,987,381	4,721,190
Interest received	31,167	39,370
Dividend received	101,174	108,189
Interest paid	(270,217)	(212,991)
Income tax return (paid)	5,714	(113,071)
Net cash generated from operating activities	<u>9,855,219</u>	<u>4,542,687</u>
CASH FLOWS FROM INVESTING ACTIVITIES		
Proceeds from the disposal of financial assets at fair value through other comprehensive income	8,626	-
Financial assets at amortized cost after maturity	20,955	25,830
Payments for property, plant and equipment	(6,036,935)	(12,752,517)
Proceeds from disposal of property, plant and equipment	7,623	340,012
Increase in refundable deposits	(71)	(63)
Decrease in refundable deposits	98	10
Payments for intangible assets	(43,201)	(35,514)
Decrease in other financial assets	-	18,678
Net cash used in investing activities	<u>(6,042,905)</u>	<u>(12,403,564)</u>

(Continued)

MACRONIX INTERNATIONAL CO., LTD. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS FOR THE YEARS ENDED DECEMBER 31, 2020 AND 2019 (In Thousands of New Taiwan Dollars)

	2020	2019
CASH FLOWS FROM FINANCING ACTIVITIES		
Proceeds from short-term borrowings	\$ -	\$ 4,000,000
Repayments of short-term borrowings	(1,550,000)	(2,450,000)
Proceeds from long-term borrowings	7,300,000	9,776,000
Repayments of long-term borrowings	(4,192,648)	(5,955,028)
Proceeds from guarantee deposits received	193,798	550
Refund of guarantee deposits received	(16,946)	(150)
Repayment of leased liabilities	(107,963)	(119,548)
Distribution of cash dividends	(2,205,564)	(2,205,852)
Increase in non-controlling interests	<u>-</u>	<u>1</u>
Net cash (used in) generated from financing activities	<u>(579,323)</u>	<u>3,045,973</u>
EFFECT OF EXCHANGE RATE CHANGES ON THE BALANCE OF CASH AND CASH EQUIVALENTS HELD IN FOREIGN CURRENCIES	<u>(78,781)</u>	<u>(71,509)</u>
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	3,154,210	(4,886,413)
CASH AND CASH EQUIVALENTS AT THE BEGINNING OF THE YEAR	<u>8,725,089</u>	<u>13,611,502</u>
CASH AND CASH EQUIVALENTS AT THE END OF THE YEAR	<u>\$ 11,879,299</u>	<u>\$ 8,725,089</u>

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

(Concluded)

MACRONIX INTERNATIONAL CO., LTD. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEARS ENDED DECEMBER 31, 2020 AND 2019 (In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

1. GENERAL INFORMATION

Macronix International Co., Ltd. (the “Company”) was incorporated in the Republic of China (ROC) on December 9, 1989 and commenced business in December 1989. The Company operates principally as a designer, manufacturer and supplier of integrated circuits (ICs) and memory chips. The Company also performs design, research and development, consultation and trade of relevant products.

The Company’s shares have been listed on the Taiwan Stock Exchange (TWSE) since March 15, 1995.

The consolidated financial statements are presented in the Company’s functional currency, the New Taiwan dollar.

2. APPROVAL OF FINANCIAL STATEMENTS

The consolidated financial statements were approved by the Company’s board of directors and were authorized for issue on February 26, 2021.

3. APPLICATION OF NEW, AMENDED AND REVISED STANDARDS AND INTERPRETATIONS

- a. Initial application of the amendments to the International Financial Reporting Standards (IFRS), International Accounting Standards (IAS), Interpretations of IFRS (IFRIC), and Interpretations of IAS (SIC) (collectively, the IFRSs) endorsed and issued into effect by the FSC

The initial application of the amendments to the IFRSs endorsed and issued into effect by the FSC did not have material impact on the Group’s accounting policies.

- b. The IFRSs endorsed by the Financial Supervisory Commission (FSC) for application starting from 2021

New IFRSs	Effective Date Announced by IASB
Amendments to IFRS 4 “Extension of the Temporary Exemption from Applying IFRS 9”	Effective immediately upon promulgation by the IASB
Amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16 “Interest Rate Benchmark Reform - Phase 2”	January 1, 2021
Amendment to IFRS 16 “Covid-19-Related Rent Concessions”	June 1, 2020

Except for the above impact, as of the date the consolidated financial statements were authorized for issue, the Group is continuously assessing the possible impact that the application of other standards and interpretations will have on the Group’s financial position and financial performance and will disclose the relevant impact when the assessment is completed.

- c. New IFRSs in issue but not yet endorsed and issued into effect by the FSC

New IFRSs	Effective Date Announced by IASB (Note 1)
“Annual Improvements to IFRS Standards 2018-2020”	January 1, 2022 (Note 2)
Amendments to IFRS 3 “Reference to the Conceptual Framework”	January 1, 2022 (Note 3)
Amendments to IFRS 10 and IAS 28 “Sale or Contribution of Assets between an Investor and its Associate or Joint Venture”	To be determined by IASB
IFRS 17 “Insurance Contracts”	January 1, 2023
Amendments to IFRS 17	January 1, 2023
Amendments to IAS 1 “Classification of Liabilities as Current or Non-current”	January 1, 2023
Amendments to IAS 16 “Property, Plant and Equipment - Proceeds before Intended Use”	January 1, 2022 (Note 4)
Amendments to IAS 37 “Onerous Contracts - Cost of Fulfilling a Contract”	January 1, 2022 (Note 5)

Note 1: Unless stated otherwise, the above New IFRSs are effective for annual reporting periods beginning on or after their respective effective dates.

Note 2: The amendments to IFRS 9 will be applied prospectively to modifications and exchanges of financial liabilities that occur on or after the annual reporting periods beginning on or after January 1, 2022.

Note 3: The amendments are applicable to business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after January 1, 2022.

Note 4: The amendments are applicable to property, plant and equipment that are brought to the location and condition necessary for them to be capable of operating in the manner intended by management on or after January 1, 2021.

Note 5: The amendments are applicable to contracts for which the entity has not yet fulfilled all its obligations on January 1, 2022.

Except for the above impact, as of the date the consolidated financial statements were authorized for issue, the Group is continuously assessing the possible impact that the application of other standards and interpretations will have on the Group’s financial position and financial performance, and will disclose the relevant impact when the assessment is completed.

4. SUMMARY OF SIGNIFICANT ACCOUNTING POLICY

- a. Statement of compliance

The consolidated financial statements have been prepared in accordance with the Regulations Governing the Preparation of Financial Reports by Securities Issuers and IFRSs as endorsed and issued into effect by the FSC.

- b. Basis of preparation

The consolidated financial statements have been prepared on the historical cost basis except for financial instruments which are measured at fair value and defined benefit liabilities.

The fair value measurements, which are grouped into Levels 1 to 3 based on the degree to which the fair value measurement inputs are observable and based on the significance of the inputs to the fair value measurement in its entirety, are described as follows:

- 1) Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities;
- 2) Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for an asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices); and
- 3) Level 3 inputs are unobservable inputs for an asset or liability.

c. Classification of current and non-current assets and liabilities

Current assets include:

- 1) Assets held primarily for the purpose of trading;
- 2) Assets expected to be realized within 12 months after the reporting period; and
- 3) Cash and cash equivalents unless the asset is restricted from being exchanged or used to settle a liability for at least 12 months after the reporting period.

Current liabilities include:

- 1) Liabilities held primarily for the purpose of trading;
- 2) Liabilities due to be settled within 12 months after the reporting period, even if an agreement to refinance, or to reschedule payments, on a long-term basis is completed after the reporting period and before the consolidated financial statements are authorized for issue; and
- 3) Liabilities for which the Group does not have an unconditional right to defer settlement for at least 12 months after the reporting period. Terms of a liability that could, at the option of the counterparty, result in its settlement by the issue of equity instruments do not affect its classification.

Assets and liabilities that are not classified as current are classified as non-current.

d. Basis of consolidation

The consolidated financial statements incorporate the financial statements of the Company and the entities controlled by the Company (i.e. its subsidiaries).

Income and expenses of subsidiaries acquired or disposed of during the period are included in the consolidated statement of comprehensive income from the effective dates of acquisitions up to the effective dates of disposals, as appropriate.

When necessary, adjustments are made to the financial statements of subsidiaries to bring their accounting policies into line with those used by the Group.

All intra-group transactions, balances, income and expenses are eliminated in full upon consolidation. Total comprehensive income of subsidiaries is attributed to the owners of the Company and to the non-controlling interests even if this results in the non-controlling interests having a deficit balance.

Changes in the Group's ownership interests in subsidiaries that do not result in the Group losing control over the subsidiaries are accounted for as equity transactions. The carrying amounts of the interests of the Group and the non-controlling interests are adjusted to reflect the changes in their relative interests

in the subsidiaries. Any difference between the amount by which the non-controlling interests are adjusted and the fair value of the consideration paid or received is recognized directly in equity and attributed to the owners of the Company.

When the Group loses control of a subsidiary, a gain or loss is recognized in profit or loss and is calculated as the difference between (i) the aggregate of the fair value of the consideration received and any investment retained in the former subsidiary at its fair value at the date when control is lost and (ii) the assets (including any goodwill) and liabilities and any non-controlling interests of the former subsidiary at their carrying amounts at the date when control is lost. The Group accounts for all amounts recognized in other comprehensive income in relation to that subsidiary on the same basis as would be required if the Group had directly disposed of the related assets or liabilities.

The fair value of any investment retained in a former subsidiary at the date when control is lost is regarded as the fair value on initial recognition of financial assets at fair value through profit or loss or, when applicable, the cost on initial recognition of an investment in an associate or a joint venture.

See Note 11 and Table 5 for the detailed information of subsidiaries (including the percentage of ownership and main business).

e. Foreign currencies

In preparing the financial statements of each individual group, transactions in currencies other than the entity's functional currency (foreign currencies) are recognized at the rates of exchange prevailing at the dates of the transactions.

At the end of each reporting period, monetary items denominated in foreign currencies are retranslated at the rates prevailing at that date. Exchange differences on monetary items arising from settlement or translation are recognized in profit or loss in the period in which they arise.

Non-monetary items measured at fair value that are denominated in foreign currencies are retranslated at the rates prevailing at the date when the fair value was determined. Exchange differences arising from the retranslation of non-monetary items are included in profit or loss for the period except for exchange differences arising from the retranslation of non-monetary items in respect of which gains and losses are recognized directly in other comprehensive income, in which cases, the exchange differences are also recognized directly in other comprehensive income.

Non-monetary items that are measured at historical cost in a foreign currency are not retranslated.

For the purpose of presenting consolidated financial statements, the functional currencies of the Company and the Group (including subsidiaries and associates that use currency different from the currency of the Company) are translated into the presentation currency - the New Taiwan dollar as follows: Assets and liabilities are translated at the exchange rates prevailing at the end of the reporting period; income and expense items are translated at the average exchange rates for the period. The resulting currency translation differences are recognized in other comprehensive income (attributed to the owners of the Company and non-controlling interests as appropriate).

f. Inventories

Inventories consist of raw materials, supplies, finished goods, merchandise and work-in-process and are stated at the lower of cost or net realizable value. Inventory write-downs are made by item, except where it may be appropriate to group similar or related items. Net realizable value is the estimated selling price of inventories less all estimated costs of completion and costs necessary to make the sale. Inventories are recorded at standard cost and adjusted to approximate weighted - average cost on the balance sheet date.

g. Property, plant, and equipment

Property, plant and equipment are stated at cost, less accumulated depreciation and accumulated impairment loss.

Depreciation on property, plant and equipment is recognized using the straight-line method. Each significant part is depreciated separately. The estimated useful lives, residual values and depreciation methods are reviewed at the end of each reporting period, with the effects of any changes in estimates accounted for on a prospective basis.

On derecognition of an item of property, plant and equipment, the difference between the sales proceeds and the carrying amount of the asset is recognized in profit or loss.

h. Intangible assets

1) Intangible assets acquired separately

Intangible assets with finite useful lives that are acquired separately are initially measured at cost and subsequently measured at cost less accumulated amortization and accumulated impairment loss. Amortization is recognized on a straight-line basis. The estimated useful life, residual value, and amortization method are reviewed at the end of each reporting period, with the effect of any changes in estimates accounted for on a prospective basis. Intangible assets with indefinite useful lives that are acquired separately are measured at cost less accumulated impairment loss.

2) Internally-generated intangible assets - research and development expenditure

Expenditure on research activities is recognized as an expense in the period in which it is incurred.

An internally-generated intangible asset arising from the development phase of an internal project is recognized if, and only if, all of the following have been demonstrated:

- a) The technical feasibility of completing the intangible asset so that it will be available for use or sale;
- b) The intention to complete the intangible asset and use or sell it;
- c) The ability to use or sell the intangible asset;
- d) How the intangible asset will generate probable future economic benefits;
- e) The availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset; and
- f) The ability to measure reliably the expenditure attributable to the intangible asset during its development.

The amount initially recognized for internally-generated intangible assets is the sum of the expenditure incurred from the date when the intangible asset first meets the recognition criteria listed above. Subsequent to initial recognition, they are measured on the same basis as intangible assets that are acquired separately.

3) Derecognition of intangible assets

On derecognition of an intangible asset, the difference between the net disposal proceeds and the carrying amount of the asset is recognized in profit or loss.

i. Impairment of property, plant and equipment, right-of-use asset, intangible assets other than goodwill

At the end of each reporting period, the Group reviews the carrying amounts of its property, plant and equipment, right-of-use asset and intangible assets, excluding goodwill, to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss. When it is not possible to estimate the recoverable amount of an individual asset, the Group estimates the recoverable amount of the cash-generating unit to which the asset belongs. Corporate assets are allocated to the smallest group of cash-generating units on a reasonable and consistent basis of allocation.

Intangible assets with indefinite useful lives and intangible assets not yet available for use are tested for impairment at least annually, and whenever there is an indication that the asset may be impaired.

The recoverable amount is the higher of fair value less costs to sell and value in use. If the recoverable amount of an asset or cash-generating unit is estimated to be less than its carrying amount, the carrying amount of the asset or cash-generating unit is reduced to its recoverable amount, with the resulting impairment loss recognized in profit or loss.

When an impairment loss is subsequently reversed, the carrying amount of the corresponding asset or cash-generating unit is increased to the revised estimate of its recoverable amount, but only to the extent of the carrying amount that would have been determined had no impairment loss been recognized on the asset or cash-generating unit in prior years. A reversal of an impairment loss is recognized in profit or loss.

j. Financial instruments

Financial assets and financial liabilities are recognized when the Group becomes a party to the contractual provisions of the instruments.

Transaction costs that are directly attributable to the acquisition or issue of financial assets and financial liabilities (other than financial assets and financial liabilities at fair value through profit or loss) are added to or deducted from the fair value of the financial assets or financial liabilities, as appropriate, on initial recognition. Transaction costs directly attributable to the acquisition of financial assets or financial liabilities at fair value through profit or loss are recognized immediately in profit or loss.

1) Financial assets

All regular way purchases or sales of financial assets are recognized and derecognized on a settlement date basis.

a) Measurement category

Financial assets are classified into the following categories: Financial assets measured at amortized cost and investments in equity instruments at FVTOCI.

i. Financial assets measured at amortized cost

Financial assets that meet the following conditions are subsequently measured at amortized cost:

- i) The financial assets are held within a business model whose objective is to hold financial assets in order to collect contractual cash flows; and
- ii) The contractual terms of the financial assets give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Subsequent to initial recognition, financial assets measured at amortized cost, including cash and cash equivalents and trade receivables measured at amortized cost, are measured at amortized cost, which equals the gross carrying amount determined using the effective interest method less any impairment loss. Exchange differences are recognized in profit or loss.

Interest income is calculated by applying the effective interest rate to the gross carrying amount of a financial asset, except for:

- i) Purchased or originated credit-impaired financial assets, for which interest income is calculated by applying the credit-adjusted effective interest rate to the amortized cost of such a financial asset; and
- ii) Financial assets that have subsequently become credit-impaired, for which interest income is calculated by applying the effective interest rate to the amortized cost of such a financial asset.

A financial asset is credit impaired when one or more of the following events have occurred:

- i) Significant financial difficulty of the issuer or the borrower;
- ii) Breach of contract, such as a default;
- iii) It is becoming probable that the borrower will enter bankruptcy or undergo a financial reorganization; or
- iv) The disappearance of an active market for that financial asset because of financial difficulties.

Cash equivalents include time deposits with original maturities, which are highly liquid, readily convertible to a known amount of cash and are subject to an insignificant risk of changes in value. These cash equivalents are held for the purpose of meeting short-term cash commitments.

ii Investments in equity instruments at FVTOCI

On initial recognition, the Group may make an irrevocable election to designate investments in equity instruments as at FVTOCI. Designation at FVTOCI is not permitted if the equity investment is held for trading or if it is contingent consideration recognized by an acquirer in a business combination.

Investments in equity instruments at FVTOCI are subsequently measured at fair value with gains and losses arising from changes in fair value recognized in other comprehensive income and accumulated in other equity. The cumulative gain or loss will not be reclassified to profit or loss on the disposal of the equity investments; instead, they will be transferred to retained earnings.

Dividends on these investments in equity instruments are recognized in profit or loss when the Group's right to receive the dividends is established, unless the dividends clearly represent a recovery of part of the cost of the investment.

b) Impairment of financial assets

The Group recognizes a loss allowance for expected credit losses on financial assets measured at amortized cost (including trade receivables).

The Group always recognizes lifetime expected credit losses (i.e. ECLs) for trade receivables and lease receivables. For all other financial instruments, the Group recognizes lifetime ECLs when there has been a significant increase in credit risk since initial recognition. If, on the other hand, the credit risk on such a financial instrument has not increased significantly since initial recognition, the Group measures the loss allowance for that financial instrument at an amount equal to 12-month ECLs.

Expected credit losses reflect the weighted average of credit losses with the respective risks of a default occurring as the weights. Lifetime ECLs represent the expected credit losses that will result from all possible default events over the expected life of a financial instrument. In contrast, 12-month ECLs represent the portion of lifetime ECLs that is expected to result from default events on a financial instrument that are possible within 12 months after the reporting date.

For internal credit risk management purposes, the Group determines that the following situations indicate that a financial asset is in default (without taking into account any collateral held by the Group):

- i Internal or external information show that the debtor is unlikely to pay its creditors.
- ii When a financial asset is more than 90 days past due unless the Group has reasonable and corroborative information to support a more lagged default criterion.

The Group recognizes an impairment gain or loss in profit or loss for all financial instruments with a corresponding adjustment to their carrying amount through a loss allowance account, except for investments in debt instruments that are measured at FVTOCI, for which the loss allowance is recognized in other comprehensive income and does not reduce the carrying amount of the financial asset.

c) Derecognition of financial assets

The Group derecognizes a financial asset only when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another party.

If the Group neither transfers nor retains substantially all the risks and rewards of ownership and continues to control the transferred asset, the Group recognizes its retained interest in the asset and any associated liability for amounts it may have to pay. If the Group retains substantially all the risks and rewards of ownership of a transferred financial asset, the Group continues to recognize the financial asset and also recognizes a collateralized borrowing for the proceeds received.

On derecognition of a financial asset at amortized cost in its entirety, the difference between the asset's carrying amount and the sum of the consideration received and receivable is recognized in profit or loss. On derecognition of an investment in an equity instrument at FVTOCI, the difference between the asset's carrying amount and the sum of the consideration received and receivable is recognized in profit or loss, and the cumulative gain or loss which had been recognized in other comprehensive income is transferred directly to retained earnings, without recycling through profit or loss.

2) Equity instruments

Equity instruments issued by the Group are recognized at the proceeds received, net of direct issue costs.

The repurchase of the Company's own equity instruments is recognized in and deducted directly from equity. No gain or loss is recognized in profit or loss on the purchase, sale, issuance or cancellation of the Company's own equity instruments.

3) Financial liabilities

a) Subsequent measurement

All financial liabilities are measured at amortized cost using the effective interest method.

b) Derecognition of financial liabilities

The difference between the carrying amount of the financial liability derecognized and the consideration paid, including any non-cash assets transferred or liabilities assumed, is recognized in profit or loss.

k. Provisions

Provisions are measured at the best estimate of the discounted cash flows of the consideration required to settle the present obligation at the end of the reporting period, taking into account the risks and uncertainties surrounding the obligation.

l. Revenue recognition

The Group identifies contracts with customers, allocates the transaction price to the performance obligations and recognizes revenue when performance obligations are satisfied.

For contracts entered into with the same customer (or related parties of the customer) at or near the same time, those contracts are accounted for as a single contract if the goods or services promised in the contracts are a single performance obligation.

1) Revenue from the sale of goods

Revenue from the sale of goods comes from sales of Memory products and wafer fabrication. Sales of Memory products and wafer fabrication are recognized as revenue when the goods are delivered to the customer's specific location because it is the time when the customer has full discretion over the manner of distribution and price to sell the goods, and has the primary responsibility for sales to future customers and bears the risks of obsolescence. Trade receivables are recognized concurrently. For Memory products and wafer fabrication, revenue is recognized when the goods are delivered to the customer's specific location, and the transaction price received is recognized as a contract liability until the goods have been delivered to the customer.

The Group does not recognize revenue on materials delivered to subcontractors because this delivery does not involve a transfer of control.

2) Revenue from the rendering of services

As the Group provides rendering services, the related revenue is recognized when services are rendered. Payment for installation services is not due from the customer until the installation services are complete, and therefore, contract assets are recognized over the period in which the

installation services are performed. The contract assets are reclassified to trade receivables when the installation is complete.

m. Leases

At the inception of a contract, the Group assesses whether the contract is, or contains, a lease.

For a contract that contains a lease component and non-lease components, the Group allocates the consideration in the contract to each component on the basis of the relative stand-alone price and accounts for each component separately.

1) The Group as lessor

Leases are classified as finance leases whenever the terms of a lease transfer substantially all the risks and rewards of ownership to the lessee. All other leases are classified as operating leases.

When the Group subleases right-of-use assets, the sublease is classified by reference to the right-of-use asset arising from the head lease, not with reference to the underlying asset. However, if the head lease is a short-term lease that the Group, as a lessee, has accounted for applying recognition exemption, the sublease is classified as an operating lease.

Lease payments (less any lease incentives payable) from operating leases are recognized as income on a straight-line basis over the terms of the relevant leases. Initial direct costs incurred in obtaining operating leases are added to the carrying amounts of the underlying assets and recognized as expenses on a straight-line basis over the lease terms. Lease modification that resulted from a negotiation with a lessee is accounted for as a new lease from the effective date of modification.

2) The Group as lessee

The Group recognizes right-of-use assets and lease liabilities for all leases at the commencement date of a lease, except for short-term leases and low-value asset leases accounted for applying a recognition exemption where lease payments are recognized as expenses on a straight-line basis over the lease terms.

Right-of-use assets are initially measured at cost, which comprises the initial measurement of lease liabilities adjusted for lease payments made at or before the commencement date, plus any initial direct costs incurred and an estimate of costs needed to restore the underlying assets, and less any lease incentives received. Right-of-use assets are subsequently measured at cost less accumulated depreciation and impairment losses and adjusted for any remeasurement of the lease liabilities. Right-of-use assets are presented on a separate line in the consolidated balance sheets.

Right-of-use assets are depreciated using the straight-line method from the commencement dates to the earlier of the end of the useful lives of the right-of-use assets or the end of the lease terms.

Lease liabilities are initially measured at the present value of the lease payments, which comprise fixed payments, in-substance fixed payments, variable lease payments which depend on an index or a rate, residual value guarantees, the exercise price of a purchase option if the Group is reasonably certain to exercise that option, and payments of penalties for terminating a lease if the lease term reflects such termination, less any lease incentives receivable. The lease payments are discounted using the interest rate implicit in a lease, if that rate can be readily determined. If that rate cannot be readily determined, the Group uses the lessee's incremental borrowing rate.

Subsequently, lease liabilities are measured at amortized cost using the effective interest method, with interest expense recognized over the lease terms. When there is a change in a lease term, a change in the amounts expected to be payable under a residual value guarantee, a change in the assessment of an option to purchase an underlying asset, or a change in future lease payments resulting from a change in an index or a rate used to determine those payments, the Group remeasures the lease liabilities with a corresponding adjustment to the right-of-use-assets. However, if the carrying amount of the right-of-use assets is reduced to zero, any remaining amount of the remeasurement is recognized in profit or loss. For a lease modification that is not accounted for as a separate lease, the Group accounts for the remeasurement of the lease liability by (a) decreasing the carrying amount of the right-of-use asset of lease modifications that decreased the scope of the lease, and recognizing in profit or loss any gain or loss on the partial or full termination of the lease; (b) making a corresponding adjustment to the right-of-use asset of all other lease modifications. Lease liabilities are presented on a separate line in the consolidated balance sheets.

n. Borrowing costs

Borrowing costs directly attributable to an acquisition, construction or production of qualifying assets are added to the cost of those assets, until such time as the assets are substantially ready for their intended use or sale.

Other than stated above, all other borrowing costs are recognized in profit or loss in the period in which they are incurred.

o. Employee benefits

1) Short-term employee benefits

Liabilities recognized in respect of short-term employee benefits are measured at the undiscounted amount of the benefits expected to be paid in exchange for the related service.

2) Retirement benefits

Payments to defined contribution retirement benefit plans are recognized as an expense when employees have rendered services entitling them to the contributions.

Defined benefit costs (including service cost, net interest and remeasurement) under defined benefit retirement benefit plans are determined using the projected unit credit method. Service cost (including current service cost) and net interest on the net defined benefit liability are recognized as employee benefit expenses in the period they occur. Remeasurement, comprising actuarial gains and losses, the effect of the changes to the asset ceiling and the return on plan assets (excluding interest), is recognized in other comprehensive income in the period in which they occur. Remeasurement recognized in other comprehensive income is reflected immediately in retain earnings and will not be reclassified to profit or loss.

Net defined benefit liability represents the actual deficit in the Group's defined benefit plan. Any surplus resulting from this calculation is limited to the present value of any refunds from the plans or reductions in future contributions to the plans.

3) Other long-term employee benefits

Other long-term employee benefits are accounted for in the same way as the accounting required for defined benefit plan except that remeasurement is recognized in profit or loss.

4) Termination benefits

A liability for a termination benefit is recognized at the earlier of when the Group can no longer withdraw the offer of the termination benefit and when the Group recognizes any related restructuring costs.

p. Share-based payment arrangements

The fair value at the grant date of the equity-settled share-based payments is expensed on a straight-line basis over the vesting period, based on the Group's best estimates of the number of shares or options that are expected to ultimately vest, with a corresponding increase in capital surplus - employee share options or other equity - employees' unearned compensation. It is recognized as an expense in full at the grant date if vesting immediately.

When restricted shares for employees are issued, other equity - employees' unearned compensation are recognized on the grant date, with a corresponding increase in capital surplus - restricted shares for employees.

At the end of each reporting period, the Group revises its estimate of the number of equity instruments expected to vest. The impact of the revision of the original estimates is recognized in profit or loss such that the cumulative expense reflects the revised estimate, with a corresponding adjustment to the capital surplus - employee share options or capital surplus-restricted share option.

q. Treasury shares

The parent company's shares held by subsidiaries is reclassified to treasury shares from investment accounted for using equity method and recognized with the original investment cost. Cash dividends earned by subsidiaries are write-off with investment income and adjust capital surplus-treasury share transaction.

r. Taxation

Income tax expense represents the sum of the tax currently payable and deferred tax.

1) Current tax

Income tax payable (recoverable) is based on taxable profit (loss) for the year determined according to the applicable tax laws of each tax jurisdiction.

According to the Income Tax Law in the ROC, an additional tax on unappropriated earnings is provided for in the year the shareholders approve to retain earnings.

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

2) Deferred tax

Deferred tax is recognized on temporary differences between the carrying amounts of assets and liabilities and the corresponding tax bases used in the computation of taxable profit.

Deferred tax liabilities are generally recognized for all taxable temporary differences. Deferred tax assets are generally recognized for all deductible temporary differences, unused loss carry forward and unused tax credits for purchases of machinery, equipment and technology, research and development expenditures and personnel training expenditures to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilized.

Deferred tax liabilities are recognized for taxable temporary differences associated with investments in subsidiaries, except where the Group is able to control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred tax assets arising from deductible temporary differences associated with such investments and interests are only recognized to the extent that it is probable that there will be sufficient taxable profits against which to utilize the benefits of the temporary differences and they are expected to reverse in the foreseeable future.

The carrying amount of deferred tax assets is reviewed at the end of each reporting period and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered. A previously unrecognized deferred tax asset is also reviewed at the end of each reporting period and recognized to the extent that it has become probable that future taxable profit will allow the deferred tax asset to be recovered.

Deferred tax liabilities and assets are measured at the tax rates that are expected to apply in the year which the liability is settled or the asset realized, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period. The measurement of deferred tax liabilities and assets reflects the tax consequences that would follow from the manner in which the Group expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

3) Current and deferred taxes

Current and deferred taxes are recognized in profit or loss, except when they relate to items that are recognized in other comprehensive income or directly in equity, in which case, the current and deferred taxes are also recognized in other comprehensive income or directly in equity, respectively.

5. CRITICAL ACCOUNTING JUDGMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY

In the application of the Group's accounting policies, management is required to make judgments, estimates and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered relevant. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the year in which the estimate is revised if the revision affects only that period or in the period of the revision and future years if the revision affects both current and future years.

a. Write-down of inventory

The net realizable value of inventory is the estimated selling price in the ordinary course of business less the estimated costs of completion and disposal. The estimation of net realizable value was based on current market conditions and historical experience with product sales of a similar nature. Changes in market conditions may have a material impact on the estimation of the net realizable value.

b. Recognition and measurement of defined benefit plans

The net defined liabilities (assets) and the resulting defined benefit costs under the defined benefit pension plans are calculated using the projected unit credit method. Actuarial assumptions comprise the discount rates, rates of employee turnover, future salary increases, etc. Changes in economic circumstances and market conditions will affect these assumptions and may have a material impact on the amount of related expenses and the liabilities.

c. Income taxes

The realizability of deferred tax assets mainly depends on whether sufficient future profit or taxable temporary differences will be available. In cases where the actual future profit generated is less than expected, a material reversal of deferred tax assets may arise, which would be recognized in profit or loss for the period in which such a reversal takes place.

6. CASH AND CASH EQUIVALENTS

	<u>December 31</u>	
	2020	2019
Cash on hand	\$ 11	\$ 58
Checking accounts and demand deposits	9,730,077	7,001,899
Cash equivalents		
Time deposits	<u>2,149,211</u>	<u>1,723,132</u>
	<u>\$ 11,879,299</u>	<u>\$ 8,725,089</u>

7. FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME

	<u>December 31</u>	
	2020	2019
<u>Non-current</u>		
Investments in equity instruments		
Domestic investments		
Listed shares	\$ 1,461,804	\$ 1,182,250
Unlisted shares	<u>420,699</u>	<u>361,594</u>
	1,882,503	1,543,844
Foreign investments		
Listed shares	453,571	421,894
Unlisted shares	<u>-</u>	<u>35,392</u>
	<u>\$ 2,336,074</u>	<u>\$ 2,001,130</u>

These investments in equity instruments are not held for trading. Instead, they are held for medium to long-term strategic purposes. Accordingly, the management elected to designate these investments in equity instruments as at FVTOCI as they believe that recognizing short-term fluctuations in these investments' fair value in profit or loss would not be consistent with the Group's strategy of holding these investments for long-term purposes.

The Group sold its ordinary shares in Tower Semiconductor Ltd. at a fair value of \$4,827 thousand in January 2020. The related unrealized loss on financial assets at FVTOCI of NT\$16,050 thousand under other equity was transferred from other equity to retained earnings.

Due to the liquidation and dissolution of Global Strategic Investment Inc. (Cayman) and Global Strategic Investment Inc. (Samoa), cash in the amount of \$33,280 thousand and 49,116 shares of Amphastar Pharmaceuticals, Inc. at fair value were allocated to the Group in August 2020 based on the shareholding ratio. The related unrealized loss on financial assets at FVTOCI of NT\$13,050 thousand under other equity was transferred to retained earnings.

The Group recognized dividend income of NT\$101,174 thousand and NT\$109,016 thousand for the years ended December 31, 2020 and 2019, respectively. As of December 31, 2020 and 2019, the Group's related investments still held amounted to NT\$1,882,503 thousand and NT\$1,543,844 thousand, respectively.

8. FINANCIAL ASSETS MEASURED AT AMORTIZED COST

	<u>December 31</u>	
	<u>2020</u>	<u>2019</u>
<u>Current</u>		
Time deposits with original maturities exceeding 1 year	\$ <u>-</u>	\$ <u>21,525</u>

The interest rate for time deposits with original maturities exceeding 1 year was 2.73% per annum as of December 31, 2019.

9. NOTES RECEIVABLE, TRADE RECEIVABLES AND OTHER RECEIVABLES

	<u>December 31</u>	
	<u>2020</u>	<u>2019</u>
<u>Trade receivables</u>		
Total amount of trade receivables measured at amortized cost	\$ 3,471,737	\$ 3,964,524
Less: Allowance for impairment loss	<u>(17,018)</u>	<u>(16,795)</u>
	<u>\$ 3,454,719</u>	<u>\$ 3,947,729</u>
<u>Other receivables</u>		
Tax receivable	\$ 110,103	\$ 123,184
Others	<u>6,827</u>	<u>32,896</u>
	<u>\$ 116,930</u>	<u>\$ 156,080</u>

a. Trade receivables

The average credit period for sales of goods was 60 days.

In determining the recoverability of a trade receivable, the Group evaluates each customer's credibility and financial position and considers any change in the credit quality of the trade receivable since the date credit was initially granted to the end of the reporting period.

The Group measures the loss allowance for trade receivables at an amount equal to lifetime ECLs.

The expected credit losses on trade receivables are estimated using a provision matrix by reference to past default experience with the respective debtors and an analysis of the debtors' current financial positions, adjusted for factors that are specific to the debtors, general economic conditions of the industry in which the debtors operate and an assessment of both the current as well as the forecasted direction of conditions at the reporting date. The Group estimates expected credit losses based on the number of days for which receivables are past due. As the Group's historical credit loss experience shows significantly different loss patterns for different customer segments, the provision for losses based on past due status of receivables is not further distinguished according to different segments of the Group's customer base.

The aging of trade receivables is as follows:

	December 31	
	2020	2019
Neither past due nor impaired	\$ 3,384,849	\$ 3,776,736
Past due but not impaired		
Within 60 days	69,837	170,993
61-120 days	33	-
Over 120 days	<u>-</u>	<u>-</u>
	<u>\$ 3,454,719</u>	<u>\$ 3,947,729</u>

The above aging schedule was based on the past due days from the end of the credit term.

As of December 31, 2020 and 2019, the Group did not hold collateral for most of its receivables.

The movements of the allowance for doubtful trade receivables are as follows:

	For the Year Ended December 31	
	2020	2019
Balance at January 1	\$ 16,795	\$ 16,812
Add: Amounts recovered	223	-
Less: Amounts written off	<u>-</u>	<u>(17)</u>
Balance at December 31	<u>\$ 17,018</u>	<u>\$ 16,795</u>

b. Other receivables

No allowance for impairment loss of other receivables was recognized since the other receivables of the Group were not past due and the Group assessed that there was no uncertainty of recoverability.

10. INVENTORIES

	December 31	
	2020	2019
Finished goods and merchandise	\$ 932,686	\$ 1,001,297
Work in progress	11,327,960	10,781,345
Raw materials	<u>684,621</u>	<u>1,027,795</u>
	<u>\$ 12,945,267</u>	<u>\$ 12,810,437</u>

The costs of inventories recognized as cost of goods sold included inventory loss that resulted from the write-downs of inventory to net realizable value and reversal of inventory loss due to sold of part of the written-down inventory. The amounts were as follows:

	For the Year Ended December 31	
	2020	2019
Loss on inventory write-downs (reversal of inventory loss)	<u>\$ (99,103)</u>	<u>\$ 2,699,918</u>

11. SUBSIDIARIES

Subsidiaries included in the consolidated financial statements

As of December 31, 2020 and 2019, the Company has direct and indirect majority ownership in the following subsidiaries: Run Hong Investment Ltd. (Run Hong), Hui Ying Investment Ltd. (Hui Ying), Mxtran Inc. (Mxtran), Macronix America, Inc. (MXA), Macronix (BVI) Co., Ltd. (MXBVI), Mxtran Holding (Samoa) Co., Ltd. (Mxtran Samoa), Mxtran (H.K.) Holding Co., Limited (MxtranHK), New Trend Technology Inc. (NTTI), Macronix (Asia) Limited (MX Asia), Macronix Pte Ltd (MPL), Macronix Europe N.V. (MXE), Macronix (Hong Kong) Co., Limited (MXHK) and Macronix Microelectronics (Suzhou) Co., Ltd. (MXm).

Investor	Investee	Nature of Activities	% of Ownership	
			2020	2019
The Company	Run Hong	Investment company	100.00	100.00
The Company	Hui Ying	Investment company	100.00	100.00
The Company and Run Hong	Mxtran	IC design	94.84	94.84
The Company	MXA	Sales and marketing	100.00	100.00
The Company	MXBVI	Investment holding company	100.00	100.00
Mxtran	Mxtran Samoa	Investment holding company	100.00	100.00
Mxtran Samoa	Mxtran HK	Investment holding company	100.00	100.00
MXBVI	NTTI	IC design	100.00	100.00
MXBVI	MX Asia	After-sales service	100.00	100.00
MXBVI	MPL	After-sales service	100.00	100.00
MXBVI	MXE	After-sales service	100.00	100.00
MXBVI	MXHK	Sales and marketing	100.00	100.00
MXHK	MXm	Development of integrated circuit system and software	100.00	100.00

12. PROPERTY, PLANT AND EQUIPMENT

	December 31	
	2020	2019
Assets used by the Group	<u>\$ 31,462,800</u>	<u>\$ 29,365,507</u>

	Years Ended December 31, 2020					
	Balance, Beginning of Year	Additions	Disposals	Net Exchange Differences	Reclassification	Balance, End of Year
<u>Cost</u>						
Freehold land	\$ 1,257,751	\$ -	\$ -	\$ (33,005)	\$ -	\$ 1,224,746
Buildings	25,161,752	-	750	3,564	275,330	25,439,896
Machinery equipment	91,635,490	-	204,065	-	9,422,251	100,853,676
Research and development equipment	3,634,881	2,457	14,672	611	613,474	4,236,751
Transportation equipment	28,642	-	7,240	31	1,200	22,633
Leasehold improvements	18,057	272	3,106	(262)	84	15,045
Miscellaneous equipment	1,225,083	8,556	151,224	(108)	106,551	1,188,858
Advance payments and construction in progress	9,822,103	5,692,111	63	2	(10,423,449)	5,090,704
	<u>132,783,759</u>	<u>\$ 5,703,396</u>	<u>\$ 381,120</u>	<u>\$ (29,167)</u>	<u>\$ (4,559)</u>	<u>138,072,309</u>
<u>Accumulated depreciation and impairment</u>						
Freehold land	372,499	\$ -	\$ -	\$ (18,636)	\$ -	353,863
Buildings	20,577,580	414,583	750	1,205	-	20,992,618
Machinery equipment	79,413,703	2,845,771	204,065	-	199,636	82,255,045
Research and development equipment	1,921,379	259,279	14,672	492	(203,687)	1,962,791
Transportation equipment	17,637	3,042	6,660	18	-	14,037
Leasehold improvements	16,359	752	2,956	(249)	84	13,990
Miscellaneous equipment	1,099,095	69,805	151,201	10	(544)	1,017,165
	<u>103,418,252</u>	<u>\$ 3,593,232</u>	<u>\$ 380,304</u>	<u>\$ (17,160)</u>	<u>\$ (4,511)</u>	<u>106,609,509</u>
Carrying amount at December 31, 2020	<u>\$ 29,365,507</u>					<u>\$ 31,462,800</u>

	Years Ended December 31, 2019					
	Balance, Beginning of Year	Additions	Disposals	Net Exchange Differences	Reclassification	Balance, End of Year
<u>Cost</u>						
Freehold land	\$ 1,273,924	\$ -	\$ -	\$ (16,173)	\$ -	\$ 1,257,751
Buildings	24,888,772	-	31,832	(8,267)	313,079	25,161,752
Machinery equipment	87,236,824	-	2,338,063	-	6,736,729	91,635,490
Research and development equipment	3,844,510	3,050	51,944	(1,302)	(159,433)	3,634,881
Transportation equipment	23,983	-	1,140	(72)	5,871	28,642
Leasehold improvements	40,157	639	148	(1,133)	(21,458)	18,057
Miscellaneous equipment	1,198,924	7,769	62,816	(3,383)	84,589	1,225,083
Advance payments and construction in progress	4,135,257	12,667,672	-	9	(6,980,835)	9,822,103
	<u>122,642,351</u>	<u>\$ 12,679,130</u>	<u>\$ 2,485,943</u>	<u>\$ (30,321)</u>	<u>\$ (21,458)</u>	<u>132,783,759</u>
<u>Accumulated depreciation and impairment</u>						
Freehold land	381,632	\$ -	\$ -	\$ (9,133)	\$ -	372,499
Buildings	20,209,450	396,660	26,066	(2,464)	-	20,577,580
Machinery equipment	79,576,058	1,921,393	2,322,942	-	239,194	79,413,703
Research and development equipment	1,989,499	223,971	51,917	(980)	(239,194)	1,921,379
Transportation equipment	15,838	2,961	1,140	(22)	-	17,637
Leasehold improvements	38,402	672	148	(1,109)	(21,458)	16,359
Miscellaneous equipment	1,122,797	41,967	62,745	(2,924)	-	1,099,095
	<u>103,333,676</u>	<u>\$ 2,587,624</u>	<u>\$ 2,464,958</u>	<u>\$ (16,632)</u>	<u>\$ (21,458)</u>	<u>103,418,252</u>
Carrying amount at December 31, 2019	<u>\$ 19,308,675</u>					<u>\$ 29,365,507</u>

For the years ended December 31, 2020 and 2019, the Group assessed that no indication of an impairment loss was present; therefore, no impairment assessment was performed.

The carrying amount of the freehold land in the United States which was unutilized by the Group as of December 31, 2020 and 2019 was US\$9,579 thousand, respectively.

The above items of property, plant and equipment are depreciated on a straight-line basis over their estimated useful lives as follows:

Buildings	
Main buildings	31-40 years
Electronic equipment	11-20 years
Facility equipment	15 years
Landscape engineering	20 years
Machinery equipment	11 years
Research and development equipment	5-11 years
Transportation equipment	5 years
Leasehold improvements	6-16 years
Miscellaneous equipment	2-16 years

Property, plant and equipment pledged as collateral for bank borrowings are set out in Note 32.

13. LEASE ARRANGEMENTS

a. Right-of-use assets

	<u>December 31</u>	
	<u>2020</u>	<u>2019</u>
<u>Carrying amounts</u>		
Freehold land	\$ 919,621	\$ 952,687
Buildings	107,825	118,282
Machinery equipment	9,445	-
Transportation equipment	5,003	6,000
Miscellaneous equipment	<u>500</u>	<u>499</u>
	<u>\$ 1,042,394</u>	<u>\$ 1,077,468</u>
	<u>For the Year Ended December 31</u>	
	<u>2020</u>	<u>2019</u>
Additions to right-of-use assets	<u>\$ 76,762</u>	<u>\$ 82,035</u>
Depreciation charge for right-of-use assets		
Freehold land	\$ 70,126	\$ 70,491
Buildings	39,729	33,378
Machinery equipment	4,861	-
Transportation equipment	3,390	3,978
Miscellaneous equipment	<u>2,000</u>	<u>1,996</u>
	<u>\$ 120,106</u>	<u>\$ 109,843</u>
Income from the subleasing of right-of-use assets (included in other income)	<u>\$ (4,036)</u>	<u>\$ (3,744)</u>

Except for the recognized depreciation, the Group did not have impairment of right-of-use assets for the years ended December 31, 2020 and 2019.

b. Lease liabilities

	<u>December 31</u>	
	<u>2020</u>	<u>2019</u>
<u>Carrying amounts</u>		
Current	<u>\$ 104,598</u>	<u>\$ 93,919</u>
Non-current	<u>\$ 940,302</u>	<u>\$ 973,712</u>

Range of discount rate for lease liabilities was as follows:

	December 31	
	2020	2019
Freehold land	1.67%-1.73%	1.67%
Buildings	1.03%-6.00%	1.07%-4.31%
Machinery equipment	1.05%	-
Transportation equipment	1.03%-1.22%	1.22%
Miscellaneous equipment	1.03%-1.22%	1.22%

c. Material lease-in activities and terms

The Group also leased certain land and buildings for the use as plant and office in a period of one to twenty years. The Group does not have bargain purchase options to acquire the leasehold land and buildings at the end of the lease terms. In addition, the Group is prohibited from subleasing or transferring all or any portion of the underlying assets without the lessor's consent.

d. Other lease information

	For the Year Ended December 31	
	2020	2019
Expenses relating to short-term leases	\$ <u> -</u>	\$ <u> 9,783</u>
Expenses relating to low-value asset leases	\$ <u> 299</u>	\$ <u> 190</u>
Expenses relating to variable lease payments not included in the measurement of lease liabilities	\$ <u> 10,529</u>	\$ <u> 10,126</u>
Total cash outflow for leases	\$ <u>(139,223)</u>	\$ <u>(139,647)</u>

The Group leases certain office buildings which qualify as short-term leases and certain office equipment which qualifies as low-value asset leases. The Group has elected to apply the recognition exemption and thus, did not recognize right-of-use assets and lease liabilities for these leases.

14. INTANGIBLE ASSETS

	Years Ended December 31, 2020				
	Balance, Beginning of Year	Additions	Disposals	Net Exchange Differences	
<u>Cost</u>					
Software	\$ 108,386	\$ 43,201	\$ 43,323	\$ 358	\$ 108,622
Others	<u>13,000</u>	<u>-</u>	<u>13,000</u>	<u>-</u>	<u>-</u>
	<u>121,386</u>	<u>\$ 43,201</u>	<u>\$ 56,323</u>	<u>\$ 358</u>	<u>108,622</u>
<u>Accumulated amortization</u>					
Software	62,447	\$ 31,906	\$ 43,323	\$ 312	51,342
Others	<u>11,917</u>	<u>1,083</u>	<u>13,000</u>	<u>-</u>	<u>-</u>
	<u>74,364</u>	<u>\$ 32,989</u>	<u>\$ 56,323</u>	<u>\$ 312</u>	<u>51,342</u>
Carrying amounts at December 31, 2020	<u>\$ 47,022</u>				<u>\$ 57,280</u>

	Years Ended December 31, 2019				
	Balance, Beginning of Year	Additions	Disposals	Net Exchange Differences	Balance, End of Year
<u>Cost</u>					
Software	\$ 86,874	\$ 35,514	\$ 13,261	\$ (741)	\$ 108,386
Others	13,000	-	-	-	13,000
	<u>99,874</u>	<u>\$ 35,514</u>	<u>\$ 13,261</u>	<u>\$ (741)</u>	<u>121,386</u>
<u>Accumulated amortization</u>					
Software	47,068	\$ 29,220	\$ 13,261	\$ (580)	62,447
Others	7,583	4,334	-	-	11,917
	<u>54,651</u>	<u>\$ 33,554</u>	<u>\$ 13,261</u>	<u>\$ (580)</u>	<u>74,364</u>
Carrying amounts at December 31, 2019	<u>\$ 45,223</u>				<u>\$ 47,022</u>

Intangible assets are amortized on a straight-line basis over their estimated useful lives as follows:

Software	3 years
Others	3 years

15. OTHER FINANCIAL ASSETS

	<u>December 31</u>	
	2020	2019
<u>Non-current</u>		
Restricted time deposits (Note 32)	\$ 157,665	\$ 157,665
Refundable deposits	<u>13,887</u>	<u>13,925</u>
	<u>\$ 171,552</u>	<u>\$ 171,590</u>

16. OTHER ASSETS

	<u>December 31</u>	
	2020	2019
<u>Current</u>		
Prepayments	<u>\$ 118,182</u>	<u>\$ 252,759</u>

17. BORROWINGS

a. Short-term borrowings

	<u>December 31</u>	
	2020	2019
Line of credit borrowings	<u>\$ -</u>	<u>\$ 1,550,000</u>
Interest rate	-	0.98%-1.10%

b. Long-term borrowings

	December 31	
	2020	2019
Secured borrowings from financial institutions	\$ 10,291,437	\$ 10,237,531
Unsecured borrowings from financial institutions	<u>5,880,000</u>	<u>2,840,000</u>
	16,171,437	13,077,531
Less: Current portion	5,412,007	3,267,200
Less: Arrangement fee	<u>22,555</u>	<u>36,001</u>
Long-term borrowings	<u>\$ 10,736,875</u>	<u>\$ 9,774,330</u>
Interest rate	0.93%-1.79%	1.23%-1.97%

Borrowing Type	Repayment Terms	December 31	
		2020	2019
Secured bank borrowing denominated in NT\$	From June 2019 to February 2024	\$ 7,700,000	\$ 4,600,000
Secured syndicated loan denominated in NT\$	From December 2017 to January 2021	2,175,812	4,818,662
Unsecured bank borrowings denominated in NT\$	From March 2020 to March 2022	1,200,000	-
Unsecured bank borrowing denominated in NT\$	From June 2019 to June 2021	960,000	1,200,000
Unsecured bank borrowings denominated in NT\$	From December 2020 to December 2023	600,000	-
Unsecured bank borrowings denominated in NT\$	From August 2020 to February 2023	600,000	-
Unsecured bank borrowing denominated in NT\$	From August 2020 to August 2023	500,000	-
Unsecured bank borrowings denominated in NT\$	From August 2020 to August 2023	500,000	-
Unsecured bank borrowings denominated in NT\$	From June 2020 to June 2023	500,000	-
Unsecured bank borrowings denominated in NT\$	From April 2019 to April 2022	450,000	600,000
Unsecured bank borrowings denominated in NT\$	From June 2020 to June 2023	300,000	-
Secured bank borrowing denominated in NT\$	From September 2017 to September 2022	218,750	343,750
Secured bank borrowing denominated in NT\$	From September 2018 to September 2021	196,875	459,375
Unsecured bank borrowings denominated in NT\$	From July 2019 to July 2022	150,000	300,000
Unsecured bank borrowings denominated in NT\$	From September 2018 to September 2021	120,000	240,000
Unsecured bank borrowings denominated in NT\$	Pay off in December 2020	-	300,000
Unsecured bank borrowings denominated in NT\$	Pay off in September 2020	-	200,000

(Continued)

Borrowing Type	Repayment Terms	December 31	
		2020	2019
Secured bank borrowing denominated in NT\$	Pay off in January 2020	\$ -	\$ 15,744
Less: Current portion		5,412,007	3,267,200
Less: Arrangement fee		<u>22,555</u>	<u>36,001</u>
Total long-term borrowings		<u>\$ 10,736,875</u>	<u>\$ 9,774,330</u> (Concluded)

To repay the vested liabilities, purchase equipment and machinery and increase operating funds, the Group signed a 5-year syndicated loan agreement with 7 financial institutions in November 2017 with a total amount of NT\$7.7 billion. In June 2020, the Group canceled the loan facility of NT\$1.1 billion. In January 2021, the Group repaid all of the loan in advance.

To purchase equipment or machinery, the Group has entered into a 5-year syndicated loan agreement with 9 financial institutions including the Taiwan Cooperative Bank in January 2019 with the total amount of NT\$8 billion. The Group provided notes used as refundable guarantees for syndicated loan mentioned above that will be cancelled upon termination of the guarantee.

In addition, the Group's floating borrowing rate on the above borrowing is reset every one to three months.

The loan agreement requires the maintenance of a current ratio, debt ratio, and interest coverage ratio based on the Group's semi-annual and annual consolidated financial statements. For the year ended December 31, 2020 and 2019, the Group had met the financial ratio covenants.

The details of assets pledged as collateral for long-term loans are set in Note 32.

18. NOTES PAYABLE AND TRADE PAYABLES

	December 31	
	2020	2019
Trade payables	<u>\$ 2,940,531</u>	<u>\$ 2,141,510</u>

The Group has financial risk management policies in place to ensure that all payables are paid within the pre-agreed upon credit terms.

19. OTHER PAYABLES

	December 31	
	2020	2019
Payables for bonuses	\$ 260,131	\$ 253,924
Payables for maintenance and repairs	192,006	219,965
Payables for donations	177,957	98,144
Payables for patents	129,333	165,357
Payables for spare parts	77,155	62,763
Others	<u>645,212</u>	<u>696,234</u>
	<u>\$ 1,481,794</u>	<u>\$ 1,496,387</u>

20. OTHER LIABILITIES

	<u>December 31</u>	
	<u>2020</u>	<u>2019</u>
<u>Current</u>		
Refund liabilities	\$ 128,992	\$ 190,061
Guarantee deposits	160,721	-
Receipts under custody	35,032	31,999
Others	<u>7,525</u>	<u>8,380</u>
	<u>\$ 332,270</u>	<u>\$ 230,440</u>
<u>Non-current</u>		
Guarantee deposits	\$ 19,409	\$ 10,271
Others	<u>9</u>	<u>9</u>
	<u>\$ 19,418</u>	<u>\$ 10,280</u>

21. PROVISIONS

	<u>December 31</u>	
	<u>2020</u>	<u>2019</u>
<u>Current</u>		
Employee benefits (a)	<u>\$ 22,687</u>	<u>\$ 20,460</u>

- a. The provision for employee benefits represents vested long service leave entitlements accrued.

22. RETIREMENT BENEFIT PLANS

- a. Defined contribution plans

The Company and the subsidiary Mxtran adopted a pension plan under the Labor Pension Act (LPA), which is a state-managed defined contribution plan. Under on the LPA, the Group makes monthly contributions to employees' individual pension accounts at 6% of monthly salaries and wages.

The Group's subsidiaries in Hong Kong, the USA, Europe, Japan, Korea, Singapore and China are required to contribute a specified percentage of payroll costs to the retirement benefit scheme to fund the benefits. The only obligation of the Group with respect to the retirement benefit plan is to make the specified contributions.

- b. Defined benefit plans

The defined benefit plan adopted by the Company in accordance with the Labor Standards Act is operated by the government. Pension benefits are calculated on the basis of the length of service and average monthly salaries of the 6 months before retirement. The Company contributes amounts equal to 2% of total monthly salaries and wages to a pension fund administered by the pension fund monitoring committee. Pension contributions are deposited in the Bank of Taiwan in the committee's name. Before

the end of each year, the Group assesses the balance in the pension fund. If the amount of the balance in the pension fund is inadequate to pay retirement benefits for employees who conform to retirement requirements in the next year, the Group is required to fund the difference in one appropriation that should be made before the end of March of the next year. The pension fund is managed by the Bureau of Labor Funds, Ministry of Labor (the “Bureau”); the Group has no right to influence the investment policy and strategy.

The amounts in the consolidated balance sheets in respect of the Group’s defined benefit plans were as follows:

	December 31	
	2020	2019
Present value of defined benefit obligation	\$ 1,898,790	\$ 1,903,616
Fair value of plan assets	<u>(942,837)</u>	<u>(791,902)</u>
Net defined benefit liability	<u>\$ 955,953</u>	<u>\$ 1,111,714</u>

Movements in net defined benefit liability were as follows:

	Present Value of Defined Benefit Obligation	Fair Value of the Plan Assets	Net Defined Benefit Liabilities (Assets)
Balance at January 1, 2019	\$ 1,890,484	\$ 710,318	\$ 1,180,166
Service cost			
Current service cost	5,296	-	5,296
Net interest expense	23,330	-	23,330
Return on plan assets	<u>-</u>	<u>8,772</u>	<u>(8,772)</u>
Recognized in profit or loss	<u>28,626</u>	<u>8,772</u>	<u>19,854</u>
Remeasurement			
Return on plan assets	-	13,955	(13,955)
Actuarial loss - change in financial assumptions	<u>91,727</u>	<u>-</u>	<u>91,727</u>
Recognized in other comprehensive income	<u>91,727</u>	<u>13,955</u>	<u>77,772</u>
Contributions from the employer	<u>-</u>	<u>166,078</u>	<u>(166,078)</u>
Benefits paid	<u>(107,221)</u>	<u>(107,221)</u>	<u>-</u>
Balance at December 31, 2019	<u>1,903,616</u>	<u>791,902</u>	<u>1,111,714</u>
Service cost			
Current service cost	5,015	-	5,015
Net interest expense	15,013	-	15,013
Return on plan assets	<u>-</u>	<u>6,241</u>	<u>(6,241)</u>
Recognized in profit or loss	<u>20,028</u>	<u>6,241</u>	<u>13,787</u>
Remeasurement			
Return on plan assets	-	26,677	(26,677)
Actuarial loss - experience adjustments	26,798	-	26,798
Actuarial loss - change in financial assumptions	39,079	-	39,079
Actuarial loss - change in demographic assumptions	<u>(5,967)</u>	<u>-</u>	<u>(5,967)</u>
Recognized in other comprehensive income	<u>59,910</u>	<u>26,677</u>	<u>33,233</u>
Contributions from the employer	<u>-</u>	<u>202,781</u>	<u>(202,781)</u>
Benefits paid	<u>(84,764)</u>	<u>(84,764)</u>	<u>-</u>
Balance at December 31, 2020	<u>\$ 1,898,790</u>	<u>\$ 942,837</u>	<u>\$ 955,953</u>

An analysis by function of the amounts recognized in profit or loss in respect of the defined benefit plans is as follows:

	For the Year Ended December 31	
	2020	2019
Operating costs	\$ 7,381	\$ 10,688
Selling and marketing expenses	797	1,051
General and administration expenses	2,478	3,630
Research and development expenses	<u>3,131</u>	<u>4,485</u>
	<u>\$ 13,787</u>	<u>\$ 19,854</u>

Through the defined benefit plans under the Labor Standards Act, the Group is exposed to the following risks:

- 1) Investment risk: The plan assets are invested in domestic and foreign equity and debt securities, bank deposits, etc. The investment is conducted at the discretion of the Bureau or under the mandated management. However, in accordance with relevant regulations, the return generated by plan assets should not be below the interest rate for a 2-year time deposit with local banks.
- 2) Interest risk: A decrease in the government/corporate bond interest rate will increase the present value of the defined benefit obligation; however, this will be partially offset by an increase in the return on the plan's debt investments.
- 3) Salary risk: The present value of the defined benefit obligation is calculated by reference to the future salaries of plan participants. As such, an increase in the salary of the plan participants will increase the present value of the defined benefit obligation.

The actuarial valuations of the present value of the defined benefit obligation were carried out by qualified actuaries. The significant assumptions used for the purposes of the actuarial valuations were as follows:

	December 31	
	2020	2019
Discount rate	0.50%	0.80%
Expected rate of salary increase	3.00%	3.00%
Expected return on plan assets increase	0.50%	0.80%

If possible reasonable change in each of the significant actuarial assumptions will occur and all other assumptions will remain constant, the present value of the defined benefit obligation would increase (decrease) as follows:

	For the Year Ended December 31	
	2020	2019
Discount rate		
0.50% increase	<u>\$ (67,172)</u>	<u>\$ (101,540)</u>
0.50% decrease	<u>\$ 71,260</u>	<u>\$ 109,956</u>
Expected rate of salary increase		
0.50% increase	<u>\$ 97,993</u>	<u>\$ 126,190</u>
0.50% decrease	<u>\$ (92,509)</u>	<u>\$ (117,415)</u>

The sensitivity analysis presented above may not be representative of the actual change in the present value of the defined benefit obligation as it is unlikely that the change in assumptions would occur in isolation of one another as some of the assumptions may be correlated.

	December 31	
	2020	2019
The expected contributions to the plan for the next year	<u>\$ 56,154</u>	<u>\$ 30,384</u>
The average duration of the defined benefit obligation	7.3 years	11.1 years

The Group maintains a separate executive pension plan and the net periodic pension costs were NT\$6,835 thousand and NT\$8,651 thousand for the years ended December 31, 2020 and 2019, respectively.

Movements in net defined benefit liability were as follows:

	Present Value of Defined Benefit Obligation
Balance at January 1, 2019	<u>\$ 459,987</u>
Service cost	
Current service cost	2,928
Net interest expense	<u>5,723</u>
Recognized in profit or loss	<u>8,651</u>
Remeasurement	
Actuarial loss - experience adjustments	21,594
Actuarial loss - changes in financial assumptions	<u>8,629</u>
Recognized in other comprehensive income	<u>30,223</u>
Benefits paid	<u>-</u>
Balance at December 31, 2019	<u>498,861</u>
Service cost	
Current service cost	2,860
Net interest expense	<u>3,975</u>
Recognized in profit or loss	<u>6,835</u>
Remeasurement	
Actuarial loss (gain) - experience adjustments	(34,790)
Actuarial loss - changes in financial assumptions	<u>4,294</u>
Recognized in other comprehensive income	<u>(30,496)</u>
Benefits paid	<u>-</u>
Balance at December 31, 2020	<u>\$ 475,200</u>

An analysis by function of the amounts recognized in profit or loss in respect of the defined benefit plans is as follows:

	For the Year Ended December 31	
	2020	2019
General and administration expenses	<u>\$ 6,835</u>	<u>\$ 8,651</u>

The actuarial valuations of the present value of the defined benefit obligation of executive pension plan were carried out by qualified actuaries. The significant assumptions used for the purposes of the actuarial valuations were as follows:

	<u>December 31</u>	
	2020	2019
Discount rate	0.50%	0.80%
Expected rate of salary increase	-	-
Expected return on plan assets increase	0.50%	0.80%

23. EQUITY

a. Share capital

Ordinary shares

	<u>December 31</u>	
	2020	2019
Number of shares authorized (in thousands)	<u>6,550,000</u>	<u>6,550,000</u>
Shares authorized	<u>\$ 65,500,000</u>	<u>\$ 65,500,000</u>
Number of shares issued and fully paid (in thousands)	<u>1,856,302</u>	<u>1,839,927</u>
Shares issued	<u>\$ 18,563,017</u>	<u>\$ 18,399,271</u>

Fully paid ordinary shares, which have a par value of \$10, carry one vote per share and carry a right to dividends.

A total of 864,704 thousand shares and 650,000 thousand shares of the Company's authorized shares were reserved for the issuance of convertible bonds and employee share options.

b. Capital surplus

	<u>December 31</u>	
	2020	2019
<u>May be used to offset a deficit, distributed as cash dividends, or transferred to share capital (1)</u>		
Donations	\$ 37	\$ 37
Treasury share transactions	<u>33,096</u>	<u>30,769</u>
	<u>\$ 33,133</u>	<u>\$ 30,806</u>
<u>May be used to offset a deficit only</u>		
Issuance of ordinary shares	\$ 145,378	\$ -
Changes in percentage of ownership interests in subsidiaries (2)	<u>4,609</u>	<u>4,609</u>
	<u>\$ 149,987</u>	<u>\$ 4,609</u>
<u>May not be used for any purpose</u>		
Employee restricted shares	<u>\$ 201,652</u>	<u>\$ 508,505</u>

- 1) Such capital surplus may be used to offset a deficit; in addition, when the Company has no deficit, such capital surplus may be distributed as cash dividends or transferred to share capital (limited to a certain percentage of the Company's paid-in capital and once a year).
 - 2) Such capital surplus arises from changes in capital surplus of subsidiaries accounted for by using the equity method.
- c. Retained earnings and dividend policy

The Company's Articles of Incorporation, state that, where the Company made profit in a fiscal year, the profit shall be first utilized for paying taxes, offsetting losses of previous years, setting aside a legal reserve 10% of the remaining profit (until the amount of the legal reserve equals the amount of the Company's paid-in capital), setting aside or reversing a special reserve in accordance with the laws and regulations, and then any remaining profit together with any undistributed retained earnings shall be used by the Company's board of directors as the basis for proposing a distribution plan, which should be resolved in the shareholders' meeting for the distribution of dividends and bonuses to shareholders. The Company state the policies on the distribution of employees' compensation and remuneration of directors state by the Company's Articles of Incorporation refer to "Employees' compensation and remuneration of directors" in Note 25 (g).

The Company is classified under the capital intensive industry. In accordance with the long-term financial program of the Company, the above shareholders' dividends can be retained as undistributed earnings, and then be distributed in the future, as determined by the shareholders at the Annual General Meeting.

Distributions shall be prioritized to take the form of cash dividends. Nevertheless, it still depends on the Company's financial, sales or operating condition. The Company's Articles of Incorporation provide that no more than 50% of the current year's total amount of distributable earnings can be distributed in the form of share dividends.

The appropriation of earnings to a legal reserve shall be made until the legal reserve equals the Company's paid-in capital. The legal reserve may be used to offset any deficit. If the Company has no deficit and the legal reserve has exceeded 25% of the Company's paid-in capital, the excess may be transferred to capital or distributed in cash.

Items referred under Rule No. 1010047490 issued by the FSC and in the directive titled "Questions and Answers for Special Reserves Appropriated Following Adoption of IFRSs" should be appropriated to or reversed from a special reserve by the Company.

The appropriation of earnings for 2019 and 2018, which had been proposed by the Company's general meeting of shareholders on May 27, 2020 and June 18, 2019, respectively. The appropriation and dividends per share were as follows:

	For the Year Ended December 31	
	2019	2018
Legal reserve	\$ 301,196	\$ 899,301
Special reserve	\$ (385,857)	\$ 932,777
Cash dividends	\$ 2,207,891	\$ 2,208,200
Cash dividends per share	\$ 1.2	\$ 1.2

d. Special reserve

	For the Year Ended December 31	
	2020	2019
Beginning at January 1	\$ 1,007,052	\$ 74,275
Appropriations in respect of		
Treasury shares (reversal)	(36,882)	48,882
Reversal of the debits to other equity items	<u>(348,975)</u>	<u>883,895</u>
Balance at December 31	<u>\$ 621,195</u>	<u>\$ 1,007,052</u>

According to the shareholding ratio, the special reserve is calculated based on the difference between the market value of the parent company's stock holdings and the book value, and the special reserve will be partially reversed on market price.

e. Other equity items

1) Exchange differences on translating foreign operations

	For the Year Ended December 31	
	2020	2019
Balance at January 1	\$ (235,880)	\$ (137,132)
Exchange differences on translating foreign operations	<u>(150,210)</u>	<u>(98,748)</u>
Balance at December 31	<u>\$ (386,090)</u>	<u>\$ (235,880)</u>

2) Unrealized valuation gain on/(loss) on financial assets at FVTOCI

	For the Year Ended December 31	
	2020	2019
Balance at January 1	\$ (299,040)	\$ (746,762)
Recognized for the year		
Unrealized gain/(loss) - equity instrument	<u>440,966</u>	<u>447,722</u>
Other comprehensive income recognized for the year	141,926	(299,040)
Cumulative unrealized gain/(loss) of equity instruments transferred to retained earnings due to disposal	<u>29,100</u>	<u>-</u>
Balance at December 31	<u>\$ 171,026</u>	<u>\$ (299,040)</u>

3) Employee unearned benefit

In the meeting of shareholders on June 16, 2016 and June 18, 2019, the shareholders approved a restricted share plan for employees. Refer to Note 28 for the information of restricted shares issued.

	For the Year Ended December 31	
	2020	2019
Balance at January 1	\$ (443,066)	\$ (19,978)
Grant by this year	-	(508,772)
Share-based payment expenses recognized	293,662	84,407
Adjustments for change of turnover rate	<u>(1,151)</u>	<u>1,277</u>
Balance at December 31	<u>\$ (150,555)</u>	<u>\$ (443,066)</u>

f. Non-controlling interests

	For the Year Ended December 31	
	2020	2019
Balance at January 1	\$ 1,276	\$ 334
Share of (loss) gain for the year	(471)	941
Other comprehensive income (loss) for the year		
Exchange difference on translating the financial statements of foreign operations	(5)	-
Invalidation of employee share option	<u>-</u>	<u>1</u>
Balance at December 31	<u>\$ 800</u>	<u>\$ 1,276</u>

g. Treasury shares

The Company's shares held by its subsidiaries at December 31, 2020 and 2019 were as follows:

Name of Subsidiary	Number of Shares Held (In Thousands)	Carrying Amount	Market Price
<u>December 31, 2020</u>			
Hui Ying	1,957	\$ 159,061	\$ 82,765
<u>December 31, 2019</u>			
Hui Ying	1,957	\$ 159,061	\$ 72,786

The Company's shares held by subsidiaries are regarded as treasury shares; shareholder's rights are retained, except for the rights to participate in any share issuances for cash and to vote.

24. REVENUE

a. Segmentation of revenue from contracts with customers

	For the Year Ended December 31	
	2020	2019
<u>Product type</u>		
Flash	\$ 20,953,865	\$ 19,481,027
ROM	16,022,159	13,290,888
Foundry	2,794,731	2,196,564
Others	<u>30,192</u>	<u>26,932</u>
	<u>\$ 39,800,947</u>	<u>\$ 34,995,411</u>

b. Contract balances

	<u>For the Year Ended December 31</u>	
	2020	2019
Contract liabilities (classified as current liabilities)	<u>\$ 92,195</u>	<u>\$ 98,557</u>

The changes in the contract liability balances primarily result from the timing difference between the satisfaction of the performance obligations and the customer's payment.

The Group recognized revenue from the beginning balance of contract liabilities as follows:

	<u>For the Year Ended December 31</u>	
	2020	2019
<u>From the beginning balance of contract liabilities</u>		
Sale of goods	<u>\$ 97,447</u>	<u>\$ 14,544</u>

25. NET PROFIT (LOSS) FROM CONTINUING OPERATIONS

a. Interest income

	<u>For the Year Ended December 31</u>	
	2020	2019
Bank deposits	<u>\$ 30,858</u>	<u>\$ 38,387</u>

b. Other income

	<u>For the Year Ended December 31</u>	
	2020	2019
Dividend income	\$ 101,174	\$ 109,016
Others	<u>29,212</u>	<u>43,191</u>
	<u>\$ 130,386</u>	<u>\$ 152,207</u>

c. Other gains and losses

	<u>For the Year Ended December 31</u>	
	2020	2019
Net foreign exchange gains (losses)	\$ 95,298	\$ (60,722)
Gains on disposal of investments	-	7,404
Other losses	<u>(35,017)</u>	<u>(12,884)</u>
	<u>\$ 60,281</u>	<u>\$ (66,202)</u>

d. Finance costs

	For the Year Ended December 31	
	2020	2019
Interest on loans	\$ 248,416	\$ 215,886
Interest on lease liabilities	20,432	18,972
Less: Amounts included in the cost of qualifying assets	<u>(21,892)</u>	<u>(37,915)</u>
	<u>\$ 246,956</u>	<u>\$ 196,943</u>

Information about capitalized interest was as follows:

	For the Year Ended December 31	
	2020	2019
Capitalized interest	\$ 21,892	\$ 37,915
Capitalization rate	1.79%	1.67%

e. Depreciation and amortization

	For the Year Ended December 31	
	2020	2019
An analysis of depreciation by function		
Operating costs	\$ 3,255,402	\$ 2,295,217
Operating expenses	<u>457,936</u>	<u>402,250</u>
	<u>\$ 3,713,338</u>	<u>\$ 2,697,467</u>
An analysis of amortization by function		
Operating costs	\$ 14,039	\$ 10,448
Operating expenses	<u>18,950</u>	<u>23,106</u>
	<u>\$ 32,989</u>	<u>\$ 33,554</u>

f. Employee benefits expense

	For the Year Ended December 31	
	2020	2019
Post-employment benefits (Note 22)		
Defined contribution plans	\$ 205,546	\$ 212,386
Defined benefit plans	<u>20,622</u>	<u>28,505</u>
	226,168	240,891
Share-based payments		
Equity-settled	293,662	84,407
Other employee benefits	<u>6,973,495</u>	<u>6,313,313</u>
Total employee benefits expense	<u>\$ 7,493,325</u>	<u>\$ 6,638,611</u>
An analysis of employee benefits expense by function		
Operating costs	\$ 3,296,709	\$ 3,005,669
Operating expenses	<u>4,196,616</u>	<u>3,632,942</u>
	<u>\$ 7,493,325</u>	<u>\$ 6,638,611</u>

g. Employees' compensation and remuneration of directors

In compliance with the Articles of Incorporation, the Company accrued employees' compensation and remuneration of directors at the rates of 15% and no higher than 2%, respectively, of net profit before income tax, employees' compensation, and remuneration of directors. For the years ended December 31, 2020 and 2019, the estimated employees' compensation and the remuneration of directors resolved by the board of directors on February 26, 2021 and February 17, 2020, respectively, were as follows:

Amount

	<u>For the Year Ended December 31</u>	
	<u>2020</u>	<u>2019</u>
Employees' compensation	\$ 1,050,180	\$ 544,330
Remuneration of directors	\$ 140,024	\$ 72,577

If there is a change in the amounts after the annual consolidated financial statements are authorized for issue, the differences are recorded as a change in the accounting estimate.

There is no difference between the actual amount of employees' compensation and remuneration of directors paid and the amount recognized in the consolidated financial statements for the years ended December 31, 2019 and 2018.

Information on the employees' compensation and remuneration of directors resolved by the Company's board of directors in 2020 and 2019 is available at the Market Observation Post System website of the Taiwan Stock Exchange.

26. INCOME TAXES RELATING TO CONTINUING OPERATIONS

a. Major components of income tax expense recognized in profit or loss

	<u>For the Year Ended December 31</u>	
	<u>2020</u>	<u>2019</u>
Current tax		
In respect of the current year	\$ 65,707	\$ 16,903
Overseas income tax	4,274	1,852
Adjustments for prior period	(1,619)	(82,065)
Deferred tax		
In respect of the current year	<u>447,072</u>	<u>76,735</u>
Income tax expense recognized in profit or loss	<u>\$ 515,434</u>	<u>\$ 13,425</u>

A reconciliation of accounting loss and income tax expenses is as follows:

	For the Year Ended December 31	
	2020	2019
Income before tax from continuing operations	<u>\$ 5,841,046</u>	<u>\$ 3,026,326</u>
Income tax expense calculated at the statutory rate	\$ 1,189,038	\$ 625,635
Non-deductible expenses in determining taxable income	7,083	6,798
Non-taxable income	(18,946)	(22,390)
Deductible temporary differences	(1,085,296)	(590,616)
Unrecognized investment credits	(25,666)	-
Recognized loss carryforwards	446,566	74,211
Overseas income tax	4,274	1,852
Adjustments for prior year	<u>(1,619)</u>	<u>(82,065)</u>
Income tax expense recognized in profit or loss	<u>\$ 515,434</u>	<u>\$ 13,425</u>

In July 2019, the president of the ROC announced the amendments to the Statute for Industrial Innovation, which stipulate that the amounts of unappropriated earnings in 2018 and thereafter that are reinvested in the construction or purchase of certain assets or technologies are allowed as deduction when computing the income tax on unappropriated earnings. When calculating the tax on unappropriated earnings, the Group only deducts the amount of the unappropriated earnings that has been reinvested in capital expenditure.

b. Current tax assets and liabilities

	December 31	
	2020	2019
Current tax assets		
Tax refund receivable	<u>\$ 3,818</u>	<u>\$ 2,978</u>
Current tax liabilities		
Income tax payable	<u>\$ 63,359</u>	<u>\$ 11,231</u>

c. Deferred tax assets and liabilities

The Group offset certain deferred tax assets and deferred tax liabilities which met the offset criteria.

The movements of deferred tax assets and deferred tax liabilities were as follows:

For the year ended December 31, 2020

	Opening Balance	Recognized in Profit or Loss	Closing Balance
<u>Deferred tax assets</u>			
Temporary differences			
Unrealized expense and losses	\$ 2,490	\$ (506)	\$ 1,984
Loss carryforwards	<u>1,104,876</u>	<u>(446,566)</u>	<u>658,310</u>
	<u>\$ 1,107,366</u>	<u>\$ (447,072)</u>	<u>\$ 660,294</u>

For the year ended December 31, 2019

	Opening Balance	Recognized in Profit or Loss	Closing Balance
<u>Deferred tax assets</u>			
Temporary differences			
Unrealized expense and losses	\$ 5,017	\$ (2,527)	\$ 2,490
Loss carryforwards	<u>1,179,084</u>	<u>(74,208)</u>	<u>1,104,876</u>
	<u>\$ 1,184,101</u>	<u>\$ (76,735)</u>	<u>\$ 1,107,366</u>

- d. Deductible temporary differences, unused loss carryforwards and unused investment credits for which no deferred assets have been recognized in the consolidated balance sheets

	<u>December 31</u>	
	<u>2020</u>	<u>2019</u>
<u>Loss carryforwards</u>		
Expire in 2020	\$ -	\$ 82,441
Expire in 2021	131,050	131,050
Expire in 2022	184,390	184,390
Expire in 2023	97,389	97,389
Expire in 2024	147,183	150,479
Expire in 2025	67,634	67,634
Expire in 2026	28,806	1,817,823
Expire in 2027	66,966	66,966
Expire in 2028	31,408	31,408
Expire in 2029	17	17
Expire in 2030	<u>8,677</u>	<u>-</u>
	<u>\$ 763,520</u>	<u>\$ 2,629,597</u>
<u>Investment credits</u>		
Research and development expenditures	\$ 200,880	\$ 200,028
Purchase of smart machines expenditures	<u>23,538</u>	<u>-</u>
	<u>\$ 224,418</u>	<u>\$ 200,028</u>
Deductible temporary differences	<u>\$ 25,574,391</u>	<u>\$ 26,394,004</u>

The unrecognized investment credits will expire in 2021.

e. Information about unused investment credits and unused loss carry-forwards

As of December 31, 2020, investment credits comprised of:

Law and Statutes	Tax Credit Source	Remaining Creditable Amount	Expiry Year
Statute for Industrial Innovation	Research and development expenditures	\$ 180,327	2020
Statute for Industrial Innovation	Research and development expenditures	200,880	2021
Statute for Industrial Innovation	Purchase of smart machines expenditures	<u>23,538</u>	2021
		<u>\$ 404,745</u>	

Loss carryforwards as of December 31, 2020 comprised of:

Unused Tax Amount	Expiry Year
\$ 26,210	2021
36,878	2022
19,478	2023
29,437	2024
97,138	2025
580,460	2026
13,393	2027
6,282	2028
3	2029
<u>1,735</u>	2030
<u>\$ 811,014</u>	

f. Income tax assessments

The Company's and its subsidiaries' tax returns through 2018 have been assessed by the tax authorities.

27. EARNINGS PER SHARE

Unit: NT\$ Per Share

	For the Year Ended December 31	
	2020	2019
Basic earnings per share	<u>\$ 2.90</u>	<u>\$ 1.64</u>
Diluted earnings per share	<u>\$ 2.84</u>	<u>\$ 1.61</u>

The income and weighted average number of ordinary shares outstanding in the computation of earnings per share from continuing operations were as follows:

Net Income for the Year

	<u>For the Year Ended December 31</u>	
	2020	2019
Income for the year attributable to owners of the Company	<u>\$ 5,326,083</u>	<u>\$ 3,011,960</u>

Weighted average number of ordinary shares outstanding (in thousand shares):

	<u>For the Year Ended December 31</u>	
	2020	2019
Weighted average number of ordinary shares in computation of basic earnings per share	1,839,322	1,831,825
Effect of potentially dilutive ordinary shares:		
Restricted shares to employees	10,105	6,243
Employees' compensation or bonus issue to employees	<u>27,631</u>	<u>29,428</u>
Weighted average number of ordinary shares in computation of diluted earnings per share	<u>1,877,058</u>	<u>1,867,496</u>

Since the Group offered to settle compensation or bonuses paid to employees in cash or shares, the Group assumed the entire amount of the compensation or bonus will be settled in shares and the resulting potential shares were included in the weighted average number of shares outstanding used in the computation of diluted earnings per share, as the effect is dilutive. Such dilutive effect of the potential shares is included in the computation of diluted earnings per share until the number of shares to be distributed to employees is resolved in the following year.

28. SHARE-BASED PAYMENT ARRANGEMENTS

a. Restricted share plan for employees

Information on share plan for employees were as follows:

Approved Date	Grant Shares (Thousand)	Board of Directors Approved Grant Shares (Thousand)	Grant Date	Issued Date	Issued Shares (Thousand)	Fair Value
2016/06/16	123,535	58,971	2016/10/25	2017/01/03	57,476	\$ 4.73
2019/06/18	35,294	16,815	2019/10/21	2020/06/16	16,400	32.55

To meet the vesting conditions, an employee has to meet performance and other conditions over the vesting period listed as follows:

- 1) If an employee remains employed by the Company for one year after the grant date; and has a current year's performance rating of "successful" (or higher) /A0 or A1, 40% of the restricted shares will be vested;
- 2) If an employee remains employed by the Company for two years after the grant date; and has a current year's performance rating of "successful" (or higher) /A0 or A1, 30% of the restricted shares will be vested;

- 3) If an employee remains employed by the Company for three years after grant date; and has a current year's performance rating of "successful" (or higher) /A0 or A1, 30% of the restricted shares will be vested.

In addition to the vesting conditions, the limitations are as follows:

- 1) Employees, except for inheritance, should not sell, transfer, pledge, donate or in any other way dispose of the shares.
- 2) The shares should be held in stock trust.
- 3) Except for the above two paragraphs, the other rights of the restricted share plan for employees, which include, but are not limited to, dividends, bonuses, the distribution rights of the legal reserve and capital surplus, share options of cash capital voting rights of shareholders, etc., are the same as the Group's issued ordinary shares.
- 4) The dividends of restricted share plan for employees are not restricted by existing conditions.
- 5) When a new share is returned in cash due to the Company's capital reduction, the refund of the vested capital loss shall be under custodian trust. In accordance with the issuance method, such capital and shares shall be granted if the vesting conditions for new restricted employee shares are met. The vested shares are granted to employees without interests; if the vested conditions are not met, such cash will be recovered by the Company (applicable to the shareholders' resolution of restricted share plan in the 2019 shareholders' meeting).

When employees do not reach the vesting conditions of restricted share plan for employees during the year, the Company will recover and cancel the shares.

Information on restricted share plan for employees was as follows:

	Number of Shares (In Thousands)	
	For the Year Ended December 31	
	2020	2019
Balance at January 1	23	7,787
Issued	16,400	-
Vested	(6,465)	(7,506)
Forfeited (Note)	<u>(122)</u>	<u>(258)</u>
Balance at December 31	<u><u>9,836</u></u>	<u><u>23</u></u>

Note: The forfeited shares for the years ended December 31, 2020 include 115 thousand shares which will be cancelled and 7 thousand shares which were already cancelled, and the forfeited shares for the year ended December 31, 2019 include 18 thousand shares which will be cancelled and 240 thousand shares which were already cancelled.

For the years ended December 31, 2020 and 2019, the compensation costs recognized were NT\$293,662 thousand and NT\$84,407 thousand, respectively.

29. CAPITAL MANAGEMENT

The Group manages its capital to ensure that the Group will be able to operate under the premises of going concerns and growth while maximizing the return to shareholders through the optimization of the debt and equity balance.

The Group's strategy for managing the capital structure is to lay out the plan of product development and expand the market share considering the growth and the magnitude of industry and further developing an integral plan founded on the required capacity, capital outlay, and magnitude of assets in long-term development. Ultimately, considering the risk factors such as the fluctuation of the industry cycle and the life cycle of products, the Group determines the optimal capital structure by estimating the profitability of products, operating profit ratio, and cash flow based on the competitiveness of products.

The management of the Group periodically examines the capital structure and contemplates on the potential costs and risks involved while exerting different financial tools. In general, the Group implements prudent strategy of risk management.

30. FINANCIAL INSTRUMENTS

a. Fair value of financial instruments not measured at fair value

The management considers that the carrying amounts of financial assets and financial liabilities recognized in the consolidated financial statements approximate their fair values or their fair values cannot be reliably measured.

b. Fair value of financial instruments measured at fair value on a recurring basis

1) Fair value hierarchy

December 31, 2020

	Level 1	Level 2	Level 3	Total
Financial assets at FVTOCI				
Equity securities				
Securities listed in the ROC	\$ 1,461,804	\$ -	\$ -	\$ 1,461,804
Securities listed in other countries	453,571	-	-	453,571
Securities unlisted	<u>-</u>	<u>-</u>	<u>420,699</u>	<u>420,699</u>
	<u>\$ 1,915,375</u>	<u>\$ -</u>	<u>\$ 420,699</u>	<u>\$ 2,336,074</u>

December 31, 2019

	Level 1	Level 2	Level 3	Total
Financial assets at FVTOCI				
Equity securities				
Securities listed in the ROC	\$ 1,182,250	\$ -	\$ -	\$ 1,182,250
Securities listed in other countries	421,894	-	-	421,894
Securities unlisted	<u>-</u>	<u>-</u>	<u>396,986</u>	<u>396,986</u>
	<u>\$ 1,604,144</u>	<u>\$ -</u>	<u>\$ 396,986</u>	<u>\$ 2,001,130</u>

There were no transfers between Level 1 and Level 2 in the current and prior years.

2) Reconciliation of Level 3 fair value measurements of financial assets

Financial Assets	Financial Assets at FVTOCI	
	For the Year Ended December 31	
	2020	2019
Balance at January 1	\$ 396,986	\$ 334,912
Total gain recognized in other comprehensive income (unrealized gain on financial assets at FVTOCI)	<u>23,713</u>	<u>62,074</u>
Balance at December 31	<u>\$ 420,699</u>	<u>\$ 396,986</u>

3) Valuation used in Level 3 fair value measurement

The fair values of equity securities listed in the ROC and other countries was arrived at using either the asset-based approach or based on the multiplier evaluated in the active market by the market approach and adjustments of liquidity.

c. Categories of financial instruments

	December 31	
	2020	2019
<u>Financial assets</u>		
Measured at amortized costs (1)	\$ 17,159,824	\$ 13,872,145
Measured at FVTOCI	2,336,074	2,001,130
<u>Financial liabilities</u>		
Measured at amortized cost (2)	25,167,034	23,524,831

1) The balances included financial assets measured at amortized cost, which comprise cash and cash equivalents, trade receivables (including receivables from related parties), other receivables and other financial assets.

2) The balances included financial liabilities measured at amortized cost, which comprise, notes payable and trade payables (including payables to related parties), other payables (including other payables to related parties), payable for purchases of equipment, guarantee deposits and long-term loans (including current portion).

d. Financial risk management objectives and policies

The Group manages its exposure to risks relating to the operations through market risk, credit risk, and liquidity risk with the objective to reduce the potentially adverse effects the market uncertainties may have on its financial performance.

The plans for material treasury activities are reviewed by management in accordance with procedures required by relevant regulations or internal controls. During the implementation of such plans, the Group must comply with certain treasury procedures that provide guiding principles for overall financial risk management.

1) Market risk

The Group's activities exposed it primarily to the financial risks of changes in foreign currency exchange rates (see (a) below), interest rates (see (b) below), and other price risk (see (c) below).

a) Foreign currency risk

The Group had foreign currency sales and purchases, which exposed the Group to foreign currency risk. Exchange rate exposures were managed within approved policy parameters utilizing foreign exchange forward contracts.

Sensitivity analysis

The Group was mainly exposed to the USD and JPY.

The sensitivity analysis of foreign currency risk focuses mainly on exchange rates for transactions in currencies other than the entity's functional currency (i.e. foreign currencies) which are recognized at the rates of exchange prevailing at the end of each reporting period.

The following table details the Group's sensitivity to a 3% and 10% increase in the New Taiwan dollars (i.e. the functional currency) against the USD and JPY, respectively. The sensitivity rates used are 3% and 10% when reporting foreign currency risk internally to key management personnel.

	<u>USD Impact</u>		<u>JPY Impact</u>	
	<u>For the Year Ended</u>		<u>For the Year Ended</u>	
	<u>December 31</u>		<u>December 31</u>	
	<u>2020</u>	<u>2019</u>	<u>2020</u>	<u>2019</u>
Pre-tax profit decrease	<u>\$ 93,594</u>	<u>\$ 90,081</u>	<u>\$ 160,081</u>	<u>\$ 117,894</u>

b) Interest rate risk

The Group is exposed to interest rate risk from outstanding bank loans. Interest rates of the Group's long-term bank loans are floating, and changes in interest rates would affect the future cash flows but not the fair value.

The sensitivity analysis of interest is performed based on the financial liabilities exposed to cash flow interest rate risk at the end of each reporting period.

If interest rates had been 50 basis points higher/lower, the Group's pre-tax loss for the years ended December 31, 2020 and 2019 would decrease/increase by NT\$80,744 thousand and NT\$65,388 thousand, respectively.

c) Other price risk

The Group was exposed to equity price risk through its investments in equity securities. Equity investments are held for strategic rather than trading purposes. The Group does not actively trade these investments.

Sensitivity analysis

A sensitivity analysis of equity prices is performed based on the fair values of equity investments at the end of each reporting period.

If equity prices had been 10% higher/lower, equity for the years ended December 31, 2020 and 2019 would have increase/decrease by NT\$233,607 thousand and NT\$200,113 thousand, respectively, as a result of the changes in fair value of available-for-sale investments.

2) Credit risk

Credit risk refers to the risk that counterparty will default on its contractual obligations resulting in financial loss to the Group. The Group's exposure to credit risk mainly arises from trade receivables - operating, bank deposits, and other financial instruments. Credit risk is managed separately for business related and financial related exposures.

Business related credit risk

In order to maintain the credit quality of trade receivables, the Group has established procedures to monitor and limit exposure to credit risk on trade receivables.

Credit evaluation is performed in the consideration of the relevant factors, such as financial condition, external and internal credit scoring, historical experience, and economic conditions, which may affect the customer's paying ability. The Group holds some of the credit enhancements such as prepayments and collateral to mitigate its credit risks.

Trade receivables consisted of a large number of customers, spread across diverse industries and geographical areas.

As of December 31, 2020 and 2019, the Group's ten largest customers accounted for 57% and 54% of its total trade receivables (including receivables from related parties), respectively. The Group believed that the concentration of credit risk is relatively insignificant for the remaining trade receivables.

Financial credit risk

The Group's exposure to financial credit risk which pertained to bank deposits and other financial instruments were evaluated and monitored by Corporate Treasury function. The Group only deals with creditworthy counterparties and banks so that no significant credit risk was identified.

3) Liquidity risk

The objective of liquidity risk management is to ensure the Group has sufficient liquidity to fund its business requirements of cash and cash equivalents and the unused of financing facilities associated with existing operations.

The table below summarizes the maturity profile of the Group's financial liabilities based on contractual and undiscounted payments, including principal and estimated interest.

December 31, 2020

	On Demand or Less than 1 Year	1-3 Years	3-5 Years	5+ Years	Total
<u>Non-derivative financial liabilities</u>					
Non-interest bearing	\$ 10,702,363	\$ -	\$ -	\$ -	\$ 10,702,363
Lease liabilities	128,813	227,291	188,559	630,296	1,174,959
Interest bearing	<u>5,626,283</u>	<u>8,046,662</u>	<u>2,891,576</u>	<u>-</u>	<u>16,564,521</u>
	<u>\$ 16,457,459</u>	<u>\$ 8,273,953</u>	<u>\$ 3,080,135</u>	<u>\$ 630,296</u>	<u>\$ 28,441,843</u>

Additional information about the maturity analysis for lease liabilities:

	Less than 1 Year	1-5 Years	5-10 Years	10-15 Years	15-20 Years	20+ Years
Lease liabilities	\$ <u>128,813</u>	\$ <u>415,850</u>	\$ <u>376,402</u>	\$ <u>245,069</u>	\$ <u>8,825</u>	\$ <u>-</u>

December 31, 2019

	On Demand or Less than 1 Year	1-3 Years	3-5 Years	5+ Years	Total
<u>Non-derivative financial liabilities</u>					
Non-interest bearing	\$ 10,522,419	\$ -	\$ -	\$ -	\$ 10,522,419
Lease liabilities	116,088	204,217	190,821	685,258	1,196,384
Interest bearing	<u>3,491,961</u>	<u>7,162,099</u>	<u>2,920,035</u>	<u>-</u>	<u>13,574,095</u>
	\$ <u>14,130,468</u>	\$ <u>7,366,316</u>	\$ <u>3,110,856</u>	\$ <u>685,258</u>	\$ <u>25,292,898</u>

Additional information about the maturity analysis for lease liabilities:

	Less than 1 Year	1-5 Years	5-10 Years	10-15 Years	15-20 Years	20+ Years
Lease liabilities	\$ <u>116,088</u>	\$ <u>395,038</u>	\$ <u>391,353</u>	\$ <u>293,905</u>	\$ <u>-</u>	\$ <u>-</u>

The amounts included above for variable interest rate instruments for both non-derivative financial assets and liabilities was subject to change if changes in variable interest rates were to differ from those estimates of interest rates determined at the end of the reporting period.

31. TRANSACTIONS WITH RELATED PARTIES

Balances and transactions between the Company and its subsidiaries, which are related parties of the Company, have been eliminated on consolidation and are not disclosed in this note. Besides information disclosed elsewhere in the other notes, details of transactions between the Group and other related parties are disclosed below.

- a. Related parties and their relationships associated with the Company:

<u>Related Parties</u>	<u>Relationship with the Company</u>
MegaChips Corporation (MegaChips)	Key management personnel
Ardentec Corporation (Ardentec)	The Group is its major management authority
TM Technology, Inc. (TMTECH)	Others (Note)
Etron Technology, Inc. (Etron)	Others
Macronix Education Foundation (MXIC Education)	Others

Note: As Etron Technology, Inc. disposed of its shares in TM Technology, Inc. on October 22, 2019, the Group lost its significant influence over TM Technology, Inc.

b. Operating revenues

Line Items	Related Parties Categories/Name	For the Year Ended December 31	
		2020	2019
Sales	Key management personnel		
	MegaChips	\$ 16,101,433	\$ 13,236,202
	Others	<u>-</u>	<u>365</u>
		<u>\$ 16,101,433</u>	<u>\$ 13,236,567</u>

Sales prices for the related parties were not comparable to those for external customers as the Group was the sole provider of these customers. The sales terms for the related parties was 30 days.

c. Purchases

Related Parties Categories/Name	For the Year Ended December 31	
	2020	2019
Key management personnel		
MegaChips	<u>\$ 6,209,245</u>	<u>\$ 2,800,371</u>

Materials purchased from related parties were for manufacturing process. The payment term was 30 days after monthly closing and after acceptance of materials.

d. Receivables from related parties

Line Items	Related Parties Categories/Name	December 31	
		2020	2019
Receivables from related parties, net	Key management personnel		
	MegaChips	<u>\$ 1,647,427</u>	<u>\$ 973,076</u>

The outstanding trade receivables from related parties are unsecured. For the years ended December 31, 2020 and 2019, no impairment loss was recognized for trade receivables from related parties.

e. Payables to related parties

Line Items	Related Parties Categories/Name	December 31	
		2020	2019
Payables to related parties	Key management personnel		
	MegaChips	\$ 4,062,278	\$ 4,653,909
	The Group is its major management authority	<u>99,149</u>	<u>66,303</u>
		<u>\$ 4,161,427</u>	<u>\$ 4,720,212</u>

The outstanding trade payables from related parties are unsecured and will be settled in cash.

f. Other transactions with related parties

Line Items	Related Parties Categories/Name	For the Year Ended December 31	
		2020	2019
Manufacturing expenses	The Group is its major management authority		
	Ardentec	\$ 306,514	\$ 255,716
	Major management authority	<u>-</u>	<u>9,254</u>
		<u>\$ 306,514</u>	<u>\$ 264,970</u>
Operating expenses	Others		
	MXIC Education	\$ 23,028	\$ 22,028
	Etron	<u>91</u>	<u>809</u>
		<u>\$ 23,119</u>	<u>\$ 22,837</u>

The manufacturing expense of related parties were comparable to those with other vendors. The payment term was 75 days after monthly closing.

g. Compensation of key management personnel

	For the Year Ended December 31	
	2020	2019
Short-term benefits	\$ 504,012	\$ 301,995
Post-employment benefits	6,835	8,651
Share-based payments	48,751	13,899
Other long-term employee benefits	<u>(14)</u>	<u>(27)</u>
	<u>\$ 559,584</u>	<u>\$ 324,518</u>

The remuneration of key executives was determined by the remuneration committee based on the performance of individuals and market trends.

32. ASSETS PLEDGED AS COLLATERAL OR FOR SECURITY

The following assets were provided as collateral for bank borrowings, the tariff of imported raw materials guarantees, natural gas agreements, and land lease agreements:

	December 31	
	2020	2019
Property, plant and equipment, net	\$ 12,915,218	\$ 13,228,948
Pledge deposits (classified as other financial assets - non-current)	<u>157,665</u>	<u>157,665</u>
	<u>\$ 13,072,883</u>	<u>\$ 13,386,613</u>

33. SIGNIFICANT CONTINGENT LIABILITIES AND UNRECOGNIZED COMMITMENTS

In addition to those disclosed in other notes, significant commitments and contingencies of the Group as of December 31, 2020 and 2019 were as follows:

- a. As of December 31, 2020 and 2019, unused letters of credit amounted to approximately NT\$0 thousand and NT\$36,917 thousand, respectively.
- b. Unrecognized commitments are as follows:

	<u>December 31</u>	
	<u>2020</u>	<u>2019</u>
Acquisition of property, plant and equipment	<u>\$ 2,137,663</u>	<u>\$ 1,420,915</u>

- c. In January 2019, the Company again signed an agreement with IBM to continue the joint development of phase-change memory technology, and the agreement is effective from January 2019 to January 2022. Under the agreement, both parties share the related expenditures of the technology development, and the unrecognized contract amounts were US\$4,000 thousand.
- d. The Company's board of directors passed a resolution to donate the Innovation Center - Macronix Hall to National Cheng Kung University with a donation amount of \$420,000 thousand. As of December 31, 2020, the Company's unrecognized amount is \$154,000 thousand.
- e. The Company's board of directors passed a resolution to donate to National Cheng Kung University to establish the "School of Computing" to cultivate cross domain innovative talents with dual expertise "specific discipline" and "computing" to contribute to the society, and to fulfill Company's social responsibilities with a donation amount of \$100,000 thousand per year for the following ten years. As of December 31, 2020, the Company has allocated \$100,000 thousand.

34. SIGNIFICANT ASSETS AND LIABILITIES DENOMINATED IN FOREIGN CURRENCIES

The Group's significant financial assets and liabilities denominated in foreign currencies aggregated by the foreign currencies other than functional currencies and the related exchange rates between foreign currencies and respective functional currencies were as follows:

December 31, 2020

	Foreign Currencies (In Thousands)	Exchange Rate	Carrying Amount
<u>Financial assets</u>			
Monetary items			
JPY	\$ 20,790,537	0.2763	\$ 5,744,425
USD	155,570	28.48	<u>4,430,634</u>
			<u>\$ 10,175,059</u> (Continued)

	Foreign Currencies (In Thousands)	Exchange Rate	Carrying Amount
<u>Financial liabilities</u>			
Monetary items			
JPY	\$ 14,996,812	0.2763	\$ 4,143,619
USD	46,026	28.48	<u>1,310,820</u>
			<u>\$ 5,454,439</u>
			(Concluded)

December 31, 2019

	Foreign Currencies (In Thousands)	Exchange Rate	Carrying Amount
<u>Financial assets</u>			
Monetary items			
JPY	\$ 21,738,886	0.2760	\$ 5,999,933
USD	139,945	29.98	<u>4,195,551</u>
			<u>\$ 10,195,484</u>
<u>Financial liabilities</u>			
Monetary items			
JPY	17,467,359	0.2760	\$ 4,820,991
USD	39,788	29.98	<u>1,192,844</u>
			<u>\$ 6,013,835</u>

For the years ended December 31, 2020 and 2019, realized and unrealized net foreign exchange gains (losses) were NT\$95,298 thousand and NT\$(60,722) thousand, respectively. It is impractical to disclose net foreign exchange losses by each significant foreign currency due to the variety of the foreign currency transactions and functional currencies of the Group.

35. SEPARATELY DISCLOSED ITEMS

a. Information about significant transactions:

- 1) Financing provided to others: None
- 2) Endorsements/guarantees provided: None
- 3) Marketable securities held (excluding investment in subsidiaries, associates and joint ventures):
Table 1 (attached)
- 4) Marketable securities acquired and disposed of at costs or prices of at least NT\$300 million or 20% of the paid-in capital: None

- 5) Acquisition of individual real estate at costs of at least NT \$300 million or 20% of the paid-in capital: None
 - 6) Disposal of individual real estate at prices of at least NT\$300 million or 20% of the paid-in capital: None
 - 7) Total purchases from or sales to related parties amounting to at least NT\$100 million or 20% of the paid-in capital: Table 2 (attached)
 - 8) Receivables from related parties amounting to at least NT\$100 million or 20% of the paid-in capital: Table 3 (attached)
 - 9) Trading in derivative instruments: None
 - 10) Intercompany relationships and significant intercompany transactions: Table 4 (attached)
- b. Information on investees: Table 5 (attached)
- c. Information on investments in mainland China:
- 1) Information on any investee company in mainland China, showing the name, principal business activities, paid-in capital, method of investment, inward and outward remittance of funds, shareholding ratio, investment gains or losses, carrying amount of the investment at the end of the period, repatriation of investment gains or losses, and limit on the amount of investment in the mainland China area: Table 6 (attached)
 - 2) Any of the significant transactions with investee companies in mainland China, either directly or indirectly through a third area, and their prices, payment terms, and unrealized gains or losses: Table 4 (attached)
- d. Information of major shareholders: List all shareholders with ownership of 5% or greater showing the name of the shareholder, the number of shares owned, and percentage of ownership of each shareholder: None

36. SEGMENT INFORMATION

Information reported to the chief operating decision maker for the purposes of resource allocation and assessment of segment performance emphasizes on the types of goods or services delivered or provided. Considering the nature of the product and the process of manufacture, the management integrated those divisions of similar operation functions into one operation segment. The reporting segments of the Group were as follows:

Memory products and wafer fabrication

IC design

There was no material difference between the accounting policies of the reportable segment and those described in Note 4.

a. Segment revenues and results

The following was an analysis of the Group's revenue and results from continuing operations by reportable segment.

	Segment Net Operating Revenue	
	For the Year Ended December 31	
	2020	2019
Memory products and wafer fabrication	\$ 39,800,902	\$ 34,987,810
IC design	<u>45</u>	<u>7,601</u>
Total	<u>\$ 39,800,947</u>	<u>\$ 34,995,411</u>
	Segment Income (Loss) from	
	Operations and Net Income	
	For the Year Ended December 31	
	2020	2019
Memory products and wafer fabrication	\$ 5,875,847	\$ 3,080,466
IC design	<u>(9,370)</u>	<u>18,411</u>
Total	5,866,477	3,098,877
Interest income	30,858	38,387
Other income	130,386	152,207
Other gains and losses	60,281	(66,202)
Finance costs	<u>(246,956)</u>	<u>(196,943)</u>
Income before tax (continuing operations)	<u>\$ 5,841,046</u>	<u>\$ 3,026,326</u>

b. Segment total assets and liabilities

	December 31	
	2020	2019
<u>Segment assets</u>		
Memory products and wafer fabrication	\$ 65,040,620	\$ 59,348,609
IC design	<u>19,751</u>	<u>29,213</u>
Total segment assets	65,060,371	59,377,822
Uncollected assets	<u>831,847</u>	<u>1,278,956</u>
Consolidated total assets	<u>\$ 65,892,218</u>	<u>\$ 60,656,778</u>
<u>Segment liabilities</u>		
Memory products and wafer fabrication	\$ 13,481,320	\$ 13,556,818
IC design	<u>4,256</u>	<u>4,522</u>
Total segment liabilities	13,485,576	13,561,340
Uncollected liabilities	<u>16,212,250</u>	<u>14,602,770</u>
Consolidated total liabilities	<u>\$ 29,697,826</u>	<u>\$ 28,164,110</u>

For the purpose of monitoring segment performance and allocating resources between segments:

- 1) All assets were allocated to reportable segments other than interests in associates accounted for using the equity method, other financial assets, and current and deferred tax assets. Assets used jointly by reportable segments were allocated on the basis of the revenue earned by individual reportable segments; and
- 2) All liabilities were allocated to reportable segments other than borrowings and other financial liabilities. Liabilities for which reportable segments are jointly liable were allocated in proportion to segment assets.

c. Geographical information

The Group operates in two principal geographical areas - Taiwan and China.

The Group's net operating revenue from external customers by location of operations and information about its non-current assets by location of assets are detailed below.

	Revenue from External Customers		Non-current Assets	
	Year Ended December 31		December 31	
	2020	2019	2020	2019
Taiwan	\$ 31,960,513	\$ 28,537,524	\$ 32,009,324	\$ 29,918,692
China	6,398,649	5,019,996	192,056	197,621
Others	<u>1,441,785</u>	<u>1,437,891</u>	<u>361,094</u>	<u>373,684</u>
	<u>\$ 39,800,947</u>	<u>\$ 34,995,411</u>	<u>\$ 32,562,474</u>	<u>\$ 30,489,997</u>

Non-current assets exclude financial instruments and deferred tax assets.

d. Information about major customers

Single customers who contributed 10% or more to the Group's revenue were as follows:

	For the Year Ended December 31	
	2020	2019
Customer A	<u>\$ 16,101,433</u>	<u>\$ 13,236,202</u>

MACRONIX INTERNATIONAL CO., LTD. AND SUBSIDIARY

MARKETABLE SECURITIES HELD

DECEMBER 31, 2020

(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

Holding Company Name	Type and Name of Marketable Securities	Relationship with the Holding Company	Financial Statement Account	December 31, 2020			Shares as Collateral	
				Shares/Units (In Thousands)	Carrying Amount	Percentage of Ownership (%)		Fair Value
The Company	Shares Ardentec Corporation	The Company serves as member of its board of directors	Financial assets at FVTOCI - non current	35,951,871	\$ 1,389,540	7.33	\$ 1,389,540	None
	United Industrial Gases Co., Ltd.	None	"	6,671,877	389,504	3.06	389,504	None
	Zowic Technology Co., Ltd.	None	"	20,426	-	0.10	-	None
MXBVI	Shares Chipbond Technology Corporation	None	Financial assets at FVTOCI - non current	1,088,319	72,264	0.17	72,264	None
	Tower Semiconductor Ltd.	None	"	578,552	425,440	0.54	425,440	None
	Amphastar Pharmaceuticals, Inc.	None	"	49,116	28,131	0.10	28,131	None
Hui Ying	Shares Macronix International Co., Ltd.	The Company	Financial assets at FVTOCI - non current	1,956,619	82,765	0.11	82,765	None
	Raio Technology Co., Ltd.	None	"	1,247,288	31,195	10.03	31,195	None

MACRONIX INTERNATIONAL CO., LTD. AND SUBSIDIARY

TOTAL PURCHASES FROM OR SALES TO RELATED PARTIES AMOUNTING TO AT LEAST NT\$100 MILLION OR 20% OF THE PAID-IN CAPITAL FOR THE YEAR ENDED DECEMBER 31, 2020

(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

Buyer	Related Party	Relationship	Transaction Details			Abnormal Transaction		Notes/Accounts Receivable (Payable)		Note
			Purchase/Sale	Amount	% to Total	Payment Terms	Unit Price	Payment Term	Ending Balance	
The Company	MegaChips	Its subsidiary, Shun Ying Investment, is represented in MXIC's board of directors	Sales	\$ 16,101,433	41	30 days after monthly closing	Note 31	\$ 1,647,427	32	-
	MXHK	Indirect subsidiary	Sales	5,778,319	15	45 days after monthly closing	Note 31	587,454	11	-
	MXA	Subsidiary	Sales	1,257,037	3	Net 60 days	Note 31	98,670	2	-
	MegaChips	Its subsidiary, Shun Ying Investment, is represented in MXIC's board of directors	Purchase	6,209,245	52	30 days after monthly closing and after acceptance of materials	Note 31	4,062,279	57	-
MXHK	The Company	Indirect subsidiary	Purchase	US\$ 195,739	100	45 days after monthly closing	No material difference	US\$ 20,627	100	-
MXA	The Company	Subsidiary	Purchase	US\$ 42,470	100	Net 60 days	No material difference	US\$ 3,465	100	-

MACRONIX INTERNATIONAL CO., LTD. AND SUBSIDIARY

RECEIVABLES FROM RELATED PARTIES AMOUNTING TO AT LEAST NT\$100 MILLION OR 20% OF THE PAID-IN CAPITAL
DECEMBER 31, 2020

(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

Company Name	Related Party	Relationship	Ending Balance	Turnover Rate	Overdue		Amounts Received in Subsequent Period	Allowance for Impairment Loss
					Amount	Action Taken		
The Company	MegaChips	Its subsidiary, Shun Ying Investment, is represented in MXIC's board of directors	\$ 1,647,427	12.29 times	\$ -	-	\$ 1,647,427 thousand	\$ -
	MXHK MXA	Indirect subsidiary Subsidiary	587,454 98,670	8.76 times 10.66 times	- -	-	587,454 thousand 98,670 thousand	- -

MACRONIX INTERNATIONAL CO., LTD. AND SUBSIDIARY

INTERCOMPANY RELATIONSHIPS AND SIGNIFICANT TRANSACTIONS

FOR THE YEAR ENDED DECEMBER 31, 2020

(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

Investee Company	Counterparty	Relationship (Note 1)	Financial Statement Accounts	Transaction Details		% to Total Revenues or Assets	
				Amount	Payment Terms		
The Company	MXHK	1	Sales	\$ 5,778,319	Note 2	15%	
			Net receivable from related parties	587,454	-	1%	
	MXE	1	Operating expenses	134,553	-	-	
			Other payables to related parties	45,740	-	-	
	MXA	1	Sales	1,257,037	Note 2	3%	
			Operating expenses	206,028	-	1%	
			Net receivable from related parties	98,670	-	-	
			Other payables to related parties	58,659	-	-	
		Mxtran	1	Rental revenue	435	Note 3	-
				IT service revenue	318	-	-
MXHK		1	Operating expenses	100,854	-	-	
			Other payables to related parties	25,574	-	-	
		3	Operating expenses	314,183	-	1%	

Note 1: The transactions from the parent company to the subsidiary are denoted as 1.

The transactions from the subsidiary to the parent company are denoted as 2.

The transactions between two subsidiaries are denoted as 3.

Note 2: The sales price refers to the agreed upon product price for the end customer.

Note 3: The Company leased office space to related parties and collected rental revenue according to the floor space per month.

Note 4: The transaction terms with related parties were 30 to 60 days after monthly closing and were similar to those with third parties.

MACRONIX INTERNATIONAL CO., LTD. AND SUBSIDIARY

INFORMATION ON INVESTEEES
FOR THE YEAR ENDED DECEMBER 31, 2020
(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

Investor Company	Investee Company	Location	Main Businesses and Products	Original Investment Amount		Balance as of December 31, 2020			Net Income (Loss) of the Investee	Share of Profit (Loss)	Note
				December 31, 2020	December 31, 2019	Shares	%	Carrying Amount			
The Company	MXA	San Jose, California, USA.	Sales and marketing	\$ 2,640	\$ 2,640	\$ 100,000	100.00	\$ 15,552	\$ 14,939	Subsidiary	
	MXBVI	Tortola, British Virgin Islands	Investment holding company	7,348,057	7,348,057	212,048,000	100.00	142,922	143,018	Subsidiary	
	Hui Ying	Taipei, Taiwan	Investment	500,000	500,000	-	100.00	7,014	4,687	Subsidiary	
	Run Hong	Taipei, Taiwan	Investment	984,432	984,432	-	100.00	(483)	(483)	Subsidiary	
MXBVI	Mxtran	Hsinchu, Taiwan	IC design	755,287	755,287	69,627,323	90.43	(9,138)	(8,262)	Subsidiary	
	NTTI	San Jose, California, USA.	IC design	899,931	891,291	27,450,000	100.00	(8,812)	Note	Subsidiary	
	MXE	Belgium	After-sales service	2,106	2,106	999	100.00	7,429	Note	Subsidiary	
	MPL	Singapore	After-sales service	3,291	3,291	174,000	100.00	2,308	Note	Subsidiary	
Run Hong	MXCHK	Hong Kong	Sales and marketing	378,427	378,427	89,700,000	100.00	130,729	Note	Subsidiary	
	MX Asia	Cayman Island	After-sales service	23,055	23,055	700,000	100.00	4,016	Note	Subsidiary	
	Mxtran	Hsinchu, Taiwan	IC design	40,318	40,318	3,393,200	4.41	(9,138)	Note	Subsidiary	
Mxtran	Mxtran Samoa	Samoa	Investment holding company	35,979	35,979	1,170,000	100.00	1	Note	Subsidiary	
	Mxtran Samoa	Hong Kong	Investment holding company	23,880	23,880	6,152,000	100.00	-	Note	Subsidiary	

Note: Under relevant regulations, no disclosure of investment gain (loss) is needed.

MACRONIX INTERNATIONAL CO., LTD. AND SUBSIDIARY

INFORMATION ON INVESTMENT IN MAINLAND CHINA
FOR THE YEAR ENDED DECEMBER 31, 2020
(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

Investee Company	Main Businesses and Products	Paid-in Capital	Method of Investment	Accumulated Outward Remittance for Investment from Taiwan as of January 1, 2020	Remittance of Funds		Accumulated Outward Remittance for Investment from Taiwan as of December 31, 2020	Net Income (Loss) of the Investee	% Ownership for Direct or Indirect Investment	Investment Gain (Loss) (Note 1)	Carrying Amount as of December 31, 2020	Accumulated Repatriation of Investment Income as of December 31, 2020
					Outward	Inward						
MXm	Development of integrated circuit system and software	\$ 296,160	MXHK (Note 2)	\$ 296,160	\$ -	\$ -	\$ 296,160	\$ 11,040	100	\$ 11,040	\$ 400,483	\$ -
Accumulated Outward Remittance for Investment in Mainland China as of December 31, 2020				Upper Limit on the Amounts of Investment Stipulated by Investment Commission, MOEA		Investment Amount Authorized by the Investment Commission, MOEA						
\$ 296,160				\$ 21,716,156		\$ 296,160						

Note 1: The amount was recognized based on the audited financial statements of the investee company.

Note 2: The Company invested in a company located in mainland China indirectly through the existing company in a third country.

Macronix International Co., Ltd.

**Parent Company Only Financial Statements for the
Years Ended December 31, 2020 and 2019 and
Independent Auditors' Report**

INDEPENDENT AUDITORS' REPORT

The Board of Directors and the Shareholders
Macronix International Co., Ltd.

Opinion

We have audited the accompanying financial statements of Macronix International Co., Ltd. (the "Company"), which comprise the balance sheets as of December 31, 2020 and 2019, and the statements of comprehensive income, changes in equity and cash flows for the years then ended, and the notes to the financial statements, including a summary of significant accounting policies (collectively referred to as the "financial statements").

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2020 and 2019, and its financial performance and its cash flows for the years then ended in accordance with the Regulations Governing the Preparation of Financial Reports by Securities Issuers.

Basis for Opinion

We conducted our audits in accordance with the Regulations Governing Auditing and Attestation of Financial Statements by Certified Public Accountants and auditing standards generally accepted in the Republic of China. Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the Company in accordance with the Norm of Professional Ethics for Certified Public Accountant of the Republic of China, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements for the year ended December 31, 2020. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Key audit matters for the Company's parent company only financial statements for the year ended December 31, 2020 are stated as follows:

Valuation of inventory

The Company manufactures and sells ROM products, NOR Flash, and NAND Flash, which are widely used in consumer electronics. As of December 31, 2020, inventory was NT\$12,912,017 thousand, accounting for 20% of the total assets. With the current rapid changes in technology and the improvements in manufacturing technologies, market demand for memory chip could change significantly and result in inventory obsolescence. Since inventory valuation and estimates of net realizable value of inventory are subject to management's judgment, they are considered as

accounting estimates with relatively high uncertainty. Therefore, valuation of inventory has been identified as a key audit matter. Refer to Notes 4(e), 5(a) and 9 to the financial statements for the details of accounting policy, accounting judgment, key sources of estimation uncertainty and the related information about the valuation of inventory.

Our key audit procedures performed in respect of the above area included the following:

1. We understood and assessed the adequacy of the policy and procedures for the inventory valuation adopted by the management.
2. We obtained data on the assessment of inventory at the lower of cost or net realizable value and selected sample data, and we tested the reasonableness of net realizable value by comparing inventory carrying amounts to recent selling prices; we tested the reasonableness of allowance for inventory loss by comparing net realizable value with carrying amounts. We obtained the inventory aging report, and we tested the accuracy and completeness of the report by agreeing the age interval, quantity and amount to the supporting documents of inbound inventory. We assessed the reasonableness of allowance for inventory loss by recalculating the amount in accordance with the stated valuation policy for the inventory.
3. We performed a retrospective review of inventory movements to evaluate the reasonableness of inventory obsolescence reserve policy and policy on scrapping of inventories.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with the Regulations Governing the Preparation of Financial Reports by Securities Issuers, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

Those charged with governance, including the audit committee, are responsible for overseeing the Company's financial reporting process.

Auditors' Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the auditing standards generally accepted in the Republic of China will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with the auditing standards generally accepted in the Republic of China, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

1. Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
2. Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control.
3. Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
4. Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the Company to cease to continue as a going concern.
5. Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
6. Obtain sufficient and appropriate audit evidence regarding the financial information of the entities or business activities within the Company to express an opinion on the financial statements. We are responsible for the direction, supervision and performance of the audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the financial statements for the year ended December 31, 2020 and are therefore the key audit matters. We describe these matters in our auditors' report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

The engagement partners on the audit resulting in this independent auditors' report are Tung Hui Yeh and Kuo Tyan Hong.

Deloitte & Touche
Taipei, Taiwan
Republic of China

February 26, 2021

Notice to Readers

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

For the convenience of readers, the independent auditors' report and the accompanying financial statements have been translated into English from the original Chinese version prepared and used in the Republic of China. If there is any conflict between the English version and the original Chinese version or any difference in the interpretation of the two versions, the Chinese-language independent auditors' report and financial statements shall prevail.

MACRONIX INTERNATIONAL CO., LTD.

PARENT COMPANY ONLY BALANCE SHEETS DECEMBER 31, 2020 AND 2019 (In Thousands of New Taiwan Dollars)

ASSETS	2020		2019	
	Amount	%	Amount	%
CURRENT ASSETS				
Cash and cash equivalents (Notes 4, 6 and 29)	\$ 10,297,465	16	\$ 7,631,948	13
Notes receivable and trade receivables, net (Notes 4, 8 and 29)	2,875,021	4	2,910,111	5
Receivables from related parties, net (Notes 4, 29 and 30)	2,333,551	4	1,841,672	3
Other receivables (Notes 4, 8, 25, 29 and 30)	110,939	-	125,248	-
Inventories (Notes 4, 5 and 9)	12,912,017	20	12,768,317	21
Other current assets (Note 15)	99,553	-	226,115	-
Total current assets	28,628,546	44	25,503,411	42
NON-CURRENT ASSETS				
Financial assets at fair value through other comprehensive income (FVTOCI) - non-current (Notes 4, 7 and 29)	1,779,044	3	1,440,574	2
Investments accounted for using equity method (Notes 4 and 10)	2,522,146	4	2,397,392	4
Property, plant and equipment (Notes 4, 11, 31 and 32)	31,016,511	47	28,904,312	48
Right-of use assets(Notes 4 and 12)	938,081	1	970,622	2
Intangible assets (Notes 4 and 13)	54,629	-	43,559	-
Deferred tax assets (Notes 4 and 25)	658,310	1	1,104,876	2
Other financial assets - non-current (Notes 4, 14, 29 and 31)	161,767	-	161,802	-
Total non-current assets	37,130,488	56	35,023,137	58
TOTAL	\$ 65,759,034	100	\$ 60,526,548	100
LIABILITIES AND EQUITY				
CURRENT LIABILITIES				
Short-term borrowings (Notes 16 and 29)	\$ -	-	\$ 1,550,000	3
Contract liabilities (Note 23)	87,155	-	97,101	-
Notes payable and trade payables (Notes 17 and 29)	2,940,247	5	2,140,288	4
Payables to related parties (Notes 29 and 30)	4,161,427	6	4,720,212	8
Accrued employees' compensation and remuneration of directors (Notes 24 and 30)	1,403,624	2	1,285,774	2
Payables for purchases of equipment (Note 29)	552,400	1	877,848	2
Other payables (Notes 18 and 29)	1,366,096	2	1,345,691	2
Other payables to related parties (Notes 29 and 30)	136,825	-	149,947	-
Current tax liabilities (Notes 4 and 25)	38,349	-	-	-
Provisions - current (Notes 4 and 20)	3,283	-	4,856	-
Lease liabilities - current (Notes 4 and 12)	79,341	-	72,307	-
Current portion of long-term borrowings (Notes 16, 29 and 31)	5,412,007	8	3,267,200	5
Other current liabilities (Note 19)	323,549	1	222,706	-
Total current liabilities	16,504,303	25	15,733,930	26
NON-CURRENT LIABILITIES				
Long-term borrowings (Notes 16, 29 and 31)	10,736,875	17	9,774,330	16
Lease liabilities - non-current (Notes 4 and 12)	873,701	1	906,049	1
Net defined benefit liabilities (Notes 4 and 21)	1,431,153	2	1,610,575	3
Other non-current liabilities (Note 19)	19,410	-	10,272	-
Total non-current liabilities	13,061,139	20	12,301,226	20
Total liabilities	29,565,442	45	28,035,156	46
EQUITY ATTRIBUTABLE TO OWNERS OF THE COMPANY (Notes 4, 22 and 27)				
Share capital				
Ordinary shares	18,563,017	28	18,399,271	31
Share capital to be cancelled	(1,153)	-	(182)	-
Total share capital	18,561,864	28	18,399,089	31
Capital surplus	384,772	1	543,920	1
Retained earnings				
Legal reserve	1,741,857	3	1,440,661	2
Special reserve	621,195	1	1,007,052	2
Unappropriated earnings	15,408,584	23	12,237,717	20
Total retained earnings	17,771,636	27	14,685,430	24
Other equity	(365,619)	(1)	(977,986)	(2)
Treasury shares	(159,061)	-	(159,061)	-
Total equity	36,193,592	55	32,491,392	54
TOTAL	\$ 65,759,034	100	\$ 60,526,548	100

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

MACRONIX INTERNATIONAL CO., LTD.

PARENT COMPANY ONLY STATEMENTS OF COMPREHENSIVE INCOME FOR THE YEARS ENDED DECEMBER 31, 2020 AND 2019 (In Thousands of New Taiwan Dollars, Except Earnings Per Share)

	2020		2019	
	Amount	%	Amount	%
NET OPERATING REVENUE (Notes 4, 23 and 30)	\$ 38,995,968	100	\$ 34,235,969	100
OPERATING COSTS (Notes 4, 9, 21, 24 and 30)	<u>26,381,126</u>	<u>68</u>	<u>25,377,649</u>	<u>74</u>
GROSS PROFIT	12,614,842	32	8,858,320	26
REALIZED (UNREALIZED) GAIN ON TRANSACTIONS WITH SUBSIDIARIES AND ASSOCIATES (Note 4)	<u>16,242</u>	<u>-</u>	<u>13,890</u>	<u>-</u>
REALIZED GROSS PROFIT	<u>12,631,084</u>	<u>32</u>	<u>8,872,210</u>	<u>26</u>
OPERATING EXPENSES (Notes 4, 21, 24 and 30)				
Selling and marketing expenses	935,687	2	894,834	3
General and administrative expenses	1,879,075	4	1,433,247	4
Research and development expenses	<u>4,125,219</u>	<u>11</u>	<u>3,577,367</u>	<u>10</u>
Total operating expenses	<u>6,939,981</u>	<u>17</u>	<u>5,905,448</u>	<u>17</u>
INCOME FROM OPERATIONS	<u>5,691,103</u>	<u>15</u>	<u>2,966,762</u>	<u>9</u>
NON-OPERATING INCOME AND EXPENSES				
Interest income (Note 24)	20,466	-	22,539	-
Other income (Notes 4, 7, 12, 24 and 30)	116,840	-	131,804	-
Other gains and losses (Note 24)	71,425	-	(56,784)	-
Finance costs (Notes 4 and 24)	(242,735)	(1)	(194,803)	-
Share of profit of subsidiaries, associates and joint ventures (Notes 4 and 10)	<u>153,899</u>	<u>1</u>	<u>142,442</u>	<u>-</u>
Total non-operating income and expenses	<u>119,895</u>	<u>-</u>	<u>45,198</u>	<u>-</u>
INCOME BEFORE INCOME TAX FROM CONTINUING OPERATIONS	5,810,998	15	3,011,960	9
INCOME TAX EXPENSE (Notes 4 and 25)	<u>(484,915)</u>	<u>(1)</u>	<u>-</u>	<u>-</u>
NET INCOME FOR THE YEAR	<u>5,326,083</u>	<u>14</u>	<u>3,011,960</u>	<u>9</u>

(Continued)

MACRONIX INTERNATIONAL CO., LTD.

PARENT COMPANY ONLY STATEMENTS OF COMPREHENSIVE INCOME FOR THE YEARS ENDED DECEMBER 31, 2020 AND 2019 (In Thousands of New Taiwan Dollars, Except Earnings Per Share)

	2020		2019	
	Amount	%	Amount	%
OTHER COMPREHENSIVE INCOME (LOSS)				
Items that will not be reclassified subsequently to profit or loss:				
Remeasurement of defined benefit plans	\$ (2,737)	-	\$ (108,120)	-
Unrealized gain on investments in equity instruments at FVTOCI (Notes 22 and 29)	338,470	-	238,750	1
Share of other comprehensive gain of subsidiaries accounted for using the equity method	102,496	-	208,972	-
Items that may be reclassified subsequently to profit or loss:				
Exchange differences on translating foreign operations (Note 22)	<u>(150,210)</u>	<u>-</u>	<u>(98,748)</u>	<u>-</u>
Other comprehensive income for the year, net of income tax	<u>288,019</u>	<u>-</u>	<u>240,854</u>	<u>1</u>
TOTAL COMPREHENSIVE INCOME FOR THE YEAR	<u>\$ 5,614,102</u>	<u>14</u>	<u>\$ 3,252,814</u>	<u>10</u>
EARNINGS PER SHARE (Note 26)				
Basic	<u>\$ 2.90</u>		<u>\$ 1.64</u>	
Diluted	<u>\$ 2.84</u>		<u>\$ 1.61</u>	

The accompanying notes are an integral part of the parent company only financial statements. (Concluded)

MACRONIX INTERNATIONAL CO., LTD.

PARENT COMPANY ONLY STATEMENTS OF CHANGES IN EQUITY
FOR THE YEARS ENDED DECEMBER 31, 2020 AND 2019
(In Thousands of New Taiwan Dollars)

	Share Capital		Share Capital to be Cancelled	Capital Surplus		Retained Earnings		Unappropriated Earnings	Exchange Differences on Translating Foreign Operations	Other Equity		Total Equity
	Shares (In Thousands)	Ordinary Shares		Legal Reserve	Special Reserve	Unrealized Gain (Loss) on Financial Assets at FVTOCI	Employee Unearned Compensation			Treasury Shares		
BALANCE AT JANUARY 1, 2019	1,840,292	\$ 18,402,919	\$ (1,249)	\$ (56,241)	\$ 541,360	\$ 74,275	\$ 13,461,892	\$ (137,132)	\$ (746,762)	\$ (159,061)	\$ 31,360,023	
Legal reserve	-	-	-	-	899,301	-	(899,301)	-	-	-	-	
Special reserve	-	-	-	-	-	932,777	(932,777)	-	-	-	-	
Cash dividends distributed by the Company - \$1.20 per share	-	-	-	-	-	-	(2,208,200)	-	-	-	(2,208,200)	
Net income for the year ended December 31, 2019	-	-	-	-	-	-	3,011,960	-	-	-	3,011,960	
Other comprehensive income (loss) for the year ended December 31, 2019, net of income tax	-	-	-	-	-	-	(108,120)	(98,748)	447,722	-	240,854	
Total comprehensive income (loss) for the year ended December 31, 2019	-	-	-	-	-	-	2,903,840	(98,748)	447,722	-	3,252,814	
Issuance of restricted shares for employees	-	-	-	508,772	-	-	-	-	-	-	-	
Compensation cost of restricted shares for employees	-	-	-	86,460	-	-	(87,737)	-	-	-	84,407	
Retirement of restricted shares for employees	(365)	(3,648)	1,067	2,581	-	-	-	-	-	-	-	
Dividends paid to subsidiaries to adjust capital surplus	-	-	-	2,348	-	-	-	-	-	-	2,348	
BALANCE AT DECEMBER 31, 2019	1,839,927	\$ 18,399,271	\$ (182)	\$ 543,920	\$ 1,440,661	\$ 1,007,052	\$ 12,237,717	\$ (235,880)	\$ (299,040)	\$ (159,061)	\$ 32,491,392	
Legal reserve	-	-	-	-	301,196	-	(301,196)	-	-	-	-	
Special reserve	-	-	-	-	-	(385,857)	385,857	-	-	-	-	
Cash dividends distributed by the Company - \$1.20 per share	-	-	-	-	-	-	(2,207,891)	-	-	-	(2,207,891)	
Net income for the year ended December 31, 2020	-	-	-	-	-	-	5,326,083	-	-	-	5,326,083	
Other comprehensive income (loss) for the year ended December 31, 2020, net of income tax	-	-	-	-	-	-	(2,737)	(150,210)	440,966	-	288,019	
Total comprehensive income (loss) for the year ended December 31, 2020	-	-	-	-	-	-	5,323,346	(150,210)	440,966	-	5,614,102	
Disposal of investments in equity instruments designated as at fair value through other comprehensive income	-	-	-	-	-	-	(29,100)	-	29,100	-	-	
Issuance of restricted shares for employees	16,400	164,002	-	(164,002)	-	-	-	-	-	-	-	
Compensation cost of restricted shares for employees	-	-	-	1,300	-	-	(149)	-	-	-	292,511	
Retirement of restricted shares for employees	(25)	(256)	(971)	1,227	-	-	-	-	-	-	293,662	
Dividends paid to subsidiaries to adjust capital surplus	-	-	-	2,327	-	-	-	-	-	-	-	
BALANCE AT DECEMBER 31, 2020	1,856,302	\$ 18,563,017	\$ (1,153)	\$ 384,772	\$ 1,741,857	\$ 621,195	\$ 15,408,584	\$ (386,090)	\$ 171,026	\$ (159,061)	\$ 36,193,892	

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

MACRONIX INTERNATIONAL CO., LTD.

PARENT COMPANY ONLY STATEMENTS OF CASH FLOWS FOR THE YEARS ENDED DECEMBER 31, 2020 AND 2019 (In Thousands of New Taiwan Dollars)

	2020	2019
CASH FLOWS FROM OPERATING ACTIVITIES		
Income before income tax	\$ 5,810,998	\$ 3,011,960
Adjustments for:		
Depreciation expense	3,663,325	2,653,483
Amortization expense	31,076	31,850
Expected credit loss recognized	223	-
Finance costs	242,735	194,803
Interest income	(20,466)	(22,539)
Dividend income	(95,559)	(105,188)
Compensation cost of employee restricted shares	293,662	84,407
Share of gain (loss) of subsidiaries and associates	(153,899)	(142,442)
Gain on disposal of property, plant and equipment	(6,994)	(319,124)
Gain on disposal of investments	-	(7,410)
Realized gain on transactions with associates and joint ventures	(16,242)	(13,890)
Net loss (gain) on foreign currency exchange	46,184	(30,337)
Changes in operating assets and liabilities		
Notes receivable and trade receivables	62,395	139,590
Receivables from related parties	(454,857)	(665,757)
Other receivables	14,164	25,889
Inventories	(143,700)	5,138,238
Other current assets	126,562	191,831
Contract liabilities	(9,946)	83,503
Notes payable and trade payables	796,250	(463,325)
Payables to related parties	(582,175)	(4,060,942)
Payables for employees' compensation and director's remuneration	117,850	(1,006,661)
Other payables	42,656	73,797
Other payables to related parties	(15,681)	(8,498)
Provisions	(1,573)	(9,250)
Other current liabilities	(59,578)	(107,465)
Net defined benefit liabilities	(182,159)	(137,614)
Cash generated from operations	9,505,251	4,528,909
Interest received	21,450	22,500
Dividend received	95,559	105,188
Interest paid	(265,996)	(212,990)
Income tax paid	(838)	(110,049)
Net cash generated from operating activities	<u>9,355,426</u>	<u>4,333,558</u>
CASH FLOWS FROM INVESTING ACTIVITIES		
Payments for property, plant and equipment	(6,024,071)	(12,741,208)
Proceeds from disposal of property, plant and equipment	7,574	340,012
Increase in refundable deposits	(62)	(63)

(Continued)

MACRONIX INTERNATIONAL CO., LTD.

PARENT COMPANY ONLY STATEMENTS OF CASH FLOWS FOR THE YEARS ENDED DECEMBER 31, 2020 AND 2019 (In Thousands of New Taiwan Dollars)

	2020	2019
Decrease in refundable deposits	\$ 98	\$ 10
Payments for intangible assets	(42,146)	(32,654)
Decrease in other financial assets	<u>-</u>	<u>18,204</u>
Net cash used in investing activities	<u>(6,058,607)</u>	<u>(12,415,699)</u>
CASH FLOWS FROM FINANCING ACTIVITIES		
Proceeds from short-term borrowings	-	4,000,000
Repayments of short-term borrowings	(1,550,000)	(2,450,000)
Proceeds from long-term borrowings	7,300,000	9,776,000
Repayments of long-term borrowings	(4,192,648)	(5,955,028)
Proceeds from guarantee deposits received	193,799	550
Refund of guarantee deposits received	(16,946)	(150)
Repayment of leased liabilities	(79,586)	(90,977)
Distribution of cash dividends	<u>(2,207,891)</u>	<u>(2,208,200)</u>
Net cash (used in) generated from financing activities	<u>(553,272)</u>	<u>3,072,195</u>
EFFECT OF EXCHANGE RATE CHANGES ON THE BALANCE OF CASH AND CASH EQUIVALENTS HELD IN FOREIGN CURRENCIES		
	<u>(78,030)</u>	<u>(70,278)</u>
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	2,665,517	(5,080,224)
CASH AND CASH EQUIVALENTS AT THE BEGINNING OF THE YEAR	<u>7,631,948</u>	<u>12,712,172</u>
CASH AND CASH EQUIVALENTS AT THE END OF THE YEAR	<u>\$ 10,297,465</u>	<u>\$ 7,631,948</u>

The accompanying notes are an integral part of the parent company only financial statements. (Concluded)

MACRONIX INTERNATIONAL CO., LTD.

NOTES TO PARENT COMPANY ONLY FINANCIAL STATEMENTS FOR THE YEARS ENDED DECEMBER 31, 2020 AND 2019 (In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

1. GENERAL INFORMATION

Macronix International Co., Ltd. (the “Company”) was incorporated in the Republic of China (ROC) on December 9, 1989 and commenced business in December 1989. The Company operates principally as a designer, manufacturer and supplier of integrated circuits (ICs) and memory chips. The Company also performs design, research and development, consultation and trade of relevant products.

The Company’s shares have been listed on the Taiwan Stock Exchange (TWSE) since March 15, 1995.

The financial statements are presented in the Company’s functional currency, the New Taiwan dollar.

2. APPROVAL OF FINANCIAL STATEMENTS

The financial statements were approved by the Company’s board of directors and were authorized for issue on February 26, 2021.

3. APPLICATION OF NEW, AMENDED AND REVISED STANDARDS AND INTERPRETATIONS

- a. Initial application of the amendments to the International Financial Reporting Standards (IFRS), International Accounting Standards (IAS), Interpretations of IFRS (IFRIC), and Interpretations of IAS (SIC) (collectively, the IFRSs) endorsed and issued into effect by the FSC

The initial application of the amendments to the IFRSs endorsed and issued into effect by the FSC would not have any material impact on the Company’s accounting policies.

- b. The IFRSs endorsed by the Financial Supervisory Commission (FSC) for application starting from 2021

New IFRSs	Effective Date Announced by IASB
Amendments to IFRS 4 “Extension of the Temporary Exemption from Applying IFRS 9”	Effective immediately upon promulgation by the IASB
Amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16 “Interest Rate Benchmark Reform - Phase 2”	January 1, 2021
Amendment to IFRS 16 “Covid-19-Related Rent Concessions”	June 1, 2020

Except for the above impact, as of the date the financial statements were authorized for issue, the Company is continuously assessing the possible impact that the application of other standards and interpretations will have on the Company’s financial position and financial performance and will disclose the relevant impact when the assessment is completed.

- c. New IFRSs in issue but not yet endorsed and issued into effect by the FSC

New IFRSs	Effective Date Announced by IASB (Note 1)
“Annual Improvements to IFRS Standards 2018-2020”	January 1, 2022 (Note 2)
Amendments to IFRS 3 “Reference to the Conceptual Framework”	January 1, 2022 (Note 3)
Amendments to IFRS 10 and IAS 28 “Sale or Contribution of Assets between an Investor and its Associate or Joint Venture”	To be determined by IASB
IFRS 17 “Insurance Contracts”	January 1, 2023
Amendments to IFRS 17	January 1, 2023
Amendments to IAS 1 “Classification of Liabilities as Current or Non-current”	January 1, 2023
Amendments to IAS 16 “Property, Plant and Equipment - Proceeds before Intended Use”	January 1, 2022 (Note 4)
Amendments to IAS 37 “Onerous Contracts - Cost of Fulfilling a Contract”	January 1, 2022 (Note 5)

Note 1: Unless stated otherwise, the above New IFRSs are effective for annual reporting periods beginning on or after their respective effective dates.

Note 2: The amendments to IFRS 9 will be applied prospectively to modifications and exchanges of financial liabilities that occur on or after the annual reporting periods beginning on or after January 1, 2022.

Note 3: The amendments are applicable to business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after January 1, 2022.

Note 4: The amendments are applicable to property, plant and equipment that are brought to the location and condition necessary for them to be capable of operating in the manner intended by management on or after January 1, 2021.

Note 5: The amendments are applicable to contracts for which the entity has not yet fulfilled all its obligations on January 1, 2022.

Except for the above impact, as of the date the financial statements were authorized for issue, the Company is continuously assessing the possible impact that the application of other standards and interpretations will have on the Company’s financial position and financial performance and will disclose the relevant impact when the assessment is completed.

4. SUMMARY OF SIGNIFICANT ACCOUNTING POLICY

- a. Statement of compliance

The parent company only financial statements have been prepared in accordance with the Regulations Governing the Preparation of Financial Reports by Securities Issuers.

- b. Basis of preparation

The financial statements have been prepared on the historical cost basis except for financial instruments which are measured at fair value and defined benefit liabilities.

The fair value measurements, which are grouped into Levels 1 to 3 based on the degree to which the fair value measurement inputs are observable and based on the significance of the inputs to the fair value measurement in its entirety, are described as follows:

- 1) Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities;
- 2) Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for an asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices); and
- 3) Level 3 inputs are unobservable inputs for an asset or liability.

When preparing its parent company only financial statements, the Company used equity method to account for its investment in subsidiaries and associates. In order for the amounts of the net profit for the year, other comprehensive income for the year and total equity in the parent company only financial statements to be the same with the amounts attributable to the owner of the Company in its consolidated financial statements, adjustments arising from the differences in accounting treatment between parent company only basis and consolidated basis were made to investments accounted for by equity method, share of profit or loss of subsidiaries, share of other comprehensive income of subsidiaries and related equity items, as appropriate, in the parent company only financial statements.

c. Classification of current and non-current assets and liabilities

Current assets include:

- 1) Assets held primarily for the purpose of trading;
- 2) Assets expected to be realized within 12 months after the reporting period; and
- 3) Cash and cash equivalents unless the asset is restricted from being exchanged or used to settle a liability for at least 12 months after the reporting period.

Current liabilities include:

- 1) Liabilities held primarily for the purpose of trading;
- 2) Liabilities due to be settled within 12 months after the reporting period, even if an agreement to refinance, or to reschedule payments, on a long-term basis is completed after the reporting period and before the financial statements are authorized for issue; and
- 3) Liabilities for which the Company does not have an unconditional right to defer settlement for at least 12 months after the reporting period. Terms of a liability that could, at the option of the counterparty, result in its settlement by the issue of equity instruments do not affect its classification.

Assets and liabilities that are not classified as current are classified as non-current.

d. Foreign currencies

In preparing the financial statements of the Company, transactions in currencies other than the entity's functional currency (foreign currencies) are recognized at the rates of exchange prevailing at the dates of the transactions.

At the end of each reporting period, monetary items denominated in foreign currencies are retranslated at the rates prevailing at that date. Exchange differences on monetary items arising from settlement or translation are recognized in profit or loss in the period in which they arise.

Non-monetary items measured at fair value that are denominated in foreign currencies are retranslated at the rates prevailing at the date when the fair value was determined. Exchange differences arising from the retranslation of non-monetary items are included in profit or loss for the period except for exchange differences arising from the retranslation of non-monetary items in respect of which gains and losses are recognized directly in other comprehensive income, in which cases, the exchange differences are also recognized directly in other comprehensive income.

Non-monetary items that are measured at historical cost in a foreign currency are not retranslated.

For the purpose of presenting parent company only financial statements, the functional currencies of the Company and the Group (including subsidiaries and associates that use currency different from the currency of the Company) are translated into the presentation currency - the New Taiwan dollar as follows: Assets and liabilities are translated at the exchange rates prevailing at the end of the reporting period; income and expense items are translated at the average exchange rates for the period. The resulting currency translation differences are recognized in other comprehensive income.

e. Inventories

Inventories consist of raw materials, supplies, finished goods, merchandise and work-in-process and are stated at the lower of cost or net realizable value. Inventory write-downs are made by item, except where it may be appropriate to group similar or related items. Net realizable value is the estimated selling price of inventories less all estimated costs of completion and costs necessary to make the sale. Inventories are recorded at standard cost and adjusted to approximate weighted - average cost on the balance sheet date.

f. Investments in subsidiaries

The Company uses the equity method to account for its investments in subsidiaries.

Subsidiaries are the entities controlled by the Company.

Under the equity method, the investment in a subsidiary is initially recognized at cost and the carrying amount is increased or decreased to recognize the Company's share of the profit or loss and other comprehensive income of the subsidiary after the date of acquisition. Besides, the Company also recognizes the Company's share of the change in other equity of the subsidiary.

Changes in the Company's ownership interest in a subsidiary that do not result in the Company losing control of the subsidiary are equity transactions. The Company recognizes directly in equity any difference between the carrying amount of the investment and the fair value of the consideration paid or received.

When the Company's share of losses of a subsidiary exceeds its interest in that subsidiary (which includes any carrying amount of the investment accounted for by the equity method and long-term interests that, in substance, form part of the Company's net investment in the subsidiary), the Company continues recognizing its share of further losses.

Any excess of the cost of acquisition over the Company's share of the net fair value of the identifiable assets and liabilities of a subsidiary that constitutes a business at the date of acquisition is recognized as goodwill, which is included within the carrying amount of the investment and is not amortized. Any excess of the Company's share of the net fair value of the identifiable assets and liabilities of a subsidiary that constitutes a business over the cost of acquisition is recognized immediately in profit or loss.

The Company assesses its investment for any impairment by comparing the carrying amount with the estimated recoverable amount as assessed based on the entire financial statements of the invested company. Impairment loss is recognized when the carrying amount exceeds the recoverable amount. If

the recoverable amount of the investment subsequently increases, the Company recognizes the reversal of the impairment loss; the adjusted post-reversal carrying amount should not exceed the carrying amount that would have been recognized (net of amortization or depreciation) had no impairment loss been recognized in prior years. An impairment loss recognized on goodwill cannot be reversed in a subsequent period.

When the Company loses control of a subsidiary, it recognizes the investment retained in the former subsidiary at its fair value at the date when control is lost. The difference between the fair value of the retained investment plus any consideration received and the carrying amount of the previous investment at the date when control is lost is recognized as a gain or loss in profit or loss. Besides, the Company accounts for all amounts previously recognized in other comprehensive income in relation to that subsidiary on the same basis as would be required if the Company had directly disposed of the related assets or liabilities.

Profits or losses resulting from downstream transactions are eliminated in full only in the parent's company only financial statements. Profits and losses resulting from upstream transactions and transactions between subsidiaries are recognized only in the parent's company financial statements only to the extent of interests in the subsidiaries that are not related to the Company.

g. Property, plant and equipment

Property, plant and equipment are stated at cost, less recognized accumulated depreciation and accumulated impairment loss.

Depreciation on property, plant and equipment is recognized using the straight-line method. Each significant part is depreciated separately. The estimated useful lives, residual values and depreciation method are reviewed at the end of each reporting period, with the effects of any changes in estimates accounted for on a prospective basis.

On derecognition of an item of property, plant and equipment the difference between the sales proceeds and the carrying amount of the asset is recognized in profit or loss.

h. Intangible assets

1) Intangible assets acquired separately

Intangible assets with finite useful lives that are acquired separately are initially measured at cost and subsequently measured at cost less accumulated amortization and accumulated impairment loss. Amortization is recognized on a straight-line basis. The estimated useful life, residual value, and amortization method are reviewed at the end of each reporting period, with the effect of any changes in estimate accounted for on a prospective basis. Intangible assets with indefinite useful lives that are acquired separately are measured at cost less accumulated impairment loss.

2) Internally-generated intangible assets - research and development expenditure

Expenditure on research activities is recognized as an expense in the period in which it is incurred.

An internally-generated intangible asset arising from the development phase of an internal project is recognized if, and only if, all of the following have been demonstrated:

- a) The technical feasibility of completing the intangible asset so that it will be available for use or sale;
- b) The intention to complete the intangible asset and use or sell it;
- c) The ability to use or sell the intangible asset;

- d) How the intangible asset will generate probable future economic benefits;
- e) The availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset; and
- f) The ability to measure reliably the expenditure attributable to the intangible asset during its development.

The amount initially recognized for internally-generated intangible assets is the sum of the expenditure incurred from the date when the intangible asset first meets the recognition criteria listed above. Subsequent to initial recognition, they are measured on the same basis as intangible assets that are acquired separately.

3) Derecognition of intangible assets

On derecognition of an intangible asset, the difference between the net disposal proceeds and the carrying amount of the asset is recognized in profit or loss.

i. Impairment of property, plant and equipment, right-of-use asset, intangible assets other than goodwill

At the end of each reporting period, the Company reviews the carrying amounts of its property, plant and equipment, right-of-use asset and intangible assets, excluding goodwill, to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss. When it is not possible to estimate the recoverable amount of an individual asset, the Company estimates the recoverable amount of the cash-generating unit to which the asset belongs. Corporate assets are allocated to the smallest group of cash-generating units on a reasonable and consistent basis of allocation.

Intangible assets with indefinite useful lives and intangible assets not yet available for use are tested for impairment at least annually, and whenever there is an indication that the asset may be impaired.

The recoverable amount is the higher of fair value less costs to sell and value in use. If the recoverable amount of an asset or cash-generating unit is estimated to be less than its carrying amount, the carrying amount of the asset or cash-generating unit is reduced to its recoverable amount, with the resulting impairment loss recognized in profit or loss.

When an impairment loss is subsequently reversed, the carrying amount of the corresponding asset or cash-generating unit is increased to the revised estimate of its recoverable amount, but only to the extent of the carrying amount that would have been determined had no impairment loss been recognized on the asset or cash-generating unit in prior years. A reversal of an impairment loss is recognized in profit or loss.

j. Financial instruments

Financial assets and financial liabilities are recognized when the Company becomes a party to the contractual provisions of the instruments.

Transaction costs that are directly attributable to the acquisition or issue of financial assets and financial liabilities (other than financial assets and financial liabilities at fair value through profit or loss) are added to or deducted from the fair value of the financial assets or financial liabilities, as appropriate, on initial recognition. Transaction costs directly attributable to the acquisition of financial assets or financial liabilities at fair value through profit or loss are recognized immediately in profit or loss.

1) Financial assets

All regular way purchases or sales of financial assets are recognized and derecognized on a settlement date basis.

a) Measurement category

Financial assets are classified into the following categories: Financial assets measured at amortized cost and investments in equity instruments at FVTOCI.

i. Financial assets measured at amortized cost

Financial assets that meet the following conditions are subsequently measured at amortized cost:

- i) The financial assets are held within a business model whose objective is to hold financial assets in order to collect contractual cash flows; and
- ii) The contractual terms of the financial assets give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Subsequent to initial recognition, financial assets measured at amortized cost, including cash and cash equivalents and trade receivables measured at amortized cost, are measured at amortized cost, which equals the gross carrying amount determined using the effective interest method less any impairment loss. Exchange differences are recognized in profit or loss.

Interest income is calculated by applying the effective interest rate to the gross carrying amount of a financial asset, except for:

- i) Purchased or originated credit-impaired financial assets, for which interest income is calculated by applying the credit-adjusted effective interest rate to the amortized cost of such a financial asset; and
- ii) Financial assets that have subsequently become credit-impaired, for which interest income is calculated by applying the effective interest rate to the amortized cost of such a financial asset.

A financial asset is credit impaired when one or more of the following events have occurred:

- i) Significant financial difficulty of the issuer or the borrower;
- ii) Breach of contract, such as a default;
- iii) It is becoming probable that the borrower will enter bankruptcy or undergo a financial reorganization; or
- iv) The disappearance of an active market for that financial asset because of financial difficulties.

Cash equivalents include time deposits with original maturities, which are highly liquid, readily convertible to a known amount of cash and are subject to an insignificant risk of changes in value. These cash equivalents are held for the purpose of meeting short-term cash commitments.

ii Investments in equity instruments at FVTOCI

On initial recognition, the Company may make an irrevocable election to designate investments in equity instruments as at FVTOCI. Designation at FVTOCI is not permitted if the equity investment is held for trading or if it is contingent consideration recognized by an acquirer in a business combination.

Investments in equity instruments at FVTOCI are subsequently measured at fair value with gains and losses arising from changes in fair value recognized in other comprehensive income and accumulated in other equity. The cumulative gain or loss will not be reclassified to profit or loss on the disposal of the equity investments; instead, they will be transferred to retained earnings.

Dividends on these investments in equity instruments are recognized in profit or loss when the Company's right to receive the dividends is established, unless the dividends clearly represent a recovery of part of the cost of the investment.

b) Impairment of financial assets

The Company recognizes a loss allowance for expected credit losses on financial assets measured at amortized cost (including trade receivables).

The Company always recognizes lifetime expected credit losses (i.e. ECLs) for trade receivables and lease receivables. For all other financial instruments, the Company recognizes lifetime ECLs when there has been a significant increase in credit risk since initial recognition. If, on the other hand, the credit risk on such a financial instrument has not increased significantly since initial recognition, the Company measures the loss allowance for that financial instrument at an amount equal to 12-month ECLs.

Expected credit losses reflect the weighted average of credit losses with the respective risks of a default occurring as the weights. Lifetime ECLs represent the expected credit losses that will result from all possible default events over the expected life of a financial instrument. In contrast, 12-month ECLs represent the portion of lifetime ECLs that is expected to result from default events on a financial instrument that are possible within 12 months after the reporting date.

For internal credit risk management purposes, the Company determines that the following situations indicate that a financial asset is in default (without taking into account any collateral held by the Company):

- i. Internal or external information show that the debtor is unlikely to pay its creditors.
- ii. When a financial asset is more than 90 days past due unless the Company has reasonable and corroborative information to support a more lagged default criterion.

The Company recognizes an impairment gain or loss in profit or loss for all financial instruments with a corresponding adjustment to their carrying amount through a loss allowance account, except for investments in debt instruments that are measured at FVTOCI, for which the loss allowance is recognized in other comprehensive income and does not reduce the carrying amount of the financial asset.

c) Derecognition of financial assets

The Company derecognizes a financial asset only when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the financial asset to another party.

If the Company neither transfers nor retains substantially all the risks and rewards of ownership and continues to control the transferred asset, the Company recognizes its retained interest in the asset and any associated liability for amounts it may have to pay. If the Company retains substantially all the risks and rewards of ownership of a transferred financial asset, the Company continues to recognize the financial asset and also recognizes a collateralized borrowing for the proceeds received.

On derecognition of a financial asset at amortized cost in its entirety, the difference between the asset's carrying amount and the sum of the consideration received and receivable is recognized in profit or loss. On derecognition of an investment in an equity instrument at FVTOCI, the difference between the asset's carrying amount and the sum of the consideration received and receivable is recognized in profit or loss, and the cumulative gain or loss which had been recognized in other comprehensive income is transferred directly to retained earnings, without recycling through profit or loss.

2) Equity instruments

Equity instruments issued by the Company are recognized at the proceeds received, net of direct issue costs.

Repurchase of the Company's own equity instruments is recognized in and deducted directly from equity. No gain or loss is recognized in profit or loss on the purchase, sale, issue or cancellation of the Company's own equity instruments.

3) Financial liabilities

a) Subsequent measurement

All financial liabilities are measured at amortized cost using the effective interest method.

b) Derecognition of financial liabilities

The difference between the carrying amount of the financial liability derecognized and the consideration paid, including any non-cash assets transferred or liabilities assumed, is recognized in profit or loss.

k. Provisions

Provisions are measured at the best estimate of the discounted cash flows of the consideration required to settle the present obligation at the end of the reporting period, taking into account the risks and uncertainties surrounding the obligation.

l. Revenue recognition

The Company identifies contracts with customers, allocates the transaction price to the performance obligations and recognizes revenue when performance obligations are satisfied.

For contracts entered into with the same customer (or related parties of the customer) at or near the same time, those contracts are accounted for as a single contract if the goods or services promised in the contracts are a single performance obligation.

1) Revenue from the sale of goods

Revenue from the sale of goods comes from sales of Memory products and wafer fabrication. Sales of Memory products and wafer fabrication are recognized as revenue when the goods are delivered

to the customer's specific location because it is the time when the customer has full discretion over the manner of distribution and price to sell the goods, and has the primary responsibility for sales to future customers and bears the risks of obsolescence. Trade receivables are recognized concurrently. For Memory products and wafer fabrication, revenue is recognized when the goods are delivered to the customer's specific location, and the transaction price received is recognized as a contract liability until the goods have been delivered to the customer.

The Company does not recognize revenue on materials delivered to subcontractors because this delivery does not involve a transfer of control.

2) Revenue from the rendering of services

As the Company provides rendering services, the related revenue is recognized when services are rendered. Payment for installation services is not due from the customer until the installation services are complete and, therefore, contract assets are recognized over the period in which the installation services are performed. The contract assets are reclassified to trade receivables when the installation is complete.

m. Lease

At the inception of a contract, the Company assesses whether the contract is, or contains, a lease.

For a contract that contains a lease component and non-lease components, the Company allocates the consideration in the contract to each component on the basis of the relative stand-alone price and accounts for each component separately.

1) The Company as lessor

Leases are classified as finance leases whenever the terms of a lease transfer substantially all the risks and rewards of ownership to the lessee. All other leases are classified as operating leases.

When the Company subleases right-of-use assets, the sublease is classified by reference to the right-of-use asset arising from the head lease, not with reference to the underlying asset. However, if the head lease is a short-term lease that the Company, as a lessee, has accounted for applying recognition exemption, the sublease is classified as an operating lease.

Lease payments (less any lease incentives payable) from operating leases are recognized as income on a straight-line basis over the terms of the relevant leases. Initial direct costs incurred in obtaining operating leases are added to the carrying amounts of the underlying assets and recognized as expenses on a straight-line basis over the lease terms. Lease modification that resulted from a negotiation with a lessee is accounted for as a new lease from the effective date of modification.

2) The Company as lessee

The Company recognizes right-of-use assets and lease liabilities for all leases at the commencement date of a lease, except for short-term leases and low-value asset leases accounted for applying a recognition exemption where lease payments are recognized as expenses on a straight-line basis over the lease terms.

Right-of-use assets are initially measured at cost, which comprises the initial measurement of lease liabilities adjusted for lease payments made at or before the commencement date, plus any initial direct costs incurred and an estimate of costs needed to restore the underlying assets, and less any lease incentives received. Right-of-use assets are subsequently measured at cost less accumulated depreciation and impairment losses and adjusted for any remeasurement of the lease liabilities. Right-of-use assets are presented on a separate line in the balance sheets.

Right-of-use assets are depreciated using the straight-line method from the commencement dates to the earlier of the end of the useful lives of the right-of-use assets or the end of the lease terms.

Lease liabilities are initially measured at the present value of the lease payments, which comprise fixed payments, in-substance fixed payments, variable lease payments which depend on an index or a rate, residual value guarantees, the exercise price of a purchase option if the Company is reasonably certain to exercise that option, and payments of penalties for terminating a lease if the lease term reflects such termination, less any lease incentives receivable. The lease payments are discounted using the interest rate implicit in a lease, if that rate can be readily determined. If that rate cannot be readily determined, the Company uses the lessee's incremental borrowing rate.

Subsequently, lease liabilities are measured at amortized cost using the effective interest method, with interest expense recognized over the lease terms. When there is a change in a lease term, a change in the amounts expected to be payable under a residual value guarantee, a change in the assessment of an option to purchase an underlying asset, or a change in future lease payments resulting from a change in an index or a rate used to determine those payments, the Group remeasures the lease liabilities with a corresponding adjustment to the right-of-use-assets. However, if the carrying amount of the right-of-use assets is reduced to zero, any remaining amount of the remeasurement is recognized in profit or loss. For a lease modification that is not accounted for as a separate lease, the Company accounts for the remeasurement of the lease liability by (a) decreasing the carrying amount of the right-of-use asset of lease modifications that decreased the scope of the lease, and recognizing in profit or loss any gain or loss on the partial or full termination of the lease; (b) making a corresponding adjustment to the right-of-use asset of all other lease modifications. Lease liabilities are presented on a separate line in the balance sheets.

n. Borrowing costs

Borrowing costs directly attributable to an acquisition, construction or production of qualifying assets are added to the cost of those assets, until such time as the assets are substantially ready for their intended use or sale.

Other than stated above, all other borrowing costs are recognized in profit or loss in the year in which they are incurred.

o. Employee benefits

1) Short-term employee benefits

Liabilities recognized in respect of short-term employee benefits are measured at the undiscounted amount of the benefits expected to be paid in exchange for the related service.

2) Retirement benefits

Payments to defined contribution retirement benefit plans are recognized as an expense when employees have rendered services entitling them to the contributions.

Defined benefit costs (including service cost, net interest and remeasurement) under defined benefit retirement benefit plans are determined using the projected unit credit method. Service cost (including current service cost) and net interest on the net defined benefit liability are recognized as employee benefit expenses in the period they occur. Remeasurement, comprising actuarial gains and losses, the effect of the changes to the asset ceiling and the return on plan assets (excluding interest), is recognized in other comprehensive income in the period in which they occur. Remeasurement recognized in other comprehensive income is reflected immediately in retain earnings and will not be reclassified to profit or loss.

Net defined benefit liability represents the actual deficit in the Company's defined benefit plan. Any surplus resulting from this calculation is limited to the present value of any refunds from the plans or reductions in future contributions to the plans.

3) Other long-term employee benefits

Other long-term employee benefits are accounted for in the same way as the accounting required for defined benefit plan except that remeasurement is recognized in profit or loss.

4) Termination benefits

A liability for a termination benefit is recognized at the earlier of when the Company can no longer withdraw the offer of the termination benefit and when the Company recognizes any related restructuring costs.

p. Share-based payment arrangements

The fair value at the grant date of the equity-settled share-based payments is expensed on a straight-line basis over the vesting period, based on the Company's best estimates of the number of shares or options that are expected to ultimately vest, with a corresponding increase in capital surplus – employee share options or other equity – employees' unearned compensation. It is recognized as an expense in full at the grant date if vesting immediately.

When restricted shares for employees are issued, other equity - unearned employee benefits are recognized on the grant date, with a corresponding increase in capital surplus - restricted shares for employees.

At the end of each reporting period, the Company revises its estimate of the number of equity instruments expected to vest. The impact of the revision of the original estimates is recognized in profit or loss such that the cumulative expense reflects the revised estimate, with a corresponding adjustment to the capital surplus - employee share options or capital surplus-restricted share option.

q. Treasury shares

The parent company's shares held by subsidiaries is reclassified to treasury shares from investment accounted for using equity method and recognized with the original investment cost. Cash dividends earned by subsidiaries are write-off with investment income and adjust capital surplus-treasury share transaction.

r. Taxation

Income tax expense represents the sum of the tax currently payable and deferred tax.

1) Current tax

Income tax payable (recoverable) is based on taxable profit (loss) for the year determined according to the applicable tax laws of each tax jurisdiction.

According to the Income Tax Law in the ROC, an additional tax on unappropriated earnings is provided for in the year the shareholders approve to retain earnings.

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

2) Deferred tax

Deferred tax is recognized on temporary differences between the carrying amounts of assets and liabilities and the corresponding tax bases used in the computation of taxable profit.

Deferred tax liabilities are generally recognized for all taxable temporary differences. Deferred tax assets are generally recognized for all deductible temporary differences, unused loss carry forward and unused tax credits for purchases of machinery, equipment and technology, research and development expenditures and personnel training expenditures to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilized.

Deferred tax liabilities are recognized for taxable temporary differences associated with investments in subsidiaries, except where the Company is able to control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred tax assets arising from deductible temporary differences associated with such investments and interests are only recognized to the extent that it is probable that there will be sufficient taxable profits against which to utilize the benefits of the temporary differences and they are expected to reverse in the foreseeable future.

The carrying amount of deferred tax assets is reviewed at the end of each reporting period and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered. A previously unrecognized deferred tax asset is also reviewed at the end of each reporting period and recognized to the extent that it has become probable that future taxable profit will allow the deferred tax asset to be recovered.

Deferred tax liabilities and assets are measured at the tax rates that are expected to apply in the year which the liability is settled or the asset realized, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period. The measurement of deferred tax liabilities and assets reflects the tax consequences that would follow from the manner in which the company expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

3) Current and deferred taxes

Current and deferred taxes are recognized in profit or loss, except when they relate to items that are recognized in other comprehensive income or directly in equity, in which case, the current and deferred taxes are also recognized in other comprehensive income or directly in equity, respectively.

5. CRITICAL ACCOUNTING JUDGMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY

In the application of the Company's accounting policies, management is required to make judgments, estimates and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered relevant. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimate is revised if the revision affects only that period or in the period of the revision and future periods if the revision affects both current and future years.

a. Write-down of inventory

The net realizable value of inventory is the estimated selling price in the ordinary course of business less the estimated costs of completion and disposal. The estimation of net realizable value was based on

current market conditions and historical experience with product sales of a similar nature. Changes in market conditions may have a material impact on the estimation of net realizable value.

b. Recognition and measurement of defined benefit plans

The net defined liabilities (assets) and the resulting defined benefit costs under the defined benefit pension plans are calculated using the projected unit credit method. Actuarial assumptions comprise the discount rates, rates of employee turnover, future salary increase, etc. Changes in economic circumstances and market conditions will affect these assumptions and may have a material impact on the amount of related expense and the liabilities.

c. Income taxes

The realizability of deferred tax asset mainly depends on whether sufficient future profit or taxable temporary differences will be available. In cases where the actual future profit generated is less than expected, a material reversal of deferred tax assets may arise, which would be recognized in profit or loss for the period in which such a reversal takes place.

6. CASH AND CASH EQUIVALENTS

	<u>December 31</u>	
	2020	2019
Cash on hand	\$ -	\$ -
Checking accounts and demand deposits	9,084,046	6,611,696
Cash equivalents		
Time deposits	<u>1,213,419</u>	<u>1,020,252</u>
	<u>\$ 10,297,465</u>	<u>\$ 7,631,948</u>

7. FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME

	<u>December 31</u>	
	2020	2019
<u>Non-current</u>		
Investments in equity instruments		
Domestic investments		
Listed shares	\$ 1,389,540	\$ 1,109,115
Unlisted shares	<u>389,504</u>	<u>331,459</u>
	<u>\$ 1,779,044</u>	<u>\$ 1,440,574</u>

These investments in equity instruments are not held for trading. Instead, they are held for medium- to long-term strategic purposes. Accordingly, the management elected to designate these investments in equity instruments as at FVTOCI as they believe that recognizing short-term fluctuations in these investments' fair value in profit or loss would not be consistent with the Company's strategy of holding these investments for long-term purposes.

The Company recognized dividends income of NT\$95,559 thousand and NT\$105,188 thousand for the years ended December 31, 2020 and 2019, respectively. As of December 31, 2020 and 2019, the Company's related investments still held amounted to NT\$1,779,044 thousand and NT\$1,440,574 thousand, respectively.

8. NOTES RECEIVABLE, TRADE RECEIVABLES AND OTHER RECEIVABLES

	December 31	
	2020	2019
<u>Trade receivables</u>		
Total amount of trade receivable measured at amortized cost	\$ 2,892,039	\$ 2,926,906
Less: Allowance for impairment loss	<u>(17,018)</u>	<u>(16,795)</u>
	<u>\$ 2,875,021</u>	<u>\$ 2,910,111</u>
<u>Other receivables</u>		
Tax receivable	\$ 108,750	\$ 120,450
Others	<u>2,189</u>	<u>4,798</u>
	<u>\$ 110,939</u>	<u>\$ 125,248</u>

a. Trade receivables

The average credit period for sales of goods was 60 days.

In determining the recoverability of a trade receivable, the Company evaluates each customer's credibility and financial position and considers any change in the credit quality of the trade receivable since the date credit was initially granted to the end of the reporting period.

The Company measures the loss allowance for trade receivables at an amount equal to lifetime ECLs.

The expected credit losses on trade receivables are estimated using a provision matrix by reference to past default experience with the respective debtors and an analysis of the debtors' current financial positions, adjusted for factors that are specific to the debtors, general economic conditions of the industry in which the debtors operate and an assessment of both the current as well as the forecasted direction of the conditions at the reporting date. The Company estimates expected credit losses based on the number of days for which receivables are past due. As the Company's historical credit loss experience shows significantly different loss patterns for different customer segments, the provision for losses based on past due status of receivables is not further distinguished according to the different segments of the Company's customer base.

The aging of trade receivables is as follows:

	December 31	
	2020	2019
Neither past due nor impaired	\$ 2,834,955	\$ 2,767,426
Past due but not impaired		
Within 60 days	40,033	142,685
61-120 days	33	-
Over 120 days	<u>-</u>	<u>-</u>
	<u>\$ 2,875,021</u>	<u>\$ 2,910,111</u>

The above aging schedule was based on the past due days from the end of the credit term.

As of December 31, 2020 and 2019, the Company did not hold collateral for most of its receivables.

The movements of the allowance for doubtful trade receivables are as follows:

	For the Year Ended December 31	
	2020	2019
Balance at January 1	\$ 16,795	\$ 16,812
Add: Amounts recovered	223	-
Less: Amounts written off	<u>-</u>	<u>(17)</u>
Balance at December 31	<u>\$ 17,018</u>	<u>\$ 16,795</u>

b. Other receivables

No allowance for impairment loss of other receivables was recognized since the other receivables of the Company were not past due and the Company assessed that there was no uncertainty of recoverability.

9. INVENTORIES

	December 31	
	2020	2019
Finished goods and merchandise	\$ 917,507	\$ 959,606
Work in progress	11,316,910	10,780,915
Raw materials	<u>677,600</u>	<u>1,027,796</u>
	<u>\$ 12,912,017</u>	<u>\$ 12,768,317</u>

The costs of inventories recognized as cost of goods sold included inventory loss that resulted from the write-downs of inventory to net realizable value and reversal of inventory loss due to sold of part of the written-down inventory. The amounts were as follows:

	For the Year Ended December 31	
	2020	2019
Loss on inventory write-downs (reversal of inventory loss)	<u>\$ (99,103)</u>	<u>\$ 2,699,600</u>

10. INVESTMENTS ACCOUNTED FOR USING EQUITY METHOD

	December 31	
	2020	2019
Investment in subsidiaries	<u>\$ 2,522,146</u>	<u>\$ 2,397,392</u>

a. Investments in subsidiaries

	December 31	
	2020	2019
Macronix (BVI) Co., Ltd. (MXBVI)	\$ 2,235,463	\$ 2,121,373
Macronix America, Inc. (MXA)	174,769	163,382
Hui Ying Investment Ltd. (Hui Ying)	83,782	75,708
Run Hong Investment Ltd. (Run Hong)	14,113	14,598
Mxtran Inc. (Mxtran)	<u>14,019</u>	<u>22,331</u>
	<u>\$ 2,522,146</u>	<u>\$ 2,397,392</u>

Name of Subsidiaries	Proportion of Ownership and Voting Rights	
	December 31	
	2020	2019
MXBVI	100.00%	100.00%
MXA	100.00%	100.00%
Hui Ying	100.00%	100.00%
Run Hong	100.00%	100.00%
Mxtran	90.43%	90.43%

The investments in subsidiaries accounted for using the equity method and the share of profit or loss and other comprehensive income of those investments for the years ended December 31, 2020 and 2019 were based on the subsidiaries' financial statements which have been audited for the same years.

11. PROPERTY, PLANT AND EQUIPMENT

	December 31	
	2020	2019
Assets used by the Company	<u>\$ 31,016,511</u>	<u>\$ 28,904,312</u>

	Years Ended December 31, 2020				
	Balance, Beginning of Year	Additions	Disposals	Reclassification	Balance, End of Year
<u>Cost</u>					
Freehold land	\$ 598,076	\$ -	\$ -	\$ -	\$ 598,076
Buildings	24,948,657	-	750	275,330	25,223,237
Machinery equipment	91,635,490	-	204,065	9,422,251	100,853,676
Research and development equipment	3,564,430	-	9,444	612,204	4,167,190
Transportation equipment	26,781	-	7,240	1,200	20,741
Leasehold improvements	3,230	-	-	-	3,230
Miscellaneous equipment	1,120,248	-	147,782	106,198	1,078,664
Advance payments and construction in progress	9,821,555	5,689,291	-	(10,421,693)	5,089,153
	<u>131,718,467</u>	<u>\$ 5,689,291</u>	<u>\$ 369,281</u>	<u>\$ (4,510)</u>	<u>137,033,967</u>
<u>Accumulated depreciation and impairment</u>					
Buildings	20,514,366	\$ 408,194	\$ 750	\$ -	20,921,810
Machinery equipment	79,413,703	2,845,772	204,065	199,636	82,255,046
Research and development equipment	1,860,125	256,188	9,444	(203,686)	1,903,183
Transportation equipment	17,079	2,672	6,660	-	13,091
Leasehold improvements	2,540	538	-	-	3,078
Miscellaneous equipment	1,006,342	63,148	147,782	(460)	921,248
	<u>102,814,155</u>	<u>\$ 3,576,512</u>	<u>\$ 368,701</u>	<u>\$ (4,510)</u>	<u>106,017,456</u>
Carrying amount at December 31, 2020	<u>\$ 28,904,312</u>				<u>\$ 31,016,511</u>

	Years Ended December 31, 2019				
	Balance, Beginning of Year	Additions	Disposals	Reclassification	Balance, End of Year
<u>Cost</u>					
Freehold land	\$ 598,076	\$ -	\$ -	\$ -	\$ 598,076
Buildings	24,667,411	-	31,832	313,078	24,948,657
Machinery equipment	87,236,825	-	2,338,064	6,736,729	91,635,490
Research and development equipment	3,775,547	-	51,683	(159,434)	3,564,430
Transportation equipment	22,050	-	1,140	5,871	26,781
Leasehold improvements	3,230	-	-	-	3,230
Miscellaneous equipment	1,093,957	-	58,300	84,591	1,120,248
Advance payments and construction in progress	4,135,257	12,667,133	-	(6,980,835)	9,821,555
	<u>121,532,353</u>	<u>\$ 12,667,133</u>	<u>\$ 2,481,019</u>	<u>\$ -</u>	<u>131,718,467</u>

(Continued)

	Years Ended December 31, 2019				Balance, End of Year
	Balance, Beginning of Year	Additions	Disposals	Reclassification	
<u>Accumulated depreciation and impairment</u>					
Buildings	\$ 20,150,462	\$ 389,970	\$ 26,066	\$ -	\$ 20,514,366
Machinery equipment	79,576,059	1,921,392	2,322,942	239,194	79,413,703
Research and development equipment	1,929,783	221,219	51,683	(239,194)	1,860,125
Transportation equipment	15,643	2,576	1,140	-	17,079
Leasehold improvements	2,001	539	-	-	2,540
Miscellaneous equipment	1,028,736	35,906	58,300	-	1,006,342
	<u>102,702,684</u>	<u>\$ 2,571,602</u>	<u>\$ 2,460,131</u>	<u>\$ -</u>	<u>102,814,155</u>
Carrying amount at December 31, 2019	<u>\$ 18,829,669</u>				<u>\$ 28,904,312</u>

(Concluded)

For the years ended December 31, 2020 and 2019, the Company assessed that no indication of an impairment loss was present; therefore, no impairment assessment was performed

The above items of property, plant and equipment are depreciated on a straight-line basis over their following estimated useful lives as follows:

Buildings	
Main buildings	31 years
Electronic equipment	11 years
Facility equipment	15 years
Machinery equipment	11 years
Research and development equipment	11 years
Transportation equipment	5 years
Leasehold improvements	6 years
Miscellaneous equipment	3-6 years

Property, plant and equipment pledged as collateral for bank borrowings are set out in Note 31.

12. LEASE ARRANGEMENTS

a. Right-of-use assets

	December 31	
	2020	2019
<u>Carrying amounts</u>		
Freehold land	\$ 901,793	\$ 934,665
Buildings	23,711	32,323
Machinery equipment	9,445	-
Transportation equipment	2,632	3,135
Miscellaneous equipment	<u>500</u>	<u>499</u>
	<u>\$ 938,081</u>	<u>\$ 970,622</u>

	For the Year Ended December 31	
	2020	2019
Additions to right-of-use assets	<u>\$ 55,579</u>	<u>\$ 1,574</u>
Depreciation charge for right-of-use assets		
Freehold land	\$ 69,642	\$ 69,984
Buildings	8,847	8,382
Machinery equipment	4,861	-
Transportation equipment	1,463	1,519
Miscellaneous equipment	<u>2,000</u>	<u>1,996</u>
	<u>\$ 86,813</u>	<u>\$ 81,881</u>
Income from the subleasing of right-of-use assets (included in other income)	<u>\$ (4,036)</u>	<u>\$ (3,744)</u>

Except for the recognized depreciation, the Company did not have impairment of right-of-use assets for the years ended December 31, 2020 and 2019.

b. Lease liabilities

	December 31	
	2020	2019
<u>Carrying amounts</u>		
Current	<u>\$ 79,341</u>	<u>\$ 72,307</u>
Non-current	<u>\$ 873,701</u>	<u>\$ 906,049</u>

Range of discount rate for lease liabilities was as follows:

	December 31	
	2020	2019
Freehold land	1.67%-1.73%	1.67%
Buildings	1.03%-1.22%	1.07%-1.22%
Machinery equipment	1.05%	-
Transportation equipment	1.03%-1.22%	1.22%
Miscellaneous equipment	1.03%-1.22%	1.22%

c. Material lease-in activities and terms

The Company also leased certain land and buildings for the use as plant and office in a period of one to twenty years. The Company does not have bargain purchase options to acquire the leasehold land and buildings at the end of the lease terms. In addition, the Company is prohibited from subleasing or transferring all or any portion of the underlying assets without the lessor's consent.

d. Other lease information

	For the Year Ended December 31	
	2020	2019
Expenses relating to short-term leases	\$ <u> -</u>	\$ <u> 2,100</u>
Expenses relating to low-value asset leases	\$ <u> 60</u>	\$ <u> 60</u>
Expenses relating to variable lease payments not included in the measurement of lease liabilities	\$ <u> 7,249</u>	\$ <u> 6,562</u>
Total cash outflow for leases	\$ <u>(103,106)</u>	\$ <u>(99,699)</u>

The Company leases certain office buildings which qualify as short-term leases and certain office equipment which qualifies as low-value asset leases. The Company has elected to apply the recognition exemption and thus, did not recognize right-of-use assets and lease liabilities for these leases.

13. INTANGIBLE ASSETS

	Year Ended December 31, 2020			
Item	Balance, Beginning of Year	Additions	Disposals	Balance, End of Period
<u>Cost</u>				
Software	\$ 89,973	\$ 42,146	\$ 43,323	\$ 88,796
Others	<u>13,000</u>	<u>-</u>	<u>13,000</u>	<u>-</u>
	<u>102,973</u>	<u>\$ 42,146</u>	<u>\$ 56,323</u>	<u>88,796</u>
<u>Accumulated amortization</u>				
Software	47,497	\$ 29,993	\$ 43,323	34,167
Others	<u>11,917</u>	<u>1,083</u>	<u>13,000</u>	<u>-</u>
	<u>59,414</u>	<u>\$ 31,076</u>	<u>\$ 56,323</u>	<u>34,167</u>
Carrying amounts at December 31, 2020	<u>\$ 43,559</u>			<u>\$ 54,629</u>
	Year Ended December 31, 2019			
Item	Balance, Beginning of Year	Additions	Disposals	Balance, End of Period
<u>Cost</u>				
Software	\$ 70,578	\$ 32,654	\$ 13,259	\$ 89,973
Others	<u>13,000</u>	<u>-</u>	<u>-</u>	<u>13,000</u>
	<u>83,578</u>	<u>\$ 32,654</u>	<u>\$ 13,259</u>	<u>102,973</u>
<u>Accumulated amortization</u>				
Software	33,240	\$ 27,516	\$ 13,259	47,497
Others	<u>7,583</u>	<u>4,334</u>	<u>-</u>	<u>11,917</u>
	<u>40,823</u>	<u>\$ 31,850</u>	<u>\$ 13,259</u>	<u>59,414</u>
Carrying amounts at December 31, 2019	<u>\$ 42,755</u>			<u>\$ 43,559</u>

Intangible assets are amortized on a straight-line basis over their estimated useful lives as follows:

Software	3 years
Others	3 years

14. OTHER FINANCIAL ASSETS

	<u>December 31</u>	
	2020	2019
<u>Non-current</u>		
Restricted time deposits (Note 31)	\$ 157,665	\$ 157,665
Refundable deposits	<u>4,102</u>	<u>4,137</u>
	<u>\$ 161,767</u>	<u>\$ 161,802</u>

15. OTHER ASSETS

	<u>December 31</u>	
	2020	2019
<u>Current</u>		
Prepayments	<u>\$ 99,553</u>	<u>\$ 226,115</u>

16. BORROWINGS

a. Short-term borrowings

	<u>December 31</u>	
	2020	2019
Line of credit borrowings	<u>\$ -</u>	<u>\$ 1,550,000</u>
Interest rate	-	0.98%-1.10%

b. Long-term borrowings

	<u>December 31</u>	
	2020	2019
Secured borrowings from financial institutions	\$ 10,291,437	\$ 10,237,531
Unsecured borrowings from financial institutions	<u>5,880,000</u>	<u>2,840,000</u>
	16,171,437	13,077,531
Less: Current portion	5,412,007	3,267,200
Less: Arrangement fee	<u>22,555</u>	<u>36,001</u>
Long-term borrowings	<u>\$ 10,736,875</u>	<u>\$ 9,774,330</u>
Interest rate	0.93%-1.79%	1.23%-1.97%

Borrowing Type	Repayment Terms	December 31	
		2020	2019
Secured bank borrowing denominated in NT\$	From June 2019 to February 2024	\$ 7,700,000	\$ 4,600,000
Secured syndicated loan denominated in NT\$	From December 2017 to January 2021	2,175,812	4,818,662
Unsecured bank borrowings denominated in NT\$	From March 2020 to March 2022	1,200,000	-
Unsecured bank borrowing denominated in NT\$	From June 2019 to June 2021	960,000	1,200,000
Unsecured bank borrowings denominated in NT\$	From December 2020 to December 2023	600,000	-
Unsecured bank borrowings denominated in NT\$	From August 2020 to February 2023	600,000	-
Unsecured bank borrowings denominated in NT\$	From August 2020 to August 2023	500,000	-
Unsecured bank borrowings denominated in NT\$	From August 2020 to August 2023	500,000	-
Unsecured bank borrowings denominated in NT\$	From June 2020 to June 2023	500,000	-
Unsecured bank borrowing denominated in NT\$	From April 2019 to April 2022	450,000	600,000
Unsecured bank borrowings denominated in NT\$	From June 2020 to June 2023	300,000	-
Secured bank borrowing denominated in NT\$	From September 2017 to September 2022	218,750	343,750
Secured bank borrowing denominated in NT\$	From September 2018 to September 2021	196,875	459,375
Unsecured bank borrowings denominated in NT\$	From July 2019 to July 2022	150,000	300,000
Unsecured bank borrowings denominated in NT\$	From September 2018 to September 2021	120,000	240,000
Unsecured bank borrowings denominated in NT\$	Pay off in December 2020	-	300,000
Unsecured bank borrowings denominated in NT\$	Pay off in September 2020	-	200,000
Secured bank borrowing denominated in NT\$	Pay off in January 2020	-	15,744
Less: Current portion		5,412,007	3,267,200
Less: Arrangement fee		<u>22,555</u>	<u>36,001</u>
Total long-term borrowings		<u>\$ 10,736,875</u>	<u>\$ 9,774,330</u>

To repay the vested liabilities, purchase equipment and machinery and increase operating funds, the Company signed a 5-year syndicated loan agreement with 7 financial institutions in November 2017 with a total amount of NT\$7.7 billion. In June 2020, the Company canceled the loan facility of NT\$1.1 billion. In January 2021, the Company repaid all of the loan in advance.

To purchase equipment or machinery, the Company has entered into a 5-year syndicated loan agreement with 9 financial institutions including the Taiwan Cooperative Bank in January 2019 with the total amount of NT\$8 billion. The Company provided notes used as refundable guarantees for syndicated loan mentioned above that will be cancelled upon termination of the guarantee.

In addition, the Company's floating borrowing rate on the above borrowing is reset every one to three months.

The loan agreement requires the maintenance of a current ratio, debt ratio, and interest coverage ratio based on the Company's semi-annual and annual financial statements. For the year ended December 31, 2020 and 2019, the Company had met the financial ratio covenants.

The details of assets pledged as collateral for long-term loans are set in Note 31.

17. NOTES PAYABLE AND TRADE PAYABLES

	<u>December 31</u>	
	<u>2020</u>	<u>2019</u>
Trade payables	<u>\$ 2,940,247</u>	<u>\$ 2,140,288</u>

The Company has financial risk management policies in place to ensure that all payables are paid within the pre-agreed upon credit terms.

18. OTHER PAYABLES

	<u>December 31</u>	
	<u>2020</u>	<u>2019</u>
Payables for bonuses	\$ 252,351	\$ 250,753
Payables for maintenance and repairs	192,006	219,965
Payables for donations	177,957	98,144
Payables for patents	129,333	165,357
Payables for spare parts	77,155	62,763
Payables for insurances	69,414	74,497
Others	<u>467,880</u>	<u>474,212</u>
	<u>\$ 1,366,096</u>	<u>\$ 1,345,691</u>

19. OTHER LIABILITIES

	<u>December 31</u>	
	<u>2020</u>	<u>2019</u>
<u>Current</u>		
Refund liabilities	\$ 124,522	\$ 184,232
Guarantee deposits	160,721	-
Receipts under custody	31,238	30,793
Others	<u>7,068</u>	<u>7,681</u>
	<u>\$ 323,549</u>	<u>\$ 222,706</u>
<u>Non-current</u>		
Guarantee deposits	<u>\$ 19,410</u>	<u>\$ 10,272</u>

20. PROVISIONS

	December 31	
	2020	2019
<u>Current</u>		
Employee benefits (a)	<u>\$ 3,283</u>	<u>\$ 4,856</u>

- a. The provision for employee benefits represents vested long service leave entitlements accrued.

21. RETIREMENT BENEFIT PLANS

- a. Defined contribution plans

The Company adopted a pension plan under the Labor Pension Act (LPA), which is a state-managed defined contribution plan. Under on the LPA, the Company makes monthly contributions to employees' individual pension accounts at 6% of monthly salaries and wages.

- b. Defined benefit plans

The defined benefit plan adopted by the Company in accordance with the Labor Standards Act is operated by the government. Pension benefits are calculated on the basis of the length of service and average monthly salaries of the 6 months before retirement. The Company contributes amounts equal to 2% of total monthly salaries and wages to a pension fund administered by the pension fund monitoring committee. Pension contributions are deposited in the Bank of Taiwan in the committee's name. Before the end of each year, the Company assesses the balance in the pension fund. If the amount of the balance in the pension fund is inadequate to pay retirement benefits for employees who conform to retirement requirements in the next year, the Company is required to fund the difference in one appropriation that should be made before the end of March of the next year. The pension fund is managed by the Bureau of Labor Funds, Ministry of Labor (the "Bureau"); the Company has no right to influence the investment policy and strategy.

The amounts in the balance sheets in respect of the Company's defined benefit plans were as follows:

	December 31	
	2020	2019
Present value of defined benefit obligation	\$ 1,898,790	\$ 1,903,616
Fair value of plan assets	<u>(942,837)</u>	<u>(791,902)</u>
Net defined benefit liability	<u>\$ 955,953</u>	<u>\$ 1,111,714</u>

Movements in net defined benefit liability were as follows:

	Present Value of Defined Benefit Obligation	Fair Value of the Plan Assets	Net Defined Benefit Liabilities (Assets)
Balance at January 1, 2019	<u>\$ 1,890,484</u>	<u>\$ 710,318</u>	<u>\$ 1,180,166</u>
Service cost			
Current service cost	5,296	-	5,296
Net interest expense	23,330	-	23,330
Return on plan assets	<u>-</u>	<u>8,772</u>	<u>(8,772)</u>
Recognized in profit or loss	<u>28,626</u>	<u>8,772</u>	<u>19,854</u>

(Continued)

	Present Value of Defined Benefit Obligation	Fair Value of the Plan Assets	Net Defined Benefit Liabilities (Assets)
Remeasurement			
Return on plan assets	\$ -	\$ 13,955	\$ (13,955)
Actuarial loss - change in financial assumptions	<u>91,727</u>	<u>-</u>	<u>91,727</u>
Recognized in other comprehensive income	<u>91,727</u>	<u>13,955</u>	<u>77,772</u>
Contributions from the employer	<u>-</u>	<u>166,078</u>	<u>(166,078)</u>
Benefits paid	<u>(107,221)</u>	<u>(107,221)</u>	<u>-</u>
Balance at December 31, 2019	<u>1,903,616</u>	<u>791,902</u>	<u>1,111,714</u>
Service cost			
Current service cost	5,015	-	5,015
Net interest expense	15,013	-	15,013
Return on plan assets	<u>-</u>	<u>6,241</u>	<u>(6,241)</u>
Recognized in profit or loss	<u>20,028</u>	<u>6,241</u>	<u>13,787</u>
Remeasurement			
Return on plan assets	-	26,677	(26,677)
Actuarial loss - experience adjustments	26,798	-	26,798
Actuarial loss - change in financial assumptions	39,079	-	39,079
Actuarial loss - change in demographic assumptions	<u>(5,967)</u>	<u>-</u>	<u>(5,967)</u>
Recognized in other comprehensive income	<u>59,910</u>	<u>26,677</u>	<u>33,233</u>
Contributions from the employer	<u>-</u>	<u>202,781</u>	<u>(202,781)</u>
Benefits paid	<u>(84,764)</u>	<u>(84,764)</u>	<u>-</u>
Balance at December 31, 2020	<u>\$ 1,898,790</u>	<u>\$ 942,837</u>	<u>\$ 955,953</u> (Concluded)

An analysis by function of the amounts recognized in profit or loss in respect of the defined benefit plans is as follows:

	<u>For the Year Ended December 31</u>	
	<u>2020</u>	<u>2019</u>
Operating costs	\$ 7,381	\$ 10,688
Selling and marketing expenses	797	1,051
General and administration expenses	2,478	3,630
Research and development expenses	<u>3,131</u>	<u>4,485</u>
	<u>\$ 13,787</u>	<u>\$ 19,854</u>

Through the defined benefit plans under the Labor Standards Act, the Company is exposed to the following risks:

- 1) Investment risk: The plan assets are invested in domestic and foreign equity and debt securities, bank deposits, etc. The investment is conducted at the discretion of the Bureau or under the mandated management. However, in accordance with relevant regulations, the return generated by plan assets should not be below the interest rate for a 2-year time deposit with local banks.

- 2) Interest risk: A decrease in the government/corporate bond interest rate will increase the present value of the defined benefit obligation; however, this will be partially offset by an increase in the return on the plan's debt investments.
- 3) Salary risk: The present value of the defined benefit obligation is calculated by reference to the future salaries of plan participants. As such, an increase in the salary of the plan participants will increase the present value of the defined benefit obligation.

The actuarial valuations of the present value of the defined benefit obligation were carried out by qualified actuaries. The significant assumptions used for the purposes of the actuarial valuations were as follows:

	December 31	
	2020	2019
Discount rate	0.50%	0.80%
Expected rate of salary increase	3.00%	3.00%
Expected return on plan assets increase	0.50%	0.80%

If possible reasonable change in each of the significant actuarial assumptions will occur and all other assumptions will remain constant, the present value of the defined benefit obligation would increase (decrease) as follows:

	For the Year Ended December 31	
	2020	2019
Discount rate		
0.50% increase	<u>\$ (67,172)</u>	<u>\$ (101,540)</u>
0.50% decrease	<u>\$ 71,260</u>	<u>\$ 109,956</u>
Expected rate of salary increase		
0.50% increase	<u>\$ 97,993</u>	<u>\$ 126,190</u>
0.50% decrease	<u>\$ (92,509)</u>	<u>\$ (117,415)</u>

The sensitivity analysis presented above may not be representative of the actual change in the present value of the defined benefit obligation as it is unlikely that the change in assumptions would occur in isolation of one another as some of the assumptions may be correlated.

	December 31	
	2020	2019
The expected contributions to the plan for the next year	<u>\$ 56,154</u>	<u>\$ 30,384</u>
The average duration of the defined benefit obligation	7.3 years	11.1 years

The Company maintains a separate executive pension plan and the net periodic pension costs were NT\$6,835 thousand and NT\$8,651 thousand for the years ended December 31, 2020 and 2019, respectively.

Movements in net defined benefit liability were as follows:

	Present Value of Defined Benefit Obligation
Balance at January 1, 2019	\$ 459,987
Service cost	
Current service cost	2,928
Net interest expense	<u>5,723</u>
Recognized in profit or loss	<u>8,651</u>
Remeasurement	
Actuarial loss - experience adjustments	21,594
Actuarial loss - changes in financial assumptions	<u>8,629</u>
Recognized in other comprehensive income	<u>30,223</u>
Benefits paid	<u>-</u>
Balance at December 31, 2019	<u>498,861</u>
Service cost	
Current service cost	2,860
Net interest expense	<u>3,975</u>
Recognized in profit or loss	<u>6,835</u>
Remeasurement	
Actuarial loss (gain) - experience adjustments	(34,790)
Actuarial loss - changes in financial assumptions	<u>4,294</u>
Recognized in other comprehensive income	<u>(30,496)</u>
Benefits paid	<u>-</u>
Balance at December 31, 2020	<u>\$ 475,200</u>

An analysis by function of the amounts recognized in profit or loss in respect of the defined benefit plans is as follows:

	For the Year Ended December 31	
	2020	2019
General and administration expenses	<u>\$ 6,835</u>	<u>\$ 8,651</u>

The actuarial valuations of the present value of the defined benefit obligation of executive pension plan were carried out by qualified actuaries. The significant assumptions used for the purposes of the actuarial valuations were as follows:

	December 31	
	2020	2019
Discount rate	0.50%	0.80%
Expected rate of salary increase	-	-
Expected return on plan assets increase	0.50%	0.80%

22. EQUITY

a. Share capital

Ordinary shares

	<u>December 31</u>	
	<u>2020</u>	<u>2019</u>
Number of shares authorized (in thousands)	<u>6,550,000</u>	<u>6,550,000</u>
Shares authorized	<u>\$ 65,500,000</u>	<u>\$ 65,500,000</u>
Number of shares issued and fully paid (in thousands)	<u>1,856,302</u>	<u>1,839,927</u>
Share issued	<u>\$ 18,563,017</u>	<u>\$ 18,399,271</u>

Fully paid ordinary shares, which have a par value of \$10, carry one vote per share and carry a right to dividends.

A total of 864,704 thousand shares and 650,000 thousand shares of the Company's authorized shares were reserved for the issuance of convertible bonds and employee share options.

b. Capital surplus

	<u>December 31</u>	
	<u>2020</u>	<u>2019</u>
<u>May be used to offset a deficit, distributed as cash dividends, or transferred to share capital (1)</u>		
Donations	\$ 37	\$ 37
Treasury share transactions	<u>33,096</u>	<u>30,769</u>
	<u>\$ 33,133</u>	<u>\$ 30,806</u>
<u>May be used to offset a deficit only</u>		
Issuance of ordinary shares	\$ 145,378	\$ -
Changes in percentage of ownership interests in subsidiaries (2)	<u>4,609</u>	<u>4,609</u>
	<u>\$ 149,987</u>	<u>\$ 4,609</u>
<u>May not be used for any purpose</u>		
Employee restricted shares	<u>\$ 201,652</u>	<u>\$ 508,505</u>

1) Such capital surplus may be used to offset a deficit; in addition, when the Company has no deficit, such capital surplus may be distributed as cash dividends or transferred to share capital (limited to a certain percentage of the Company's capital surplus and once a year).

2) Such capital surplus arises from changes in capital surplus of subsidiaries accounted for by using the equity method.

c. Retained earnings and dividend policy

The Company's Articles of Incorporation, state that, where the Company made profit in a fiscal year, the profit shall be first utilized for paying taxes, offsetting losses of previous years, setting aside a legal reserve 10% of the remaining profit (until the amount of the legal reserve equals the amount of the Company's paid-in capital), setting aside or reversing a special reserve in accordance with the laws and regulations, and then any remaining profit together with any undistributed retained earnings shall be used by the Company's board of directors as the basis for proposing a distribution plan, which should be resolved in the shareholders' meeting for the distribution of dividends and bonuses to shareholders. For the policies on the distribution of employees' compensation and remuneration of directors stated by the Company's Articles of Incorporation, refer to "Employees' compensation and remuneration of directors" in Note 24 (g).

The Company is classified under the capital intensive industry. In accordance with the long-term financial program of the Company, the above shareholders' dividends can be retained as undistributed earnings, and then be distributed in the future, as determined by the shareholders at the Annual General Meeting.

Distributions shall be prioritized to take the form of cash dividends. Nevertheless, it still depends on the Company's financial, sales or operating condition. The Company's Articles of Incorporation provide that no more than 50% of the current year's total amount of distributable earnings can be distributed in the form of share dividends.

The appropriation of earnings to a legal reserve shall be made until the legal reserve equals the Company's paid-in capital. The legal reserve may be used to offset any deficit. If the Company has no deficit and the legal reserve has exceeded 25% of the Company's paid-in capital, the excess may be transferred to capital or distributed in cash.

Items referred under Rule No. 1010047490 issued by the FSC and in the directive titled "Questions and Answers for Special Reserves Appropriated Following Adoption of IFRSs" should be appropriated to or reversed from a special reserve by the Company.

The appropriation of earnings for 2019 and 2018, which had been proposed by the Company's general meeting of shareholders on May 27, 2020 and June 18, 2019, respectively. The appropriation and dividends per share were as follows:

	For the Year Ended December 31	
	2019	2018
Legal reserve	<u>\$ 301,196</u>	<u>\$ 899,301</u>
Special reserve	<u>\$ (385,857)</u>	<u>\$ 932,777</u>
Cash dividends	<u>\$ 2,207,891</u>	<u>\$ 2,208,200</u>
Cash dividends per share	\$ 1.2	\$ 1.2

d. Special reserve

	For the Year Ended December 31	
	2020	2019
Beginning at January 1	\$ 1,007,052	\$ 74,275
Appropriations in respect of		
Treasury shares (reversal)	(36,882)	48,882
Reversal of the debits to other equity items	<u>(348,975)</u>	<u>883,895</u>
Balance at December 31	<u>\$ 621,195</u>	<u>\$ 1,007,052</u>

According to the shareholding ratio, the special reserve is calculated based on the difference between the market value of the parent company's stock holdings and the book value, and the special reserve will be partially reversed on market price.

e. Other equity items

1) Exchange differences on translating foreign operations

	For the Year Ended December 31	
	2020	2019
Balance at January 1	\$ (235,880)	\$ (137,132)
Exchange differences on translating foreign operations	<u>(150,210)</u>	<u>(98,748)</u>
Balance at December 31	<u>\$ (386,090)</u>	<u>\$ (235,880)</u>

2) Unrealized valuation gain on/(loss) on financial assets at FVTOCI

	For the Year Ended December 31	
	2020	2019
Balance at January 1	\$ (299,040)	\$ (746,762)
Recognized for the year		
Unrealized gain/(loss) - equity instrument	338,470	238,750
Share from associates accounted for using the equity method	<u>102,496</u>	<u>208,972</u>
Other comprehensive income recognized for the year	141,926	(299,040)
Cumulative unrealized gain/(loss) of equity instruments transferred to retained earnings due to disposal in subsidiaries	<u>29,100</u>	<u>-</u>
Balance at December 31	<u>\$ 171,026</u>	<u>\$ (299,040)</u>

3) Employee unearned benefit

In the meetings of shareholders on June 16, 2016 and June 18, 2019, the shareholders approved a restricted share plan for employees. Refer to Note 27 for the information on restricted shares issued.

	For the Year Ended December 31	
	2020	2019
Balance at January 1	\$ (443,066)	\$ (19,978)
Grant by this year	-	(508,772)
Share-based payment expenses recognized	293,662	84,407
Adjustments for change of turnover rate	<u>(1,151)</u>	<u>1,277</u>
Balance at December 31	<u>\$ (150,555)</u>	<u>\$ (443,066)</u>

f. Treasury shares

The Company's shares held by its subsidiaries at December 31, 2020 and 2019 were as follows:

Name of Subsidiary	Number of Shares Held (In Thousands)	Carrying Amount	Market Price
<u>December 31, 2020</u>			
Hui Ying	1,957	\$ 159,061	\$ 82,765
<u>December 31, 2019</u>			
Hui Ying	1,957	\$ 159,061	\$ 72,786

The Company's shares held by subsidiaries are regarded as treasury shares; shareholders' rights are retained, except for the rights to participate in any share issuances for cash and to vote.

23. REVENUE

a. Segmentation of revenue from contracts with customers

<u>Product type</u>	<u>For the Year Ended December 31</u>	
	2020	2019
Flash	\$ 20,153,644	\$ 18,731,911
ROM	16,022,159	13,290,888
Foundry	2,794,731	2,196,612
Others	<u>25,434</u>	<u>16,558</u>
	<u>\$ 38,995,968</u>	<u>\$ 34,235,969</u>

b. Contract balances

	<u>For the Year Ended December 31</u>	
	2020	2019
Contract liabilities (classified as current liabilities)	<u>\$ 87,155</u>	<u>\$ 97,101</u>

The changes in the contract liability balances primarily result from the timing difference between the satisfaction of the performance obligations and the customer's payment.

The Company recognized revenue from the beginning balance of contract liabilities as follows:

<u>From the beginning balance of contract liabilities</u>	<u>For the Year Ended December 31</u>	
	2020	2019
Sale of goods	<u>\$ 96,861</u>	<u>\$ 13,278</u>

24. NET PROFIT (LOSS) FROM CONTINUING OPERATIONS

a. Interest income

	For the Year Ended December 31	
	2020	2019
Bank deposits	<u>\$ 20,466</u>	<u>\$ 22,539</u>

b. Other income

	For the Year Ended December 31	
	2020	2019
Dividend income	\$ 95,559	\$ 105,188
Others	<u>21,281</u>	<u>26,616</u>
	<u>\$ 116,840</u>	<u>\$ 131,804</u>

c. Other gains and losses

	For the Year Ended December 31	
	2020	2019
Net foreign exchange gains (losses)	\$ 71,859	\$ (62,996)
Gains on disposal of investments	-	7,410
Other losses	<u>(434)</u>	<u>(1,198)</u>
	<u>\$ 71,425</u>	<u>\$ (56,784)</u>

d. Finance costs

	For the Year Ended December 31	
	2020	2019
Interest on loans	\$ 248,416	\$ 215,886
Interest on lease liabilities	16,211	16,832
Less: Amounts included in the cost of qualifying assets	<u>(21,892)</u>	<u>(37,915)</u>
	<u>\$ 242,735</u>	<u>\$ 194,803</u>

Information about capitalized interest was as follows:

	For the Year Ended December 31	
	2020	2019
Capitalized interest	\$ 21,892	\$ 37,915
Capitalization rate	1.79%	1.67%

e. Depreciation and amortization

	For the Year Ended December 31	
	2020	2019
An analysis of depreciation by function		
Operating costs	\$ 3,255,402	\$ 2,295,217
Operating expenses	<u>407,923</u>	<u>358,266</u>
	<u>\$ 3,663,325</u>	<u>\$ 2,653,483</u>
An analysis of amortization by function		
Operating costs	\$ 14,039	\$ 10,447
Operating expenses	<u>17,037</u>	<u>21,403</u>
	<u>\$ 31,076</u>	<u>\$ 31,850</u>

f. Employee benefits expense

	For the Year Ended December 31	
	2020	2019
Post-employment benefits (Note 21)		
Defined contribution plans	\$ 194,661	\$ 192,348
Defined benefit plans	<u>20,622</u>	<u>28,505</u>
	215,283	220,853
Share-based payments		
Equity-settled	293,662	84,407
Other employee benefits	<u>6,301,205</u>	<u>5,597,242</u>
Total employee benefits expense	<u>\$ 6,810,150</u>	<u>\$ 5,902,502</u>
An analysis of employee benefits expense by function		
Operating costs	\$ 3,275,037	\$ 3,005,845
Operating expenses	<u>3,535,113</u>	<u>2,896,657</u>
	<u>\$ 6,810,150</u>	<u>\$ 5,902,502</u>

g. Employees' compensation and remuneration of directors

In compliance with the Articles of Incorporation, the Company accrued employees' compensation and remuneration of directors at the rates of 15% and no higher than 2%, respectively, of net profit before income tax, employees' compensation, and remuneration of directors. For the years ended December 31, 2020 and 2019, the estimated employees' compensation and the remuneration of directors resolved by the board of directors on February 26, 2021 and February 17, 2020, respectively, were as follows:

Amount

	For the Year Ended December 31	
	2020	2019
Employees' compensation	<u>\$ 1,050,180</u>	<u>\$ 544,330</u>
Remuneration of directors	<u>\$ 140,024</u>	<u>\$ 72,577</u>

If there is a change in the amounts after the annual parent company only financial statements are authorized for issue, the differences are recorded as a change in the accounting estimate.

There is no difference between the actual amount of employees' compensation and remuneration of directors paid and the amount recognized in the financial statements for the years ended December 31, 2019 and 2018.

Information on the employees' compensation and remuneration of directors resolved by the Company's board of directors in 2020 and 2019 is available at the Market Observation Post System website of the Taiwan Stock Exchange.

25. INCOME TAXES RELATING TO CONTINUING OPERATIONS

- a. Major components of income tax expense (benefit) recognized in profit or loss:

	<u>For the Year Ended December 31</u>	
	2020	2019
Current tax		
In respect of the current year	\$ 38,349	\$ -
Adjustments for prior year	-	(74,208)
Deferred tax		
In respect of the current year	<u>446,566</u>	<u>74,208</u>
Income tax expense recognized in profit or loss	<u>\$ 484,915</u>	<u>\$ -</u>

A reconciliation of accounting loss and income tax expenses is as follows:

	<u>For the Year Ended December 31</u>	
	2020	2019
Income before tax from continuing operations	<u>\$ 5,810,998</u>	<u>\$ 3,011,960</u>
Income tax expense calculated at the statutory rate	\$ 1,162,200	\$ 602,392
Non-deductible expenses in determining taxable income	7,083	6,791
Non-taxable income	(18,213)	(22,389)
Deductible temporary differences	(1,087,055)	(586,794)
Unrecognized investment credits	(25,666)	-
Recognized loss carryforwards	446,566	74,208
Adjustments for prior year	<u>-</u>	<u>(74,208)</u>
Income tax expense recognized in profit or loss	<u>\$ 484,915</u>	<u>\$ -</u>

In July 2019, the president of the ROC announced the amendments to the Statute for Industrial Innovation, which stipulate that the amounts of unappropriated earnings in 2018 and thereafter that are reinvested in the construction or purchase of certain assets or technologies are allowed as deduction when computing the income tax on unappropriated earnings. When calculating the tax on unappropriated earnings, the Company only deducts the amount of the unappropriated earnings that has been reinvested in capital expenditure.

b. Current tax assets and liabilities

	<u>December 31</u>	
	<u>2020</u>	<u>2019</u>
Current tax assets		
Tax refund receivable	<u>\$ 3,816</u>	<u>\$ 2,978</u>
Current tax liabilities		
Income tax payable	<u>\$ 38,349</u>	<u>\$ -</u>

c. Deferred tax assets and liabilities

The Company offset certain deferred tax assets and deferred tax liabilities which met the offset criteria.

The movements of deferred tax assets and deferred tax liabilities were as follows:

For the year ended December 31, 2020

Deferred Tax Assets	Opening Balance	Recognized in Profit or Loss	Closing Balance
Loss carryforwards	<u>\$ 1,104,876</u>	<u>\$ (446,566)</u>	<u>\$ 658,310</u>

For the year ended December 31, 2019

Deferred Tax Assets	Opening Balance	Recognized in Profit or Loss	Closing Balance
Loss carryforwards	<u>\$ 1,179,084</u>	<u>\$ (74,208)</u>	<u>\$ 1,104,876</u>

d. Deductible temporary differences, unused loss carryforwards and unused investment credits for which no deferred assets have been recognized in the parent company only balance sheets

	<u>December 31</u>	
	<u>2020</u>	<u>2019</u>
Loss carryforwards		
Expire in 2026	<u>\$ -</u>	<u>\$ 1,789,017</u>
Investment credits		
Research and development expenditures	\$ 200,880	\$ 200,028
Purchase of smart machines expenditures	<u>23,538</u>	<u>-</u>
	<u>\$ 224,418</u>	<u>\$ 200,028</u>
Deductible temporary differences	<u>\$ 25,555,069</u>	<u>\$ 26,375,606</u>

The unrecognized investment credits will expire in 2021.

e. Information about unused investment credits and unused loss carry-forwards

As of December 31, 2020, the investment tax credits comprised of:

Law and Statutes	Tax Credit Source	Remaining Creditable Amount	Expiry Year
Statute for Industrial Innovation	Research and development expenditures	\$ 180,327	2020
Statute for Industrial Innovation	Research and development expenditures	200,880	2021
Statute for Industrial Innovation	Purchase of smart machines expenditures	<u>23,538</u>	2021
		<u>\$ 404,745</u>	

Loss carryforwards as of December 31, 2020 comprised of:

Unused Tax Amount	Expiry Year
\$ 83,611	2025
<u>574,699</u>	2026
<u>\$ 658,310</u>	

f. Income tax assessments

The Company's tax returns through 2018 have been assessed by the tax authorities.

26. EARNINGS PER SHARE

Unit: NT\$ Per Share

	For the Year Ended December 31	
	2020	2019
Basic earnings per share	<u>\$ 2.90</u>	<u>\$ 1.64</u>
Diluted earnings per share	<u>\$ 2.84</u>	<u>\$ 1.61</u>

The income and weighted average number of ordinary shares outstanding in the computation of earnings per share from continuing operations were as follows:

Net Income for the Year

	For the Year Ended December 31	
	2020	2019
Income for the year attributable to owners of the Company	<u>\$ 5,326,083</u>	<u>\$ 3,011,960</u>

Weighted average number of ordinary shares outstanding (in thousand shares):

	For the Year Ended December 31	
	2020	2019
Weighted average number of ordinary shares in computation of basic earnings per share	1,839,322	1,831,825
Effect of potentially dilutive ordinary shares:		
Restricted shares to employees	10,105	6,243
Employees' compensation or bonus issue to employees	<u>27,631</u>	<u>29,428</u>
Weighted average number of ordinary shares in computation of diluted earnings per share	<u>1,877,058</u>	<u>1,867,496</u>

Since the Company offered to settle compensation or bonuses paid to employees in cash or shares, the Company assumed the entire amount of the compensation or bonus will be settled in shares and the resulting potential shares were included in the weighted average number of shares outstanding used in the computation of diluted earnings per share, as the effect is dilutive. Such dilutive effect of the potential shares is included in the computation of diluted earnings per share until the number of shares to be distributed to employees is resolved in the following year.

27. SHARE-BASED PAYMENT ARRANGEMENTS

Restricted share plan for employees

Information on share plan for employees were as follows:

Approved Date	Grant Shares (Thousand)	Board of Directors Approved Grant Shares (Thousand)	Grant Date	Issued Date	Issued Shares (Thousand)	Fair Value
2016/06/16	123,535	58,971	2016/10/25	2017/01/03	57,476	\$ 4.73
2019/06/18	35,294	16,815	2019/10/21	2020/06/16	16,400	32.55

To meet the vesting conditions, an employee has to meet performance and other conditions over the vesting period, as follows:

- 1) If an employee remains employed by the Company for one year after the grant date; and has a current year's performance rating of "successful" (or higher) /A0 or A1, 40% of the restricted shares will be vested;
- 2) If an employee remains employed by the Company for two years after the grant date; and has a current year's performance rating of "successful" (or higher) /A0 or A1, 30% of the restricted shares will be vested;
- 3) If an employee remains employed by the Company for three years after grant date; and has a current year's performance rating of "successful" (or higher) /A0 or A1, 30% of the restricted shares will be vested.

In addition to the vesting conditions, the limitations are as follows:

- 1) Employees, except for inheritance, should not sell, transfer, pledge, donate or in any other way dispose of the shares.
- 2) The shares should be held in a share trust.
- 3) Except for the above two paragraphs, the other rights of the restricted share plan for employees, which include, but are not limited to, dividends, bonuses, the distribution rights of the legal reserve and capital surplus, share options of cash capital, voting rights of shareholders, etc., are the same as the Company's issued ordinary shares.
- 4) The dividends of restricted share plan for employees are not restricted by existing conditions.
- 5) When a new share is returned in cash due to the Company's capital reduction, the refund of the vested capital loss shall be under custodian trust. In accordance with the issuance method, such capital and shares shall be granted if the vesting conditions for new restricted employee shares are met. The vested shares are granted to employees without interests; if the vested conditions are not met, such cash will be recovered by the Company (applicable to the shareholders' resolution of restricted share plan in the 2019 shareholders' meeting)

When employees do not reach the vesting conditions of restricted share plan for employees during the year, the Company will recover and cancel the shares.

Information on restricted share plan for employees was as follows:

	Number of Shares (In Thousands)	
	For the Year Ended December 31	
	2020	2019
Balance at January 1	23	7,787
Issued	16,400	-
Vested	(6,465)	(7,506)
Forfeited (Note)	<u>(122)</u>	<u>(258)</u>
Balance at December 31	<u>9,836</u>	<u>23</u>

Note : The forfeited shares for the year ended December 31, 2020 include 115 thousand shares which will be cancelled and 7 thousand shares which were already cancelled, and the forfeited shares for the year ended December 31, 2019 include 18 thousand shares which will be cancelled and 240 thousand shares which were already cancelled.

For the years ended December 31, 2020 and 2019, the compensation costs recognized were NT\$293,662 thousand and NT\$84,407 thousand, respectively.

28. CAPITAL MANAGEMENT

The Company manages its capital to ensure that the Company will be able to operate under the premises of going concerns and growth while maximizing the return to shareholders through the optimization of the debt and equity balance.

The Company's strategy for managing the capital structure is to lay out the plan of product development and expand the market share considering the growth and the magnitude of industry and further developing an integral plan founded on the required capacity, capital outlay, and magnitude of assets in long-term development. Ultimately, considering the risk factors such as the fluctuation of the industry cycle and the

life cycle of products, the Company determines the optimal capital structure by estimating the profitability of products, operating profit ratio, and cash flow based on the competitiveness of products.

The management of the Company periodically examines the capital structure and contemplates on the potential costs and risks involved while exerting different financial tools. In general, the Company implements prudent strategy of risk management.

29. FINANCIAL INSTRUMENTS

a. Fair value of financial instruments not measured at fair value

The management considers that the carrying amounts of financial assets and financial liabilities recognized in the financial statements approximate their fair values or their fair values cannot be reliably measured.

b. Fair value of financial instruments measured at fair value on a recurring basis

1) Fair value hierarchy

December 31, 2020

	Level 1	Level 2	Level 3	Total
Financial assets at FVTOCI				
Equity securities				
Securities listed in ROC	\$ 1,389,540	\$ -	\$ -	\$ 1,389,540
Securities unlisted in ROC	<u>-</u>	<u>-</u>	<u>389,504</u>	<u>389,504</u>
	<u>\$ 1,389,540</u>	<u>\$ -</u>	<u>\$ 389,504</u>	<u>\$ 1,779,044</u>

December 31, 2019

	Level 1	Level 2	Level 3	Total
Financial assets at FVTOCI				
Equity securities				
Securities listed in ROC	\$ 1,109,115	\$ -	\$ -	\$ 1,109,115
Securities unlisted in ROC	<u>-</u>	<u>-</u>	<u>331,459</u>	<u>331,459</u>
	<u>\$ 1,109,115</u>	<u>\$ -</u>	<u>\$ 331,459</u>	<u>\$ 1,440,574</u>

There were no transfers between Level 1 and Level 2 in the current and prior years.

2) Reconciliation of Level 3 fair value measurements of financial assets

Financial Assets	Financial Assets at FVTOCI	
	2020	2019
Balance at January 1	\$ 331,459	\$ 267,075
Total gain recognized in other comprehensive (unrealized gain on financial assets at FVTOCI)	<u>58,045</u>	<u>64,384</u>
Balance at December 31	<u>\$ 389,504</u>	<u>\$ 331,459</u>

3) Valuation used in Level 3 fair value measurement

The fair values of equity securities listed in the ROC and other countries was arrived at using either the asset-based approach or based on the multiplier evaluated in the active market by the market approach and adjustments of liquidity.

c. Categories of financial instruments

	<u>December 31</u>	
	<u>2020</u>	<u>2019</u>
<u>Financial assets</u>		
Measured at amortized cost (1)	\$ 15,669,993	\$ 12,550,331
Measured at FVTOCI	1,779,044	1,440,574
<u>Financial liabilities</u>		
Measured at amortized cost (2)	25,193,792	23,525,343

1) The balances included financial assets measured at amortized cost, which comprise cash and cash equivalents, trade receivables (including receivables from related parties), other receivables and other financial assets.

2) The balances included financial liabilities measured at amortized cost, which comprise, notes payable and trade payables (including payables to related parties), other payables (including other payables to related parties), payable for purchases of equipment, guarantee deposits and long-term loans (including current portion).

d. Financial risk management objectives and policies

The Company manages its exposure to risks relating to the operations through market risk, credit risk, and liquidity risk with the objective to reduce the potentially adverse effects the market uncertainties may have on its financial performance.

The plans for material treasury activities are reviewed by management in accordance with procedures required by relevant regulations or internal controls. During the implementation of such plans, the Company must comply with certain treasury procedures that provide guiding principles for overall financial risk management.

1) Market risk

The Company's activities exposed it primarily to the financial risks of changes in foreign currency exchange rates (see (a) below), interest rates (see (b) below), and other price risk (see (c) below).

a) Foreign currency risk

The Company had foreign currency sales and purchases, which exposed the Company to foreign currency risk. Exchange rate exposures were managed within approved policy parameters utilizing foreign exchange forward contracts.

Sensitivity analysis

The Company was mainly exposed to the USD and JPY.

The sensitivity analysis of foreign currency risk focuses mainly on exchange rates for transactions in currencies other than the entity's functional currency (i.e. foreign currencies) which are recognized at the rates of exchange prevailing at the end of each reporting period.

The following table details the Company's sensitivity to a 3% and 10% increase in the New Taiwan dollars (i.e. the functional currency) against the USD and JPY, respectively. The sensitivity rates used are 3% and 10% when reporting foreign currency risk internally to key management personnel.

	<u>USD Impact</u>		<u>JPY Impact</u>	
	<u>For the Year Ended</u>		<u>For the Year Ended</u>	
	<u>December 31</u>		<u>December 31</u>	
	<u>2020</u>	<u>2019</u>	<u>2020</u>	<u>2019</u>
Pre-tax profit decrease	\$ <u>110,542</u>	\$ <u>110,197</u>	\$ <u>158,596</u>	\$ <u>116,377</u>

b) Interest rate risk

The Company is exposed to interest rate risk from outstanding bank loans. Interest rates of the Company's long-term bank loans are floating, and changes in interest rates would affect the future cash flows but not the fair value.

The sensitivity analysis of interest is performed based on the financial liabilities exposed to cash flow interest rate risk at the end of each reporting period.

If interest rates had been 50 basis points higher/lower, the Company's pre-tax profit for the years ended December 31, 2020 and 2019 would decreased/increased by NT\$80,744 thousand and NT\$65,388 thousand, respectively.

c) Other price risk

The Company was exposed to equity price risk through its investments in listed equity securities. Equity investments are held for strategic rather than trading purposes. The Company does not actively trade these investments.

Sensitivity analysis

A sensitivity analysis of equity prices is performed based on the fair values of equity investments at the end of each reporting period.

If equity prices had been 10% higher/lower, equity for the years ended December 31, 2020 and 2019 would have increased/decreased by NT\$177,904 thousand and NT\$144,058 thousand, as a result of the changes in fair value of available-for-sale investments.

2) Credit risk

Credit risk refers to the risk that counterparty will default on its contractual obligations resulting in financial loss to the Company. The Company's exposure to credit risk mainly arises from trade receivables - operating, bank deposits, and other financial instruments. Credit risk is managed separately for business related and financial related exposures.

Business related credit risk

In order to maintain the credit quality of trade receivables, the Company has established procedures to monitor and limit exposure to credit risk on trade receivables.

Credit evaluation is performed in the consideration of the relevant factors such as financial condition, external and internal credit scoring, historical experience, and economic conditions, which may affect the customer's paying ability. The Company holds some of the credit enhancements such as prepayments and collateral to mitigate its credit risks.

Trade receivables consisted of a large number of customers, spread across diverse industries and geographical areas.

As of December 31, 2020 and 2019, the Company's ten largest customers accounted for 65% and 61% of its total trade receivables (including receivables from related parties), respectively. The Company believed that the concentration of credit risk is relatively insignificant for the remaining trade receivables.

Financial credit risk

The Company's exposure to financial credit risk which pertained to bank deposits and other financial instruments were evaluated and monitored by Corporate Treasury function. The Company only deals with creditworthy counterparties and banks so that no significant credit risk was identified.

3) Liquidity risk

The objective of liquidity risk management is to ensure the Company has sufficient liquidity to fund its business requirements of cash and cash equivalents and the unused of financing facilities associated with existing operations.

The table below summarizes the maturity profile of the Company's financial liabilities based on contractual and undiscounted payments, including principal and estimated interest.

December 31, 2020

	On Demand or Less than 1 Year	1-3 Years	3-5 Years	5+ Years	Total
<u>Non-derivative financial liabilities</u>					
Non-interest bearing	\$ 10,721,340	\$ -	\$ -	\$ -	\$ 10,721,340
Lease liabilities	94,523	175,632	160,363	630,297	1,060,815
Interest bearing	<u>5,626,283</u>	<u>8,046,662</u>	<u>2,891,576</u>	<u>-</u>	<u>16,564,521</u>
	<u>\$ 16,442,146</u>	<u>\$ 8,222,294</u>	<u>\$ 3,051,939</u>	<u>\$ 630,297</u>	<u>\$ 28,346,676</u>

Additional information about the maturity analysis for lease liabilities:

	Less than 1 Year	1-5 Years	5-10 Years	10-15 Years	15-20 Years	20+ Years
Lease liabilities	<u>\$ 94,523</u>	<u>\$ 335,995</u>	<u>\$ 376,402</u>	<u>\$ 245,069</u>	<u>\$ 8,826</u>	<u>\$ -</u>

December 31, 2019

	On Demand or Less than 1 Year	1-3 Years	3-5 Years	5+ Years	Total
<u>Non-derivative financial liabilities</u>					
Non-interest bearing	\$ 10,369,812	\$ -	\$ -	\$ -	\$ 10,369,812
Lease liabilities	87,968	172,589	159,151	675,783	1,095,491
Interest bearing	<u>3,491,961</u>	<u>7,162,099</u>	<u>2,920,035</u>	<u>-</u>	<u>13,574,095</u>
	<u>\$ 13,949,741</u>	<u>\$ 7,334,688</u>	<u>\$ 3,079,186</u>	<u>\$ 675,783</u>	<u>\$ 25,039,398</u>

Additional information about the maturity analysis for lease liabilities:

	Less than 1 Year	1-5 Years	5-10 Years	10-15 Years	15-20 Years	20+ Years
Lease liabilities	<u>\$ 87,968</u>	<u>\$ 331,740</u>	<u>\$ 381,878</u>	<u>\$ 293,905</u>	<u>\$ -</u>	<u>\$ -</u>

The amounts included above for variable interest rate instruments for both non-derivative financial assets and liabilities was subject to change if changes in variable interest rates were to differ from those estimates of interest rates determined at the end of the reporting period.

30. TRANSACTIONS WITH RELATED PARTIES

In addition to those disclosed in other notes, detail of transactions between the Company and related parties are disclosed below.

- a. Related parties and their relationships associated with the Company:

<u>Related Parties</u>	<u>Relationship with the Company</u>
Macronix America, Inc. (MXA)	Subsidiary
Mxtran Inc. (Mxtran)	Subsidiary
Macronix (Hong Kong) Co., Limited (MXHK)	Indirect subsidiary
Macronix Europe N.V. (MXE)	Indirect subsidiary
Macronix Pte Ltd (MPL)	Indirect subsidiary
Macronix (Asia) Limited (MX Asia)	Indirect subsidiary
MegaChips Corporation (MegaChips)	Key management personnel
Ardentec Corporation (Ardentec)	The Company is its major management authority
TM Technology, Inc. (TMTECH)	Others (Note)
Etron Technology, Inc. (Etron)	Others
Macronix Education Foundation (MXIC Education)	Others

Note: As Etron Technology, Inc. disposed of its shares in TM Technology, Inc. on October 22, 2019, the Company lost its significant influence over TM Technology, Inc.

b. Operating revenues

Line Items	Related Parties Categories/Name	For the Year Ended December 31	
		2020	2019
Sales	Key management personnel		
	MegaChips	\$ 16,101,433	\$ 13,236,202
	Subsidiaries		
	MXHK	5,778,319	4,440,347
	Others	1,257,181	1,265,699
	Others	<u>-</u>	<u>365</u>
		<u>\$ 23,136,933</u>	<u>\$ 18,942,613</u>

Sale prices to foreign related parties were negotiated based on those charged to ultimate customers and were not comparable to those with external customers as foreign related parties were the primary regional distributors. Sales to domestic related parties were priced at a markup on the unit cost of the product, price that was not comparable to those with other customers.

Sales prices for the related parties were not comparable to those for external customers as the Company sells the specific purpose product. The sales terms to the related parties were between 30 to 60 days after monthly closing, similar to those with external customers.

c. Purchases

Related Parties Categories/Name	For the Year Ended December 31	
	2020	2019
Key management personnel		
MegaChips	<u>\$ 6,209,245</u>	<u>\$ 2,800,371</u>

Materials purchased from related parties were for manufacturing process. The payment term was 30 days after monthly closing and after acceptance of materials.

d. Receivables from related parties

Line Items	Related Parties Categories/Name	December 31	
		2020	2019
Receivables from related parties, net	Subsidiaries		
	MXHK	\$ 587,454	\$ 731,345
	Others	98,670	137,251
	Key management personnel		
	MegaChips	<u>1,647,427</u>	<u>973,076</u>
		<u>\$ 2,333,551</u>	<u>\$ 1,841,672</u>
Other receivables	Subsidiaries		
	MXHK	\$ 89	\$ 120
	Mxtran	113	119
	Key management personnel		
	MegaChips	<u>30</u>	<u>-</u>
		<u>\$ 232</u>	<u>\$ 239</u>

The outstanding trade receivables from related parties are unsecured. For the year ended December 31, 2020 and 2019, no impairment loss was recognized for trade receivables from related parties.

e. Payables to related parties

Line Items	Related Parties Categories/Name	December 31	
		2020	2019
Payables to related parties	Key management personnel		
	MegaChips	\$ 4,062,278	\$ 4,653,909
	The Company is its major management authority	<u>99,149</u>	<u>66,303</u>
		<u>\$ 4,161,427</u>	<u>\$ 4,720,212</u>
Other payables to related parties	Subsidiaries		
	MXA	\$ 58,659	\$ 66,988
	MXE	45,740	49,364
	MX Asia	25,574	26,128
	Others	<u>6,852</u>	<u>7,467</u>
	<u>\$ 136,825</u>	<u>\$ 149,947</u>	

The outstanding trade payables from related parties are unsecured and will be settled in cash.

f. Other transactions with related parties

Line Items	Related Parties Categories/Name	For the Year Ended December 31	
		2020	2019
Manufacturing expense	The Company is its major management authority		
	Ardentec	\$ 306,514	\$ 255,716
	Key management personnel	<u>-</u>	<u>9,254</u>
		<u>\$ 306,514</u>	<u>\$ 264,970</u>
Operating expense	Subsidiaries		
	MXA	\$ 206,028	\$ 205,571
	MXE	134,553	149,678
	MXAsia	100,854	108,412
	Others	22,727	50,143
	Others	<u>23,119</u>	<u>22,837</u>
	<u>\$ 487,281</u>	<u>\$ 536,641</u>	
IT service revenue	Subsidiaries		
	Mxtran	<u>\$ 318</u>	<u>\$ 321</u>
Rental revenue	Subsidiaries		
	Mxtran	<u>\$ 435</u>	<u>\$ 435</u>

The manufacturing expense and operating expense of related parties were comparable to those with other vendors. The payment term was between 30 to 90 days after monthly closing.

The Company leases offices to its subsidiaries (rentals are classified under other gains and losses). The amount of lease payment was based on the office space leased by each related party and was collected on a monthly basis.

Under certain contracts, the Company provided the IT service to the above related parties. The specifically negotiated terms were not comparable to those with external customers.

g. Compensation of key management personnel

	For the Year Ended December 31	
	2020	2019
Short-term benefits	\$ 462,655	\$ 259,209
Post-employment benefits	6,835	8,651
Share-based payments	48,751	13,899
Other long-term employee benefits	<u>(14)</u>	<u>(27)</u>
	<u>\$ 518,227</u>	<u>\$ 281,732</u>

The remuneration of key executives was determined by the remuneration committee based on the performance of individuals and market trends.

31. ASSETS PLEDGED AS COLLATERAL OR FOR SECURITY

The following assets were provided as collateral for bank borrowings, the tariff of imported raw materials guarantees, natural gas agreements, and land lease agreements:

	December 31	
	2020	2019
Property, plant and equipment, net	\$ 12,915,218	\$ 13,228,948
Pledge deposits (classified as other financial assets - non-current)	<u>157,665</u>	<u>157,665</u>
	<u>\$ 13,072,883</u>	<u>\$ 13,386,613</u>

32. SIGNIFICANT CONTINGENT LIABILITIES AND UNRECOGNIZED COMMITMENTS

In addition to those disclosed in other notes, significant commitments and contingencies of the Company as of December 31, 2020 and 2019 were as follows:

- a. As of December 31, 2020 and 2019, unused letters of credit amounted to approximately \$0 thousand and \$36,917 thousand, respectively.
- b. Unrecognized commitments are as follows:

	December 31	
	2020	2019
Acquisition of property, plant and equipment	<u>\$ 2,137,663</u>	<u>\$ 1,420,915</u>

- c. In January 2019, the Company again signed an agreement with IBM to continue the joint development of phase-change memory technology, and the agreement is effective from January 2019 to January 2022. Under the agreement, both parties share the related expenditures of the technology development, and the unrecognized contract amounts were US\$4,000 thousand.
- d. The Company's board of directors passed a resolution to donate the Innovation Center - Macronix Hall to National Cheng Kung University with a donation amount of \$420,000 thousand. As of December 31, 2020, the Company's unrecognized amount is \$154,000 thousand.
- e. The Company's board of directors passed a resolution to donate to National Cheng Kung University to establish the "School of Computing" to cultivate cross domain innovative talents with dual expertise "specific discipline" and "computing" to feedback to the society, and to fulfill Company's social responsibilities with a donation amount of \$100,000 thousand per year for the following ten years. As of December 31, 2020, the Company has allocated \$100,000 thousand.

33. SIGNIFICANT ASSETS AND LIABILITIES DENOMINATED IN FOREIGN CURRENCIES

The Company's significant financial assets and liabilities denominated in foreign currencies aggregated by the foreign currencies other than functional currencies and the related exchange rates between foreign currencies and respective functional currencies were as follows:

December 31, 2020

	Foreign Currencies (In thousands)	Exchange Rate	Carrying Amount
<u>Financial assets</u>			
Monetary items			
JPY	\$ 20,790,537	0.2763	\$ 5,744,425
USD	179,035	28.48	<u>5,098,926</u>
			<u>\$ 10,843,351</u>
Non-monetary items			
Investments accounted for using the equity method			
USD	84,629	28.48	<u>\$ 2,410,232</u>
<u>Financial liabilities</u>			
Monetary items			
JPY	15,050,542	0.2763	\$ 4,158,465
USD	49,655	28.48	<u>1,414,181</u>
			<u>\$ 5,572,646</u>

December 31, 2019

	Foreign Currencies (In thousands)	Exchange Rate	Carrying Amount
<u>Financial assets</u>			
Monetary items			
JPY	\$ 21,738,886	0.2760	\$ 5,999,933
USD	164,911	29.98	<u>4,944,045</u>
			<u>\$ 10,943,978</u>
Non-monetary items			
Investments accounted for using the equity method			
USD	76,209	29.98	<u>\$ 2,284,755</u>
<u>Financial liabilities</u>			
Monetary items			
JPY	17,522,332	0.2760	\$ 4,836,164
USD	42,388	29.98	<u>1,270,792</u>
			<u>\$ 6,106,956</u>

For the years ended December 31, 2020 and 2019, realized and unrealized net foreign exchange gains (losses) were NT\$71,859 thousand and NT\$(62,996) thousand, respectively. It is impractical to disclose net foreign exchange losses by each significant foreign currency due to the variety of the foreign currency transactions.

34. SEPARATELY DISCLOSED ITEMS

a. Information on significant transactions:

- 1) Financing provided to others: None
- 2) Endorsements/guarantees provided: None
- 3) Marketable securities held (excluding investment in subsidiaries, associates and joint ventures):
Table 1 (attached)
- 4) Marketable securities acquired and disposed of at costs or prices of at least NT\$300 million or 20% of the paid-in capital: None
- 5) Acquisition of individual real estate at costs of at least NT\$300 million or 20% of the paid-in capital: None
- 6) Disposal of individual real estate at prices of at least NT\$300 million or 20% of the paid-in capital: None
- 7) Total purchases from or sales to related parties amounting to at least NT\$100 million or 20% of the paid-in capital: Table 2 (attached)

- 8) Receivables from related parties amounting to at least NT\$100 million or 20% of the paid-in capital: Table 3 (attached)
 - 9) Trading in derivative instruments: None
- b. Information on investees: Table 4 (attached)
- c. Information on investments in mainland China:
- 1) Information on any investee company in mainland China, showing the name, principal business activities, paid-in capital, method of investment, inward and outward remittance of funds, shareholding ratio, investment gain or loss, carrying amount of the investment at the end of the period, repatriation of investment gains, and limit on the amount of investment in the mainland China area: Table 5 (attached)
 - 2) Any of the significant transactions with investee companies in mainland China, either directly or indirectly through a third area, and their prices, payment terms, and unrealized gains or losses: None
- d. Information of major shareholders: List all shareholders with ownership of 5% or greater showing the name of the shareholder, the number of shares owned, and percentage of ownership of each shareholder: None

MACRONIX INTERNATIONAL CO., LTD.

MARKETABLE SECURITIES HELD

DECEMBER 31, 2020

(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

Holding Company Name	Type and Name of Marketable Securities	Relationship with the Holding Company	Financial Statement Account	December 31, 2020				Shares as Collateral
				Shares/Units (In Thousands)	Carrying Amount	Percentage of Ownership (%)	Fair Value (Note)	
The Company	Shares Ardentec Corporation	The Company serves as member of its board of directors	Financial assets at FVTOCI - non current	35,951,871	\$ 1,389,540	7.33	\$ 1,389,540	None
MXBVI	United Industrial Gases Co., Ltd.	None	"	6,671,877	389,504	3.06	389,504	None
	Zowie Technology Co., Ltd.	None	"	20,426	-	0.10	-	None
Hui Ying	Shares Chipbond Technology Corporation	None	Financial assets at FVTOCI - non current	1,088,319	72,264	0.17	72,264	None
	Tower Semiconductor Ltd.	None	"	578,552	425,440	0.54	425,440	None
	Amphastar Pharmaceuticals, Inc.	None	"	49,116	28,131	0.10	28,131	None
	Shares Macronix International Co., Ltd.	The Company	Financial assets at FVTOCI - non current	1,956,619	82,765	0.11	82,765	None
	Rato Technology Co., Ltd.	None	"	1,247,288	31,195	10.03	31,195	None

MACRONIX INTERNATIONAL CO., LTD.

TOTAL PURCHASES FROM OR SALES TO RELATED PARTIES AMOUNTING TO AT LEAST NT\$100 MILLION OR 20% OF THE PAID-IN CAPITAL FOR THE YEAR ENDED DECEMBER 31, 2020

(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

Buyer	Related Party	Relationship	Transaction Details			Abnormal Transaction		Notes/Accounts Receivable (Payable)		Note
			Purchase/Sale	Amount	% to Total	Payment Terms	Unit Price	Payment Term	Ending Balance	
The Company	MegaChips	Its subsidiary, Shun Ying Investment, is represented in MXIC's board of directors	Sales	\$ 16,101,433	41	30 days after monthly closing	Note 30	\$ 1,647,427	32	-
	MXHK	Indirect subsidiary	Sales	5,778,319	15	45 days after monthly closing	Note 30	587,454	11	-
	MXA	Subsidiary	Sales	1,257,037	3	Net 60 days	Note 30	98,670	2	-
	MegaChips	Its subsidiary, Shun Ying Investment, is represented in MXIC's board of directors	Purchase	6,209,245	52	30 days after monthly closing and after acceptance of materials	Note 30	4,062,279	57	-
MXHK	The Company	Indirect subsidiary	Purchase	US\$ 195,739	100	45 days after monthly closing	No material difference	US\$ 20,627	100	-
MXA	The Company	Subsidiary	Purchase	US\$ 42,470	100	Net 60 days	No material difference	US\$ 3,465	100	-

MACRONIX INTERNATIONAL CO., LTD.

RECEIVABLES FROM RELATED PARTIES AMOUNTING TO AT LEAST NT\$100 MILLION OR 20% OF THE PAID-IN CAPITAL
DECEMBER 31, 2020

(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

Company Name	Related Party	Relationship	Ending Balance	Turnover Rate	Overdue		Amounts Received in Subsequent Period	Allowance for Impairment Loss
					Amount	Action Taken		
The Company	MegaChips	Its subsidiary, Shun Ying Investment, is represented in MXIC's board of directors	\$ 1,647,427	12.29 times	\$ -	-	\$ 1,647,427 thousand	\$ -
	MXHK MXA	Indirect subsidiary Subsidiary	587,454 98,670	8.76 times 10.66 times	- -	- -	587,454 thousand 98,670 thousand	- -

MACRONIX INTERNATIONAL CO., LTD.

INFORMATION ON INVESTEEES
FOR THE YEAR ENDED DECEMBER 31, 2020
(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

Investor Company	Investee Company	Location	Main Businesses and Products	Original Investment Amount		Balance as of December 31, 2020			Net Income (Loss) of the Investee	Share of Profit (Loss)	Note
				December 31, 2020	December 31, 2019	Shares	%	Carrying Amount			
The Company	MXA	San Jose, California, USA.	Sales and marketing	\$ 2,640	\$ 2,640	100,000	100.00	\$ 174,769	\$ 15,552	14,939	Subsidiary
	MXBVI	Tortola, British Virgin Islands	Investment holding company	7,348,057	7,348,057	212,048,000	100.00	2,235,463	142,922	143,018	Subsidiary
MXBVI	Hui Ying	Taipei, Taiwan	Investment	500,000	500,000	-	100.00	83,782	7,014	4,687	Subsidiary
	Run Hong	Taipei, Taiwan	Investment	984,432	984,432	-	100.00	14,113	(483)	(483)	Subsidiary
	Mxtran	Hsinchu, Taiwan	IC design	755,287	755,287	69,627,323	90.43	14,019	(9,138)	(8,262)	Subsidiary
	New Trend Technology Inc.	San Jose, California, USA.	IC design	899,931	891,291	27,450,000	100.00	278,367	(8,812)	Note	
	MPL	Belgium	After-sales service	2,106	2,106	999	100.00	133,516	7,429	Note	
	MXHK	Singapore	After-sales service	3,291	3,291	174,000	100.00	21,932	2,308	Note	
	MX Asia	Hong Kong	Sales and marketing	378,437	378,437	89,700,000	100.00	917,699	130,729	Note	
	Mxtran	Cayman Island	After-sales service	23,035	23,035	700,000	100.00	4,016	4,016	Note	
	Mxtran Samoa	Hsinchu, Taiwan	IC design	403,188	403,188	3,393,200	4.41	683	(9,138)	Note	
	Mxtran Samoa	Samoa	Investment holding company	35,979	35,979	1,170,000	100.00	984	1	Note	
	Mxtran HK	Hong Kong	Investment holding company	23,880	23,880	6,152,000	100.00	419	-	Note	

Note : Under relevant regulations, no disclosure of investment gain (loss) is needed.

MACRONIX INTERNATIONAL CO., LTD.
INFORMATION ON INVESTMENT IN MAINLAND CHINA
FOR THE YEARS ENDED DECEMBER 31, 2020
(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

Investee Company	Main Businesses and Products	Paid-in Capital	Method of Investment	Accumulated Outward Remittance for Investment from Taiwan as of January 1, 2020	Remittance of Funds		Accumulated Outward Remittance for Investment from Taiwan as of December 31, 2020	Net Income (Loss) of the Investee	% Ownership for Direct or Indirect Investment	Investment Gain (Loss) (Note 1)	Carrying Amount as of December 31, 2020	Accumulated Repatriation of Investment Income as of December 31, 2020
					Outward	Inward						
MXm	Development of integrated circuit system and software	\$ 296,160	MXHK (Note 2)	\$ 296,160	\$ -	\$ -	\$ 296,160	\$ 11,040	100	\$ 11,404	\$ 400,483	\$ -
Accumulated Outward Remittance for Investment in Mainland China as of December 31, 2020				Upper Limit on the Amounts of Investment Stipulated by Investment Commission, MOEA		Investment Amount Authorized by the Investment Commission, MOEA						
\$ 296,160				\$ 21,716,156		\$ 296,160						

Note 1: The amount was recognized based on the audited financial statements of the investee company.

Note 2: The Company invested in a company located in mainland China indirectly through the existing company in a third country.

Macronix International Co., Ltd.

Chairman : Miin Chyou Wu