

# ***winbond***

***We Deliver***



Winbond Electronics Corp.  
2019 Annual Report  
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## Letter to Shareholders

Dear Shareholders,

The global economic growth slowed down in 2019 amid U.S.-China trade war and rising geopolitical risk. The memory industry suffered as a result of slow inventory digestion and weaker than expected market demands. However, Winbond turned in a stable performance on the strength of diversified market deployment, good partnerships with customers, high value-added products and a flexible yet prudent capacity policy.

### Financial Performance

In 2019, our consolidated revenue amounted to NT\$48.8 billion, down 5% in comparison with 2018. Memory and logic products made up respectively 79% and 21 % of total revenue. The consolidated gross margin was 27% and the operating margin was 3%. The Company recorded NT\$1.48 billion of consolidated net income after tax, down 81% from 2018. Earnings per share was NT\$0.32.

### Market and Product Applications

In 2019, the revenue of our Code Storage Flash hit a record high, accounting for 51% of memory revenue and surpassing the DRAM revenue for the first time in the company's history. We have been diligently cultivating the Code Storage Flash market, provided high-quality and high-efficiency products to international clients with close partnership. We are the world's number 1 NOR Flash supplier, which contributes a major revenue stream and steady growth momentum for the Company. DRAM made up 49% of memory revenue. We are currently the world's top 5 own-brand DRAM supplier, focusing on R&D, production and sales of specialty DRAM. We have successfully positioned ourselves in a differentiated market with stable supply.

In terms of application, our products are evenly distributed among four major electronics product lines and we continue to optimize product mix. The weight of communication products as a percentage of memory revenue increased slightly to 30% in 2019, due to the booming mobile and networking market, while consumer products stayed at 28% of total revenue. The revenue of computer and peripheral products on the other hand dropped to 22% from 26% in the previous year, mainly due to decline in global PC shipment. Our high-quality products for automotive and industrial applications accounted for 20% of memory revenue.

### Capacity planning

The production capacity of our fab at Central Taiwan Science Park (CTSP) has increased to 54,000 wafers per month in 2019. We will continue to increase the capacity at CTSP by using industry 4.0, smart manufacturing and flexible production in the hope to maximize output. We believe it will bring promising growth momentum to further lift Winbond's share and position in the memory market.

### Technology Development and Manufacturing

We possess own memory process technology and embark on the development of innovative products to address future demands at Internet of Everything (IoE) and edge computing. For Code Storage Flash memory products, after having launched Low Power Flash, we furthermore released high-speed and high-quality SLC NAND Flash to broaden the scope of product application. For DRAM, we have developed a new generation of LPDDR4 with unique features of lower power, high bandwidth and better data transmission rate. We also make headway into low-pin-count and easy-to-design HyperRam, which markedly improves the efficiency of IoT terminal devices and human-machine interface devices, showing our commitment to green technology.

Our 25nm process has begun volume production in 2019. As we continue to invest in the development of advanced technology, we expect the 20nm DRAM process to enter scale production when it achieves satisfactory yield. It will set a solid foundation for Winbond's long-term growth and development. For Code Storage Flash products, we will continue to develop 45nm NOR Flash to accommodate demand of high density. We have always been relentlessly building up our R&D capability. We continue to enhance the technological competitiveness through strong core technology and value-added products.

## Honors and Awards

We received several awards in quality certification and sustainable development in 2019. Winbond is the first automotive memory manufacturer in Taiwan to obtain ISO 26262 – Road vehicles functional safety certified, thus enhancing reliability and safety of our automotive electronics products. We are a trustworthy partner of international automakers for our memory products.

In terms of sustainable development, Winbond won the Corporate Sustainability Report Gold Award in the 12th Taiwan Corporate Sustainability Awards (TCSA), which recognized Winbond's leadership and positive influence in corporate social responsibility and sustainable development.

## Future Outlook

Under the robust development of new applications such as IoT, AI and 5G, technology innovation leads to applications in information security, smart cloud, terminal sensing and edge computing. Holding onto the beliefs in business continuity and environmental sustainability, Winbond develops low power consumption, securing and highly efficient products which offer clients the best solutions. Winbond also strives to create maximum value for shareholders, customers and employees alike and aspires to become a hidden champion in providing sustainable semiconductors to enrich human life and meets the expectations of society.

On behalf of the management team at Winbond, I would like to thank you for your continued support.

Chairman

A handwritten signature in black ink, appearing to be 'Arthur H. Hsiao', written in a cursive style.

## Company Profile

### 1. Company History

Winbond was established in September 1987 and listed on Taiwan Stock Exchange in 1995, with headquarters in Central Taiwan Science Park, Taichung, Taiwan.

Winbond is a specialty memory IC company engaged in design, manufacturing and sales services. From product design, research and development, and wafer fabrication to the marketing of brand name products, Winbond endeavors to provide its global clientele top quality memory solutions.

Winbond's major product lines include Code Storage Flash Memory, Specialty DRAM and Mobile DRAM. Our advantage of technological autonomy and prudent capacity strategy enables us to build a highly flexible production system and create synergy among product lines, which allows us to meet the diverse demands of customers while building the brand image.

In the area of Code Storage Flash Memory products, we focus on the "low to medium density" market by offering a full spectrum of Serial Flash products. Our Flash memory packages offer features such as low pin count, small size and low cost. We also develop SPI NAND and SLC NAND flash products to meet client demands for code storage. With considerable market share in computer peripheral markets, we also actively develop a diversity of flash memory products for applications in mobile devices, consumer electronics, automotive electronics, IoT and wearable devices. Winbond specializes in the design of high-performance, low-power memory. With a 12-inch fab, we offer a whole series of Specialty DRAM and Mobile DRAM products that target a top-tier clientele and quality-oriented applications. Winbond's products are used extensively in handheld devices, consumer electronics and computer peripherals. We also focus on high-barrier, high-quality applications, such as KGD, automotive and industrial electronics.

To provide timely and respective services to clients around the world, Winbond has set up operations and distributor networks in the USA, Japan, China, Hong Kong and Israel to serve clients better and expand the depth and breadth of product sales. With regard to quality, Winbond implements rigorous process control and quality control, strengthening yield analysis and supply chain management to satisfy customer needs. The long-standing efforts in quality assurance have earned the Company a good reputation and resulted in the accreditation of ISO 9001, ISO26262, IATF 16949, QC 080000, ISO 14001 and OHSAS 18001.

In the future, Winbond will continue to provide customer-oriented services and concentrate our resources on the markets in which we have a competitive advantage. At the same time, riding on the strength of our advanced semiconductor design and manufacturing know-how, coupled with the innovation and wisdom of our employees, observing the core values of "accountability, innovation and synergy" and incorporating the corporate spirits of "execution, innovation and passion" in all operational activities, Winbond will strive towards the goal of becoming a world-class solution provider.

### 2. Major business development in the past year and up to the date of report

- (1) With in-house developed 25nm DRAM process, we launched a series of products in 2019. The ongoing success of these products continue to contribute to our business performance.
- (2) With improved efficiency, the 12-inch FAB at Central Taiwan Science Park (CTSP) increased its output from 52,000 wafers per month to 54,000 wafers per month by the end of 2019.

### 3. Investment in affiliates in the past year and up to the date of report

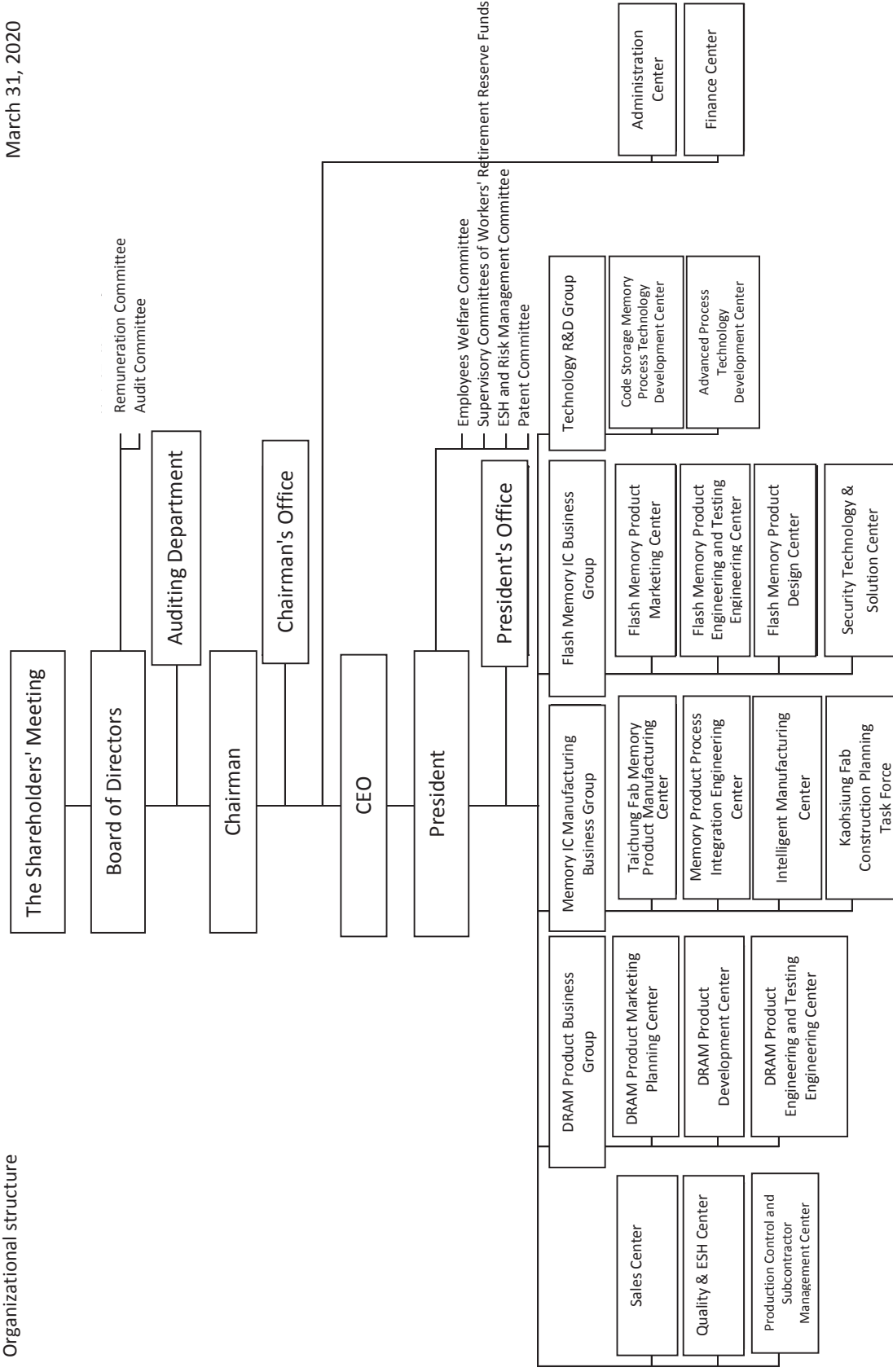
For investments in affiliated enterprises, please see page 222~228 of this report

# Corporate Governance Report

## (I) Organization

### 1. Organizational structure

March 31, 2020





## 2. Major business units and their key businesses

Unit		Function
Auditing Department		<ol style="list-style-type: none"> <li>1. Planning and execution of internal audit operations.</li> <li>2. Planning and execution of internal control self-assessment operations.</li> <li>3. Review of company codes and rules.</li> </ol>
Administration Center		<ol style="list-style-type: none"> <li>1. Providing a safe and comfortable working environment in a most cost effective manner, and assisting other business units to achieve the overall business goals of the company.</li> <li>2. Providing software/hardware and IT systems, and assisting related business units to improve productivity and business performance.</li> <li>3. Providing legal and intellectual property consulting support and management, and assisting related business units to operate and improve business performance.</li> <li>4. Responsible for supply chain management and assisting other business units to achieve the company's overall business goals.</li> </ol>
Finance Center		<ol style="list-style-type: none"> <li>1. Planning and execution of accounting system and tax matters.</li> <li>2. Planning and evaluation of budget and costs.</li> <li>3. Planning and maneuvering of company funds and investment management.</li> <li>4. Planning and execution of investors relations and shareholder services.</li> </ol>
Sales Center		<ol style="list-style-type: none"> <li>1. In charge of worldwide sales (except for foundry).</li> <li>2. New client development and new product promotion.</li> <li>3. Responsible for the attainment of annual sales targets.</li> <li>4. Management of dealers and distributors.</li> <li>5. Collection of accounts receivable.</li> </ol>
Quality & ESH Center		<ol style="list-style-type: none"> <li>1. Planning and execution of company quality policy.</li> <li>2. Drafting and implementing quality indicators and maintaining quality system.</li> <li>3. Elevating the quality and professional knowhow of employees and continuously improving the quality of products through continuous improvement of quality management system and employee training.</li> <li>4. In charge of internal quality management and external quality assurance, reliability assurance and handling of quality complaints.</li> <li>5. Management of outsourcing quality.</li> <li>6. Supervising the implementation of effective ESH plans and risk management measures, establishing a work environment in compliance with environmental regulations and international standards, and reducing the company's operational risks.</li> </ol>
Production Control and Subcontractor Management Center		<ol style="list-style-type: none"> <li>1. Production planning and execution and production-sales coordination.</li> <li>2. Planning and execution of logistics supply.</li> <li>3. Planning and execution of outsourcing capacity and production plan.</li> <li>4. Vendor management and quality control.</li> <li>5. Outsourcing process and production procedure streamlining.</li> <li>6. Import and verification of new IC assembly technology.</li> </ol>
DRAM Business Group	DRAM Product Marketing Planning Center	<ol style="list-style-type: none"> <li>1. Planning and execution of medium- and long-term DRAM strategies</li> <li>2. Customer engagement, product advertising and marketing</li> <li>3. New DRAM product planning and product management</li> <li>4. Product mix optimization and capacity planning</li> <li>5. Strategic customer and third party partner relationship management</li> <li>6. Trend analysis of DRAM market.</li> <li>7. Troubleshooting of customer application problems and error analysis.</li> </ol>
	DRAM Product Development Center	<ol style="list-style-type: none"> <li>1. Research and development of DRAM products.</li> <li>2. Improving the DRAM product design platform.</li> <li>3. Improving the quality of DRAM products and enhancing competitiveness.</li> <li>4. Confirmation of product specifications and mapping market blueprint.</li> <li>5. Analysis of customer-reported failure.</li> <li>6. Resources planning and use for IC design and layout.</li> <li>7. Central planning of R&amp;D manpower allocation and OEM project support.</li> <li>8. Planning and management of outside premises R&amp;D personnel.</li> </ol>
	DRAM Product Engineering and Testing Engineering Center	<ol style="list-style-type: none"> <li>1. Verification of product performance</li> <li>2. Improvement of product yield</li> <li>3. Improvement of product quality</li> <li>4. Product failure analysis</li> <li>5. Efficient product testing</li> <li>6. Development of advanced product testing technology</li> <li>7. Process development validation</li> </ol>
Memory IC Manufacturing Business Group	Taichung Fab Memory Product Manufacturing Center	<ol style="list-style-type: none"> <li>1. Planning of fab establishment, capacity and display.</li> <li>2. Analysis of fab budget/cost structure.</li> <li>3. General administration for fab preparation and equipment installation and planning of production systems</li> <li>4. Introduction of new products and new technologies and volume production.</li> <li>5. Operation and maintenance of factory systems and fab equipment</li> <li>6. Establishment of fab quality system.</li> <li>7. Planning and risk management for factory systems and fab environmental health and safety systems</li> <li>8. Energy conservation and waste reduction for factory and fab systems and compliance</li> <li>9. Efficiency enhancement and automation for Fab Industry 4.0 precision manufacturing</li> </ol>

Unit		Function
	Memory Product Process Integration and Testing Center	<ol style="list-style-type: none"> <li>1. Transfer and implementation of new processes/products</li> <li>2. Planning and certification of yield and quality improvement processes</li> <li>3. Planning and implementation of process monitoring system</li> <li>4. Analysis and improvement of process optimization</li> <li>5. Development and management of generative process</li> <li>6. Planning and execution of trial production</li> <li>7. Planning and management of trial production at China Walton plant</li> <li>8. Installation and enhancement of automation for trial production</li> </ol>
	Intelligent Manufacturing Center	<ol style="list-style-type: none"> <li>1. Establishment and maintenance of fab automation related systems.</li> <li>2. Establishment and maintenance of plant management information systems.</li> <li>3. Establishment and maintenance of yield improvement systems.</li> <li>4. Establishment and maintenance of automated handling and storage systems.</li> <li>5. Establishment and maintenance of plant quality related systems.</li> <li>6. Establishment and maintenance of testing systems.</li> <li>7. Establishment and maintenance of packaging/testing outsourcing information system.</li> <li>8. Customer production and engineering report support.</li> <li>9. Development and applications of big data and artificial intelligence technology.</li> </ol>
	Kaohsiung Fab Construction Planning Taskforce	<ol style="list-style-type: none"> <li>1. Planning and execution of Kaohsiung fab construction.</li> <li>2. Simulation and planning of capacity optimization.</li> <li>3. Implementation of new process and new products.</li> </ol>
Flash Memory IC Business Group	Flash Memory Product Marketing Center	<ol style="list-style-type: none"> <li>1. Planning of new flash products.</li> <li>2. Development management of flash products.</li> <li>3. Promotion of flash products.</li> <li>4. Optimization of flash product mix.</li> <li>5. Trend analysis of flash market.</li> </ol>
	Flash Memory Product Engineering and Testing Engineering Center	<ol style="list-style-type: none"> <li>1. Design, testing and validation of flash memory products.</li> <li>2. Implementing volume production of new products and improving product yield, quality, costs and process to meet customer demands.</li> </ol>
	Flash Memory Development Center	<ol style="list-style-type: none"> <li>1. Providing high speed, high quality, low power and low voltage code storage memory with innovative design and technology.</li> <li>2. Developing competitive and value-added product design.</li> <li>3. Creating user-friendly EDA/CAD solutions and environment to product design.</li> <li>4. Producing key documents needed for product design.</li> <li>5. Managing the designed IP and providing design service support.</li> </ol>
	Security Technology & Solution Center	<ol style="list-style-type: none"> <li>1. Development of InfoSec technology and strategic planning</li> <li>2. Assistance in developing InfoSec technology</li> <li>3. Development and promotion of security memory and security components</li> </ol>
Technology R&D Group	Code Storage Memory Process Technology Development Center	<ol style="list-style-type: none"> <li>1. Developing new technologies to lift Winbond's standing in code storage memory market.</li> <li>2. New technologies including but not limited to NAND, NOR and RRAM.</li> <li>3. Design and development of memory cell and peripheral components.</li> <li>4. Ensuring attainment of product yield and reliability targets and transferring to volume production.</li> <li>5. Supporting customer product testing service and failure analysis.</li> <li>6. Supporting company-wide SPICE model parameter extraction and TCAD component simulation.</li> <li>7. Supporting company-wide ESD/LU design and product analysis</li> </ol>
	Advanced Process Technology Development Center	<ol style="list-style-type: none"> <li>1. Developing new technologies to lift Company's standing in low-density memory market.</li> <li>2. Developing new technologies to lift Company's standing in working memory market.</li> <li>3. New technologies include but are not limited to DRAM and 3D printing.</li> <li>4. Design and development of memory cell and peripheral components.</li> <li>5. Ensuring attainment of product yield and reliability targets and transferring to volume production.</li> <li>6. Developing and supporting company-wide OPC technology.</li> <li>7. Developing and supporting company-wide modular technology.</li> </ol>

## 2. Profile of Directors, President, Vice Presidents, Assistant Vice Presidents, and Department and Branch Managers

### 2.1 Directors (1)

Title	Nationality or place of registration	Name	Gender	Date appointed	Term	Date first elected	Shares held when elected		Shares currently held		Shares currently held by spouse and minor 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			Note
							Shares	% (Note 1)	Shares	% (Note 2)	Shares	% (Note 2)	Shares	% (Note 2)			Title	Name	Relationship	
Chairman	ROC	Arthur Yu-Cheng Chiao	M	2017.06.13	3yrs	1987.09.04	58,264,955	1.63%	63,472,995	1.59%	11,778,797	0.30%	-	-	<ul style="list-style-type: none"> <li>Master in Electrical Engineering and Researcher of Management College of Washington University</li> <li>Chairman of Walsin Lihwa Corp.</li> <li>Chairman of Nuoton Technology Co.</li> </ul>	Note 3	Director and Chief Administrative Officer	Yung Chin	Spouse	Note 15
Vice Chairman	ROC	Yuan-Mow Su	M	2017.06.13	3yrs	2017.06.13	1,330,859	0.04%	801,279	0.02%	-	-	-	-	<ul style="list-style-type: none"> <li>MSEE, University of Southern California</li> <li>Bachelor in Department of Electronics Engineering, National Chiao Tung University</li> <li>Deputy CEO of Winbond Electronics Corp.</li> </ul>	Note 4	None	None	None	None
Director	ROC	Yung Chin	F	2017.06.13	3yrs	1996.04.09	10,720,537	0.30%	11,778,797	0.30%	63,472,995	1.59%	-	-	<ul style="list-style-type: none"> <li>Master in Applied Mathematics, Washington University</li> <li>Bachelor of Mathematics, National Taiwan University</li> <li>Chief Administrative Officer of Winbond Electronics Corp. (incumbent)</li> </ul>	Note 5	Chairman and CEO	Yu-Cheng Chiao	Spouse	None
Independent director	ROC	Francis Tsai	M	2017.06.13	3yrs	2014.06.17	-	-	-	-	-	-	-	-	<ul style="list-style-type: none"> <li>Computer &amp; Control Engineering Department, National Chiao Tung University, Taiwan</li> <li>Chairman and CEO of Wafer Technology Corp. (incumbent)</li> <li>Convener of the Company's Remuneration Committee (incumbent)</li> </ul>	Note 6	None	None	None	None
Independent director	ROC	Allen Hsu	M	2017.06.13	3yrs	2014.06.17	-	-	-	-	-	-	-	-	<ul style="list-style-type: none"> <li>MBA, National Chengchi University and Refresher course of Walton Business School</li> <li>Chairman of Altek Corporation</li> <li>Chairman of Taiwan Mask Corporation</li> <li>Chairman of Myson Century, Inc.</li> <li>Chairman of Hestia Power Inc. (incumbent)</li> <li>Convener of Company's Remuneration Committee (incumbent)</li> </ul>	Note 7	None	None	None	None
Independent director	ROC	Jerry Hsu	M	2017.06.13	3yrs	2014.06.17	-	-	-	-	-	-	-	-	<ul style="list-style-type: none"> <li>MBA, Waseda Business School</li> <li>Director and Executive VP of AclBel Polytech (incumbent)</li> </ul>	Note 8	None	None	None	None

Title	Nationality or place of registration	Name	Gender	Date appointed	Term	Date first elected	Shares held when elected		Shares currently held		Shares currently held by spouse and minor 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			Note
							Shares	% (Note 1)	Shares	% (Note 2)	Shares	% (Note 2)	Shares	% (Note 2)			Title	Name	Relationship	
Independent director	ROC	Stephen T. Tso	M	2017.06.14	3yrs	2019.06.14	-	-	-	-	-	-	-	-	<ul style="list-style-type: none"> <li>•Ph.D. in Material Science, U.C. Berkeley</li> <li>•President, WaferTech</li> <li>•President of CVD Department, Applied Materials, Inc.</li> <li>•Senior Vice President of Operations and Organization, TSMC</li> </ul>	Note 9	None	None	None	None
Director	ROC	Wei-Hsin Ma	F	2017.06.13	3yrs	2017.06.13	-	-	-	-	25,609,166	0.64%	-	-	<ul style="list-style-type: none"> <li>•Ph. D., School of Humanities, Tsinghua University</li> <li>•Master of Business Administration for Senior Managers, Peking University</li> <li>•University of California (Berkeley), Department of East Asian Languages</li> <li>•Chairman of HannsTouch Solution Incorporated</li> </ul>	Note 10	Chairman and CEO	Arthur Yu-Cheng Chiao	Relative by marriage	None
Director	ROC	Chih-Chen Lin	M	2017.06.13	3yrs	2017.06.13	-	-	-	-	-	-	-	-	<ul style="list-style-type: none"> <li>•Bachelor of Science in Chemical Engineering, National Taiwan University</li> <li>•MBA, Stern School of Business, New York University</li> <li>•President of Taiwan Mobile Corporation Ltd. (Incumbent)</li> </ul>	Note 11	None	None	None	None
Director	ROC	Walsin Lihwa Corp.	-	2017.06.13	3yrs	1987.09.04	811,327,531	22.66%	883,848,423	22.21%	-	-	-	-	-	Note 12	-	-	-	None
	ROC	Sophi Pan	F	2017.06.13	3yrs	2017.06.13	10,131	0.00%	11,036	0.00%	-	-	-	-	•Bachelor of Accounting from National Chengchi University	Note 13	None	None	None	None

Note 1: "Shareholding Percentage" when appointed is based on then issued and outstanding shares common shares of 3,580,000,193 shares.

Note 2: "Shareholding percentage" was based on then issued and outstanding common shares of 3,980,000,193 shares as of March 31, 2020.

Note 3: Serving concurrently as CEO of Winbond. Serving concurrently as Chairman of Chin Xin Investment Corp. and Cheng He Investment Corp. Serving concurrently as Director of Nuvoton Technology Co., Walsin Lihwa Corp., Walsin Technology Corporation, MITAC Holdings Corporation, United Industrial Gases Co., Ltd., Kolin Cons. & Development Co., Ltd., Landmark Group Holdings Ltd., Peaceful River Corp., Winbond International Corporation, Winbond Electronics Corporation America, Great Target Development Ltd., Marketplace Management Limited, Nuvocon Investment Holding Ltd., and Song Yong Investment Corporation. Serving concurrently as Manager of Goldbond LLC. Serving concurrently as Independent Director, Audit Committee member and Remuneration Committee Convener of Taiwan Cement, and Independent Director, Audit Committee member and Remuneration Committee Convener of Synnex Technology International Corporation.

Note 4: Serving concurrently as Chairman and CEO of Nuvocon Technology Co. Serving concurrently as Director of Winbond (Suzhou) Integrated Circuit.

Note 5: Serving concurrently as Chairman of Pine Capital Investment Ltd., Winbond Electronics (HK) Ltd. and Hwa Bao Botanic Conservation Corp. Serving concurrently as Director of Nuvocon Technology Co., Peaceful River Corp., Winbond Electronics Corporation Japan, Nuvocon Electronics Technology (Shanghai) Ltd. and Nuvocon Electronics Technology (H.K.) Ltd. Serving concurrently as Supervisor of Qing An Investment Limited, Yau Cheung Investment Limited, Cheng He Investment Corp., Winbond Electronics Technology (Shanghai) Ltd. and Winbond Electronics (Suzhou) Ltd.

Note 6: Serving concurrently as Chairman of NAFCO. Serving concurrently as Vice Chairman of Getac Technology Corporation.

Note 7: Serving concurrently as Chairman of Jet King International Co., Yizhong Technology Inc., You Yuan Investment Ltd., and Fortune Star Investment Ltd. Serving concurrently as Independent Director of Nuvocon Technology Co. Serving concurrently as Director of Pilot Electronics Corporation, Immodisk Corporation, ACME Electronics Corporation, and Bao Yue Investment Co.

Note 8: Serving concurrently as Director of Cal-Comp Biotech, Kinpo Electronics, Inc., Prudence Venture Investment Corp., PCHome Online Inc., Lippo Big Data, The Esite Spectrum Corp., Kang Exhibition Electronics (Dongguan), AcBel Polytech (Dongguan), AcBel Polytech (Wuhan), AcBel (USA) Polytech Inc., AcBel Polytech (SAMOA) Investment Inc., AcBel Polytech (Singapore) Pte Ltd., AcBel Polytech (UK) Limited, AcBel Polytech Japan Inc. and Power Station Holdings Ltd. Serving concurrently as Independent Director of Nuvocon Technology Corporation and Sirtec International Co. Ltd. Serving concurrently as Supervisor of Fu Bao Investment Inc. and Teleport Access Services Inc. Serving concurrently as President of Kang Exhibition Electronics (Dongguan), AcBel Polytech (Dongguan), and AcBel Polytech (Wuhan).

Note 9: Serving as Independent Director of AOPEN Inc.

Note 10: Serving concurrently as Chairman of Shinshi Yaoma Investment, Yaoma No. 1 Investment, Whitestone Corp., and Jinpingguo Investment Corp. Serving concurrently as Director of HannStar Display Corporation and Walsin Lihwa Corp.

Note 11: Serving concurrently as Chairman of AppWorks Ventures and AppWorks Fund III Co., Ltd. Serving concurrently as Director of Fubon Multimedia Technology Co., Ltd. Serving concurrently as Executive Director of Taiwan Internet and E-Commerce Association (TIEA).

Note 12: Serving concurrently as Director of Waltuo Green Resources Corporation, HamStar Display Corporation, Walsin Technology Corporation, Walsin Lippo Industrial Co., P. T. Walsin Lippo Kabel, Min Maw Precision Industry Corp, Walsin Info-Electric Co., Global Investment Holdings, Concord Venture Capital Group, Chin Xin Investment Corp., HamStar Color Co., Ltd., Kuang Tai Metal Industrial Co. and I-Chi United Trading Corp. Serving concurrently as Supervisor of Zhong Tai Technology Development Engineering Co. and Hwa Bao Botanic Conservation Corp.

Note 13: Serving as Chief of Staff of President's Office of Walsin Lihwa Corp. Serving concurrently as Director of Walsin Info-Electric Co., Min Maw Precision Industry Corp, Nanjing Walsin Nonferrous Metals Corp, Jiangyin Walsin Steel Cable Corp, Global Investment Holdings, Walsin Lippo Industrial Co. and Borrego Solar Systems, Inc. Serving concurrently as Supervisor of Waltuo Green Resources Corporation, Zhong Tai Technology Development Engineering Co. and Hwa Bao Botanic Conservation Corp. Serving concurrently as Supervisor of Cool Settlement Nanjing Business Management Inc., Cool Hua Cai Nanjing Cultural and Art Inc., Xi'an Walsin Metal Product Co., Xi'an Green Technology Co., Xi'an Walsin United Technology Co., and Shaanxi Optoelectronics Technology Co. Serving concurrently as Liquidator of Touch Micro-System Technology.

Note 14: Mr. San-Cheng Chang resigned as an independent director from Winbond's Board of Directors on November 16, 2019.

Note 15: The purpose of having the same person serve concurrently as both chairman and CEO of the company is to have this person lead the management team in efficiently executing the board's decisions. With the aforesaid practice in place, the number of independent directors on the board of the company is raised from the statutory requirement of 3 to 4, and more than half of the board members are individuals who are not managers or employees of the company.

#### Directors who are major shareholders of institutional shareholders

March 31, 2020	
Major shareholders of institutional shareholders	
Name of institutional shareholder	
Walsin Lihwa Corporation	Winbond Electronics Corporation (6.55%), Chin Xin Investment Corp. (6.31%), LGT Bank (Singapore) Investment Fund under the custody of JPMorgan Chase Bank N.A. Taipei Branch (5.87%), Polaris Taiwan Dividend+ ETF (5.64%), Yu-Hui Chiao (2.77%), Oriental Consortium investment Limited (2.16%), Yu-Heng Chiao (1.74%), Vanguard Total International Stock Index Fund, a series of Vanguard Star Funds under the custody of JPMorgan Chase Bank N.A. Taipei Branch (1.67%), Rong Chiang International Ltd. (1.66%), Yu-Chi Chiao (1.53%)

#### Major shareholders in the above table who are institutional investor and their major shareholders

March 31, 2020	
Major shareholders of institutional shareholders	
Name of institutional shareholder	
Chin Xin Investment Corp.	Winbond Electronics Corporation (37.69%), Walsin Lihwa Corp. (37.00%), Oriental Consortium investment Limited (4.43%), Arthur Yu-Cheng Chiao (3.14%), Yu-Lon Chiao (3.14%), Yu-Heng Chiao (3.14%), Yu-Chi Chiao (3.14%), Walsin Technology Corporation (1.86%), HamStar Board Corporation (1.34%), Prosperity Dielectrics Co., Ltd. (0.72%)
Winbond Electronics Corporation	Walsin Lihwa Corporation (22.21%), Chin Xin Investment Corp. (5.55%), Arthur Yu-Cheng Chiao (1.59%), Vanguard Total International Stock Index Fund, a series of Vanguard Star Funds under the custody of JPMorgan Chase Bank N.A. Taipei Branch (1.23%), Vanguard Emerging Markets Stock Index Fund managed by Vanguard Group under the custody of JPMorgan Chase Bank N.A. Taipei Branch (1.16%), Norges Bank Investment Account under the trust of Citibank (Taiwan) (1.13%), LGT Bank (Singapore) Investment Fund under the custody of JPMorgan Chase (1.04%), Pai-Yung Hong (0.97%), Dimension Emerging Market Evaluation Fund under the trust of Citibank (Taiwan) (0.89%), Yu-Heng Chiao (0.80%)
Oriental Consortium Investment Limited	HamStar Display Corporation (100%)
Rong Chiang International Ltd.	Tian Jiang Co., Ltd. (70.00%), Wonderful Assets Co. Ltd. (30%)



# Profile of Directors (2)

March 31, 2020

Name	Criteria	Has at least 5 years of work experience and meet one of the following professional qualifications			Meet the independence criteria (Note 1)												Number of Other Taiwanese Public Companies Concurrently Serving as an Independent director
		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 Specialists Who Has Passed a National Examination and Been Awarded a Certificate in a Profession Necessary for the Business of the Company	Have Work Experience in the Area 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	
Arthur Yu-Cheng Chiao				V						V			V		V	V	2
Yuan-Mow Su				V			V	V	V	V	V	V	V	V	V	V	-
Yung Chin				V						V		V	V		V	V	-
Francis Tsai				V	V	V	V	V	V	V	V	V	V	V	V	V	-
Allen Hsu				V	V	V	V	V	V	V	V	V	V	V	V	V	1
Jerry Hsu				V	V	V	V	V	V	V	V	V	V	V	V	V	2
Stephen T. Tso				V	V	V	V	V	V	V	V	V	V	V	V	V	1
Wei-Hsin Ma				V	V	V				V			V		V	V	-
Chih-Chen Lin				V	V	V	V	V	V	V	V	V	V	V	V	V	-
Walsin Lihwa Corporation (representative: Sophi Pan)				V	V	V	V			V			V	V	V		-

Note 1: If the director or supervisor meets any of the following criteria in the two years before being elected or during the term of office, please check "V" 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 any of its affiliates (except where the person is simultaneously an independent director of the Company and its parent company, a subsidiary or another subsidiary of the same parent company appointed pursuant to the Securities and Exchange Act or local 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 number of 1% or more of the shares of the Company or ranks as one of its top ten shareholders.

(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 or closer to anyone listed in (2) or (3).

(5)Not a director, supervisor or employee of an institutional shareholder holding directly 5% or more of the company's shares, being one of the top five shareholders, or being appointed a director or supervisor of the company pursuant to Article 27, Paragraph 1 or 2 of the Company Act (except where the person is simultaneously an independent director of the Company and its parent company, a subsidiary or another subsidiary of the same parent company appointed pursuant to the Securities and Exchange Act or local regulations).

(6)Not a director, supervisor or employee of another company that has the same directors as the Company or is controlled by the same person that has more than half of the voting power in the Company (except where the person is simultaneously an independent director of the Company or its parent company, a subsidiary or another subsidiary of the same parent company appointed pursuant to the Securities and Exchange Act or local regulations).

(7)Not a director, supervisor or employee of another company or institution that has the same chairman, president, or the equivalent or a spouse in one of the roles as the Company (except where the person is simultaneously an independent director of the Company and its parent company, a subsidiary or another subsidiary of the same parent company appointed pursuant to the Securities and Exchange Act or local regulations).

- (8)Not a director, supervisor, manager or shareholder holding 5% or more of the Company's shares of certain company or institution that has a financial or business relationship with the Company (except where the certain company or institution holds 20% or more but no more than 50% of the Company's shares and is simultaneously an independent director of the Company and its parent company, a subsidiary or another subsidiary of the same parent company appointed pursuant to the Securities and Exchange Act or local regulations).
- (9)Not a professional who provides audit or receives no more than NT\$500,000 in cumulative compensation in the last two years for commercial, legal, financial, or accounting services to the Company or its affiliates, nor is an owner, partner, director, supervisor, or manager, or the spouse of any of the above, of a sole proprietorship, partnership, company, or organization that provides such services to the Company or its affiliates. However, exception applies to members of a remuneration committee, a take-over bid review committee, or a special committee for merger and acquisition exercising their authority pursuant to provisions of the Securities and Exchange Act or the Business Mergers and Acquisitions Act.
- (10)Not a spouse or relative within the second degree of kinship to any other directors.
- (11)Not been a person in any of the circumstances listed in Article 30 of the Company Act.
- (12)Not a governmental, juridical person or its representative as defined under Article 27 of the Company Act.

Note 2: Mr. San-Cheng Chang resigned as an independent director from Winbond's Board of Directors on November 16, 2019.

### Profile of Directors (3)

The board member diversity policy stated in Article 20 of the Company's corporate governance principles is as follows:

The Company's Board of Directors reports to the Shareholders' Meeting. Operations and arrangements under the Company's corporate governance policy shall ensure that directors will exercise their authority and duty in accordance with laws and regulations, the Company's Articles of Incorporation or resolutions adopted in shareholders' meetings.

The structure of the Board of Directors should take into account the company operations, development and business scale, shareholding of major shareholders and diversity of board members, for example, different professional backgrounds, gender or field of work. The Company should select an appropriate number of board members, which should not be less than five, given consideration to actual operational needs,

The members of the Board of Directors should be selected with an emphasis on gender equality, and general knowledge, skills and the competencies required performing their duties. To achieve an ideal level of corporate governance, the Board of Directors as a whole should be equipped with the following abilities:

- I. Ability to make sound business judgments.
- II. Ability to conduct accounting and financial analysis.
- III. Ability to manage the business.
- IV. Ability to manage a crisis.
- V. Industry knowledge.
- VI. An understanding of international markets.
- VII. Leadership ability.
- VIII. Decision-making ability.

The Board of Directors is Winbond's highest governing body. The 11th-term Board of Directors consists of 10 directors (see Profile of Directors (1)). The ages of board members cover different generations and their professional background covers different industries. All board members possess the ability to perform their duties and to give constructive feedback and make recommendations for corporate strategies. The Board has 4 independent directors and 3 female directors. Directors who do not hold managerial positions in the Company make up more than two thirds of board members. All board members are highly experienced in business operations. The only institutional director on the board - Walsin Lihwa Corporation is a founder of the Company, also the largest shareholder and a director since Company's inception.

Management goals for the board diversity policy: According to Article 20 of the Winbond Corporate Governance Best Practice Principles, in addition to the existing mechanisms to maintain participation of female directors and recruit top talent from different generations and professional fields, Winbond will hold an election to replace all existing directors in 2020. The number of institutional shareholder representatives will be raised so to enable a rotation of institutional shareholder representatives that will facilitate succession planning for the management and achieve sustainable development.

# Implementation of board member diversity policy

Title	Name	Gender	Background					Percentage by gender		Percentage of independent directors	Percentage of directors who are also employees	All directors Age distribution	
			Business management	Leadership	Industry knowledge	Finance/Accounting	Information	Male	Female			Aged 50 and over	Aged 50 and below
Chairman	Arthur Yu-Cheng Chiao	M	V	V	V	V	V	70%	30%	40%	20%	70%	30%
Vice Chairman	Yuan-Mow Su	M	V	V	V	V	V						
Director	Yung Chin	F	V	V	V	V	V						
Independent director	Francis Tsai (Term: 6 years)	M	V	V	V	V	V						
Independent director	Allen Hsu (Term: 6 years)	M	V	V	V	V							
Independent director	Jerry Hsu (Term: 6 years)	M	V	V	V	V							
Independent director	Stephen T. Tso (Term: 1 year)	M	V	V	V		V						
Director	Wei-Hsin Ma	F	V	V	V	V	V						
Director	Chih-Chen Lin	M	V	V	V	V	V						
Director	Walsin Lihwa Corporation (Representative: Sophi Pan)	F	V	V	V	V							

Note: Mr. San-Cheng Chang resigned as an independent director from Winbond's Board of Directors on November 16, 2019.

## 2. Profile of President, Vice Presidents, Assistant Vice Presidents, and Department and Branch Managers

March 31, 2020

Title	Nationality	Name	Gender	Date appointed	Shares held		Shares held by spouse and minor children		Shares held in the name of others		Main work (education) experiences	Other positions	Other manager who is the spouse or a relative within second degree			Note
					Shares	% (Note 2)	Shares	% (Note 2)	Shares	(Note 2)			Title	Name	Relationship	
CEO	ROC	Arthur Yu-Cheng Chiao	M	2005.08.01	63,472,995	1.59%	11,778,797	0.30%	-	-	•Master in Electrical Engineering and Researcher of Management College of Washington University •Chairman of Walsin Lihwa Corp.	Note 3	None	None	None	Note 12
Deputy CEO	ROC	Yuan-Mow Su (Note 4)	M	2017.06.13	801,279	0.02%	-	-	-	-	•MSEE, University of Southern California •Vice Chairman and Deputy CEO of Winbond Electronics Corp.	•Chairman of Winbond Electronics Corporation America •Director of Winbond Electronics (Suzhou) Ltd. •Director of Winbond Electronics (HK) Ltd.	None	None	None	None
Deputy CEO	ROC	Tung-Yi Chan (Note 5)	M	2009.02.09	901,000	0.02%	-	-	-	-	•Ph.D. in Electrical Engineering, U.C. Berkeley and Master in Management Science, Stanford University •President of Winbond Electronics Corp.(Incumbent) •BCD Semiconductor CEO	Note 5	None	None	None	None
President	ROC	Pei-Ming Chen (Note 6)	M	2005.10.01	362,767	-	-	-	-	-	•M.S.E.E., University of Detroit, USA •Chairman of Nuvoton Technology Co. •Vice President of DRAM Product Business Group of Winbond Electronics Corp.	Note 6	None	None	None	None
Vice President	ROC	Cheng-Kung Lin	M	2006.11.01	1,684,607	0.04%	175,978	0.00%	-	-	•MS in Engineering Technology of National Taiwan University of Science and Technology •Division Director and Assistant Vice President of Winbond Electronics Corporation	•President of Winbond Electronics (Suzhou) Ltd. •Chairman of Callisto Holding Limited •Director of Callisto Technology Limited •Director of Pine Capital Investment Ltd. •Director of Hwa Bao Botanic Conservation Corp.	None	None	None	None
Vice President	ROC	Chin-Fen Tsai	M	2011.11.01	335,000	0.01%	-	-	-	-	•Ph.D. in Material Science and Engineering of University of Utah •Vice President of Winbond Electronics Sales & Marketing •CTO of General Energy Solutions Inc. •Vice President of Eversol Corp. •Deputy Divisional Director, UMC	None	None	None	None	None
Vice President	ROC	Pei-Lin Pai	M	2014.10.01	191,608	0.00%	9,000	0.00%	-	-	•Ph.D. in Electrical Engineering, U.C. Berkeley •Vice President of Embedded Memory Business Group of Winbond Electronics Corp. •Vice President of FocalTech Systems Co., Ltd. •Vice President of Nanya Technology Co., Ltd. •President of Ascent Semiconductor Corporation	•Director of HITI Digital Inc. •Independent director of Green River Holding Co., Ltd. •Supervisor of Excelsior Bio-System Incorporation	None	None	None	None
Vice President, Chief Financial Officer, and Corporate Governance Officer	ROC	Jessica Huang (Note 7)	F	2015.04.01	555,290	0.01%	-	-	-	-	•MBA, Indiana University •Chief Auditor of Winbond Electronics Corp. •Vice President, Citibank	Note 7	None	None	None	None

Title	Nationality	Name	Gender	Date appointed	Shares held		Shares held by spouse and minor children		Shares held in the name of others		Main work (education) experiences	Other positions	Other manager who is the spouse or a relative within second degree			Note
					Shares	% (Note 2)	Shares	% (Note 2)	Shares	% (Note 2)			Title	Name	Relationship	
Vice President	ROC	Hsiang-Yun Fan (Note 8)	M	2019.08.01	220,804	0.01%	-	-	-	-	<ul style="list-style-type: none"> <li>•MBA, National Chung Cheng University</li> <li>•Vice President of Administration Center of Nuvoaton Technology Corp.</li> </ul>	Note 8	None	None	None	None
Vice President	ROC	Wen-Hua Lu (Note 9)	M	2019.11.01	451	-	-	-	-	-	<ul style="list-style-type: none"> <li>•MS in Material Science and Engineering, National Taiwan University</li> <li>•Division Director, Assistant Vice President, and Deputy Technical Executive of Winbond Electronics Corp.</li> <li>•Assistant Researcher of Material and Chemical Research Laboratories, ITRI</li> </ul>	None	None	None	None	None
Chief Business Officer	U.S.A	Eungjoon Park	M	2008.08.04	250,000	0.01%	-	-	-	-	<ul style="list-style-type: none"> <li>•Master in Electrical Engineering, U.C. Berkeley</li> <li>•Executive Vice President of Winbond Electronics Corp. America</li> <li>•Executive Vice President of NexFlash Technologies Inc.</li> <li>•Vice President of Azalea Microelectronics Corp.</li> </ul>	Director and President of Winbond Electronics Corporation America	None	None	None	None
Assistant Vice President	ROC	Shi-Yuan Wang	M	2005.08.01	817,200	0.02%	202,689	0.01%	-	-	<ul style="list-style-type: none"> <li>•M.S. in Electric Engineering, National Tsing Hua University</li> <li>•Junior Engineer, Industrial Technology and Research Institute</li> </ul>	None	None	None	None	None
Assistant Vice President	ROC	Eddy Hung	M	2012.01.16	68,990	0.00%	6,000	0.00%	-	-	<ul style="list-style-type: none"> <li>•M.S. in Industrial Engineering and System Management, Chung Hua University</li> </ul>	<ul style="list-style-type: none"> <li>•Director of Winbond Electronics (Suzhou) Ltd.</li> <li>•Director of Winbond Electronics (HK) Ltd.</li> <li>•Director of Winbond Electronics Corporation Japan</li> <li>•Director of Winbond Electronics Germany GmbH</li> </ul>	None	None	None	None
Assistant Vice President	ROC	Mao-Hsiang Yen	M	2012.07.01	332,017	0.01%	10,893	0.00%	-	-	<ul style="list-style-type: none"> <li>•MS in Electric Engineering, National Cheng Kung University</li> </ul>	None	None	None	None	None
Assistant Vice President	ROC	Hsiu-Han Liao	M	2014.10.01	309,213	0.01%	-	-	-	-	<ul style="list-style-type: none"> <li>•M.S., Institute of Electronics, National Chiactung University</li> <li>•Division Director of Winbond Electronics Corporation</li> <li>•Project Division Director of Epsil Technologies Inc.</li> <li>•Senior Division Director of Brilliance Semiconductor Corporation</li> </ul>	None	None	None	None	None
Assistant Vice President	ROC	Yo-Song Cheng (Note 10)	M	2015.04.01	173,832	0.00%	-	-	-	-	<ul style="list-style-type: none"> <li>•D.E.Eng., Tamkang University</li> <li>•Division Director, Assistant VP, and Deputy Technology Executive of Winbond Electronics Corporation</li> </ul>	None	None	None	None	None
Deputy Director and Chief Accounting Officer	ROC	Chin-Feng Yang (Note 11)	F	2020.03.01	54,002	-	-	-	-	-	<ul style="list-style-type: none"> <li>•M.A. in accounting, National Chengchi University</li> <li>•Manager, Senior Manager, and Professional Director of Winbond Electronics Corp.</li> </ul>	None	None	None	None	None

Note 1: Management is defined the same as the interpretation provided in the Ministry of Finance letter Tai-Cai-Zheng-San-Zi- 0920001301, including president, vice president, assistant vice president, chief financial officer and chief accounting officer.



Note 2: "Shareholding percentage" was based on then issued and outstanding common shares of 3,980,000,193 shares as of Tuesday, March 31, 2020.

Note 3: Refer to Note 3 under Profile of Directors (1).

Note 4: Mr. Yuan-Mow Su was a deputy CEO at Winbond from June 13, 2017 to February 29, 2020. The above table discloses his information up to the date his service as a managerial officer of the Company ends.

Note 5: Mr. Tung-Yi Chan is promoted from president to deputy CEO starting March 1, 2020. Mr. Tong-Yi Chan serves concurrently as Chairman of Winbond (Suzhou) Integrated Circuit, and Director of Walton Advanced Engineering, Inc., Walsin Lihwa Corp., Winbond International Corporation, Winbond Electronics Corporation America, Winbond Electronics Corporation Japan, Landmark Group Holdings Ltd., Peaceful River Corp., Pine Capital Investment Ltd., and Marketplace Management Limited.

Note 6: Mr. Pei-Ming Chen was a vice president at Winbond from October 1, 2005 to July 31, 2019. He is promoted from technical director to president starting March 1, 2020. The above table discloses his information during his service as a manager of the Company. Mr. Pei-Ming Chen serves concurrently as Chairman of Winbond Technology Ltd., and Director of Winbond Electronics (Suzhou) Ltd., Winbond Electronics Corporation America, NuvoTon Technology (Shanghai) Ltd., NuvoTon Technology (Hong Kong) Ltd., NuvoTon Technology (Shenzhen) Ltd., NuvoTon Technology Corporation America, and NuvoTon Technology Israel Ltd.

Note 7: Ms. Jessica Huang was relieved of the concurrent position as chief accounting officer on March 1, 2020. Ms. Jessica Huang serves concurrently as Director of Winbond Electronics (H.K.), Winbond Technology Ltd., Winbond Electronics Corporation Japan, Winbond Electronics Corporation America, Winbond Electronics (Suzhou) Ltd., and NuvoTon Investment Holding Ltd.; President of Pine Capital Investment Ltd.; Supervisor of Search Marketing Co. and Chin Xin Investment Corp.; and Manager of Goldbond LLC.

Note 8: Mr. Hsiang-Yun Fan was appointed as vice president starting August 1, 2019. Mr. Hsiang-Yun Fan serves concurrently as Director of Winbond Electronics Germany GmbH, Callisto Holding Limited, Landmark Group Holdings Ltd., Winbond Electronics Corporation Japan, Winbond International Corporation, Winbond Electronics Corporation America, and Winbond Electronics (H.K.); and Chairman of Song Yong Investment Corporation.

Note 9: Mr. Wen-Hua Lu was appointed as vice president starting November 1, 2019.

Note 10: Mr. Yo-Song Cheng was an assistant VP at Winbond from April 1, 2015 to October 13, 2019. The above table discloses his information up to the date his service as a manager of the Company ends.

Note 11: Ms. Jin-Feng Yang is appointed chief accounting officer starting March 1, 2020.

Note 12: Refer to Note 15 under Profile of Directors (1).

### (III) Remunerations to directors, supervisors, president, and vice presidents in recent years

#### 1. Remuneration to directors and independent directors

December 31, 2019; Unit: NT\$1,000

Title	Name	Director's remuneration						A+B+C+D as a percentage of after-tax net profit (%) (Note 7)		Pay received as an employee				Ratio of total (A), (B), (C), (D), (E), (F) and (G) to after-tax income (%) (Note 7)		Remuneration received from parent company or investees other than subsidiaries, if any (Note 8)	
		Remuneration (A) (Note 1)		Pension (B) (Note 2)		Director's remuneration (C) (Note 3)		Business expense (D) (Note 4)		Salary, bonus and special allowance (E) (Note 5)		Pension (F) (Note 2)		Employee compensation (G) (Note 3)			
		Winbond	All companies in consolidated statements (Note 6)	Winbond	All companies in consolidated statements (Note 6)	Winbond	All companies in consolidated statements (Note 6)	Winbond	All companies in consolidated statements (Note 6)	Winbond	All companies in consolidated statements (Note 6)	Cash	Stock	Winbond	All companies in consolidated statements (Note 6)		
Chairman	Arthur Yu-Cheng Chiao	-	-	8,591	2,160	2,352	0.86	0.93	43,601	48,152	95	323	170	-	4.35	4.80	26,980
	Vice Chairman	Yuan-Mow Su	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		Director	Yung Chin	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Director	Wei-Hsin Ma	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		Director	Chih-Chen Lin	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Director	Walsin Lihwa Corporation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		Representative	Sophi Pan	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Independent Director	Francis Tsai	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Independent Director	Allen Hsu	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Independent Director	Jerry Hsu	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Independent Director	Da-Chuan Zuo	2,653	3,133	5,428	1,592	1,832	0.77	0.95	-	-	-	-	-	0.77	0.95		
Independent Director	San-Cheng Chang	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
1. The Winbond Rules for Remuneration of Directors and Performance Evaluation of the Board of Directors state explicitly that for remuneration for directors and independent directors, salaries and compensation should depend on the company's long- and short-term business plans, and be based on the industry standards and the results of board performance evaluation. Individual salaries should be decided by a collegial approach consistent with the board's nature, and follow the equality principle. Salaries may be adjusted to reflect changes in responsibilities or actual needs.																	
2. Except as disclosed above, remuneration received by directors for services rendered to all companies in the latest year consolidated statements (e.g. acting as a non-employee consultant) : 0																	

Note 1: Remuneration to the director in the past year (including salary, additional pay, severance pay, bonuses and rewards).

Note 2: Pension includes:

- Amount equal to 6% of the monthly salary paid into an account at the Bureau of Labor Insurance pursuant to the new pension system under the Labor Pension Act.
- Amount equal to 2% of the monthly salary deposited into an account at Bank of Taiwan under the name of the Company's Pension Supervision Committee pursuant to the old pension system under the Labor Standards Act.
- Other types of pensions that should be paid according to law in addition to the pensions that require appropriation as described above.

Note 3: For 2019, the board of directors has approved a 1% distribution for director remuneration, which, based on the audited profit, will be NT\$14,019 thousand. As of the date of the report, compensation to individual directors who also worked as an employee has not been decided. The figures in the table above are estimates.

Note 4: This is business expense of directors in the past year (including transportation allowance, special allowance, stipends, dormitory, and car).

Note 5: All pays to the director who is also employee of the Company (including the position of president, vice president, other managerial officer and staff), including salary, additional pay, severance pay, bonuses, rewards, transportation allowance, special allowance, stipends, dormitory, and car. In addition, according to IFRS2, salary expenses recognized under "share-based payment" including employee stock options, restricted stock award and stocks subscribed through cash capital increase should also be included in the remuneration.

Note 6: The total pay to the director from all companies in the consolidated statements (including the Company).

Note 7: Calculated based on the Company's after-tax income from the 2019 stand-alone financial statements of NT\$1,256,387 thousand.

Note 8: a. This field shows the amount of remuneration a director of the Company receives from investees other than subsidiaries of the Company.

b. The remuneration means pay, compensation (including compensation of employees, directors and supervisors) and business expenses received by the director serving as a director, supervisor or manager of an investee of the Company other than subsidiaries.

Note 9: Mr. San-Cheng Chang resigned as an independent director from Winbond's Board of Directors on November 16, 2019.

Range of remuneration paid to each director	Name of director				
	Total of (A+B+C+D)		Total of (A+B+C+D+E+F+G)		
	Winbond	All companies in consolidated statements	Winbond	Winbond and all investees (Note)	
Below NT\$1,000,000	Walsin Lihwa Corporation (representative: Sophi Pan)	Walsin Lihwa Corporation (representative: Sophi Pan)	Walsin Lihwa Corporation (representative: Sophi Pan)		
NT\$ 1,000,000 (inclusive) ~ NT\$ 2,000,000 (exclusive)	Yuan-Mow Su, Yung Chin, Wei-Hsin Ma, Chih-Chen Lin, Walsin Lihwa Corporation, Stephen T. Tso, San-Cheng Chang	Yuan-Mow Su, Wei-Hsin Ma, Chih-Chen Lin, Walsin Lihwa Corporation, Stephen T. Tso, San-Cheng Chang	Wei-Hsin Ma, Chih-Chen Lin, Walsin Lihwa Corporation, Stephen T. Tso, San-Cheng Chang	Chih-Chen Lin, Walsin Lihwa Corporation (representative: Sophi Pan), Stephen T. Tso, San-Cheng Chang	
NT\$ 2,000,000 (inclusive) ~ NT\$ 3,500,000 (exclusive)	Arthur Yu-Cheng Chiao, Francis Tsai, Allen Hsu, Jerry Hsu	Arthur Yu-Cheng Chiao, Yung Chin, Francis Tsai, Allen Hsu, Jerry Hsu	Francis Tsai, Allen Hsu, Jerry Hsu	Wei-Hsin Ma, Francis Tsai, Allen Hsu, Jerry Hsu	
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)			Yung Chin	Yung Chin	
NT\$ 15,000,000 (inclusive) ~ NT\$ 30,000,000 (exclusive)			Arthur Yu-Cheng Chiao, Yuan-Mow Su	Arthur Yu-Cheng Chiao, Yuan-Mow Su, Walsin Lihwa Corporation	
NT\$ 30,000,000 (inclusive) ~ NT\$ 50,000,000 (exclusive)					
NT\$ 50,000,000 (inclusive) ~ NT\$ 100,000,000 (exclusive)					
Greater than NT\$ 100,000,000					
Total	12 people	12 people	12 people	12 people	

Note: When calculating the range of remuneration, remuneration received by each director from investees other than subsidiaries was also included.

## 2. Remunerations to president and vice president

Title	Name	Salary (A) (Note 1)		Pension (B) (Note 2)		Bonus and special allowance (C) (Note 3)		Employee compensation (D) (Note 4)				A+B+C+D as a percentage of after-tax net profit (%) (Note6)		Remuneration received from parent company or investees other than subsidiaries, if any (Note 7)
		Winbond	All companies in consolidated statements (Note 5)	Winbond	All companies in consolidated statements (Note 5)	Winbond	All companies in consolidated Statements (Note 5)	Winbond	All companies in consolidated statements (Note 5)	Cash	Stock	Winbond	All companies in consolidated statements (Note 5)	
CEO	Arthur Yu-Cheng Chiao													
Deputy CEO	Yuan-Mow Su													
President	Tung-Yi Chan													
Vice President	Pei-Ming Chen (Note 8)													
Vice President	Hsiang-Yun Fan (Note 9)													
Vice President	Cheng-Kung Lin													
Vice President	Chin-Fen Tsai	45,618	50,813	635	862	64,185	64,185	474	0	474	0	8.83	9.26	3,406
Vice President	Pei-Lin Pai													
Vice President	Wen-Hua Lu (Note 10)													
Vice President, Chief Financial Officer, Chief Accounting Officer, and Corporate Governance Officer	Jessica Huang													

December 31, 2019; Unit: NT\$1,000

Note 1: Salary, additional pay, and severance pay received by the president or vice president in the past year.

Note 2: Pension includes:

- a. Amount equal to 6% of the monthly salary paid into an account at the Bureau of Labor Insurance pursuant to the new pension system under the Labor Pension Act.  
b. Amount equal to 2% of the monthly salary deposited into an account at Bank of Taiwan under the name of the Company's Pension Supervision Committee pursuant to the old pension system under the Labor Standards Act.

- c. Other types of pensions that should be paid according to law in addition to the pensions that require appropriation as described above.

Note 3: Bonus, reward, transportation allowance, special allowance, stipends, dormitory, car and other pays received by the president or vice president in the past year. In addition, according to IFRS2, salary expenses recognized under "share-based payment" including employee stock options, restricted stock award and stocks subscribed through cash capital increase should also be included in the remuneration.

Note 4: The Company's Board of Directors has passed the 2019 compensation plan for employees. Figures of employee compensation to president and vice presidents in the table above are estimates.

Note 5: The total pay to the president or vice president from all companies in the consolidated statements (including the Company).

Note 6: Calculated based on the Company's after-tax income from the 2019 stand-alone financial statements of NT\$1,256,387 thousand.

Note 7: a. This field shows the amount of remuneration the president or vice president of the Company receives from investees other than subsidiaries of the Company.

- b. The remuneration means pay, compensation (including compensation of employees, directors and supervisors) and business expense received by the president or vice president serving as a director, supervisor or manager of an investee of the Company other than subsidiaries.

Note 8: Mr. Pei-Ming Chen was a vice president at Winbond from October 1, 2005 to July 31, 2019. The above table discloses his information up to the date his service as a managerial officer of the Company ends.

Note 9: Mr. Hsiang-Yun Fan was appointed as vice president starting August 1, 2019. The above table discloses his information during his service as a manager of the Company.

Note 10: Mr. Wen-Hua Lu was appointed as vice president starting November 1, 2019. The above table discloses his information during his service as a manager of the Company.

Range of remuneration paid to presidents and vice presidents	Names of presidents and vice presidents	
	Winbond	Winbond and all investees (Note)
Below NT\$1,000,000	Wen-Hua Lu	Wen-Hua Lu
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)	Hsiang-Yun Fan	Hsiang-Yun Fan
NT\$ 5,000,000 (inclusive) ~ NT\$ 10,000,000 (exclusive)		
NT\$ 10,000,000 (inclusive) ~ NT\$ 15,000,000 (exclusive)	Cheng-Kung Lin, Chin-Fen Tsai, Jessica Huang	Chin-Fen Tsai, Jessica Huang
NT\$ 15,000,000 (inclusive) ~ NT\$ 30,000,000 (exclusive)	Pei-Ming Chen, Pei-Lin Pai,	Cheng-Kung Lin, Pei-Ming Chen, Pei-Lin Pai,
NT\$ 30,000,000 (inclusive) ~ NT\$ 50,000,000 (exclusive)	Arthur Yu-Cheng Chiao, Yuan-Mow Su, Tung-Yi Chan	Arthur Yu-Cheng Chiao, Yuan-Mow Su, Tung-Yi Chan
NT\$ 50,000,000 (inclusive) ~ NT\$ 100,000,000 (exclusive)		
Greater than NT\$ 100,000,000		
Total	10 people	10 people

Note: When calculating the range of remuneration, remuneration received by president and vice presidents from investees other than subsidiaries was also included.



### 3. Manager's name and the distribution of employee bonus

December 31, 2019; Unit: NT\$1,000

	Title	Name	Stock	Cash	Total	Total as a percentage of earnings (%) (Note 2)
Manager	CEO	Arthur Yu-Cheng Chiao	-	964	964	0.08%
	Deputy CEO	Yuan-Mow Su				
	President	Tung-Yi Chan				
	Vice President	Pei-Ming Chen (Note 4)				
	Vice President	Hsiang-Yun Fan (Note 5)				
	Vice President	Cheng-Kung Lin				
	Vice President	Chin-Fen Tsai				
	Vice President	Pei-Lin Pai				
	Vice President	Wen-Hua Lu (Note 6)				
	Vice President, Chief Financial Officer, Chief Accounting Officer and Corporate Governance Officer	Jessica Huang				
	Chief Business Officer	Eungjoon Park				
	Assistant Vice President	Shi-Yuan Wang				
	Assistant Vice President	Eddy Hung				
	Assistant Vice President	Mao-Hsiang Yen				
	Assistant Vice President	Hsiu-Han Liao				
	Assistant Vice President	Yo-Song Cheng (Note 3)				

Note 1: The Company's Board of Directors has passed the 2018 compensation plan for employees. Figures in the table above are estimates.

Note 2: Calculated based on the Company's after-tax income from the 2019 stand-alone financial statements of NT\$ 1,256,387.

Note 3: Mr. Yo-Song Cheng was an assistant VP at Winbond from April 1, 2015 to October 13, 2019. The above table discloses his information up to the date his service as a manager of the Company ends.

Note 4: Mr. Pei-Ming Chen was a vice president at Winbond from October 1, 2005 to July 31, 2019. The above table discloses his information up to the date his service as a managerial officer of the Company ends.

Note 5: Mr. Hsiang-Yun Fan was appointed vice president starting August 1, 2019. The above table discloses his information during his service as a manager of the Company.

Note 6: Mr. Wen-Hua Lu was appointed vice president starting November 1, 2019. The above table discloses his information during his service as a manager of the Company.

### 4. Analysis of remunerations to directors, supervisors, president and vice presidents etc. as a percentage of the after-tax income of the Company and all the companies' consolidated statements in the stand-alone financial statements from the last two years and description of the policy, standards and packages of remunerations, procedure for making such decision and correlation with business performance and future risks

#### (1) Analysis of remunerations to directors, supervisors, president and vice presidents as a percentage of the Company's after-tax income in the stand-alone financial statements from the last two years

Title	Total remuneration as a percentage of earnings (%)			
	2019		2018	
	Winbond	All companies in consolidated statements	Winbond	All companies in consolidated statements
Director	5.12%	5.75%	1.79%	1.86%
President and Vice Presidents	8.83%	9.26%	2.10%	2.17%

#### (2) Description of remuneration policy, standards and packages of remunerations, procedure for making such decision and correlation with business performance and future risks.

##### A. Remuneration policy, standards and packages of remunerations, procedure for making such decision

##### (A) Director

Article 22 of the Company's Articles of Incorporation: Not more than 1% of the Company's pre-tax earnings before deducting remunerations to employees and directors shall be appropriated as remuneration to directors.

The Remuneration Committee will recommend remuneration to directors and supervisors in accordance with the Company's articles of incorporation, the internal Rules for Remuneration and Performance Evaluation of Directors, board members' self-assessment results, and Company earnings for the year after deducting accumulated deficit, and report the recommendation to Shareholders' Meeting after it has been approved by the Board of Directors.

(B) President and Vice Presidents

The remuneration of managers will be decided in accordance with the Company's articles of incorporation and the internal Rules for Remuneration and Performance Evaluation of Managers, including salary, bonus and employee compensation systems and standards. The remuneration will be distributed after it is passed by the Remuneration Committee and approved by the Board of Directors.

B. Correlation with business performance and future risks

In a move to reduce operating risks, the Company established a Remuneration Committee in 2011. The committee reviews regularly the annual performance targets of directors, supervisors and managers as well as salary and remuneration policy, systems, standards and structure in view of actual operational status and related regulations to seek a balance between sustainable operations and risk management. As described above, there is a positive correlation between the remuneration of directors, supervisors and managers and the Company's business performance.

(IV) Implementation of corporate governance

1. Operation of Board of Directors

(1) A total of 8 (A) meetings of the Board of Directors were held in the most recent year. The attendance was as follows:

Title	Name	Attendance in person (B)	By proxy	Attendance rate (%) (B/A)	Notes
Chairman	Arthur Yu-Cheng Chiao	8	0	100%	
Vice Chairman	Yuan-Mow Su	8	0	100%	
Director	Yung Chin	8	0	100%	
Independent director	Francis Tsai	8	0	100%	
Independent director	Allen Hsu	6	2	75%	
Independent director	Jerry Hsu	2	6	25%	
Independent director	Stephen T. Tso	4	1	80%	Newly elected on June 14, 2019 Scheduled attendances: 5
Independent director	San-Cheng Chang	6	1	86%	Resigned on November 16, 2019 Scheduled attendances: 7
Director	Wei-Hsin Ma	7	1	88%	
Director	Chih-Chen Lin	7	1	88%	
Director	Walsin Lihwa Corporation (Representative: Sophi Pan)	6	0	75%	

(2) Resolutions adopted by the Board of Directors pursuant to Article 14-3 of the Securities and Exchange Act: The Company has set up an Audit Committee. Hence the provisions of Article 14-3 of the Securities and Exchange Act do not apply. For relevant information, please see p.23~p25 of this report.

(3) Other resolutions adopted by the Board of Directors, to which an independent Director has a dissenting or qualified opinion that is on record or stated in a written statement: None.

(4) Directors recused themselves from discussion or voting on an agenda item in which they have an interest:

Name of director	Agenda item	Reason for recusal	Voting on the agenda item	Notes
Arthur Yu-Cheng Chiao Yuan-Mow Su	Performance bonus for Q3 and Q4 2018 and retention of performance bonus for 201	The director has an interest in the matter	Did not participate in voting	13th meeting of 11th-term Board

Name of director	Agenda item	Reason for recusal	Voting on the agenda item	Notes
Arthur Yu-Cheng Chiao Yuan-Mow Su	Proposal of the 2018 employee compensation distribution plan.	The director has an interest in the matter	Did not participate in voting	13th meeting of 11th-term Board
Arthur Yu-Cheng Chiao Yuan-Mow Su	Proposal of the 2019 remuneration plan for individual managers.	The director has an interest in the matter	Did not participate in voting	13th meeting of 11th-term Board
Francis Tsai	Acquisition of Waffer Technology Corporation's wholly owned subsidiary, Great Target Development Ltd. (Seychelles), for an investment project in India.	The director has an interest in the matter	Did not participate in voting	14th meeting of 11th-term Board
Yung Chin Jerry Hsu Chih-Chen Lin Sophi Pan	Proposal to remove non-compete clause for directors (independent directors included).	The director has an interest in the matter	Did not participate in voting	14th meeting of 11th-term Board
Stephen T. Tso	Appointment of Independent Director Stephen T. Tso to serve as a member of the 3rd-term Remuneration Committee.	The director has an interest in the matter	Did not participate in voting	15th meeting of 11th-term Board
Arthur Yu-Cheng Chiao Yunng Chin Allen Hsu Jerry Hsu	Participation in cash issuance of capital increase by Nuvoton Technology Corporation for 2019	The director has an interest in the matter	Did not participate in voting	17th meeting of 11th-term Board

(5) Evaluation of Board of Directors:

The Company established a Board of Directors performance assessment system in 2011 to measure the works of directors guiding the Company's strategic directions and overseeing the Company's operations and management so as to help increase the long-term shareholder value. The staff in charge of board meeting affairs will compile the results and submit the results to the Remuneration Committee and the Board of Directors, and based on which, draw up the Board of Directors performance enhancement plan.

Frequency	Period	Scope	Method	Description	Result
Once a year (in December)	From January 1, 2019 to December 31, 2019	Board of Directors, Director and Functional committee	Member self-assessment	<p>(1) Board of Directors: Degree of participation in company operations; quality of board decisions; board composition and structure; selection of suitable board directors and continuing professional education; and internal control.</p> <p>(2) Individual director: Grasp of company targets and missions, understanding of the director's role and responsibilities, level of participation in company operations, internal relationship management and communication, director's specialty and continued development, and internal controls.</p> <p>(3) Functional committee: degree of participation in company operations, awareness of functional committee responsibilities, improvement in the quality of decision making by</p>	2019 evaluation results: All results of the self-assessments regarding the board of directors and the functional committees showed a relatively lower degree of participation in the company's business activities. Efforts to improve board performance will proceed in the following directions: 1) Strengthen the board's ability in managing the company's risks. (2) Increase board members' participation in the company's decision making process. The 2019 evaluation results have been submitted to the Remuneration Committee and the Board of Directors.

Frequency	Period	Scope	Method	Description	Result
				the functional committee, composition and structure of the functional committee and member selection, and internal control.	

(6) An evaluation of the goals set for strengthening the functions of the Board and implementation status during the current and immediately preceding fiscal years:

1. The Company has established the Rules of Procedures for Board of Directors Meetings in accordance with the Regulations Governing Procedure for Board of Directors Meetings of Public Companies and would post information on the attendance by directors and supervisors on the Market Observation Post System after each board meeting and disclose important resolutions adopted by board meetings on the Company website.
2. The Company holds strategy review meeting every quarter before the scheduled board meeting, at which directors and supervisors are present to understand Company's finance and business conditions as well as the execution of major business plans. The Company endeavors to enhance the transparency of corporate information. Aside from holding investors conference to discuss the Company's business and financial conditions after the semi-annual and annual board meetings, the Company also posts related information on the Market Observation Post System and Company website.

## 2. State of operations of the Audit Committee

The key tasks of the Audit Committee are as follows. The operations and proposals are listed in the table below.

I. Fair presentation of the company's financial reports.

II. The hiring (and dismissal) of certificated public accountants and evaluation of their independence and performance.

III. The effective implementation of the company's internal control system.

IV. Compliance with relevant laws and regulations.

V. Management of the existing or potential risks for the company.

Current term of office: Starting on June 13, 2017 and ending on June 12, 2020.

A total of 8 (A) meetings of the Audit Committee were held in 2019. The attendance was as follows:

Title	Name	Attendance in person (B)	By proxy	Attendance rate (%) (B/A)	Notes
Convenor of Audit Committee	Allen Hsu	6	2	75	N/A
Audit committee member	Francis Tsai	8	0	100	N/A
Audit committee member	Jerry Hsu	2	6	25	N/A
Audit committee member	Stephen T. Tso	4	1	80	Newly elected on June 14, 2019; scheduled attendances: 5
Audit committee member	San-Cheng Chang	5	2	71	Resigned on November 16, 2019; scheduled attendances: 7

Other matters that require reporting:

- I. If the operation of Audit Committee has any of the following situations, describe the date of board meeting, term of the board, agenda items, resolutions adopted by the board, and actions taken by the Company in response to the opinion of the audit committee:

(1) Matters provided under Article 14-5 of the Securities and Exchange Act.

Board of Directors Date/Term	Agenda item	Resolution adopted by the audit committee	Company's action with regard to the opinion of audit committee
2019.01.31 12th meeting of 11th-term Board	Preparation of the 2018 standalone financial report and consolidated financial report. Preparation of the 2019 consolidated business report, consolidated financial statements and affiliation report covering affiliated enterprises.	Passed by all committee members presented	None
	Preparation of the 2018 Statement on Internal Control System.	Same as above	None
	Proposal of the 2019 capital expenditure budget.	Same as above	None
	Proposal for annual remuneration paid to Deloitte & Touche accounting firm.	Same as above	None
2019.03.25 13th meeting of 11th-term Board	Preparation of the 2018 business report.	Same as above	None
	Preparation of the 2018 earnings distribution plan.	Same as above	None
	Amendment of the Procedure for Acquisition and Disposal of Assets.	Same as above	None
	Amendment of the Procedure for Engaging in Financial Derivative Transactions.	Same as above	None
2019.04.26 14th meeting of 11th-term Board	Proposal to increase the 2019 capital expenditure budget.	Same as above	None
	Acquisition of Waffer Technology Corporation's wholly owned subsidiary, Great Target Development Ltd. (Seychelles), for an investment project in India.	Same as above	None
	Establishment of a wholly owned subsidiary in Germany.	Same as above	None
	Amendment of the Rules for Endorsements and Guarantees and its renaming to the Procedures for Making Endorsements and Guarantees.	Same as above	None
	Amendment of the Operating Procedure for Fund Lending.	Same as above	None
	Amendment of the Internal Control System for Shareholder Service Unit.	Same as above	None
	Proposal to remove non-compete clause for directors (independent directors included).	Same as above	None
2019.07.26 15th meeting of 11th-term Board	Preparation of the 2019 Q2 consolidated financial report.	Same as above	None
	Proposal to increase the 2019 capital expenditure budget.	Same as above	None
	Proposal not to distribute earnings for the first half of the 2019 fiscal year.	Same as above	None
	Proposal for the short-form merger with the wholly owned subsidiary Mobile Magic Design Corp.	Same as above	None
2019.08.22 16th meeting of 11th-term Board	Proposal to increase the 2019 capital expenditure budget.	Same as above	None
2019.09.10 17th meeting of 11th-term Board	Participation in capital increase by Nuvoton Technology Corporation for 2019	Same as above	None
	Passed the proposal to grant the chairman the authority in the negotiation regarding Nankang real estate project in Taipei.	Same as above	None
2019.10.25 18th meeting of 11th-term Board	Increased the budget for capital expenditure.	Same as above	None
	Finalization of the 2020 audit plan.	Same as above	None
2019.12.23 19th meeting of 11th-term Board	Increased the budget for capital expenditure.	Same as above	None
	Proposal to change signing CPA in 2019 Q4.	Same as above	None



(2) Matters not passed by the audit committee but approved with the consent of more than two thirds of all directors:  
None

- II. With respect to independent directors recusing themselves from discussion or voting on an agenda item in which they have an interest, describe the name of independent director, agenda item, reason for recusal and voting on the agenda item:

Name of independent director	Agenda item	Reason for recusal	Voting on the agenda item	Notes
Francis Tsai	Acquisition of Waffer Technology Corporation's wholly owned subsidiary, Great Target Development Ltd. (Seychelles), for an investment project in India.	The director has an interest in the matter	Did not participate in voting	14th meeting of 11th-term Board
Jerry Hsu	Proposal to remove non-compete clause for directors (independent directors included).	The director has an interest in the matter	Did not participate in voting	14th meeting of 11th-term Board

- III. Communication between independent directors and the Company's internal audit chief and CPA (material items on Company's finance and business communicated, methods and results of communication):

(1) Communication between independent directors and internal audit chief:

- The audit unit conducted audits according to the annual audit plan. The audit chief submitted the completed audit report (or follow-up report) to the independent directors for examination in the following month, and periodically reported to audit committee the implementation of the audit operation, to which the audit committee members did not raise any objection.
- Internal audit chief's periodic reporting to the Board of Directors and Audit Committee. The communication between independent directors and the internal audit chief are as follows:

Date	Gist of communication	Suggestions and actions taken by the Company
2019.01.31 (10th meeting of 1st-term Audit Committee)	<ul style="list-style-type: none"> <li>2018 Q4 follow-up of improvement actions taken for deficiencies found in the previous period and 2018 Q4 audit results</li> <li>2018 self-evaluation of internal control system</li> <li>2018 Statement on Internal Control System.</li> </ul>	<ul style="list-style-type: none"> <li>None of the independent directors expressed dissent.</li> <li>The Committee gave consent to the 2018 Statement on Internal Control System, which will be submitted to the Board of Director for approval.</li> </ul>
2019.04.26 (12th meeting of first-term Audit Committee)	<ul style="list-style-type: none"> <li>2019 Q1 follow-up of improvement actions taken for deficiencies found in the previous period and 2019 Q1 audit results.</li> </ul>	<ul style="list-style-type: none"> <li>None of the independent directors expressed dissent.</li> </ul>
2019.07.26 (13th meeting of 1st-term Audit Committee)	<ul style="list-style-type: none"> <li>2019 Q2 follow-up of improvement actions taken for deficiencies found in the previous period and 2019 Q2 audit results.</li> </ul>	<ul style="list-style-type: none"> <li>None of the independent directors expressed dissent.</li> </ul>
2019.10.25 (16th meeting of 1st-term Audit Committee)	<ul style="list-style-type: none"> <li>2019 Q3 follow-up of improvement actions taken for deficiencies found in the previous period and 2019 Q3 audit results.</li> <li>2020 audit plan.</li> </ul>	<ul style="list-style-type: none"> <li>None of the independent directors expressed dissent.</li> <li>The Committee gave consent to the 2020 audit plan, which will be submitted to the Board of Directors for approval.</li> </ul>

(2) Communication between independent directors and CPA:

- If deemed necessary, independent directors would communicate directly with CPA on the financial condition of the Company. The communications taken place are as follows:

Date	Gist of communication	Suggestions and actions taken by the Company
2019.01.31 (10th meeting of 1st-term Audit Committee)	<ul style="list-style-type: none"> <li>CPA and independent directors discussed 2018 audit findings on key audit matters (KAM).</li> <li>CPA and independent directors discussed the reasonableness analysis report on inventory devaluation of slow-moving inventory.</li> <li>CPA and independent directors discussed the final opening ledgers under IFRS 16 for 2019.</li> </ul>	<ul style="list-style-type: none"> <li>None of the independent directors expressed dissent.</li> </ul>
2019.07.26 (13th meeting of 1st-term Audit Committee)	<ul style="list-style-type: none"> <li>CPA and independent directors discussed the reasonableness of allowance to inventory write-downs and inventory turnover, and collection turnover.</li> </ul>	<ul style="list-style-type: none"> <li>None of the independent directors expressed dissent.</li> </ul>

### 3. State of operations of the Remuneration Committee:

The Remuneration Committee is in charge of the performance evaluation of directors, supervisors and managers, setting and reviewing the remuneration policy, system standards and structure, and the remuneration of individual director, supervisor and manager, and propose same to the Board of Directors for discussion.

Responsibilities of Remuneration Committee:

1. Periodically review Remuneration Committee rules and offer suggestions for amendment.
2. Set and review the annual performance targets for directors and managers as well as salary and remuneration policy, system, standards and structure.
3. Periodically evaluate the attainment of performance targets by directors and managers, and set the components and amount of salary and compensation for individual director and manager.

(1) The Remuneration Committee comprises 4 members, who are all independent directors of the Company with the following qualifications:

Status	Criteria	Has at least 5 years of work experience and meet one of the following professional qualifications			Compliance of independence (Note)										Number of other public companies in which the member also serves as a member of their Remuneration Committee	Notes
		An instructor or higher position in the department of commerce, law, accounting, finance or other department related to the business needs of the Company in a public or private junior college or university	A Judge, Public Prosecutor, Attorney, Certified Public Accountant, or Other Professional or Technical Specialists Who Has Passed a National Examination and been Awarded a Certificate in a Profession Necessary for the Business of the Company	Have work experience in commerce, law, accounting, finance, or a profession necessary for the business of the Company	1	2	3	4	5	6	7	8	9	10		
Independent director	Francis Tsai			V	V	V	V	V	V	V	V	V	V	V	-	Convener
Independent director	Allen Hsu			V	V	V	V	V	V	V	V	V	V	V	1	
Independent director	Jerry Hsu			V	V	V	V	V	V	V	V	V	V	V	2	
Independent director	Stephen T. Tso			V	V	V	V	V	V	V	V	V	V	V	1	July 26, 2019: Newly elected
Independent director	San-Cheng Chang			V	V	V	V	V	V	V	V	V	V	V	-	November 16, 2019: Resigned

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 "V" 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 any of its affiliates; The same does not apply in cases where the committee member is an independent director of the Company, its parent company, or any subsidiary established in accordance with the ROC law or law of the host country.
- (3) Not a natural-person shareholder whose shareholding, together with those of his/her spouse, minor children, and shares held under others' names, exceed 1% of the total number of outstanding shares of the Company, or ranks the person in the top ten shareholders of the Company.
- (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 or closer to anyone listed in (2) or (3).
- (5) Not a director, supervisor or employee of an institutional shareholder holding directly 5% or more of the company's shares, being one of the top five shareholders, or being appointed a director or supervisor of the company pursuant to Article 27, Paragraph 1 or 2 of the Company Act (except where the person is simultaneously an independent director of the Company and its parent company, a subsidiary or another subsidiary of the same parent company appointed pursuant to the Securities and Exchange Act or local regulations).
- (6) Not a director, supervisor or employee of another company that has the same directors as the Company or is controlled by the same person that has more than half of the voting power in the Company (except where the person is simultaneously an independent director of the Company or

- its parent company, a subsidiary or another subsidiary of the same parent company appointed pursuant to the Securities and Exchange Act or local regulations)
- (7) Not a director, supervisor or employee of another company or institution that has the same chairman, president, or the equivalent or a spouse in one of the roles as the Company (except where the person is simultaneously an independent director of the Company and its parent company, a subsidiary or another subsidiary of the same parent company appointed pursuant to the Securities and Exchange Act or local regulations).
- (8) Not a director, supervisor, manager or shareholder holding 5% or more of the Company's shares of certain company or institution that has a financial or business relationship with the Company (except where the certain company or institution holds 20% or more but no more than 50% of the Company's shares and is simultaneously an independent director of the Company and its parent company, a subsidiary or another subsidiary of the same parent company appointed pursuant to the Securities and Exchange Act or local regulations).
- (9) Not a professional who provides audit or receives no more than NT\$500,000 in cumulative compensation in the last two years for commercial, legal, financial, or accounting services to the Company or its affiliates, nor is an owner, partner, director, supervisor, or manager, or the spouse of any of the above, of a sole proprietorship, partnership, company, or organization that provides such services to the Company or its affiliates. However, exception applies to members of a remuneration committee, a take-over bid review committee, or a special committee for merger and acquisition exercising their authority pursuant to provisions of the Securities and Exchange Act or the Business Mergers and Acquisitions Act.
- (10) Not been a person in any of the circumstances listed in Article 30 of the Company Act.

## (2) Operation of Remuneration Committee:

The third term of office: Between June 13, 2017 to June 12, 2020, the Remuneration Committee held a total of 3 (A) meetings in the most recent year. The members' attendances were as follows:

Title	Name	Attendance in person (B)	By proxy	Attendance rate (%) (B/A)	Notes
Convener	Francis Tsai	4	0	100%	
Member	Allen Hsu	3	1	75%	
Member	Jerry Hsu	0	4	-	
Member	Stephen T. Tso	2	0	100%	Newly elected on July 25, 2019; scheduled attendances: 2
Member	San-Cheng Chang	2	1	67%	Resigned on November 16, 2019; scheduled attendances: 3

Other matters that require reporting:

- I. If the Board of Directors did not adopt or revised the recommendations of the Remuneration Committee, describe the date of board meeting, term of the board, agenda item, resolutions adopted by the board, and actions taken by the company in response to the opinion of the Remuneration Committee: N/A.
- II. If with respect to any resolution of the Remuneration Committee, any member has a dissenting or qualified opinion that is on record or stated in a written statement, describe the date of committee meeting, term of the committee, agenda item, opinions of all members, and actions taken by the company in response to the opinion of members: N/A.
- III. Proposals to and resolutions of the Remuneration Committee in the past year and the company's response to the members' opinions:

Remuneration Committee	Item	Resolution	The company's response to the members' opinions
2019.03.25 6th meeting of 3rd-term committee	Proposal of the 2018 remuneration for individual directors on the 11th-term board.	Passed by all committee members present	None
	Proposal of the 2019 remuneration for individual directors on the 11th-term board.	Same as above	None
	Proposal of the 2018 Q3 and Q4 performance bonus for managerial officers and the 2018 retention bonus.	Same as above	None
	Proposal of the 2018 employee compensation distribution plan.	Same as above	None
	Proposal of the 2019 remuneration plan for managerial officers.	Same as above	None
	Appointment of Vice President of Finance Jessica Huang to serve concurrently as the chief governance officer.	Same as above	None
	Review of the Organizational Rules for Remuneration Committee for compliance. No correction was needed given no change was required by any change of the law.	N/A.	N/A.

Remuneration Committee	Item	Resolution	The company's response to the members' opinions
2019.07.25 7th meeting of 3rd-term committee	Proposal of the 2019 remuneration plan for Independent Director Stephen T. Tso.	Passed by all committee members present	None
	Appointment of Mr. Hsiang-Yun Fan as vice president of the company.	Same as above	None
	Discharge of Mr. Pei-Ming Chen as the VP of DRAM Product Business Group and managerial officer.	Same as above	None
	Discharge of Mr. Yo-Song Cheng as a managerial officer.	Same as above	None
	Amendment to the Rules for Manager Retirement.	Same as above	None
2019.10.25 8th meeting of 3rd-term committee	Finalization of the 2019 director compensation distribution plan.	Same as above	None
	Finalization of the 2019 employee compensation distribution plan.	Same as above	None
	Promotion of Mr. Wen-Hua Lu to vice president.	Same as above	None
2019.12.23 9th meeting of 3rd-term committee	Amendment of the Rules for Remuneration and Performance Evaluation of Directors and renaming to the Rules for Remuneration of Directors and Performance Evaluation of the Board of Directors.	Same as above	None

The Company held a routine meeting of the Remuneration Committee for the first half of the year to review the policies, systems, standards and structures regarding director and managerial performance evaluation and remuneration. In its 11th meeting, the 3rd-term Remuneration Committee discussed the following: (1) Regarding board performance evaluation, external evaluation should be conducted every 3 years to improve board efficiency, and the Rules for Remuneration of Directors and Performance Evaluation of the Board of Directors were amended accordingly. No change to the policy, structure, system and standards of director remuneration was required after they were reviewed and found consistent with the requirements of annual reports and the actual demands of business management. (2) The Rules for Remuneration and Performance Evaluation of Managerial Officers were reviewed. No change to the policies, structures, systems and standards of performance evaluation and remuneration was required as they were found consistent with the requirements of annual reports and the actual demands of business management.

The Remuneration Committee's recommendations above were approved in the 22th meeting of the 11th-term board of directors.

4. Corporate governance implementation status and deviations from Corporate Governance Best-Practice Principles for TWSE/TPEx Listed Companies and reasons

Assessed items	Implementation status			Deviations from Corporate Governance Best-Practice Principles for TWSE/TPEx Listed Companies and reasons
	Yes	No	Summary	
I. Does the company establish and disclose its corporate governance principles in accordance with the Corporate Governance Best-Practice Principles for TWSE/TPEx Listed Companies?	V		The Company has established corporate governance principles in accordance with the TWSE Corporate Governance Best-Practice Principles for TWSE/TPEx Listed Companies and disclosed it on Company website.	None
II. Shareholding structure & stockholders' equity				
(I) Does the company establish internal operating procedures for handling shareholder suggestions, questions, complaints or litigation and handled related matters accordingly?	V		(I) The Company's Shareholders' Affairs Department is in charge of shareholder services and handling shareholder suggestions, questions and complaints in accordance with the Regulations Governing the Administration of Shareholder Services of Public Companies and the Standards for the Internal Control Systems of Shareholder Service Units.	None
(II) Does the company have a list of major shareholders that have actual control over the Company and a list of ultimate owners of those major shareholders?	V		(II) The Company discloses the list of major shareholders and the list of ultimate owners of major shareholders in accordance with applicable regulations.	None
(III) Does the company establish and implement risk management and firewall systems within its conglomerate structure?	V		(III) Business and financial dealings between the Company and an affiliate are treated as dealings with an independent third party, which are handled by the principles of fairness and reasonableness with documented rules established, and pricing and payment terms clearly defined to prevent non-arm's-length transactions.	None
(IV) Does the company establish internal rules against insiders trading with undisclosed information?	V		(IV) The Company has established the Insider Trading Prevention Procedure, publicizes the procedure among employees regularly every half a year, and discloses the procedure on Company website.	None
III. Composition and responsibilities of the Board of Directors				
(I) Does the Board of Directors develop and implement a diversified policy for the composition of its members?	V		(I) Article 20 of the Company's Corporate Governance Principles specify that the structure of Board of Directors should take into account the company operations, development and business scale, shareholding of major shareholders and diversity of Board Members, for example, different professional backgrounds, gender or fields of work. The Company's 11th-term Board of Directors' members meet the aforementioned goals.	None
(II) Does the company voluntarily establish other functional committees in addition to remuneration committee and audit committee?	V		(II) The Company has established an "Employees' Welfare Committee," "Supervisory Committees of Workers' Retirement Reserve Funds," and "ESH and Risk Management Committee," and "patent committee."	None
(III) Does the company establishes standards and method for evaluating the performance of the Board of Directors, and implemented it annually?	V		(III) The Company has established the Rules for Remuneration and Performance Evaluation of Directors, and performs self-assessment of the board operations and board members in December every year. The evaluation results will be submitted to the Remuneration Committee and the Board of Directors. Please refer to the section under "Operation of the Board of Directors."	None
(IV) Does the company regularly evaluate the independence of CPAs?	V		(IV) The Company's Board of Directors evaluates the independence of certifying CPAs every year in accordance with the Certified Public Accountant Act, Professional Ethics Standards for ROC Accountants, and CPA Assessment and Performance Evaluation Instructions to examine whether the certifying CPA is a company director or shareholder or draws salary from the Company and to confirm that the certifying CPA is not a stakeholder. In addition,	None

Assessed items	Implementation status		Deviations from Corporate Governance Best-Practice Principles for TWSE/TPEx Listed Companies and reasons
	Yes	No	
			<p>certifying CPA is required to recuse him/herself if his/her service or him/herself has a direct relationship with or interest in the matter concerned. The Company also observes relevant rules in rotation of accountant.</p>
IV. A TWSE/TPEx listed company may set up a full- (or part-) time corporate governance unit or personnel to be in charge of corporate governance affairs (including but not limited to furnishing information required for business execution by directors and supervisors, handling matters relating to board meetings and shareholders meetings according to laws, handling corporate registration and amendment registration, producing minutes of board meetings and shareholders meetings, etc.)	V		<p>By the resolution adopted by the 6th meeting of third-term Remuneration Committee and 13th meeting of 11th-term Board of Director, the Company decides to appoint the vice president of finance to serve concurrently as the chief governance officer who will be in charge of corporate governance related affairs with his/her main duties (but not limited) as follows in accordance with Article 21 of the Operation Directions for Compliance with the Establishment of Board of Directors by TWSE Listed Companies and the Board's Exercise of Powers:</p> <p>(I) Optimize the board performance, enhance the transparency of corporate information, and implement regulatory compliance and internal audit and internal controls.</p> <p>(II) Plan next year's board meeting dates in the previous year to facilitate planning and attendance by board members; Send out meeting notice to directors and furnish adequate meeting information at least 7 days before the scheduled board meeting and remind in advance if any board member has an interest in any of the motions to be discussed in the meeting in accordance with the Company Act and the Rules of Procedures for Board of Directors Meetings.</p> <p>(III) Make sure board members perform self-assessment of the board operations and board members in December every year in accordance with the Rules for Remuneration and Performance Evaluation of Directors, submit the assessment results to the Remuneration Committee and the Board of Directors, and formulate improvement plan based on the assessment results to boost the performance of the board and maximize its efficacy on a long term basis.</p> <p>(IV) Hold a general shareholders' meeting before June 30 every year, post the Chinese and English meeting notice, meeting brochure and annual report on the Market Observation Post System for perusal by shareholders, and implement resolutions or election affairs decided in the shareholders' meeting afterwards, such as distribution of dividends, registration of amended Articles of Incorporation or newly elected directors.</p> <p>Business activities in the current year:</p> <ol style="list-style-type: none"> <li>1. Collected and summarized agenda items from the departments, and prepared sufficient Board meeting materials to be sent along with the meeting notices. Notified relevant parties to attend Board meetings as needed. (8 meetings held in 2019)</li> <li>2. Invited CPAs to report audit results or discuss on accounting related topics every half fiscal year.</li> <li>3. Organized preregistration of the shareholders' meeting date, preparation of meeting notice, agenda, and minutes; and published related information by the deadlines as required and simultaneously made English versions available to investors worldwide. (1</li> </ol>





Assessed items	Implementation status			Deviations from Corporate Governance Best-Practice Principles for TWSE/TPEx Listed Companies and reasons
	Yes	No	Summary	
clients and suppliers), set up a dedicated stakeholder area on the Company website, as well as appropriately responded to important corporate and social responsibility issues that stakeholders are concerned about?			responsibility issues of concern to stakeholders.	
VI. Has the Company hired a professional agency to handle tasks and issues related to holding the shareholder's meeting?		V	The Company handles shareholder service matters by itself.	N/A
VII. Disclosure of information (I) Does the company establish a corporate website to disclose information regarding the company's financial, business and corporate governance status?	V		(I) The Company discloses periodically (quarterly) financial and business as well as corporate governance information on its website.	None
II) Does the company have other information disclosure channels (e.g., maintaining an English-language website, appointing responsible people to handle information collection and disclosure, creating a spokesperson system, webcasting investor conference on company website)?	V		(II) The Company's material information is made public in accordance with the internal Spokesperson and Deputy Spokesperson Operation Instruction and the Investor Relations Department are in charge of collecting and revealing corporate information, and posting the investor conference information on Company website. The Company website posts information in traditional Chinese, simplified Chinese, English and Japanese.	None
(III) Does the TWSE/TPEx listed company publish and report its annual financial report within two months after the end of a fiscal year, and publish and report its financial reports for the first, second and third quarters as well as its operating status for each month before the specified deadline? ㉔	V		(III) The Company published and reported its annual financial report within two months after the end of a fiscal year, and published and reported its financial reports for the first, second and third quarters as well as its operating status for each month before the specified deadline.	None
VIII. Is there any other important information to facilitate a better understanding of the company's corporate governance practices (including but not limited to employee rights, employee wellness, investor relations, supplier relations, rights of stakeholders, continuing education of directors and supervisors, the implementation of risk management policies and risk evaluation standards, the implementation of customer relations policies, and purchasing insurance for directors and supervisors)?	V		1. The Company discloses corporate governance structure, internal audit operations, corporate social responsibility policies, stakeholder section and relevant operational rules on Company website: <a href="https://www.winbond.com/hq/about-winbond/csr/policy">https://www.winbond.com/hq/about-winbond/csr/policy</a> 2. Continuing education of directors: The Company arranges continuing education courses for directors and supervisors every year, and provides from time to time information on professional courses offered by outside institutions to the directors and supervisors. The continuing education courses taken by directors and supervisors can be found in the Corporate Governance section of the MOPS website. 3. Attendance records of directors: Please see p.21, 23 and 27 of this report for the operations of the Board of Directors. 4. Purchase of liability insurance for directors: The Company has purchased liability insurance starting year 2015. Please refer to the Corporate Governance section of the MOPS website.	None
IX. Describe the improvement actions taken in response to the corporate governance assessment results published by the TWSE Corporate Governance Center in the most recent year and priority items and measures for matters that have not been improved. The Company ranked in the top 6% ~ 20% in the 2019 corporate governance assessment of TWSE-listed companies and will continue to improve its corporate governance.				

## 5. Implementation of corporate social responsibility (CSR)

Company's systems and measures and implementation status with respect to environmental protection, community involvement, social contribution, social service, public interest, consumer interests, human rights, safety and health, and other social responsibility activities:

Assessed items	Implementation status		Departure from Corporate Social Responsibility Best Practice Principles for TWSE/TPEx listed companies and reasons
	Yes	No	
I.Does the company perform assessments of risks in environmental, social, and corporate governance issues relevant to its business activities and devise risk management policies and strategies based on the principle of materiality?	V		The Company performed assessments of risks in environmental, social, or corporate governance issues relevant to its business activities, and devised a corporate social responsibility policy and related management strategies. The documents have been disclosed in the CSR report and on the company website.
II.Does the company have a unit that supports CSR practices on a full-time or part-time basis? Is the CSR unit operated by senior managers as authorized by the board of directors, and does the CSR unit report to the board of directors?	V		The Company's Quality & ESH Center is in charge of promoting CSR related operations and regularly reviews the implementation status. The company President reports the CSR implementation to the Board of Directors regularly (fourth quarter) every year.
III.Environmental issues (I)Does the company have in place a suitable environmental management system based on the characteristics of the industry?	V		(I)The Company has received certification of ISO 14001 environmental management system, and undertakes internal audit every half a year and external audit every year by an international certification body to ensure normal system operations.
(II)Does the company work to improve resource utilization efficiency and use recycled materials that have a low impact on the environment?	V		(II)To boost the energy use efficiency, the Company has established key performance indicators (KPI) for the use of all important energy resources, including water and electricity, and set annual goals and implement management programs to undertake reduction of water and electricity consumption and waste output or increase waste reutilization on an ongoing basis. The Company president will review the execution results and target attainment every quarter. Appropriate recycling systems have been considered in the design phase of plants and priority considerations are given to the recovery and reuse of wastewater, waste heat and solid waste generated by plant operations. Thus the Company has taken actions to effectively reduce the consumption of resources and impact on the environment. In 2019, the Company achieved 82% recycling of plant-wide water consumed, 91% recycling of process water consumed (meeting the commitments made in the environmental assessment conducted by the Science Park Administration - 77% recycling of plant-wide water consumed and 85% recycling of process water consumed). Regulatory compliance is only the basic requirements set by the Company. The Company endeavors to make sure every drop of water is fully utilized and to reduce the discharge of wastewater. In 2019, carbon reduction measures adopted by the Company helped reduce 237,631 tons of carbon dioxide equivalent emissions, which amounts to the annual carbon sequestration of 616 Da-an Forest Park (note: calculated by the standard of 386 tons of carbon dioxide absorbed by Da-an Forest Park every year) With respect to the future development of advanced technologies and capacity expansion, the Company will continue to promote carbon reduction plans and enhance energy use efficiency with the goals of reducing total greenhouse gas emission for every photomask layer in 12-inch wafer fabrication by 8% in 2020 as compared

Assessed items	Implementation status		Departure from Corporate Social Responsibility Best Practice Principles for TWSE/TPEX listed companies and reasons
	Yes	No	
(III) Does the company evaluate the potential risks and opportunities in climate change with regard to the present and future of its business, and take appropriate action to counter climate change issues?			to 2010 to as to improve production efficiency and reduce impact on the environment. In the ongoing efforts of promoting waste recycling and reuse, the Company adopts source improvement approaches by reducing chemical use and extending use cycle of chemicals and parts replacement in processes to reduce waste generation, and enhance the usability of waste through better waste collection and sorting. In 2019, the Company achieved 92% waste recycling, surpassing the self-set target of 90% or higher.
	V		(III) The Company watches the impact of climate change brought about by greenhouse effect on the environment and business operations. Aside from undertaking management programs to reduce the consumptions of water, electricity, and raw materials, and reduce waste generation to achieve the KPI targets, the Company has been participating in the PFCs emission reduction programs advocated by Taiwan Semiconductor Industry Association and World Semiconductor Council since 2000. Through process adjustment and use of alternative fuels, and installation of PFCs reduction equipment, the Company has been able to reduce greenhouse gas emission. The Company's PFCs emission reduction results over the years have passed the validation of international certification body. The Company has also been named "Company with Outstanding Performance in Voluntary Reduction of Greenhouse Gas Emission" by the Industrial Development Bureau, MOEA. In addition, as reference for formulating energy conservation and GHG reduction strategies, the Company performs greenhouse gas inventory taking every year and register the information on the Taiwan National Greenhouse Gas (GHG) Registry of Environmental Protection Administration, and furthermore, disclose relevant data in the CSR section of Company website.
(IV) Does the company take inventory of its greenhouse gas emissions, water consumption, and the total weight of waste in the last two years, and draw up policies on energy efficiency and carbon reduction, greenhouse gas reduction, water reduction, or waste management?			(IV) The Company's environmental protection policy focuses on "complying with the latest international environmental standards and other regulations; making ongoing improvement, ensuring effective environmental protection, and reducing environmental risks; and taking optimized preventive and improvement measures as a sustainable green business." Inventory of greenhouse gas emissions, water consumption, and total weight of waste are taken every year. There are also key performance indicators (KPI), such as greenhouse gas emission, water recycling, and waste recycling per unit product, in place. Total greenhouse gas emission was 347,378 tons CO <sub>2</sub> e, water consumption 3,368,166 m <sup>3</sup> , and waste 6,042 tons in 2019. Total greenhouse gas emission was 330,106 tons CO <sub>2</sub> e, water consumption 3,127,688 m <sup>3</sup> , and waste 6,082 tons in 2018.
	V		None
IV. Social issues (I) Does the company have adequate management policies and procedures in place pursuant to the applicable regulations and the International Bill of Human Rights?			(I) The Company has established CSR policies approved by the Board of Directors that comply with the highest ethical standards, and protect and support human rights, such as barring any form of discrimination and respecting employee's freedom of association, and clearly defines award and disciplinary items in the work rules for observation by all employees.
	V		(II) The Company provides well-established employee benefits. In addition to the statutory benefits (e.g. enrollment in the Labor Insurance Program and the National Health Insurance Program and pension contributions), the Company provides better-than-industry-average group insurance, child allowance, marriage and birth allowances, and a wellness leave system. A wide range of employee benefits are in place to take care of the employees and their families. Furthermore, the Articles of Incorporation requires that
			None

Assessed items	Implementation status		Departure from Corporate Social Responsibility Best Practice Principles for TWSE/TPEX listed companies and reasons
	Yes	No	
(III) Does the company provide a safe and healthy work environment and organize regular health and safety training for employees?	V		<p>not more than 1% of the Company's pre-tax earnings before deducting employee and director remuneration be allocated to employee compensation as a means to reflect business results in employee pay.</p> <p>(III) The Company is ISO45001 (Occupational Health and Safety Management System) and CNS45001 (Taiwan Occupational Safety and Health Management System) certified, and undertakes internal audit every half a year and external audit every year by an international certification body to ensure normal system operations. The Company vigorously observes government's safety and health regulations and undertakes related management works, including carrying out safety and health risk assessment, drafting and executing safety and health related work rules, and arranging employee safety, sanitation and health training courses every year.</p>
(IV) Does the company have in place effective tools to help employees with career planning and development?	V		<p>(IV) The Company has established career development plan for employees. For managers, the Company provides proper management knowhow training based on the needs of management at different levels. For regular employees, the Company designs proper near, medium and long-term training programs based on their job requirements.</p>
(V) Does the company comply with relevant laws and international standards in relation to customer health and safety, customer privacy, marketing, and labeling of products and services, and does it establish relevant consumer protection policies and grievance procedures?	V		<p>(V) The Company adheres strictly to the EU's RoHS Directive and REACH Regulations as well as halogen-free requirements and other international standards in relation to customer health and safety. For marketing and labeling of products and services, the Company complies with the Fair Trade Act, and follows the anti-trust code of conduct, the Commodity Labeling Act, the Consumer Protection Act and related regulations. Protection of customer privacy follows the requirements under the Personal Data Protection Act. Consumers who wish to ask a question regarding a product or service are invited to visit the company website and use the contact information in the stakeholders section or the complaint hotline.</p>
(VI) Does the company implement supplier management policies to require suppliers observe certain regulations on environmental protection, occupational health and safety, or labor or human rights? If yes, describe the results.	V		<p>(VI) The Company's supplier management policy focuses on developing long term partnerships with suppliers in order to achieve sustainability. The Company will conduct CSR audit of major material suppliers and outsourcing service providers to make sure they meet the Company's CSR policy requirements. All audit results for 2019 met the Company's requirements.</p>
V. Does the company prepare corporate social responsibility reports and other reports that disclose non-financial information by following international reporting standards or guidelines? Does the company obtain third party assurance or certification for the reports above?	V		<p>The Company's CSR report has been prepared in accordance with the Global Reporting Initiative (GRI Standards) and examined by the Taiwan Branch of British Standards Institution (BSI Taiwan) in accordance with the AA1000 Assurance Standard 2015.</p> <p>CSR information is disclosed on:  Company website: <a href="https://www.winbond.com/hq/about-winbond/csr/policy">https://www.winbond.com/hq/about-winbond/csr/policy</a>  Market Observation Post System: <a href="http://mops.twse.com.tw">http://mops.twse.com.tw</a></p>
VI. Describe the difference, if any, between actual practice and the corporate social responsibility principles, if the company has implemented such principles based on the Corporate Social Responsibility Best Practice Principles for TWSE/TPEX Listed Companies: The Company has established "Corporate Social Responsibility Principles" in accordance with the Corporate Social Responsibility Best Practice Principles for TWSE/TPEX Listed Companies and internal rules, and related implementation does not deviate from the established principles.			None

Assessed items	Implementation status		Departure from Corporate Social Responsibility Best Practice Principles for TWSE/TPEx listed companies and reasons
	Yes	No	
<p>VII. Other useful information for explaining the status of corporate social responsibility practices:</p> <p>1. The Company endeavors to meet the advanced international safety, health and environmental standards and is committed to providing employees with a complying and healthy working environment through respect, caring and counseling, through continuous improvement, promoting personnel safety and environmental protection, and reducing risk to assets. The Company also promotes health and wellness activities and builds employee loyalty to create a corporate culture of LOHAS (lifestyle of health and sustainability). The award of "Excellence in Healthy Workplace Promotion - Ten Years of Achievement" received by the Company from the Ministry of Health and Welfare at the end of 2014 and the "2016 Work and Living Balance Award" in the categories of "Family LOHAS" and "Health Wellness" received by the Company from the Ministry of Labor in 2016 best showcase the Company's performance record in this regard. Disaster and loss can be prevented beforehand through sound management and active participation of all employees. The Company carries out effective training, communication and propagation to make sure all personnel and contractors are aware of and observe the Company's ESH rules and requirements, and conduct work in accordance with the established operating standards. Zero accident and reducing environmental loads are the social responsibility of a world-class corporation. Through optimum prevention and improvement measures, we gradually reduce workplace injury rate, resources consumption and pollutant discharge. We put the concepts of safety, health and environmental protection into actions to develop the Company into a sustainable green enterprise.</p> <p>2. We attach great importance to the rights and health of employees. We prohibit the hiring of workers under 15 years of age (or under the age for completing compulsory education), and implement protective measures as required by law for employees and female workers over 15 years of age. We prohibit any and every form of job discrimination, sexual harassment and inhuman treatment of employees, and we respect the free agency of job candidates to choose employment and employees' right of free association. Our personnel systems (e.g. salary, benefits, performance review, promotion, award and discipline, employee cultivation, job assignment, termination of employment contract, etc.) do not harbor differential treatment because of employee's race, color, nationality, glass, language, ideology, religion, political affiliation, hometown, place of birth, gender, sexual orientation, age, marital status, pregnancy, look, features, disability or previous status as a workers' representative. With respect to management and supervision of working hours, we pay our employees compensation in compliance with local laws, including those relating to minimum wage, overtime hours and legally mandated benefits. We hold communication meetings regularly and propagate the setup of communication channels for employees to voice their opinions.</p> <p>3. Over the years, the Company has been endeavoring to fulfill the social responsibility of a corporate citizen. The Company actively participates in academic seminars and technical forums, and fosters academia-industry collaboration.</p> <p>4. To put its beliefs in social care, public service and friendly environment in actions, the Company gathers internal resources and the passion and love of its employees and put them to work in four areas - "promoting public interests", "assisting disadvantaged groups", "caring for youth and children", and "emergency aid."</p> <p><b>A. Promotion of public interests</b></p> <p><u>Arts and cultural activities:</u> The Company encourages and has been promoting arts activities. Through the union of technology, culture and art, we aspire to transform the quality of art life into actions to enrich the rebuilding of humanism. Since 2018, Winbond has been sponsoring a stage show "Grandpa's Coffee Time" adapted from a picture book. By subscribing tickets to the show, we hope to encourage the involvement of more cultural and creative workers in the construction of a quality performance platform. Winbond sponsored the Hannstar Foundation in 2019 by purchasing 96 tickets to give to Winbond employees.</p> <p><b>B. Assisting disadvantaged groups</b></p> <p><u>Used computer donation project:</u> The Company participates in the used computer donation project regularly to join the efforts of narrowing urban-rural information gap and raising awareness to environmental protection and recycling. In 2019, the Company donated 10 computers to Meimen - Wellness Society.</p> <p><u>Orphanage home service:</u> Working with public interest groups, Winbond employees join volunteer services to help clean orphanage homes and contribute to the replacement of damaged facilities. Starting September 2015, employees join the after-school tutoring service, providing tutoring on a long-term basis for children at Taichung Christian Herald Children's Home and Nantou Home of Charity. As of end of 2019, Winbond volunteers have provided 3,647.5 hours of service involving 1,820 person-times to help alleviate manpower shortage at orphanage homes.</p> <p><u>Charity sale activity:</u> The Company collects second-hand items, calls volunteers to participate in charity sales and donates proceeds from the sale. By participating in the donation and charity sale, employees and their families join the action of cherishing the Earth resources and giving back to the society. As of year-end 2019, the Company collected more than 2,400 books, 1,431 kg of clothing and bags, and 31 boxes of 3C products, home appliances, art works and accessories.</p> <p>Continuing the objective of caring for youth and children, our efforts in 2019 remained focused on the "Seedling Project" by devoting our resources to helping disadvantaged youth and children. It is hoped that our timely help, like sunshine, air and water to the growing seedlings, will enable the seedlings to take root and grow strong, that they will one day help other people in the society and let the "kindness" recycle:</p>			



Assessed items	Implementation status		Departure from Corporate Social Responsibility Best Practice Principles for TWSE/TPEx listed companies and reasons
	Yes	No	
<p>• <u>Grants for children of low-income families</u>: To help impoverished school children learn in a stable environment, Winbond has been working with Taiwan Fund for Children and Families since 2017 by inviting employees to join the effort of raising education grants. From Company president to low-level employees, our colleagues responded enthusiastically to the drive. In 2019, 834 employees donated more than NT\$2.884 million to help 721 children for the whole school year.</p> <p>• <u>Supporting orphanage children in acquiring skills</u>: Disadvantaged children are often academically behind due to family factors that they often experience frustration and lose passion and self-confidence in learning. By helping those children develop other skills, it creates the opportunity for them to develop passion for learning and gain self-affirmation. In 2018, Winbond donated the first-time instructor fees for woodwork and Taiko drumming courses offered in the skill curriculum of the Taichung Christian Herald Children's Home that have not had the support of business, government agencies or organizations. In 2019, 144 courses were offered in which 397 students attended, and by the assessment of the instructors, more than 80% of students received a grade of "good" or better. By visiting a brief exhibition of students' works, it is apparent the courses have been nourishing to the children in terms of attentiveness, patience, and teamwork.</p> <p>• <u>Remote villages volunteer service</u>: As all seedlings come from families in the community, Winbond works with public interest groups to help communities in remote areas build or grow organic crops in the hope to help disadvantaged families and invigorate industrial development in remote villages. Furthermore, Winbond solicits employee volunteers to visit tribal communities in remote villages, during which they assist the Taiwan Fund for Children and Families in developing community services for remote and indigenous communities and join the Company in fulfilling its corporate social responsibility. In 2018, Winbond sponsored the first-time public interest activity that was designed to assist indigenous villages build and develop tourism. A total of 41 employees participated in two sessions of the activity in 2019. Participating employees shared what they have learned about the daily life and culture of the tribal community, the community's lack of resources and other social issues. They also felt strongly about the passion and hard work of social workers working in those areas. The participants gave high praise to the activity and spent a rich and meaningful weekend.</p> <p><b>C. Caring for youth and children</b></p> <p><u>Breakfast project</u>: The Company has been working with a foundation for many years, funding nutritious breakfast for school children in remote areas. In 2019, the Company continued to raise funds for breakfast to provide children in remote areas with the opportunity to learn in a healthy environment. Company employees also visit schools that have received donation to learn and evaluate firsthand the benefits of the service projects.</p> <p><u>Movie appreciation project</u>: The Company is a regular sponsor of movie watching event for orphanage children, hoping to sow the seeds of life education and help children develop an appreciation for arts. In 2019, Winbond's movie appreciation project entertained 179 orphanage children.</p> <p><u>Family day activity</u>: In the Company's annual family day, children from orphanage homes are invited to participate in games and activities, watch performance and enjoy good food. It is hoped that while disadvantaged children enjoy a good time, they are also motivated in learning. In 2019, Winbond's family day invited 68 children from orphanage homes to participate.</p> <p><b>D. Emergency aid</b></p> <p><u>Emergency aid for employees</u>: The Company has set up employee emergency aid and loan programs to help employees in financial distress when the employee or his/her family suffers sudden calamity, such as injury, disability, death, or accident, to make sure they can continue to work and live with assurance that their livelihood is secure.</p> <p><u>Blood donation activity</u>: The Company calls employees to donate blood in the annual blood drive which illustrates the Company's belief in the value of life in actions. In 2019, 416 employees participated in the blood drive and donated altogether 669 bags of blood.</p> <p><b>E. Others</b></p> <p><u>Sponsoring academic discussions and technical forums</u>: Winbond regularly sponsors academic discussions and participates in collaboration projects among academia, industry, research institution and government agency to promote communications and interactions.</p>			Summary
<p>VII. If the corporate social responsibility reports have received assurance from external institutions, they should state so below: The Company's CSR report has been examined by the Taiwan Branch of British Standards Institution (BSI Taiwan) in accordance with the AA1000 Assurance Standard 2015.</p>			

6. Ethical corporate management and departure from the Ethical Corporate Management Best Practice Principles for TWSE/TPEx Listed Companies and reasons:

Assessed areas:	Implementation status			Departure from "Ethical Corporate Management Best Practice Principles for TWSE/GTSM Listed Companies" and reasons
	Y e s	N o	Summary	
I. Establishment of ethical corporate management policy and approaches (I) Has the company implemented a board-approved ethical corporate management policy and stated in its regulations and external correspondence the ethical corporate management policy and practices as well as the commitment of the board of directors and the executive management to enforcement of the ethical corporate management policy? (II) Does the company have mechanisms in place to assess the risk of unethical conduct, and perform regular analysis and assessment of the risk of unethical conduct within the scope of business? Does the company implement programs to prevent unethical conduct based on the above and ensure the programs cover at least those described in Article 7, Paragraph 2 of the Ethical Corporate Management Best Practice Principles for TWSE/GTSM Listed Companies? (III) Does the company provide clearly the operating procedures, code of conduct, disciplinary actions, and appeal procedures in the programs against dishonest conducts, and enforce the programs effectively and perform regular reviews?	V		(I) Believing in honest management, the Company has established Ethical Corporate Management Principles that has been approved by the Board of Directors. On the basis of integrity, externally the Company serves customers with integrity and good faith, and internally, the Company rigorously requires that employees practice self-discipline and observe internal rules to build a good corporate governance and risk management mechanism so as to create a sustainable business environment. (II) For operating activities within the scope of business with higher risk of unethical conduct, the Company has established relevant procedures, including "Procedure for Acquisition or Disposal of Assets", "Rules for Endorsements and Guarantees", "Operating Procedure for Fund Lending", "Operating Procedure for Transactions with Group Enterprises, Specific Companies and Related Parties", and "Operating Rules for Donations" in place, and observes those procedures and regulations in related-party transactions to prevent unethical conduct. (III) The Company has established "Conflict of Interest Reporting and Recusal Instruction", "Insider Trading Prevention Procedure", "Instruction for Personal Finance Reporting by Employees at Specific Positions and Business Related Personnel and Suppliers", "Rules for Receiving or Providing Gifts and Entertainment", "Technical and Classified Data Management Instruction", and "Anti-Trust Code of Conduct" to prevent unethical behaviors. The Company also has established the "Ethical Management Violation Handling Instruction", which describes explicitly the methods and channels for filing a complaint, vigorously promotes and implements the Instruction, reviews the Instruction regularly, and metes out disciplinary action against violators.	None
II. Implementation of ethical corporate management (I) Does the company assess business partners' records of integrity, and include a moral clause in the contracts with its business partners? (II) Does the company have a unit that supports ethical management practices on a full-time basis under the board of directors, and reports the ethical management policy and programs against unethical conduct regularly (at least once a year) to the board of directors and oversees the operations?	V		(I) The Company requires all suppliers to sign a letter of undertaking of integrity before commencing business dealing with them. (II) The Company's Human Resources is in charge of promoting ethical management related operations and responsible for formulating, publicizing and promoting ethical management related rules; Human Resources also offers education and training to all directors, supervisors and employees every year with regard to "Corporate Governance Principles", "Ethical Corporate Management Principles", "Corporate Social Responsibility Principles", "Corporate Social Responsibility Management Principles", "Ethical Code of Conduct for Directors", and "Employee Code of Conduct" to ensure the implementation of ethical management. The president would report to the Board of Directors in Q4 every year the year's results in promotion of ethical management and related training.	None
(III) Does the company have a conflict of interest management policy in place, provides adequate reporting channels, and enforce the rules	V		(III) The Company has established the Ethical Corporate Management Principles and the Conflict of Interest Reporting and Recusal Instruction to specify the code of business conduct that	None



Assessed areas:	Implementation status			Departure from "Ethical Corporate Management Best Practice Principles for TWSE/GTSM Listed Companies" and reasons
	Y e s	N o	Summary	
accordingly?			employees are required to observe, and provides an adequate whistleblowing channel and carries out regular training for employees. The Company publishes internal rules and regulations and work rules on internal company website and keeps all employees informed of any revisions. The Company also regularly educates employees on insider trading to prevent inadvertent violation of insider trading law.	
(IV) Does the company have effective accounting and internal control systems in place to enforce ethical management? Does the internal audit unit follow the results of unethical conduct risk assessments and devise audit plans to audit the systems accordingly to prevent unethical conduct or hire outside accountants to perform the audits?	V		(IV) The Company has established effective accounting system and internal control systems, and has drawn up relevant operating procedures, which are readily reviewed and revised according to regulatory requirements or actual needs. The Company faithfully carries out self-evaluation of internal control systems by requiring managers, internal units and subsidiaries as well as internal audit unit to conduct self-evaluation at least once a year and produce a report therefor. The audit unit conducts audits according to the annual audit plan approved by the Board of Directors. The audit chief submits the completed audit report (or follow-up report) to independent directors for examination in the following month, and periodically reports to the audit committee and the Board of Directors the annual audit operation and annual internal control self-evaluation operation.	None
(V) Does the company hold internal and external educational trainings on operational integrity regularly?	V		(V) The Company attaches great importance to ethical management and corporate social responsibility. Human Resources would report to the Board of Directors in Q4 every year the year's results in promotion of ethical management and related training. The Company steps up the publicity of worker's rights, environmental protection, health and safety, ethics, prevention of insider trading and related training to ensure observation of corporate ethics and government regulations and to improve ethical corporate management. In 2019, the Company offered 7 sessions of related courses which totaled 1,198 person-hours and 2,893 person-times of training, and all directors and employees have attended the courses on "Ethical Corporate Management" and "Corporate Social Responsibility".	None
III. Operation of whistleblowing system (I) Does the company have a well established whistleblowing and reward system and an accessible reporting channel in place, and appoint suitable representatives for approaching accused individuals?	V		(I) The Company has a variety of reporting and complaint channels in place, including e-mail, suggestion box and other communication channels, and we make sure employees are aware of these. The channels are reviewed and amended from time to time to ensure effective and full communication in the workplace so that problems are rapidly and effectively communicated and resolved when they arise. The Company also has relevant reward and disciplinary measures in place.	None
(II) Does the company have in place standard operating procedures for investigating reports and taking followup actions and the necessary confidentiality measures?	V		(II) The Company has operating procedures and confidentiality measures in place as basis for handling reported cases.	None
(III) Does the company take measures to protect whistleblowers from inappropriate treatment or retaliation?	V		(III) The Company always tries its best to keep confidential and protect the identity of the whistleblowers to shield them from threats.	None

Assessed areas:	Implementation status			Departure from "Ethical Corporate Management Best Practice Principles for TWSE/GTSM Listed Companies" and reasons
	Y e s	N o	Summary	
IV.Enhancing information disclosure Does the company disclose the Ethical Corporate Management Best Practice Principles and its results on the company website and the Market Observation Post System?	V		The Company has disclosed its Ethical Corporate Management Principles on its website to make it known internally/ externally. <a href="https://www.winbond.com/hq/about-winbond/investor/compliance/">https://www.winbond.com/hq/about-winbond/investor/compliance/</a>	None
V.Describe the difference, if any, between actual practice and the ethical corporate management principles, if the company has implemented such principles based on the Ethical Corporate Management Best Practice Principles for TWSE/TPEX Listed Companies: The Company has established "Ethical Corporate Management Principles" in accordance with the "Ethical Corporate Management Best Practice Principles for TWSE/TPEX Listed Companies" and internal rules, and related implementation does not deviate from the established principles.				
VI.Other important information to facilitate a better understanding of the company's corporate social responsibility practices: The Company constantly watches the development of ethical management related rules and regulations at home and abroad, and based on which, reviews and improves its own policies to enhance performance management.				

7. If the company has established corporate governance principles and related guidelines, disclose the means of accessing this information: The Company has a section "Investor Services/Rules and Regulations" on its website for investors to inquiry corporate governance related rules.
8. Other significant information which may improve the understanding of corporate governance and operation: Please refer to the Company website below:  
<https://www.winbond.com/>

9. Implementation of internal control system  
9.1 Statement on Internal Control

Winbond Electronics Corporation  
Statement on Internal Control System

Date: February 7, 2020

The Company states the following with regard to its internal control system during fiscal year 2019, based on the findings of a self-evaluation:

- I. The Company acknowledges and understands that the establishment, enforcement and maintenance of the internal control system are the responsibility of the Board of Directors and manager, and that the company has already established such a system. The purpose is to provide reasonable assurance to the effectiveness and efficiency of business operations (including profitability, performance and security of assets), reliability of financial reporting and compliance with relevant regulatory requirements.
- II. There are inherent limitations to even the most well designed internal control system. As such, an effective internal control system can only reasonably ensure the achievement of the aforementioned goals. Moreover, the operating environment and situation may change, impacting the effectiveness of the internal control system. However, self-supervision measures were implemented within the Company's internal control policies to facilitate immediate rectification once procedural flaws have been identified.
- III. The Company determines the effectiveness of the design and implementation of its internal control system in accordance with the items in "Governing Regulations for Public Company's Establishment of Internal Control System" (hereinafter called "Governing Regulations") that are related to the effectiveness of internal control systems. The criteria introduced by the "Governing Regulations" cover the process of management control and consist of five major elements, each representing a different stage of internal control: (1) Control Environment, (2) Risk Assessment, (3) Control Operation, (4) Information and Communication, and (5) Monitoring. Each of the elements in turn contains certain audit items. Please refer to "Governing Regulations" for details.
- IV. The Company has adopted the aforementioned measures for an examination of the effectiveness of the design and implementation of the internal control system.
- V. Based on the findings of the evaluation mentioned in the preceding paragraph, the Company believes that as of December 31, 2019, its internal control system (including its supervision and management of subsidiaries), encompassing internal controls for knowledge of the degree of achievement of operational effectiveness and efficiency objectives, reliability of reporting, and compliance with applicable laws and regulations, is effectively designed and operating, and reasonably assures the achievement of the above-stated objectives.
- VI. This statement shall be an integral part of the annual report and prospectus of the company and will be made public. If any fraudulent information, concealment or unlawful practices are discovered in the content of the aforementioned information, the Company shall be held liable under Article 20, Article 32, Article 171 and Article 174 of the Securities and Exchange Act.
- VII. This Statement has been passed by the Board of Directors Meeting of the Company held on February 7, 2020, where none of the 10 attending directors expressed dissenting opinions, and the remainder all affirmed the content of this Statement.

Winbond Electronics Corporation

Chairman: Arthur Yu-Cheng Chiao

President: Tung-Yi Chan

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

10. Penalty on the Company and its personnel or punishment imposed by the Company on personnel in violation of internal control system regulations, major deficiencies and improvement in the past year and up to the date of report: None

11. Important resolutions adopted in shareholders meeting and Board of Directors' meeting in the past year and up to the date of report

11.1 Report on the execution of resolutions adopted at the 2018 General Shareholders' Meeting

1.Motion: Ratify 2018 business report and financial report.

Resolution: Passed as proposed. (For details of the resolution, please visit Market Observation Post System)

Implementation status: Per resolution adopted.

2.Motion: Acknowledge the Company's 2018 earnings distribution plan.

Resolution: Passed as proposed. (For details of the resolution, please visit Market Observation Post System)

Implementation status: The Board of Directors decided on June 26, 2019 that the ex-dividend date will be July 17, 2019 and will carry out the cash dividend distribution operation starting August 9, 2019.

3.Motion: Discuss the amended Articles of Incorporation.

Resolution: Passed as proposed. (For details of the resolution, please visit Market Observation Post System)

Implementation status: The Company has completed registration of change with the Central Taiwan Science Park Administration, Ministry of Science and Technology per approval letter No. Zhong-Shang-Zi-1080013711 dated July 2, 2019.

4.Discuss amendments of Articles of Incorporation.

(1) Procedure for Acquisition and Disposal of Assets

(2) Procedure for Engaging in Financial Derivative Transactions

(3) Renaming of the Rules for Endorsements and Guarantees to the Procedures for Making Endorsements and Guarantees

(4) Operating Procedure for Fund Lending.

(5) Rules Governing the Conduct of Shareholders' Meeting

(6) Rules Governing the Election of Directors

Resolution: Passed as proposed. (For details of the resolution, please visit Market Observation Post System)

Implementation status: All related processes now follow the amended regulations.

5.Discuss the removal of non-compete clause for directors (independent directors included)

Resolution: Passed as proposed. (For details of the resolution, please visit Market Observation Post System)

Implementation status: Per resolution adopted.

6.Election: Elected one additional independent director

Person elected: Stephen T. Tso

Implementation status: The Company has completed registration of change with the Central Taiwan Science Park Administration, Ministry of Science and Technology per approval letter No. Zhong-Shang-Zi-1080013711 dated July 2, 2019.

11.2 Important resolutions adopted by the Board of Directors in 2019 and up to March 31, 2020:

Meeting date	Summary of resolutions
January 31, 2019	1.Passed the 2018 standalone financial report and consolidated financial report. 2.Passed the 2018 consolidated business report, consolidated financial statements and affiliation report covering affiliated enterprises. 3.Passed the 2018 Statement on Internal Control System. 4.Passed the 2019 business plan and budget. 5.Passed the 2019 capital expenditure budget. 6.Passed the annual remuneration paid to accounting firm Deloitte & Touche. 7.Passed the purchase of liability insurance for directors, supervisors and other key persons. 8.Passed the Company's financial derivative transactions. 9.Approved the syndicated loan/credit limit for financial derivatives transactions granted by banks.
March 25, 2019	1.Passed the 2018 business report. 2.Passed the 2018 earnings distribution plan. 3.Passed the proposal to add one seat for independent director to replace vacancy in the board seat to be considered in the 2019 general shareholders' meeting. 4.Passed the amended Procedure for Acquisition and Disposal of Assets. 5.Passed the amended Procedure for Engaging in Financial Derivative Transactions.

Meeting date	Summary of resolutions
	6. Passed the proposed calling of 2019 general shareholders' meeting. 7. Passed the Company's financial derivative transactions. 8. Approved the syndicated loan/credit limit for financial derivatives transactions granted by banks. 9. Passed the 2018 compensation for individual directors on the 11th-term board. 10. Passed the 2019 remuneration for individual directors on the 11th-term board. 11. Passed the 2018 Q3 and Q4 performance bonus for managerial officers and the 2018 retention bonus. 12. Passed the 2018 employee compensation distribution plan. 13. Passed the 2019 remuneration plan for managerial officers. 14. Passed the appointment of Vice President of Finance Jessica Huang to serve concurrently as the chief governance officer.
April 26, 2019	1. Passed the 2019 capital expenditure budget. 2. Passed the Company's investment project in India. 3. Passed the establishment of a wholly owned subsidiary in Germany. 4. Passed the amendment of the Rules for Endorsements and Guarantees and its renaming to the Procedures for Making Endorsements and Guarantees. 5. Passed the amended Operating Procedure for Fund Lending. 6. Passed the amended Internal Control System for Shareholder Service Unit. 7. Passed the removal of non-compete clause for directors (independent directors included). 8. Passed the board review of the candidate list for the additional 1 independent director to be elected to the 11th-term board. 9. Passed the review of shareholder motions by the Board of Directors. 10. Passed the amended Articles of Incorporation. 11. Passed the amended Rules Governing the Conduct of Shareholders' Meeting. 12. Passed the amended Rules for the Election of Directors. 13. Passed the amended Board of Directors Meeting Rules. 14. Passed additional proposals to 2019 general shareholders' meeting. 15. Passed the Company's financial derivative transactions.
July 26, 2019	1. Passed the 2019 capital expenditure budget. 2. Passed the proposal not to distribute earnings for the first half of the 2019 fiscal year. 3. Passed the short-form merger with the wholly owned subsidiary Mobile Magic Design Corp. 4. Passed the appointment of Independent Director Da-Chuan Zuo to serve as a member of the 3rd-term Remuneration Committee. 5. Passed the Company's financial derivative transactions. 6. Approved the syndicated loan/credit limit for financial derivatives transactions granted by banks. 7. Passed the appointment of Mr. Hsiang-Yun Fan as a managerial officer and vice president. 8. Passed the 2019 remuneration for Mr. Stepehn T. Tso as a newly elected independent director on the 11th-term board. 9. Passed the discharge of Mr. Pei-Ming Chen as the VP of DRAM Product Business Group and managerial officer. 10. Passed the discharge of Mr. Yo-Song Cheng as a managerial officer. 11. Passed the amended Rules for Manager Retirement.
August 22, 2019	1. Passed the 2019 capital expenditure budget. 2. Passed the Company's financial derivative transactions.
September 10, 2019	1. Passed the Company's participation in cash capital increase by Nuvoton Technology Corporation 2. Passed the proposal to grant the chairman the authority in the negotiation regarding Nankang real estate project in Taipei. 3. Passed the Company's financial derivative transactions. 4. Approved the syndicated loan/credit limit for financial derivatives transactions granted by banks.
October 25, 2019	1. Passed the increase in budget for capital expenditure. 2. Passed the 2020 audit plan. 3. Passed the Company's financial derivative transactions. 4. Approved the syndicated loan/credit limit for financial derivatives transactions granted by banks. 5. Passed the proposal to remove non-compete clause for Ms. Jessica Huang as a managerial officer. 6. Passed the 2019 directors compensation distribution plan. 7. Passed the 2019 employees compensation distribution plan. 8. Passed the promotion of Mr. Wen-Hua Lu to vice president.
December 23, 2019	1. Passed the increase in budget for capital expenditure. 2. Passed the proposal to change signing accountants in 2019 Q4. 3. Passed the Company's financial derivative transactions. 4. Approved the syndicated loan/credit limit for financial derivatives transactions granted by banks. 5. Passed the amended Rules for Remuneration and Performance Evaluation of Directors and renaming to the Rules for Remuneration of Directors and Performance Evaluation of the Board of Directors.

Meeting date	Summary of resolutions
February 7, 2020	1. Passed the 2019 financial reports. 2. Passed the 2019 consolidated business report, consolidated financial statements and affiliation report covering affiliated enterprises. 3. Passed the 2019 Statement on Internal Control System. 4. Passed the 2020 business plan and budget. 5. Passed the 2020 capital expenditure budget. 6. Passed the annual remuneration paid to accounting firm Deloitte & Touche. 7. Passed the purchase of liability insurance for directors, supervisors and other key persons. 8. Passed the Company's financial derivative transactions. 9. Passed the short-term lines of credit obtained from financial institutions. 10. Passed the appointment of Mr. Pei-Ming Chen as a managerial officer and president. 11. Passed the promotion of Mr. Tung-Yi Chan to deputy CEO. 12. Approved the retirement application made by deputy CEO Yuan-Mow Su and his discharge as a managerial officer. 13. Passed the change of the Company's Chief Accounting Officer. 14. Passed the special bonus for VP Jessica Huang.
March 12, 2020	1. Passed the 2019 business report. 2. Passed the proposed preparation of the 2019 earnings distribution plan. 3. Passed the increase in budget for capital expenditure. 4. Passed the amended Procedures for Making Endorsements and Guarantees. 5. Passed the amended Organizational Rules for Audit Committee. 6. Passed the amended company regulations. 7. Passed the proposed election of directors (and independent directors). 8. Passed the candidate list for 12th-term board of directors (including independent directors) nominated by the Board of Directors. 9. Passed the removal of non-compete clause for 12th-term board of directors (independent directors included). 10. Passed the removal of non-compete clause for Vice Chairman Yuan-Mow Su. 11. Passed the removal of non-compete clause for managerial officer Mr. Pei-Ming Chen. 12. Passed the proposed calling of 2020 general shareholders' meeting. 13. Passed financial derivative transactions made on the Company's behalf. 14. Approved syndicated loans/credit limits for financial derivatives transactions obtained on behalf of the Company.

12. Dissenting or qualified opinion of directors against an important resolution passed by the Board of Directors that is on record or stated in a written statement in the past year and up to the date of report: None

13. Resignation and dismissal of managers related to the financial report (including chairman, president, chief accounting officer, chief financial officer, chief R&D officer and chief internal auditor) in the past year and up to the date of report:

March 31, 2020				
Title	Name	Date of appointment	Date of dismissal	Reason for resignation or dismissal
Chief Accounting Officer	Jessica Huang	2015.04.01	2020.03.01	Reassignment

14. Handling of material information:

The Company has a rigorous internal operating process in place for the handling of material information, which is made public in accordance with the "Rules for Spokesperson and Acting Spokesperson Operation." The Company also publicizes its Procedure for Prevention of Insider Trading among employees from time to time to prevent the violation of relevant rules.

(V) Information on fees to CPA:

1. Fees paid to certifying accountants and accounting firm in 2019 are as follows, where non-audit fee is less than one fourth of audit fee.

Name of accounting firm	CPA Name		Duration of audit	Notes
Deloitte & Touche	Kuo-Tien Hung	Hung-Bin Yu	2019.01.01 - 2019.09.30	
Deloitte & Touche	Wen Yea Shyu	Hung-Bin Yu	2019.10.01 - 2019.12.31	

Unit: NTD

Scale \ Fee category		Audit Fee	Non-Audit Fee	Total
1	Below NT\$2,000,000		V	
2	NT\$2,000,000 ~ NT\$4,000,000			
3	NT\$4,000,000 ~ NT\$6,000,000			
4	NT\$6,000,000 ~ NT\$8,000,000	V		
5	NT\$8,000,000 ~ NT\$10,000,000			V
6	NT\$10,000,000 or above			

Unit: NTD Thousand

Name of accounting firm	CPA Name	Audit Fee	Non-Audit Fee					Duration of Audit	Notes
			Sytem Design	Business Registration	Human Resource	Others	Sum		
Deloitte & Touche	Kuo-Tien Hung	7,498	-	65	-	793	858	108.01.01   108.09.30	Others of Non-Audit Fee: Transfer pricing Report, Tax Consultancy, Non-manager salary filing audit report, and Chattel Mortgage review report.
	Hung-Bin Yu								
Deloitte & Touche	Wen-Yea Shyu							108.10.01   108.12.31	
	Hung-Bin Yu								

2. If the company changes accounting firm and the amount of audit fee paid in the year of change is less than that in the year before, the amount of decrease and reason: The Company did not change accounting firm in 2019.
3. If the audit fee is more than 15% less than that paid in the previous year, the amount and percentage of decrease and reason: Not applicable.

(VI) Information on change of accountants:

Due to internal changes in the CPA firm, the Company's CPA Kuo-Tien Hung and Hung-Bin Yu have been changed to CPA Wen-Yea Shyu and Hung-Bin Yu since 2019 Fourth quarter.

(1) Regarding previous CPA

Date of change	December 23, 2019		
Reasons for change and remark	Internal adjustment of the certifying CPA firm		
Termination initiated by client or accountant declined to accept the appointment	Contracting parties	CPA	Client
	Scenario		
	Termination initiated by client	N/A	
	CPA declined to accept (continue) the appointment		
Audit opinions other than unqualified opinions issued in the past two years and reasons	None		
Opinions different from those of issuer	None		
Other disclosures	None		

(2) Regarding succeeding CPA

Name of firm	Deloitte & Touche
CPA Name	Wen-Yea Shyu and Hung-Bin Yu
Date of appointment	December 23, 2019



Consultation given on accounting treatment or accounting principle adopted for any specific transactions and on possible opinion issued on financial report prior to appointment and results	None
Succeeding CPAs' written opinions that are different from those of the previous CPAs	None

(3) The former CPA's reply to matters under Items 1 and 2-3, Subparagraph 6, Article 10 of the Regulations Governing Information to be published in Annual Reports of Public Companies: None

(VII) The chairman, president and financial or accounting manager of the Company who had worked for the certifying accounting firm or its affiliate in the past year: None

(VIII) Share transfer by directors, managers and shareholders holding more than 10% of shares and changes to share pledging by them in the past year and up to the date of report

Unit: Shares

Title	Name	2019		2020 up to March 31	
		Increase (decrease) in shares held	Increase (decrease) in shares pledged	Increase (decrease) in shares held	Increase (decrease) in shares pledged
Chairman and CEO	Arthur Yu-Cheng Chiao	-	-	-	-
Vice Chairman and Deputy CEO	Yuan-Mow Su (Note 3)	(162,000)	-	-	-
Director	Yung Chin	-	-	-	-
Independent director	Francis Tsai	-	-	-	-
Independent director	Allen Hsu	-	-	-	-
Independent director	Jerry Hsu	-	-	-	-
Independent director	San-Cheng Chang (Note 4)	-	-	-	-
Independent director	Stephen T. Tso (Note 5)	-	-	-	-
Director	Wei-Hsin Ma	-	-	-	-
Director	Chih-Chen Lin	-	-	-	-
Director	Institutional and top 10 shareholder	-	-	-	-
	Representative	-	-	-	-
Deputy CEO	Tung-Yi Chan (Note 3)	-	-	-	-
President	Pei-Ming Chen (Note 6)	-	-	-	-
Vice President	Cheng-Kung Lin	-	-	-	-
Vice President	Chin-Fen Tsai	-	-	-	-
Vice President	Pei-Lin Pai	-	-	-	-
Vice President, Chief Financial Officer, and Corporate Governance Officer	Jessica Huang	(63,000)	-	-	-
Vice President	Hsiang-Yun Fan (Note 7)	120,000	-	-	-
Vice President	Wen-Hua Lu (Note 8)	-	-	-	-
Chief Business Officer	Eungjoon Park	-	-	-	-
Assistant Vice President	Shi-Yuan Wang	-	-	-	-
Assistant Vice President	Eddy Hung	(8,000)	-	(72,000)	-
Assistant Vice President	Mao-Hsiang Yen	12,552	-	-	-
Assistant Vice President	Hsiu-Han Liao	13,416	-	-	-
Assistant Vice President	Yo-Song Cheng (Note 9)	11,476	-	-	-
Accounting Officer	Chin-Feng Yang (Note 10)	-	-	-	-

Note 1: The information above is based on actual shares held.

Note 2: Share transfer to non-related parties, not pledged.

Note 3: Deputy CEO Yuan-Mow Su is to retire on March 1, 2020. President Tung-Yi Chan is to be promoted to deputy CEO on March 1, 2020.

Note 4: Mr. San-Cheng Chang served as an independent director of the Company up to November 15, 2019. The above table discloses his information up to the date his term of office as Winbond's independent director ends.

Note 5: Mr. Stephen T. Tso is appointed an independent director starting June 14, 2019.

Note 6: Mr. Pei-Ming Chen is appointed President starting March 1, 2020.

Note 7: Mr. Hsiang-Yun Fan is appointed vice president starting August 1, 2019.

Note 8: Mr. Wen-Hua Lu is appointed vice president starting November 1, 2019.

Note 9: Mr. Yo-Song Cheng served as an assistant vice president of the Company up to October 14, 2019. The above table discloses his information up to the date his service as a manager of the Company ends.

Note 10: Ms. Jin-Feng Yang is appointed chief accounting officer starting March 1, 2020.

(IX) Information on relationship between any of the top ten shareholders (related party, spouse, or kinship within the second degree)

March 31, 2020; Unit: Shares

Name	Shares held by the person		Shares held by spouse and minor children		Total amount of shares held in the name of others		Titles, names and relationships between top 10 shareholders (related party, spouse, or kinship within the second degree) (Note 3)		Notes
	Shares	Shareholding percentage (Note 1)	Shares	Shareholding percentage (Note 1)	Shares	Shareholding percentage (Note 1)	Title (or name)	Relationship	
Walsin Lihwa Corporation	883,848,423	22.21%	-	-	-	-	<ul style="list-style-type: none"> <li>Chin Xin Investment Corp.</li> <li>Arthur Yu-Cheng Chiao</li> <li>Pai-Yung Hong</li> <li>Yu-Lon Chiao</li> <li>Yu-Heng Chiao</li> </ul>	<ul style="list-style-type: none"> <li>The chairmen of two institutional shareholders have second degree of kinship</li> <li>A relative within second degree of kinship with the chairman of the institutional shareholder</li> <li>A relative within first degree of kinship with the chairman of the institutional shareholder</li> <li>Chairman of the institutional shareholder</li> <li>A relative within second degree of kinship with the chairman of the institutional shareholder</li> </ul>	
Walsin Lihwa Corporation Representative: Yu-Lon Chiao	29,694,984	0.80%	4,531,771	0.11%	-	-	<ul style="list-style-type: none"> <li>Arthur Yu-Cheng Chiao</li> <li>Pai-Yung Hong</li> <li>Chin Xin Investment Corp.</li> <li>Yu-Heng Chiao</li> </ul>	<ul style="list-style-type: none"> <li>The two have second degree of kinship</li> <li>The two persons have first degree of kinship</li> <li>The chairmen of two institutional shareholders have second degree of kinship</li> <li>The two have second degree of kinship</li> </ul>	
Chin Xin Investment Corp.	221,003,072	5.55%	-	-	-	-	<ul style="list-style-type: none"> <li>Walsin Lihwa Corporation</li> <li>Arthur Yu-Cheng Chiao</li> <li>Pai-Yung Hong</li> <li>Yu-Lon Chiao</li> <li>Yu-Heng Chiao</li> </ul>	<ul style="list-style-type: none"> <li>The chairmen of two institutional shareholders have second degree of kinship</li> <li>Chairman of the institutional shareholder</li> <li>A relative within first degree of kinship with the chairman of the institutional shareholder</li> <li>A relative within second degree of kinship with the chairman of the institutional shareholder</li> <li>A relative within second degree of kinship with the chairman of the institutional shareholder</li> </ul>	
Chin Xin Investment Corp. Representative: Arthur Yu-Cheng Chiao	63,472,995	1.59%	11,778,797	0.30%	-	-	<ul style="list-style-type: none"> <li>Walsin Lihwa Corporation</li> <li>Pai-Yung Hong</li> </ul>	<ul style="list-style-type: none"> <li>A relative within second degree of kinship with the chairman of the institutional shareholder</li> <li>The two persons have first degree of kinship</li> </ul>	

Name	Shares held by the person		Shares held by spouse and minor children		Total amount of shares held in the name of others		Titles, names and relationships between top 10 shareholders (related party, spouse, or kinship within the second degree) (Note 3)		Notes
	Shares	Shareholding percentage (Note 1)	Shares	Shareholding percentage (Note 1)	Shares	Shareholding percentage (Note 1)	Title (or name)	Relationship	
							<ul style="list-style-type: none"> <li>Yu-Lon Chiao</li> <li>Yu-Heng Chiao</li> </ul>	<ul style="list-style-type: none"> <li>The two have second degree of kinship</li> <li>The two have second degree of kinship</li> </ul>	
Arthur Yu-Cheng Chiao	63,472,995	1.59%	11,778,797	0.30%	-	-	Walsin Lihwa Corporation  <ul style="list-style-type: none"> <li>Pai-Yung Hong</li> <li>Yu-Lon Chiao</li> <li>Chin Xin Investment Corp.</li> <li>Yu-Heng Chiao</li> </ul>	<ul style="list-style-type: none"> <li>A relative within second degree of kinship with the chairman of the institutional shareholder</li> <li>The two persons have first degree of kinship</li> <li>The two have second degree of kinship</li> <li>Chairman of the institutional shareholder</li> <li>The two have second degree of kinship</li> </ul>	
Vanguard Total International Stock Index Fund, a series of Vanguard Star Funds under the custody of JPMorgan Chase Bank N.A. Taipei Branch	48,916,909	1.23%	-	-	-	-			Note 2
Vanguard Emerging Markets Stock Index Fund managed by Vanguard Group under the custody of JPMorgan Chase Bank N.A. Taipei Branch	46,148,602	1.16%	-	-	-	-			Note 2
Norges Bank Investment Account under the trust of Citibank (Taiwan)	44,890,045	1.13%	-	-	-	-			Note 2
LGT Bank (Singapore) Investment Fund under the custody of JPMorgan Chase Bank N.A. Taipei Branch	41,540,306	1.04%	-	-	-	-			Note 2
Pai-Yung Hong	38,433,771	0.97%	-	-	-	-	Walsin Lihwa Corporation  <ul style="list-style-type: none"> <li>Arthur Yu-Cheng Chiao</li> <li>Yu-Lon Chiao</li> <li>Chin Xin Investment Corp.</li> <li>Yu-Heng Chiao</li> </ul>	<ul style="list-style-type: none"> <li>A relative within first degree of kinship with the chairman of the institutional shareholder</li> <li>The two persons have first degree of kinship</li> <li>The two persons have first degree of kinship</li> <li>A relative within first degree of kinship with the chairman of the institutional shareholder</li> <li>The two persons have first degree of kinship</li> </ul>	-
Dimension Emerging Market Evaluation Fund under the trust of Citibank (Taiwan)	35,350,572	0.89%	-	-	-	-			Note 2

Name	Shares held by the person		Shares held by spouse and minor children		Total amount of shares held in the name of others		Titles, names and relationships between top 10 shareholders (related party, spouse, or kinship within the second degree) (Note 3)		Notes
	Shares	Shareholding percentage (Note 1)	Shares	Shareholding percentage (Note 1)	Shares	Shareholding percentage (Note 1)	Title (or name)	Relationship	
Yu-Heng Chiao	31,988,748	0.80%	2,728,567	0.07%	-	-	Walsin Lihwa Corporation  • Arthur Yu-Cheng Chiao • Pai-Yung Hong  • Chin Xin Investment Corp.  • Yu-Lon Chiao	<ul style="list-style-type: none"> <li>• A relative within second degree of kinship with the chairman of the institutional shareholder</li> <li>• The two have second degree of kinship</li> <li>• The two persons have first degree of kinship</li> <li>• A relative within second degree of kinship with the chairman of the institutional shareholder</li> <li>• The two have second degree of kinship</li> </ul>	-

Note 1: "Shareholding percentage" was based on then issued and outstanding common shares of 3,980,000,193 shares as of March 31, 2020.

Note 2: The custodian banks are unable to provide the list of ultimate holders.

Note 3: Relationships are disclosed pursuant to the "Regulations Governing the Preparation of Financial Reports by Securities Issuers."

(X) The shareholding of the Company, Director, manager and an enterprise that is directly or indirectly controlled by the Company in the invested company

December 31, 2019; Unit: Shares

Invested entity (Note)	Investment by the Company (A)		Investments by directors, managers and directly or indirectly controlled enterprises (B)		Combined investment (A+B)	
	Shares	Percentage (%)	Shares	Percentage (%)	Shares	Percentage (%)
Winbond International Corporation	95,410,000	100	-	-	95,410,000	100
Pine Capital Investment Ltd.	780,000	100	-	-	780,000	100
Landmark Group Holdings Ltd.	5,343,000	100	-	-	5,343,000	100
Winbond Electronics (H.K.) Ltd.	71,150,000	100	-	-	71,150,000	100
Winbond Technology Ltd	100,000	100	-	-	100,000	100
Callisto Holding Limited	40,000,000	100	-	-	40,000,000	100
Great Target Development Ltd.	4,460,000	100	-	-	4,460,000	100
Winbond Electronics Germany GmbH	850,000	100	-	-	850,000	100
Nuvoton Technology Corporation	177,000,000	62	477,979	-	177,477,979	62
Chin Xin Investment Corp.	182,840,999	38	194,696,278	40	377,537,277	78
Hwa Bao Botanic Conservation Corp.	75,000	15	75,000	15	150,000	30

Note: Long-term investment accounted for using equity method.

## Capital Raising Overview

### I. Capital and shareholding

#### (I) Sources of capital

March 31, 2020; Unit: shares; NTD

Year/ month	Issue price	Authorized capital		Paid-in capital		Sources of capital	Notes	
		Shares	Amount	Shares	Amount		Subscriptions paid with property other than cash	Approval date and number
2014.02	10	6,700,000,000	67,000,000,000	3,694,023,193	36,940,231,930	Exercise of employee stock options: NT\$20,560,000	None	Zhong-Shang-Zi-103000 3799 dated 2014/02/19
2014.05	10	6,700,000,000	67,000,000,000	3,694,466,193	36,944,661,930	Exercise of employee stock options: NT\$4,430,000	None	Zhong-Shang-Zi-103001 1345 dated 2014/05/14
2014.09	10	6,700,000,000	67,000,000,000	3,694,640,193	36,946,401,930	Exercise of employee stock options: NT\$1,740,000	None	Zhong-Shang-Zi-103002 1668 dated 2014/09/18
2014.11	10	6,700,000,000	67,000,000,000	3,694,982,193	36,949,821,930	Exercise of employee stock options: NT\$3,420,000	None	Zhong-Shang-Zi-103002 6773 dated 2014/11/20
2015.11	10	6,700,000,000	67,000,000,000	3,580,000,193	35,800,001,930	Decrease in treasury stock: NT\$1,149,820,000	None	Zhong-Shang-Zi-104002 8089 dated 2015/11/18
2017.12	10	6,700,000,000	67,000,000,000	3,980,000,193	39,800,001,930	Cash capital increase: NT\$4,000,000,000	None	Zhong-Shang-Zi-106100 0748 dated 2017/12/26

March 31, 2019; Unit: shares

Type of stock	Authorized capital			Notes Shares issued and outstanding
	Shares issued and outstanding	Un-issued shares	Total	
Common Shares	3,980,000,193	2,719,999,807	6,700,000,000	Listed Stock

Note 1: Of the total capital amount, up to NT\$5 billion may be used for issues of employee stock options, preferred stocks or corporate bonds with warrant for a total of 500 million shares with par value of NT\$10 per share. Those shares may be issued in installments. The respective amount for the issue of employee stock options, preferred stocks or corporate bonds with warrant may be adjusted by resolution of the Board of Directors in view of the capital market situation and business needs.

Note 2: Information on shelf registration: None

#### (II) Shareholder structure

March 31, 2020

Quantity/ shareholder structure	Government agencies	Financial institutions	other corporations	Individual investors	Foreign institutions and foreigners	Chinese investors (Note)	Total
Number of people	3	68	283	237,758	549	4	238,665
Shares held	8,893,494	96,608,849	1,137,440,701	1,937,645,377	805,410,397	1,375	3,980,000,193
Percentage (%)	0.22%	2.28%	28.58%	48.68%	20.24%	0.00%	100%

Note: Chinese investors refer to China individuals, juristic persons, groups, other institutions or companies based in a third area as provided in Article 3 of the Regulations Governing Investment by People in Mainland China.

#### (III) Dispersion of equity ownership

##### 1. Common shares:

March 31, 2020; Par value of NT\$10 per share

Shares	Number of shareholders	Shares held	Percentage (%)
1 ~ 999	62,131	17,140,593	0.43
1,000 ~ 5,000	115,852	270,872,716	6.81
5,001 ~ 10,000	29,139	232,481,118	5.84
10,001 ~ 15,000	9,956	125,364,398	3.15
15,001 ~ 20,000	6,842	127,479,252	3.20
20,001 ~ 30,000	5,606	142,783,119	3.59
30,001 ~ 50,000	4,271	171,536,609	4.31

Shares	Number of shareholders	Shares held	Percentage (%)
50,001 ~ 100,000	2,836	203,171,533	5.10
100,001 ~ 200,000	1,132	159,013,698	4.00
200,001 ~ 400,000	466	129,349,109	3.25
400,001 ~ 600,000	132	64,503,982	1.62
600,001 ~ 800,000	62	42,715,701	1.07
800,001 ~ 1,000,000	40	35,741,306	0.90
>1,000,001	200	2,257,847,059	56.73
Total	238,665	3,980,000,193	100.00

2. Preferred stocks: N/A

#### (IV) List of major shareholders

1. Names, shares and percentage of shareholding of shareholders with more than 5% of equity:

March 31, 2020		
Name/ shareholding of major shareholder	Shares held	Percentage (%)
Walsin Lihwa Corporation	883,848,423 shares	22.21%
Chin Xin Investment Corp.	221,003,072 shares	5.55%

2. For names, shares and percentage of shareholding of top ten shareholders please see p. 47-49 .

#### (V) Stock price, net worth, earnings, dividends and related information for the previous two years

Unit: NT\$					
Item/ Year			2018	2019	2020 up to March 31
Stock price (Note 1)	High		25.25	20.3	20.6
	Low		11.35	12.35	16.95
	Average		18.47	17.14	16.03
Net worth per share (Note 2)	Before distribution		15.69	15.33	-
	After distribution		14.69	15.23	-
Earnings per share	Weighted average shares (1,000 shares)		3,980,000	3,980,000	-
	Earnings per share		1.87	0.32	-
Dividends per share	Cash dividend		1.00	0.10	-
	Stock dividends	From retained earnings	-	-	-
		From capital surplus	-	-	-
	Accumulated unpaid dividend		-	-	-
Return analysis	Price-earnings ratio (Note 3)		9.88	53.56	-
	Price-dividend ratio (Note 4)		18.47	171.40	-
	Cash dividend yield (Note 5)		5.41%	0.58	-

Note 1: The year's high and low market prices of common share are provided and the average price for the year is computed based on the year's transaction amount and volume.

Note 2: Net worth per share is computed based on the number of shares issued and outstanding at the end of the year.

Note 3: Price-earnings ratio = Year's average per share closing price / earnings per share.

Note 4: Price-dividend ratio = Year's average per share closing price / cash dividend per share.

Note 5: Cash dividend yield = Cash dividend per share / year's average per share closing price.

Note 6: The 2019 earnings distribution plan was resolved in Board Meeting dated March 31, 2020.

#### (VI) Dividend policy and implementation status

1. Dividend policy

The Company's dividend policy declared in the Articles of Incorporation is as follows:

Any profit at the closing of each fiscal year shall be used to offset prior years' losses after paying all taxes. The Company shall set aside 10% of the remainder, if any, as legal reserve until such reserve equals the paid-in capital. Special reserve may be set aside or reversed according to laws or the competent authority. For the remainder, if any, plus undistributed earnings in prior years, the Board of Directors may propose an earnings distribution plan for dividends for stockholders and submit the plan to the shareholders' meeting for approval.

Where the earnings, statutory surplus reserve, and capital surplus above are to be made in cash, the board of directors shall be granted the authority to decide by a resolution adopted by a majority vote at a meeting attended by over two-thirds of the directors. A distribution report shall also be presented at the shareholders meeting.

The Company's dividend policy is set up in accordance with the Company Act and the Articles of Incorporation of Winbond Electronics Corp. in consideration of factors including capital, financial structure, operating status, earnings, industry characteristics and cycle, etc. Hence the distribution of dividends will factor in the future plans for operational scale and cash flow needs, which however shall not be less than 30% of earnings for the year after offsetting accumulated deficits and deducting legal reserve and special reserve and may be distributed in the form of stock or cash, in which cash dividend to be distributed shall not be less than 50% of total dividends to promote the sustainable development of the Company.

The Company may distribute surplus earnings or offset losses after the end of each half fiscal year. The board of directors should be charged with preparing the books and proposal under Article 21 and following the statutory procedure to submit the documents to the board of directors for approval.

2. Dividend distribution to be proposed to the shareholders' meeting: Pursuant to Article 240 of the Company Act and the Winbond Articles of Incorporation, the board of directors passed a resolution on March 12, 2020 to distribute NT\$398,000,019 in cash dividends, or NT\$0.1 per common share, for 2019. The actual cash dividends will be rounded down to the nearest dollar. The odd amounts under NT\$1 will be combined and recognized as other income for the Company. In the event of a future buyback causing changes in the number of outstanding shares and consequently the amount per share to be distributed to shareholders, the chairman is authorized to make adjustments based on the actual number of outstanding shares on the ex-dividend date.

(VII) Effect of the proposed stock dividends (to be adopted by the shareholders' meeting) on the operating performance and earnings per share: N/A.

(VIII) Remuneration to employees and directors

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

The Company shall set aside not more than 1% of its earnings before tax for the year prior to deducting compensation of employees and directors as remuneration to directors, and not less than 1% as employee compensation. Employee compensation shall be decided by the Board of Directors, and may be distributed in the form of stock or cash to employees. Employee bonus and director remuneration proposals shall be presented to the shareholders meeting.

However when the Company still has accumulated loss, a certain amount of the earnings shall be retained for making up the loss and the remainder may be set aside as employee compensation and remuneration to directors according to the percentage specified in the preceding paragraph.

2. Basis for estimating the amount of compensation for employees and directors, basis for calculating the number of shares to be distributed as stock compensation, and the accounting treatment of the discrepancy, if any, between the actual distributed amount and the estimated amount, for the current period:

According to Article 22 of the Company's Articles of Incorporation, 1% of the Company's 2019 CPA-audited earnings in the amount of NT\$14,019,096 will be appropriated as remuneration to directors, and 2% in the amount of NT\$28,038,192 will be appropriated as employee compensation. The remuneration to directors and the employee compensation will all be distributed in cash. The aforementioned appropriation ratios and amounts have been passed by the Remuneration Committee and the Board of Directors.

If the estimated amount differs from the actual amount after the date of the consolidated financial report, the discrepancy will be treated according to changes in accounting estimates and adjusted and entered into account the following year.



3. Distribution of compensation passed by the Board of Directors:

- (1) Employee compensation and remuneration to directors distributed in the form of cash or stock. In case of any discrepancy between the amounts and the amortized estimates for the year, the differences, reasons, and responses should be disclosed.

Year of compensation: 2019				Unit: shares; NT\$			
Employee compensation				Remuneration to directors	Any difference between the amounts and the estimates stated in the financial statements for the year		
Cash	Stock	Number of shares	Total	Cash	Difference	Reason	Actions taken
28,038,192	-	-	28,038,192	14,019,096	-	N/A	N/A

Note: There is no difference between the aforementioned compensation of employees and directors and the amount recognized in the 2019 consolidated financial statements.

- (2) Amount of employee compensation distributed in the form of stock as a percentage of the after-tax income provided in this year's stand-alone financial statements and total employee compensation combined: N/A.

4. Information on actual distribution of employee compensation and remuneration to directors in the previous year:

Year of compensation: 2018				Unit: shares; NT\$			
Employee compensation				Remuneration to directors	Any difference between the amounts and the estimates stated in the financial statements for the year		
Cash	Stock	Number of shares	Total	Cash	Difference	Reason	Actions taken
163,649,825	-	-	163,649,825	81,824,913	-	N/A	N/A

Note: There is no difference between the aforementioned compensation of employees, and directors and the amount recognized in the 2018 consolidated financial statements.

(IX) Stock buyback: None

II. Issuance of corporate bonds

March 31, 2020; Unit: NT\$

Type of corporate bond	2018 first secured corporate bonds	
Date of issue	2018/7/17	
Denomination	1,000,000	
Issue price	Fully issued at par value	
Total amount	10,000,000,000	
Coupon Rate	1% per annum	
Tenor	7-year maturity date: 2025/7/17	
Guarantors	Taiwan Cooperative Bank, CTBC Bank, Taishin International Bank, Mega Bank, DBS Bank, Bank of Taiwan, Chang Hwa Bank, E.Sun Commercial Bank, First Commercial Bank, Taiwan Business Bank	
Trustee	SinoPac Bank	
Underwriter	Taiwan Cooperative Bank	
Legal advisor	Hsin-Lan Hsu, Lee and Li, Attorneys-at-Law	
Auditor	Hung-Bin Yu, Deloitte & Touche	
Repayment	Bullet loan	
Unpaid principal	10,000,000,000	
Redemption or early repayment clause	None	
Covenants	None	
Name of credit rating agency, date of rating, and bond rating	None	
Other rights of	Amount of converted (exchanged or subscribed) common shares, GDRs or other securities	Other rights of bondholders

bondholders	Issuance and conversion (or exchange) features	
Possible dilution effect of issuance and conversion, exchange or subscription features and terms of issue, and effects on existing stockholders' equity		None
Custodian		N/A

III. Issuance of preferred stocks: None

IV. Issuance of global depository receipts (GDR)

March 31, 2020; Unit: USD

Date of issue		February 5, 1999	
Place of issue and trading		Luxembourg	
Total amount		US\$333,502,000	
Offering price per unit		February 5, 1999 - initial issue US\$11.45	November 18, 1999 - additional issue US\$16.70
Total units issued (units)		30,336,980	
		February 5, 1999 - initial issue	14,600,000
		November 18, 1999 - additional issue	9,960,000
		July 7, 2000 - additional issue for the distribution of stock dividends	2,108,252
		June 1, 2001 - additional issue for the distribution of stock dividends	3,668,728
Source of underlying security		Issuance of new shares for cash capital increase	
Underlying security		10 common shares of Winbond	
Rights and obligations of GDR holder		Dividends, interest distribution and relevant taxes of the underlying shares represented by the GDRs shall be governed by the laws of the Republic of China, the Depository Agreement and the Custodial Agreement.	
Trustee		None	
Depository bank		Bank of New York Mellon Corp.	
Custodial bank		Bank International Commercial Bank	
Balance outstanding (units)		13,354	
Allocation method for fees incurred in issuance and the outstanding period		Borne by Winbond Electronics Corp.	
Covenants of depository agreement and custodial agreement		The deposit, redemption and delivery of the underlying shares represented by the GDRs and the re-issuance of the GDRs shall be governed by the laws of the Republic of China, Depository Agreement and the Custodial Agreement.	
Unit price (US\$)	2019	High	6.56
		Low	4.37
		Average	5.36
	2020 up to March 31	High	6.62
		Low	3.28
		Average	5.29

V. Exercise of employee stock option plan (ESOP): None

VI. Restricted stock awards: None

VII Mrgers, acquisitions or issuance of new shares for acquisition of shares of other companies: None

VIII. Implementation of fund utilization plan:

I. Financing project that is not yet fully implemented:

After being approved by the Board of Directors, the Company issued new shares on September 7, 2017 for cash capital increase, which has been approved by the FSC Securities and Futures Bureau per letter No.

Jin-Guan-Zheng-Fa-Zi-1060038453 dated October 16, 2017. All funds are used to purchase machinery and equipment.

(I) Issuance plan:

1.Total funding needs under the plan: NT\$10,935,000,000

2.Sources of funds:

- (1) Issuance of 400,000,000 new shares at the price of NT\$22 per share to raise capital in the amount of NT\$8,800,000,000.
- (2) The rest of the funds in the amount of NT\$2,135,000,000 necessary to the plan will come from own funds or bank loans.

3.Project and planned fund utilization schedule

(1) Total fund utilization plan

Unit: NT\$1,000

Project	Planned completion date	Total funds needed	Planned fund utilization schedule					
			2017		2018			
			Q3	Q4	Q1	Q2	Q3	Q4
Expansion of 12-inch wafer capacity	Q4 2018	10,935,000	800,658	1,101,911	5,705,838	2,847,693	405,882	73,018

Note 1: The cash capital increase this time is expected to be completed by the end of 2017. Before the funds are raised in full, the Company will use own funds and bank loans to meet the funding needs for capacity expansion.

Note 2: If the actual fund raised are less than the originally planned, the Company will use own fund and bank loans to cover the shortfall. If the actual fund raised is more than the originally planned, extra fund will also be used in the expansion of 12-inch wafer capacity.

(2) Plan for utilizing funds raised in the planned capital increase

Unit: NT\$1,000

Project	Planned completion date	Total funds raised	Planned fund utilization schedule		
			2018		
			Q1	Q2	Q3
Expansion of 12-inch wafer capacity	Q3 2018	8,800,000	5,705,838	2,847,693	246,469

4.Expected benefits

The Company plans to purchase NT\$10,935,000,000 of machinery and equipment this time. The expected benefits are illustrated below:

Unit: 1,000 pcs; NT\$1,000

Year	Product	Production volume	Sales volume	Sales value	Gross profit	Operating profits
2018	12-inch wafers	49	39	3,057,635	993,704	810,246
2019	12-inch wafers	72	72	4,902,542	1,414,427	1,120,275
2020	12-inch wafers	72	72	4,461,314	1,248,416	980,737
2021	12-inch wafers	72	72	4,059,795	1,095,835	852,247
2022	12-inch wafers	72	72	3,694,414	955,598	733,933
2023	12-inch wafers	72	72	3,361,917	826,705	624,991

(II)Implementation status:

Unit: NT\$1,000

Deadline	Date of Market Observation Post System	Implementati on status	Current quarter		Grand total		Reasons for ahead or behind schedule and improvement plan
			Planned	Actual	Planned	Actual	
2017.12.31	2018.01.10	Spending	0	228,603	0	228,603	The cash capital increase was completed on December 15, 2017. Therefore the plan was executed ahead of schedule in Q4 2017.
		Progress (%)	0.00%	2.59%	0.00%	2.59%	
2018.03.31	2018.04.10	Spending	5,705,838	4,421,721	5,705,838	4,650,324	Ongoing according to plan
		Progress (%)	64.83%	50.25%	64.83%	52.84%	
2018.06.30	2018.07.09	Spending	2,847,693	2,652,710	8,553,531	7,303,034	Ongoing according to plan
		Progress (%)	32.36%	30.15%	97.19%	82.99%	
2018.09.30	2018.10.09	Spending	246,469	423,933	8,800,000	7,726,967	Ongoing according to plan
		Progress (%)	2.81%	4.81%	100.00%	87.80%	

2018.12.31	2019.01.08	Spending	0	157,263	8,800,000	7,884,230	Factory expansion ongoing according to plan
		Progress (%)	0.00%	1.79%	100.00%	89.59%	
2019.03.31	2019.04.08	Spending	0	62,847	8,800,000	7,947,077	Factory expansion ongoing according to plan
		Progress (%)	0.00%	0.71%	100.00%	90.30%	
2019.06.30	2019.07.08	Spending	0	183,115	8,800,000	8,130,192	Factory expansion ongoing according to plan
		Progress (%)	0.00%	2.08%	100.00%	92.38%	
2019.09.30	2019.10.08	Spending	0	76,127	8,800,000	8,206,319	Factory expansion ongoing according to plan
		Progress (%)	0.00%	0.87%	100.00%	93.25%	
2019.12.31	2020.01.09	Spending	0	143,075	8,800,000	8,349,394	The fund raised for the 12-inch wafer capacity expansion project was executed in full. The remaining balance was redirected to provide working capital.
		Progress (%)	0.00%	6.75%	100.00%	94.87%	

## Business Overview

### 1. Business activities

#### a. Business Scope

##### 1. Major business activities and percentages of total revenue

Winbond's core products include DRAM and Code Storage Flash Memory. Logic ICs are the principal products of Nuvoton Technology Corporation ("Nuvoton Technology"), a major subsidiary of Winbond.

2018 revenue breakdown by product (as percentages of consolidated revenue):

Unit: NT\$1,000

Key products	Operating revenue	%
DRAM product income	18,790,988	39
Flash memory product income	19,723,011	40
Logic IC revenue	10,256,574	21
Other income	861	-
Sales revenue - Consolidated financial statements	48,771,434	100

### 2. Key products

#### 2.1 Dynamic random access memory (DRAM)

- Specialty DRAM: They are chiefly used in computing, communication and consumer electronics, automotive and industrial electronics, and medical electronics. Specifications include 16Mb-4Gb and KGD (Known Good Die).
- Mobile DRAM: They are chiefly used in cell phones, tablets, low power mobile handheld devices, wearable devices, automotive and industrial electronics, and the Internet of Things (IoT). Specifications include 32Mb-256Mb pseudo SRAM and 128Mb-4Gb Low Power Mobile DRAM.

#### 2.2 Code Storage Flash Memory

They are chiefly used in PCs and their peripherals, mobile handheld devices and their peripheral modules, network communications products, IoT, consumer electronics, automotive and industrial electronics, medical electronics, and household appliance modules, etc. Specifications include 512Kb-8Gb.

#### 2.3 Logic IC

Nuvoton Technology's primary business consists of IC design and sales and IC foundry services. The main IC products offer a wide range of applications. Products include microcontrollers (MCU), audio products and cloud computing products. Nuvoton Technology also owns a 6-inch IC plant equipped with diversified processing technologies to provide professional IC foundry services.

### 3. New products and services under development

#### 3.1 Dynamic random access memory (DRAM)

- Specialty DRAM: The company continues to develop 25nm shrink version manufacturing process for low- and medium-capacity products. They are chiefly used in computing, communication and consumer electronics, automotive and industrial electronics, and medical electronics. We will also continue to develop the more advancing process.
- Mobile DRAM: We will continue to develop medium-to-low density as well as low power consumption, high bandwidth and better data transmission rate mobile DRAM for applications principally in cell phones, tablets, low power consumption mobile devices, wearable devices, IoT, automotive and industrial electronics.

#### 3.2 Code Storage Flash Memory

We will continue to follow the 4xnm process to produce safe, high performance, low power consumption code storage flash memory products with high added value for applications in PCs and peripherals, mobile handheld devices and peripheral modules, network communications products, IoT, consumer electronics, automotive

and industrial electronics, medical electronics, household appliance modules, and information security, etc. We will also continue to develop more advancing process technology.

### 3.3 Logic IC

The development of new logic IC will focus on low power consumption MCU using high-end processing technologies to satisfy the demands for low-power high-performance applications in IoT, industrial control, etc. Current development of audio products focuses on Class D smart amplifier and audio MCU for applications in smart speaker, cell phone, consumer electronics and portable notebook markets. In terms of cloud computing products, the Company actively introduces functions that satisfy future energy conservation legislation. In addition, we increase the computing speed of the embedded processor and the hardware encryption module to fulfill customer demand for product innovation and security functions.

## b. Industry overview

### 1. Industry current trends and future outlook

#### 1.1 DRAM

The global economic growth slowed down in 2019 amid U.S.-China trade war and rising geopolitical risk. The memory industry suffered as a result of slow inventory digestion and weaker than expected market demands. However, changes in the industrial environment marked by more orderly competition in the DRAM market and diverse applications that drive a new wave of demands for memory have aided the stable growth of the semiconductor industry. For example, emerging technologies, such as AI and 5G are expected to greatly expand the application of IoT, and terminal devices enabled with edge computing will create demands for product upgrade while driving increased use of memory for the add-ons.

#### 1.2 Code Storage Flash Memory

Winbond's code storage flash memory features a serial interface. Winbond is one of the world's three leading serial flash memory suppliers and holds more than one third of the global market. Code storage flash memory is a relatively stable market in terms of size and growth. The code storage flash process is a mature technology that requires relatively less investment and new capacities added in recent years are not disruptive to market equilibrium. Moreover, code storage flash is a key component in numerous electronic applications. The growing number of electronic products and higher capacities will keep the market stable as a whole for a long time.

#### 1.3 Logic IC

The demand for MCU continues to climb. The 32-bit ARM® Cortex®-M MCU is the backbone of the market and new applications are wide ranging as the product offers low power consumption and high performance. With respect to audio products, a wave of revolution and innovations involving applications that enable hands free natural language interaction between voice-user interfaces (VUI) and the internet is setting the industry standards. The demand for cloud services and applications continues to grow while technologies from smart networks to AI computing start changing the everyday life. Servers, data centers, and custom computing devices all serve to satisfy consumers' needs for changes in a constantly changing world.

### 2. Relationships with suppliers in the industry's supply chain

#### 2.1 Memory industry

In terms of the supply chain, upstream equipment suppliers provide the manufacturing equipment, while raw material suppliers are responsible for producing silicon wafers, masks, chemicals, metal targets, gases, and other raw materials for the production of memory.

Midstream memory suppliers, after purchasing equipment and raw materials, use the manufacturing equipment to develop a series of complex processes, such as lithography, rapid hi-temperature processing, chemical vapor deposition, ion implantation, etching, chemical machinery polishing and grinding, and process control and monitoring. Moreover, midstream memory manufacturers will design and develop related memory products based on market demand and future trends. Manufacturers will use process technology to etch the finished product onto the wafers and deliver the wafers to downstream packaging and testing suppliers for backend packaging and testing.

Downstream packaging and testing suppliers are responsible for cutting, grinding, packaging, and completing the final tests of wafers produced in the preceding stage before delivering the finished product to the memory

manufacturers. Memory manufacturers sell the finished product to end-product system manufacturers, module manufacturers, or distributors who will then apply the memory to related products or sell the memory to end customers.

## 2.2 Logic IC industry

The supply chain of the Logic IC industry can be roughly divided into upstream IC design companies, midstream IC manufacturers and downstream IC packaging and testing plants. In terms of the supply chain, MCUs are the control and computing core of end products. In cloud computing IC, downstream customers consist mainly of servers, desktop workstations, personal computers, smart handheld devices, network communications and industrial computer industries.

## 3. Product trends and competition

### 3.1 Dynamic random access memory (DRAM)

With respect to product technology, specialty DRAM product technology has advanced from SDR, DDR, DDR2, DDR3, and DDR4 to DDR5. Mobile DRAM will also move from LP DDR, LP DDR2, LP DDR3 and LP DDR4 to LP DDR5. DDR4 and LP DDR4 are the current mainstream of the DRAM industry, which continues to be dominated by an oligopoly of three large international DRAM manufacturers.

With respect to process technology, international DRAM manufacturers continue to increase the percentage of advanced production such as 1xnm in 2019. Other manufacturers in Taiwan implement 2xnm through technology licensing, and develop their own 1xnm processes at the same time. Trial production is expected to start in late 2020. Winbond is Taiwan's only successful manufacturer with in-house 25nm process technology, which has entered mass production in the fourth quarter of 2018. It will also continue to invest to develop the 25nm shrink version process.

### 3.2 Code Storage Flash Memory

With respect to product capacity, the demand for high-capacity code storage flash memory continues to increase. The capacity of NOR flash memory ranges from 512Kb to 512Mb, and the capacity of NAND flash memory has been expanded to 8Gb, which is the prevailing industry trend. Furthermore, the market will be moving toward an approach that begins with end user applications and proceeds to develop code storage flash memory that offers added value, security, high speed and low voltage. The code storage flash memory market is currently dominated by international manufacturers and some Taiwanese and Chinese manufacturers.

### 3.3 Logic IC

MCU products must feature low power consumption as well as high performance and cost effectiveness. Different fields of application demand specific designs and one product cannot satisfy all requirements. Therefore, the MCU platform products with high security design and software/hardware reference solutions developed for different applications are the market mainstreams. The development of audio products will continue to focus on audio microcontrollers, ultra-low power (ULP) audio CODEC, smart class-D audio amplifier and the DSP algorithm to provide integrated solutions for all kinds of voice interface applications. The demand for cloud services appears when users try to upload a massive amount of data. Innovative applications and service leadership depend not only on well-established data centers, but also on solutions for a growing need for security in end user information gathering infrastructure.

## c. Overview of Technology and R&D

1. Winbond's R&D expenses (including those of the subsidiary and Nuvoton Technology) in the previous year and in the current year up to the annual report publication date:

Unit: NT\$1,000

Item	2019	2020 up to March 31
R&D Expenses	8,132,031	1,911,335

2. Successfully developed technologies and products

### 2.1 Dynamic random access memory (DRAM)

Winbond is Taiwan's only supplier with in-house process technology. It has completed the development of 25nm DRAM, and continued to improve the yield for the in-house 25nm process technology. Winbond is proceeding to develop the 25nm shrink version process in order to meet customers' requirements of high quality, high reliability, and special process specifications.



## 2.2 Code Storage Flash Memory

Winbond continues to use the 4Xnm process to develop code storage flash memory that offers added value, security, high speed, low power consumption, low voltage or encryption. The company also takes a step further to develop more advancing process in order to secure its leading position in serial NOR flash memory. In addition, Winbond continues to promote the serial interface and the more economical 1Gb/2Gb/4Gb/8Gb products to meet the demand of different end user applications.

## 2.3 Logic IC

- The Company launched the high-performance Cortex®-M0 M0564 and high-performance NUC126 USB controllers, which are adapted to industrial control and smart meters, and high-level low-pin 1T 8051 MCU--N76E003.
- NuMicro® M2351 series MCU built in with TrustZone® that focuses on IoT security.
- The Company launched the third-generation BMC (Baseboard Management Controller) products, which support Intel's Purley and AMD Rome server platforms. The product line uses top-performing Cortex® A9 dual-core processor and supports the safe activation of BMC to prevent attacks on the firmware.

## d. Business plan - long-term and short-term

### 1. Short-term business development plans

#### 1.1 Dynamic random access memory (DRAM)

- The company works to improve yield for 25nm process and invests in the development of 2xnm process to reduce product costs and improve quality.
- The company is devoted to developing new products, new customers, and new applications in order to increase chip sales volume and revenue and improve profitability.
- Applications, customers, and product combinations are constantly enhanced to increase the value and profitability of each chip.

#### 1.2 Code Storage Flash Memory

- The company continues to develop the advancing manufacturing process to reduce product costs and improve quality.
- The company continues to try to increase its market share in computers and their peripherals, mobile handheld devices and their peripheral modules, IoT, automotive and industrial electronics, and medical electronics.
- Applications, customers, and product combinations are optimized to increase the value and profitability of each chip.
- The company cultivates world-class brand customers in pursuit of profit stability and growth.

#### 1.3 Logic IC

- In MCU, we enhance the advantages in cost-performance ratio and localized support and actively build an ecosystem where we provide a complete development platform to provide customers with the best development experience.
- With respect to audio products, we will provide customers with comprehensive and high-performance audio and voice solutions.
- Regarding cloud computing products, the Company will expand the development of competitive hardware and software solutions that are suitable for the world's leading brands through leading secure technologies and integrated local advantages.

### 2. Long-term business development plans

#### 2.1 Dynamic random access memory (DRAM)

- The company continues the development of advanced processes to increase core competitiveness.
- The company develops mobile DRAM with new specifications and explores different areas of applications.
- The company increases market share for niche markets such as KGD, automotive, industrial, and medical, MCP, and SiP.

#### 2.2 Code Storage Flash Memory

- The company continues the development of the high-margin end product application market, including automotive and industrial electronics, medical electronics, IoT, and wearable devices. We have received

certification from leading international manufacturers.

- The goal is to offer value in high speed, low voltage, low power, and heightened security levels.

### 2.3 Logic IC

- MCU operations will continue to focus on product development and strengthen technologies in terms of low power consumption, analog and security; and through product innovation and process technology evolution, enrich the 32-bit and 8-bit MCU product platform.
- Audio operations will be built around high-performance, low power consumption audio processing controller and expand the deployment of amplifier and ULP audio CODEC products in the hope to skip the low-end, low-price market and put more resources into developing the smart toy market that offers higher profit margin.

## 2. Market, production and sales

### a. Market analysis

1. Winbond's consolidated sales revenue (including that of the subsidiary Nuvoton Technology) by region of product sales for the year 2019:

Unit: NT\$1,000

Region	Sales	%
Asia	44,709,682	92%
Americas	2,492,029	5%
Europe	1,528,999	3%
Other	40,724	-
Total	48,771,434	100%

### 2. Market share and growth potential

#### 2.1 DRAM

In 2019, Winbond held nearly 1% of the entire DRAM market. For 2020, market research firm predicts that under global economic uncertainties due to COVID-19 pandemic and the U.S.-China trade war, 2020 first half demands for PC, smart phones and consumer electronic end devices will slow down except for NB, Servers, and Data center which are in contrary benefited from stay-at-home economy. The bit growth for DRAM is expected to be mild this year. But in the long run, AI and 5G are expected to greatly expand the application of IoT and the growing use of artificial intelligence in consumer electronics, IoV (Internet of Vehicle) and Industry 4.0 will push up the demand for embedded memory chips and bit capacity. All these developments will contribute to the steady growth of the DRAM sector.

#### 2.2 Code Storage Flash Memory

After many years of hard work in establishing its presence in the market, Winbond is now a leading supplier of code storage flash memory in the world. Winbond continues to hold more than one third of the global serial flash market in 2018. Moreover, the demand for code storage flash memory is shifting toward high capacity. Higher density and the advantages of fewer pins and lower overall costs afforded by code storage flash memory using a serial interface ensure continuing growth in the market for code storage flash memory using a serial interface.

#### 2.3 Logic IC

Our 32-bit Cortex®-M0/M4 MCU, ARM® 7/9, and 8-bit MCUs are cost effective and well received by the market that help drive up our market share every year. Meanwhile, the development of MCUs is moving toward energy-efficient, smart, small, light and multi-functions. The popularity of smart phones also drives the strong demand for wireless chargers. The demands for energy efficient IoT devices, security management, health management and AI products are expected to grow and propel the growth of MCU market.

The applications of our audio products in toys, IoV, IoT and consumer home appliances have acquired a significant market share. The output of audio CODEC IC and amplifiers in consumer electronics continues to rise. With regard to computer/cloud applications, market share of our motherboard Super I/O, notebook EC and TPM still rank in the top three worldwide in 2018. Our major clients include well-known computer brands and OEM service providers.

### 3. Competitive edge, favorable and adverse factors for long-term growth and strategy

#### 3.1 Dynamic random access memory (DRAM)

- Competitive niches: Process development, product development, testing techniques, FAE capabilities, and marketing and sales strengths are Winbond's core competencies. Currently, other DRAM suppliers in Taiwan receive process technology from large foreign DRAM manufacturers by technology licensing. Winbond is the only Taiwanese DRAM supplier with advanced processes development capabilities.
- Favorable conditions for future development: Higher density in smart phones, tablets, TVs, set-top boxes, networking and storage devices will increase DRAM demand. In terms of supply, Moore's law in advanced DRAM process technology is entering a bottleneck, causing the supply to slow down, which will encourage industry development.
- Unfavorable factors and countermeasures: Slowing demand for smartphones may prompt other suppliers to reallocate production capacity to DRAM production, leading to an increased supply and disrupting the demand-supply balance. Winbond continues to optimize the applications lineup and try to explore new opportunities in automotive and industrial electronics, medical electronics, and IoT applications. The company will also invest in new processes and implement advanced processes to improve product profitability. Winbond is constantly exploring new applications and building strong customer relationships as a means to mitigate the risks arising from economic uncertainties.

#### 3.2 Code Storage Flash Memory

- Competitive niches: Winbond has been working in the flash memory market for many years. It offers a complete Code Storage Flash product series (512Kb-8Gb). Winbond held more than one third of the global serial flash market in 2019.
- Favorable conditions for future development: The company shipped more than 3.1 billion units and held more than one third of the global market in 2019. Winbond is highly regarded by its customers for quality and cost. The fact is demonstrated by the company holding more than 40% of the PCs and peripherals market.
- Unfavorable factors and countermeasures: New manufacturers in China will start supplying new production capacities, which will affect the supply and demand in the low to medium density memory market and have an impact on end product demand. Winbond continues to optimize the applications lineup and try to explore new opportunities in automotive and industrial electronics, medical electronics, and IoT applications. The company will also invest in new processes and implement advanced processes to improve product profitability. Winbond is constantly exploring new applications and new customers as a means to reduce the risks arising from market uncertainties.

#### 3.3 Logic IC

- Competitive niches: The company provides professional R&D and technical support teams and establishes strategic partnerships with customers. It provides total solutions to lower cost for customers and enhance their competitive edge. The company's experience in the voice and audio processing market involves IoT market application for the integration of MCU audio CODEC and third-party voice recognition in hopes of providing diversified product options and ideal economic solutions. With regard to cloud computing products, Winbond and customers collaborated on developing customized chips for usage in non-computer product lines to lower cost for customers and enhance their competitive edge.
- Favorable conditions for future development: MCUs retain advantages in the ease of development by users and environmental protection certifications. This core competitive edge raises the barrier to competition for rivals. The audio enhancement DSP chips and the audio amplifier integrated chip can provide audio optimization for customers' devices. Cloud computing products retain a leading position in the market. We are also the world's only TPM IC supplier that is FIPS (Federal Information Processing Standards), Common Criteria EAL4+ and TCG (Trust Computing Group) certified.
- Unfavorable factors and countermeasures: Fierce competition in the consumer electronics market in recent years, short product life cycles, and rapid replacement of traditional products by new products have all contributed to increased costs. The only way to maintain a leading position in the market is to develop products with high integration capabilities and lower cost while enhancing R&D capabilities. The company will continue to strengthen optimization of its products and invest in global technical support teams in order to provide localized customer support services. We will also provide reference designs to reduce R&D costs and time required for customers to adopt our products, which will be the direction for gaining the first-mover advantage.

## b. Major product manufacturing processes

### 1. Major applications of core products

#### 1.1 Dynamic random access memory (DRAM)

- SDR/DDR/DDR2/DDR3 specialty DRAM: used in computer peripherals, automobile electronics, and consumer electronic products
- Pseudo SRAM, Mobile DRAM (Low Power DRAM): used in mobile devices, computers and consumer electronic products

#### 1.2 Code Storage Flash Memory

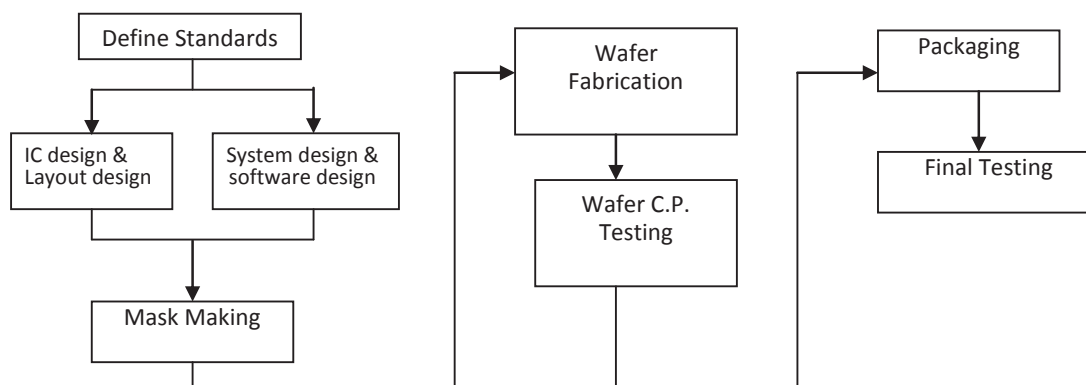
They are used in PCs and their peripherals, mobile handheld devices and their peripheral modules, network communications products, IoT, consumer electronics, automotive and industrial electronics, medical electronics, and household appliance modules, etc.

#### 1.3 Logic IC

Provide customers with industrial controls, consumer electronics, smart home appliances, computer equipment, vehicle-mounted equipment, and communication products.

### 2. Chief product manufacturing processes

The integrated circuit manufacturing process consists of five processes: IC design, mask making, wafer fabrication, packaging, and testing. (see flowchart below):



## c. State of supply of chief raw materials

Winbond's major raw materials and parts include silicon chips, chemicals used in processes, special gases, and targets, etc. The suppliers of these materials are located in the US, Japan, Korea, and Taiwan. A certain level of quality and a steady supply can be expected of these suppliers. Outsourced items include testing and packaging. We have at least two different qualified suppliers for each item, ensuring source and stability of supply.

## d. Names of suppliers who accounted for more than 10% of the purchase by the Company in the last two years, and the amount of purchase to total purchase

Unit: NT\$1,000

Item	2019				2018			
	Name	Amount	% of the year's net purchase	Relationship with the issuer	Name	Amount	% of the year's net purchase	Relationship with the issuer
1	Supplier Z222	1,084,268	11.0%	None	Supplier Z222	796,034	8.1%	None
	Supplier Z016	1,033,965	10.5%	None	Supplier Z016	957,324	9.7%	None
	Supplier Z018	940,620	9.5%	None	Supplier Z018	1,176,102	11.9%	None
	Other	6,804,070	69.0%		Other	6,934,094	70.3%	
	Net purchase	9,862,923	100.0%		Net purchase	9,863,554	100.0%	

e. Names of customers who accounted for more than 10% of the sales in the last two years, and sales as a percentage of total sales

Unit: NT\$1,000

Item	2019				2018			
	Name	Amount	% of the year's net purchase	Relationship with the issuer	Name	Amount	% of the year's net purchase	Relationship with the issuer
1	Customer Y	5,153,522	10.6%	None	Customer Y	5,184,432	10.1%	None
	Other	43,617,912	89.4%		Other	46,005,891	89.9%	
	Net Sale	48,771,434	100.0%		Net Sale	51,190,323	100.0%	

f. Output volume and value during the most recent two years

Total combined output of the company and its subsidiaries, including Nuvoton Technology:

Unit: NT\$1,000

Year	2019				2018			
Core products /Production capacity /Output	Production capacity (Note 1)	Output volume (Note 2)		Value	Production capacity (Note 1)	Output volume (Note 2)		Value
		Wafer	Die			Wafer	Die	
DRAM	12-inch wafers 644	0.8	1,303,387	14,556,355	12-inch wafers 615	1.5	1,142,445	14,904,657
Flash		0.2	3,169,534	12,727,104		0.5	2,746,719	10,525,031
Logic IC	6-inch wafers 500	412	918,358	5,987,514	6-inch wafers 500	395	920,999	5,904,023
Total		413	5,391,279	33,270,973		397	4,810,163	31,333,711

Note 1: Wafer production capacity is measured in 1,000 pieces.

Note 2: Wafer production is measured in 1,000 pieces; die production is measured in 1,000 pieces.

g. Sales volume and value during most recent two years

Total combined sales of the company and its subsidiaries, including Nuvoton Technology:

Unit: NT\$1,000

Year	2019						2018					
Product/ Sales volume and value	Domestic sales			Exports			Domestic sales			Exports		
	Sales volume (note)		Sales	Sales volume (note)		Sales	Sales volume (note)		Sales	Sales volume (note)		Sales
	Wafer	Die		Wafer	Die		Wafer	Die		Wafer	Die	
DRAM	-	243,844	3,336,009	1	1,001,049	15,454,979	-	301,605	5,065,937	1	843,918	16,517,023
Flash	-	829,288	4,356,660	-	2,288,390	15,366,351	-	616,933	3,621,715	-	2,087,491	16,026,128
Logic ICs	197	220,319	3,792,168	208	699,463	6,464,406	228	255,164	3,767,729	161	649,765	6,190,639
Other	-	-	16	-	-	845	-	-	467	-	-	685
Total	197	1,293,451	11,484,853	209	3,988,902	37,286,581	228	1,173,702	12,455,848	162	3,581,174	38,734,475

Note: Wafer sales are measured in 1,000 pieces; die sales are measured in 1,000 pieces.

3. Employees

Information related to the employees of the Company and subsidiary Nuvoton Technology:

Year		2018	2019	2020 up to March 31
Number of employees	Technical personnel (engineers)	3,011	3,120	3,100
	Administration and sales staff	956	1,010	994
	Assistant to technicians	769	769	769
	Total	4,736	4,899	4,863

Year		2018	2019	2020 up to March 31
Average age		39.52	39.28	40.01
Average years of service		9.78	8.92	9.79
Education background (%)	Ph.D	1.88	1.99	1.86
	Master's	41.81	44.54	43.83
	University/College	45.08	44.95	43.72
	Senior High School	10.96	8.42	10.26
	Senior High School and below	0.27	0.09	0.33

#### 4. Spending on environmental protections

a. Losses (including damages and violations of the environmental regulations named in environmental audits, which should list the date, document number, and article number and content of the regulations violated, and penalty description) incurred for polluting the environment in last two years and up to the publication date of this annual report, and estimated potential loss at present and in the future and countermeasures: None

b. Preventive measures taken to ensure a safe working environment and maintain employees' personal safety

The Company upholds the spirit of the ISO 14001 environmental management system, and pledges to provide and maintain a working environment better than that required by law and industry practice. We also strive to comply with international environmental protection standards, and seek to eliminate possible environmental risks through continuous improvement.

As a member of the global village, in line with the principle of environmentally-friendly design, we strive to develop green products and energy-consuming, low-pollution products that will fulfill our vision of sustainable corporate development.

Throughout production operations, we rely on process optimization to reduce consumption of water and power, use of raw materials and parts, and pollution emissions for each output unit. With respect to organizational management, the company established a Quality & ESH Center responsible for environmental, health, and safety management. We have also appointed suitable environmental management specialists dedicated to air pollution control, water pollution control, and waste disposal and toxic chemicals management. In accordance with law, we have obtained all required environmental protection permits and licenses. Adequate recycling systems for process waste water exhaust gases, and solid wastes were incorporated during an early stage of the plant design process, enabling us to reduce resource losses and pollutant discharges.

Furthermore, we have also undertaken the health, safety, and risk management tasks prescribed in OHSAS 18001 and CNS15506, and integrated an environmental, health and safety management system in order to enhance our overall environmental management performance. The company undertakes an internal environmental, health, and safety audit every half a year and an external audit yearly to ensure proper implementation.

Thanks to our dedication to environmental protection, we have received honors such as the Green Business Award, National Outstanding Industrial Waste Reduction Factory and Contributing Group Award, and Industry Outstanding Voluntary Greenhouse Gas Emission Reduction Factory Award from agencies including the EPA and MOEA. We have received many honors over the years, including the Council of Labor Affairs' Friendly Workplace Award and the Central Taiwan Science Park Administration's Superior Labor Health, Safety Enterprise Award and Health Promotion Administration's Outstanding Healthy Workplace Award.

Looking to the future, we will continue to strengthen our spirit of corporate sustainability, while responding to increasing environmental consciousness by engaging in appropriate environmental protection expenditure when needed, employing innovative technologies to improve the efficiency of pollution control equipment, and striving to minimize the environmental impact of production activities.

#### 5. Employees-employer relations

a. Employee welfare, education and training, retirement system and implementation

1. Employee welfare

- (1) The company has established an "Employee Welfare Committee," "retirement reserve fund supervisory committee," and "environmental, health, safety, and risk management committee," and employees can rely on channels such as employer-employee conferences, opinion boxes, complaint hotlines, and the sexual harassment complaints committee to communicate with management.
- (2) The company provides a comprehensive quality benefit package for its employees and their families. In addition to statutory benefits, such as Labor Insurance, National Health Insurance, and a pension reserve, the company provides a higher child allowance than the industry average.
  - A. Child allowance: In support of the government's policy to encourage people to have children, the company provides a higher child allowance for children born to Winbond employees.  
Employees who have been with the company for one year or longer will receive an allowance of NT\$5,000 per month for each newborn baby until he/she reaches the age of four.  
The allowance makes the company become one of the best companies to work for.
  - B. Marriage and childbirth allowances: In addition to the child allowance, employees are entitled to a marriage or childbirth allowance when they get married or have a child.

## 2. Employee training and education

The Company has established a complete, diversified learning environment in accordance with the Education and Training Management Procedures, and has trained several dozen in-house lecturers in line with the ideal of "respect for the individual and cultivation of professionalism." A total of 884 classroom training classes and 993 online training classes were held in 2019, and were attended for a total of 104,921 person-hours. Employees took part in training a total of 71,335 person-times, training expenditures totaled NT\$1,158 million, and the average training cost per employee was NT\$3,703. The company's main learning channels included the following:

- (1) Classroom classes: In accordance with demand, we formulate professional, QC, work safety, management, and general education and training classes on an annual basis, and hold classes in accordance with plans; employees may sign up to participate in these classes. The following is a summary of the various types of classes:
  - A. We offer management development training activities in accordance with our management functions blueprint; these activities include high-level, mid-level, and basic-level new manager training and other elective classes.
  - B. We offer common, QC, and work safety training in accordance with the Company's quality policy, government laws, and overall demand. Examples of these training classes include working methods, statistical analysis methods, and emergency response safety training classes.
  - C. Professional training is offered when our units have need of specific professional functions. Examples include R&D design classes, process testing classes, and international seminar sharing sessions.
  - D. New employee training classes are geared to getting newcomers quickly up to speed, and include the employment system, corporate culture, and work adaptation classes.
  - E. We conduct basic training assessments for direct personnel, including new employees, as well as continuing advanced professional skills assessments.
- (2) Learning platform: The company's training website provides information on various online classes to encourage learning. To ensure that learning is not limited to certain times or places, employees can select suitable courses and access lecture notes online at any time. We offer the following types of online classes: Classes on the company environment and management system, etc.; classes on laws, regulations, and rules of conduct; basic process training; language classes and other elective classes.
- (3) Lifelong learning: To encourage employers' continuing development and personal growth, in accordance with the In-service Continuing Education Regulations, we recommend that employees study for Master's or Ph.D. degrees at Ministry of Education-accredited domestic universities or approved foreign universities, and the company will subsidize relevant costs. We also provide employees subsidies for enhancement and work-related skills training provided by an external or foreign organization.

## 3. Retirement system

The company has drafted retirement regulations in line with the requirements of the Labor Standards Law and Labor Pension Act. It makes contributions to the pension reserve for its employees under the old or new pension plan.



- (1) Employees under the old pension plan pursuant to the Labor Standards Act: The contribution rate, in addition to monthly contributions at 2% of the monthly salary, is reviewed every year. The Supervisory Committees of Workers' Retirement Reserve Funds is in place to audit pension contributions regularly and to review pension applications.
- (2) Employees under the new pension plan pursuant to the Labor Pension Act: Monthly contributions are made at 6% of the corresponding pay grade into the employees' personal pension accounts. Employees may make voluntary monthly contributions up to 6% of the corresponding pay grade into their personal pension accounts.

b. Licenses held by personnel involved in meaning the transparency of financial information:

Certification	Number of People
International certified internal auditor (CIA)	6
International certification in control self-assessor (CCSA)	1
International certified information systems auditor (CISA)	3
CPA of ROC (CPA)	2

c. Labor-management harmony and employee rights maintenance measures

1. The Company has drafted "employer-employee conference implementation regulations," and regularly holds employer-employee conferences to discuss and negotiate issues of importance. Items in conference resolutions must be dealt with fully by relevant units within a limited time.
2. The Company has drafted "internal appeal regulations" intended to maintain employees' lawful rights and interests and help eliminate illegal and unreasonable treatment of employees, ensuring that employees enjoy a legally-compliant, reasonable, and fair working environment.

d. Losses (including violations of the Labor Standards Act named in labor inspections, which should list the date, document number, article number, content of the regulations violated, and penalty description) incurred for labor disputes in last two years and up to the publication date of this annual report:

The Notice of Labor Inspection Results Zhu-Huan-Zi-1090007755 dated March 16, 2020 fined Nuvoton Technology, a Winbond subsidiary, NT\$50,000 each for "the total number of overtime exceeding forty-six hours a month", a violation of Article 32, Paragraph 2 of the Labor Standards Act, and for "failing to allow workers two regular days off every seven days, where one day would be a regular leave and the other one a rest day", a violation of Article 36, Paragraph 1 of the same act. The total fine imposed was NT\$100,000.

e. Estimated losses due to current and possible future labor-management disputes and response measures

The Company holds regular employer-employee conferences to promote the exchange of views between employer-employee. Both sides have consistently maintained a state of consensus since the founding of the Company, and no disputes have occurred. Furthermore, Winbond reiterated the importance of compliance, and strengthened overtime management.

f. Employee rules of conduct

This company has drafted comprehensive rules of conduct to provide employees with standards for work ethics and conduct, protection of intellectual property rights/business secrets, and work orders. These rules, which are described below, can be viewed by employees via the document management system, announcements in relevant internal websites, or bulletin board messages:

1. Work ethics and conduct
  - (1) Work rules: The Company's regulations contain dedicated service rules and general principles for prevention of sexual harassment.
  - (2) Workplace sexual harassment prevention regulations: In accordance with relevant government laws and regulations, The Company has explicitly drafted workplace sexual harassment prevention regulations and established a dedicated awareness website, and has adopted appropriate prevention, correction, and punishment measures.
  - (3) Employment contracts: Specifies the requirement that employees faithfully perform their duties.
  - (4) Human resource management conduct guidelines: In accordance with relevant government laws and regulations and company regulations, we have drafted "human resource management conduct guidelines"

classes on such subjects as eliminating discrimination, fair treatment, and prohibition of involuntary labor. To ensure that everyone can work under fair and lawful conditions, all company employees receive extensive awareness of these guidelines.

2. Rules for protection of intellectual property rights and maintenance of business secrets

- (1) Work rules: The Company's regulations contain general principles for maintenance of the confidentiality of business secrets.
- (2) Employment contracts: Employment contracts specify requirements concerning confidentiality duties, document ownership, secret information, ownership of intellectual or industrial property, and non-compete terms.

3. Work orders

- (1) Division of responsibilities: The "guidelines for responsibility stratification" specify the division of responsibilities, and serve to guide the performance of on-the-job duties.
- (2) Duties of individual units: The mission of each unit is clearly defined.
- (3) Restrictions on the hiring of relatives: The "restrictions on the hiring of relatives" specify that relatives should not be hired to fill certain positions. This is intended to ensure that the effectiveness and efficiency of the company's internal management is not compromised unnecessarily by family relationships between employees.
- (4) Attendance management
  - (a) "Request for leave regulations": These regulations explicitly state The Company's leave request principles and regulations.
  - (b) "Domestic travel regulations" and "foreign travel regulations": To facilitate personnel management and activate substitute mechanisms, the company has established operating procedures for travel applications; To ensure that personnel taking business trips accomplish their missions, such personnel shall be given appropriate travel subsidies.
  - (c) "Overtime regulations": These regulations explicitly specify The Company's overtime principles and standards.
  - (d) "Regulations concerning work stoppages due to natural disasters and major accidents": These regulations explicitly state standards for work stoppages in the event of natural disasters and major accidents.
- (5) Performance management
  - (a) "Performance management and evaluation regulations": These regulations seek to provide an understanding of employees' strengths and weaknesses, and help them to develop their personal abilities, by assessing the degree to which employees have achieved their personal goals; Employees' contributions to the organization are determined on the basis of mutual comparisons between peers.
  - (b) "Performance guidance operating regulations": Performance guidance work seeks to enhance the productivity of the company as a whole.
- (6) Reward and penalty regulations  
The "Reward and penalty handling regulations" prescribe appropriate rewards or punishments for those employees who display superior performance or violate regulations, and have the intent of encouraging and maintaining on-the-job morale and order.
- (7) Manpower development
  - (a) "In-service continuing education regulations": These regulations establish channels for continuing education, and have a goal of accumulating the human resources needed for the company's long-term operations.
  - (b) "Regulations concerning application to participate in academic groups and organizations": Participation in academic groups and organizations participate can promote the diffusion of knowledge and experience, and help employees to find out about the newest information in their professional fields.
  - (c) "Conference participation and management regulations": Participation in international conferences enables employees to acquire the newest information in their professional fields.
- (8) Communication channels
  - (a) "Labor-management conference implementation regulations": These regulations enshrine the consensus and shared welfare of labor and management, promote teamwork for the sake of corporate development and employee welfare, establish an effective two-way communication system between labor and management, put an end to labor-management disputes, ensure harmonious labor-management relations, and encourage maximal productivity.
  - (b) "Corporate internal appeal regulations": These regulations provide employees with channels expressing their views and making appeals directly to the company, maintain employees' rights and interests, and encourage communication of views.

- (c) "Employee suggestion regulations": Employee's ideas and creative thinking can help the company to continue to improve. These regulations provide for rewards for employees who submit proposals concerning the company's operations, and are intended to encourage employees to contribute their intelligence and experience.

## 6. Important contracts

Nature of contract	Contracting parties	Year and month of contract start and end	Content	Restriction clauses
Technical cooperation	Qimonda AG of Germany	2007.06 - 2014.12 (Note 2)	Licensing of 75nm and 58nm DRAM technology and reserving specific capacity (Note 1)	None
Technical cooperation	Qimonda AG of Germany	2008.04 - 2015.12 (Note 2)	Licensing of 65nm DRAM technology and reserving specific capacity (Note 1)	None
Technical cooperation	Qimonda AG of Germany	2009.08-permanent (Note 2)	Licensing of graphics DRAM process technology and equipment purchase, expanded licensing for 90-65nm process technology, and settlement of insolvency procedure	None
Technical cooperation	Qimonda AG of Germany	2010.04-permanent (Note 2)	Licensing of 45 nm and 46 nm Buried Wordline DRAM processes and equipment purchase	None
Bank loans	Bank of Taiwan	2014.12 - 2021.12	NT\$617.6 million medium-term secured loan	None
Construction contracts	TASA Construction Corporation	2015.05 - 2021.11	Material procurement for new civil construction at FAB-C at Central Taiwan Science Park (CTSP)	None
Construction contracts	TASA Construction Corporation	2015.05 - 2021.11	Construction contract for new civil construction at FAB-C at Central Taiwan Science Park	None
Construction contracts	TASA Construction Corporation	2016.05 - 2024.12	Material procurement for basement, above ground structure, and exterior glass curtain walls under new construction in Zhubei Building	None
Construction contracts	TASA Construction Corporation	2016.05 - 2024.12	Construction contract for basement, above ground structure, and exterior glass curtain walls under new construction in Zhubei Building	None
Syndicated loan	17 banks, including Bank of Taiwan	2016.08 - 2021.12	NT\$12 billion syndicated loan	Financial ratios and others
Construction contracts	Wholetech System Hitech Limited	2017.03 - 2019.12	Contract services for CTSP B2-2 Project - hook-up turkey project	None
Construction contracts	Wholetech System Hitech Limited	2017.03 - 2019.12	Material procurement for CTSP B2-2 Project - hook-up turkey project	None
Construction contracts	Continental Engineering Co., Ltd.	2017.07 - 2021.12	Material procurement for machines and power and air conditioning systems under new construction in Zhubei Building	None
Construction contracts	Continental Engineering Co., Ltd.	2017.07 - 2021.12	Contract services for machines and power and air conditioning systems under new construction in Zhubei Building	None
Joint guarantee	10 banks, including Taiwan Cooperative Bank	2018.06 - 2025.07	Joint guarantee for NT\$10.15 billion	Financial ratios and others
Construction contracts	TASA Construction Corporation	2018.11 - 2024.06	Contract services for Kaohsiung FAB_A and CUB lower part structures	None
Construction contracts	TASA Construction Corporation	2018.11 - 2024.06	Material procurement for Kaohsiung FAB_A and CUB lower part structures	None
Construction contracts	TASA Construction Corporation	2018.11 - 2021.02	Contract services for phase 3 falsework of Kaohsiung Fab	None
Construction contracts	TASA Construction Corporation	2018.11 - 2021.02	Material procurement for phase 3 falsework of Kaohsiung Fab	None
Construction contracts	TASA Construction Corporation	2018.12 - 2025.09	Contract services for main structure work of Kaohsiung Fab	None
Construction contracts	TASA Construction Corporation	2018.12 - 2025.09	Material procurement for main structure work of Kaohsiung Fab	None
Syndicated loan	19 banks, including Bank of Taiwan	2019.01~2026.09	NT\$42 billion syndicated loan	Financial ratios and others
Construction contracts	Nomura Micro Science Co., Ltd.	2019.03~2022.09	Contract services for pure water system work at Kaohsiung Fab	None

Nature of contract	Contracting parties	Year and month of contract start and end	Content	Restriction clauses
Construction contracts	Nomura Micro Science Co., Ltd.	2019.03~2022.09	Material procurement for pure water system work at Kaohsiung Fab	None
Construction contracts	TASA Construction Corporation	2019.03~2024.12	Contract services for steel structure work of Kaohsiung Fab A	None
Construction contracts	TASA Construction Corporation	2019.03~2024.12	Material procurement for steel structure work of Kaohsiung Fab A	None
Construction contracts	TASA Construction Corporation	2019.05~2024.05	Contract services for building renovation at Kaohsiung Fab A	None
Construction contracts	TASA Construction Corporation	2019.05~2024.05	Material procurement for building renovation at Kaohsiung Fab A	None
Construction contracts	TASA Construction Corporation	2019.07~2025.11	Contract services for exterior wall work of Kaohsiung Fab	None
Construction contracts	TASA Construction Corporation	2019.07~2025.11	Material procurement for exterior wall work of Kaohsiung Fab	None
Construction contracts	Mega Union Technology Inc.	2019.09~2023.06	Contract services for wastewater collection and processing system work at Kaohsiung Fab-A of Winbond Electronics	None
Construction contracts	Mega Union Technology Inc.	2019.09~2023.06	Material procurement for wastewater collection and processing system work at Kaohsiung Fab-A of Winbond Electronics	None
Construction contracts	L&K Engineering Co., Ltd.	2019.11~2024.04	Contract services for Phase 1 of mechanical, electrical, and plumbing (MEP) system work at Kaohsiung Fab	None
Construction contracts	L&K Engineering Co., Ltd.	2019.11~2024.04	Material procurement for Phase 1 of mechanical, electrical, and plumbing (MEP) system work at Kaohsiung Fab	None
Construction contracts	Exyte Taiwan Co., Ltd.	2019.12~2024.04	Contract services for clean room work at Kaohsiung Fab of Winbond Electronics	None
Construction contracts	Exyte Taiwan Co., Ltd.	2019.12~2024.04	Material procurement for clean room work at Kaohsiung Fab of Winbond Electronics	None
Merger agreement	Mobile Magic Design Corporation	2019.07~2019.10	Merger with wholly owned subsidiary Mobile Magic Design Corp with October 1, 2019 as the record date	None
Sale and purchase agreement	Nanrong Development Construction Co., Ltd.	2019.09~2024.06	Acquisition of Floors 13 and 14 of Building H and 13 parking spaces in the Nankang World Pearl project	None
Sales agreement	Company M	2017.08~2022.07	Product sales	Providing product warranties. The company has a duty of confidentiality.
Acquisition agreement	Panasonic Corporation	2019.11~2020.12	Acquisition	Paying the contract price as agreed
Licensing agreement	Microchip Technology Incorporated	2020.03~2034.10	Technology licensing	The company shall not grant the same license to any third party.

Note 1: Winbond and Qimonda AG of Germany entered an agreement in August 2009 to terminate the prior agreement on reserving specific capacity.

Note 2: The licensing of 90-45nm process technologies from Qimonda AG of Germany becomes permanent after Winbond pays off royalties as agreed.

7. Financial difficulties and corporate events encountered by the Company and affiliates in the past year and up to the date of report that have material impact on the financial status of the Company:  
None

## Financial Overview

I. Condensed balance sheets, statements of income, names of CPAs, and audit opinions of the last five years

(I) Condensed consolidated balance sheet and statements of income

### 1. Condensed consolidated balance sheet

Unit: NT\$1,000

Item\Year		Financial information of the last five years				
		2015	2016	2017	2018	2019
Current assets		24,712,757	27,259,743	37,240,205	37,528,246	37,557,286
Property, plant and equipment		31,915,030	34,372,537	43,828,707	52,484,183	56,977,114
Intangible assets		270,926	285,304	288,013	229,195	407,722
Other assets		5,699,054	6,071,911	6,759,198	5,800,840	9,862,778
Total Assets		62,597,767	67,989,495	88,116,123	96,042,464	104,804,900
Current liabilities	Before distribution	12,333,195	14,605,735	16,240,188	16,469,744	17,515,468
	After distribution	12,691,195	16,753,735	20,220,188	20,449,744	(Note 2)
Non-current liabilities		10,166,033	8,162,961	10,248,944	15,681,623	23,432,245
Total liabilities	Before distribution	22,499,228	22,768,696	26,489,132	32,151,367	40,947,713
	After distribution	22,857,228	24,916,696	30,469,132	36,131,367	(Note 2)
Equity attributable to owners of parent		38,901,971	43,920,961	60,212,164	62,444,371	61,020,622
Capital		35,800,002	35,800,002	39,800,002	39,800,002	39,800,002
Capital surplus		2,470,292	2,471,044	7,540,440	7,540,440	7,536,396
Accumulated profit (loss)	Before distribution	2,086,060	4,556,570	7,885,707	11,621,286	8,793,542
	After distribution	1,728,060	2,408,570	3,905,707	7,641,286	(Note 2)
Other interests		(1,347,996)	1,199,732	4,986,015	3,482,643	4,890,682
Treasury stock		(106,387)	(106,387)	-	-	-
Non-controlling interests		1,196,568	1,299,838	1,414,827	1,446,726	2,836,565
Total equity	Before distribution	40,098,539	45,220,799	61,626,991	63,891,097	63,857,187
	After distribution	39,740,539	43,072,799	57,646,991	59,911,097	(Note 2)

Note 1: The aforesaid financial information was audited and certified by the CPAs. The 2019 financial report has been approved by the Board of Directors, but has not yet been submitted to the shareholders' meeting.

Note 2: Pending final approval from Shareholders' Meeting.

### 2. Condensed consolidated statements of income

Unit: NT\$1,000

Item\Year		Financial information of the last five years				
		2015	2016	2017	2018	2019
Operating revenue		38,350,315	42,091,709	47,591,792	51,190,323	48,771,434
Gross profit		11,821,653	12,017,772	16,323,687	19,151,103	12,913,852
Operating profits		4,108,926	3,712,956	6,655,768	7,926,697	1,255,209
Non-operating income and expenses		139,258	41,664	441,761	468,203	497,308
Net income (loss) before tax		4,248,184	3,754,620	7,097,529	8,394,900	1,752,517
Less: Income tax expense		775,311	614,546	1,274,579	667,242	275,230
Current period net profit		3,472,873	3,140,074	5,822,950	7,727,658	1,477,287
Other comprehensive income for the current period		(1,754,383)	2,485,116	3,749,701	(1,738,472)	1,294,756
Total comprehensive income for the current period		1,718,490	5,625,190	9,572,651	5,989,186	2,772,043
Net profit attributable to owners of parent		3,291,251	2,897,791	5,550,562	7,446,496	1,256,387
Net profit attributable to non-controlling interests		181,622	242,283	272,388	281,162	220,900
Total comprehensive income attributable to owners of parent		1,541,648	5,376,238	9,263,420	5,810,825	2,560,295
Total comprehensive income attributable to non-controlling interests		176,842	248,952	309,231	178,361	211,748
Earnings per share (NT\$)		0.90	0.81	1.54	1.87	0.32

Note: The aforesaid financial information was audited and certified by the CPAs. The 2019 financial report has been approved by the Board of Directors, but has not yet been submitted to the shareholders' meeting.

## (II) Individual condensed balance sheet and statements of income

### 1. Individual condensed balance sheet

Unit: NT\$1,000

Item\Year	Financial information of the last five years				
	2015	2016	2017	2018	2019
Current assets	19,345,192	21,269,634	31,046,641	31,188,039	27,470,545
Property, plant and equipment	31,195,173	33,607,842	42,969,011	51,577,630	55,691,405
Intangible assets	76,371	69,438	115,325	104,925	123,949
Other assets	8,879,536	9,452,136	10,279,023	9,303,235	14,963,032
Total Assets	59,496,272	64,399,050	84,410,000	92,173,829	98,248,931
Current liabilities	Before distribution	10,878,474	12,760,416	14,638,436	15,267,599
	After distribution	11,236,474	14,908,416	18,618,436	(Note 2)
Non-current liabilities		7,717,673	9,837,779	15,091,022	21,960,710
Total liabilities	Before distribution	20,594,301	20,478,089	29,729,458	37,228,309
	After distribution	20,952,301	22,626,089	33,709,458	(Note 2)
Capital		35,800,002	35,800,002	39,800,002	39,800,002
Capital surplus		2,470,292	2,471,044	7,540,440	7,536,396
Accumulated profit (loss)	Before distribution	2,086,060	4,556,570	11,621,286	8,793,542
	After distribution	1,728,060	2,408,570	7,641,286	(Note 2)
Other interests		(1,347,996)	1,199,732	4,986,015	4,890,682
Treasury stock		(106,387)	(106,387)	-	-
Total equity	Before distribution	38,901,971	43,920,961	60,212,164	61,020,622
	After distribution	38,543,971	41,772,961	56,232,164	(Note 2)

Note 1: The aforesaid financial information was audited and certified by the CPAs. The 2019 financial report has been approved by the Board of Directors, but has not yet been submitted to the shareholders' meeting.

Note 2: Pending final approval from Shareholders' Meeting.

### 2. Individual condensed statements of income

Unit: NT\$1,000

Item\Year	Financial information of the last five years				
	2015	2016	2017	2018	2019
Operating revenue	30,843,606	33,534,343	38,102,813	40,733,527	37,884,848
Gross profit	8,462,362	8,259,823	12,158,001	14,781,238	8,239,412
Operating profits	3,506,698	2,969,794	5,710,689	6,943,927	379,841
Non-operating income and expenses	403,553	401,436	941,679	993,089	980,011
Net income (loss) before tax	3,910,251	3,371,230	6,652,368	7,937,016	1,359,852
Less: Income tax expense	619,000	473,439	1,101,806	490,520	103,465
Current period net profit	3,291,251	2,897,791	5,550,562	7,446,496	1,256,387
Other comprehensive income for the current period	(1,749,603)	2,478,447	3,712,858	(1,635,671)	1,303,908
Total comprehensive income for the current period	1,541,648	5,376,238	9,263,420	5,810,825	2,560,295
Earnings per share (NT\$)	0.90	0.81	1.54	1.87	0.32

Note: The aforesaid financial information was audited and certified by the CPAs. The 2019 financial report has been approved by the Board of Directors, but has not yet been submitted to the shareholders' meeting.

## (III) Names of CPAs and audit opinions of the last five years

Year	CPA Name	Audit opinion
2015	K. T. Hong and K. C. Wu	Unqualified opinion
2016	K. C. Wu and Hung-Bin Yu	Unqualified opinion
2017	Hung-Bin Yu and K. C. Wu	Unqualified opinion
2018	K. T. Hong and Hung-Bin Yu	Unqualified opinion
2019	Wen Yea Shyu and Hung-Bin Yu	Unqualified opinion

## II. Financial analysis of the last five years

### 1. Financial ratios analysis of consolidated financial statements

Item\Year		Financial analysis of the last five years				
		2015	2016	2017	2018	2019
Financial structure	Debt-to-asset ratio (%)	35.94	33.48	30.06	33.47	39.07
	Long-term fund to property, plant and equipment (fixed assets) ratio (%)	157.49	155.30	163.99	151.61	153.20
Solvency	Current ratio (%)	200.37	186.63	229.30	227.86	214.42
	Quick ratio (%)	122.21	126.78	173.14	156.31	150.85
	Times interest earned	17.10	21.07	91.27	47.05	9.00
Operating ability	Receivables turnover ratio (times)	7.11	7.60	7.58	7.72	7.71
	Average days of collection	51	48	48	47	47
	Inventory turnover rate (times)	3.57	3.74	3.98	3.36	3.37
	Payables turnover ratio (times)	5.88	6.51	6.51	6.49	6.73
	Average days of sales	102	98	92	109	108
	Property, plant and equipment turnover ratio (times)	1.16	1.26	1.21	1.06	0.89
	Total assets turnover ratio (times)	0.60	0.64	0.60	0.55	0.48
Profitability	Return on assets (%)	5.79	5.04	7.54	8.55	1.64
	Return on equity (%)	8.74	7.36	10.89	12.31	2.31
	Income before tax to paid-in capital ratio (%)	11.86	10.48	17.83	21.09	4.40
	Net profit margin (%)	9.05	7.46	12.23	15.09	3.02
	Earnings per share (NT\$)	0.90	0.81	1.54	1.87	0.32
Cash flow	Cash flow ratio (%)	62.09	68.40	74.77	82.17	60.38
	Cash flow adequacy ratio (%)	120.88	129.69	101.45	78.21	75.01
	Cash reinvestment ratio (%)	5.58	6.62	5.91	5.19	3.30
Leverage	Operating leverage	3.91	4.27	3.05	3.07	16.22
	Financial leverage	1.06	1.05	1.01	1.02	1.21
Reasons for changes in financial ratios exceeding 20%:						
1. Decreases in return on assets, return on equity, income before tax to paid-in capital ratio, net profit margin and earnings per share: Mainly due to decrease in operating income in 2019.						
2. Decreases in cash flow ratio and cash reinvestment ratio: Mainly due to the decrease in net cash flows from operating activities.						
3. Increases in operating leverage and financial leverage: Mainly due to decrease in operating income in 2019.						

Note: Financial ratios were computed based on audited financial information. The computation formulas used in

financial analysis:

1. Financial structure
  - (1) Debt-to-asset ratio = total liabilities / total assets.
  - (2) Long-term fund to property, plant and equipment ratio = (total equity + non-current liabilities) / net property, plant and equipment.
2. Solvency
  - (1) Current ratio = current assets / current liabilities.
  - (2) Quick ratio = (current assets – inventory – prepaid expense) / current liabilities.
  - (3) Times interest earned = net income before income tax and interest expense / current interest expense.
3. Operating ability
  - (1) Receivable (including accounts receivable and business-related notes receivable) turnover ratio = net operating revenue / average balance of receivable of the period (including accounts receivable and business-related notes receivable).
  - (2) Average days of collection = 365 / receivables turnover ratio.
  - (3) Inventory turnover rate = cost of goods sold / average amount of inventory.
  - (4) Payable (including accounts payable and business-related notes payable) turnover ratio = cost of goods sold / average balance of payable of the period (including accounts payable and business-related notes payable).
  - (5) Average days of sales = 365 / inventory turnover rate.
  - (6) Property, plant and equipment turnover ratio = net sales / net average property, plant and equipment.
  - (7) Total assets turnover ratio = net sales / total average assets.
4. Profitability
  - (1) Return on assets = [net income + interest expense (1– tax rate)] / average total assets.
  - (2) Return on equity = after-tax profit / total average equity.
  - (3) Net profit margin = net income / net sales.
  - (4) Earnings per share = (income attributable to owners of parent – dividend to preferred stock) / weighted average of shares issued.
5. Cash flows
  - (1) Cash flow ratio = new cash flows from operating activities / current liabilities.
  - (2) Cash flow adequacy ratio = net cash flows from operating activities in the past five years / (capital expenditure + increase in inventory + cash dividend) in the past five years.
  - (3) Cash reinvestment ratio = (net cash flows from operating activities – cash dividend) / (gross margin of property, plant and equipment + long-term investment + other non-current assets + working capital).
6. Leverage:
  - (1) Operating leverage = (net operating revenue – variable operating cost and expenses) / operating income.
  - (2) Financial leverage = operating income / (operating income – interest expense).



## 2. Financial ratios analysis of financial statements

Item\Year		Financial analysis of the last five years				
		2015	2016	2017	2018	2019
Financial structure	Debt-to-asset ratio (%)	34.61	31.79	28.66	32.25	37.89
	Long-term fund to property, plant and equipment (fixed assets) ratio (%)	155.85	153.65	163.02	150.32	149.00
Solvency	Current ratio (%)	177.83	166.68	216.20	213.05	179.92
	Quick ratio (%)	99.46	109.12	165.80	144.61	118.37
	Times interest earned	15.90	19.02	85.60	44.53	7.66
Operating ability	Receivables turnover ratio (times)	7.13	7.73	7.51	7.60	7.93
	Average days of collection	51	47	49	48	46
	Inventory turnover rate (times)	3.43	3.64	4.03	3.27	3.27
	Payables turnover ratio (times)	5.71	6.56	6.65	6.42	6.85
	Average days of sales	106	100	91	112	112
	Property, plant and equipment turnover ratio (times)	0.95	1.03	0.99	0.86	0.70
	Total assets turnover ratio (times)	0.50	0.54	0.51	0.46	0.39
Profitability	Return on assets (%)	5.77	4.92	7.54	8.59	1.49
	Return on equity (%)	8.53	6.99	10.66	12.14	2.03
	Income before tax to paid-in capital ratio (%)	10.92	9.41	16.71	19.94	3.41
	Net profit margin (%)	10.67	8.64	14.56	18.28	3.31
	Earnings per share (NT\$)	0.90	0.81	1.54	1.87	0.32
Cash flows	Cash flow ratio (%)	68.19	73.17	82.71	87.70	66.35
	Cash flow adequacy ratio (%)	118.15	125.75	99.70	76.54	73.83
	Cash reinvestment ratio (%)	6.15	6.98	6.39	5.31	3.41
Leverage	Operating leverage	3.71	4.18	2.89	2.92	42.17
	Financial leverage	1.08	1.06	1.01	1.02	2.16
Reasons for changes in financial ratios exceeding 20%:						
(1) Decrease in times interest earned: Mainly due to decrease in pre-tax income in 2019.						
(2) Decreases in return on assets, return on equity, income before tax to paid-in capital ratio, net profit margin and earnings per share: Mainly due to decrease in operating income in 2019.						
(3) Decreases in cash flow ratio and cash reinvestment ratio: Mainly due to the decrease of net cash flows from operating activities.						
(4) Increases in operating leverage and financial leverage: Mainly due to decrease in operating income in 2019.						

Note: Financial ratios were computed based on audited financial information. The computation formulas used in financial analysis:

### 1. Financial structure

- (1) Debt-to-asset ratio = total liabilities / total assets.
- (2) Long-term fund to property, plant and equipment ratio = (total equity + non-current liabilities) / net property, plant and equipment.

### 2. Solvency

- (1) Current ratio = current assets / current liabilities.
- (2) Quick ratio = (current assets – inventory – prepaid expense) / current liabilities.
- (3) Times interest earned = net income before income tax and interest expense / current interest expense.

### 3. Operating ability

- (1) Receivable (including accounts receivable and business-related notes receivable) turnover ratio = net operating revenue / average balance of receivable of the period (including accounts receivable and business-related notes receivable).
- (2) Average days of collection = 365 / receivables turnover ratio.
- (3) Inventory turnover rate = cost of goods sold / average amount of inventory.
- (4) Payable (including accounts payable and business-related notes payable) turnover ratio = cost of goods sold / average balance of payable of the period (including accounts payable and business-related notes payable).
- (5) Average days of sales = 365 / inventory turnover rate.
- (6) Property, plant and equipment turnover ratio = net sales / net average property, plant and equipment.
- (7) Total assets turnover ratio = net sales / total average assets.

### 4. Profitability

- (1) Return on assets = [net income + interest expense (1– tax rate)] / average total assets.
- (2) Return on equity = after-tax profit / total average (stockholders' equity) equity.
- (3) Net profit margin = net income / net sales.
- (4) Earnings per share = (income attributable to owners of parent – dividend to preferred stock) / weighted average of shares issued.

### 5. Cash flows

- (1) Cash flow ratio = new cash flows from operating activities / current liabilities.
- (2) Cash flow adequacy ratio = net cash flows from operating activities in the past five years / (capital expenditure + increase in inventory + cash dividend) in the past five years.
- (3) Cash reinvestment ratio = (net cash flows from operating activities – cash dividend) / (gross margin of property, plant and equipment + long-term investment + other non-current assets + working capital).

### 6. Leverage:

- (1) Operating leverage = (net operating revenue – variable operating cost and expenses) / operating income.
- (2) Financial leverage = operating income / (operating income – interest expense).

### III. Report of the Audit Committee on 2019 Financial Report

#### Report of the Audit Committee

We have examined the 2019 financial statements (including consolidated financial statements), together with business report and earnings distribution proposal prepared by the Board of Directors and audited and certified by CPAs Wen-Yea Shyu and Hung-Bin Yu of Deloitte & Touche with the issue of an unqualified opinion, who did not find any discrepancy. The aforesaid financial statements, business report, and earnings distribution proposal have been reviewed by the Audit Committee and all content was found appropriate. We therefore submit it for your review in accordance with Article 14-4 of the Securities Exchange Act and Article 219 of the Company Act.

To:

Winbond Electronics Corp. 2020 General Shareholders' Meeting

Winbond Electronics Corporation

Convenor of Audit Committee: Allen Hsu

March 16, 2020

**Winbond Electronics Corporation and  
Subsidiaries**

**Consolidated Financial Statements for the  
Years Ended December 31, 2019 and 2018 and  
Independent Auditors' Report**

### INDEPENDENT AUDITORS' REPORT

The Board of Directors and Shareholders  
Winbond Electronics Corporation

#### Opinion

We have audited the accompanying consolidated financial statements of Winbond Electronics Corporation (the “Company”) and its subsidiaries (collectively referred as the “Group”), which comprise the consolidated balance sheets as of December 31, 2019 and 2018, 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, 2019 and 2018, 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, 2019. 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.

### Occurrence of Sales Revenues

There is a significant risk on revenue recognition, and customers' line of credit and delivery of products are highly correlated to recognition of sales revenue. We therefore considered that the occurrence of sales revenue from the twenty largest customers with changes in credit limits and temporary increase in credit limits in 2019 as a key audit matter for the year ended December 31, 2019. Refer to Note 4 to the consolidated financial statements for the Group's revenue recognition policies.

Our audit procedures in response to the validity of sales revenue included understanding the design and the implementation of internal control of sales revenue and selecting samples of revenue items to verify that revenue transactions have indeed occurred.

### **Other Matter**

We have also audited the parent company only financial statements of the Company as of and for the years ended December 31, 2019 and 2018 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 IFRS, IAS, IFRIC, and 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 audit committees, 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 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, 2019 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 Wen-Yea Shyu and Hung-Bin Yu.

Wen-yea Shyu

Hung-Bin Yu

Deloitte & Touche  
Taipei, Taiwan  
Republic of China

February 7, 2020

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.*



# WINBOND ELECTRONICS CORPORATION AND SUBSIDIARIES

## CONSOLIDATED BALANCE SHEETS DECEMBER 31, 2019 AND 2018 (In Thousands of New Taiwan Dollars)

ASSETS	2019		2018	
	Amount	%	Amount	%
<b>CURRENT ASSETS</b>				
Cash and cash equivalents (Notes 4 and 6)	\$ 11,467,907	11	\$ 12,559,631	13
Current financial assets at fair value through profit or loss (Notes 4 and 7)	75,462	-	8,290	-
Current financial assets at fair value through other comprehensive income (Notes 4 and 8)	7,225,588	7	6,249,212	7
Accounts receivable, net (Notes 4 and 9)	6,085,003	6	6,469,413	7
Accounts receivable due from related parties, net (Note 27)	45,903	-	44,297	-
Other receivables (Note 6)	750,720	1	406,879	-
Inventories (Notes 4 and 10)	10,332,143	10	10,908,106	11
Other current assets	1,574,560	1	882,418	1
Total current assets	37,557,286	36	37,528,246	39
<b>NON-CURRENT ASSETS</b>				
Non-current financial assets at fair value through other comprehensive income (Notes 4 and 8)	1,501,756	2	861,853	1
Investments accounted for using equity method (Notes 4 and 11)	4,548,939	4	3,585,328	4
Property, plant and equipment (Notes 4 and 12)	56,977,114	54	52,484,183	55
Right-of-use assets (Notes 4 and 13)	2,298,393	2	-	-
Investment properties (Notes 4 and 14)	44,207	-	50,527	-
Intangible assets (Notes 4 and 15)	407,722	-	229,195	-
Deferred income tax assets	923,902	1	953,726	1
Other non-current assets (Note 6)	545,581	1	349,406	-
Total non-current assets	67,247,614	64	58,514,218	61
<b>TOTAL</b>	<b>\$ 104,804,900</b>	<b>100</b>	<b>\$ 96,042,464</b>	<b>100</b>
<b>LIABILITIES AND EQUITY</b>				
<b>CURRENT LIABILITIES</b>				
Short-term borrowings (Note 16)	\$ 1,000,000	1	\$ -	-
Notes and accounts payable	4,786,251	5	4,317,866	4
Accounts payable to related parties (Note 27)	911,529	1	629,681	1
Payables on machinery and equipment	3,013,266	3	2,860,869	3
Other payables	3,125,368	3	3,776,574	4
Current tax liabilities (Note 21)	198,242	-	178,690	-
Lease liabilities - current (Notes 4 and 13)	186,556	-	-	-
Long-term borrowings - current portion (Note 16)	4,123,520	4	4,563,520	5
Other current liabilities	170,736	-	142,544	-
Total current liabilities	17,515,468	17	16,469,744	17
<b>NON-CURRENT LIABILITIES</b>				
Bonds payable (Notes 4 and 17)	9,931,746	10	9,919,779	10
Long-term borrowings (Note 16)	9,730,473	9	4,179,273	4
Lease liabilities - non-current (Notes 4 and 13)	2,096,115	2	-	-
Net defined benefit liabilities, non-current (Notes 4 and 18)	1,251,869	1	1,167,325	1
Other non-current liabilities	422,042	-	415,246	1
Total non-current liabilities	23,432,245	22	15,681,623	16
Total liabilities	40,947,713	39	32,151,367	33
<b>EQUITY ATTRIBUTABLE TO OWNERS OF THE PARENT (Note 19)</b>				
Share capital	39,800,002	38	39,800,002	41
Capital surplus	7,536,396	7	7,540,440	8
Retained earnings				
Legal reserve	1,798,091	2	1,053,441	1
Unappropriated earnings	6,995,451	6	10,567,845	11
Exchange differences on translation of foreign financial statements	(119,246)	-	(50,780)	-
Unrealized gains on financial assets measured at fair value through other comprehensive income	5,009,928	5	3,533,423	4
Total equity attributable to owners of the parent	61,020,622	58	62,444,371	65
<b>NON-CONTROLLING INTERESTS</b>	2,836,565	3	1,446,726	2
Total equity	63,857,187	61	63,891,097	67
<b>TOTAL</b>	<b>\$ 104,804,900</b>	<b>100</b>	<b>\$ 96,042,464</b>	<b>100</b>

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

# WINBOND ELECTRONICS CORPORATION AND SUBSIDIARIES

## CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018

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

	2019		2018	
	Amount	%	Amount	%
OPERATING REVENUE	\$ 48,771,434	100	\$ 51,190,323	100
OPERATING COSTS (Note 10)	<u>35,857,582</u>	<u>73</u>	<u>32,039,220</u>	<u>63</u>
GROSS PROFIT	<u>12,913,852</u>	<u>27</u>	<u>19,151,103</u>	<u>37</u>
OPERATING EXPENSES				
Selling expenses	1,408,662	3	1,486,523	3
General and administrative expenses	2,123,292	4	2,045,248	4
Research and development expenses	8,132,031	17	7,697,343	15
Expected credit (gain) loss (Note 9)	<u>(5,342)</u>	<u>-</u>	<u>(4,708)</u>	<u>-</u>
Total operating expenses	<u>11,658,643</u>	<u>24</u>	<u>11,224,406</u>	<u>22</u>
INCOME FROM OPERATIONS	<u>1,255,209</u>	<u>3</u>	<u>7,926,697</u>	<u>15</u>
NON-OPERATING INCOME AND EXPENSES				
Interest income	95,203	-	93,833	-
Dividend income	531,803	1	416,339	1
Other income	49,788	-	45,572	-
Gains (losses) on disposal of property, plant and equipment	(1,039)	-	764	-
Foreign exchange gains (losses)	(137,534)	-	280,264	1
Gains (losses) on financial instruments at fair value through profit or loss	64,016	-	(328,890)	(1)
Share of profit of associates accounted for using equity method	241,034	-	228,981	-
Interest expense	(218,980)	-	(182,299)	-
Other expenses	(126,983)	-	(73,471)	-
Other impairment loss	<u>-</u>	<u>-</u>	<u>(12,890)</u>	<u>-</u>
Total non-operating income and expenses	<u>497,308</u>	<u>1</u>	<u>468,203</u>	<u>1</u>
PROFIT BEFORE INCOME TAX	1,752,517	4	8,394,900	16
INCOME TAX EXPENSE (Notes 4 and 22)	<u>275,230</u>	<u>1</u>	<u>667,242</u>	<u>1</u>
NET PROFIT	<u>1,477,287</u>	<u>3</u>	<u>7,727,658</u>	<u>15</u>

(Continued)

# WINBOND ELECTRONICS CORPORATION AND SUBSIDIARIES

## CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018

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

	2019		2018	
	Amount	%	Amount	%
OTHER COMPREHENSIVE INCOME (LOSS)				
Components of other comprehensive income (loss) that will not be reclassified to profit or loss:				
Gains (losses) on remeasurement of defined benefit plans	\$ (135,829)	-	\$ (142,113)	-
Unrealized gains (losses) from investments in equity instruments at fair value through other comprehensive income	724,814	1	(505,248)	(1)
Share of other comprehensive income (loss) of associates accounted for using the equity method	777,428	2	(1,157,275)	(2)
Components of other comprehensive income (loss) that will be reclassified to profit or loss:				
Exchange differences on translation of foreign financial statements	<u>(71,657)</u>	<u>-</u>	<u>66,164</u>	<u>-</u>
Other comprehensive income (loss)	<u>1,294,756</u>	<u>3</u>	<u>(1,738,472)</u>	<u>(3)</u>
TOTAL COMPREHENSIVE INCOME	<u>\$ 2,772,043</u>	<u>6</u>	<u>\$ 5,989,186</u>	<u>12</u>
NET PROFIT ATTRIBUTABLE TO:				
Owners of the parent	\$ 1,256,387	3	\$ 7,446,496	14
Non-controlling interests	<u>220,900</u>	<u>-</u>	<u>281,162</u>	<u>1</u>
	<u>\$ 1,477,287</u>	<u>3</u>	<u>\$ 7,727,658</u>	<u>15</u>
TOTAL COMPREHENSIVE INCOME ATTRIBUTABLE TO:				
Owners of the parent	\$ 2,560,295	5	\$ 5,810,825	12
Non-controlling interests	<u>211,748</u>	<u>1</u>	<u>178,361</u>	<u>-</u>
	<u>\$ 2,772,043</u>	<u>6</u>	<u>\$ 5,989,186</u>	<u>12</u>
EARNINGS PER SHARE (Note 23)				
Basic	<u>\$ 0.32</u>		<u>\$ 1.87</u>	
Diluted	<u>\$ 0.32</u>		<u>\$ 1.87</u>	

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

(Concluded)

# WINBOND ELECTRONICS CORPORATION AND SUBSIDIARIES

## CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018 (In Thousands of New Taiwan Dollars)

	Equity Attributable to Owners of the Parent										
	Share Capital	Capital Surplus	Retained Earnings				Other Equity			Non-controlling Interests	Total Equity
			Legal Reserve	Special Reserve	Unappropriated Earnings	Exchange Differences on Translation of Foreign Financial Statements	Unrealized Gains (Losses) on Financial Assets measured at Fair Value Through Other Comprehensive Income	Unrealized Gains (Losses) on Available-for-sale Financial Assets			
BALANCE AT JANUARY 1, 2018	\$ 39,800,002	\$ 7,540,440	\$ 498,385	\$ 31,429	\$ 7,355,893	\$ (120,988)	\$ -	\$ 5,107,003	\$ 60,212,164	\$ 1,414,827	\$ 61,626,991
Effect of retrospective application and retrospective restatement	-	-	-	-	471,170	-	5,065,763	(5,107,003)	429,930	55,874	485,804
BALANCE AT JANUARY 1, 2018 RESTATED	39,800,002	7,540,440	498,385	31,429	7,827,063	(120,988)	5,065,763	-	60,642,094	1,470,701	62,112,795
Appropriation of 2017 earnings	-	-	555,056	-	(555,056)	-	-	-	-	-	-
Legal reserve appropriated	-	-	-	(31,429)	31,429	-	-	-	-	-	-
Reversal of special reserve	-	-	-	-	(3,980,000)	-	-	-	(3,980,000)	-	(3,980,000)
Cash dividends	-	-	-	-	-	-	-	-	-	-	-
Total appropriations	-	-	555,056	(31,429)	(4,503,627)	-	-	-	(3,980,000)	-	(3,980,000)
Net profit for the year ended December 31, 2018	-	-	-	-	7,446,496	-	-	-	7,446,496	281,162	7,727,658
Other comprehensive income (loss) for the year ended December 31, 2018	-	-	-	-	(115,861)	70,208	(1,590,018)	-	(1,635,671)	(102,801)	(1,738,472)
Total comprehensive income (loss) for the year ended December 31, 2018	-	-	-	-	7,330,635	70,208	(1,590,018)	-	5,810,825	178,361	5,989,186
Disposal of investments in equity instruments designated as at fair value through other comprehensive income	-	-	-	-	(86,226)	-	57,678	-	(28,548)	-	(28,548)
Changes in non-controlling interests	-	-	-	-	-	-	-	-	-	(202,336)	(202,336)
BALANCE AT DECEMBER 31, 2018	39,800,002	7,540,440	1,053,441	-	10,567,845	(50,780)	3,533,423	-	62,444,371	1,446,726	63,891,097
Appropriation of 2018 earnings	-	-	744,650	-	(744,650)	-	-	-	-	-	-
Legal reserve appropriated	-	-	-	-	(3,980,000)	-	-	-	(3,980,000)	-	(3,980,000)
Cash dividends	-	-	744,650	-	(4,724,650)	-	-	-	(3,980,000)	-	(3,980,000)
Total appropriations	-	-	-	-	1,256,387	-	-	-	1,256,387	220,900	1,477,287
Net profit for the year ended December 31, 2019	-	-	-	-	(115,561)	(68,466)	1,487,935	-	1,303,908	(9,152)	1,294,756
Other comprehensive income (loss) for the year ended December 31, 2019	-	-	-	-	1,140,826	(68,466)	1,487,935	-	2,560,295	211,748	2,772,043
Total comprehensive income (loss) for the year ended December 31, 2019	-	-	-	-	-	-	-	-	-	-	-
Changes in ownership interests in subsidiaries	-	(4,044)	-	-	-	-	-	-	(4,044)	-	(4,044)
Disposal of investments in equity instruments designated as at fair value through other comprehensive income	-	-	-	-	11,430	-	(11,430)	-	-	-	-
Changes in non-controlling interests	-	-	-	-	-	-	-	-	-	-	-
BALANCE AT DECEMBER 31, 2019	\$ 39,800,002	\$ 7,536,396	\$ 1,798,091	\$ -	\$ 6,995,451	\$ (119,246)	\$ 5,009,928	\$ -	\$ 61,020,622	\$ 2,836,565	\$ 63,857,187

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

# WINBOND ELECTRONICS CORPORATION AND SUBSIDIARIES

## CONSOLIDATED STATEMENTS OF CASH FLOWS FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018 (In Thousands of New Taiwan Dollars)

	2019	2018
CASH FLOWS FROM OPERATING ACTIVITIES		
Profit before income tax	\$ 1,752,517	\$ 8,394,900
Adjustments for:		
Depreciation expense	8,666,391	7,480,661
Amortization expense	111,440	102,201
Expected credit (gain) loss recognized on accounts receivable	(5,342)	(4,708)
(Reversal of) provision for declines in market value, obsolescence and scraps of inventories	1,146,371	113,910
Net (gains) losses on financial assets and liabilities at fair value through profit or loss	(67,172)	24,455
Interest expense	218,980	182,299
Interest income	(95,203)	(93,833)
Dividend income	(531,803)	(416,339)
Share of (profit) loss of associates accounted for using equity method	(241,034)	(228,981)
(Gains) losses on disposal of property, plant and equipment	1,039	(764)
Impairment loss on non-financial assets	-	12,890
Compensation costs of employee share options	49,920	-
Other adjustments to reconcile (profit) loss	(679)	-
Changes in operating assets and liabilities		
(Increase) decrease in notes and accounts receivable	391,215	187,018
(Increase) decrease in accounts receivable due from related parties	(1,606)	(10,751)
(Increase) decrease in other receivables	(345,490)	257,184
(Increase) decrease in inventories	(570,408)	(2,882,034)
(Increase) decrease in other current assets	68,173	101,095
(Increase) decrease in other non-current assets	(118,045)	(59,222)
Increase (decrease) in notes and accounts payable	471,003	(103,079)
Increase (decrease) in accounts payable to related parties	281,848	132,894
Increase (decrease) in other payables	(695,784)	449,962
Increase (decrease) in other current liabilities	28,192	(51,483)
Increase (decrease) in other non-current liabilities	(44,489)	(69,160)
Cash flows from (used in) operations	10,470,034	13,519,115
Interest received	94,164	89,052
Dividends received	586,655	416,339
Interest paid	(348,667)	(206,744)
Income taxes paid	(226,290)	(284,520)
Net cash flows from (used in) operating activities	<u>10,575,896</u>	<u>13,533,242</u>

(Continued)

# WINBOND ELECTRONICS CORPORATION AND SUBSIDIARIES

## CONSOLIDATED STATEMENTS OF CASH FLOWS FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018 (In Thousands of New Taiwan Dollars)

	2019	2018
<b>CASH FLOWS FROM INVESTING ACTIVITIES</b>		
Acquisition of financial asset at fair value through other comprehensive income	\$ (992,439)	\$ (280,233)
Proceeds from disposal of financial asset at fair value through other comprehensive income	106,799	147,925
Proceeds from capital reduction of financial assets at fair value through other comprehensive income	4,000	24,072
Acquisition of investments accounted for using the equity method	-	(750)
Net cash flow from acquisition of subsidiaries	(127,514)	-
Acquisition of property, plant and equipment	(13,431,076)	(16,930,434)
Proceeds from disposal of property, plant and equipment	1,967	2,549
Acquisition of intangible assets	<u>(197,990)</u>	<u>(25,260)</u>
Net cash flows from (used in) investing activities	<u>(14,636,253)</u>	<u>(17,062,131)</u>
<b>CASH FLOWS FROM FINANCING ACTIVITIES</b>		
Increase (decrease) in short-term borrowings	1,000,000	(553,539)
Proceeds from issuing bonds	-	10,000,000
Proceeds from long-term borrowings	10,350,000	-
Repayments of long-term borrowings	(5,123,520)	(3,323,520)
Cash dividends paid	(3,980,000)	(3,980,000)
Change in non-controlling interests	1,124,126	(202,336)
Repayments of lease liabilities	(202,489)	-
Other financing activities	<u>(135,000)</u>	<u>(86,171)</u>
Net cash flows from (used in) financing activities	<u>3,033,117</u>	<u>1,854,434</u>
<b>EFFECT OF EXCHANGE RATE CHANGES ON CASH AND CASH EQUIVALENTS</b>	<u>(64,484)</u>	<u>61,645</u>
<b>NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS</b>	<b>(1,091,724)</b>	<b>(1,612,810)</b>
<b>CASH AND CASH EQUIVALENTS AT THE BEGINNING OF THE YEAR</b>	<u>12,559,631</u>	<u>14,172,441</u>
<b>CASH AND CASH EQUIVALENTS AT THE END OF THE YEAR</b>	<u><b>\$ 11,467,907</b></u>	<u><b>\$ 12,559,631</b></u>

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

(Concluded)

# WINBOND ELECTRONICS CORPORATION AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018 (In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

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### 1. GENERAL INFORMATION

Winbond Electronics Corporation (the “Company”) was incorporated in the Republic of China (ROC) on September 29, 1987 and is engaged in the design, development, manufacture and marketing of Very Large Scale Integration (VLSI) integrated circuits (ICs) used in a variety of microelectronic applications.

The Company’s shares have been listed on the Taiwan Stock Exchange Corporation since October 18, 1995. Walsin Lihwa Corporation is a major shareholder of the Company and held approximately 22% ownership interest in the Company as of December 31, 2019 and 2018.

### 2. APPROVAL OF FINANCIAL STATEMENTS

The consolidated financial statements were approved by the board of directors on February 7, 2020.

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

- a. Initial application of the amendments to the Regulations Governing the Preparation of Financial Reports by Securities Issuers and 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 Financial Supervisory Commission (FSC)

Except for the following, whenever applied, the initial application of the amendments to the Regulations Governing the Preparation of Financial Reports by Securities Issuers and the IFRSs endorsed and issued into effect by the FSC would not have any material impact on the Group’s accounting policies:

#### 1) IFRS 16 “Leases”

IFRS 16 provides a comprehensive model for the identification of lease arrangements and their treatment in the financial statements of both the lessee and the lessor. It supersedes IAS 17 “Leases”, IFRIC 4 “Determining whether an Arrangement contains a Lease”, and a number of related interpretations. Refer to Note 4 for information relating to the relevant accounting policies.

#### Definition of a lease

The Group elects to apply the guidance of IFRS 16 in determining whether contracts are, or contain, a lease only to contracts entered into (or changed) on or after January 1, 2019. Contracts identified as containing a lease under IAS 17 and IFRIC 4 are not reassessed and are accounted for in accordance with the transitional provisions under IFRS 16.



### The Group as lessee

The Group recognizes lease liabilities for all leases on the consolidated balance sheets except for those whose payments under low-value asset and short-term leases are recognized as expenses on a straight-line basis. On the consolidated statements of comprehensive income, the Group presents the depreciation expense charged on right-of-use assets separately from the interest expense accrued on lease liabilities; interest is computed using the effective interest method. On the consolidated statements of cash flows, cash payments for the principal portion of lease liabilities are classified within financing activities; cash payments for the interest portion are classified within financing activities. Prior to the application of IFRS 16, payments under operating lease contracts were recognized as expenses on a straight-line basis. Cash flows for operating leases were classified within operating activities on the consolidated statements of cash flows.

The lessee's weighted average lessee's incremental borrowing rate applied to lease liabilities recognized on January 1, 2019 is 1.34%-3.69%. The difference between the lease liabilities recognized and operating lease commitments disclosed on December 31, 2018 is explained as follows:

The future minimum lease payments of non-cancellable operating lease commitments on December 31, 2018	\$ 3,020,797
Less: Recognition exemption for short-term leases	(16,790)
Less: Recognition exemption for leases of low-value assets	<u>(5,853)</u>
Undiscounted amounts on January 1, 2019	<u>\$ 2,998,154</u>
Lease liabilities recognized on January 1, 2019	<u>\$ 2,387,252</u>

### The Group as lessor

Except for sublease transactions, the Group does not make any adjustments for leases in which it is a lessor, and it accounts for those leases with the application of IFRS 16 starting from January 1, 2019.

The Group subleased its leasehold to a third party. Such sublease was classified as an operating lease under IAS 17. The Group classified the sublease as a finance lease on the basis of the remaining contractual terms and conditions of the head lease and sublease on January 1, 2019.

The impact on assets, liabilities and equity as of January 1, 2019 from the initial application of IFRS 16 is set out as follows:

	<b>Carrying Amount as of December 31, 2018</b>	<b>Adjustments Arising from Initial Application</b>	<b>Adjusted Carrying Amount as of January 1, 2019</b>
Prepayments for leases - current	\$ 3,463	\$ (3,463)	\$ -
Prepayments for leases - non-current	35,129	(35,129)	-
Right-of-use assets	<u>-</u>	<u>2,425,844</u>	<u>2,425,844</u>
Total effect on assets	<u>\$ 38,592</u>	<u>\$ 2,387,252</u>	<u>\$ 2,425,844</u>
Lease liabilities - current	\$ -	\$ 177,083	\$ 177,083
Lease liabilities - non-current	<u>-</u>	<u>2,210,169</u>	<u>2,210,169</u>
Total effect on liabilities	<u>\$ -</u>	<u>\$ 2,387,252</u>	<u>\$ 2,387,252</u>

## 2) IFRIC 23 “Uncertainty over Income Tax Treatments”

IFRIC 23 clarifies that when there is uncertainty over income tax treatments, the Group should assume that the taxation authority has full knowledge of all related information when making related examinations. If the Group concludes that it is probable that the taxation authority will accept an uncertain tax treatment, the Group should determine the taxable profit, tax bases, unused tax losses, unused tax credits or tax rates consistently with the tax treatments used or planned to be used in its income tax filings. If it is not probable that the taxation authority will accept an uncertain tax treatment, the Group should make estimates using either the most likely amount or the expected value of the tax treatment, depending on which method the Group expects to better predict the resolution of the uncertainty. The Group has to reassess its judgments and estimates if facts and circumstances change.

- b. The IFRSs endorsed by the Financial Supervisory Commission (FSC) for application starting from 2020

<b>New IFRSs</b>	<b>Effective Date Announced by IASB</b>
Amendments to IFRS 3 “Definition of a Business”	January 1, 2020 (Note 1)
Amendments to IFRS 9, IAS 39 and IFRS 7 “Interest Rate Benchmark Reform”	January 1, 2020 (Note 2)
Amendments to IAS 1 and IAS 8 “Definition of Material”	January 1, 2020 (Note 3)

Note 1: The Group shall apply these amendments 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, 2020 and to asset acquisitions that occur on or after the beginning of that period.

Note 2: The Group shall apply these amendments retrospectively for annual reporting periods beginning on or after January 1, 2020.

Note 3: The Group shall apply these amendments prospectively for annual reporting periods beginning on or after January 1, 2020.

As of the date the consolidated financial statements were authorized for issue, the Group is continuously assessing the possible impact that the application of above 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

<b>New IFRSs</b>	<b>Effective Date Announced by IASB (Note)</b>
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, 2021

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

As of the date the consolidated financial statements were authorized for issue, the Group is continuously assessing the possible impact that the application of above 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 POLICIES

##### 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.

##### Basis of Preparation

The consolidated financial statements have been prepared on the historical cost basis except for financial instruments and defined benefit liabilities which are measured at the present value of the defined benefit obligation less the fair value of plan assets that are measured at fair value. Historical cost is generally based on the fair value of the consideration given in exchange for assets.

##### Basis of Consolidation

###### a. Principles for preparing consolidated financial statements

The consolidated financial statements incorporate the financial statements of the Company and the entities controlled by the Company. When necessary, adjustments are made to the financial statements of subsidiaries to bring their accounting policies into line with those used by the Company. All intra-group transactions, balances, income and expenses are eliminated in full upon consolidation.

###### Attribution of total comprehensive income to non-controlling interests

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 existing subsidiaries

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 Group's interests 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.

###### b. Subsidiaries included in consolidated financial statements

Investor	Investee	Main Business	% of Ownership December 31	
			2019	2018
The Company WIC	Winbond Int'l Corporation (WIC)	Investment holding	100.00	100.00
	Winbond Electronics Corporation America (WECA)	Design, sales and after-sales service of semiconductor	100.00	100.00
The Company Landmark	Landmark Group Holdings Ltd. (Landmark)	Investment holding	100.00	100.00
	Winbond Electronics Corporation Japan (WECJ)	Research, development, sales and after-sales service of semiconductor	100.00	100.00
Landmark	Peaceful River Corp. (PRC)	Investment holding	100.00	100.00
The Company	Winbond Electronics (HK) Limited (WEHK)	Sales of semiconductor and investment holding	100.00	100.00
WEHK	Winbond Electronics (Suzhou) Limited (WECN)	Design, development and marketing of VLSI integrated ICs	100.00	100.00

(Continued)

Investor	Investee	Main Business	% of Ownership	
			December 31	
			2019	2018
The Company	Pine Capital Investment Limited (PCI)	Investment holding	100.00	100.00
The Company	Mobile Magic Design Corporation (MMDC) (Note 1)	Design, development and marketing of Pseudo SRAM	-	100.00
The Company	Winbond Technology Ltd. (WTL)	Design and service of semiconductor	100.00	100.00
The Company	Techdesign Corporation (“TDC”) (Note 2)	Electronic commerce and product marketing	-	100.00
The Company	Callisto Holdings Limited (“Callisto”)	Electronic commerce and investment holding	100.00	100.00
The Company	Winbond Electronics Germany GmbH (“WEG”) (Note 3)	Sales and service of semiconductor	100.00	-
Callisto	Callisto Technology Limited (“CTL”) (Note 4)	Electronic commerce and investment holding	100.00	-
The Company	Great Target Development Ltd. (“GTD”) (Note 5)	Investment holding	100.00	-
GTD	GLMTD Technology Private Limited (“GLMTD”) (Note 5)	Sales and service of semiconductor	99.99	-
The Company	Nuvoton Technology Corporation (“NTC”) (Note 6)	Research, development, design, manufacture and marketing of Logic IC, 6 inch wafer product, test, and OEM	62.00	61.00
NTC	Marketplace Management Ltd. (“MML”)	Investment holding	100.00	100.00
MML	Goldbond LLC (“GLLC”)	Investment holding	100.00	100.00
GLLC	Nuvoton Electronics Technology (Shanghai) Limited (“NTSH”)	Provide project of sale in China and repair, test and consult of software	100.00	100.00
GLLC	Winbond Electronics (Nanjing) Ltd. (“WENJ”)	Computer software service (except I.C. design)	100.00	100.00
NTC	Pigeon Creek Holding Co., Ltd. (“PCH”) (Note 7)	Investment holding	-	100.00
PCH	Nuvoton Technology Corp. America (“NTCA”) (Note 7)	Design, sales and after-sales service of semiconductor	-	100.00
NTC	Nuvoton Technology Corp. America (“NTCA”)	Design, sales and after-sales service of semiconductor	100.00	-
NTC	Nuvoton Investment Holding Ltd. (“NIH”)	Investment holding	100.00	100.00
NIH	Nuvoton Technology Israel Ltd. (“NTIL”)	Design and service of semiconductor	100.00	100.00
NTC	Nuvoton Electronics Technology (H.K.) Limited (“NTHK”)	Sales of semiconductor	100.00	100.00
NTHK	Nuvoton Electronics Technology (Shenzhen) Limited (“NTSZ”)	Computer software service (except I.C. design), wholesale business for computer, supplement and software	100.00	100.00
NTC	Song Yong Investment Corporation (“SYI”)	Investment holding	100.00	100.00
NTC	Nuvoton Technology India Private Limited (“NTIPL”)	Design, sales and service of semiconductor	100.00	100.00

(Concluded)

Note 1: MMDC conducted a short-form merger with the Company on the effective date of October 1, 2019. The Company is the surviving company after the short-form merger.

Note 2: TDC filed for liquidation in June 2019 and the date of dissolution was on June 10, 2019. The liquidation procedures were not been completed as of December 31, 2019.

Note 3: A capital was injected in WEG, which was incorporated in November 2019.

Note 4: CTL was incorporated in October 2018, and Callisto had injected a capital in CTL in April 2019.

Note 5: The Company purchased GTD in July 2019 and indirectly hold GLMTD with 99.99% ownership.

Note 6: On July 25, 2019, NTC’s board of directors resolved to issue 80,000 thousand ordinary shares with a par value of NT\$10 to fund working capital. The consideration of NT\$45 per share was determined by the chairman which was authorized by the board of directors of NTC; the subscription base date was October 23, 2019; the increase in share capital was fully paid.

On December 6, 2019, the extraordinary general shareholders' meeting of NTC resolved to increase its capital by issuing ordinary shares between 60,000 thousand shares and 90,000 thousand shares through the offering of the Global Depository Shares (GDSs) to raise fund for the acquisition of the related business of Panasonic Semiconductor. The offering price for the GDSs was NT\$45 per share tentatively. According to the laws, the actual offering price should not be lower than the closing share price of NTC, one of the simple arithmetic averages of NTC ordinary share closing price for one, three or five business days prior to the pricing data adjusted for any distribution of stock dividends, cash dividends or capital reduction, and 90% of the average price ex-dividends. The total proposed fund amounted to US\$132,787 thousand (at the exchange rate of US\$1:NT\$30.5); the total amount of the actual offering was based on the outstanding unit and price of the GDSs. The chairman of NTC was authorized by NTC's board to set the pricing date and subscription base date after the approval by the FSC.

Note 7: PCH completed the liquidation and legal procedures in January 2019.

### **Classification of Current and Non-current Assets and Liabilities**

Current assets include cash and cash equivalents and those assets held primarily for trading purposes or to be realized, sold or consumed within twelve months after the reporting period, unless the asset is restricted from being exchanged or used to settle a liability for at least twelve months after the reporting period. Current liabilities are obligations incurred for trading purposes or to be settled within twelve months after the reporting period and liabilities that the Group does not have an unconditional right to defer settlement for at least twelve months after the reporting period. Except as otherwise mentioned, assets and liabilities that are not classified as current are classified as non-current.

### **Foreign Currencies**

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

In preparing the financial statements of each individual group entity, transactions in currencies other than the entity's 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 are recognized in profit or loss in the period they arise.

Exchange differences arising on the retranslation of non-monetary items measured at fair value are included in profit or loss for the period at the rates prevailing at the end of reporting 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 case, the exchange differences are also recognized directly in other comprehensive income.

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

For the purposes of presenting consolidated financial statements, the assets and liabilities of the Group's foreign operations are translated into New Taiwan dollars using exchange rates prevailing at the end of each reporting period. Income and expense items are translated at the average exchange rates for the period, and exchange differences arising are recognized in other comprehensive income (attributed to the owners of the Company and non-controlling interests as appropriate).

### **Cash Equivalents**

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

## Financial Instruments

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

Financial assets and financial liabilities are initially measured at fair value. 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 FVTPL 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 FVTPL are recognized immediately in profit or loss.

### a. Measurement category

All regular way purchases or sales of financial assets are recognized and derecognized on a trade date basis, except derivative financial assets which are recognized and derecognized on settlement date basis.

#### 1) Financial asset at FVTPL

Financial assets are classified as at FVTPL when such financial assets are mandatorily classified or designated as at FVTPL. Financial assets mandatorily classified as at FVTPL include investments in equity instruments which are not designated as at FVTOCI and debt instruments that do not meet the amortized cost criteria or the FVOCI criteria.

Financial assets at FVTPL are subsequently measured at fair value, with any gains or losses arising on remeasurement recognized in profit or loss. The net gain or loss recognized in profit or loss does not incorporate any dividend or interest earned on the financial asset. Fair value is determined in the manner described in Note 26.

#### 2) Financial assets at amortized cost

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

- a) The financial asset is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows; and
- b) The contractual terms of the financial asset 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 at amortized cost are measured at amortized cost, which equals to gross carrying amount determined by 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:

- a) 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 the financial asset; and
- b) Financial assets that are not credit-impaired on purchase or origination but have subsequently become credit-impaired, for which interest income is calculated by applying the effective interest rate to the amortized cost of such financial assets in subsequent reporting periods.



### 3) Investments in equity instruments at FVTOCI

On initial recognition, the Group may make an irrevocable election to designate investments in equity instruments as at FVOCI. Designation at FVOCI 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 FVOCI 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 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 at amortized cost (including trade receivable).

The Group always recognizes lifetime Expected Credit Loss (ECL) on accounts receivable. On all other financial instruments, the Group recognizes lifetime ECL when there has been a significant increase in credit risk since initial recognition. If, on the other hand, the credit risk on the 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 ECL.

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

The Group recognizes an impairment loss in profit or loss for all financial instruments with a corresponding adjustment to their carrying amount through a loss allowance account.

#### 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.

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 a debt instrument at FVTOCI, the difference between the asset's carrying amount and the sum of the consideration received and receivable and the cumulative gain or loss which had been recognized in other comprehensive income is recognized in profit or loss. However, 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.



d. Financial liabilities

Financial liabilities are classified as at fair value through profit or loss when the financial liability is either held for trading or it is measured at fair value through profit or loss. Financial liabilities at fair value through profit or loss are stated at fair value, with any gains or losses arising on remeasurement recognized in profit or loss.

Corporate bonds issued by the Group are initially recognized at fair value, net of transaction costs incurred. Corporate bonds are subsequently stated at amortized cost; any difference between the proceeds and the redemption value is accounted for as the premium or discount on bonds payable and presented as an addition to or deduction from bonds payable, which is amortized in profit or loss over the period of bond circulation using the effective interest method.

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

e. Derecognition of financial liabilities

The difference between the carrying amount of the financial liability derecognized and the consideration paid and payable is recognized in profit or loss.

f. Derivative financial instruments

The Group enters into a variety of derivative financial instruments to manage its exposure to foreign exchange rate risks, including foreign exchange forward contracts and cross currency swaps.

Derivatives are initially recognized at fair value at the date the derivative contracts are entered into and are subsequently remeasured to their fair value at the end of each reporting period. The resulting gain or loss is recognized in profit or loss immediately unless the derivative is designated and effective as a hedging instrument, in which event the timing of the recognition in profit or loss depends on the nature of the hedge relationship. When the fair value of derivative financial instruments is positive, the derivative is recognized as a financial asset; when the fair value of derivative financial instruments is negative, the derivative is recognized as a financial liability.

g. Information about fair value of financial instruments

The Group determined the fair value of financial assets and liabilities as follows:

- 1) The fair values of financial assets and liabilities which have standard terms and conditions and traded in active market are determined by reference to quoted market price. If there is no quoted market price in active market, valuation techniques are applied.
- 2) The fair value of foreign-currency derivative financial instrument could be determined by reference to the price and discount rate of currency swap quoted by financial institutions. Foreign exchange forward contracts use individual maturity rate to calculate the fair value of each contract.
- 3) The fair values of other financial assets and financial liabilities are determined by discounted cash flow analysis in accordance with generally accepted pricing models.

## **Inventories**

Inventories consist of raw materials, supplies, finished goods 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 weighted-average cost on the balance sheet date.

## **Investments in Associates**

An associate is an entity over which the Group has significant influence and that is neither a subsidiary nor an interest in a joint venture. Significant influence is the power to participate in the financial and operating policy decisions of the investee without having control or joint control over those policies.

The Group uses equity method to recognize investments in associates. Under the equity method, an investment in an associate is initially recognized at cost and adjusted thereafter to recognize the Group's share of the profit or loss and other comprehensive income of the associate. The Group also recognizes the changes in the Group's share of equity of associates.

Any excess of the cost of acquisition over the Group's share of the net fair value of the identifiable assets and liabilities of an associate recognized 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 Group's share of the net fair value of the identifiable assets and liabilities over the cost of acquisition, after reassessment, is recognized immediately in profit or loss.

When the Group subscribes for additional new shares of the associate at a percentage different from its existing ownership percentage, the resulting carrying amount of the investment differs from the amount of the Group's proportionate interest in the associate. The Group records such a difference as an adjustment to investments with the corresponding amount charged or credited to capital surplus. If the Group's ownership interest is reduced due to the additional subscription of the new shares of associate, the proportionate amount of the gains or losses previously recognized in other comprehensive income in relation to that associate is reclassified to profit or loss on the same basis as would be required if the investee had directly disposed of the related assets or liabilities. When the adjustment should be debited to capital surplus, but the capital surplus recognized from investments accounted for by the equity method is insufficient, the shortage is debited to retained earnings.

When the Group's share of losses of an associate equals or exceeds its interest in that associate (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 Group's net investment in the associate), the Group discontinues recognizing its share of further losses. Additional losses and liabilities are recognized only to the extent that the Group has incurred legal obligations, or constructive obligations, or made payments on behalf of that associate.

The entire carrying amount of an investment (including goodwill) is tested for impairment as a single asset by comparing its recoverable amount with its carrying amount. Any impairment loss recognized is not allocated to any asset, including goodwill, that forms part of the carrying amount of the investment. Any reversal of that impairment loss is recognized to the extent that the recoverable amount of the investment subsequently increases.

The Group discontinues the use of the equity method from the date on which its investment ceases to be an associate. Any retained investment is measured at fair value at that date and the fair value is regarded as its fair value on initial recognition as a financial asset. The difference between the previous carrying amount of the associate attributable to the retained interest and its fair value is included in the determination of the gain or loss on disposal of the associate. The Group accounts for all amounts previously recognized in other comprehensive income in relation to that associate on the same basis as would be required if that associate had directly disposed of the related assets or liabilities.

When the Group transacts with its associate, profits and losses resulting from the transactions with the associate are recognized in the Group's consolidated financial statements only to the extent of interests in the associate that are not related to the Group.

## **Property, Plant and Equipment**

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

Properties, plant and equipment in the course of construction are carried at cost, less any recognized impairment loss. Cost includes professional fees and borrowing costs eligible for capitalization. Such assets are depreciated and classified to the appropriate categories of property, plant and equipment when completed and ready for intended use.

Depreciation is recognized using the straight-line method. The estimated useful lives, residual values and depreciation method are reviewed at the end of each reporting period, with the effect of any changes in estimate accounted for on a prospective basis.

Any gain or loss arising on the disposal or retirement of an item of property, plant and equipment is determined as the difference between the sales proceeds and the carrying amount of the asset and is recognized in profit or loss.

The Group's property, plant and equipment with residual values were depreciated straight-line basis over the estimated useful life of the asset:

Buildings	8-50 years
Machinery and equipment	3-7 years
Other equipment	5 years

## **Investment Properties**

Investment properties are properties held to earn rentals and/or for capital appreciation. Investment properties are measured initially at cost. Subsequent to initial recognition, investment properties are measured at cost less accumulated depreciation and accumulated impairment loss, and depreciated over 20 years useful lives after considered residual values, using the straight-line method. Any gain or loss arising on derecognition of the property is calculated as the difference between the net disposal proceeds and the carrying amount of the asset and is included in profit or loss in the period in which the property is derecognized.

## **Intangible Assets**

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 over their estimated useful lives. 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.

## **Impairment of Tangible and Intangible Assets (Except Goodwill)**

At the end of each reporting period, the Group reviews the carrying amounts of its tangible and intangible assets 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.

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 subsequently is reversed, the carrying amount of the asset, 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 for the asset, cash-generating unit in prior years. A reversal of an impairment loss is recognized immediately in profit or loss.

### **Non-current assets classified as held for sale**

Non-current assets are classified as held for sale if their carrying amounts will be recovered principally through a sale transaction rather than through continuing use. This condition is regarded as met only when the sale is highly probable and the non-current asset is available for immediate sale in its present condition. To meet the criteria for the sale being highly probable, the appropriate level of management must be committed to the sale, and the sale should be expected to qualify for recognition as a completed sale within 1 year from the date of classification.

Non-current assets classified as held for sale are measured at the lower of their previous carrying amount and fair value less costs to sell. Recognition of depreciation of those assets would cease.

### **Provisions**

Provisions are recognized when the Group has a present obligation as a result of a past event and at the best estimate 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. For potential product risk, the Group accrues reserve for products guarantee based on commitment to specific customers.

### **Revenue Recognition**

The Group identifies the performance obligations in the contract with customers, allocates the transaction price to the performance obligations in the contracts and recognizes revenue when the Group satisfies a performance obligation.

Revenue from the sale of goods is mainly recognized when a customer obtains control of promised goods, at which time the goods are delivered to the customer's specific location and performance obligation is satisfied.

Revenue from sale of goods is measured at the fair value of the consideration received or receivable. Revenue is reduced for estimated customer returns, rebates and other similar allowances. Provision for estimated sales returns and other allowances is generally made and adjusted based on historical experience and on the consideration of varying contractual terms affecting the recognition of a provision, which is classified under other non-current liabilities.

### **Leasing**

#### 2019

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

#### **a. 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 a right-of-use asset, 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.

Under operating lease, lease payments (less any lease incentives payable) are recognized as income on a straight-line basis over the terms of the relevant lease. Initial direct costs incurred in obtaining operating lease are added to the carrying amount of the underlying assets and recognized as expenses on a straight-line basis over the lease terms.

b. 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 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. Lease liabilities are presented on a separate line in the consolidated balance sheets.

Variable lease payments that do not depend on an index or a rate are recognized as expenses in the periods in which they are incurred.

2018

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

Under finance lease, the Group as lessor recognizes amounts due from lessees as receivables at the amount of the Group's net investment in the lease. Finance lease income is allocated to accounting periods so as to reflect a constant periodic rate of return on the Group's net investment outstanding in respect of the leases.

Under operating lease, the Group as lessor recognizes rental income from operating lease on a straight-line basis over the term of the relevant lease. Contingent rents receivable arising under operating leases are recognized as income in the period in which they are earned. As lessee, operating lease payments are recognized as an expense on a straight-line basis over the lease term. Contingent rents payable arising under operating leases are recognized as an expense in the period in which they are incurred.

## **Borrowing Costs**

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

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

## **Employee Benefits**

### **a. 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 rendered by employees.

### **b. Retirement benefits**

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

Defined benefit costs (including service cost, net interest and remeasurement) under the defined benefit retirement benefit plans are determined using the projected unit credit method. Service cost and net interest on the net defined benefit liability are recognized as employee benefits expense in the period they occur. Remeasurement, comprising actuarial gains and losses 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 retained 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.

Pension cost for an interim period is calculated on a year-to-date basis by using the actuarially determined pension cost rate at the end of the period adjusted for significant market fluctuations since that time and for significant plan amendments, settlements, or other significant one-off events.

## **Share-based Payments Agreements**

The fair values at the grant date of the equity-settled share-based payments/employee share options are 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. It is recognized as an expense in full at the grant date if vested immediately.

## **Taxation**

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

### **a. Current tax**

According to the Income Tax Law in the ROC, an additional tax of unappropriated earnings is recognized for as income tax 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.

b. Deferred tax

Deferred tax is recognized on temporary differences between the carrying amounts of assets and liabilities in the consolidated financial statements and the corresponding tax bases used in the computation of taxable profit and it is remeasured at the end of each reporting period and recognized to the extent that it has become probable that there will be future taxable profit.

Deferred tax liabilities are recognized for taxable temporary differences associated with investments in subsidiaries and associates, 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 and liabilities are measured at the tax rates that are expected to apply in the period in which the liabilities are settled or the assets are 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.

## **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, estimations 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 periods.

The Group's critical accounting judgments and key sources of estimation uncertainty is below:

a. Valuation of inventory

Net realizable value of inventory is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale. The estimation of net realizable value is based on current market conditions and the historical experience from selling products of a similar nature. Changes in market conditions may have a material impact on the estimation of net realizable value.

b. Impairment of financial assets

The provision for impairment of accounts receivable is based on assumptions about risk of default and expected loss rates. The Group uses judgement in making these assumptions and in selecting the inputs to the impairment calculation, based on the Group's past history, existing market conditions as well as forward looking estimates at the end of each reporting period. For details of the key assumptions and inputs used, see Note 9. Where the actual future cash inflows are less than expected, a material impairment loss may arise.



## 6. CASH AND CASH EQUIVALENTS

	<b>December 31</b>	
	<b>2019</b>	<b>2018</b>
Cash and deposits in banks	\$ 9,758,907	\$ 11,306,329
Repurchase agreements collateralized by bonds	<u>1,709,000</u>	<u>1,253,302</u>
	<u>\$ 11,467,907</u>	<u>\$ 12,559,631</u>

- a. The Group has time deposits pledged to secure land and building leases, customs tariff obligations and sales deposits which are reclassified to “other non-current assets”. Time deposits pledged as security at the end of the reporting period were as follows:

	<b>December 31</b>	
	<b>2019</b>	<b>2018</b>
Time deposits	<u>\$ 207,903</u>	<u>\$ 201,414</u>

- b. The Group has partial time deposits which were not held for the purpose of meeting short-term cash commitments and are reclassified to “other receivables”. These partial time deposits at the end of the reporting period were as follows:

	<b>December 31</b>	
	<b>2019</b>	<b>2018</b>
Time deposits	<u>\$ 447,725</u>	<u>\$ 145,654</u>

## 7. FINANCIAL INSTRUMENTS AT FAIR VALUE THROUGH PROFIT OR LOSS

	<b>December 31</b>	
	<b>2019</b>	<b>2018</b>
<u>Financial assets at FVTPL - current</u>		
Derivative financial assets (not under hedge accounting)		
Forward exchange contracts	\$ 64,001	\$ 8,094
Foreign exchange swap contracts	<u>11,461</u>	<u>196</u>
	<u>\$ 75,462</u>	<u>\$ 8,290</u>

At the date of balance sheet, the outstanding forward exchange contracts not under hedge accounting were as follows:

	<b>Currencies</b>	<b>Maturity Date</b>	<b>Contract Amount (In Thousands)</b>
<u>December 31, 2019</u>			
Sell forward exchange contracts	USD to NTD	2020.01.03-2020.03.05	USD162,000/NTD4,906,489
Sell forward exchange contracts	RMB to NTD	2020.01.10-2020.02.21	RMB75,000/NTD322,743
Foreign exchange swap contracts	USD to NTD	2020.01.09	USD23,280/NTD708,638
Foreign exchange swap contracts	RMB to NTD	2020.02.21	RMB5,100/NTD21,879
(Continued)			

	<b>Currencies</b>	<b>Maturity Date</b>	<b>Contract Amount (In Thousands)</b>
<u>December 31, 2018</u>			
Sell forward exchange contracts	USD to NTD	2019.01.04-2019.03.08	USD127,000/NTD3,902,302
Buy forward exchange contracts	NTD to USD	2019.01.11-2019.01.25	NTD613,385/USD20,000
Foreign exchange swap contracts	USD to NTD	2019.02.15	USD5,150/NTD157,858
			(Concluded)

The Group entered into derivative financial instruments contracts to manage exposures to exchange rate fluctuations of foreign-currency-denominated assets and liabilities. The derivative financial instruments contracts entered into by the Group did not meet the criteria for hedge accounting; therefore, the Group did not apply hedge accounting treatment.

## 8. FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME

Equity instruments at FVTOCI:

	<b>December 31</b>	
	<b>2019</b>	<b>2018</b>
Domestic listed and emerging stocks		
Walsin Lihwa Corporation	\$ 3,357,200	\$ 3,350,000
Walsin Technology Corporation	2,342,228	1,509,218
Hannstar Display Corporation	890,443	774,873
Walton Advanced Engineering Inc.	583,230	540,677
Nyquest Technology Co., Ltd.	60,720	120,209
Brightek Optoelectronic Co., Ltd.	485	341
Domestic unlisted stocks		
United Industrial Gases Co., Ltd.	440,000	396,000
Yu-Ji Venture Capital Co., Ltd.	16,605	22,733
Harbinger III Venture Capital Corp.	236	6,147
Others	17,240	17,510
Overseas listed stocks		
Everspin Technologies, Inc.	52,487	57,351
Telit Communications PLC	-	4,521
Micron Technology, Inc.	-	12,572
Overseas unlisted stocks		
Autotalks Ltd. - preferred E. shares	599,600	-
LTIP Trust Fund	223,667	227,228
JVP VIII, L.P.	130,584	71,420
TEGNA Electronics Private Limited	12,619	-
Others	-	265
	<u>\$ 8,727,344</u>	<u>\$ 7,111,065</u>
Current	\$ 7,225,588	\$ 6,249,212
Non-current	<u>1,501,756</u>	<u>861,853</u>
	<u>\$ 8,727,344</u>	<u>\$ 7,111,065</u>

These investments in equity instruments 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.

For the year ended December 31, 2019, the Group disposed the shares for \$106,101 thousand at the fair value for the adjustment of the investment position. The unrealized gains on financial assets at fair value through other comprehensive income of \$28,221 thousand were transferred to retained earnings.

The Group recognized dividend income \$531,803 thousand and \$416,339 thousand for the year ended December 31, 2019 and 2018, respectively. Those related to investments derecognized during the period of the year ended December 31, 2019 and 2018 were \$4,006 thousand and \$648 thousand, respectively. Those related to investments held at the end of the period of the year ended December 31 2019 and 2018 were \$527,797 thousand and \$415,691 thousand, respectively.

On May 27, 2019, after resolved by the Audit Committee, NTC's board of directors resolved to invest the Preferred E Share of the non-related party Israel communicate chipmaker, Autotalks Ltd., NTC invested the funds in August 2019. The entitled rights of the Preferred E Share were as follows:

- a. Each Preferred E shares grants its holder a number of votes equal to the number of votes per ordinary share.
- b. The Preferred E shares shall be prior to all other equity securities of Autotalks Ltd. in the event of liquidation.
- c. The holders of the Preferred E shares shall be entitled to receive non-cumulative cash dividends at the rate of eight percent.
- d. The investors shall have the right to appoint one non-voting observer ("Observer") to attend Autotalks Ltd.'s board meetings.
- e. The holders of the Preferred E shares shall be entitled to preemptive right with respect to future issuance of new securities of Autotalks Ltd.
- f. The investors have the rights to obtain the annual financial statements, quarterly financial statements and etc.

## 9. NOTES AND ACCOUNTS RECEIVABLE

	<b>December 31</b>	
	<b>2019</b>	<b>2018</b>
<u>Notes receivable</u>	\$ 21	\$ -
<u>Accounts receivable</u>		
At amortized cost		
Gross carrying amount	6,233,335	6,624,571
Less: Allowance for impairment loss	<u>(148,353)</u>	<u>(155,158)</u>
	<u>\$ 6,085,003</u>	<u>\$ 6,469,413</u>

The average credit period of sales of goods was 30 to 60 days. No interest was charged on accounts receivable. The Group adopted a policy of only dealing with entities that are rated the equivalent of investment grade or higher and obtaining sufficient collateral, where appropriate, as a means of mitigating the risk of financial loss from defaults. Credit rating information is supplied by independent rating agencies where available and, if not available, the Group uses other publicly available financial information and its own trading records to rate its major customers. The Group's exposure and the credit ratings of its counterparties are continuously monitored and the aggregate value of transactions concluded is spread amongst approved counterparties. Credit exposure is controlled by counterparty limits that are reviewed and approved annually.

In order to minimize credit risk, the management of the Group has delegated a team responsible for determining credit limits, credit approvals and other monitoring procedures to ensure that follow-up action is taken to recover overdue debts. In addition, the Group reviews the recoverable amount of each individual trade debt at the end of the reporting period to ensure that adequate allowance is made for possible irrecoverable amounts. In this regard, the management believes the Group's credit risk was significantly reduced.

The Group applies the simplified approach to providing for expected credit losses prescribed by IFRS 9, which permits the use of lifetime expected loss provision for all notes and accounts receivable. The expected credit losses on accounts receivable are estimated using a provision matrix by reference to past default experience of the debtor and an analysis of the debtor's current financial position, adjusted for general economic conditions of the industry in which the debtors operate and an assessment of both the current as well as the forecast direction of conditions at the reporting date. The Group estimates expected credit losses based on past due days. As the Group's historical credit loss experience does not show significantly different loss patterns for different customer segments, the provision for loss allowance based on past due status is not further distinguished between the Group's different customer base.

The Group writes off notes and accounts receivable when there is information indicating that the debtor is in severe financial difficulty and there is no realistic prospect of recovery. For notes and accounts receivable that have been written off, the Group continues to engage in enforcement activity to attempt to recover the receivables due. Where recoveries are made, these are recognized in profit or loss.

The following table details the loss allowance of notes and accounts receivable based on the Group's provision matrix.

#### December 31, 2019

	Not Overdue	Overdue under 30 Days	Overdue 31-90 Days	Overdue 91-180 Days	Over 181 Days	Total
Expected credit loss rate	2%	2%	10%	20%	100%	
Gross carrying amount	\$ 5,753,824	\$ 448,004	\$ 12,540	\$ 144	\$ 18,844	\$ 6,233,356
Loss allowance (lifetime ECL)	<u>(119,266)</u>	<u>(8,960)</u>	<u>(1,254)</u>	<u>(29)</u>	<u>(18,844)</u>	<u>(148,353)</u>
Amortized cost	<u>\$ 5,634,558</u>	<u>\$ 439,044</u>	<u>\$ 11,286</u>	<u>\$ 115</u>	<u>\$ -</u>	<u>\$ 6,085,003</u>

#### December 31, 2018

	Not Overdue	Overdue under 30 Days	Overdue 31-90 Days	Overdue 91-180 Days	Over 181 Days	Total
Expected credit loss rate	2%	2%	10%	20%	100%	
Gross carrying amount	\$ 6,073,766	\$ 513,593	\$ 18,336	\$ 32	\$ 18,844	\$ 6,624,571
Loss allowance (Lifetime ECL)	<u>(124,203)</u>	<u>(10,272)</u>	<u>(1,833)</u>	<u>(6)</u>	<u>(18,844)</u>	<u>(155,158)</u>
Amortized cost	<u>\$ 5,949,563</u>	<u>\$ 503,321</u>	<u>\$ 16,503</u>	<u>\$ 26</u>	<u>\$ -</u>	<u>\$ 6,469,413</u>

The movements in the allowance for doubtful accounts recognized on accounts receivable were as follows:

	<b>2019</b>	<b>2018</b>
Balance at January 1	\$ 155,158	\$ 158,302
Less: Reversal of provision recognized on accounts receivable	(5,342)	(4,708)
Effect of exchange rate changes	<u>(1,463)</u>	<u>1,564</u>
Balance at December 31	<u>\$ 148,353</u>	<u>\$ 155,158</u>

## 10. INVENTORIES

	<b>December 31</b>	
	<b>2019</b>	<b>2018</b>
Finished goods	\$ 2,239,612	\$ 2,045,369
Work-in-process	7,381,909	8,049,457
Raw materials and supplies	702,423	777,692
Inventories in transit	<u>8,199</u>	<u>35,588</u>
	<u>\$ 10,332,143</u>	<u>\$ 10,908,106</u>

- a. Operating costs for the years ended December 31, 2019 and 2018 included inventory write-downs for the decline in market value, obsolescence and scrap of inventories of \$1,146,371 thousand and \$113,910 thousand, respectively.
- b. Unallocated fixed manufacturing costs recognized as cost of sales in the years ended December 31, 2019 and 2018, were \$1,223,784 thousand and \$329,373 thousand, respectively.

## 11. INVESTMENTS ACCOUNTED FOR USING EQUITY METHOD

### Investments in Associates

	<b>December 31</b>	
	<b>2019</b>	<b>2018</b>
Associates that are not individually material		
Chin Xin Investment Co., Ltd.	\$ 4,548,224	\$ 3,584,605
Hwa Bao Botanic Conservation Corp.	<u>715</u>	<u>723</u>
	<u>\$ 4,548,939</u>	<u>\$ 3,585,328</u>

The Company subscribed the ordinary shares of Hwa Bao Botanic Conservation Corp. (Hwa Bao) in \$750 thousand and owned 15% of ownership interest directly in July 2018. As of December 31, 2019, the main shareholders of Hwa Bao was Chin Xin Investment Co., Ltd., and its ownership interest were 70%. The Company accounted for the equity investment in Hwa Bao using equity method for its consolidated ownership interest of Hwa Bao was 41%.

As of December 31, 2019, the Company had 182,841 thousand shares of Chin Xin Investment Co., Ltd. with a 38% ownership interest.

The investments accounted for using equity method and the shares of profit or loss and other comprehensive income of those investments for the years ended December 31, 2019 and 2018 were based on the associates' financial statements audited by independent auditors.

## 12. PROPERTY, PLANT AND EQUIPMENT

	December 31	
	2019	2018
Land	\$ 1,122,431	\$ 1,619,877
Buildings	11,605,854	10,105,591
Machinery and equipment	35,939,094	37,569,737
Other equipment	736,237	685,940
Construction in progress and prepayments for purchase of equipment	<u>7,573,498</u>	<u>2,503,038</u>
	<u>\$ 56,977,114</u>	<u>\$ 52,484,183</u>

	Land	Buildings	Machinery and Equipment	Other Equipment	Construction in Progress and Prepayments for Purchase of Equipment	Total
<u>Cost</u>						
Balance at January 1, 2019	\$ 1,619,877	\$ 26,794,687	\$ 121,948,989	\$ 3,882,485	\$ 2,503,038	\$ 156,749,076
Additions	-	460,883	4,963,752	498,999	7,808,589	13,732,223
Disposals	-	(3,964)	(385,911)	(6,662)	-	(396,537)
Liquidation of subsidiary	-	-	-	(2,123)	-	(2,123)
Reclassified	-	2,632,317	364,778	(258,966)	(2,738,129)	-
Transfers to non-current assets classified as held for sale	(495,641)	(294,298)	-	(16,582)	-	(806,521)
Transfers to other non-current assets	-	(28,660)	-	-	-	(28,660)
Effect of exchange rate changes	<u>(1,805)</u>	<u>(6,504)</u>	<u>3,443</u>	<u>4,296</u>	<u>-</u>	<u>(570)</u>
Balance at December 31, 2019	<u>\$ 1,122,431</u>	<u>\$ 29,554,461</u>	<u>\$ 126,895,051</u>	<u>\$ 4,101,447</u>	<u>\$ 7,573,498</u>	<u>\$ 169,246,888</u>
<u>Accumulated depreciation and impairment</u>						
Balance at January 1, 2019	\$ -	\$ 16,689,096	\$ 84,379,252	\$ 3,196,545	\$ -	\$ 104,264,893
Depreciation expense	-	1,297,699	6,955,006	187,130	-	8,439,835
Disposals	-	(3,964)	(380,552)	(6,397)	-	(390,913)
Liquidation of subsidiary	-	-	-	(991)	-	(991)
Transfers to non-current assets classified as held for sale	-	(29,475)	-	(12,349)	-	(41,824)
Effect of exchange rate changes	<u>-</u>	<u>(4,749)</u>	<u>2,251</u>	<u>1,272</u>	<u>-</u>	<u>(1,226)</u>
Balance at December 31, 2019	<u>\$ -</u>	<u>\$ 17,948,607</u>	<u>\$ 90,955,957</u>	<u>\$ 3,365,210</u>	<u>\$ -</u>	<u>\$ 112,269,774</u>
<u>Cost</u>						
Balance at January 1, 2018	\$ 1,617,532	\$ 25,773,108	\$ 108,091,801	\$ 4,208,296	\$ 1,403,829	\$ 141,094,566
Additions	-	603,202	12,529,976	868,503	2,129,134	16,130,815
Disposals	-	-	(418,469)	(60,286)	-	(478,755)
Reclassified	-	409,927	1,748,036	(1,127,846)	(1,030,117)	-
Effect of exchange rate changes	<u>2,345</u>	<u>8,450</u>	<u>(2,355)</u>	<u>(6,182)</u>	<u>192</u>	<u>2,450</u>
Balance at December 31, 2018	<u>\$ 1,619,877</u>	<u>\$ 26,794,687</u>	<u>\$ 121,948,989</u>	<u>\$ 3,882,485</u>	<u>\$ 2,503,038</u>	<u>\$ 156,749,076</u>
<u>Accumulated depreciation and impairment</u>						
Balance at January 1, 2018	\$ -	\$ 15,461,015	\$ 78,711,312	\$ 3,093,532	\$ -	\$ 97,265,859
Depreciation expense	-	1,222,354	6,086,182	167,429	-	7,475,965
Disposals	-	-	(416,901)	(60,069)	-	(476,970)
Reclassified	-	23	-	(23)	-	-
Effect of exchange rate changes	<u>-</u>	<u>5,704</u>	<u>(1,341)</u>	<u>(4,324)</u>	<u>-</u>	<u>39</u>
Balance at December 31, 2018	<u>\$ -</u>	<u>\$ 16,689,096</u>	<u>\$ 84,379,252</u>	<u>\$ 3,196,545</u>	<u>\$ -</u>	<u>\$ 104,264,893</u>

- a. As of December 31, 2019 and 2018, the carrying amounts of \$21,230,163 thousand and \$21,008,324 thousand of land, buildings, manufacturing facilities and non-current assets classified as held for sale were pledged to secure long-term borrowings and corporate bonds.

b. Information about capitalized interest

	<b>For the Year Ended December 31</b>	
	<b>2019</b>	<b>2018</b>
Capitalized interest amounts	\$ 148,751	\$ 74,013
Capitalized interest rates	1.79%-1.81%	1.79%

**13. LEASE ARRANGEMENTS**

2019

a. Right-of-use assets

	<b>December 31, 2019</b>
<u>Carrying amounts</u>	
Land	\$ 1,914,889
Buildings	334,224
Other equipment	<u>49,280</u>
	<u>\$ 2,298,393</u>
	<b>For the Year Ended December 31, 2019</b>
Additions to right-of-use assets	<u>\$ 109,701</u>
Depreciation charge for right-of-use assets	
Land	\$ 106,870
Buildings	99,242
Other equipment	<u>15,679</u>
	<u>\$ 221,791</u>
Income from the subleasing of right-of-use assets (recorded as "other income")	<u>\$ (1,941)</u>

b. Lease liabilities

	<b>December 31, 2019</b>
<u>Carrying amounts</u>	
Current	<u>\$ 186,556</u>
Non-current	<u>\$ 2,096,115</u>



Range of discount rate for lease liabilities was as follows:

	<b>December 31, 2019</b>
Land	1.76%-2.47%
Buildings	1.34%-3.75%
Other equipment	1.34%-3.61%

For the year ended December 31, 2019, the interest expense under lease liabilities amounted to \$54,611 thousand.

c. Material lease-in activities and terms

The Company and NTC leased lands from Science Park Administration, and the lease term will expire from 2023 to 2037 and 2027, respectively, which can be extended after the expiration of the lease periods.

NTC leased a land from Taiwan Sugar Corporation under a twenty-year term from October 2014 to September 2034, which can be extended after expiration. The chairman of NTC is a joint guarantor of such lease, refer to Note 27.

The Group leased some of the offices in the United States, China, Hong Kong, Japan, Israel, India, Shen-Zhen and part in Taiwan, and the lease terms will expire between 2020 and 2026 which can be extended after the expiration of the lease periods.

d. Subleases

The Group subleases its right-of-use assets for buildings under operating leases with lease terms between 1 and 5 years.

The maturity analysis of lease payments receivable under operating subleases is as follows:

	<b>December 31, 2019</b>
Year 1	\$ 1,985
Year 2	1,985
Year 3	1,985
Year 4	<u>1,985</u>
	<u>\$ 7,940</u>

To reduce the residual asset risk related to the subleased asset at the end of the relevant sublease, the lease contract between the Group and the lessee includes the receipt of the deposits and the compensation for damage due to the lack of management and maintenance.

e. Other lease information

	<b>For the Year Ended December 31, 2019</b>
Expenses relating to short-term leases	\$ 31,197
Expenses relating to low-value asset leases	\$ 946
Expenses relating to variable lease payments not included in the measurement of lease liabilities	\$ 23,780
Total cash outflow for leases	<u>\$ (307,634)</u>

The Group has elected to apply the recognition exemption for short-term leases and low-value assets leases and, thus, did not to recognize the right-of-use assets and lease liabilities for these leases.

Lease-out arrangements under operating leases for investment properties are set out in Note 14.

2018

Prepayments for lease obligations

	<b>December 31, 2018</b>
Current (recorded as “other current assets”)	\$ 3,463
Non-current (recorded as “other non-current assets”)	<u>35,129</u>
	<u>\$ 38,592</u>

Prepayments for lease obligations are prepayments for the right-of-use of land which NTC leased from Taiwan Sugar Corporation.

Lease expense

	<b>For the Year Ended December 31, 2018</b>
Lease expense	<u>\$298,063</u>

**14. INVESTMENT PROPERTIES**

	<b>December 31</b>	
	<b>2019</b>	<b>2018</b>
Investment properties, net	<u>\$ 44,207</u>	<u>\$ 50,527</u>

The investment properties are located in Shenzhen, China. As of December 31, 2019 and 2018, the fair value of such investment properties was both approximately NT\$200,000 thousand, which was used as a reference to the neighboring area transactions.

	<b>Investment Properties</b>
<u>Cost</u>	
Balance at January 1, 2019	\$ 102,333
Effect of exchange rate changes	<u>(3,822)</u>
Balance at December 31, 2019	<u>\$ 98,511</u>
<u>Accumulated depreciation and impairment</u>	
Balance at January 1, 2019	\$ 51,806
Depreciation expense	4,605
Effect of exchange rate changes	<u>(2,107)</u>
Balance at December 31, 2019	<u>\$ 54,304</u>
<u>Cost</u>	
Balance at January 1, 2018	\$ 104,460
Effect of exchange rate changes	<u>(2,127)</u>
Balance at December 31, 2018	<u>\$ 102,333</u>
<u>Accumulated depreciation and impairment</u>	
Balance at January 1, 2018	\$ 48,182
Depreciation expense	4,696
Effect of exchange rate changes	<u>(1,072)</u>
Balance at December 31, 2018	<u>\$ 51,806</u>

The investment properties were leased out for 3 years. The lease contracts contain market review clauses in the event that the lessees exercise their options to extend. The lessees do not have bargain purchase options to acquire the investment properties at the expiry of the lease periods.

The maturity analysis of lease payments receivable under operating leases of investment properties is as follows:

	<b>December 31, 2019</b>
Year 1	\$ 7,913
Year 2	4,163
Year 3	<u>2,294</u>
	<u>\$ 14,370</u>

To reduce the residual asset risk related to the subleased asset at the end of the relevant sublease, the lease contract between the Group and the lessee includes the receipt of the deposits and the compensation for damage due to the lack of management and maintenance.

## 15. INTANGIBLE ASSETS

	December 31		
	2019	2018	
Deferred technical assets, net	\$ 371,074	\$ 225,717	
Other intangible assets, net	<u>36,648</u>	<u>3,478</u>	
	<u>\$ 407,722</u>	<u>\$ 229,195</u>	
	<b>Deferred Technical Assets</b>	<b>Other Intangible Assets</b>	<b>Total</b>
<u>Cost</u>			
Balance at January 1, 2019	\$ 18,901,179	\$ 25,240	\$ 18,926,419
Additions	235,706	34,700	270,406
Disposals	(53,844)	(742)	(54,586)
Effect of exchange rate changes	<u>5,634</u>	<u>(302)</u>	<u>5,332</u>
Balance at December 31, 2019	<u>\$ 19,088,675</u>	<u>\$ 58,896</u>	<u>\$ 19,147,571</u>
<u>Accumulated amortization and impairment</u>			
Balance at January 1, 2019	\$ 18,675,462	\$ 21,762	\$ 18,697,224
Amortization expense	90,192	1,528	91,720
Disposals	(53,844)	(742)	(54,586)
Effect of exchange rate changes	<u>5,791</u>	<u>(300)</u>	<u>5,491</u>
Balance at December 31, 2019	<u>\$ 18,717,601</u>	<u>\$ 22,248</u>	<u>\$ 18,739,849</u>
<u>Cost</u>			
Balance at January 1, 2018	\$ 18,877,126	\$ 23,329	\$ 18,900,455
Additions	27,985	1,511	29,496
Disposals	-	(536)	(536)
Effect of exchange rate changes	<u>(3,932)</u>	<u>936</u>	<u>(2,996)</u>
Balance at December 31, 2018	<u>\$ 18,901,179</u>	<u>\$ 25,240</u>	<u>\$ 18,926,419</u>
<u>Accumulated amortization and impairment</u>			
Balance at January 1, 2018	\$ 18,591,849	\$ 20,593	\$ 18,612,442
Amortization expense	87,342	839	88,181
Disposals	-	(536)	(536)
Effect of exchange rate changes	<u>(3,729)</u>	<u>866</u>	<u>(2,863)</u>
Balance at December 31, 2018	<u>\$ 18,675,462</u>	<u>\$ 21,762</u>	<u>\$ 18,697,224</u>

The amounts of deferred technical assets were the technical transfer fees in connection with certain technical transfer agreements. The above technical assets pertained to different products or process technology. The assets were depreciated on a straight-line basis from the commencement of production, and over the estimated useful life of the assets. The estimated useful lives of technical assets were based on the economic benefits generated from the assets or the terms of the technical asset contracts. The estimated useful lives of other intangible assets were 3 to 5 years.

## 16. BORROWINGS

### a. Short-term borrowings

	December 31			
	2019		2018	
	Interest Rate		Interest Rate	
	%	Amount	%	Amount
Bank lines of credit	1.00	\$ 1,000,000	-	\$ -

### b. Long-term borrowings

			December 31	
	Period	Interest Rate	2019	2018
<u>Secured borrowings</u>				
CTBC Bank Co., Ltd. syndicated loan (IV)	2014.07.07-2019.11.27	1.87%-2.23%	\$ -	\$ 2,600,000
Bank of Taiwan secured medium-term loan	2014.12.29-2021.12.29	1.40%-1.70%	247,040	370,560
Bank of Taiwan syndicated loan (IV)	2016.08.15-2021.12.29	1.79%-1.81%	9,000,000	5,800,000
Bank of Taiwan syndicated loan (V)	2019.01.14-2026.09.19	1.89%	4,250,000	-
<u>Unsecured borrowings</u>				
The Export - Import Bank of ROC	2019.09.20-2026.09.21	1.16%	500,000	-
			13,997,040	8,770,560
Less: Current portion			(4,123,520)	(4,563,520)
Less: Syndication agreement management fee			(143,047)	(27,767)
			<u>\$ 9,730,473</u>	<u>\$ 4,179,273</u>

#### 1) CTBC Bank Co., Ltd. Syndicated Loan (IV)

- On July 7, 2014, the Company entered into a syndicated loan, with a group of financial institutions to procure equipment for 12-inch fab and repay bank loans, credit line was divided into part A and B, which amounted to \$6.5 billion and \$2.5 billion, respectively; the total line of credit \$9 billion.
- Part A will be repaid every six months from November 27, 2017 until maturity, part B will be repaid every six months from November 27, 2016 until maturity.
- Refer to Note 12 for collateral on bank borrowings.
- On August 26, 2019, the loan be repaid in advance.

#### 2) The collateral on the Bank of Taiwan secured medium-term loan is the land and building of the Company in Zhubei. Refer to Note 12. The principal will be repaid every six months from June 29, 2017 until maturity.

#### 3) Bank of Taiwan Syndicated Loan (IV)

- On August 15, 2016, the Company entered into a syndicated loan, with a group of financial institutions, to procure equipment for 12-inch fab, repay bank loans and augment medium-term working capital. The credit line was divided into part A and B, which amounted to \$10 billion and \$2 billion, respectively; and the total line of credit amounted to \$12 billion.

- b) Part A will be repaid every six months from December 29, 2019 until maturity, and part B will be repaid every six months from December 29, 2018 until maturity.
- c) Refer to Note 12 for collateral on bank borrowings.
- 4) Bank of Taiwan Syndicated Loan (V)
  - a) On January 14, 2019, the Company entered into a syndicated loan, with a group of financial institutions, to procure equipment for fab. The credit line amounted to \$42 billion. The principal will be repaid every six months from September 19, 2022 until maturity.
  - b) Refer to Note 12 for collateral on bank borrowings.
- 5) The Company is required to maintain certain financial covenants, including current ratio, debt ratio and tangible net equity, on June 30 and December 31 during the tenors of the loans. Additionally, the principal and interest coverage should be also maintained on June 30 and December 31 during the tenors of the loans except for the Bank of Taiwan secured medium - term loan. The computations of financial ratios mentioned above are done based on the audited consolidated financial statements.
- 6) The proceeds of the NTC's unsecured loan from the Export-Import Bank of ROC was invested in Autotalks Ltd. The principal will be repaid every six months from September 20, 2023 until maturity and the interest rate will be reviewed and may be adjusted every six months.

## 17. BONDS PAYABLE

	<b>December 31</b>	
	<b>2019</b>	<b>2018</b>
Domestic secured bonds	\$ 10,000,000	\$ 10,000,000
Less: Discounts on bonds payable	<u>(68,254)</u>	<u>(80,221)</u>
	<u>\$ 9,931,746</u>	<u>\$ 9,919,779</u>

On July 10, 2018, the Company was approved by the SFB to offer and issue the first secured corporate bonds of 2018, with an aggregate principal amount of \$10,000,000 thousand. The terms of issuance, amounts and interest rate as follows:

<b>Issuance Date</b>	<b>Period</b>	<b>Amount</b>	<b>Coupon Rate</b>	<b>Repayment and Interest Payment</b>
2018.07.17	7 years	\$10,000,000	1%	The principal will be repaid upon maturity.
				The interest is payable once a year at the coupon rate accrued annually on a simple basis starting from the issue date.

Refer to Note 12 for collateral of 12-inch Fab Manufacturing facilities on corporate bonds.

## 18. RETIREMENT BENEFIT PLANS

### a. Defined contribution plan

The Company, MMDC, NTC, SYI and TDC adopted a pension plan under the Labor Pension Act (LPA), which is a state-managed defined contribution plan. Under the LPA, an entity makes monthly contributions to employees' individual pension accounts at 6% of monthly salaries and wages.

The employees of the Group's subsidiaries in the United States, Japan, Hong Kong, Israel 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 plan

The defined benefit plans adopted by the Company, MMDC and NTC in accordance with the Labor Standards Law is operated by the government of the ROC. Pension benefits are calculated on the basis of the length of service and average of monthly salaries of the 6 months before retirement. The Company contributed amounts equal to 2% of total monthly salaries and wages; NTC and MMDC contributed amounts equal to 15% of total monthly salaries and wages to a pension fund administered by the pension fund monitoring committee of the Company. 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 payables for employee turnover of WTL and NTIL are calculated on the basis of the length of service and the last month's salary under a defined benefit plan.

The amount included in the consolidated balance sheet in respect of the Group's obligation to its defined benefit plan was as follows:

	<b>December 31</b>	
	<b>2019</b>	<b>2018</b>
Present value of the defined benefit obligation	\$ 3,064,210	\$ 2,792,238
Fair value of the plan assets	<u>(1,812,341)</u>	<u>(1,624,913)</u>
Net defined benefit liabilities, non-current	<u>\$ 1,251,869</u>	<u>\$ 1,167,325</u>

Movements in net defined benefit liabilities (assets) were as follows:

	<b>Present Value of the Defined Benefit Obligation</b>	<b>Fair Value of the Plan Assets</b>	<b>Net Defined Benefit Liabilities (Assets)</b>
Balance at January 1, 2019	<u>\$ 2,792,238</u>	<u>\$ (1,624,913)</u>	<u>\$ 1,167,325</u>
Service cost			
Current service cost	80,427	-	80,427
Net interest expense (income)	47,117	(25,023)	22,094
Others	<u>1,062</u>	<u>286</u>	<u>1,348</u>
Recognized in profit or loss	<u>128,606</u>	<u>(24,737)</u>	<u>103,869</u>

(Continued)



	Present Value of the Defined Benefit Obligation	Fair Value of the Plan Assets	Net Defined Benefit Liabilities (Assets)
Remeasurement			
Actuarial (gain) loss			
- realized rate greater than the discounted rate	\$ -	\$ (38,635)	\$ (38,635)
- changes in demographic assumptions	(4,210)	-	(4,210)
- changes in financial assumptions	187,779	(42,433)	145,346
- experience adjustments	40,737	(7,409)	33,328
Recognized in other comprehensive income	<u>224,306</u>	<u>(88,477)</u>	<u>135,829</u>
Contributions from the employer	-	(155,408)	(155,408)
Benefits paid	(106,716)	106,716	-
Effect of exchange rate changes	<u>25,776</u>	<u>(25,522)</u>	<u>254</u>
Balance at December 31, 2019	<u>\$ 3,064,210</u>	<u>\$ (1,812,341)</u>	<u>\$ 1,251,869</u>
Balance at January 1, 2018	<u>\$ 2,619,972</u>	<u>\$ (1,532,883)</u>	<u>\$ 1,087,089</u>
Service cost			
Current service cost	72,829	-	72,829
Net interest expense (income)	46,468	(25,285)	21,183
Others	<u>(3,565)</u>	<u>3,368</u>	<u>(197)</u>
Recognized in profit or loss	<u>115,732</u>	<u>(21,917)</u>	<u>93,815</u>
Remeasurement			
Actuarial (gain) loss			
- realized rate greater than the discounted rate	-	(28,197)	(28,197)
- changes in demographic assumptions	18,837	-	18,837
- changes in financial assumptions	(188)	15,524	15,336
- experience adjustments	136,923	(563)	136,360
Adjustments for prior year actuarial (gain) loss	<u>(652)</u>	<u>429</u>	<u>(223)</u>
Recognized in other comprehensive income	<u>154,920</u>	<u>(12,807)</u>	<u>142,113</u>
Contributions from the employer	-	(153,381)	(153,381)
Benefits paid	(75,937)	74,435	(1,502)
Account paid	(438)	-	(438)
Effect of exchange rate changes	<u>(22,011)</u>	<u>21,640</u>	<u>(371)</u>
Balance at December 31, 2018	<u>\$ 2,792,238</u>	<u>\$ (1,624,913)</u>	<u>\$ 1,167,325</u> (Concluded)

Amounts recognized in profit or loss in respect of these defined benefit plans analyzed by function were as follows:

	<b>For the Year Ended December 31</b>	
	<b>2019</b>	<b>2018</b>
Operating cost	\$ 20,819	\$ 21,623
Selling expenses	2,224	2,220
General and administrative expenses	14,400	8,875
Research and development expenses	<u>66,426</u>	<u>61,097</u>
	<u>\$ 103,869</u>	<u>\$ 93,815</u>

Through the defined benefit plans under the Labor Standards Law, 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 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 principal assumptions used for the purposes of the actuarial valuations were as follows:

	<b>December 31</b>	
	<b>2019</b>	<b>2018</b>
Discount rates	0.75%-4.18%	1.25%-3.65%
Expected rates of salary increase	1.00%-3.46%	1.00%-3.58%

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

	<b>December 31</b>	
	<b>2019</b>	<b>2018</b>
Discount rates		
0.25%-0.50% increase	<u>\$ (114,858)</u>	<u>\$ (104,428)</u>
0.25%-0.50% decrease	<u>\$ 125,741</u>	<u>\$ 113,484</u>
Expected rates of salary increase		
0.25%-0.50% increase	<u>\$ 120,099</u>	<u>\$ 109,407</u>
0.25%-0.50% decrease	<u>\$ (109,476)</u>	<u>\$ (101,073)</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 changes in assumptions would occur in isolation of one another as some of the assumptions may be correlated.

	<b>December 31</b>	
	<b>2019</b>	<b>2018</b>
The expected contribution to the plan for the next year	<u>\$ 83,692</u>	<u>\$ 164,314</u>
The average duration of defined benefit obligation	7.47-12.74 years	7.03-13.17 years

## 19. EQUITY

### a. Share capital

	<b>December 31</b>	
	<b>2019</b>	<b>2018</b>
Number of shares authorized (in thousands)	<u>6,700,000</u>	<u>6,700,000</u>
Shares authorized	<u>\$ 67,000,000</u>	<u>\$ 67,000,000</u>
Number of shares issued and fully paid (in thousands)	<u>3,980,000</u>	<u>3,980,000</u>
Shares issued	<u>\$ 39,800,002</u>	<u>\$ 39,800,002</u>

As of December 31, 2019 and 2018, the balance of the Company's capital account amounted to \$39,800,002 thousand, divided into 3,980,000 thousand shares with a par value of NT\$10.

### b. Capital surplus

	<b>December 31</b>	
	<b>2019</b>	<b>2018</b>
<u>May be used to offset a deficit, distributed as cash dividends, or transferred to share capital</u>		
Arising from issuance of share capital	\$ 4,787,673	\$ 4,787,673
Arising from treasury share transactions	2,342,036	2,342,036
Arising from conversion of bonds	136,352	136,352
<u>May only be used to offset a deficit</u>		
Arising from changes in percentage of ownership interest in subsidiaries	1,998	6,042
Arising from share of changes in capital surplus of associates	29,137	29,137
Cash capital increase reserved for employee share options	208,451	208,451
Others	<u>30,749</u>	<u>30,749</u>
	<u>\$ 7,536,396</u>	<u>\$ 7,540,440</u>

The capital surplus generated from the excess of the issuance price over the par value of capital stock (including the stock issued for new capital, mergers and convertible bonds) 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 stock dividends up to a certain percentage of the Company's paid-in capital. The capital surplus from share of changes in equities of subsidiaries and associates may be used to offset a deficit; however, when generated from issuance of restricted shares for employees, such capital surplus may not be used for any purpose.

### c. Retained earnings and dividend policy

The shareholders held their regular meeting on June 14, 2019 and resolved the amendments to the Company's Articles of Incorporation. The amendments of the Company's dividend distribution policy as follows:

From the pre-tax net profit of the current year, before deducting remuneration of employees and remuneration of directors, no more than 1% shall be allocated as remuneration of directors and no less than 1% as remuneration of employees. The remuneration of employees may be distributed in stock or cash upon resolution of the board of directors and may be distributed to the employees of subsidiaries of the Company meeting certain criteria.

However, if the Company has accumulated losses, the Company shall first set aside an amount for making up losses and then allocate remuneration of employees and remuneration of directors according to the percentage set forth in the preceding paragraph.

The Company purchases its stock for transferring such treasury shares, issues employee options, provides pre-emptive right for employees' subscription upon issuing new shares, issues new restricted employee shares, and distributes employee remuneration, to employees of the Company's controlling or subordinated companies who meet certain criteria, which shall be determined and resolved by the board of directors.

If the Company has pre-tax profits at the end of the current fiscal year, after paying all taxes and covering all accumulated losses, the Company shall set aside 10% of said earnings as legal reserve. However, legal reserve need not be made when the accumulated legal reserve equals the paid-in capital of the Company. After setting aside or reversing special reserve pursuant to applicable laws and regulations and orders of competent authorities or based on the business needs of the Company, if there is any balance, the board of directors may submit a proposal for allocation of the remaining balance and the accumulated undistributed earnings to the shareholders meeting for resolution of distributing bonuses and dividends to shareholders.

The board of directors shall be authorized to distribute the profit, the legal reserve and the capital reserve mentioned in the preceding paragraph in cash upon resolution by a majority vote at a board meeting attended by two-thirds or more of the directors, and shall report the same to the shareholders' meeting.

The Company's dividend distribution policy is made in accordance with the Company Act and the Articles of Incorporation in consideration of factors including capital and financial structure, operating status, retained earnings, industry characteristics and economic cycle. The dividends shall be distributed in a steady manner. With respect to distribution of dividends, in consideration of future operation scale and cash flow needs, no less than 30% of the remaining amount of the net profit after tax of the current year, after covering the accumulative losses and setting aside the legal reserve and the special reserve, shall be distributed to shareholders as dividends, which may be distributed in stock dividend or cash dividend, and the distribution of cash dividend shall not be less than 50% of total dividends, so as to maintain continuous growth.

The Company may distribute its profit or make up its losses at the end of each half of a fiscal year. The business report, the financial statements, and the proposal for distribution of earnings or making up loss shall be prepared by and then resolved by the board of directors. The Company, in distributing its profit according to the preceding paragraph, shall estimate and reserve employee and director remuneration and any taxes payable as well as cover any losses and set aside the legal reserve in accordance with the law; however, provided that the legal reserve amounts to the total paid-in capital, the legal reserve need not be set aside. Where the Company distributes the profit in cash, such distribution shall be resolved by the board of directors, but where the profit is distributed in the form of newly issued shares, such distribution shall be resolved by the shareholders' meeting.

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 deficits. 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.

Pursuant to existing regulations, the Company is required to set aside additional special capital reserve equivalent to the net debit balance of the other components of shareholders' equity, such as the accumulated balance of foreign currency translation reserve, unrealized valuation gain (loss) from available-for-sale financial assets, net amount of fair value below the cost of the Company's ordinary shares held by subsidiaries, etc. For the subsequent decrease in the deduction amount to shareholders' equity, any special reserve appropriated may be reversed to the extent that the net debit balance reverses.

As of the date of the Company's board meeting, the appropriation of earnings for 2019 are not subjected.

The appropriations of earnings for 2018 and 2017 were approved in the shareholders' meetings on June 14, 2019 and June 11, 2018, respectively, as follows:

	<b>Appropriation of Earnings</b>		<b>Dividends Per Share (NT\$)</b>	
	<b>For Year 2018</b>	<b>For Year 2017</b>	<b>For Year 2018</b>	<b>For Year 2017</b>
Legal reserve appropriated	\$ 744,650	\$ 555,056		
Reversal of special reserve	-	(31,429)		
Cash dividends	<u>3,980,000</u>	<u>3,980,000</u>	\$ 1.0	\$ 1.0
	<u>\$ 4,724,650</u>	<u>\$ 4,503,627</u>		

d. Other equity items

1) Exchange differences on translation of foreign financial statements

	<b>For the Year Ended December 31</b>	
	<b>2019</b>	<b>2018</b>
Balance at January 1	\$ (50,780)	\$ (120,988)
Exchange differences arising on translating the financial statements of foreign operations	<u>(68,466)</u>	<u>70,208</u>
Balance at December 31	<u>\$ (119,246)</u>	<u>\$ (50,780)</u>

The exchange differences arising on translation of foreign operation's net assets from its functional currency to the Group's presentation currency are recognized directly in other comprehensive income and also accumulated in the foreign currency translation reserve.

2) Unrealized gains (losses) on financial assets at FVTOCI

	<b>For the Year Ended December 31</b>	
	<b>2019</b>	<b>2018</b>
Balance at January 1	\$ 3,533,423	\$ 5,065,763
Unrealized gains (losses) on revaluation of financial assets at FVTOCI	710,507	(432,743)
Share of unrealized gains (losses) on revaluation of financial assets at FVTOCI of associates accounted for using equity method	777,428	(1,157,275)
Disposal of investments in equity instruments designated at FVTOCI	<u>(11,430)</u>	<u>57,678</u>
Balance at December 31	<u>\$ 5,009,928</u>	<u>\$ 3,533,423</u>

Unrealized gains (losses) on financial assets at FVTOCI represents the cumulative gains or losses arising from the fair value measurement on financial assets at FVTOCI that are recognized in other comprehensive income. The cumulative gain or loss will not be reclassified to profit or loss on disposal of the equity investments, instead, they will be transferred to retained earnings.

e. Non-controlling interests

	<b>For the Year Ended December 31</b>	
	<b>2019</b>	<b>2018</b>
Balance at January 1	\$ 1,446,726	\$ 1,470,701
Share attributable to non-controlling interests		
Profit for the year	220,900	281,162
Exchange differences on translation of foreign financial statements	(3,191)	(4,044)
Remeasurement of defined benefit plans	(20,268)	(26,252)
Unrealized losses on investments in equity instruments measured at fair value through other comprehensive income	14,307	(72,505)
Cash dividends issued by subsidiaries to non-controlling interests	(202,336)	(202,336)
Changes in ownership interests in subsidiaries	<u>1,380,427</u>	<u>-</u>
Balance at December 31	<u>\$ 2,836,565</u>	<u>\$ 1,446,726</u>

## 20. REVENUE

Refer to Note 33 for the Group's revenue.

## 21. EMPLOYEE BENEFITS EXPENSE, DEPRECIATION, AND AMORTIZATION

	<b>For the Year Ended December 31, 2019</b>			
	<b>Classified as Operating Costs</b>	<b>Classified as Operating Expenses</b>	<b>Classified as Non-operating Income and Losses</b>	<b>Total</b>
Short-term employee benefits	<u>\$ 2,635,857</u>	<u>\$ 5,479,081</u>	<u>\$ -</u>	<u>\$ 8,114,938</u>
Post-employment benefits	<u>\$ 131,266</u>	<u>\$ 327,166</u>	<u>\$ -</u>	<u>\$ 458,432</u>
Compensation costs of employee share options	<u>\$ 16,667</u>	<u>\$ 33,253</u>	<u>\$ -</u>	<u>\$ 49,920</u>
Depreciation	<u>\$ 7,847,263</u>	<u>\$ 811,480</u>	<u>\$ 7,648</u>	<u>\$ 8,666,391</u>
Amortization	<u>\$ 33,506</u>	<u>\$ 58,214</u>	<u>\$ 19,720</u>	<u>\$ 111,440</u>
	<b>For the Year Ended December 31, 2018</b>			
	<b>Classified as Operating Costs</b>	<b>Classified as Operating Expenses</b>	<b>Classified as Non-operating Income and Losses</b>	<b>Total</b>
Short-term employee benefits	<u>\$ 3,206,420</u>	<u>\$ 5,740,847</u>	<u>\$ -</u>	<u>\$ 8,947,267</u>
Post-employment benefits	<u>\$ 130,861</u>	<u>\$ 290,835</u>	<u>\$ -</u>	<u>\$ 421,696</u>
Depreciation	<u>\$ 6,751,457</u>	<u>\$ 721,820</u>	<u>\$ 7,384</u>	<u>\$ 7,480,661</u>
Amortization	<u>\$ 33,330</u>	<u>\$ 54,851</u>	<u>\$ 14,020</u>	<u>\$ 102,201</u>

In accordance with the Company Act and the Articles of Incorporation, it stipulates distribution of the compensation of employees and remuneration of directors at the rates no more than 1% and no less than 1%, respectively, of net profit before income tax, remuneration to directors and compensation of employees. The calculation for the rate mentioned above also include the Company's remuneration of supervisors before establishment of the Audit Committee. For the years ended December 31, 2019 and 2018, the employees' compensation and remuneration of directors were as follows:

	<b>For the Year Ended December 31</b>			
	<b>2019</b>		<b>2018</b>	
	<b>Amounts</b>	<b>Accrual Rate</b>	<b>Amounts</b>	<b>Accrual Rate</b>
Employees' compensation	<u>\$ 28,038</u>	2%	<u>\$ 163,650</u>	2%
Remuneration of directors	<u>\$ 14,019</u>	1%	<u>\$ 81,825</u>	1%

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

The compensation to employees and remuneration to the directors of 2018 and 2017 were approved by the Company's board of directors on March 25, 2019 and February 2, 2018, respectively, were as below:

	<b>For the Year Ended December 31</b>	
	<b>2018</b>	<b>2017</b>
Employees' compensation	<u>\$ 163,650</u>	<u>\$ 67,881</u>
Remuneration of directors	<u>\$ 81,825</u>	<u>\$ 67,881</u>

There was no difference between the actual amounts of employees' compensation and remuneration of directors paid and the amounts recognized in the consolidated financial statements for the years ended December 31, 2018 and 2017.

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

## 22. INCOME TAXES RELATING TO CONTINUING OPERATIONS

### a. Income tax recognized in profit or loss

	<b>For the Year Ended December 31</b>	
	<b>2019</b>	<b>2018</b>
Current income tax expense		
In respect of the current year	\$ 158,549	\$ 137,800
Additional income tax expense on unappropriated earnings	88,192	76,294
Adjustment for prior years' tax	<u>21,617</u>	<u>48,802</u>
Deferred income tax		
In respect of the current year	6,872	608,170
Effect of tax rate changes	<u>-</u>	<u>(203,824)</u>
Income tax expense recognized in profit or loss	<u>\$ 275,230</u>	<u>\$ 667,242</u>



Reconciliation of accounting profit and income tax expense were as follows:

	<b>For the Year Ended December 31</b>	
	<b>2019</b>	<b>2018</b>
Income tax expense from continuing operations at the statutory rate	\$ 480,125	\$ 1,798,728
Tax effect of adjustment item		
Permanent differences	(255,813)	(238,437)
Others	5,109	18,223
Tax-exempt income	<u>-</u>	<u>(14,000)</u>
Current income tax	229,421	1,564,514
Effect of tax rate changes	-	(203,824)
Unrecognized loss carryforwards, investment credits and deductible temporary differences	(64,000)	(818,544)
Additional income tax on unappropriated earnings	88,192	76,294
Adjustment for prior years' income tax expense	<u>21,617</u>	<u>48,802</u>
Tax expense recognized in profit or loss	<u>\$ 275,230</u>	<u>\$ 667,242</u>

The Income Tax Act in the ROC was amended in 2018, and the corporate income tax rate was adjusted from 17% to 20%. The effect of the change in tax rate on deferred tax expense to be recognized in profit or loss is recognized in full in the period in which the change in tax rate occurs. In addition, the rate of the corporate surtax applicable to the 2018 unappropriated earnings was reduced from 10% to 5%. Tax rates used by other entities in the Group operating in other jurisdictions are based on the tax laws in those jurisdictions.

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.

b. Current tax assets and liabilities

	<b>December 31</b>	
	<b>2019</b>	<b>2018</b>
Current tax assets		
Tax refund receivables (recorded as "other receivables and notes receivable")	<u>\$ 9,971</u>	<u>\$ 14,018</u>
Current tax liabilities		
Income tax payables	<u>\$ 198,242</u>	<u>\$ 178,690</u>

c. Deferred tax assets

As of December 31, 2019 and 2018, deferred income tax assets of \$923,902 thousand and \$953,726 thousand, respectively, were mainly net operating loss carryforwards.

d. Operating loss carryforwards and tax exemptions

Information about the Group's operating loss carryforwards as of December 31, 2019 and tax exemptions was as follows:

As of December 31, 2019 WECA's operating loss carryforward was US\$11,374 thousand, and will expire in 2025.

As of December 31, 2019, the Company's operating loss carryforwards comprised:

**Operating Loss  
Carryforwards**

**Expiry Year**

\$ 51,000

2022

e. Information about investment credits

The Company apply the Statute for Industrial Innovation Article 10, up to ten percent of the R&D expenses may be credited against the profit-seeking enterprise income tax payable by it in each of the three years following the then current year.

f. Tax return assessments

The Company's tax returns through 2017 have been assessed by the tax authorities.

## 23. EARNINGS PER SHARE

	For the Year Ended December 31					
	2019			2018		
	Amounts (Numerator) After Income Tax (Attributable to Owners of the Parent)	Shares (Denominator) (In Thousands)	Earnings Per Share (NT\$) After Income Tax (Attributable to Owners of the Parent)	Amounts (Numerator) After Income Tax (Attributable to Owners of the Parent)	Shares (Denominator) (In Thousands)	Earnings Per Share (NT\$) After Income Tax (Attributable to Owners of the Parent)
Basic earnings per share						
Net income attributed to ordinary shareholders	\$ 1,256,387	3,980,000	<u>\$ 0.32</u>	\$ 7,446,496	3,980,000	<u>\$ 1.87</u>
Effect of dilutive potential ordinary share						
Employees' compensation	-	1,434		-	12,078	
Diluted earnings per share						
Net income attributed to ordinary shareholders	<u>\$ 1,256,387</u>	<u>3,981,434</u>	<u>\$ 0.32</u>	<u>\$ 7,446,496</u>	<u>3,992,078</u>	<u>\$ 1.87</u>

If the Company offered to settle the compensation or bonuses paid to employees by cash or shares, the Company assumed that the entire amount of the compensation or bonuses 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 (EPS), if the shares have a dilutive effect. Such dilutive effect of the potential shares is included in the computation of diluted EPS until the number of shares to be distributed to employees is resolved in the following year.

## 24. BUSINESS COMBINATIONS

a. Subsidiaries acquired and consideration transferred

Subsidiary	Principal Activity	Date of Acquisition	Proportion of Voting Equity Interests Acquired (%)	Consideration Transferred
GTD	Investment holding	July 4, 2019	100	<u>\$ 155,367</u> <u>US\$ 5,000</u>

In July 2019, the Company purchase 100% ownership interest of Great Target Development Ltd. in order to indirectly hold GTD's subsidiary in India, GLMTD Technology Private Limited, with a 99.99% ownership interest.

b. Assets acquired and liabilities assumed at the date of acquisition

	<b>GTD</b>
Current assets	
Cash and cash equivalents	\$ 27,853
Other receivables	19
Other current assets	552
Non-current assets	
Non-current financial assets at fair value through other comprehensive income	13,531
Other non-current assets	84,758
Current liabilities	
Current tax liabilities	(575)
Other payables	<u>(417)</u>
	<u>\$ 125,721</u>

c. Goodwill recognized on acquisitions

	<b>GTD</b>
Consideration transferred	\$ 155,367
Less: Fair value of identifiable net assets acquired	<u>(125,721)</u>
Goodwill recognized on acquisitions	<u>\$ 29,646</u>

The goodwill recognized in the acquisition of Great Target Development Ltd. mainly represents the control premium included in the cost of the combination. In addition, the consideration paid for the combination effectively included amounts attributed to the benefits of expected synergies, revenue growth, future market development and the assembled workforce of Great Target Development Ltd.

d. Net cash outflow on acquisition of subsidiaries

	<b>GTD</b>
Consideration paid in cash	\$ 155,367
Less: Cash and cash equivalent balances acquired	<u>(27,853)</u>
	<u>\$ 127,514</u>

## 25. CAPITAL MANAGEMENT

The Group's capital management objective is to ensure it has the necessary financial resources and operational plan so that it can cope with the next twelve months working capital requirements, capital expenditures, research and development activities, debt repayments and dividends payments.

## 26. FINANCIAL INSTRUMENT

### a. Fair value of financial instruments

#### 1) Valuation techniques and assumptions used in fair value measurement

The fair values of financial assets and financial liabilities are determined as follows:

- The fair values of financial assets and financial liabilities with standard terms and conditions and traded on active liquid markets are determined with reference to quoted market prices (includes publicly traded stock and mutual funds).
- Forward exchange contracts and foreign exchange swap contracts are measured using quoted forward exchange rates and yield curves derived from quoted interest rates matching maturities of the contracts.
- Domestic and overseas unlisted equity instrument at FVTOCI were all measured based on Level 3. Fair values of the above equity instruments were determined using comparable listed company approach, refer to strike price of similar business at active market, implied value multiple of the price and relevant information. Significant unobservable inputs included PE ratio, value multiple and market liquidity discount.

#### 2) Fair value measurements recognized in the consolidated balance sheets

The following table provides an analysis of financial instruments that are measured subsequent to initial recognition at fair value, grouped into Levels 1 to 3 based on the degree to which the fair value is observable:

- Level 1 fair value measurements are those derived from quoted prices (unadjusted) in active markets for identical assets or liabilities;
- Level 2 fair value measurements are those derived from inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices); and
- Level 3 fair value measurements are those derived from valuation techniques that include inputs for the asset or liability that are not based on observable market data (unobservable inputs).

#### 3) Fair value of financial instruments that are not measured at fair value

Fair value hierarchy as at December 31, 2019

	Carrying Amount	Fair Value			
		Level 1	Level 2	Level 3	Total
<u>Financial liabilities</u>					
Financial liabilities measured at amortized cost					
Bonds payable	\$ 9,931,746	\$ -	\$ 9,931,746	\$ -	\$ 9,931,746

Fair value hierarchy as at December 31, 2018

	Carrying Amount	Fair Value			
		Level 1	Level 2	Level 3	Total
<u>Financial liabilities</u>					
Financial liabilities measured at amortized cost					
Bonds payable	\$ 9,919,779	\$ -	\$ 9,919,779	\$ -	\$ 9,919,779

4) Fair value of financial instruments that are measured at fair value on a recurring basis

Fair value hierarchy as at December 31, 2019

	Level 1	Level 2	Level 3	Total
<u>Financial assets at FVTPL</u>				
Derivative financial assets (not under hedge accounting)	<u>\$ -</u>	<u>\$ 75,462</u>	<u>\$ -</u>	<u>\$ 75,462</u>
<u>Financial assets at FVTOCI</u>				
Equity securities				
Domestic listed and emerging securities	\$ 7,234,306	\$ -	\$ -	\$ 7,234,306
Overseas listed securities	52,487	-	-	52,487
Domestic and overseas unlisted securities	<u>-</u>	<u>17,240</u>	<u>1,423,311</u>	<u>1,440,551</u>
	<u>\$ 7,286,793</u>	<u>\$ 17,240</u>	<u>\$ 1,423,311</u>	<u>\$ 8,727,344</u>

Fair value hierarchy as at December 31, 2018

	Level 1	Level 2	Level 3	Total
<u>Financial assets at FVTPL</u>				
Derivative financial assets (not under hedge accounting)	<u>\$ -</u>	<u>\$ 8,290</u>	<u>\$ -</u>	<u>\$ 8,290</u>
<u>Financial assets at FVTOCI</u>				
Equity securities				
Domestic listed and emerging securities	\$ 6,295,318	\$ -	\$ -	\$ 6,295,318
Overseas listed securities	74,444	-	-	74,444
Domestic and overseas unlisted securities	<u>-</u>	<u>17,510</u>	<u>723,793</u>	<u>741,303</u>
	<u>\$ 6,369,762</u>	<u>\$ 17,510</u>	<u>\$ 723,793</u>	<u>\$ 7,111,065</u>

b. Categories of financial instruments

Fair values of financial assets and liabilities were summarized as follows:

	December 31			
	2019		2018	
	Carrying Amount	Fair Value	Carrying Amount	Fair Value
<u>Financial assets</u>				
Measured at amortized cost				
Cash and cash equivalents	\$ 11,467,907	\$ 11,467,907	\$ 12,559,631	\$ 12,559,631
Notes and accounts receivable (included related parties)	6,130,906	6,130,906	6,513,710	6,513,710
Other receivables	750,720	750,720	406,879	406,879
Refundable deposits (recorded in other non-current assets)	396,681	396,681	268,707	268,707
Financial assets at fair value through profit or loss	75,462	75,462	8,290	8,290
Financial assets at fair value through other comprehensive income (current and non-current)	8,727,344	8,727,344	7,111,065	7,111,065
<u>Financial liabilities</u>				
Measured at amortized cost				
Short-term borrowings	1,000,000	1,000,000	-	-
Notes and accounts payable (included related parties)	5,697,780	5,697,780	4,947,547	4,947,547
Payable on equipment and other payables	6,138,634	6,138,634	6,637,443	6,637,443
Bonds payable	9,931,746	9,931,746	9,919,779	9,919,779
Long-term borrowings (included current portion)	13,997,040	13,997,040	8,770,560	8,770,560
Guarantee deposits (recorded in other non-current liabilities)	64,347	64,347	59,858	59,858

c. Financial risk management objectives and policies

The Group's Corporate Treasury function provides services to the business, coordinates access to domestic and international financial markets, monitors and manages the financial risks relating to the operations of the Group through internal risk reports which analyze exposures by degree and magnitude of risks. These risks include market risk, credit risk and liquidity risk.

The use of financial derivatives was governed by the Group's policies approved by the board of directors, which provide written principles on foreign exchange risk, and use of financial derivatives. Compliance with policies and exposure limits was reviewed by the internal auditors on a continuous basis.

1) Market risk

The Group's activities expose it primarily to the financial risks of changes in foreign currency exchange rates and interest rates. The Group uses forward foreign exchange contracts to hedge the foreign currency risk on export.

There had been no change to the Group's exposure to market risks or the manner in which these risks were managed and measured.

a) Foreign currency risk

The Group uses forward foreign exchange contracts to hedge the exchange rate risk within approved policy parameters utilizing forward foreign exchange contracts.

The sensitivity analysis included only outstanding foreign currency denominated monetary items at the end of the reporting period and an increase in net income and equity if New Taiwan dollars strengthen by 1% against foreign currencies. For a 1% weakening of New Taiwan dollars against U.S. dollars, there would be impact on net income increase in the amounts of \$23,287 thousand and \$34,120 thousand for the years ended December 31, 2019 and 2018, respectively.

b) Interest rate risk

The Group's interest rate risk arises primarily from floating rate borrowings.

The carrying amount of the Group's financial liabilities with exposure to interest rates at the end of the reporting period were as follows:

	<b>December 31</b>	
	<b>2019</b>	<b>2018</b>
Cash flow interest rate risk		
Financial assets	\$ 284,413	\$ 133,666
Financial liabilities	13,997,040	8,770,560

The sensitivity analyses below were determined based on the Group's exposure to interest rates for fair value of variable-rate derivatives instruments at the end of the reporting period. If interest rates had been higher by one percentage point, the Group's cash flows for the years ended December 31, 2019 and 2018 would have increased by \$137,126 thousand and \$86,369 thousand, respectively.

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 adopted a policy of only dealing with creditworthy counterparties and obtaining sufficient collateral, where appropriate, as a means of mitigating the risk of financial loss from defaults. In order to minimize credit risk, the management of the Group has delegated a team responsible for determination of credit limits, credit approvals and other monitoring procedures to ensure that follow-up action is taken to recover overdue receivables. In addition, the Group reviews the recoverable amount of each individual accounts receivables at the end of the reporting period to ensure that adequate impairment losses are recognized for irrecoverable amounts. In this regard, the directors of the Group consider that the Group's credit risk was significantly reduced.

3) Liquidity risk

The Group has enough operating capital to comply with loan covenants; liquidity risk is low.



The Group's non-derivative financial liabilities and their agreed repayment period were as follows:

	<b>December 31, 2019</b>			
	<b>Within 1 Year</b>	<b>1-2 Years</b>	<b>Over 2 Years</b>	<b>Total</b>
Non-interest bearing	\$ 11,836,414	\$ 64,347	\$ -	\$ 11,900,761
Lease liabilities	239,834	220,802	2,337,896	2,798,532
Variable interest rate liabilities	4,123,520	5,123,520	4,750,000	13,997,040
Fixed interest rate liabilities	<u>1,000,000</u>	<u>-</u>	<u>10,000,000</u>	<u>11,000,000</u>
	<u>\$ 17,199,768</u>	<u>\$ 5,408,669</u>	<u>\$ 17,087,896</u>	<u>\$ 39,696,333</u>

Additional information about the maturity analysis for lease liabilities:

	<b>Less than 2 Years</b>	<b>2-5 Years</b>	<b>5-10 Years</b>	<b>10-15 Years</b>	<b>Over 15 Years</b>
Lease liabilities	<u>\$ 460,636</u>	<u>\$ 538,384</u>	<u>\$ 651,067</u>	<u>\$ 526,818</u>	<u>\$ 621,627</u>

	<b>December 31, 2018</b>			
	<b>Within 1 Year</b>	<b>1-2 Years</b>	<b>Over 2 Years</b>	<b>Total</b>
Non-interest bearing	\$ 11,584,990	\$ 59,858	\$ -	\$ 11,644,848
Variable interest rate liabilities	4,563,520	1,883,520	2,323,520	8,770,560
Fixed interest rate liabilities	<u>-</u>	<u>-</u>	<u>10,000,000</u>	<u>10,000,000</u>
	<u>\$ 16,148,510</u>	<u>\$ 1,943,378</u>	<u>\$ 12,323,520</u>	<u>\$ 30,415,408</u>

## 27. RELATED PARTY TRANSACTIONS

- a. The names and relationships of related parties are as follows:

<b>Related Party</b>	<b>Relationship with the Group</b>
Walsin Lihwa Corporation	Investor that exercises significant influence over the Group
Chin Xin Investment Co., Ltd.	Associate
Hwa Bao Botanic Conservation Corp.	Associate
Nyquest Technology Co., Ltd.	Related party in substance
Walton Advanced Engineering Inc.	Related party in substance
Walton Advanced Engineering Ltd. (Suzhou)	Related party in substance
Chin Cherng Construction Co., Ltd.	Related party in substance
Walsin Technology Corporation	Related party in substance
Harbinger III Venture Capital Corp.	Related party in substance
Prosperity Dielectrics Co., Ltd.	Related party in substance
Hannstar Display Corporation	Related party in substance
United Industrial Gases Co., Ltd.	Related party in substance
TDC	Subsidiary (June 10, 2019 as the date of liquidation)

b. Operating activities

		<b>For the Year Ended December 31</b>	
		<b>2019</b>	<b>2018</b>
1) Operating revenue			
Related party in substance		\$ <u>246,399</u>	\$ <u>247,453</u>
2) Manufacturing expenses			
Related party in substance			
Walton Advanced Engineering Inc.		\$ 2,957,727	\$ 2,678,821
Others		<u>562,033</u>	<u>566,350</u>
		\$ <u>3,519,760</u>	\$ <u>3,245,171</u>
3) General and administrative expenses			
Investor that exercises significant influence over the Group		\$ 11,467	\$ 10,078
Related party in substance		<u>10,818</u>	<u>10,567</u>
		\$ <u>22,285</u>	\$ <u>20,645</u>
4) Dividend income			
Investor that exercises significant influence over the Group			
Walsin Lihwa Corporation		\$ 252,000	\$ 200,000
Related party in substance			
Walsin Technology Corporation		160,051	39,384
United Industrial Gases Co., Ltd.		62,858	57,570
HannStar Display Corporation		33,020	50,034
Walton Advanced Engineering Inc.		15,019	42,553
Others		<u>8,820</u>	<u>25,914</u>
		\$ <u>531,768</u>	\$ <u>415,455</u>
5) Other income			
Associate		\$ 72	\$ -
Related party in substance			
Walsin Technology Corporation		14,669	2,256
Others		<u>299</u>	<u>434</u>
		\$ <u>15,040</u>	\$ <u>2,690</u>
		<b>December 31</b>	
		<b>2019</b>	<b>2018</b>
6) Accounts receivable due from related parties			
Related party in substance		\$ <u>45,903</u>	\$ <u>44,297</u>

	<b>December 31</b>	
	<b>2019</b>	<b>2018</b>
7) Accounts payable to related parties		
Related party in substance		
Walton Advanced Engineering Inc.	\$ 773,107	\$ 473,453
Others	<u>138,422</u>	<u>156,228</u>
	<u>\$ 911,529</u>	<u>\$ 629,681</u>
8) Other receivables and other current assets		
Investor that exercises significant influence over the Group	\$ -	\$ 209
Subsidiary	<u>16,157</u>	<u>-</u>
	<u>\$ 16,157</u>	<u>\$ 209</u>
9) Other payables and other current liabilities		
Related party in substance	\$ 34,923	\$ 35,789
Investor that exercises significant influence over the Group	<u>1,117</u>	<u>1,862</u>
	<u>\$ 36,040</u>	<u>\$ 37,651</u>
10) Refundable deposits (recorded as “other non-current assets”)		
Related party in substance	\$ 1,722	\$ 1,722
Investor that exercises significant influence over the Group	<u>203</u>	<u>203</u>
	<u>\$ 1,925</u>	<u>\$ 1,925</u>

The Group’s transactions with the related party were conducted under normal terms.

c. Lease arrangements

	<b>December 31, 2019</b>
Lease liabilities	
Related party in substance	\$ 32,869
Investor that exercises significant influence over the Group	<u>5,160</u>
	<u>\$ 38,029</u>
	<b>For the Year Ended December 31, 2019</b>
Interest expense	
Related party in substance	\$ 604
Investor that exercises significant influence over the Group	<u>100</u>
	<u>\$ 704</u>

d. Guarantee

As of December 31, 2019, the chairman of NTC is a joint guarantor of the land-leasing from Taiwan Sugar Corporation. Refer to Note 13.

e. Compensation of key management personnel

	<b>For the Year Ended December 31</b>	
	<b>2019</b>	<b>2018</b>
Short-term employment benefits	\$ 342,723	\$ 437,686
Post-employment benefits	8,590	32,550
Compensation costs of employee share options	<u>2,072</u>	<u>-</u>
	<u>\$ 353,385</u>	<u>\$ 470,236</u>

The remuneration of directors and key management personnel was suggested by the remuneration committee having regard to the performance of individuals and market trends. And the remuneration was resolved by the board of directors.

## 28. PLEDGED AND COLLATERALIZED ASSETS

Refer to Note 6 and Note 12 to the consolidated financial statements.

## 29. SIGNIFICANT CONTINGENT LIABILITIES AND UNRECOGNIZED COMMITMENTS

a. Amounts available under unused letters of credit as of December 31, 2019 and 2018 were approximately US\$6,592 thousand and US\$14,888 thousand, JPY449,780 thousand and JPY2,483,939 thousand, and EUR0 thousand and EUR122 thousand, respectively.

b. Signed construction contract

	<b>Total Contract Price</b>	<b>Payment as of December 31, 2019</b>
TASA Construction Corporation	<u>\$ 8,530,699</u>	<u>\$ 6,103,853</u>

c. Microchip Technology Inc. (a listed company in the United States) filed a first amended complaint in January 2019, which alleges that NTC and NTCA infringed six patents of Microchip Technology Inc. The parties were given 90 days to reach an out-of-court settlement but no agreement was reached. The case proceeding is held in the United States District Court for the Northern District of California where NTC and NTCA filed their statement of defense. The case is still in its initial stages; hence, the possible impact on NTC's business and finance is not yet determinable.

### 30. SIGNIFICANT CONTRACTS

On November 28, 2019, NTC's board of directors resolved to acquire the semiconductor business of Panasonic Corporation. Consequently, NTC and Panasonic Corporation reached an agreement and signed a contract for NTC's acquisition of the semiconductor business of Panasonic Corporation. Both parties will obtain approval from their government authorities and estimate to complete the contract settlement in June 2020. The total contract amount is US\$250,000 thousand (approximately NT\$7,627,500 thousand), which will be adjusted on or after the settlement in accordance with the regulated price formula in the contract.

### 31. SIGNIFICANT ASSETS AND LIABILITIES DENOMINATED IN FOREIGN CURRENCIES

The following information was aggregated by the foreign currencies other than functional currencies of the Group entities and the exchange rates between foreign currencies and respective functional currencies were disclosed.

The significant assets and liabilities denominated in foreign currencies were as follows:

	December 31					
	2019			2018		
	Foreign Currencies (In Thousands)	Exchange Rate (Note 1)	New Taiwan Dollars (In Thousands)	Foreign Currencies (In Thousands)	Exchange Rate (Note 1)	New Taiwan Dollars (In Thousands)
<u>Financial assets</u>						
Monetary items						
USD	\$ 209,636	29.98	\$ 6,284,877	\$ 234,740	30.715	\$ 7,210,033
USD	23,628	108.62	708,381	16,855	110.41	517,691
		(Note 2)			(Note 2)	
EUR	591	33.59	19,847	1,475	35.2	51,911
JPY	1,615,538	0.276	445,888	1,781,786	0.2782	495,693
RMB	75,469	4.305	324,895	15,978	4.472	71,452
RMB	68,803	0.1436	296,199	103	0.1456	459
		(Note 3)			(Note 3)	
ILS	14,128	8.6652	122,421	12,398	8.1494	101,037
Non-monetary items						
USD	7,461	29.98	223,667	7,407	30.715	227,493
<u>Financial liabilities</u>						
Monetary items						
USD	132,119	29.98	3,960,917	122,895	30.715	3,774,717
USD	14,739	108.62	441,864	8,523	110.41	261,790
		(Note 2)			(Note 2)	
EUR	2,683	33.59	90,135	3,894	35.2	137,069
JPY	1,636,729	0.276	451,737	3,147,009	0.2782	875,498
RMB	47,882	0.1436	206,132	630	0.1456	2,815
		(Note 3)			(Note 3)	
ILS	24,104	8.6652	208,865	14,600	8.1494	119,471

Note 1: Except as otherwise noted, exchange rate represents the number of New Taiwan dollars for which one unit of foreign currency could be exchanged.

Note 2: The exchange rate represents the number of JPY for which one U.S. dollar could be exchanged.

Note 3: The exchange rate represents the number of U.S. dollar for which one RMB could be exchanged.

For the years ended December 31, 2019 and 2018, realized and unrealized net foreign exchange gain (loss) were loss of \$137,534 thousand and gain of \$280,264 thousand, respectively. It is impractical to disclose net foreign exchange gains (losses) by each significant foreign currency due to the variety of the foreign currency transactions and functional currencies of the group entities.

## 32. ADDITIONAL DISCLOSURE

- a. Following are the additional disclosures for material transactions and; b. investments required by the Securities and Futures Bureau for the Company:

1)	Financings provided	None
2)	Endorsement and guarantee provided	None
3)	Marketable securities held (excluding investments in subsidiaries and associates)	Table 1
4)	Marketable securities acquired and disposed of at costs or prices of at least NT\$300 million or 20% of the paid-in capital	Table 2
5)	Acquisition of individual real estate properties at costs of at least NT\$300 million or 20% of the paid-in capital	Table 3
6)	Disposal of individual real estate properties 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 of at least NT\$100 million or 20% of the paid-in capital	Table 4
8)	Receivables from related parties amounting to at least NT\$100 million or 20% of the paid-in capital	Table 5
9)	Information about the derivative financial instruments transaction	Note 7
10)	Names, locations, and related information of investees over which the Company exercises significant influence (excluding information on investment in mainland China)	Table 6

- c. Information on investment in mainland China

1)	The name of the investee in mainland China, the main businesses and products, its issued capital, method of investment, information on inflow or outflow of capital, percentage of ownership, income (losses) of the investee, share of profits (losses) of investee, ending balance, amount received as dividends from the investee, and the limitation on investee.	Table 7
2)	Significant direct or indirect transactions with the investee, its prices and terms of payment, unrealized gain or loss, and other related information which is helpful to understand the impact of investment in mainland China on financial reports.	Table 7

- d. Information on intercompany relationships and significant intercompany transactions: Refer to Table 8 attached.

## 33. SEGMENT INFORMATION

- a. Basic information about operating segment

- 1) Classification of operating segments

The Group's reportable segments under IFRS 8 "Operating Segments" was as follows:

- a) Segment of DRAM IC product

The DRAM IC product segment engages mainly in the manufacturing, selling, researching, designing and after-sales service of Mobile RAM and Specialty DRAM.

b) Segment of Flash Memory product

The Flash Memory product segment engages mainly in the manufacturing, selling, researching, designing and after-sales service of Flash Memory product.

c) Segment of Logic IC product

The Logic IC product segment engages mainly in the manufacturing, selling, researching, designing and after-sales service of Logic IC product.

2) Principles of measuring reportable segments, profit, assets and liabilities

The significant accounting principles of each operating segment are the same as those stated in Note 4 to the consolidated financial statements. The Group's operating segment profit or loss represents the profit or loss earned by each segment. The profit or loss is controllable by segment managers and is the basis for assessment of segment performance. Individual segment assets are disclosed as zero since those measures are not reviewed by the chief operating decision maker. Major liabilities are arranged based on the capital cost and deployment of the whole company, which are not controlled by individual segment managers.

b. Segment revenues and operating results

The following was an analysis of the Group's revenue from continuing operations by reportable segments.

	<b>Segment Revenue</b>		<b>Segment Profit and Loss</b>	
	<b>For the Year Ended</b>		<b>For the Year Ended</b>	
	<b>December 31</b>		<b>December 31</b>	
	<b>2019</b>	<b>2018</b>	<b>2019</b>	<b>2018</b>
DRAM IC product	\$ 18,790,988	\$ 21,582,960	\$ 98,225	\$ 3,900,169
Flash Memory product	19,723,011	19,647,843	4,298,936	6,132,727
Logic IC product	<u>10,256,574</u>	<u>9,958,368</u>	<u>1,507,729</u>	<u>1,501,616</u>
Total of segment revenue	48,770,573	51,189,171	5,904,890	11,534,512
Other revenue	<u>861</u>	<u>1,152</u>	861	1,152
Operating revenue	<u>\$ 48,771,434</u>	<u>\$ 51,190,323</u>		
Unallocated expenditure				
Administrative and supporting expenses			(2,123,292)	(2,045,247)
Sales and other common expenses			<u>(2,527,250)</u>	<u>(1,563,720)</u>
Income from operations			<u>1,255,209</u>	<u>7,926,697</u>

(Continued)

	<b>Segment Revenue</b>		<b>Segment Profit and Loss</b>	
	<b>For the Year Ended</b>		<b>For the Year Ended</b>	
	<b>December 31</b>		<b>December 31</b>	
	<b>2019</b>	<b>2018</b>	<b>2019</b>	<b>2018</b>
Non-operating income and expenses				
Interest income			\$ 95,203	\$ 93,833
Dividend income			531,803	416,339
Other income			49,788	45,572
Gains (losses) on disposal of property, plant and equipment			(1,039)	764
Foreign exchange gains (losses)			(137,534)	280,264
Gains (losses) on financial instruments at fair value through profit or loss			64,016	(328,890)
Share of profit of associates accounted for using equity method			241,034	228,981
Interest expense			(218,980)	(182,299)
Other expenses			(126,983)	(73,471)
Other impairment loss			-	(12,890)
Profit before income tax			<u>\$ 1,752,517</u>	<u>\$ 8,394,900</u>
				(Concluded)

c. Geographical information

The Group's revenue from continuing operations from external customers by location of operations and information about its non-current assets (non-current assets exclude financial instruments, deferred income tax assets and post-employment benefit assets) by location of assets are detailed below.

	<b>Revenue from</b>			
	<b>External Customers</b>		<b>Non-current Assets</b>	
	<b>For the Year Ended</b>		<b>December 31</b>	
	<b>December 31</b>		<b>December 31</b>	
	<b>2019</b>	<b>2018</b>	<b>2019</b>	<b>2018</b>
Asia	\$ 44,709,682	\$ 46,549,128	\$ 59,631,806	\$ 52,640,704
United States	2,492,029	2,663,718	244,530	203,900
Europe	1,528,999	1,758,828	-	-
Others	40,724	218,649	-	-
	<u>\$ 48,771,434</u>	<u>\$ 51,190,323</u>	<u>\$ 59,876,336</u>	<u>\$ 52,844,604</u>

d. Major customer information

For the years ended December 31, 2019 and 2018, the Group's operating revenue were \$48,771,434 thousand and \$51,190,323 thousand and single customer contacting 10% or more to the Group's operating revenue were \$5,153,522 thousand and \$5,184,432 thousand, respectively. For the years ended December 31, 2019 and 2018, there was no other individual customer exceeded 10% of the Group's operating revenue.



TABLE 1

## WINBOND ELECTRONICS CORPORATION AND SUBSIDIARIES

## MARKETABLE SECURITIES HELD

DECEMBER 31, 2019

(In Thousands of New Taiwan Dollars and Foreign Currencies)

Company Name	Type and Name of Marketable Securities	Relationship with the Holding Company	Financial Statement Account	December 31, 2019			Note
				Shares/Units	Carrying Amount	Percentage of Ownership (%)	
Winbond Electronics Corp. (WEC)	Shares Walsin Lihwa Corporation	The investee's chairman are relatives within the second degree of relationship of WEC's chairman. As WEC's corporate director, the investee held 22% ownership interest in WEC	Current financial assets at fair value through other comprehensive income	218,000,000	\$ 3,357,200	7	\$ 3,357,200
	Hannstar Display Corporation	The investee's chairman are relatives within the second degree of relationship of WEC's chairman.	"	110,067,210	890,443	4	890,443
	Walton Advanced Engineering Inc.	The investee chairman are relatives within the second degree of relationship of WEC's chairman. WEC as the investee's director.	"	50,062,641	583,230	10	583,230
	Walsin Technology Corporation	The investee's chairmans are relatives within the second degree of relationship of WEC's chairman.	"	9,800,117	2,342,228	2	2,342,228
	Shares His Chu Golf Country Club	None	Non-current financial assets at fair value through other comprehensive income	3	9,120	-	9,120
WECA	Linkou Golf Course	"	"	1	8,120	-	8,120
	Smart Catch International Co., Ltd.	"	"	4,000,000	-	16	-
	Harbinger III Venture Capital Corp.	WEC as the investee's supervisor	"	5,440	236	5	236
	Shares Everspin Technologies, Inc.	None	Current financial assets at fair value through other comprehensive income	332,834	USD 1,751	2	USD 1,751
	Funds JVP VIII, L.P.	None	Non-current financial assets at fair value through other comprehensive income	-	USD 4,356	7	USD 4,356
WECJ	Shares Nihon Computer Co., Ltd.	None	Non-current financial assets at fair value through other comprehensive income	10	JPY -	1	-
GLMTD	Shares TEGNA Electronics Private Limited	The held company as the investee's director	Non-current financial assets at fair value through other comprehensive income	3,001,000	INR 30,010	10	INR 30,010

(Continued)

Company Name	Type and Name of Marketable Securities	Relationship with the Holding Company	Financial Statement Account	December 31, 2019			Note
				Shares/Units	Carrying Amount	Percentage of Ownership (%)	
NTC	Shares Yu-Ji Venture Capital Co., Ltd. United Industrial Gases Co., Ltd. Brightek Optoelectronic Co., Ltd. Autotalks Ltd. - Preferred E. shares	The held company as the investee's director The held company as the investee's director None None	Non-current financial assets at fair value through other comprehensive income " " "	1,350,000	\$ 16,605	5	\$ 16,605
				8,800,000	440,000	4	440,000
				34,680	485	-	485
				3,932,816	599,600	8	599,600
SYI	Shares Nyquest Technology Co., Ltd.	The held company as the investee's director	Non-current financial assets at fair value through other comprehensive income	1,650,000	60,720	5	60,720

Note: Refer to Tables 6 and 7 for information of investment in subsidiaries, investments in associates and investment in mainland China.

(Concluded)

TABLE 2

## WINBOND ELECTRONICS CORPORATION AND SUBSIDIARIES

MARKETABLE SECURITIES ACQUIRED AND DISPOSED OF AT COSTS OR PRICES OF AT LEAST NT\$300 MILLION OR 20% OF THE PAID-IN CAPITAL  
FOR THE YEAR ENDED DECEMBER 31, 2019  
(In Thousands of New Taiwan Dollars)

Company Name	Marketable Securities Type and Name	Financial Statement Account	Purpose of Transaction	Nature of Relationship	Beginning Balance		Acquisition		Disposal			Ending Balance		
					Shares/Units	Amount	Shares/Units	Amount	Shares/Units	Amount	Carrying Amount (Note 3)	Gain (Loss) on Disposal	Shares/Units	Amount
WEC	Shares NTC	Investments accounted for using equity method	Subscription of shares	Related party	126,620,087	\$ 2,256,830	50,379,913	\$ 2,588,607 (Note 1)	-	\$ -	\$ (316,550) (Note 2)	\$ -	177,000,000	\$ 4,528,887
NTC	Shares Autotalks Ltd. - Preferred E. shares	Non-current financial assets at fair value through other comprehensive income	Subscription of shares issued by Autotalks Ltd.	Non-related party	-	-	3,932,816	630,000	-	-	-	-	3,932,816	599,600 (Note 3)

Note 1: Include adjustment for equity method.

Note 2: Cash dividends.

Note 3: Include adjustments for change in value of financial assets at fair value through other comprehensive income.

TABLE 3

## WINBOND ELECTRONICS CORPORATION AND SUBSIDIARIES

ACQUISITION OF INDIVIDUAL REAL ESTATE AT COSTS OF AT LEAST NT\$300 MILLION OR 20% OF THE PAID-IN CAPITAL  
FOR THE YEAR ENDED DECEMBER 31, 2019  
(In Thousands of New Taiwan Dollars)

Company Name	Property	Event Date	Transaction Amount	Payment Term	Counterparty	Relationship	Information on Previous Title Transfer If Counterparty Is A Related Party				Pricing Reference	Purpose of Acquisition	Other Terms
							Property Owner	Relationship	Transaction Date	Amount			
WEC	Buildings	2019.01.04-2019.12.23	\$ 4,872,879	Monthly settlement by the construction progress and acceptance	TASA Construction Corporation	None	N/A	N/A	N/A	N/A	Price comparison and price negotiation	Business purpose	None
	Buildings	2019.01.15-2019.11.21	553,992	Monthly settlement by the construction progress and acceptance	Continental Engineering Corporation	None	N/A	N/A	N/A	N/A	Price comparison and price negotiation	Business purpose	None

TABLE 4

## WINBOND ELECTRONICS CORPORATION AND SUBSIDIARIES

TOTAL PURCHASES FROM OR SALES TO RELATED PARTIES OF AT LEAST NT\$100 MILLION OR 20% OF THE PAID-IN CAPITAL  
FOR THE YEAR ENDED DECEMBER 31, 2019  
(In Thousands of New Taiwan Dollars and Foreign Currencies)

Company Name	Related Party	Relationship	Transaction Details			Abnormal Transaction	Notes/Accounts Payable or Receivable		Note
			Purchase/Sale	Amount	% of Total	Payment Terms	Unit Price	Payment Terms	
WEC	WEHK	Direct subsidiary with 100% ownership	Sales	\$ 8,417,086	22	Net 90 days from invoice date	N/A	N/A	22
	WECJ	Indirect subsidiary with 100% ownership	Sales	4,607,248	12	Net 90 days from invoice date	N/A	N/A	10
	WECN	Indirect subsidiary with 100% ownership	Sales	1,381,178	4	Net 90 days from invoice date	N/A	N/A	1
	WECA	Indirect subsidiary with 100% ownership	Sales	677,958	2	Net 90 days from invoice date	N/A	N/A	-
	NTC	Direct subsidiary with 62% ownership	Sales	132,125	-	Net 30 days from invoice date	N/A	N/A	1
WEHK	WEC	Parent company	Purchases	USD 272,650	100	Net 90 days from invoice date	N/A	N/A	(100)
WECJ	WEC	Parent company	Purchases	JPY 16,425,963	98	Net 90 days from invoice date	N/A	N/A	(95)
WECN	WEC	Parent company	Purchases	RMB 309,793	100	Net 90 days from invoice date	N/A	N/A	(100)
WECA	WEC	Parent company	Purchases	USD 22,292	100	Net 90 days from invoice date	N/A	N/A	-
NTC	WEC	Parent company	Purchases	131,874	4	Net 30 days from invoice date	N/A	N/A	(2)
	NTHK	Subsidiary	Sales	3,792,364	37	Net 90 days from invoice date	N/A	N/A	7
	NTCA	Subsidiary	Sales	101,972	1	Net 90 days from invoice date	N/A	N/A	2
	Nyquest Technology Co., Ltd.	Indirect 5% ownership through NTC's subsidiary	Sales	246,292	2	Net 45 days from invoice date	N/A	N/A	5
NTHK	NTC	Parent company	Purchases	USD 122,713	100	Net 90 days from invoice date	N/A	N/A	(100)
NTCA	NTC	Parent company	Purchases	USD 3,277	100	Net 90 days from invoice date	N/A	N/A	(100)

TABLE 5

## WINBOND ELECTRONICS CORPORATION

RECEIVABLES FROM RELATED PARTIES AMOUNTING TO AT LEAST NT\$100 MILLION OR 20% OF THE PAID-IN CAPITAL  
 DECEMBER 31, 2019  
 (In Thousands of New Taiwan Dollars)

Company Name	Related Party	Relationship	Ending Balance	Turnover Rate	Overdue		Amount Received in Subsequent Period	Allowance for Impairment Loss
					Amount	Action Taken		
WEC	WEHK WECJ	Direct subsidiary with 100% ownership Indirect subsidiary with 100% ownership	\$ 984,183 425,678	9.20 13.29	\$ - -	- -	\$ 410,422 -	\$ - -

TABLE 6

## WINBOND ELECTRONICS CORPORATION

NAMES, LOCATIONS, AND RELATED INFORMATION OF INVESTEE OVER WHICH THE COMPANY EXERCISES SIGNIFICANT INFLUENCE (EXCLUDING INFORMATION ON INVESTMENT IN MAINLAND CHINA)  
FOR THE YEAR ENDED DECEMBER 31, 2019  
(In Thousands of New Taiwan Dollars and Foreign Currencies)

Investor Company	Investee Company	Location	Main Businesses and Products	Original Investment Amount December 31, 2019	December 31, 2018	Number of Shares	As of December 31, 2019 %	Carrying Amount	Net Income (Loss) of the Investee	Share of Profit (Loss)	Note
Winbond Electronics Corp.	Nuvoton Technology Corporation	Taiwan	Research, development, design, manufacture and marketing of Logic IC, 6 inch wafer product, test, and OEM	\$ 2,994,644	\$ 721,548	177,000,000	62	\$ 4,528,887	\$ 558,459	\$ 349,373	
	Winbond Int'l Corporation	British Virgin Islands	Investment holding	2,992,157	2,992,157	95,410,000	100	1,625,896	49,421	49,421	
	Landmark Group Holdings Ltd.	British Virgin Islands	Investment holding	168,755	186,126	5,343,000	100	409,747	48,422	48,422	(Note 1)
	Mobile Magic Design Corporation	Taiwan	Design, development and marketing of Pseudo SRAM	-	50,000	-	-	-	7,848	106,528	
	Winbond Electronics (HK) Limited	Hong Kong	Sales of semiconductor and investment holding	278,158	278,158	71,150,000	100	421,958	106,518	967	
	Pine Capital Investment Limited	Hong Kong	Investment holding	2,967	2,967	780,000	100	7,281	967	967	
	Winbond Technology Ltd.	Israel	Design and service of semiconductor	21,242	21,242	100,000	100	70,113	16,739	16,739	
	Chin Xin Investment Co., Ltd.	Taiwan	Investment holding	1,874,825	1,874,825	182,840,999	38	4,548,224	639,834	241,042	
	Hwa Bao Botanic Conservation Corp.	Taiwan	Agriculture and forestry botanic conservation	750	750	75,000	15	715	(56)	(8)	
	Techdesign Corporation	Taiwan	Electronic commerce and product marketing	156,292	50,000	40,000,000	100	142,793	(1,530)	(1,285)	(Note 2)
	Callisto Holding Limited	Hong Kong	Electronic commerce and investment holding	155,367	156,292	4,460,000	100	147,019	(10,586)	(10,586)	(Note 3)
	Great Target Development Ltd.	Seychelles	Investment Holding	28,679	-	850,000	100	28,551	250	118	(Note 4)
	Winbond Electronics Germany GmbH	Germany	Sales and service of semiconductor	-	-	-	-	-	-	-	
Winbond Int'l Corporation	Winbond Electronics Corporation America	United States of America	Design, sales and after-sales service of semiconductor	1,683,207	1,683,207	3,067	100	1,432,562	49,528	49,528	
Landmark Group Holdings Ltd.	Winbond Electronics Corporation Japan	Yokohama, Japan	Research, development, sales and after-sales service of semiconductor	112,644	112,644	2,970	100	421,938	48,109	48,109	
Callisto Holding Limited	Peaceful River Corp.	British Virgin Islands	Investment holding	20,044	21,789	5,660,000	100	(13,195)	2,204	2,204	(Note 5)
	Callisto Technology Limited	Hong Kong	Electronic commerce and investment holding	30,895	-	1,000,000	100	30,130	165	165	(Note 6)
				USD 1,000				USD 1,005	5	5	
Great Target Development Ltd.	GLMTD Technology Private Limited	India	Sales and service of semiconductor	135,415	-	27,998,400	99.99	117,284	285	285	(Note 3)
Nuvoton Technology Corporation	Nuvoton Electronics Technology (H.K.) Limited	Hong Kong	Sales of semiconductor	427,092	427,092	107,400,000	100	459,960	21,929	21,929	
	Pigeon Creek Holding Co., Ltd.	British Virgin Islands	Investment holding	-	439,651	-	-	-	-	-	
	Marketplace Management Limited	British Virgin Islands	Investment holding	273,418	271,798	8,842,789	100	77,837	951	-	(Note 7)
	Nuvoton Investment Holding Ltd.	British Virgin Islands	Investment holding	590,953	574,296	17,960,000	100	277,739	38,840	38,840	
	Song Yong Investment Corporation	Taiwan	Investment holding	38,500	38,500	3,850,000	100	78,834	3,632	3,632	
	Nuvoton Technology India Private Limited	India	Design, sales and after-sales service of semiconductor	30,211	30,211	600,000	100	22,228	1,411	1,411	
	Nuvoton Technology Corp. America	United States of America	Design, sales and after-sales service of semiconductor	190,862	190,862	60,500	100	186,060	(1,287)	(1,287)	(Note 8)
Marketplace Management Limited	Goldbond LLC	United States of America	Investment holding	1,472,903	1,472,124	-	100	77,533	1,267	1,267	
Nuvoton Investment Holding Ltd.	Nuvoton Technology Israel Ltd.	Israel	Design and service of semiconductor	46,905	46,905	1,000	100	278,765	41,401	41,401	

Note 1: MMDC conducted a short-form merger with the Company on the effective date on October 1, 2019. The Company is the surviving company after the short-form merger.

Note 2: TDC filed for liquidation in June 2019 and the date of dissolution was set on June 10, 2019. The liquidation and legal procedures were not completed as of December 31, 2019.

Note 3: The Company purchased GTD in July 2019 and indirectly held GLMTD with 99.99% ownership.

Note 4: A capital was injected in WEG, which was incorporated in November 2019.

Note 5: PRC has a negative net carrying amount as of December 31, 2019, which is reclassified to other non-current liabilities.

Note 6: CTL was incorporated in October 2018, and Callisto has injected a capital in CTL in April 2019.

Note 7: PCH completed the liquidation and legal procedures in January 2019.

Note 8: Since PCH completed the liquidation, NTC directly owned 100% of interest in NTCA.

Note 9: Refer to Table 7 for information on investment in mainland China.

TABLE 7

## WINBOND ELECTRONICS CORPORATION

INFORMATION ON INVESTMENT IN MAINLAND CHINA  
FOR THE YEAR ENDED DECEMBER 31, 2019  
(In Thousands of New Taiwan Dollars and Foreign Dollars)

1. Information on any investee company in mainland China, main businesses and procedures, paid-in capital, method of investment, inward and outward remittance of funds, ownership percentage, investment income or loss, carrying amount of the investment at the end of the period and repatriations of investment income:

Investor Company	Investee Company	Main Businesses and Products	Paid-in Capital	Method of Investment	Remittance of Funds		Accumulated Outward Remittance for Investment from Taiwan as of December 31, 2019	Net Income of the Investee	% Ownership of Direct or Indirect Investment	Investment Gain (Note 1)	Carrying Amount as of December 31, 2019	Accumulated Repatriation of Investment Income as of December 31, 2019
WEC	Winbond Electronics (Suzhou) Limited	Design, development and marketing of VLSI integrated ICs	\$ 276,435 USD 9,000	Through investing in WEHK in the third area, which then invested in the investee in mainland China indirectly	\$ -	\$ -	\$ 276,435 USD 9,000	\$ 21,618	100	\$ 21,618	\$ 292,909	\$ 35,880
NTC	Nuvoton Electronics Technology (Shanghai) Limited	Provide project of sale in China and repair, test and consult of software	68,036 USD 2,000	Through investing in MML in the third area in British Virgin Islands, which then invested in the investee in mainland China indirectly	-	-	68,036 USD 2,000	1,623	62	999	48,554	-
	Winbond Electronics (Nanjing) Ltd.	Computer software service (except I.C. design)	16,429 USD 500	Through investing in MML in the third area in British Virgin Islands, which then invested in the investee in mainland China indirectly	-	-	16,429 USD 500	(1)	62	(1)	(1,053) (Note 2)	-
	Nuvoton Electronics Technology (Shenzhen) Limited	Computer software service (except I.C. design), wholesale business for computer, supplement and software	197,670 USD 6,000	Through investing in NTHK in the third area, which then invested in the investee in mainland China indirectly	-	-	197,670 USD 6,000	6,354	62	3,911	127,386	-

Note 1: Investment profit or loss for the year ended December 31, 2019 was recognized under the basis of the financial statements audited by the Company's auditor.

Note 2: WENJ has a negative net book value as of December 31, 2019, which is reclassified to other non-current liabilities.

2. Information on any investee company in mainland China, main businesses and procedures, paid-in capital, method of investment, inward and outward remittance of funds, ownership percentage, investment income or loss, carrying amount of the investment at the end of the period and repatriations of investment income:

Company	Accumulated Outward Remittance for Investment in Mainland China as of December 31, 2019	Investment Amounts Authorized by Investment Commission, MOEA	Upper Limit on the Amount of Investment Stipulated by Investment Commission, MOEA (Note 3)
WEC	\$ 276,435 (USD9,000)	\$ 276,435 (USD9,000)	\$ 36,612,373
NTC	282,135 (USD8,500)	282,135 (USD8,500)	4,435,219

Note 3: Upper limit on the amount of 60% of the investee's net book value.

3. Refer to Table 4 for significant transactions with the investee in mainland China directly and indirectly through investing in companies in the third area.
4. Handling endorsement, guarantee and collateral to the investee in mainland China directly and indirectly through investing in companies in the third area: None.
5. Financing of funds to investee in mainland China directly and indirectly through investing in companies in the third area: None.
6. Other transactions with significant influence on profit or loss for the period or financial performance: None.



**WINBOND ELECTRONICS CORPORATION AND SUBSIDIARIES**  
**INTERCOMPANY RELATIONSHIPS AND SIGNIFICANT INTERCOMPANY TRANSACTIONS**  
**FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018**  
**(In Thousands of New Taiwan Dollars)**

No.	Company Name	Related Party	Nature of Relationship	Transaction Details			Percentage of Consolidated Total Gross Sales or Total Assets (%)
				Financial Statement Account	Amount	Terms	
0	2019 WEC				\$ 8,417,086	-	17
		WEHK	Transactions between parent company and subsidiaries	Operating revenue	984,183	-	1
		WEHK	Transactions between parent company and subsidiaries	Accounts receivable due from related parties	677,958	-	1
		WECA	Transactions between parent company and subsidiaries	Operating revenue	366,646	-	-
		WECA	Transactions between parent company and subsidiaries	Research and development expenses	184,945	-	-
		WECA	Transactions between parent company and subsidiaries	Selling expenses	129,510	-	-
		WECA	Transactions between parent company and subsidiaries	Other payables	347,631	-	1
		WECJ	Transactions between parent company and subsidiaries	Research and development expenses	425,678	-	-
		WECJ	Transactions between parent company and subsidiaries	Accounts receivable due from related parties	55,675	-	-
		WECJ	Transactions between parent company and subsidiaries	Other payables	4,607,248	-	9
		WECJ	Transactions between parent company and subsidiaries	Operating revenue	4,312	-	-
		WECJ	Transactions between parent company and subsidiaries	Selling expenses	1,381,178	-	3
		WECN	Transactions between parent company and subsidiaries	Operating revenue	42,550	-	-
		NTC	Transactions between parent company and subsidiaries	Accounts receivable due from related parties	132,125	-	-
		NTC	Transactions between parent company and subsidiaries	Operating revenue	24,726	-	-
		NTC	Transactions between parent company and subsidiaries	Accounts receivable due from related parties	2,553	-	-
		NTC	Transactions between parent company and subsidiaries	Other receivables	545	-	-
		NTC	Transactions between parent company and subsidiaries	Other non-current assets	7,408	-	-
		NTC	Transactions between parent company and subsidiaries	Other income	434	-	-
		NTC	Transactions between parent company and subsidiaries	Other payables	204	-	-
		NTC	Transactions between parent company and subsidiaries	Interest expense	4,223	-	-
		NTC	Transactions between parent company and subsidiaries	General and administrative expenses	1,780	-	-
		NTC	Transactions between parent company and subsidiaries	Other non-current liabilities	11,168	-	-
		NTC	Transactions between parent company and subsidiaries	Right-of-use assets	11,254	-	-
		NTC	Transactions between parent company and subsidiaries	Lease liabilities	137,231	-	-
		MMDc	Transactions between parent company and subsidiaries	Research and development expenses	297	-	-
		MMDc	Transactions between parent company and subsidiaries	Other income	291,378	-	1
		WTL	Transactions between parent company and subsidiaries	Research and development expenses	54,516	-	-
		WTL	Transactions between parent company and subsidiaries	Other payables	37	-	-
		TDC	Transactions between parent company and subsidiaries	Selling expenses	176	-	-
		Callisto	Transactions between parent company and subsidiaries	Accounts receivable due from related parties	74	-	-
		Callisto	Transactions between parent company and subsidiaries	Selling expenses		-	-

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No.	Company Name	Related Party	Nature of Relationship	Transaction Details			Percentage of Consolidated Total Gross Sales or Total Assets (%)
				Financial Statement Account	Amount	Terms	
1	WEHK	WECN WECN NTHK NTHK NTHK NTHK NTHK	Transactions between subsidiaries Transactions between subsidiaries Transactions between subsidiaries Transactions between subsidiaries Transactions between subsidiaries Transactions between subsidiaries	Other payables	\$ 8,395	-	-
				Selling expenses	34,300	-	-
				Other payables	320	-	-
				Right-of-use assets	523	-	-
				Lease liabilities	532	-	-
				General and administrative expenses	1,617	-	-
				Interest expense	49	-	-
				Other income	8,346	-	-
				Operating revenue	1	-	-
				Other income	19	-	-
3	TDC	Callisto Callisto	Transactions between subsidiaries Transactions between subsidiaries	General and administrative expenses	10	-	-
				Operating revenue	15	-	-
4	Callisto	NTC NTC	Transactions between subsidiaries Transactions between subsidiaries	Other current liabilities	39	-	-
				Operating revenue	90,302	-	-
5	NTC	WECJ WECJ NTHK NTHK NTCA NTCA NTCA NTCA NTIL NTIL NTIL NTSZ NTSZ NTIPL NTIPL	Transactions between subsidiaries Transactions between subsidiaries Transactions between parent company and subsidiaries Transactions between parent company and subsidiaries Transactions between parent company and subsidiaries Transactions between parent company and subsidiaries Transactions between parent company and subsidiaries Transactions between parent company and subsidiaries Transactions between parent company and subsidiaries Transactions between parent company and subsidiaries Transactions between parent company and subsidiaries Transactions between parent company and subsidiaries Transactions between parent company and subsidiaries Transactions between parent company and subsidiaries Transactions between parent company and subsidiaries	Accounts receivable due from related parties	21,490	-	-
				Operating revenue	3,792,364	-	1
				Accounts receivable due from related parties	56,121	-	-
				Operating revenue	101,972	-	-
				Research and development expenses	275,223	-	-
				General and administrative expenses	38,049	-	-
				Accounts receivable due from related parties	17,640	-	-
				Other payables	4,406	-	-
				Research and development expenses	742,819	-	1
				General and administrative expenses	55,613	-	-
				Other payables	154,348	-	-
				Operating revenue	24,495	-	-
				Accounts receivable due from related parties	3,531	-	-
				Selling expenses	5,078	-	-
				Other current liabilities	731	-	-
				Selling expenses	91,494	-	-
				Other current assets	1,019	-	-
				Selling expenses	61,975	-	-
				Other payables	4,467	-	-
6	NTHK	NTSZ NTSZ NTSH NTSH	Transactions between parent company and subsidiaries Transactions between parent company and subsidiaries Transactions between subsidiaries Transactions between subsidiaries	Selling expenses	91,494	-	-
				Other current assets	1,019	-	-
				Selling expenses	61,975	-	-
				Other payables	4,467	-	-

(Continued)

No.	Company Name	Related Party	Nature of Relationship	Transaction Details			Percentage of Consolidated Total Gross Sales or Total Assets (%)
				Financial Statement Account	Amount	Terms	
0	2018 WEC	WEHK WEHK WECA WECA WECA WECA WECJ WECJ WECJ WECJ WECN WECN NTC NTC NTC NTC NTC NTC MMDC MMDC MMDC WTL WTL TDC TDC PCI Callisto	Transactions between parent company and subsidiaries Transactions between parent company and subsidiaries Transactions between parent company and subsidiaries Transactions between parent company and subsidiaries Transactions between parent company and subsidiaries Transactions between parent company and subsidiaries Transactions between parent company and subsidiaries Transactions between parent company and subsidiaries Transactions between parent company and subsidiaries Transactions between parent company and subsidiaries Transactions between parent company and subsidiaries Transactions between parent company and subsidiaries Transactions between parent company and subsidiaries Transactions between parent company and subsidiaries Transactions between parent company and subsidiaries Transactions between parent company and subsidiaries Transactions between parent company and subsidiaries Transactions between parent company and subsidiaries Transactions between parent company and subsidiaries Transactions between parent company and subsidiaries	Operating revenue	\$ 7,485,855	-	15
				Accounts receivable due from related parties	846,501	-	1
				Operating revenue	1,072,653	-	2
				Research and development expenses	367,089	-	1
				Selling expenses	182,790	-	-
				Accounts receivable due from related parties	19,389	-	-
				Other payables	125,609	-	-
				Research and development expenses	320,486	-	1
				Accounts receivable due from related parties	267,477	-	-
				Other payables	58,758	-	-
				Operating revenue	4,864,471	-	10
				Selling expenses	4,300	-	-
				Operating revenue	1,304,397	-	3
				Accounts receivable due from related parties	63,232	-	-
				Operating revenue	103,684	-	-
				Accounts receivable due from related parties	15,844	-	-
				Other receivables	3,071	-	-
				Other non-current assets	545	-	-
				Other income	7,817	-	-
				Other payables	347	-	-
1	WEHK	WECN WECN NTHK	Transactions between subsidiaries Transactions between subsidiaries Transactions between subsidiaries	Other payables	9,273	-	-
				Selling expenses	39,626	-	-
				Other payables	336	-	-
				Other receivables	12	-	-
				Other income	8,141	-	-
2	WECA	WTL NTCA NTCA	Transactions between subsidiaries Transactions between subsidiaries	Other receivables	216	-	-
				Other income	12	-	-
3	TDC	NTC NTC Callisto Callisto	Transactions between subsidiaries Transactions between subsidiaries Transactions between subsidiaries Transactions between subsidiaries	Other payables	7	-	-
				Other income	2	-	-
				Other income	2,464	-	-
				Other receivables	2,465	-	-
				Other receivables	2,465	-	-

(Continued)

No.	Company Name	Related Party	Nature of Relationship	Transaction Details			Percentage of Consolidated Total Gross Sales or Total Assets (%)
				Financial Statement Account	Amount	Terms	
4	NTC	NTHK	Transactions between parent company and subsidiaries	Operating revenue	\$ 3,790,977	-	7
		NTHK	Transactions between parent company and subsidiaries	Accounts receivable due from related parties	233,440	-	-
		NTCA	Transactions between parent company and subsidiaries	Operating revenue	106,538	-	-
		NTCA	Transactions between parent company and subsidiaries	Research and development expenses	257,911	-	1
		NTCA	Transactions between parent company and subsidiaries	General and administrative expenses	34,202	-	-
		NTCA	Transactions between parent company and subsidiaries	Accounts receivable due from related parties	33,522	-	-
		NTCA	Transactions between parent company and subsidiaries	Other payables	850	-	-
		WECJ	Transactions between subsidiaries	Operating revenue	85,611	-	-
		WECJ	Transactions between subsidiaries	Accounts receivable due from related parties	18,008	-	-
		NTIL	Transactions between parent company and subsidiaries	Research and development expenses	604,928	-	1
		NTIL	Transactions between parent company and subsidiaries	General and administrative expenses	49,582	-	-
		NTIL	Transactions between parent company and subsidiaries	Other payables	100,770	-	-
		NTSZ	Transactions between parent company and subsidiaries	Operating revenue	15,631	-	-
		NTSZ	Transactions between parent company and subsidiaries	Accounts receivable due from related parties	2,760	-	-
5	NTHK	NTIPL	Transactions between parent company and subsidiaries	Selling expenses	2,092	-	-
		NTIPL	Transactions between parent company and subsidiaries	Other payables	703	-	-
		NTSZ	Transactions between parent company and subsidiaries	Selling expenses	94,460	-	-
		NTSZ	Transactions between parent company and subsidiaries	Other payables	2,764	-	-
		NTSH	Transactions between subsidiaries	Selling expenses	65,787	-	-
		NTSH	Transactions between subsidiaries	Other current assets	4,884	-	-

Note: The sales prices and payment terms to related parties were not significantly different from those of sales to third parties. For other related party transactions, price and terms were determined in accordance with mutual agreements.

(Concluded)

## **Winbond Electronics Corporation**

**Financial Statements for the  
Years Ended December 31, 2019 and 2018 and  
Independent Auditors' Report**

## INDEPENDENT AUDITORS' REPORT

The Board of Directors and Shareholders  
Winbond Electronics Corporation

### Opinion

We have audited the accompanying financial statements of Winbond Electronics Corporation (the "Company"), which comprise the balance sheets as of December 31, 2019 and 2018, 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, 2019 and 2018, 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 audit 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, 2019. 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.

#### Occurrence of Sales Revenues

There is a significant risk on revenue recognition, and customers' line of credit and delivery of products are highly correlated to recognition of sales revenue. We therefore considered that the occurrence of sales revenue from the twenty largest customers with changes in credit limits and temporary increase in credit limits in 2019 as a key audit matter for the year ended December 31, 2019. Refer to Note 4 to the consolidated financial statements for the Company's revenue recognition policies.

Our audit procedures in response to the validity of sales revenue included understanding the design and the implementation of internal control of sales revenue and selecting samples of revenue items to verify that revenue transactions have indeed occurred.

## **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 audit committees, 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.

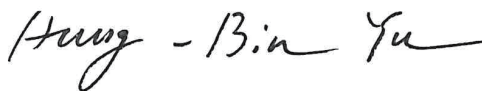
6. Obtain sufficient and appropriate audit evidence regarding the financial information of the entities or business activities within the Company to express an opinion on the financial statements. We are responsible for the direction, supervision, and performance of the audit. We remain solely responsible 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, 2019 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 Wen-Yea Shyu and Hung-Bin Yu.



Deloitte & Touche  
Taipei, Taiwan  
Republic of China

February 7, 2020

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.*



# WINBOND ELECTRONICS CORPORATION

## BALANCE SHEETS

DECEMBER 31, 2019 AND 2018

(In Thousands of New Taiwan Dollars)

ASSETS	2019		2018	
	Amount	%	Amount	%
<b>CURRENT ASSETS</b>				
Cash and cash equivalents (Notes 4 and 6)	\$ 5,424,966	6	\$ 9,384,525	10
Current financial assets at fair value through profit or loss (Notes 4 and 7)	69,425	-	7,526	-
Current financial assets at fair value through other comprehensive income (Notes 4 and 8)	7,173,101	7	6,174,768	7
Accounts receivable, net (Notes 4 and 9)	2,940,289	3	3,918,246	4
Accounts receivable due from related parties, net (Note 26)	1,477,313	2	1,213,213	1
Other receivables	221,601	-	469,494	1
Inventories (Notes 4 and 10)	8,750,071	9	9,330,646	10
Other current assets	1,413,779	1	689,621	1
Total current assets	27,470,545	28	31,188,039	34
<b>NON-CURRENT ASSETS</b>				
Non-current financial assets at fair value through other comprehensive income (Notes 4 and 8)	17,476	-	23,657	-
Investments accounted for using equity method (Notes 4 and 11)	11,931,184	12	8,413,315	9
Property, plant and equipment (Notes 4 and 12)	55,691,405	57	51,577,630	56
Right-of-use assets (Notes 4 and 13)	1,716,292	2	-	-
Investment properties (Notes 4 and 14)	295,251	-	-	-
Intangible assets (Notes 4 and 15)	123,949	-	104,925	-
Deferred income tax assets (Notes 4 and 21)	652,000	1	667,000	1
Other non-current assets (Note 6)	350,829	-	199,263	-
Total non-current assets	70,778,386	72	60,985,790	66
<b>TOTAL</b>	<b>\$ 98,248,931</b>	<b>100</b>	<b>\$ 92,173,829</b>	<b>100</b>
<b>LIABILITIES AND EQUITY</b>				
<b>CURRENT LIABILITIES</b>				
Short-term borrowings (Note 16)	\$ 1,000,000	1	\$ -	-
Notes payable	181,352	-	207,394	-
Accounts payable	3,488,513	4	3,233,658	4
Accounts payable to related parties (Note 26)	911,529	1	629,681	1
Payables on machinery and equipment	2,919,647	3	2,790,736	3
Other payables	2,410,968	3	3,083,269	3
Current tax liabilities (Note 21)	86,193	-	73,504	-
Lease liabilities - current (Notes 4 and 13)	74,527	-	-	-
Long-term borrowings - current portion (Note 16)	4,123,520	4	4,563,520	5
Other current liabilities	71,350	-	56,674	-
Total current liabilities	15,267,599	16	14,638,436	16
<b>NON-CURRENT LIABILITIES</b>				
Bonds payable (Notes 4 and 17)	9,931,746	10	9,919,779	11
Long-term borrowings (Note 16)	9,230,473	9	4,179,273	4
Lease liabilities - non-current (Notes 4 and 13)	1,660,704	2	-	-
Net defined benefit liabilities, non-current (Notes 4 and 18)	952,775	1	758,432	1
Other non-current liabilities	185,012	-	233,538	-
Total non-current liabilities	21,960,710	22	15,091,022	16
<b>Total liabilities</b>	<b>37,228,309</b>	<b>38</b>	<b>29,729,458</b>	<b>32</b>
<b>EQUITY (Note 19)</b>				
Share capital	39,800,002	40	39,800,002	43
Capital surplus	7,536,396	8	7,540,440	8
Retained earnings				
Legal reserve	1,798,091	2	1,053,441	1
Unappropriated earnings	6,995,451	7	10,567,845	12
Exchange differences on translation of foreign financial statements	(119,246)	-	(50,780)	-
Unrealized gains on financial assets measured at fair value through other comprehensive income	5,009,928	5	3,533,423	4
Total equity	61,020,622	62	62,444,371	68
<b>TOTAL</b>	<b>\$ 98,248,931</b>	<b>100</b>	<b>\$ 92,173,829</b>	<b>100</b>

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

# WINBOND ELECTRONICS CORPORATION

## STATEMENTS OF COMPREHENSIVE INCOME

FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018

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

	2019		2018	
	Amount	%	Amount	%
OPERATING REVENUE	\$ 37,884,848	100	\$ 40,733,527	100
OPERATING COSTS (Note 10)	<u>29,645,436</u>	<u>78</u>	<u>25,952,289</u>	<u>64</u>
GROSS PROFIT	<u>8,239,412</u>	<u>22</u>	<u>14,781,238</u>	<u>36</u>
OPERATING EXPENSES				
Selling expenses	930,591	2	1,034,591	3
General and administrative expenses	1,407,488	4	1,400,498	3
Research and development expenses	5,539,492	15	5,399,222	13
Expected credit (gain) loss (Note 9)	<u>(18,000)</u>	<u>-</u>	<u>3,000</u>	<u>-</u>
Total operating expenses	<u>7,859,571</u>	<u>21</u>	<u>7,837,311</u>	<u>19</u>
INCOME FROM OPERATIONS	<u>379,841</u>	<u>1</u>	<u>6,943,927</u>	<u>17</u>
NON-OPERATING INCOME AND EXPENSES				
Interest income	56,775	-	65,662	-
Dividend income	461,274	1	342,184	1
Other income	42,671	-	38,459	-
Gains (losses) on financial instruments at fair value through profit or loss	64,269	-	(298,216)	(1)
Share of profit of subsidiaries and associates accounted for using equity method	808,579	2	830,792	2
Interest expense	(204,095)	(1)	(182,299)	(1)
Other expenses	(117,052)	-	(62,909)	-
Losses on disposal of property, plant and equipment	(903)	-	(411)	-
Foreign exchange (losses) gains	(131,507)	-	272,717	1
Other impairment loss	<u>-</u>	<u>-</u>	<u>(12,890)</u>	<u>-</u>
Total non-operating income and expenses	<u>980,011</u>	<u>2</u>	<u>993,089</u>	<u>2</u>
PROFIT BEFORE INCOME TAX	1,359,852	3	7,937,016	19
INCOME TAX EXPENSE (Notes 4 and 21)	<u>103,465</u>	<u>-</u>	<u>490,520</u>	<u>1</u>
NET PROFIT	<u>1,256,387</u>	<u>3</u>	<u>7,446,496</u>	<u>18</u>

(Continued)

# WINBOND ELECTRONICS CORPORATION

## STATEMENTS OF COMPREHENSIVE INCOME

FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018

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

	2019		2018	
	Amount	%	Amount	%
OTHER COMPREHENSIVE INCOME (LOSS)				
Components of other comprehensive income (loss) that will not be reclassified to profit or loss:				
(Gains) losses on remeasurement of defined benefit plans (Note 18)	\$ (74,024)	-	\$ (85,080)	-
Unrealized gains (losses) from investments in equity instruments measured at fair value through other comprehensive loss	700,754	2	(301,203)	(1)
Share of other comprehensive income (loss) of subsidiaries and associates accounted for using equity method	745,644	2	(1,319,596)	(3)
Components of other comprehensive income (loss) that will be reclassified to profit or loss:				
Exchange differences on translation of foreign financial statements	(10,985)	-	(1,486)	-
Share of other comprehensive (loss) income of subsidiaries and associates accounted for using equity method	<u>(57,481)</u>	<u>-</u>	<u>71,694</u>	<u>-</u>
Other comprehensive income (loss)	<u>1,303,908</u>	<u>4</u>	<u>(1,635,671)</u>	<u>(4)</u>
TOTAL COMPREHENSIVE INCOME	<u>\$ 2,560,295</u>	<u>7</u>	<u>\$ 5,810,825</u>	<u>14</u>
EARNINGS PER SHARE (Note 22)				
Basic	<u>\$ 0.32</u>		<u>\$ 1.87</u>	
Diluted	<u>\$ 0.32</u>		<u>\$ 1.87</u>	

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

(Concluded)

# WINBOND ELECTRONICS CORPORATION

STATEMENTS OF CHANGES IN EQUITY  
FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018  
(In Thousands of New Taiwan Dollars)

	Share Capital	Capital Surplus	Legal Reserve	Retained Earnings		Unappropriated Earnings	Exchange Differences on Translation of Foreign Financial Statements	Other Equity		
				Special Reserve	Special Reserve			Unrealized Gains (Losses) on Financial Assets Measured at Fair Value Through Other Comprehensive Income	Unrealized Gains (Losses) on Available-for-sale Financial Assets	Total Equity
BALANCE AT JANUARY 1, 2018	\$ 39,800,002	\$ 7,540,440	\$ 498,385	\$ 31,429	\$ 31,429	\$ 7,355,893	\$ (120,988)	\$ -	\$ 5,107,003	\$ 60,212,164
Effect of retrospective application and retrospective restatement	-	-	-	-	-	471,170	-	5,065,763	(5,107,003)	429,930
BALANCE AT JANUARY 1, 2018 RESTATED	39,800,002	7,540,440	498,385	31,429	31,429	7,827,063	(120,988)	5,065,763	-	60,642,094
Appropriation of 2017 earnings	-	-	555,056	-	-	(555,056)	-	-	-	-
Legal reserve appropriated	-	-	-	(31,429)	-	31,429	-	-	-	-
Reversal of special reserve	-	-	-	-	-	(3,980,000)	-	-	-	(3,980,000)
Cash dividends	-	-	-	-	-	-	-	-	-	-
Total appropriations	-	-	555,056	(31,429)	(31,429)	(4,503,627)	-	-	-	(3,980,000)
Net profit for the year ended December 31, 2018	-	-	-	-	-	7,446,496	-	-	-	7,446,496
Other comprehensive income (loss) for the year ended December 31, 2018	-	-	-	-	-	(115,861)	70,208	(1,590,018)	-	(1,635,671)
Total comprehensive income (loss) for the year ended December 31, 2018	-	-	-	-	-	7,330,635	70,208	(1,590,018)	-	5,810,825
Disposal of investments in equity instruments designated at fair value through other comprehensive income	-	-	-	-	-	(86,226)	-	57,678	-	(28,548)
BALANCE AT JANUARY 1, 2019	39,800,002	7,540,440	1,053,441	-	-	10,567,845	(50,780)	3,533,423	-	62,444,371
Appropriation of 2018 earnings	-	-	744,650	-	-	(744,650)	-	-	-	-
Legal reserve appropriated	-	-	-	-	-	(3,980,000)	-	-	-	(3,980,000)
Cash dividends	-	-	744,650	-	-	(4,724,650)	-	-	-	(3,980,000)
Total appropriations	-	-	-	-	-	1,256,387	-	-	-	1,256,387
Net profit for the year ended December 31, 2019	-	-	-	-	-	(115,561)	(68,466)	1,487,935	-	1,303,908
Other comprehensive income (loss) for the year ended December 31, 2019	-	-	-	-	-	1,140,826	(68,466)	1,487,935	-	2,560,295
Total comprehensive income (loss) for the year ended December 31, 2019	-	-	-	-	-	-	-	-	-	-
Changes in ownership interest in subsidiaries	-	(4,044)	-	-	-	-	-	-	-	(4,044)
Disposal of investments in equity instruments designated at fair value through other comprehensive income	-	-	-	-	-	11,430	-	(11,430)	-	-
BALANCE AT DECEMBER 31, 2019	\$ 39,800,002	\$ 7,536,396	\$ 1,798,091	\$ -	\$ -	\$ 6,995,451	\$ (119,246)	\$ 5,009,928	\$ -	\$ 61,020,622

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

# WINBOND ELECTRONICS CORPORATION

## STATEMENTS OF CASH FLOWS FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018 (In Thousands of New Taiwan Dollars)

	2019	2018
CASH FLOWS FROM OPERATING ACTIVITIES		
Profit before income tax	\$ 1,359,852	\$ 7,937,016
Adjustments for:		
Depreciation expense	8,328,952	7,285,916
Amortization expense	30,120	24,420
Expected credit (gain) loss recognized on accounts receivable	(18,000)	3,000
(Reversal of) provision for declines in market value, obsolescence and scraps of inventories	1,087,821	69,522
Net (gains) losses on financial assets and liabilities at fair value through profit or loss	(61,898)	23,509
Interest expense	204,095	182,299
Interest income	(56,775)	(65,662)
Dividend income	(461,274)	(342,184)
Share of profit of subsidiaries and associates accounted for using equity method	(808,579)	(830,792)
Gains (losses) on disposal of property, plant and equipment	903	411
(Reversal of) impairment loss on non-financial assets	-	12,890
Unrealized profit (loss) on the transactions with subsidiaries	(14,010)	(15,664)
Other adjustments to reconcile (profit) loss	(669)	-
Changes in operating assets and liabilities		
(Increase) decrease in notes and accounts receivable	995,957	(91,067)
(Increase) decrease in accounts receivable due from related parties	(198,643)	540,388
(Increase) decrease in other receivables	(10,826)	55,396
(Increase) decrease in inventories	(507,246)	(2,902,906)
(Increase) decrease in other current assets	40,542	44,360
(Increase) decrease in other non-current assets	(122,838)	(26,480)
Increase (decrease) in notes payable	(26,042)	(26,293)
Increase (decrease) in accounts payable	257,472	(38,328)
Increase (decrease) in accounts payable to related parties	281,744	132,894
Increase (decrease) in other payables	(689,328)	455,655
Increase (decrease) in other current liabilities	14,421	(28,117)
Increase (decrease) in other non-current liabilities	17,296	20,848
Cash generated from (used in) operations	9,643,047	12,421,031
Interest received	62,000	60,695
Dividends received	832,677	694,614
Interest paid	(335,849)	(206,744)
Income taxes paid	(70,855)	(130,233)
Net cash flows from (used in) operating activities	10,131,020	12,839,363

(Continued)

# WINBOND ELECTRONICS CORPORATION

## STATEMENTS OF CASH FLOWS FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018 (In Thousands of New Taiwan Dollars)

	2019	2018
<b>CASH FLOWS FROM INVESTING ACTIVITIES</b>		
Proceeds from capital reduction of financial assets at fair value through other comprehensive income	\$ -	\$ 11,914
Acquisition of financial assets at fair value through other comprehensive income	(291,398)	(183,229)
Acquisition of investments accounted for using the equity method	(2,451,142)	(433,252)
Proceeds from capital reduction of investments accounted for using equity method	284,436	148,609
Acquisition of property, plant and equipment	(13,158,790)	(16,714,392)
Proceeds from disposal of property, plant and equipment	495	608
Acquisition of intangible assets	(29,423)	-
Net cash inflows from business combination	<u>26,375</u>	<u>-</u>
Net cash flows from (used in) investing activities	<u>(15,619,447)</u>	<u>(17,169,742)</u>
<b>CASH FLOWS FROM FINANCING ACTIVITIES</b>		
Increase (decrease) in short-term borrowings	1,000,000	(553,539)
Proceeds from issuing bonds	-	10,000,000
Proceeds from long-term borrowings	9,850,000	-
Repayments of long-term borrowings	(5,123,520)	(3,323,520)
Cash dividends paid	(3,980,000)	(3,980,000)
Repayments of lease liabilities	(82,612)	-
Other financing activities	<u>(135,000)</u>	<u>(86,171)</u>
Net cash flows from (used in) financing activities	<u>1,528,868</u>	<u>2,056,770</u>
<b>NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS</b>	<b>(3,959,559)</b>	<b>(2,273,609)</b>
<b>CASH AND CASH EQUIVALENTS AT THE BEGINNING OF THE YEAR</b>	<b><u>9,384,525</u></b>	<b><u>11,658,134</u></b>
<b>CASH AND CASH EQUIVALENTS AT THE END OF THE YEAR</b>	<b><u>\$ 5,424,966</u></b>	<b><u>\$ 9,384,525</u></b>

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

(Concluded)

# WINBOND ELECTRONICS CORPORATION

## NOTES TO FINANCIAL STATEMENTS

### FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018

(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

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#### 1. GENERAL INFORMATION

Winbond Electronics Corporation (the “Company”) was incorporated in the Republic of China (ROC) on September 29, 1987 and is engaged in the design, development, manufacture and marketing of Very Large Scale Integration (VLSI) integrated circuits (ICs) used in a variety of microelectronic applications.

The Company’s shares have been listed on the Taiwan Stock Exchange Corporation since October 18, 1995. Walsin Lihwa Corporation is a major shareholder of the Company and held approximately 22% ownership interest in the Company as of December 31, 2019 and 2018.

These financial statements are presented in the Company’s functional currency, New Taiwan dollars.

#### 2. APPROVAL OF FINANCIAL STATEMENTS

The financial statements were approved by the board of directors on February 7, 2020.

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

- a. Initial application of the amendments to the Regulations Governing the Preparation of Financial Reports by Securities Issuers and 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 Financial Supervisory Commission (FSC)

Except for the following, whenever applied, the initial application of the amendments to the Regulations Governing the Preparation of Financial Reports by Securities Issuers and the IFRSs endorsed and issued into effect by the FSC would not have any material impact on the Company’s accounting policies:

##### 1) IFRS 16 “Leases”

IFRS 16 provides a comprehensive model for the identification of lease arrangements and their treatment in the financial statements of both the lessee and the lessor. It supersedes IAS 17 “Leases”, IFRIC 4 “Determining whether an Arrangement contains a Lease”, and a number of related interpretations. Refer to Note 4 for information relating to the relevant accounting policies.

##### Definition of a lease

The Company elects to apply the guidance of IFRS 16 in determining whether contracts are, or contain, a lease only to contracts entered into (or changed) on or after January 1, 2019. Contracts identified as containing a lease under IAS 17 and IFRIC 4 are not reassessed and are accounted for in accordance with the transitional provisions under IFRS 16.

### The Company as lessee

The Company recognizes lease liabilities for all leases on the balance sheets except for those whose payments under low-value asset and short-term leases are recognized as expenses on a straight-line basis. On the statements of comprehensive income, the Company presents the depreciation expense charged on right-of-use assets separately from the interest expense accrued on lease liabilities; interest is computed using the effective interest method. On the statements of cash flows, cash payments for the principal portion of lease liabilities are classified within financing activities; cash payments for the interest portion are classified within financing activities. Prior to the application of IFRS 16, payments under operating lease contracts were recognized as expenses on a straight-line basis. Cash flows for operating leases were classified within operating activities on the statements of cash flows.

The lessee's weighted average lessee's incremental borrowing rate applied to lease liabilities recognized on January 1, 2019 is 1.34%-2.47%. The difference between the lease liabilities recognized and operating lease commitments disclosed on December 31, 2018 is explained as follows:

The future minimum lease payments of non-cancellable operating lease commitments on December 31, 2018	\$ 2,364,484
Less: Recognition exemption for leases of low-value assets	<u>(122)</u>
Undiscounted amounts on January 1, 2019	<u>\$ 2,364,362</u>
Lease liabilities recognized on January 1, 2019	<u>\$ 1,836,887</u>

### The Company as lessor

Except for sublease transactions, the Company does not make any adjustments for leases in which it is a lessor, and it accounts for those leases with the application of IFRS 16 starting from January 1, 2019.

The Company subleased its leasehold to a third party. Such sublease was classified as an operating lease under IAS 17. The Company classified the sublease as a finance lease on the basis of the remaining contractual terms and conditions of the head lease and sublease on January 1, 2019.

The impact on assets, liabilities and equity as of January 1, 2019 from the initial application of IFRS 16 is set out as follows:

	<b>Carrying Amount as of December 31, 2018</b>	<b>Adjustments Arising from Initial Application</b>	<b>Adjusted Carrying Amount as of January 1, 2019</b>
Right-of-use assets	\$ -	\$ 1,836,887	<u>\$ 1,836,887</u>
Total effect on assets	<u>\$ -</u>	<u>\$ 1,836,887</u>	<u>\$ 1,836,887</u>
Lease liabilities - current	\$ -	\$ 80,076	\$ 80,076
Lease liabilities - non-current	<u>-</u>	<u>1,756,811</u>	<u>1,756,811</u>
Total effect on liabilities	<u>\$ -</u>	<u>\$ 1,836,887</u>	<u>\$ 1,836,887</u>



## 2) IFRIC 23 “Uncertainty over Income Tax Treatments”

IFRIC 23 clarifies that when there is uncertainty over income tax treatments, the Company should assume that the taxation authority has full knowledge of all related information when making related examinations. If the Company concludes that it is probable that the taxation authority will accept an uncertain tax treatment, the Company should determine the taxable profit, tax bases, unused tax losses, unused tax credits or tax rates consistently with the tax treatments used or planned to be used in its income tax filings. If it is not probable that the taxation authority will accept an uncertain tax treatment, the Company should make estimates using either the most likely amount or the expected value of the tax treatment, depending on which method the Company expects to better predict the resolution of the uncertainty. The Company has to reassess its judgments and estimates if facts and circumstances change.

- b. The IFRSs endorsed by the Financial Supervisory Commission (FSC) for application starting from 2020

<b>New IFRSs</b>	<b>Effective Date Announced by IASB</b>
Amendments to IFRS 3 “Definition of a Business”	January 1, 2020 (Note 1)
Amendments to IFRS 9, IAS 39 and IFRS 7 “Interest Rate Benchmark Reform”	January 1, 2020 (Note 2)
Amendments to IAS 1 and IAS 8 “Definition of Material”	January 1, 2020 (Note 3)

Note 1: The Company shall apply these amendments 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, 2020 and to asset acquisitions that occur on or after the beginning of that period.

Note 2: The Company shall apply these amendments retrospectively for annual reporting periods beginning on or after January 1, 2020.

Note 3: The Company shall apply these amendments prospectively for annual reporting periods beginning on or after January 1, 2020.

As of the date the financial statements were authorized for issue, the Company is continuously assessing the possible impact that the application of above 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

<b>New IFRSs</b>	<b>Effective Date Announced by IASB (Note)</b>
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, 2021

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

As of the date the financial statements were authorized for issue, the Company is continuously assessing the possible impact that the application of above 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 POLICIES**

##### **Statement of Compliance**

The financial statements have been prepared in accordance with the Regulations Governing the Preparation of Financial Reports by Securities Issuers.

##### **Basis of Preparation**

The financial statements have been prepared on the historical cost basis except for financial instruments and defined benefit liabilities which are measured at the present value of the defined benefit obligation less the fair value of plan assets that are measured at fair values. Historical cost is generally based on the fair value of the consideration given in exchange for assets.

The Company used equity method to account for its investment in subsidiaries and associates for the stand-alone financial statements. The amounts of the net profit, other comprehensive income and total equity in stand-alone financial statements are same with the amounts attributable to the owner of the Company in its consolidated financial statements since there is no difference in accounting treatment between stand-alone basis and consolidated basis.

##### **Classification of Current and Non-current Assets and Liabilities**

Current assets include cash and cash equivalents and those assets held primarily for trading purposes or to be realized, sold or consumed within twelve months after the reporting period, unless the asset is restricted from being exchanged or used to settle a liability for at least twelve months after the reporting period. Current liabilities are obligations incurred for trading purposes or to be settled within twelve months after the reporting period and liabilities that the Company does not have an unconditional right to defer settlement for at least twelve months after the reporting period. Except as otherwise mentioned, assets and liabilities that are not classified as current are classified as non-current.

##### **Foreign Currencies**

In preparing the financial statements, transactions in currencies other than the entity's functional currency 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 are recognized in profit or loss in the period they arise.

Exchange differences arising on the retranslation of non-monetary items measured at fair value are included in profit or loss for the period at the rates prevailing at the end of reporting 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 case, the exchange differences are also recognized directly in other comprehensive income.

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

For the purposes of presenting financial statements, the assets and liabilities of the Company's foreign operations (including subsidiaries and associates in other countries that use currencies which are different from the currency of the Company) are translated into New Taiwan dollars using exchange rate prevailing at the end of each reporting period. Income and expense items are translated at the average exchange rates for the period. The exchange differences arising are recognized in other comprehensive income and accumulated in balance of foreign currency translation of equity.

## Cash Equivalents

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

## Financial Instruments

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

Financial assets and financial liabilities are initially measured at fair value. 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 FVTPL 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 FVTPL are recognized immediately in profit or loss.

### a. Measurement category

All regular way purchases or sales of financial assets are recognized and derecognized on a trade date basis, except derivative financial assets which are recognized and derecognized on settlement date basis.

#### 1) Financial asset at FVTPL

Financial assets are classified as at FVTPL when such financial assets are mandatorily classified or designated as at FVTPL. Financial assets mandatorily classified as at FVTPL include investments in equity instruments which are not designated as at FVTOCI and debt instruments that do not meet the amortized cost criteria or the FVOCI criteria.

Financial assets at FVTPL are subsequently measured at fair value, with any gains or losses arising on remeasurement recognized in profit or loss. The net gain or loss recognized in profit or loss does not incorporate any dividend or interest earned on the financial asset. Fair value is determined in the manner described in Note 25.

#### 2) Financial assets at amortized cost

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

- a) The financial asset is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows; and
- b) The contractual terms of the financial asset 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 at amortized cost are measured at amortized cost, which equals to gross carrying amount determined by 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:

- a) 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 the financial asset; and

- b) Financial assets that are not credit-impaired on purchase or origination but have subsequently become credit-impaired, for which interest income is calculated by applying the effective interest rate to the amortized cost of such financial assets in subsequent reporting periods.

### 3) Investments in equity instruments at FVTOCI

On initial recognition, the Company may make an irrevocable election to designate investments in equity instruments as at FVOCI. Designation at FVOCI 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 FVOCI 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 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 at amortized cost (including trade receivable).

The Company always recognizes lifetime Expected Credit Loss (ECL) on accounts receivable. On all other financial instruments, the Company recognizes lifetime ECL when there has been a significant increase in credit risk since initial recognition. If, on the other hand, the credit risk on the 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 ECL.

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

The Company recognizes an impairment loss in profit or loss for all financial instruments with a corresponding adjustment to their carrying amount through a loss allowance account.

#### 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 asset to another party.

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 a debt instrument at FVTOCI, the difference between the asset's carrying amount and the sum of the consideration received and receivable and the cumulative gain or loss which had been recognized in other comprehensive income is recognized in profit or loss. However, 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.

d. Financial liabilities

Financial liabilities are classified as at fair value through profit or loss when the financial liability is either held for trading or it is measured at fair value through profit or loss. Financial liabilities at fair value through profit or loss are stated at fair value, with any gains or losses arising on remeasurement recognized in profit or loss.

Corporate bonds issued by the Company are initially recognized at fair value, net of transaction costs incurred. Corporate bonds are subsequently stated at amortized cost; any difference between the proceeds and the redemption value is accounted for as the premium or discount on bonds payable and presented as an addition to or deduction from bonds payable, which is amortized in profit or loss over the period of bond circulation using the effective interest method.

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

e. Derecognition of financial liabilities

The difference between the carrying amount of the financial liability derecognized and the consideration paid and payable is recognized in profit or loss.

f. Derivative financial instruments

The Company enters into a variety of derivative financial instruments to manage its exposure to foreign exchange rate risks, including foreign exchange forward contracts and cross currency swaps.

Derivatives are initially recognized at fair value at the date the derivative contracts are entered into and are subsequently remeasured to their fair value at the end of each reporting period. The resulting gain or loss is recognized in profit or loss immediately unless the derivative is designated and effective as a hedging instrument, in which event the timing of the recognition in profit or loss depends on the nature of the hedge relationship. When the fair value of derivative financial instruments is positive, the derivative is recognized as a financial asset; when the fair value of derivative financial instruments is negative, the derivative is recognized as a financial liability.

g. Information about fair value of financial instruments

The Company determined the fair value of financial assets and liabilities as follows:

- 1) The fair values of financial assets and liabilities which have standard terms and conditions and traded in active market are determined by reference to quoted market price. If there is no quoted market price in active market, valuation techniques are applied.
- 2) The fair value of foreign-currency derivative financial instrument could be determined by reference to the price and discount rate of currency swap quoted by financial institutions. Foreign exchange forward contracts use individual maturity rate to calculate the fair value of each contract.
- 3) The fair values of other financial assets and financial liabilities are determined by discounted cash flow analysis in accordance with generally accepted pricing models.

## **Inventories**

Inventories consist of raw materials, supplies, finished goods 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 weighted-average cost on the balance sheet date.

## **Investments Accounted for Using Equity Method**

Investment accounted for using equity method include investments in subsidiaries and associates.

### **a. Investment 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 interests in subsidiaries that do not result in the Company's loss of control over the subsidiaries are accounted for as equity transactions. Any difference between the carrying amount of the investment and the fair value of the consideration paid or received is recognized directly in equity.

When the Company's share of losses of a subsidiary equals or exceeds its interest in that subsidiary (which includes any carrying amount of the investment in subsidiary 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.

Profits and losses from downstream transactions with a subsidiary are eliminated in full. Profits and losses from upstream transactions with a subsidiary and sidestream transactions between subsidiaries are recognized in the Company's financial statements only to the extent of interests in the subsidiary that are not related to the Company.

### **b. Investment in associates**

An associate is an entity over which the Company has significant influence and that is neither a subsidiary nor an interest in a joint venture. Significant influence is the power to participate in the financial and operating policy decisions of the investee without having control or joint control over those policies.

The Company uses equity method to recognize investments in associates. Under the equity method, an investment in an associate is initially recognized at cost and adjusted thereafter to recognize the Company's share of the profit or loss and other comprehensive income of the associate. The Company also recognizes the changes in the Company's share of equity of associates.

Any excess of the cost of acquisition over the Company's share of the net fair value of the identifiable assets and liabilities of an associate recognized 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 over the cost of acquisition, after reassessment, is recognized immediately in profit or loss.

When the Company subscribes for additional new shares of the associate, at a percentage different from its existing ownership percentage, the resulting carrying amount of the investment differs from the amount of the Company's proportionate interest in the associate. The Company records such a difference as an adjustment to investments with the corresponding amount charged or credited to capital surplus. If the Company's ownership interest is reduced due to the additional subscription of the new shares of associate, the proportionate amount of the gains or losses previously recognized in other comprehensive income in relation to that associate is reclassified as profit or loss on the same basis as would be required if the investee had directly disposed of the related assets or liabilities. When the



adjustment should be debited to capital surplus, but the capital surplus recognized from investments accounted for by the equity method is insufficient, the shortage is debited to retained earnings.

When the Company's share of losses of an associate equals or exceeds its interest in that associate (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 associate), the Company discontinues recognizing its share of further losses. Additional losses and liabilities are recognized only to the extent that the Company has incurred legal obligations, or constructive obligations, or made payments on behalf of that associate.

The entire carrying amount of the investment (including goodwill) is tested for impairment as a single asset by comparing its recoverable amount with its carrying amount. Any impairment loss recognized forms part of the carrying amount of the investment. Any reversal of that impairment loss is recognized to the extent that the recoverable amount of the investment subsequently increases.

The Company discontinues the use of the equity method from the date on which its investment ceases to be an associate. Any retained investment is measured at fair value at that date and the fair value is regarded as its fair value on initial recognition as a financial asset. The difference between the previous carrying amount of the associate attributable to the retained interest and its fair value is included in the determination of the gain or loss on disposal of the associate. The Company accounts for all amounts previously recognized in other comprehensive income in relation to that associate on the same basis as would be required if that associate had directly disposed of the related assets or liabilities.

When the Company transacts with its associate, profits and losses resulting from the transactions with the associate are recognized in the Company's financial statements only to the extent of interests in the associate that are not related to the Company.

### **Property, Plant and Equipment**

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

Properties, plant and equipment in the course of construction are carried at cost, less any recognized impairment loss. Cost includes professional fees and borrowing costs eligible for capitalization. Such assets are depreciated and classified to the appropriate categories of property, plant and equipment when completed and ready for intended use.

Depreciation is recognized using the straight-line method. The estimated useful lives, residual values and depreciation method are reviewed at the end of each reporting period, with the effect of any changes in estimate accounted for on a prospective basis.

Any gain or loss arising on the disposal or retirement of an item of property, plant and equipment is determined as the difference between the sales proceeds and the carrying amount of the asset and is recognized in profit or loss.

The Company's property, plant and equipment with residual values were depreciated straight-line basis over the estimated useful life of the asset:

Buildings	8-50 years
Machinery and equipment	3-7 years
Other equipment	5 years

## **Investment Properties**

Investment properties are properties held to earn rentals and/or for capital appreciation. Investment properties are measured initially at cost. Subsequent to initial recognition, investment properties are measured at cost less accumulated depreciation and accumulated impairment loss, and depreciated over 20 to 50 years useful lives after considered residual values, using the straight-line method. Any gain or loss arising on derecognition of the property is calculated as the difference between the net disposal proceeds and the carrying amount of the asset and is included in profit or loss in the period in which the property is derecognized.

## **Intangible Assets**

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 over their estimated useful lives. 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.

## **Impairment of Tangible and Intangible Assets (Except Goodwill)**

At the end of each reporting period, the Company reviews the carrying amounts of its tangible and intangible assets 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.

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 subsequently is reversed, the carrying amount of the asset, 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 for the asset, cash-generating unit in prior years. A reversal of an impairment loss is recognized immediately in profit or loss.

## **Non-current assets held for sale**

Non-current assets are classified as held for sale if their carrying amounts will be recovered principally through a sale transaction rather than through continuing use. This condition is regarded as met only when the sale is highly probable and the non-current asset is available for immediate sale in its present condition. To meet the criteria for the sale being highly probable, the appropriate level of management must be committed to the sale, and the sale should be expected to qualify for recognition as a completed sale within 1 year from the date of classification.

Non-current assets classified as held for sale are measured at the lower of their previous carrying amount and fair value less costs to sell. Recognition of depreciation of those assets would cease.

## **Provisions**

Provisions are recognized when the Company has a present obligation as a result of a past event and at the best estimate 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. For potential product risk, the Company accrues reserve for products guarantee based on commitment to specific customers.



## **Revenue Recognition**

The Company identifies the performance obligations in the contract with customers, allocates the transaction price to the performance obligations in the contracts and recognizes revenue when the Company satisfies a performance obligation.

Revenue from the sale of goods is mainly recognized when a customer obtains control of promised goods, at which time the goods are delivered to the customer's specific location and performance obligation is satisfied.

Revenue from sale of goods is measured at the fair value of the consideration received or receivable. Revenue is reduced for estimated customer returns, rebates and other similar allowances. Provision for estimated sales returns and other allowances is generally made and adjusted based on historical experience and on the consideration of varying contractual terms affecting the recognition of a provision.

## **Leasing**

### 2019

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

#### **a. 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 a right-of-use asset, 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.

Under operating lease, lease payments (less any lease incentives payable) are recognized as income on a straight-line basis over the terms of the relevant lease. Initial direct costs incurred in obtaining operating lease are added to the carrying amount of the underlying assets and recognized as expenses on a straight-line basis over the lease terms.

#### **b. 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 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 Company 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. Lease liabilities are presented on a separate line in the balance sheets.

Variable lease payments that do not depend on an index or a rate are recognized as expenses in the periods in which they are incurred.

## 2018

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

Under finance lease, the Company as lessor recognizes amounts due from lessees as receivables at the amount of the Company's net investment in the lease. Finance lease income is allocated to accounting periods so as to reflect a constant periodic rate of return on the Company's net investment outstanding in respect of the leases.

Under operating lease, the Company as lessor recognizes rental income from operating lease on a straight-line basis over the term of the relevant lease. Contingent rents receivable arising under operating leases are recognized as income in the period in which they are earned. As lessee, operating lease payments are recognized as an expense on a straight-line basis over the lease term. Contingent rents payable arising under operating leases are recognized as an expense in the period in which they are incurred.

## **Borrowing Costs**

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

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

## **Employee Benefits**

### a. 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 rendered by employees.

### b. Retirement benefits

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

Defined benefit costs (including service cost, net interest and remeasurement) under the defined benefit retirement benefit plans are determined using the projected unit credit method. Service cost and net interest on the net defined benefit liability are recognized as employee benefits expense in the period they occur. Remeasurement, comprising actuarial gains and losses 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 retained 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.

Pension cost for an interim period is calculated on a year-to-date basis by using the actuarially determined pension cost rate at the end of the period adjusted for significant market fluctuations since that time and for significant plan amendments, settlements, or other significant one-off events.

## **Taxation**

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

### **a. Current tax**

According to the Income Tax Law in the ROC, an additional tax of unappropriated earnings is recognized for as income tax 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.

### **b. Deferred tax**

Deferred tax is recognized on temporary differences between the carrying amounts of assets and liabilities in the financial statements and the corresponding tax bases used in the computation of taxable profit and it is remeasured at the end of each reporting period and recognized to the extent that it has become probable that there will be future taxable profit.

Deferred tax liabilities are recognized for taxable temporary differences associated with investments in subsidiaries and associates, 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 and liabilities are measured at the tax rates that are expected to apply in the period in which the liabilities are settled or the assets are 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.

## **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, estimations 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 periods. The Company's critical accounting judgments and key sources of estimation uncertainty is below:

a. Valuation of inventory

Net realizable value of inventory is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale. The estimation of net realizable value is based on current market conditions and the historical experience from selling products of a similar nature. Changes in market conditions may have a material impact on the estimation of net realizable value.

b. Impairment of financial assets

The provision for impairment of accounts receivable is based on assumptions about risk of default and expected loss rates. The Company uses judgement in making these assumptions and in selecting the inputs to the impairment calculation, based on the Company's past history, existing market conditions as well as forward looking estimates at the end of each reporting period. For details of the key assumptions and inputs used, see Note 9. Where the actual future cash inflows are less than expected, a material impairment loss may arise.

## 6. CASH AND CASH EQUIVALENTS

	<b>December 31</b>	
	<b>2019</b>	<b>2018</b>
Cash and deposits in banks	\$ 3,924,966	\$ 8,284,525
Repurchase agreements collateralized by bonds	<u>1,500,000</u>	<u>1,100,000</u>
	<u>\$ 5,424,966</u>	<u>\$ 9,384,525</u>

The Company has time deposits pledged to secure land and building leases at a science park, customs tariff obligations and export bill deposits which are reclassified as other non-current assets. Time deposits pledged as security at the end of the reporting period were as follows:

	<b>December 31</b>	
	<b>2019</b>	<b>2018</b>
Time deposits	<u>\$ 126,395</u>	<u>\$ 123,776</u>

## 7. FINANCIAL INSTRUMENTS AT FAIR VALUE THROUGH PROFIT OR LOSS

	<b>December 31</b>	
	<b>2019</b>	<b>2018</b>
<u>Financial assets at FVTPL - current</u>		
Derivative financial assets (not under hedge accounting)		
Foreign exchange swap contracts	\$ 11,461	\$ 196
Forward exchange contracts	<u>57,964</u>	<u>7,330</u>
	<u>\$ 69,425</u>	<u>\$ 7,526</u>

At the end of the reporting period, outstanding forward exchange contracts not under hedge accounting were as follows:

	<b>Currencies</b>	<b>Maturity Date</b>	<b>Contract Amount (In Thousands)</b>
<u>December 31, 2019</u>			
Sell forward exchange contracts	USD to NTD	2020.01.03-2020.02.27	USD142,000/NTD4,302,439
Sell forward exchange contracts	RMB to NTD	2020.01.10-2020.02.21	RMB75,000/NTD322,743
Foreign exchange swap contracts	USD to NTD	2020.01.09	USD23,280/NTD708,638
Foreign exchange swap contracts	RMB to NTD	2020.02.21	RMB5,100/NTD21,879

December 31, 2018

Sell forward exchange contracts	USD to NTD	2019.01.04-2019.03.08	USD110,000/NTD3,380,571
Buy forward exchange contracts	NTD to USD	2019.01.11-2019.01.25	NTD613,385/USD20,000
Foreign exchange swap contracts	USD to NTD	2019.02.15	USD5,150/NTD157,858

The Company entered into derivative financial instruments contracts to manage exposures to exchange rate fluctuations of foreign-currency-denominated assets and liabilities. The derivative financial instruments contracts entered into by the Company did not meet the criteria for hedge accounting; therefore, the Company did not apply hedge accounting treatment.

## 8. FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME

Equity instruments at FVTOCI:

	<b>December 31, 2019</b>	<b>December 31, 2018</b>
Domestic listed and emerging stocks		
Walsin Lihwa Corporation	\$ 3,357,200	\$ 3,350,000
Walsin Technology Corporation	2,342,228	1,509,218
Hannstar Display Corporation	890,443	774,873
Walton Advanced Engineering Inc.	583,230	540,677
Domestic unlisted stocks	<u>17,476</u>	<u>23,657</u>
	<u>\$ 7,190,577</u>	<u>\$ 6,198,425</u>
Current	\$ 7,173,101	\$ 6,174,768
Non-current	<u>17,476</u>	<u>23,657</u>
	<u>\$ 7,190,577</u>	<u>\$ 6,198,425</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.

## 9. ACCOUNTS RECEIVABLE

	<b>December 31</b>	
	<b>2019</b>	<b>2018</b>
<u>Accounts receivable</u>		
At amortized cost		
Gross carrying amount	\$ 3,022,289	\$ 4,018,246
Less: Allowance for impairment loss	<u>(82,000)</u>	<u>(100,000)</u>
	<u>\$ 2,940,289</u>	<u>\$ 3,918,246</u>

The average credit period of sales of goods was 30 to 60 days. No interest was charged on accounts receivable. The Company adopted a policy of only dealing with entities that are rated the equivalent of investment grade or higher and obtaining sufficient collateral, where appropriate, as a means of mitigating the risk of financial loss from defaults. Credit rating information is supplied by independent rating agencies where available and, if not available, the Company uses other publicly available financial information and its own trading records to rate its major customers. The Company's exposure and the credit ratings of its counterparties are continuously monitored and the aggregate value of transactions concluded is spread amongst approved counterparties. Credit exposure is controlled by counterparty limits that are reviewed and approved annually.

In order to minimize credit risk, the management of the Company has delegated a team responsible for determining credit limits, credit approvals and other monitoring procedures to ensure that follow-up action is taken to recover overdue debts. In addition, the Company reviews the recoverable amount of each individual trade debt at the end of the reporting period to ensure that adequate allowance is made for possible irrecoverable amounts. In this regard, the management believes the Company's credit risk was significantly reduced.

The Company applies the simplified approach to providing for expected credit losses prescribed by IFRS 9, which permits the use of lifetime expected loss provision for all accounts receivable. The expected credit losses on accounts receivable are estimated using a provision matrix by reference to past default experience of the debtor and an analysis of the debtor's current financial position, adjusted for general economic conditions of the industry in which the debtors operate and an assessment of both the current as well as the forecast direction of conditions at the reporting date. The Company estimates expected credit losses based on past due days. As the Company's historical credit loss experience does not show significantly different loss patterns for different customer segments, the provision for loss allowance based on past due status is not further distinguished between the Company's different customer base.

The Company writes off accounts receivable when there is information indicating that the debtor is in severe financial difficulty and there is no realistic prospect of recovery. For accounts receivable that have been written off, the Company continues to engage in enforcement activity to attempt to recover the receivables due. Where recoveries are made, these are recognized in profit or loss.

The following table details the loss allowance of accounts receivable based on the Company's provision matrix.

December 31, 2019

	Not Overdue	Overdue under 30 Days	Overdue 31-90 Days	Overdue 91-180 Days	Over 180 Days	Total
Expected credit loss rate	2%	2%	10%	20%	100%	
Gross carrying amount	\$ 2,606,288	\$ 385,072	\$ 11,941	\$ 144	\$ 18,844	\$ 3,022,289
Loss allowance (Lifetime ECL)	<u>(54,232)</u>	<u>(7,701)</u>	<u>(1,194)</u>	<u>(29)</u>	<u>(18,844)</u>	<u>(82,000)</u>
Amortized cost	<u>\$ 2,552,056</u>	<u>\$ 377,371</u>	<u>\$ 10,747</u>	<u>\$ 115</u>	<u>\$ -</u>	<u>\$ 2,940,289</u>

December 31, 2018

	Not Overdue	Overdue under 30 Days	Overdue 31-90 Days	Overdue 91-180 Days	Over 180 Days	Total
Expected credit loss rate	2%	2%	10%	20%	100%	
Gross carrying amount	\$ 3,606,142	\$ 390,593	\$ 2,635	\$ 32	\$ 18,844	\$ 4,018,246
Loss allowance (Lifetime ECL)	<u>(73,075)</u>	<u>(7,812)</u>	<u>(263)</u>	<u>(6)</u>	<u>(18,844)</u>	<u>(100,000)</u>
Amortized cost	<u>\$ 3,533,067</u>	<u>\$ 382,781</u>	<u>\$ 2,372</u>	<u>\$ 26</u>	<u>\$ -</u>	<u>\$ 3,918,246</u>

The movements in the allowance for doubtful accounts recognized on accounts receivable were as follows:

	2019	2018
Balance at January 1	\$ 100,000	\$ 97,000
Add: Provision recognized on accounts receivable	-	3,000
Less: Reversal of provision recognized on accounts receivable	<u>(18,000)</u>	<u>-</u>
Balance at December 31	<u>\$ 82,000</u>	<u>\$ 100,000</u>

## 10. INVENTORIES

	<u>December 31</u>	
	2019	2018
Finished goods	\$ 1,953,329	\$ 1,686,541
Work-in-process	6,200,256	6,987,250
Raw materials and supplies	596,486	653,743
Inventories in transit	<u>-</u>	<u>3,112</u>
	<u>\$ 8,750,071</u>	<u>\$ 9,330,646</u>

- Operating costs for the years ended December 31, 2019 and 2018 included inventory write-downs for the decline in market value, obsolescence and scrap of inventories of \$1,087,821 thousand and \$69,522 thousand, respectively.
- Unallocated fixed manufacturing costs recognized as operating costs in the years ended December 31, 2019 and 2018 amounted to \$1,223,784 thousand and \$329,373 thousand, respectively.

## 11. INVESTMENTS ACCOUNTED FOR USING EQUITY METHOD

	<b>December 31</b>	
	<b>2019</b>	<b>2018</b>
Investments in subsidiaries	\$ 7,382,245	\$ 4,827,987
Investments in associates	<u>4,548,939</u>	<u>3,585,328</u>
	<u>\$ 11,931,184</u>	<u>\$ 8,413,315</u>

### a. Investments in subsidiaries

	<b>December 31</b>			
	<b>2019</b>		<b>2018</b>	
<b>Name of Subsidiaries</b>	<b>Carrying Value</b>	<b>Ownership Percentage</b>	<b>Carrying Value</b>	<b>Ownership Percentage</b>
Listed companies				
Nuvoton Technology Corporation (“NTC”)	\$ 4,528,887	62%	\$ 2,256,830	61%
Unlisted companies				
Winbond Int’l Corporation (“WIC”)	1,625,896	100%	1,628,543	100%
Winbond Electronics (H.K.) Limited (“WEHK”)	421,958	100%	314,666	100%
Landmark Group Holdings Ltd. (“Landmark”)	409,747	100%	382,317	100%
Great Target Development Ltd. (“GTD”)	147,019	100%	-	-
Callisto Holding Limited (“Callisto”)	142,793	100%	156,614	100%
Winbond Technology Ltd. (“WTL”)	70,113	100%	55,387	100%
Winbond Electronics Germany GmbH (“WEG”)	28,551	100%	-	-
Pine Capital Investment Limited (“PCI”)	7,281	100%	6,314	100%
Techdesign Corporation (“TDC”)	-	-	27,316	100%
Mobile Magic Design Corporation (“MMDC”)	-	-	-	100%
	<u>\$ 7,382,245</u>		<u>\$ 4,827,987</u>	

Refer to Table 6 for information of above subsidiaries’ company name, main business and products, and registered location.

- 1) The fair value of investment in subsidiaries for which there are published price quotations, based on closing price of those investments at the balance sheet date, are summarized as follows:

	<b>December 31</b>	
<b>Name of Subsidiary</b>	<b>2019</b>	<b>2018</b>
NTC	<u>\$ 8,274,750</u>	<u>\$ 5,026,817</u>

- 2) On July 25, 2019, NTC’s board of directors resolved to issue 80,000 thousand ordinary shares with a par value of NT\$10 to fund working capital. The Company subscribed 50,380 thousand shares of the ordinary shares of NTC at \$45 per share and directly owned 62% of interest.



- 3) In March 2019, the board of directors of Landmark resolved the capital reductions for the repayment of shares in the amount of \$17,371 thousand.
- 4) In July 2019, the Company purchased 100% ownership interest of GTD for investing activities in India. The Company has provided the financial information of the subsidiaries acquired in the consolidated financial statements. The parent company only financial statements do not provide such information.
- 5) Callisto was incorporated in May 2018, and the Company has injected capital in Callisto in August 2018.
- 6) A capital was injected in WEG, which was incorporated in November 2019.
- 7) In December 2018, the board of directors of PCI resolved capital reductions for the repayment of shares in the amount of \$267,065 thousand.
- 8) TDC filed for liquidation in June 2019 and the date of dissolution was on June 10, 2019. The liquidation procedures were not completed as of December 31, 2019.
- 9) On July 2019, MMDC's board of directors resolved to conduct a short-form merger with the Company on the effective date of October 1, 2019. The Company is the surviving company after the short-form merger. Refer to Note 23 for information on the assets acquired and liabilities assumed at the date of combination.
- 10) In 2019 and 2018, the Company recognized shares of subsidiaries' profit in the amounts of \$567,545 thousand and \$601,811 thousand, respectively.

b. Investments in associates

- 1) Aggregate information of associates that are not individually material

	<b>December 31</b>	
	<b>2019</b>	<b>2018</b>
Associates that are not individually material		
Chin Xin Investment Co., Ltd.	\$ 4,548,224	\$ 3,584,605
Hwa Bao Botanic Conservation Corp.	<u>715</u>	<u>723</u>
	<u>\$ 4,548,939</u>	<u>\$ 3,585,328</u>

The Company subscribed the ordinary shares of Hwa Bao Botanic Conservation Corp. (Hwa Bao) in \$750 thousand and owned 15% of ownership interest directly in July 2018. As of December 31, 2019, the main shareholders of Hwa Bao was Chin Xin Investment Co., Ltd., and its ownership interest were 70%. The Company accounted for the equity investment in Hwa Bao using equity method for its consolidated ownership interest of Hwa Bao was 41%.

As of December 31, 2019, the Company had 182,841 thousand shares of Chin Xin Investment Co., Ltd. with a 38% ownership interest.

2) Aggregate information of associates that are not individually material

	<b>For the Year Ended December 31</b>	
	<b>2019</b>	<b>2018</b>
The Company's share of:		
Profit from continuing operations for the year	\$ 241,034	\$ 228,981
Other comprehensive income (loss)	<u>777,428</u>	<u>(1,157,275)</u>
Total comprehensive income	<u>\$ 1,018,462</u>	<u>\$ (928,294)</u>

The investments accounted for using equity method and the shares of profit or loss and other comprehensive income of those investments for the years ended December 31, 2019 and 2018 were based on the subsidiaries' and associates' financial statements audited by independent auditors.

## 12. PROPERTY, PLANT AND EQUIPMENT

	<b>December 31</b>	
	<b>2019</b>	<b>2018</b>
Land	\$ 977,945	\$ 1,544,450
Buildings	11,115,211	9,822,098
Machinery and equipment	35,456,547	37,154,939
Other equipment	569,620	553,105
Construction in progress and prepayments for purchase of equipment	<u>7,572,082</u>	<u>2,503,038</u>
	<u>\$ 55,691,405</u>	<u>\$ 51,577,630</u>

	<b>Land</b>	<b>Buildings</b>	<b>Machinery and Equipment</b>	<b>Other Equipment</b>	<b>Construction in Progress and Prepayments on Purchase of Equipment</b>	<b>Total</b>
<u>Cost</u>						
Balance at January 1, 2019	\$ 1,544,450	\$ 22,873,232	\$ 110,465,977	\$ 3,416,727	\$ 2,503,038	\$ 140,803,424
Additions	-	441,747	4,785,488	402,044	7,807,173	13,436,452
Disposals	-	-	(328,413)	(692)	-	(329,121)
Reclassified	-	2,632,316	341,043	(235,230)	(2,738,129)	-
Transfers to non-current assets classified as held for sale	(495,641)	(294,298)	-	(16,582)	-	(806,521)
Transfers to investment property	(70,864)	(225,723)	-	-	-	(296,587)
Transfers to other non-current assets	-	(28,660)	-	-	-	(28,660)
Balance at December 31, 2019	<u>\$ 977,945</u>	<u>\$ 25,398,614</u>	<u>\$ 115,264,079</u>	<u>\$ 3,566,267</u>	<u>\$ 7,572,082</u>	<u>\$ 152,778,987</u>
<u>Accumulated depreciation and impairment</u>						
Balance at January 1, 2019	\$ -	\$ 13,051,134	\$ 73,311,038	\$ 2,863,622	\$ -	\$ 89,225,794
Depreciation expense	-	1,261,744	6,820,907	146,066	-	8,228,717
Disposals	-	-	(324,413)	(692)	-	(325,105)
Transfers to non-current assets classified as held for sale	-	(29,475)	-	(12,349)	-	(41,824)
Balance at December 31, 2019	<u>\$ -</u>	<u>\$ 14,283,403</u>	<u>\$ 79,807,532</u>	<u>\$ 2,996,647</u>	<u>\$ -</u>	<u>\$ 97,087,582</u>
<u>Cost</u>						
Balance at January 1, 2018	\$ 1,544,450	\$ 21,901,502	\$ 96,572,096	\$ 3,731,698	\$ 1,383,662	\$ 125,133,408
Additions	-	561,826	12,371,256	849,561	2,112,911	15,895,554
Disposals	-	-	(224,614)	(924)	-	(225,538)
Reclassified	-	409,904	1,747,239	(1,163,608)	(993,535)	-
Balance at December 31, 2018	<u>\$ 1,544,450</u>	<u>\$ 22,873,232</u>	<u>\$ 110,465,977</u>	<u>\$ 3,416,727</u>	<u>\$ 2,503,038</u>	<u>\$ 140,803,424</u>

(Continued)

	Land	Buildings	Machinery and Equipment	Other Equipment	Construction in Progress and Prepayments on Purchase of Equipment	Total
Accumulated depreciation and impairment						
Balance at January 1, 2018	\$ -	\$ 11,862,914	\$ 67,566,205	\$ 2,735,278	\$ -	\$ 82,164,397
Depreciation expense	-	1,188,220	5,968,428	129,268	-	7,285,916
Disposals	-	-	(223,595)	(924)	-	(224,519)
Balance at December 31, 2018	<u>\$ -</u>	<u>\$ 13,051,134</u>	<u>\$ 73,311,038</u>	<u>\$ 2,863,622</u>	<u>\$ -</u>	<u>\$ 89,225,794</u>

(Concluded)

- a. As of December 31, 2019 and 2018, the carrying amounts of \$21,230,163 thousand and \$21,008,324 thousand of land, buildings and 12-inch fab facilities were pledged to secure long-term borrowings and corporate bonds.
- b. Information about capitalized interest

	<b>For the Year Ended December 31</b>	
	<b>2019</b>	<b>2018</b>
Capitalized interest amounts	\$ 148,751	\$ 74,013
Capitalized interest rate	1.79%-1.81%	1.79%

### 13. LEASE ARRANGEMENTS

#### 2019

- a. Right-of-use assets

	<b>December 31, 2019</b>
<u>Carrying amounts</u>	
Land	\$ 1,688,309
Buildings	16,288
Other equipment	<u>11,695</u>
	<u>\$ 1,716,292</u>
	<b>For the Year Ended December 31, 2019</b>
Additions to right-of-use assets	<u>\$ 5,616</u>
Depreciation charge for right-of-use assets	
Land	\$ 81,461
Buildings	12,705
Other equipment	<u>4,574</u>
	<u>\$ 98,740</u>

b. Lease liabilities

**December 31,  
2019**

Carrying amounts

Current	<u>\$ 74,527</u>
Non-current	<u>\$ 1,660,704</u>

Range of discount rate for lease liabilities was as follows:

**December 31,  
2019**

Land	2.47%
Buildings	1.34%-1.6%
Other equipment	1.34%-1.6%

For the year ended December 31, 2019, the interest expense under lease liabilities amounted to \$42,709 thousand.

c. Material lease-in activities and terms

The Company leased lands from Science Park Administration, and the lease term will expire in 2023 and 2037, respectively, which can be extended after the expiration of the lease periods.

d. Other lease information

**For the Year  
Ended  
December 31,  
2019**

Expenses relating to short-term leases	<u>\$ 9,736</u>
Expenses relating to variable lease payments not included in the measurement of lease liabilities	<u>\$ 19,663</u>
Total cash outflow for leases	<u>\$ 151,241</u>

The Company has elected to apply the recognition exemption for short-term leases and low-value assets leases and, thus, did not to recognize the right-of-use assets and lease liabilities for these leases.

2018

Lease expense

**For the Year  
Ended  
December 31,  
2018**

Lease expense	<u>\$ 141,747</u>
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#### 14. INVESTMENT PROPERTIES

**December 31,  
2019**

Investment properties, net	<u>\$ 295,251</u>
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The Company has been subleasing its offices located in Hsinchu to its subsidiary, NTC, since November 2019, which was classified as operating lease with lease terms of 5 years and with an extension option. As of December 31, 2019, the fair value of such investment properties was approximately NT\$297,000 thousand, which used as reference the neighboring area transactions.

#### Investment Properties

##### Cost

Balance at January 1, 2019	\$ -
Reclassified from property, plant and equipment	<u>296,587</u>

Balance at December 31, 2019	<u>\$ 296,587</u>
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##### Accumulated depreciation and impairment

Balance at January 1, 2019	\$ -
Depreciation expense	<u>1,336</u>

Balance at December 31, 2019	<u>\$ 1,336</u>
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#### 15. INTANGIBLE ASSETS

**December 31**

<b>2019</b>	<b>2018</b>
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Deferred technical assets, net	<u>\$ 123,949</u>	<u>\$ 104,925</u>
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#### Deferred Technical Assets

##### Cost

Balance at January 1, 2019	\$ 17,844,211
Additions	<u>29,424</u>

Balance at December 31, 2019	<u>\$ 17,873,635</u>
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##### Accumulated amortization and impairment

Balance at January 1, 2019	\$ 17,739,286
Amortization expense	<u>10,400</u>

Balance at December 31, 2019	<u>\$ 17,749,686</u>
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(Continued)

**Deferred  
Technical  
Assets**

Cost

Balance at January 1, 2018 \$ 17,844,211

Balance at December 31, 2018 \$ 17,844,211

Accumulated amortization and impairment

Balance at January 1, 2018 \$ 17,728,886

Amortization expense 10,400

Balance at December 31, 2018 \$ 17,739,286  
(Concluded)

The amounts of deferred technical assets were the technical transfer fees in connection with certain technical transfer agreements. The above technical assets pertained to different products or process technology. The assets were depreciated on a straight-line basis from the commencement of production and over the estimated useful lives of the assets. The estimated useful lives of technical assets were based on the economic benefits generated from the assets or the terms of the technical asset contracts.

## 16. BORROWINGS

### a. Short-term borrowings

	December 31			
	2019		2018	
	Interest Rate		Interest Rate	
	%	Amount	%	Amount
Bank lines of credit	1.00	<u>\$ 1,000,000</u>	-	<u>\$ -</u>

### b. Long-term borrowings

	Period	Interest Rate	December 31	
			2019	2018
<u>Secured borrowings</u>				
CTBC Bank Co., Ltd. syndicated loan (IV)	2014.07.07-2019.11.27	1.87%-2.23%	\$ -	\$ 2,600,000
Bank of Taiwan secured medium-term loan	2014.12.29-2021.12.29	1.40%-1.70%	247,040	370,560
Bank of Taiwan syndicated loan (IV)	2016.08.15-2021.12.29	1.79%-1.81%	9,000,000	5,800,000
Bank of Taiwan syndicated loan (V)	2019.01.14-2026.09.19	1.89%	<u>4,250,000</u>	<u>-</u>
			13,497,040	8,770,560
Less: Current portion			(4,123,520)	(4,563,520)
Less: Syndication agreement management fee			<u>(143,047)</u>	<u>(27,767)</u>
			\$ 9,230,473	\$ 4,179,273

- 1) CTBC Bank Co., Ltd. Syndicated Loan (IV)
  - a) On July 7, 2014, the Company entered into a syndicated loan, with a group of financial institutions to procure equipment for 12-inch fab and repay bank loans, credit line was divided into part A and B, which amounted to \$6.5 billion and \$2.5 billion, respectively; the total line of credit \$9 billion.
  - b) Part A will be repaid every six months from November 27, 2017 until maturity, part B will be repaid every six months from November 27, 2016 until maturity.
  - c) Refer to Note 12 for collateral on bank borrowings.
  - d) On August 26, 2019, the loan be repaid in advance.
- 2) The collateral on the Bank of Taiwan secured medium-term loan is the land and building of the Company in Zhubei. Refer to Note 12. The principal will be repaid every six months from June 29, 2017 until maturity.
- 3) Bank of Taiwan Syndicated Loan (IV)
  - a) On August 15, 2016, the Company entered into a syndicated loan, with a group of financial institutions, to procure equipment for 12-inch fab, repay bank loans and augment medium-term working capital. The credit line was divided into part A and B, which amounted to \$10 billion and \$2 billion, respectively; and the total line of credit amounted to \$12 billion.
  - b) Part A will be repaid every six months from December 29, 2019 until maturity, and part B will be repaid every six months from December 29, 2018 until maturity.
  - c) Refer to Note 12 for collateral on bank borrowings.
- 4) Bank of Taiwan Syndicated Loan (V)
  - a) On January 14, 2019, the Company entered into a syndicated loan, with a group of financial institutions, to procure equipment for fab. The credit line amounted to \$42 billion. The principal will be repaid every six months from September 19, 2022 until maturity.
  - b) Refer to Note 12 for collateral on bank borrowings.
- 5) The Company is required to maintain certain financial covenants, including current ratio, debt ratio and tangible net equity, on June 30 and December 31 during the tenors of the loans. Additionally, the principal and interest coverage should be also maintained on June 30 and December 31 during the tenors of the loans except for the Bank of Taiwan secured medium-term loan. The computations of financial ratios mentioned above are done based on the audited consolidated financial statements.

## 17. BONDS PAYABLE

	<b>December 31</b>	
	<b>2019</b>	<b>2018</b>
Domestic secured bonds	\$ 10,000,000	\$ 10,000,000
Less: Discounts on bonds payable	<u>(68,254)</u>	<u>(80,221)</u>
	<u>\$ 9,931,746</u>	<u>\$ 9,919,779</u>

On July 10, 2018, the Company was approved by the SFB to offer and issue the first secured corporate bonds of 2018, with an aggregate principal amount of \$10,000,000 thousand. The terms of issuance, amounts and interest rate as follows:

<b>Issuance Date</b>	<b>Period</b>	<b>Amount</b>	<b>Coupon Rate</b>	<b>Repayment and Interest Payment</b>
2018.07.17	7 years	\$10,000,000	1%	The principal will be repaid upon maturity.  The interest is payable once a year at the coupon rate accrued annually on a simple basis starting from the issue date.

Refer to Note 12 for collateral of 12-inch Fab Manufacturing facilities on corporate bonds.

## 18. RETIREMENT BENEFIT PLANS

### a. Defined contribution plan

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

### b. Defined benefit plan

The defined benefit plan adopted by the Company in accordance with the Labor Standards Law is operated by the government. Pension benefits are calculated on the basis of the length of service and average monthly salaries of the six months before retirement. The Company contribute amounts equal to 2% of total monthly salaries and wages to a pension fund administered by the pension fund monitoring committee of the Company. 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 amount included in the balance sheet in respect of the Company's obligation to its defined benefit plan was as follows:

	<b>December 31</b>	
	<b>2019</b>	<b>2018</b>
Present value of the defined benefit obligation	\$ 1,543,793	\$ 1,278,847
Fair value of the plan assets	<u>(591,018)</u>	<u>(520,415)</u>
Net defined benefit liabilities, non-current	<u>\$ 952,775</u>	<u>\$ 758,432</u>



Movements in net defined benefit liabilities (assets) were as follows:

	<b>Present Value of the Defined Benefit Obligation</b>	<b>Fair Value of the Plan Assets</b>	<b>Net Defined Benefit Liabilities (Assets)</b>
Balance at January 1, 2019	<u>\$ 1,278,847</u>	<u>\$ (520,415)</u>	<u>\$ 758,432</u>
Service cost			
Current service cost	23,984	-	23,984
Net interest expense (income)	<u>16,345</u>	<u>(6,652)</u>	<u>9,693</u>
Recognized in profit or loss	<u>40,329</u>	<u>(6,652)</u>	<u>33,677</u>
Remeasurement			
Actuarial (gain) loss			
- realized rate greater than the discounted rate	-	(18,781)	(18,781)
- changes in demographic assumptions	(4,608)	-	(4,608)
- changes in financial assumptions	79,485	-	79,485
- experience adjustments	<u>17,928</u>	<u>-</u>	<u>17,928</u>
Recognized in other comprehensive income	<u>92,805</u>	<u>(18,781)</u>	<u>74,024</u>
Contributions from the employer	-	(17,023)	(17,023)
Benefits paid	(27,598)	27,598	-
Transfer from pension liabilities from subsidiaries	<u>159,410</u>	<u>(55,745)</u>	<u>103,665</u>
Balance at December 31, 2019	<u>\$ 1,543,793</u>	<u>\$ (591,018)</u>	<u>\$ 952,775</u>
Balance at January 1, 2018	<u>\$ 1,148,246</u>	<u>\$ (495,793)</u>	<u>\$ 652,453</u>
Service cost			
Current service cost	19,516	-	19,516
Net interest expense (income)	<u>16,763</u>	<u>(7,095)</u>	<u>9,668</u>
Recognized in profit or loss	<u>36,279</u>	<u>(7,095)</u>	<u>29,184</u>
Remeasurement			
Actuarial (gain) loss			
- realized rate greater than the discounted rate	-	(12,847)	(12,847)
- changes in demographic assumptions	18,837	-	18,837
- changes in financial assumptions	33,393	-	33,393
- experience adjustments	<u>45,697</u>	<u>-</u>	<u>45,697</u>
Recognized in other comprehensive income	<u>97,927</u>	<u>(12,847)</u>	<u>85,080</u>
Contributions from the employer	-	(15,907)	(15,907)
Benefits paid	(11,227)	11,227	-
Transfer from pension liabilities from subsidiaries	8,060	-	8,060
Account paid	<u>(438)</u>	<u>-</u>	<u>(438)</u>
Balance at December 31, 2018	<u>\$ 1,278,847</u>	<u>\$ (520,415)</u>	<u>\$ 758,432</u>

Amounts recognized in profit or loss in respect of these defined benefit plans analyzed by function were as follows:

	<b>For the Year Ended December 31</b>	
	<b>2019</b>	<b>2018</b>
Operating cost	\$ 14,566	\$ 14,691
Selling expenses	2,120	2,115
General and administrative expenses	5,120	3,751
Research and development expenses	<u>11,871</u>	<u>8,627</u>
	<u>\$ 33,677</u>	<u>\$ 29,184</u>

Through the defined benefit plans under the Labor Standards Law, 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 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 principal assumptions used for the purposes of the actuarial valuations were as follows:

	<b>December 31</b>	
	<b>2019</b>	<b>2018</b>
Discount rate	0.75%	1.25%
Expected rate of salary increase	1.00%-3.00%	3.00%

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

	<b>December 31</b>	
	<b>2019</b>	<b>2018</b>
Discount rate		
0.5% increase	<u>\$ (79,485)</u>	<u>\$ (65,542)</u>
0.5% decrease	<u>\$ 85,621</u>	<u>\$ 70,752</u>
Expected rate of salary increase		
0.5% increase	<u>\$ 83,449</u>	<u>\$ 69,170</u>
0.5% decrease	<u>\$ (78,341)</u>	<u>\$ (64,785)</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.

	<b>December 31</b>	
	<b>2019</b>	<b>2018</b>
The expected contribution to the plan for the next year	<u>\$ 20,356</u>	<u>\$ 16,744</u>
The average duration of defined benefit obligation	10.70 years	10.70 years

## 19. EQUITY

### a. Share capital

	<b>December 31</b>	
	<b>2019</b>	<b>2018</b>
Number of shares authorized (in thousands)	<u>6,700,000</u>	<u>6,700,000</u>
Shares authorized	<u>\$ 67,000,000</u>	<u>\$ 67,000,000</u>
Number of shares issued and fully paid (in thousands)	<u>3,980,000</u>	<u>3,980,000</u>
Shares issued	<u>\$ 39,800,002</u>	<u>\$ 39,800,002</u>

As of December 31, 2019 and 2018, the balance of the Company's capital account amounted to \$39,800,002 thousand, divided into 3,980,000 thousand shares with a par value of NT\$10.

### b. Capital surplus

	<b>December 31</b>	
	<b>2019</b>	<b>2018</b>
<u>May be used to offset a deficit, distributed as cash dividends, or transferred to share capital</u>		
Arising from issuance of share capital	\$ 4,787,673	\$ 4,787,673
Arising from treasury share transactions	2,342,036	2,342,036
Arising from conversion of bonds	136,352	136,352
<u>May only be used to offset a deficit</u>		
Arising from changes in percentage of ownership interest in subsidiaries	1,998	6,042
Arising from share of changes in capital surplus of associates	29,137	29,137
Cash capital increase reserved for employee share options	208,451	208,451
Others	<u>30,749</u>	<u>30,749</u>
	<u>\$ 7,536,396</u>	<u>\$ 7,540,440</u>

The capital surplus generated from the excess of the issuance price over the par value of capital stock (including the stock issued for new capital, mergers and convertible bonds) 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 stock dividends up to a certain percentage of the Company's paid-in capital. The capital surplus from share of changes in equities of subsidiaries and associates may be used to offset a deficit; however, when generated from issuance of restricted shares for employees, such capital surplus may not be used for any purpose.

c. Retained earnings and dividend policy

The shareholders held their regular meeting on June 14, 2019 and resolved the amendments to the Company's Articles of Incorporation. The amendments of the Company's dividend distribution policy as follows:

From the pre-tax net profit of the current year, before deducting remuneration of employees and remuneration of directors, no more than 1% shall be allocated as remuneration of directors and no less than 1% as remuneration of employees. The remuneration of employees may be distributed in stock or cash upon resolution of the board of directors and may be distributed to the employees of subsidiaries of the Company meeting certain criteria.

However, if the Company has accumulated losses, the Company shall first set aside an amount for making up losses and then allocate remuneration of employees and remuneration of directors according to the percentage set forth in the preceding paragraph.

The Company purchases its stock for transferring such treasury shares, issues employee options, provides pre-emptive right for employees' subscription upon issuing new shares, issues new restricted employee shares, and distributes employee remuneration, to employees of the Company's controlling or subordinated companies who meet certain criteria, which shall be determined and resolved by the board of directors.

If the Company has pre-tax profits at the end of the current fiscal year, after paying all taxes and covering all accumulated losses, the Company shall set aside 10% of said earnings as legal reserve. However, legal reserve need not be made when the accumulated legal reserve equals the paid-in capital of the Company. After setting aside or reversing special reserve pursuant to applicable laws and regulations and orders of competent authorities or based on the business needs of the Company, if there is any balance, the board of directors may submit a proposal for allocation of the remaining balance and the accumulated undistributed earnings to the shareholders meeting for resolution of distributing bonuses and dividends to shareholders.

The board of directors shall be authorized to distribute the profit, the legal reserve and the capital reserve mentioned in the preceding paragraph in cash upon resolution by a majority vote at a board meeting attended by two-thirds or more of the directors, and shall report the same to the shareholders' meeting.

The Company's dividend distribution policy is made in accordance with the Company Act and the Articles of Incorporation in consideration of factors including capital and financial structure, operating status, retained earnings, industry characteristics and economic cycle. The dividends shall be distributed in a steady manner. With respect to distribution of dividends, in consideration of future operation scale and cash flow needs, no less than 30% of the remaining amount of the net profit after tax of the current year, after covering the accumulative losses and setting aside the legal reserve and the special reserve, shall be distributed to shareholders as dividends, which may be distributed in stock dividend or cash dividend, and the distribution of cash dividend shall not be less than 50% of total dividends, so as to maintain continuous growth.

The Company may distribute its profit or make up its losses at the end of each half of a fiscal year. The business report, the financial statements, and the proposal for distribution of earnings or making up loss shall be prepared by and then resolved by the board of directors. The Company, in distributing its profit according to the preceding paragraph, shall estimate and reserve employee and director remuneration and any taxes payable as well as cover any losses and set aside the legal reserve in accordance with the law; however, provided that the legal reserve amounts to the total paid-in capital, the legal reserve need not be set aside. Where the Company distributes the profit in cash, such distribution shall be resolved by the board of directors, but where the profit is distributed in the form of newly issued shares, such distribution shall be resolved by the shareholders' meeting.

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 deficits. 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.

Pursuant to existing regulations, the Company is required to set aside additional special capital reserve equivalent to the net debit balance of the other components of shareholders' equity, such as the accumulated balance of foreign currency translation reserve, unrealized valuation gain (loss) from available-for-sale financial assets, net amount of fair value below the cost of the Company's ordinary shares held by subsidiaries, etc. For the subsequent decrease in the deduction amount to shareholders' equity, any special reserve appropriated may be reversed to the extent that the net debit balance reverses.

As of the date of the Company's board meeting, the appropriation of earnings for 2019 are not subjected.

The appropriations of earnings for 2018 and 2017 were approved in the shareholders' meetings on June 14, 2019 and June 11, 2018, respectively, as follows:

	<b>Appropriation of Earnings</b>		<b>Dividends Per Share (NT\$)</b>	
	<b>For Year 2018</b>	<b>For Year 2017</b>	<b>For Year 2018</b>	<b>For Year 2017</b>
Legal reserve appropriated	\$ 744,650	\$ 555,056		
Reversal of special reserve	-	(31,429)		
Cash dividends	<u>3,980,000</u>	<u>3,980,000</u>	\$ 1.0	\$ 1.0
	<u>\$ 4,724,650</u>	<u>\$ 4,503,627</u>		

d. Other equity items

1) Exchange differences on translation of foreign financial statements

	<b>For the Year Ended December 31</b>	
	<b>2019</b>	<b>2018</b>
Balance at January 1	\$ (50,780)	\$ (120,988)
Exchange differences arising on translating the financial statements of foreign operations	(10,985)	(1,486)
Share of exchange difference of subsidiaries and associates accounted for using the equity method	<u>(57,481)</u>	<u>71,694</u>
Balance at December 31	<u>\$ (119,246)</u>	<u>\$ (50,780)</u>

The exchange differences arising on translation of foreign operation's net assets from its functional currency to the Company's presentation currency are recognized directly in other comprehensive income and also accumulated in the foreign currency translation reserve.

2) Unrealized gains (losses) on financial assets at FVTOCI

	<b>For the Year Ended December 31</b>	
	<b>2019</b>	<b>2018</b>
Balance at January 1	\$ 3,533,423	\$ 5,065,763
Unrealized gains (losses) on revaluation of financial assets at FVTOCI	700,754	(301,203)
Share of unrealized gains (losses) on revaluation of financial assets at FVTOCI of associates accounted for using equity method	787,181	(1,288,815)
Disposal of investments in equity instruments designated at FVTOCI	<u>(11,430)</u>	<u>57,678</u>
Balance at December 31	<u>\$ 5,009,928</u>	<u>\$ 3,533,423</u>

Unrealized gains (losses) on financial assets at FVTOCI represents the cumulative gains or losses arising from the fair value measurement on financial assets at FVTOCI that are recognized in other comprehensive income. The cumulative gain or loss will not be reclassified as profit or loss on disposal of the equity investments, instead, they will be transferred to retained earnings.

**20. EMPLOYEE BENEFITS EXPENSE, DEPRECIATION, AND AMORTIZATION**

	<b>For the Year Ended December 31, 2019</b>			
	<b>Classified as Operating Costs</b>	<b>Classified as Operating Expenses</b>	<b>Classified as Non-operating Income and Losses</b>	<b>Total</b>
Short-term employee benefits				
Salary	\$ 1,783,158	\$ 2,212,453	\$ -	\$ 3,995,611
Insurance	\$ 141,361	\$ 149,617	\$ -	\$ 290,978
Board compensation	\$ -	\$ 20,424	\$ -	\$ 20,424
Post-employment benefits				
Pension	\$ 100,474	\$ 105,482	\$ -	\$ 205,956
Depreciation	\$ 7,724,047	\$ 603,410	\$ 1,495	\$ 8,328,952
Amortization	\$ -	\$ 10,400	\$ 19,720	\$ 30,120

	<b>For the Year Ended December 31, 2018</b>			
	<b>Classified as Operating Costs</b>	<b>Classified as Operating Expenses</b>	<b>Classified as Non-operating Income and Losses</b>	<b>Total</b>
Short-term employee benefits				
Salary	\$ 2,338,387	\$ 2,554,625	\$ -	\$ 4,893,012
Insurance	\$ 140,989	\$ 120,334	\$ -	\$ 261,323
Board compensation	\$ -	\$ 88,185	\$ -	\$ 88,185
Post-employment benefits				
Pension	\$ 99,648	\$ 82,641	\$ -	\$ 182,289
Depreciation	\$ 6,654,240	\$ 631,676	\$ -	\$ 7,285,916
Amortization	\$ -	\$ 10,400	\$ 14,020	\$ 24,420

There were 2,984 and 2,795 employees in the Company 7 and 8 of the directors do not doubled as employee as of December 31, 2019 and 2018, respectively.

As of December 31, 2019 and 2018, the average employee benefits and average salaries and wages were \$1,516 thousand, \$1,342 thousand, \$1,946 thousand and \$1,756 thousand, respectively. The average salaries and wages decrease 24%.

In accordance with the Company Act and the Articles of Incorporation, it stipulates distribution of the compensation of employees and remuneration of directors at the rates no more than 1% and no less than 1%, respectively, of net profit before income tax, remuneration to directors and compensation of employees. The calculation for the rate mentioned above also include the Company's remuneration of supervisors before establishment of the Audit Committee. For the years ended December 31, 2019 and 2018, the employees' compensation and remuneration of directors were as follows:

	<b>For the Year Ended December 31</b>			
	<b>2019</b>		<b>2018</b>	
	<b>Amounts</b>	<b>Accrual Rate</b>	<b>Amounts</b>	<b>Accrual Rate</b>
Employees' compensation	<u>\$ 28,038</u>	2%	<u>\$ 163,650</u>	2%
Remuneration of directors	<u>\$ 14,019</u>	1%	<u>\$ 81,825</u>	1%

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

The compensation to employees and remuneration to the directors of 2018 and 2017 were approved by the Company's board of directors on March 25, 2019 and February 2, 2018, respectively, were as below:

	<b>For the Year Ended December 31</b>	
	<b>2018</b>	<b>2017</b>
Employees' compensation	<u>\$ 163,650</u>	<u>\$ 67,881</u>
Remuneration of directors	<u>\$ 81,825</u>	<u>\$ 67,881</u>

There was no difference between the amounts of the compensation of employees and remuneration of directors resolved by the Company's board of directors, and the amounts recognized in the financial statements for the years ended December 31, 2018 and 2017.

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

## 21. INCOME TAXES RELATING TO CONTINUING OPERATIONS

### a. Income tax recognized in profit or loss

The major components of income tax expense were as follows:

	<b>For the Year Ended December 31</b>	
	<b>2019</b>	<b>2018</b>
Current income tax expense		
In respect of the current year	\$ -	\$ -
Additional income tax expense on unappropriated earnings	88,192	68,146
Adjustment for prior years' tax	20,273	6,371
Deferred income tax		
In respect of the current year	(5,000)	607,827
Effect of tax rate changes	-	(191,824)
Income tax expense recognized in profit or loss	<u>\$ 103,465</u>	<u>\$ 490,520</u>

Reconciliation of accounting profit and income tax expense is as follows:

	<b>For the Year Ended December 31</b>	
	<b>2019</b>	<b>2018</b>
Income tax expense from continuing operations at the statutory rate	\$ 272,000	\$ 1,587,000
Tax effect of adjustment items		
Permanent difference	(243,000)	(209,000)
Others	-	(3,997)
Current income tax expense	29,000	1,374,003
Effect of tax rate changes	-	(191,824)
Unrecognized loss carryforwards and deductible temporary differences	(34,000)	(766,176)
Additional income tax expense on unappropriated earnings	88,192	68,146
Adjustment for prior years' income tax expense	20,273	6,371
Tax expense recognized in profit or loss	<u>\$ 103,465</u>	<u>\$ 490,520</u>

The Income Tax Act in the ROC was amended in 2018, and the corporate income tax rate was adjusted from 17% to 20%. The effect of the change in tax rate on deferred tax expense to be recognized in profit or loss is recognized in full in the period in which the change in tax rate occurs. In addition, the rate of the corporate surtax applicable to the 2018 unappropriated earnings was reduced from 10% to 5%.

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.



b. Current tax assets and liabilities

	<b>December 31</b>	
	<b>2019</b>	<b>2018</b>
Current income tax assets		
Tax refund receivable (recorded as “other receivables”)	<u>\$ 5,807</u>	<u>\$ 10,727</u>
Current income tax liabilities		
Income tax payable	<u>\$ 86,193</u>	<u>\$ 73,504</u>

c. Deferred tax assets

As of December 31, 2019 and 2018, deferred tax assets were as follows:

	<b>December 31</b>	
	<b>2019</b>	<b>2018</b>
<u>Deferred tax assets</u>		
Operating loss carryforwards	\$ 51,000	\$ 463,000
Temporary differences		
Allowance for loss on inventories	332,000	148,000
Others	<u>269,000</u>	<u>56,000</u>
	<u>\$ 652,000</u>	<u>\$ 667,000</u>

d. Operating loss carryforwards

Operating loss carryforwards as of December 31, 2019 comprised:

<b>Operating Loss Carryforwards</b>	<b>Expiry Year</b>
<u>\$ 51,000</u>	2022

e. Information about investment credits

The Company apply the Statute for Industrial Innovation Article 10, up to ten percent of the R&D expenses may be credited against the profit-seeking enterprise income tax payable by it in each of the three years following the then current year.

f. Tax return assessments

The tax returns through 2017 have been assessed by the tax authorities.

## 22. EARNINGS PER SHARE

	For the Year Ended December 31					
	2019			2018		
	Amounts (Numerator) Net profit	Shares (Denominator) (In Thousands)	Earnings Per Share (NT\$) Net profit	Amounts (Numerator) Net profit	Shares (Denominator) (In Thousands)	Earnings Per Share (NT\$) Net profit
Basic earnings per share						
Net income attributed to ordinary shareholders	\$ 1,256,387	3,980,000	<u>\$ 0.32</u>	\$ 7,446,496	3,980,000	<u>\$ 1.87</u>
Effect of dilutive potential ordinary shares						
Employees' compensation	-	1,434		-	12,078	
Diluted earnings per share						
Net income attributed to ordinary shareholders	<u>\$ 1,256,387</u>	<u>3,981,434</u>	<u>\$ 0.32</u>	<u>\$ 7,446,496</u>	<u>3,992,078</u>	<u>\$ 1.87</u>

If the Company offered to settle the compensation or bonuses paid to employees by cash or shares, the Company assumed that the entire amount of the compensation or bonuses 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 (EPS), if the shares have a dilutive effect. Such dilutive effect of the potential shares is included in the computation of diluted EPS until the number of shares to be distributed to employees is resolved in the following year.

## 23. BUSINESS COMBINATIONS

### a. Subsidiaries acquired

Subsidiary	Principal Activity	Date of Acquisition	Proportion of Voting Equity Interests Acquired (%)	Consideration Transferred
GTD	Investment holding	July 4, 2019	100	<u>\$ 155,367</u> <u>US\$ 5,000</u>

In July 2019, the Company purchase 100% ownership interest of GTD in order to indirectly hold GTD's subsidiary in India, GLMTD Technology Private Limited, with a 99.99% ownership interest.

### b. Subsidiaries combinations

Subsidiary	Main Business	Date of Combination
MMDC	Design, development and marketing of Pseudo SRAM	October 1, 2019

On July 25, 2019, MMDC's board of directors resolved to conduct a short-form merger with the Company on the effective date of October 1, 2019. The Company is the surviving company after the short-form merger.

Assets acquired and liabilities assumed at the date of combination:

	<b>Amounts</b>
Assets	
Cash and cash equivalents	\$ 26,375
Other	67,627
Liabilities	
Net defined benefit liabilities, current	(103,665)
Other	<u>(15,834)</u>
	<u>\$ (25,497)</u>

## 24. CAPITAL MANAGEMENT

The Company's capital management objective is to ensure it has the necessary financial resources and operational plan so that it can cope with the next twelve months working capital requirements, capital expenditures, research and development activities, debt repayments and dividends payments.

## 25. FINANCIAL INSTRUMENT

### a. Fair value of financial instruments

#### 1) Valuation techniques and assumptions used in fair value measurement

The fair values of financial assets and financial liabilities are determined as follows:

- The fair values of financial assets and financial liabilities with standard terms and conditions and traded on active liquid markets are determined with reference to quoted market prices (includes publicly traded stock and mutual funds).
- Forward exchange contracts and foreign exchange swap contracts are measured using quoted forward exchange rates and yield curves derived from quoted interest rates matching maturities of the contracts.
- Domestic and overseas unlisted equity instrument at FVTOCI were all measured based on Level 3. Fair values of the above equity instruments were determined using comparable listed company approach, refer to strike price of similar business at active market, implied value multiple of the price and relevant information. Significant unobservable inputs included PE ratio, value multiple and market liquidity discount.

#### 2) Fair value measurements recognized in the balance sheets

The following table provides an analysis of financial instruments that are measured subsequent to initial recognition at fair value, grouped into Levels 1 to 3 based on the degree to which the fair value is observable:

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

- Level 3 fair value measurements are those derived from valuation techniques that include inputs for the asset or liability that are not based on observable market data (unobservable inputs).

3) Fair value of financial instruments that are not measured at fair value

Fair value hierarchy as at December 31, 2019

	Carrying Amount	Fair Value			
		Level 1	Level 2	Level 3	Total
<u>Financial liabilities</u>					
Financial liabilities measured at amortized cost					
Bonds payable	\$ 9,931,746	\$ -	\$ 9,931,746	\$ -	\$ 9,931,746

Fair value hierarchy as at December 31, 2018

	Carrying Amount	Fair Value			
		Level 1	Level 2	Level 3	Total
<u>Financial liabilities</u>					
Financial liabilities measured at amortized cost					
Bonds payable	\$ 9,919,779	\$ -	\$ 9,919,779	\$ -	\$ 9,919,779

4) Fair value of financial instruments that are measured at fair value on a recurring basis

Fair value hierarchy as at December 31, 2019

	Level 1	Level 2	Level 3	Total
<u>Financial assets at FVTPL</u>				
Derivative financial assets (not under hedge accounting)	\$ -	\$ 69,425	\$ -	\$ 69,425
<u>Financial assets at FVTOCI</u>				
Equity securities				
Domestic listed and emerging securities	\$ 7,173,101	\$ -	\$ -	\$ 7,173,101
Domestic unlisted securities	-	17,240	236	17,476
	\$ 7,173,101	\$ 17,240	\$ 236	\$ 7,190,577

Fair value hierarchy as at December 31, 2018

	Level 1	Level 2	Level 3	Total
<u>Financial assets at FVTPL</u>				
Derivative financial assets (not under hedge accounting)	\$ -	\$ 7,526	\$ -	\$ 7,526
<u>Financial assets at FVTOCI</u>				
Equity securities				
Domestic listed and emerging securities	\$ 6,174,768	\$ -	\$ -	\$ 6,174,768
Domestic unlisted securities	-	17,510	6,147	23,657
	\$ 6,174,768	\$ 17,510	\$ 6,147	\$ 6,198,425

b. Categories of financial instruments

Fair values of financial assets and liabilities were summarized as follows:

	December 31			
	2019		2018	
	Carrying Amount	Fair Value	Carrying Amount	Fair Value
<u>Financial assets</u>				
Measured at amortized cost				
Cash and cash equivalents	\$ 5,424,966	\$ 5,424,966	\$ 9,384,525	\$ 9,384,525
Accounts receivable (included related parties)	4,417,602	4,417,602	5,131,459	5,131,459
Other receivables	221,601	221,601	469,494	469,494
Refundable deposits (recorded in other non-current assets)	291,751	291,751	168,535	168,535
Financial assets at fair value through profit or loss	69,425	69,425	7,526	7,526
Financial assets at fair value through other comprehensive income (current and non-current)	7,190,577	7,190,577	6,198,425	6,198,425
<u>Financial liabilities</u>				
Measured at amortized cost				
Short-term borrowings	1,000,000	1,000,000	-	-
Notes and accounts payable (included related parties)	4,581,394	4,581,394	4,070,733	4,070,733
Payable on equipment and other payables	5,330,615	5,330,615	5,874,005	5,874,005
Bonds payable	9,931,746	9,931,746	9,919,779	9,919,779
Long-term borrowings (included current portion)	13,497,040	13,497,040	8,770,560	8,770,560
Guarantee deposits (recorded in other non-current liabilities)	1,810	1,810	40	40

c. Financial risk management objectives and policies

The Company's Corporate Treasury function provides services to the business, coordinates access to domestic and international financial markets, monitors and manages the financial risks relating to the operations of the Company through internal risk reports which analyze exposures by degree and magnitude of risks. These risks include market risk, credit risk and liquidity risk.

The use of financial derivatives was governed by the Company's policies approved by the board of directors, which provided written principles on foreign exchange risk, and use of financial derivatives. Compliance with policies and exposure limits was reviewed by the internal auditors on a continuous basis.

1) Market risk

The Company's activities expose it primarily to the financial risks of changes in foreign currency exchange rates and interest rates. The Company uses forward foreign exchange contracts to hedge the foreign currency risk on export.

There had been no change to the Company's exposure to market risks or the manner in which these risks were managed and measured.

a) Foreign currency risk

The Company uses forward foreign exchange contracts to hedge the exchange rate risk within approved policy parameters utilizing forward foreign exchange contracts.

The sensitivity analysis included only outstanding foreign currency denominated monetary items at the end of the reporting period and an increase in net income and equity if New Taiwan dollars strengthen by 1% against foreign currencies. For a 1% weakening of New Taiwan dollars against US dollars, there would be an increase in net income in the amounts of \$18,934 thousand and \$29,834 thousand for the years ended December 31, 2019 and 2018.

b) Interest rate risk

The Company's interest rate risk arises primarily from floating rate borrowings.

The carrying amount of the Company's financial liabilities with exposure to interest rates at the end of the reporting period were as follows:

	<b>December 31</b>	
	<b>2019</b>	<b>2018</b>
Cash flow interest rate risk		
Financial liabilities	\$ 13,497,040	\$ 8,770,560

The sensitivity analyses below were determined based on the Company's exposure to interest rates for fair value of variable-rate derivatives instruments at the end of the reporting period. If interest rates had been higher by one percentage point, the Company's cash flows for the years ended December 31, 2019 and 2018 would increase by \$134,970 thousand and \$87,706 thousand, respectively.

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 adopted a policy of only dealing with creditworthy counterparties and obtaining sufficient collateral, where appropriate, as a means of mitigating the risk of financial loss from defaults. In order to minimize credit risk, the management of the Company has delegated a team responsible for determination of credit limits, credit approvals and other monitoring procedures to ensure that follow-up action is taken to recover overdue receivables. In addition, the Company reviews the recoverable amount of each individual accounts receivable at the end of the reporting period to ensure that adequate impairment losses are recognized for irrecoverable amounts. In this regard, the directors of the Company consider that the Company's credit risk was significantly reduced.

### 3) Liquidity risk

The Company has enough operating capital to comply with loan covenants; liquidity risk is low.

The Company's non-derivative financial liabilities and their agreed repayment period were as follows:

	<b>December 31, 2019</b>			
	<b>Within 1 Year</b>	<b>1-2 Years</b>	<b>Over 2 Years</b>	<b>Total</b>
Non-interest bearing	\$ 9,912,009	\$ 1,810	\$ -	\$ 9,913,819
Lease liabilities	115,353	115,030	1,983,279	2,213,662
Variable interest rate liabilities	4,123,520	5,123,520	4,250,000	13,497,040
Fixed interest rate liabilities	<u>1,000,000</u>	<u>-</u>	<u>10,000,000</u>	<u>11,000,000</u>
	<u>\$ 15,150,882</u>	<u>\$ 5,240,360</u>	<u>\$ 16,233,279</u>	<u>\$ 36,624,521</u>

Additional information about the maturity analysis for lease liabilities:

	<b>Less than 2 Years</b>	<b>2-5 Years</b>	<b>5-10 Years</b>	<b>10-15 Years</b>	<b>Over 15 Years</b>
Lease liabilities	<u>\$ 230,383</u>	<u>\$ 319,471</u>	<u>\$ 521,091</u>	<u>\$ 521,091</u>	<u>\$ 621,626</u>

	<b>December 31, 2018</b>			
	<b>Within 1 Year</b>	<b>1-2 Years</b>	<b>Over 2 Years</b>	<b>Total</b>
Non-interest bearing	\$ 9,944,738	\$ 40	\$ -	\$ 9,944,778
Variable interest rate liabilities	4,563,520	1,883,520	2,323,520	8,770,560
Fixed interest rate liabilities	<u>-</u>	<u>-</u>	<u>10,000,000</u>	<u>10,000,000</u>
	<u>\$ 14,508,258</u>	<u>\$ 1,883,560</u>	<u>\$ 12,323,520</u>	<u>\$ 28,715,338</u>

## 26. RELATED PARTY TRANSACTIONS

- a. The names and relationships of related parties are as follows:

<b>Related Party</b>	<b>Relationship with the Company</b>
Walsin Lihwa Corporation	Investor that exercises significant influence over the Company
WEHK	Subsidiary
PCI	Subsidiary
MMDC	Subsidiary (October 1, 2019 as the date of short-form merger date with the Company)
WTL	Subsidiary
TDC	Subsidiary (June 10, 2019 as the date of liquidation)
Callisto	Subsidiary
Winbond Electronics (Suzhou) Limited ("WECN")	Subsidiary
Winbond Electronics Corporation America ("WECA")	Subsidiary

(Continued)

<u>Related Party</u>	<u>Relationship with the Company</u>
Winbond Electronics Corporation Japan (“WECJ”)	Subsidiary
GTD	Subsidiary
NTC	Subsidiary
Chin Xin Investment Co., Ltd.	Associate
Hwa Bao Botanic Conservation Corp.	Associate
Walton Advanced Engineering Inc.	Related party in substance
Walton Advanced Engineering (Suzhou) Inc.	Related party in substance
HannStar Display Corporation	Related party in substance
Walsin Technology Corporation	Related party in substance
Harbinger III Venture Capital Corp.	Related party in substance

(Concluded)

b. Operating activities

	<u>For the Year Ended December 31</u>	
	<u>2019</u>	<u>2018</u>
1) Operating revenue		
Subsidiaries		
WEHK	\$ 8,417,086	\$ 7,485,855
WECJ	4,607,248	4,864,471
Others	<u>2,191,261</u>	<u>2,480,734</u>
	<u>\$ 15,215,595</u>	<u>\$ 14,831,060</u>
2) Manufacturing expenses		
Related party in substance		
Walton Advanced Engineering Inc.	\$ 2,957,727	\$ 2,678,821
Others	<u>562,033</u>	<u>566,350</u>
	<u>\$ 3,519,760</u>	<u>\$ 3,245,171</u>
3) Selling expenses		
Subsidiaries		
WECA	\$ 184,945	\$ 182,790
Others	<u>4,424</u>	<u>4,507</u>
	<u>\$ 189,369</u>	<u>\$ 187,297</u>
4) General and administrative expenses		
Investor that exercises significant influence over the Company	\$ 11,467	\$ 10,078
Subsidiaries	4,223	-
Related party in substance	<u>38</u>	<u>29</u>
	<u>\$ 15,728</u>	<u>\$ 10,107</u>

(Continued)



		<b>For the Year Ended December 31</b>	
		<b>2019</b>	<b>2018</b>
5) Research and development expenses			
Subsidiaries		<u>\$ 1,142,886</u>	<u>\$ 1,135,332</u>
6) Dividend income			
Investor that exercises significant influence over the Company			
Walsin Lihwa Corporation		\$ 252,000	\$ 200,000
Related party in substance			
Walsin Technology Corporation		160,051	39,384
HannStar Display Corporation		33,020	50,034
Walton Advanced Engineering Inc.		15,019	42,553
Others		<u>1,184</u>	<u>10,213</u>
		<u>\$ 461,274</u>	<u>\$ 342,184</u>
7) Other income			
Associate		\$ 72	\$ -
Subsidiaries			
NTC		7,408	7,818
Others		297	396
Related party in substance		<u>14,968</u>	<u>2,690</u>
		<u>\$ 22,745</u>	<u>\$ 10,904</u>
			(Concluded)
		<b>December 31</b>	
		<b>2019</b>	<b>2018</b>
8) Accounts receivable due from related parties			
Subsidiaries			
WEHK		\$ 984,183	\$ 846,501
WECJ		425,678	267,477
Others		<u>67,452</u>	<u>99,235</u>
		<u>\$ 1,477,313</u>	<u>\$ 1,213,213</u>
9) Accounts payable to related parties			
Related party in substance			
Walton Advanced Engineering Inc.		\$ 773,107	\$ 473,453
Others		<u>138,422</u>	<u>156,228</u>
		<u>\$ 911,529</u>	<u>\$ 629,681</u>
			(Continued)

	December 31 2019	2018
10) Other receivables and other current assets		
Subsidiaries		
PCI	\$ -	\$ 277,470
Others	18,710	3,071
Investor that exercises significant influence over the Company	<u>-</u>	<u>209</u>
	<u>\$ 18,710</u>	<u>\$ 280,750</u>
11) Other payables		
Subsidiaries	\$ 240,135	\$ 245,495
Related party in substance	34,908	35,745
Investor that exercises significant influence over the Company	<u>1,117</u>	<u>1,862</u>
	<u>\$ 276,160</u>	<u>\$ 283,102</u>
12) Refundable deposits paid (recorded as “other non-current assets”)		
Subsidiaries	\$ 545	\$ 545
Investor that exercises significant influence over the Company	<u>203</u>	<u>203</u>
	<u>\$ 748</u>	<u>\$ 748</u>
13) Refundable deposits received (recorded as “other non-current liabilities”)		
Subsidiaries	<u>\$ 1,780</u>	<u>\$ -</u>
14) Acquisitions of property, plant and equipment		
Subsidiaries	<u>\$ 1,670</u>	<u>\$ -</u>
		(Concluded)

The Company’s transactions with the related party were conducted under normal terms.

c. Lease arrangements

	December 31, 2019
Lease liabilities	
Subsidiaries	\$ 11,254
Investor that exercises significant influence over the Company	<u>5,161</u>
	<u>\$ 16,415</u>

**For the Year  
Ended  
December 31,  
2019**

Interest expense	
Subsidiaries	\$ 204
Investor that exercises significant influence over the Company	<u>99</u>
	<u>\$ 303</u>

d. Subleasing

Refer to Note 14.

e. Compensation of key management personnel

	<b>For the Year Ended December 31 2019</b>	<b>2018</b>
Short-term employment benefits	\$ 140,654	\$ 237,990
Post-employment benefits	<u>685</u>	<u>21,485</u>
	<u>\$ 141,339</u>	<u>\$ 259,475</u>

The remuneration of directors and key management personnel was determined by the remuneration committee having regard to the performance of individuals and market trends. And the remuneration was resolved by the board of directors.

## 27. PLEDGED AND COLLATERALIZED ASSETS

Refer to Notes 6 and 12 to the financial statements.

## 28. SIGNIFICANT CONTINGENT LIABILITIES AND UNRECOGNIZED COMMITMENTS

- a. Amounts available under unused letters of credit as of December 31, 2019 and 2018 were approximately US\$6,592 thousand and US\$14,708 thousand, JPY436,580 thousand and JPY2,483,939 thousand, and EUR0 thousand and EUR122 thousand, respectively.
- b. Signed construction contract

	<b>Total Contract Price</b>	<b>Payment as of December 31, 2019</b>
TASA Construction Corporation	<u>\$ 8,530,699</u>	<u>\$ 6,103,853</u>

## 29. SIGNIFICANT ASSETS AND LIABILITIES DENOMINATED IN FOREIGN CURRENCIES

The following information was aggregated by the foreign currencies other than functional currencies of the Company entities and the exchange rates between foreign currencies and respective functional currencies were disclosed. The significant assets and liabilities denominated in foreign currencies were as follows:

	December 31					
	2019			2018		
	Foreign Currencies (In Thousands)	Exchange Rate	New Taiwan Dollars (In Thousands)	Foreign Currencies (In Thousands)	Exchange Rate	New Taiwan Dollars (In Thousands)
<u>Financial assets</u>						
Monetary items						
USD	\$ 169,151	29.98	\$ 5,071,147	\$ 193,353	30.715	\$ 5,938,826
EUR	564	33.59	18,957	1,392	35.20	49,006
JPY	1,600,445	0.276	441,723	1,780,210	0.2782	495,254
RMB	73,383	4.305	315,915	14,162	4.472	63,334
Non-monetary items						
USD	18,837	29.98	564,741	15,840	30.715	486,529
ILS	8,091	8.6652	70,113	6,796	8.1494	55,387
EUR	850	33.59	28,552	-	-	-
<u>Financial liabilities</u>						
Monetary items						
USD	105,995	29.98	3,177,737	96,221	30.715	2,955,419
EUR	2,526	33.59	84,854	3,358	35.20	118,201
JPY	1,574,340	0.276	434,518	3,120,742	0.2782	868,190
ILS	6,291	8.6652	54,516	2,295	8.1494	18,702

The significant realized and unrealized foreign exchange gains (losses) were as follows:

Foreign Currencies	For the Year Ended December 31	
	2019	2018
USD	\$ (116,593)	\$ 279,526

## 30. ADDITIONAL DISCLOSURE

- a. Following are the additional disclosures for material transactions and; b. investments required by the Securities and Futures Bureau for the Company:

1)	Financings provided	None
2)	Endorsement and guarantee provided	None
3)	Marketable securities held (excluding investments in subsidiaries and associates)	Table 1
4)	Marketable securities acquired and disposed of at costs or prices of at least NT\$300 million or 20% of the paid-in capital	Table 2
5)	Acquisition of individual real estate properties at costs of at least NT\$300 million or 20% of the paid-in capital	Table 3
6)	Disposal of individual real estate properties 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 of at least NT\$100 million or 20% of the paid-in capital	Table 4
8)	Receivables from related parties amounting to at least NT\$100 million or 20% of the paid-in capital	Table 5
9)	Information about the derivative financial instruments transaction	Note 7
10)	Names, locations, and related information of investees over which the Company exercises significant influence (excluding information on investment in mainland China)	Table 6

c. Information on investment in mainland China

1)	The name of the investee in mainland China, the main businesses and products, its issued capital, method of investment, information on inflow or outflow of capital, percentage of ownership, income (losses) of the investee, share of profits (losses) of investee, ending balance, amount received as dividends from the investee, and the limitation on investee.	Table 7
2)	Significant direct or indirect transactions with the investee, its prices and terms of payment, unrealized gain or loss, and other related information which is helpful to understand the impact of investment in mainland China on financial reports.	Table 7

**31. SEGMENT INFORMATION**

The Company has provided the financial information of the operating segments in the consolidated financial statements. These parent company only financial statements do not provide such information.

TABLE 1

## WINBOND ELECTRONICS CORPORATION

## MARKETABLE SECURITIES HELD

DECEMBER 31, 2019

(In Thousands of New Taiwan Dollars and Foreign Currencies)

Company Name	Type and Name of Marketable Securities	Relationship with the Holding Company	Financial Statement Account	December 31, 2019			Note
				Shares/Units	Carrying Amount	Percentage of Ownership (%)	
Winbond Electronics Corp. (WEC)	Shares Walsin Lihwa Corporation	The investee's chairman are relatives within the second degree of relationship of WEC's chairman. As WEC's corporate director, the investee held 22% ownership interest in WEC	Current financial assets at fair value through other comprehensive income	218,000,000	\$ 3,357,200	7	\$ 3,357,200
	Hannstar Display Corporation	The investee's chairman are relatives within the second degree of relationship of WEC's chairman.	"	110,067,210	890,443	4	890,443
	Walton Advanced Engineering Inc.	The investee chairman are relatives within the second degree of relationship of WEC's chairman. WEC as the investee's director.	"	50,062,641	583,230	10	583,230
	Walsin Technology Corporation	The investee's chairmans are relatives within the second degree of relationship of WEC's chairman.	"	9,800,117	2,342,228	2	2,342,228
	Shares His Chu Golf Country Club	None	Non-current financial assets at fair value through other comprehensive income	3	9,120	-	9,120
WECA	Linkou Golf Course	"	"	1	8,120	-	8,120
	Smart Catch International Co., Ltd.	"	"	4,000,000	-	16	-
	Harbinger III Venture Capital Corp.	WEC as the investee's supervisor	"	5,440	236	5	236
	Shares Everspin Technologies, Inc.	None	Current financial assets at fair value through other comprehensive income	332,834	USD 1,751	2	USD 1,751
	Funds JVP VIII, L.P.	None	Non-current financial assets at fair value through other comprehensive income	-	USD 4,356	7	USD 4,356
WECJ	Shares Nihon Computer Co., Ltd.	None	Non-current financial assets at fair value through other comprehensive income	10	JPY -	1	-
GLMTD	Shares TEGNA Electronics Private Limited	The held company as the investee's director	Non-current financial assets at fair value through other comprehensive income	3,001,000	INR 30,010	10	INR 30,010

(Continued)

Company Name	Type and Name of Marketable Securities	Relationship with the Holding Company	Financial Statement Account	December 31, 2019			Note
				Shares/Units	Carrying Amount	Percentage of Ownership (%)	
NTC	Shares Yu-Ji Venture Capital Co., Ltd. United Industrial Gases Co., Ltd. Brightek Optoelectronic Co., Ltd. Autotalks Ltd. - Preferred E. Share	The held company as the investee's director The held company as the investee's director None None	Non-current financial assets at fair value through other comprehensive income " " "	1,350,000	\$ 16,605	5	\$ 16,605
				8,800,000	440,000	4	440,000
				34,680	485	-	485
				3,932,816	599,600	8	599,600
SYI	Shares Nyquest Technology Co., Ltd.	The held company as the investee's director	Non-current financial assets at fair value through other comprehensive income	1,650,000	60,720	5	60,720

Note: Refer to Tables 6 and 7 for information of investment in subsidiaries, investments in associates and investment in Mainland China.

(Concluded)

TABLE 2

## WINBOND ELECTRONICS CORPORATION

MARKETABLE SECURITIES ACQUIRED AND DISPOSED OF AT COSTS OR PRICES OF AT LEAST NT\$300 MILLION OR 20% OF THE PAID-IN CAPITAL  
FOR THE YEAR ENDED DECEMBER 31, 2019  
(In Thousands of New Taiwan Dollars)

Company Name	Marketable Securities Type and Name	Financial Statement Account	Purpose of Transaction	Nature of Relationship	Beginning Balance		Acquisition		Disposal		Gain (Loss) on Disposal		Ending Balance	
					Shares/Units	Amount	Shares/Units	Amount	Shares/Units	Amount	Carrying Amount (Note 3)		Shares/Units	Amount
WEC	Shares NTC	Investments accounted for using equity method	Subscription of shares	Related party	126,620,087	\$ 2,256,830	50,379,913	\$ 2,588,607 (Note 1)	-	\$ -	\$ (316,550) (Note 2)	\$ -	177,000,000	\$ 4,528,887
NTC	Shares Autotalks Ltd. - Preferred E. Share	Non-current financial assets at fair value through other comprehensive income	Subscription of shares issued by Autotalks Ltd.	Non-related party	-	-	3,932,816	630,000	-	-	-	-	3,932,816	599,600 (Note 3)

Note 1: Include adjustment for equity method.

Note 2: Cash dividends.

Note 3: Include adjustments for change in value of financial assets at fair value through other comprehensive income.



TABLE 3

## WINBOND ELECTRONICS CORPORATION

ACQUISITION OF INDIVIDUAL REAL ESTATE AT COSTS OF AT LEAST NT\$300 MILLION OR 20% OF THE PAID-IN CAPITAL  
FOR THE YEAR ENDED DECEMBER 31, 2019  
(In Thousands of New Taiwan Dollars)

Company Name	Property	Event Date	Transaction Amount	Payment Term	Counterparty	Relationship	Information on Previous Title Transfer				Pricing Reference	Purpose of Acquisition	Other Terms
							Property Owner	Relationship	Transaction Date	Amount			
WEC	Buildings	2019.01.04 - 2019.12.23	\$ 4,872,879	Monthly settlement by the construction progress and acceptance	TASA Construction Corporation	None	N/A	N/A	N/A	N/A	Price comparison and price negotiation	Business purpose	None
	Buildings	2019.01.15 - 2019.11.21	553,992	Monthly settlement by the construction progress and acceptance	Continental Engineering Corporation	None	N/A	N/A	N/A	N/A	Price comparison and price negotiation	Business purpose	None

TABLE 4

## WINBOND ELECTRONICS CORPORATION

TOTAL PURCHASES FROM OR SALES TO RELATED PARTIES OF AT LEAST NT\$100 MILLION OR 20% OF THE PAID-IN CAPITAL  
FOR THE YEAR ENDED DECEMBER 31, 2019  
(In Thousands of New Taiwan Dollars and Foreign Currencies)

Company Name	Related Party	Relationship	Transaction Details				Abnormal Transaction		Notes/Accounts Payable or Receivable		Note
			Purchase/Sale	Amount	% of Total	Payment Terms	Unit Price	Payment Terms	Ending Balance	% to Total	
WEC	WEHK	Direct subsidiary with 100% ownership	Sales	\$ 8,417,086	22	Net 90 days from invoice date	N/A	N/A	\$ 984,183	22	
	WECJ	Indirect subsidiary with 100% ownership	Sales	4,607,248	12	Net 90 days from invoice date	N/A	N/A	425,678	10	
	WECN	Indirect subsidiary with 100% ownership	Sales	1,381,178	4	Net 90 days from invoice date	N/A	N/A	42,550	1	
	WECA	Indirect subsidiary with 100% ownership	Sales	677,958	2	Net 90 days from invoice date	N/A	N/A	-	-	
	NTC	Direct subsidiary with 62% ownership	Sales	132,125	-	Net 30 days from invoice date	N/A	N/A	24,726	1	
WEHK	WEC	Parent company	Purchases	USD 272,650	100	Net 90 days from invoice date	N/A	N/A	USD (32,776)	(100)	
WECJ	WEC	Parent company	Purchases	JPY 16,425,963	98	Net 90 days from invoice date	N/A	N/A	JPY (1,555,555)	(95)	
WECN	WEC	Parent company	Purchases	RMB 309,793	100	Net 90 days from invoice date	N/A	N/A	RMB (9,884)	(100)	
WECA	WEC	Parent company	Purchases	USD 22,292	100	Net 90 days from invoice date	N/A	N/A	-	-	
NTC	WEC	Parent company	Purchases	131,874	4	Net 30 days from invoice date	N/A	N/A	(24,535)	(2)	
	NTHK	Subsidiary	Sales	3,792,364	37	Net 90 days from invoice date	N/A	N/A	56,121	7	
	NTCA	Subsidiary	Sales	101,972	1	Net 90 days from invoice date	N/A	N/A	17,640	2	
	Nyquest Technology Co., Ltd.	Indirect 5% ownership through NTC's subsidiary	Sales	246,292	2	Net 45 days from invoice date	N/A	N/A	45,883	5	
NTHK	NTC	Parent company	Purchases	USD 122,713	100	Net 90 days from invoice date	N/A	N/A	USD (1,872)	(100)	
NTCA	NTC	Parent company	Purchases	USD 3,277	100	Net 90 days from invoice date	N/A	N/A	USD (588)	(100)	

TABLE 5

## WINBOND ELECTRONICS CORPORATION

## RECEIVABLES FROM RELATED PARTIES AMOUNTING TO AT LEAST NT\$100 MILLION OR 20% OF THE PAID-IN CAPITAL

DECEMBER 31, 2019

(In Thousands of New Taiwan Dollars)

Company Name	Related Party	Relationship	Ending Balance	Turnover Rate	Overdue		Amount Received in Subsequent Period	Allowance for Impairment Loss
					Amount	Action Taken		
WEC	WEHK WECJ	Direct subsidiary with 100% ownership Indirect subsidiary with 100% ownership	\$ 984,183 425,678	9.20 13.29	\$ - -	- -	\$ 410,422 -	\$ - -

TABLE 6

## WINBOND ELECTRONICS CORPORATION

NAMES, LOCATIONS, AND RELATED INFORMATION OF INVESTEE OVER WHICH THE COMPANY EXERCISES SIGNIFICANT INFLUENCE (EXCLUDING INFORMATION ON INVESTMENT IN MAINLAND CHINA)  
FOR THE YEAR ENDED DECEMBER 31, 2019  
(In Thousands of New Taiwan Dollars and Foreign Currencies)

Investor Company	Investee Company	Location	Main Businesses and Products	Original Investment Amount December 31, 2019	As of December 31, 2019	Carrying Amount	Net Income (Loss) of the Investee	Share of Profit (Loss)	Note
Winbond Electronics Corp.	Nuvoton Technology Corporation	Taiwan	Research, development, design, manufacture and marketing of Logic IC, 6 inch wafer product, test, and OEM	\$ 2,994,644	177,000,000	\$ 4,528,887	\$ 558,459	\$ 349,373	
	Winbond Int'l Corporation	British Virgin Islands	Investment holding	2,992,157	95,410,000	2,992,157	49,421	49,421	
	Landmark Group Holdings Ltd.	British Virgin Islands	Investment holding	168,755	5,343,000	186,126	48,422	48,422	(Note 1)
	Mobile Magic Design Corporation	Taiwan	Design, development and marketing of Pseudo SRAM	-	-	409,747	7,848	7,848	
	Winbond Electronics (HK) Limited	Hong Kong	Sales of semiconductor and investment holding	278,158	71,150,000	278,158	106,518	106,518	
	Pine Capital Investment Limited	Hong Kong	Investment holding	2,967	780,000	2,967	967	967	
	Winbond Technology Ltd.	Israel	Design and service of semiconductor	21,242	100,000	21,242	16,739	16,739	
	Chin Xin Investment Co., Ltd.	Taiwan	Investment holding	1,874,825	182,840,999	1,874,825	639,834	241,042	
	Hwa Bao Botanic Conservation Corp.	Taiwan	Agriculture and forestry botanic conservation	750	75,000	715	(56)	(8)	
	Techdesign Corporation	Taiwan	Electronic commerce and product marketing	50,000	-	-	(1,530)	(1,285)	(Note 2)
	Callisto Holding Limited	Hong Kong	Electronic commerce and investment holding	156,292	40,000,000	156,292	(10,586)	(10,586)	(Note 3)
	Great Target Development Ltd.	Seychelles	Investment Holding	155,367	4,460,000	147,019	250	118	(Note 4)
	Winbond Electronics Germany GmbH	Germany	Sales and service of semiconductor	28,679	850,000	28,551	-	-	
Winbond Int'l Corporation	Winbond Electronics Corporation America	United States of America	Design, sales and after-sales service of semiconductor	1,683,207	3,067	1,683,207	49,528	49,528	
Landmark Group Holdings Ltd.	Winbond Electronics Corporation Japan	Yokohama, Japan	Research, development, sales and after-sales service of semiconductor	112,644	2,970	112,644	48,109	48,109	
Callisto Holding Limited	Peaceful River Corp.	British Virgin Islands	Investment holding	20,044	5,660,000	21,789	2,204	2,204	(Note 5)
	Callisto Technology Limited	Hong Kong	Electronic commerce and investment holding	30,895	-	-	165	165	(Note 6)
				USD 1,000	1,000,000	USD 1,005	5	5	
Great Target Development Ltd.	GLMTD Technology Private Limited	India	Sales and service of semiconductor	135,415	27,998,400	117,284	285	285	(Note 3)
Nuvoton Technology Corporation	Nuvoton Electronics Technology (H.K.) Limited	Hong Kong	Sales of semiconductor	427,092	107,400,000	427,092	21,929	21,929	
	Pigeon Creek Holding Co., Ltd.	British Virgin Islands	Investment holding	-	-	459,960	-	-	
	Marketplace Management Limited	British Virgin Islands	Investment holding	273,418	8,842,789	271,798	951	951	(Note 7)
	Nuvoton Investment Holding Ltd.	British Virgin Islands	Investment holding	590,953	17,960,000	574,296	38,840	38,840	
	Song Yong Investment Corporation	Taiwan	Investment holding	38,500	3,850,000	38,500	3,632	3,632	
	Nuvoton Technology India Private Limited	India	Design, sales and after-sales service of semiconductor	30,211	600,000	30,211	1,411	1,411	
	Nuvoton Technology Corp. America	United States of America	Design, sales and after-sales service of semiconductor	190,862	190,862	190,862	(1,287)	(1,287)	(Note 8)
Marketplace Management Limited	Goldbond LLC	United States of America	Investment holding	1,472,903	-	1,472,124	1,267	1,267	
Nuvoton Investment Holding Ltd.	Nuvoton Technology Israel Ltd.	Israel	Design and service of semiconductor	46,905	1,000	278,765	41,401	41,401	

Note 1: MMDC conducted a short-form merger with the Company on the effective date on October 1, 2019. The Company is the surviving company after the short-form merger.

Note 2: TDC filed for liquidation in June 2019 and the date of dissolution was set on June 10, 2019. The liquidation and legal procedures were not completed as of December 31, 2019.

Note 3: The Company purchased GTD in July 2019 and indirectly held GLMTD with 99.99% ownership.

Note 4: A capital was injected in WEG, which was incorporated in November 2019.

Note 5: PRC has a negative net carrying amount as of December 31, 2019, which is reclassified to other non-current liabilities.

Note 6: CTL was incorporated in October 2018, and Callisto has injected a capital in CTL in April 2019.

Note 7: PCH completed the liquidation and legal procedures in January 2019.

Note 8: Since PCH completed the liquidation, NTC directly owned 100% of interest in NTCA.

Note 9: Refer to Table 7 for information on investment in mainland China.

TABLE 7

**WINBOND ELECTRONICS CORPORATION**  
**INFORMATION ON INVESTMENT IN MAINLAND CHINA**  
**FOR THE YEAR ENDED DECEMBER 31, 2019**  
(In Thousands of New Taiwan Dollars and Foreign Dollars)

1. Information on any investee company in mainland China, main businesses and procedures, paid-in capital, method of investment, inward and outward remittance of funds, ownership percentage, investment income or loss, carrying amount of the investment at the end of the period and repatriations of investment income:

Investor Company	Investee Company	Main Businesses and Products	Paid-in Capital	Method of Investment	Remittance of Funds		Accumulated Outward Remittance for Investment from Taiwan as of December 31, 2019	Net Income of the Investee	% Ownership of Direct or Indirect Investment	Investment Gain (Note 1)	Carrying Amount as of December 31, 2019	Accumulated Repatriation of Investment Income as of December 31, 2019
					Outward	Inward						
WEC	Winbond Electronics (Suzhou) Limited	Design, development and marketing of VLSI integrated ICs	\$ 276,435 USD 9,000	Through investing in WEHK in the third area, which then invested in the investee in mainland China indirectly	\$ -	\$ -	\$ 276,435 USD 9,000	\$ 21,618	100	\$ 21,618	\$ 292,909	\$ 35,880
NTC	Nuvoton Electronics Technology (Shanghai) Limited	Provide project of sale in China and repair, test and consult of software	68,036 USD 2,000	Through investing in MML in the third area in British Virgin Islands, which then invested in the investee in mainland China indirectly	-	-	68,036 USD 2,000	1,623	62	999	48,554	-
	Winbond Electronics (Nanjing) Ltd.	Computer software service (except I.C. design)	16,429 USD 500	Through investing in MML in the third area in British Virgin Islands, which then invested in the investee in mainland China indirectly	-	-	16,429 USD 500	(1)	62	(1)	(1,053) (Note 2)	-
	Nuvoton Electronics Technology (Shenzhen) Limited	Computer software service (except I.C. design), wholesale business for computer, supplement and software	197,670 USD 6,000	Through investing in NTHK in the third area, which then invested in the investee in mainland China indirectly	-	-	197,670 USD 6,000	6,354	62	3,911	127,386	-

Note 1: Investment profit or loss for the year ended December 31, 2019 was recognized under the basis of the financial statements audited by the Company's auditor.

Note 2: WENJ has a negative net book value as of December 31, 2019, which is reclassified to other non-current liabilities.

2. Information on any investee company in mainland China, main businesses and procedures, paid-in capital, method of investment, inward and outward remittance of funds, ownership percentage, investment income or loss, carrying amount of the investment at the end of the period and repatriations of investment income:

Company	Accumulated Outward Remittance for Investment in Mainland China as of December 31, 2019	Investment Amounts Authorized by Investment Commission, MOEA	Upper Limit on the Amount of Investment Stipulated by Investment Commission, MOEA (Note 3)	
WEC	\$ 276,435 (USD9,000)	\$ 276,435 (USD9,000)	\$	36,612,373
NTC	282,135 (USD8,500)	282,135 (USD8,500)		4,435,219

Note 3: Upper limit on the amount of 60% of the investee's net book value.

3. Refer to Table 4 for significant transactions with the investee in mainland China directly and indirectly through investing in companies in the third area.
4. Handling endorsement, guarantee and collateral to the investee in mainland China directly and indirectly through investing in companies in the third area: None.
5. Financing of funds to investee in mainland China directly and indirectly through investing in companies in the third area: None.
6. Other transactions with significant influence on profit or loss for the period or financial performance: None.

## Financial Position, Financial Performance and Risk Analysis

### I. Financial position

Unit: NT\$1,000

Item\Year	2019 consolidated financial statements	2018 consolidated financial statements	Increase (decrease) amount	Change (%)
Current assets	37,557,286	37,528,246	29,040	0
Property, plant and equipment	56,977,114	52,484,183	4,492,931	9
Intangible assets	407,722	229,195	178,527	78
Other assets	9,862,778	5,800,840	4,061,938	70
Total Assets	104,804,900	96,042,464	8,762,436	9
Current liabilities	17,515,468	16,469,744	1,045,724	6
Non-current liabilities	23,432,245	15,681,623	7,750,622	49
Total liabilities	40,947,713	32,151,367	8,796,346	27
Equity attributable to owners of parent	61,020,622	62,444,371	(1,423,749)	(2)
Capital	39,800,002	39,800,002	-	-
Capital surplus	7,536,396	7,540,440	(4,044)	(0)
Retained earnings	8,793,542	11,621,286	(2,827,744)	(24)
Other interests	4,890,682	3,482,643	1,408,039	40
Non-controlling interests	2,836,565	1,446,726	1,389,839	96
Total equity	63,857,187	63,891,097	(33,910)	(0)
Reasons for changes exceeding 20%:				
1. Increase in intangible assets: Mainly due to increase in deferred technology assets.				
2. Increase in other assets: Mainly due to reorganization of "right-of-use assets" and acquisition of "financial assets at fair value through other comprehensive income" in accordance with IFRS 16.				
3. Increase in non-current liabilities: Mainly due to reorganization of lease liabilities in accordance with IFRS 16 and increase in long-term borrowing.				
4. Decrease in retained earnings: Mainly due to distribution of cash dividends.				
5. Increase in other interests: Mainly due to unrealized valuation gain on "financial assets at fair value through other comprehensive income" held by the Company and associates accounted for using equity method.				
6. Increase in non-controlling interests: Mainly due to increase in equity ownership of the subsidiaries.				

### II. Financial performance

Unit: NT\$1,000

Item\Year	2019 consolidated financial statements	2018 consolidated financial statements	Increase (decrease) amount	Change (%)
Net revenue	48,771,434	51,190,323	(2,418,889)	(5)
Operating cost	35,857,582	32,039,220	3,818,362	12
Gross profit	12,913,852	19,151,103	(6,237,251)	(33)
Operating Expenses	11,658,643	11,224,406	434,237	4
Operating profits	1,255,209	7,926,697	(6,671,488)	(84)
Non-operating income and expenses	497,308	468,203	29,105	6
Net income (loss) before tax	1,752,517	8,394,900	(6,642,383)	(79)
Income tax expense	275,230	667,242	(392,012)	(59)
Current period net profit	1,477,287	7,727,658	(6,250,371)	(81)
Other comprehensive income for the current period	1,294,756	(1,738,472)	3,033,228	174
Total comprehensive income for the current period	2,772,043	5,989,186	(3,217,143)	(54)

Reasons for changes exceeding 20%:

1.Decreases in gross profit, operating income, and net income before tax: Mainly due to falling average selling prices that led to decreases in gross profit, operating income, and net income before tax.

2.Decrease in income tax expense: Mainly due to decrease in profit that led to decrease in income tax expense.

3.Increase in other interests for the current period: Mainly due to unrealized valuation gain on “financial assets at fair value through other comprehensive income” held by the Company and associates accounted for using equity method.

4.Decrease in total comprehensive income for the current period: Mainly due to decrease in profit.

Sales forecast for the coming year and main reasons for the forecast of growth in sales:

Based on current industry outlook, future market demands and the Company's capacity, we project that the outputs of 12-inch wafer (equivalent) could reach 670,000 pcs in 2020.

### III. Cash flows

#### (I) Financial analysis of 2019 consolidated financial statements

Unit: NT\$1M

Cash balance at beginning of period (Dec. 31, 2018)	Net cash flow from operating activities (2019)	Net cash flow from investing and financing activities (2019)	Cash surplus (December 31, 2019)	Remedial measures for cash deficit	
				Investment plan	Investment plan
12,560	10,576	(11,668)	11,468	-	-
1.Analysis on the cash flow changes in 2019 consolidated financial statements:					
(1) Operating activities: Operating activities produced a net cash inflow of NT\$10.6 billion.					
(2) Investing activities: Purchase of production equipment produced a cash outflow of NT\$13.4 billion; equity investment and others produced a cash outflow of NT\$1.2 billion.					
(3) Financing activities: Loans produced an additional cash inflow of NT\$11.4 billion; loan repayment produced a cash outflow of NT\$5.1 billion; distribution of cash dividends and others produced a cash outflow of NT\$3.3 billion.					
2.Remedial action for cash deficit and liquidity analysis: N/A.					

#### (II) Analysis on consolidated cash flow for the coming year

Net cash inflow from operating activities of the Company and subsidiaries for the coming year is estimated at NT\$11.3 billion, and net cash outflow due to investing and financing activities is estimated at NT\$16.4 billion, which to be used mainly on capital expenditure, equity investment and distribution of cash dividends.

### IV. Effect of major capital expenditure on financial position and business operation

#### (I) Utilization of fund on major capital expenditure and sources of funds

Unit: NT\$1M

Project	Actual or expected source of funds	Actual or estimated completion date	Total funds needed	Actual or expected status of spending		
				2017	2018	2019
Expansion of fab facilities and capacity and process upgrade	Bank syndication loan, issuance of corporate bonds and operating profit	2019	45,078	15,164	16,714	13,160

#### (II) Anticipated benefit

Expansion of plant facilities and capacity, accelerated upgrade of process technology, and sustained market share.

### V. Investment policy in the past year, profit/loss analysis, improvement plan, and investment plan for the coming year

1.Investment policy: The Company makes investment in the hope to boost business performance in principle.

2. Investment profit or loss in recent years: The Company recognized NT\$809 million of gain on equity method investments in 2019 (NT\$241 million of gain on equity method investments in consolidated statements).
3. Investment plan for the next year: The Company will formulate an investment plan in view of operating needs of the Company and invested enterprises.

## VI. Risk management and evaluation

### (I) Impact of interest rate and exchange rate changes and inflation on Company's profit and response measures

#### 1. Interest rate change

The Company's interest rate risk is associated mainly with long-term floating rate loans borrowed to meet the operational needs of process upgrade or capacity expansion. At the time of financing, the Company has negotiated better rates based on then market conditions to reduce the impact brought about by interest rate fluctuation. The Company pay a fixed rate on the NTD-denominated corporate bonds issued, which are accounted at amortized cost and therefore will not affect cash flows or fair value during interest rate fluctuation.

The consolidated interest expense in 2019 amounted to NT\$123,777 thousand, accounting for 0.25% of 2019 consolidated revenue and 7.06% of 2019 consolidated net income before tax. Rate changes are not expected to produce much impact on Company operations. In the future, the Company will watch closely of interest rate movement and the impact on cash flows.

#### 2. Exchange rate change

The Company's exchange gain (loss) arises mainly from the foreign currency positions associated with its import/export business. The income/loss from foreign exchange transactions (including financial derivatives transactions) in 2019 amounted to NT\$73,518 thousand, representing 0.15% of 2019 consolidated revenue. The Company would hedge the exchange rate risk associated with the net position of its foreign-currency assets/liabilities in view of the exchange rate fluctuation. As of year-end 2019, the Company held USD 185,280 thousand and RMB 80,100 thousand of financial derivatives assets which are subject to exchange rate risk. The unrealized loss on those assets valued by fair value amounted to NT\$75,462 thousand, which is within controllable range. The Company will continue to adopt the following response actions for exchange rate risk:

- (1) Engage in financial derivatives transactions for the main purpose of hedging exchange rate risks, and choose financial derivative products to primarily hedge the risks associated with the Company's business operations. In the selection of trading counterparty, give primary consideration to credit risk to avoid loss arising from counterparty's failure to perform its contractual obligation. In addition, financial institutions with low credit risk and good relationship with the Company, and having the capability to provide the Company with professional information will be chosen as trading counterparties.
- (2) The Company keeps abreast of financial market information, predicts market trends, gets familiar with financial products and related regulations and trading techniques, and provides full and timely information to the management and relevant departments for reference.
- (3) The Company sets the limit of unrealized loss on all financial derivatives contracts to 20% of the contract values or 3% of stockholders' equity, whichever is lower. The Company's finance unit evaluates the Company's position on financial derivatives every month and produces a report therefor, which is submitted to the head of finance and senior management authorized by the Board of Directors for review in the hope to predict the risk of each every transaction and potential loss.

#### 3. Inflation

The inflation problem has not been serious in recent years and hence has had limited impact on the Company's profit.



(II) Policies of engaging in high-risk, high-leverage investments, lending to others, providing endorsement and guarantee, and derivatives transactions, profit/loss analysis, and future response measures

1. The Company does not engage in any high-risk, high-leverage investment. The Company's derivatives trading policy aims to minimize the risk of fair value fluctuation for assets and liabilities actually owned by the Company under the objective of economic hedge. Under this principle, all derivatives trading undertaken by the Company correspond to the real positions held by the Company. Any gain or loss resulting from derivative transactions and hedged positions during the period arises from difference in time of disposing a real position and the time a gain or loss on a derivative trading is realized. Such gain or loss is insignificant. Other than those derivatives transactions described above, the Company does not engage in other high-risk derivatives transactions and will continue to observe the principle of hedging only positions actually owned by the Company.
2. The Company does not extend loans to other companies or individuals.
3. The Company does not make endorsement/guarantee for other companies or individuals.

(III) Future R&D projects and estimated R&D expenditure

The Company's subsidiaries including Nuvoton Technology are expected to spend NT\$9.3 billion on R&D in the following directions in 2020:

1. DRAM

Specialty DRAM:

We will continue to develop medium-to-low density specialty DRAM products using 25nm shrink version process in computing, communication and consumer electronics, automotive and industrial electronics, and medical electronics. We will also continue to develop more advancing process technology.

Mobile DRAM:

We will continue to develop medium to low capacity as well as low power consumption, high bandwidth and better data transmission rate mobile DRAM for applications principally in cell phones, tablets, low power consumption mobile devices, wearable devices, IoT, automotive and industrial electronics.

2. Code Storage Flash Memory

We will continue to follow the 4xnm process to produce safe, high performance, low power consumption code storage flash memory products with high added value for applications in PCs and peripherals, mobile handheld devices and peripheral modules, network communications products, IoT, consumer electronics, automotive and industrial electronics, medical electronics, household appliance modules, and information security, etc. We will also continue to develop more advancing process technology.

3. Logic IC

The R&D of logic ICs will focus on more advanced process platform, low voltage, low power consumption, secure and high speed CPU core and special IP technology, while strengthening IC's noise cancellation capability, low-temp working and high-temp resistance and ESD capability, and gradually making headway into the fields of energy efficient electrical goods and automotive electronics. We aim to attain the technical level of European, American and Japanese MCU suppliers and continue to expand our clientele base and applications and stay prepared for future changes in the industry. At the same time, we will continue to invest in the development of logic IC for use in cloud computing, smart handheld devices and PCs, and gear toward three directions - secure management, energy efficient and better user experience to expand the scope of products and applications on a solid existing basis.

(IV) Major changes in government policies and laws at home and broad and the impact on Company finance and business

The Company's operation policies comply with all applicable laws and regulations and the Company watches closely the important shifts in policies and laws at home and abroad and consult related experts for their opinion when necessary to take appropriate response measures. In the last year and up to the date of report, the Company

finance and business have not been affected by major changes in government policies and laws at home and abroad.

**(V) Impact of recent technological and market changes on the Company's finance and business, and response measures**

The Company watches closely for technological and market changes, and will, in view of the circumstances, assign staff or a project team to study and evaluate the impact of those changes on the Company's development, finance and business in the future as well as response measures. As of the date of report, there have not been significant technological changes that may produce material impact on the Company's finance and business.

**(VI) Impact of corporate image change on risk management and response measures**

Winbond believes in honesty and integrity in business practice. We emphasize honest dealing with customers and rigorously demand self-discipline and compliance with internal rules from employees. We are committed to information disclosure and financial transparency, and utilize all kinds of communication channels to help shareholders, institutional investors and the general public know more about Winbond and win their recognition and support for our management philosophy and directions. In addition, we have departments set up to take charge of investor relations, employee relationship, internal audit, risk management, quality management, and customer service. Those departments work closely with related business units to unite the resources and strength throughout the company. In case of any contingency, the Company's senior officer will act as the convenor and promptly set up a crisis response team to quickly address the crisis, and prepare readiness plans to prevent and control all kinds of latent risks. As of the date of report, the Company is free of corporate image change event that calls for prompt actions in crisis management.

**(VII) Expected benefits and potential risks of merger and acquisition**

The company's subsidiary Nuvoton Technology Corporation will acquire 100% shares of Panasonic Semiconductor Solutions., Ltd. (the semiconductor business of Panasonic), certain operating assets used in the semiconductor business, including equipment and inventories, of Panasonic Semiconductor (Suzhou) Co., Ltd, and assets, liabilities and contracts related to predefined specific business of Panasonic Industrial Devices Semiconductor Asia in an all-cash transaction. This transaction will be closed by June 2020, and the required regulatory approvals and consents, as well as all other approvals and consents in the relevant jurisdictions, shall be obtained. The deal is expected to increase our presence in the global semiconductor industry and our long-term competitiveness through the increasing scale of our company's semiconductor business, broadening our distribution channels and customers, and strengthening our technology platform via deeper R&D resources and a broader intellectual property portfolio.

**(VIII) Expected benefits and potential risks of capacity expansion**

All undertakings of expansion and construction of new-generation fab have had feasibility evaluation done by relevant professional teams before the project is proceeded. The purpose of fab expansion is to enhance the process technology and reduce production costs so as to fend off market competition and make headway into end-market applications. In light of the high market volatility of the memory industry, we will watch closely the market movement and supply-demand situation. We will take a prudent approach to capacity allocation, and opt for a diversity of optimal product mixes to keep our production plans flexible. We will also adopt advanced process to optimize the cost structure in the efforts to minimize the risk associated with market volatility. Financially, we will plan our future expansion and the necessary capital expenditure and funds in a prudent manner. We will also draw up sound business plans to lower the risk of incurring heavy debt. We believe we will have sufficient profit and cash flows to meet the additional investment needs and repayment obligations. Our technical team consists of wafer fabrication experts and IC design experts with dozens of years of experience in related fields. We also bring in advanced processes from abroad and embark on R&D with our own technology. The switch to high-end process is expected to improve our cost control capability and augment the possibility of product expansion. To sum up, Winbond will endeavor in fending off the risk of market volatility from the aspects of product, finance and technology, and in the process, maximize our profitability.

**(IX) Risks associated with over-concentration in purchase or sale and response measures**

Purchasing from a sole supplier carries the risk of over-concentration that the Company may not receive timely delivery when the supplier's plant has an accident or the supplier has financial or quality problems. The Company has multiple sources and qualified suppliers for all of its main materials to ensure supply stability.

Concentration in sales was a result of optimization of customer structure and long-term strategic cooperation. The Company has credit management and internal control and audit systems in place, and adopts computerized operations for sales, and hence does not run the risk of over-concentration in sales.

**(X) Impact of mass transfer of equity by or change of directors or shareholders holding more than 10% interests on the Company, associated risks and response measures**

In the last year and up to the date of report, the Company directors and Walsin Lihwa Corp., a shareholder holding more than 10% interests on the Company did not transfer their equity.

**(XI) Impact of change of management rights on the Company, associated risk and response measures**

The Company is free of the aforementioned situation in recent years up to the date of report.

**(XII) Material litigious or non-litigious events**

1. Concluded or pending litigious, non-litigious or administrative litigation event as of the date of report: None

2. The outcome of concluded or pending litigious, non-litigious, or administrative litigation events involving the director, president, de facto responsible person, major shareholders holding more than 10% of shares, or subsidiary of the Company that may have material impact on shareholders' equity or stock price:

Microchip Technology Inc., a publicly listed corporation in the U.S., filed a lawsuit against a Winbond subsidiary Nuvoton Technology and its North America subsidiary for infringing on six of Microchip Technology's patents. The civil complaint filed was served in January 2019. The case was later transferred to the United States District Court for the Northern District of California. Both Nuvoton Technology and its North America subsidiary had filed a statement of defense. The parties reached a settlement in March 2020, and Microchip agreed to withdraw the lawsuit.

**(XIII) Risk management of organization framework**

The Company's risk management tasks are dispersed among different functions inside the Company. The Company has established sound internal management guidelines and operating procedures, and has developed comprehensive plans and processes for risk aversion, loss prevention and crisis management. In addition, the Company's management keeps continuous watch over changes in the macroeconomic environment that might affect the Company business and operations, and has assigned staff to make planning and formulate response actions against all kinds of contingencies to reduce operational uncertainties to the minimum.

**(XIV) Other significant risks and response measures**

**1. Information security policy**

The Company has established an "information security policy" and "instructions for Technology and Classified Information Management" to protect classified information of the Company, including business secrets and intellectual properties to make sure customer privacy is safeguarded. We sign a confidentiality agreement with all of our suppliers and customers to protect the classified information of both parties and prevent the inadvertent disclosure of sensitive information. In addition, we conduct annual internal audit in accordance with the internal control system for information security operation.

**2. Information security management**

In reference to the standards and best practices recommended by ISO/IEC 27001/27002, we have set up an information security organization that holds regularly information security management meetings to discuss all kinds of information security issues and events, and carry out improvement projects.

For important product data, we continue to strengthen access control and monitoring, implement information system access authority management and safekeep records to strictly control personnel entry and egress as well as data access. We impose disciplinary action and penalty against employees and vendors who breach data security rules to protect internal data against unauthorized access or alternation and prevent theft or leakage of trade secrets and intellectual properties.

In addition, the design & development, product, delivery and related operating environment of our secure memory products are Common Criteria EAL 5+ certified. It means Winbond's controls over the information security of products meet the requirements of Common Criteria, and Winbond manufactures trusted secure products that meet international standards and protect customer information and assets.

### 3. Assessment of information security and cybersecurity risks

Regarding information security risk assessment and countermeasures, on the matters of cyber attack and data breach, we have adopted a defense in depth structure and constructed a network and computer security protection system to control and maintain the normal functions of production, ERP and other important systems. The security protection system includes new-generation firewall/intrusion detection/intrusion prevention systems as well as security information and event management system (SIEM) to shore up our information security and protection capabilities. Meanwhile, through annual system audits, backup and restore, offsite redundancy, and cyber security emergency response drills, we become more familiar with all operating systems, and examine cyber security rules and procedures in order to ensure each information security mechanism is adequate and effective. All employees receive training every year to raise awareness of cyber security. Cyber security bulletins are also put in place to ensure all employees work together to safeguard the company's information assets.

Nevertheless, IT technologies are evolving constantly, and despite our efforts in reinforcing our cyber defense, we may still be exposed to risks and effects of new technologies. It would be impossible to guarantee complete safety from third party attack and data theft. There may also be attempts to steal our trade secrets, intellectual properties and sensitive information, and cause data breach. Because of these attacks, the Company may need to compensate customers for their losses or implement costly remedies or improvement actions. The Company may also be exposed to significant legal liabilities arising from or related to legal proceedings or regulatory investigations associated with leakage of customer or third party information.

In addition, the Company needs to share Company information with certain third-party service providers to enable them to provide relevant services. While we require all third-party service providers to comply with the confidentiality requirements in the service agreements with them, there is no assurance that every service provider will fulfill or observe such obligations. The systems, equipment and/or offsite cloud computing networks maintained by the service providers and/or their contractors are also exposed to the risk of cyber attacks. When those systems, equipment or services are under attack, if the Company or the service providers are not able to timely resolve the problems caused by such cyber attack, or ensure the accuracy and availability of the Company data, the Company's commitments to its customers and other stakeholders may be materially impaired and the Company's operations, financial condition and reputation may also be materially and adversely affected as a result.

### 4. The impact of major information security incidents and response measures

In 2019 and up to the date of report, the Company did not discover any information security incident that has caused or may produce materially adverse effect on Company business and operations.

## VII. Other important events:

### Industry-specific key performance indicator

Performance indicator	2019
Output of 12-inch wafer	583,633 pcs
Average in-line yield	99.39 %

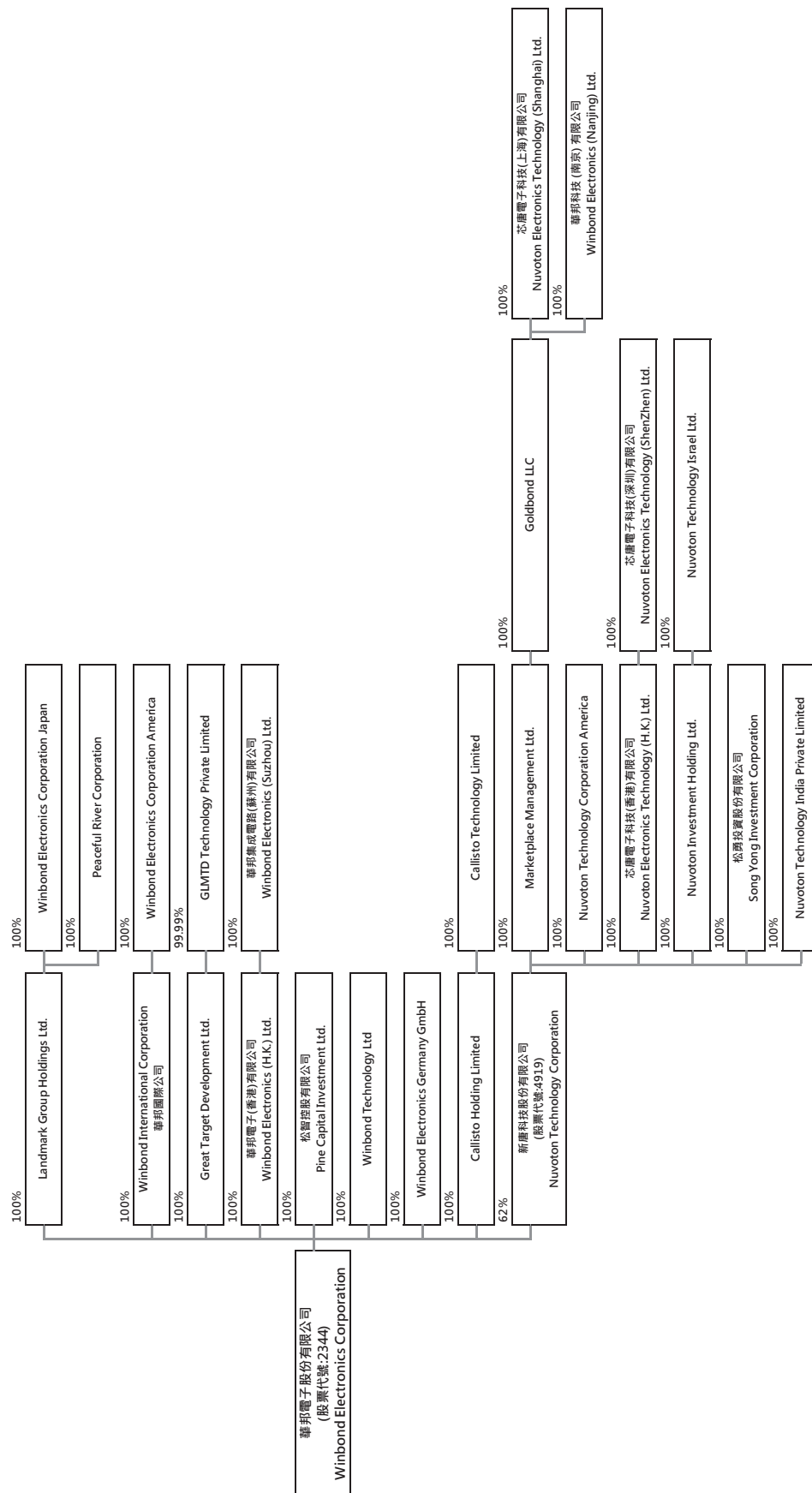
## Important Notice

### I. Profiles on affiliates and subsidiaries

#### A. Consolidated Business Report

##### 1. Corporate Affiliation Chart

December 31, 2019



## 2. Profile of individual Affiliates

December 31, 2019 ; Unit : NT\$1,000

Name of the Enterprise	Date of Incorporation	Address	Paid-in capital	Main business and products
Winbond Electronics Corporation	1987.09.29	No. 8, Keya 1st Rd., Daya Dist., Taichung City 428, Taiwan, R.O.C.	TWD 39,800,002	Research, development, production, and sale of semiconductor parts and components used in integrated circuits and other system products
Landmark Group Holdings Ltd.	2005.07.25	Palm Grove House, P.O.Box 438, Road Town, Tortola, British Virgin Islands	USD 5,343	Investment
Winbond Electronics Corporation Japan	2001.01.05	Shin-Yokohama Square Bldg. 9F 2-3-12 Shin-Yokohama, Kouhoku-ku, Yokohama, Kanagawa, Japan 222-0033	JPY 148,500	Research, development, and sales of semiconductor parts and components, and after-sale service
Peaceful River Corporation	1997.03.12	Flemming House, Wickhams Cay, P.O. Box 662, Road Town, Tortola, British Virgin Islands	USD 5,660	Investment
Winbond International Corporation	1995.08.28	Flemming House, Wickhams Cay, P.O. Box 662, Road Town, Tortola, British Virgin Islands	USD 95,410	Investment
Winbond Electronics Corporation America	1998.07.01	32 Lookerman Square, suite L-100, Dover, Kent 19904, Delaware	USD 58,917	Design, sales and service of semiconductor parts and components
Great Target Development Ltd	2017.05.30	No. 4, Franky Building, Providence Industrial Estate, Mahe, Seychelles.	USD 4,460	Investment
GLMTD Technology Private Limited	2017.08.07	A-4, Phase-II, Noida, Gautam Buddha Nagar, Uttar Pradesh 201305, India	INR 280,000	Sales and service of semiconductor parts and components
Winbond Electronics (H.K.) Ltd.	2008.06.13	Unit 9-11, 22F, Millennium City 2, No 378 Kwun Tong Road, Kowloon, Hong Kong	HKD 71,150	Investment, Sales and service of semiconductor parts and components
Winbond Electronics (Suzhou) Ltd.	2011.06.21	Rm1206, 12 <sup>th</sup> Floor, No.505, 光明 Rd., Huaqiao Town, Kunshan City, Jiangsu Province, China	USD 9,000	Research, design, development and sales of integrated circuits and equipment, and after-sale service
Pine Capital Investment Ltd.	2011.01.12	Unit 9-11, 22F, Millennium City 2, No 378 Kwun Tong Road, Kowloon, Hong Kong	HKD 780	Investment
Winbond Technology Ltd	2013.07.31	1 Abba Eban Ave, Building B, First Floor Herzliya: 4672519, Israel	ILS 1	Design and service of semiconductor components
Winbond Electronics Germany GmbH	2019.11.29	Pacellstrasse 8, 80333 Munich, Germany	EUR 850	Sales and service of semiconductor parts and components
Callisto Holding Limited	2018.05.04	Unit 9-11, 22F, Millennium City 2, No 378 Kwun Tong Road, Kowloon, Hong Kong	HKD 40,000	E-commerce and Investment
Callisto Technology Limited	2018.10.23	Unit 9-11, 22F, Millennium City 2, No 378 Kwun Tong Road, Kowloon, Hong Kong	USD1,000	E-commerce and Investment
Nuvoton Technology Corp.	2008.04.09	No.4, Yan Hsin 3 <sup>rd</sup> Rd., Hsinchu Science and Industrial Park	TWD 2,875,544	Research, design, development, manufacturing and sales of logic IC and 6"Fab production, testing and OEM
Marketplace Management Limited	2000.07.28	P.O.Box 957, Offshore Incorporations Centre, Road Town, Tortola, British Virgin Islands	USD8,843	Investment
Goldbond LLC	2000.09.22	1912 Capitol Ave, Cheyenne, WY 82001	USD44,752	Investment
Nuvoton Electronics Technology (Shanghai) Ltd.	2001.03.30	Rm2701, 27F, No.2299, Yen An W. Rd., Shanghai, China	RMB16,555	Provides repair and maintenance, testing and technology consultation service for products sold in Mainland China and related software
Winbond Electronics (Nanjing) Ltd.	2005.09.21	Suite 413-40, Gao Xing Technology Industrial Development Zone Office Building, Nanjing, China	RMB4,046	Provides computer Software services (excluding IC Design)
Nuvoton Technology Corporation America	2008.05.01	251 Little Falls Drive, Wilmington, DE 19808, Delaware	USD6,050	Design, sales and service of semiconductor parts and components
Nuvoton Electronics Technology (H.K.) Ltd.	1989.04.04	Unit 9-11, 22F, Millennium City 2, No 378 Kwun Tong Road, Kowloon, Hong Kong	HKD107,400	Sales and service of semiconductor parts and components

Name of the Enterprise	Date of Incorporation	Address	Paid-in capital	Main business and products
Nuvoton Electronics Technology (Shenzhen) Ltd.	2007.02.16	Rm801, 8F Microprofit Building, Gaoxinnan 6 <sup>TH</sup> Rd., High-Tech Industrial Park, Nanshan Dist., Shenzhen, China	RMB46,434	Provides computer software services (excluding IC design), computer and peripheral equipment and software wholesale
Nuvoton Investment Holding Ltd.	2005.03.21	3rd Floor, Omar Hodge Building, Wickhams Cay I, P.O. Box 362, Road Town, Tortola, British Virgin Islands	USD17,960	Investment
Nuvoton Technology Israel Ltd.	2005.03.22	8 Hasadnaot Street, Herzliya B, 4672835 Israel	ILS1	Design and service of semiconductor components
Song Yong Investment Corporation	2014.04.09	3F, No.192, Jingye 1 <sup>st</sup> Rd., Zhongshan Dist., Taipei City 104, Taiwan	TWD 38,500	Investment
Nuvoton Technology India Private Limited	2014.09.26	PS22-23, Bridge+, Unit No. 02-02 to 15, 2nd Floor, Ascendas Park Square Mall, Whitefield Road, ITPB, Bengaluru, 560066	INR60,000	Design, sales and service of semiconductor parts and components

3. Profiles on shareholders deemed to have dominant-subordinate relations: None

4. Profiles of Directors, Supervisors and Presidents of Affiliates and Subsidiaries

December 31, 2019 ; Unit : Share

Name of Enterprise	Title	Name or Representative	Shares held	
			Shares	%
Winbond Electronics Corporation	Chairman	Arthur Yu-Cheng Chiao	63,472,995	2%
	Vice Chairman	Yuan-Mow Su	801,279	0%
	Director	Yung Chin	11,778,797	0%
	Independent director	Francis Tsai	-	-
	Independent director	Allen Hsu	-	-
	Independent director	Jerry Hsu	-	-
	Independent director	Stephen T. Tso	-	-
	Director	Wei-Shin Ma	-	-
	Director	Chih-Chen Lin	-	-
	Director	Sophi Pan (Representative of Walsin Lihwa Corporation)	883,848,423 (Note 1)	22%
	President	Tung-Yi Chan	901,000	0%
Landmark Group Holdings Ltd.	Director	Winbond Electronics Corp. Representative - Arthur Yu-Cheng Chiao	5,343,000 (Note 1)	100%
	Director	Winbond Electronics Corp. Representative - Tung-Yi Chan		
	Director	Winbond Electronics Corp. Representative - Hsiang-Yun Fan		
Winbond Electronics Corporation Japan	Director	Landmark Group Holdings Ltd. Representative – Tatsuo Okamoto	2,970 (Note 1)	100%
	Director	Landmark Group Holdings Ltd. Representative - Tung-Yi Chan		
	Director	Landmark Group Holdings Ltd. Representative –Wen-Chang Hung		
	Director	Landmark Group Holdings Ltd. Representative –Jessica Huang		
	Director	Landmark Group Holdings Ltd. Representative - Hsiang-Yun Fan		
	Supervisor	Landmark Group Holdings Ltd. Representative – Yung Chin		
	President	Tatsuo Okamoto	-	-
Peaceful River Corporation	Director	Landmark Group Holdings Ltd. Representative - Arthur Yu-Cheng	5,660,000 (Note 1)	100%
	Director	Landmark Group Holdings Ltd. Representative - Tung-Yi Chan		
	Director	Landmark Group Holdings Ltd. Representative – Yung Chin		
Winbond International Corporation	Director	Winbond Electronics Corp. Representative - Arthur Yu-Cheng Chiao	95,410,000 (Note 1)	100%
	Director	Winbond Electronics Corp. Representative - Tung-Yi Chan		
	Director	Winbond Electronics Corp. Representative - Hsiang-Yun Fan		



Name of Enterprise	Title	Name or Representative	Shares held	
			Shares	%
Winbond Electronics Corporation America	Chairman	Winbond International Corporation Representative - Yuan-Mow Su	3,067 (Note 1)	100%
	Director	Winbond International Corporation Representative - Arthur Yu-Cheng		
	Director	Winbond International Corporation Representative - Tung-Yi Chan		
	Director	Winbond International Corporation Representative - Yung Chin		
	Director	Winbond International Corporation Representative - Hsiang-Yun Fan		
	Director	Winbond International Corporation Representative - Jessica Huang		
	Director	Winbond International Corporation Representative -Eung Joon Park		
	President	Eung Joon Park	-	-
Great Target Development Ltd	Director	Winbond Electronics Corp. Representative - Arthur Yu-Cheng Chiao	4,460,000	100%
GLMTD Technology Private Limited	Director	Great Target Development Ltd. Representative - Hsi-Jung Tsai	27,998,400 (Note 1)	99.99%
	Director	Great Target Development Ltd. Representative- Chih-Chung Chou		
	Director	Great Target Development Ltd. Representative - Varun Manwani		
Winbond Electronics (H.K.) Ltd.	Chairman	Winbond Electronics Corp. Representative - Yung Chin	71,150,000 (Note 1)	100%
	Director	Winbond Electronics Corp. Representative - Yuan-Mou Su		
	Director	Winbond Electronics Corp. Representative - Jessica Huang		
	Director	Winbond Electronics Corp. Representative - Hsiang Yun Fan		
	President	Wen-Chang Hung		
			-	-
Winbond Electronics (Suzhou) Ltd.	Chairman	Winbond Electronics (H.K.) Ltd. Representative - Tung-Yi Chan	(Note 2)	100%
	Director	Winbond Electronics (H.K.) Ltd. Representative - Yuan-Mou Su		
	Director	Winbond Electronics (H.K.) Ltd. Representative - Pei-Ming Chen		
	Director	Winbond Electronics (H.K.) Ltd. Representative - Jessica Huang		
	Director	Winbond Electronics (H.K.) Ltd. Representative - Eddie Hung		
	Supervisor	Winbond Electronics (H.K.) Ltd. Representative - Yung Chin		
	President	Cheng-Kung Lin	-	-
Pine Capital Investment Ltd.	Chairman	Winbond Electronics Corp. Representative - Yung Chin	780,000 (Note 1)	100%
	Director	Winbond Electronics Corp. Representative - Tung-Yi Chan		
	Director	Winbond Electronics Corp. Representative - Cheng-Kung Lin		
	President	Jessica Huang	-	-
Winbond Technology Ltd	Chairman	Winbond Electronics Corp. Representative - Tung-Yi Chan	100,000 (Note 1)	100%
	Director	Winbond Electronics Corp. Representative - Jessica Huang		
	Director	Winbond Electronics Corp. Representative - Ilia Stolov		
	President	Ilia Stolov	-	-
Winbond Electronics Germany GmbH	Director	Winbond Electronics Corp. Representative - Hsiang-Yun Fan	850,000 (Note 1)	100%
	Director	Winbond Electronics Corp. Representative - Eddie Hung		
	Director	Winbond Electronics Corp. Representative - Chih-Chung Chou		
Callisto Holding Limited	Chairman	Winbond Electronics Corp. Representative - Cheng-Kung Lin	40,000,000 (Note 1)	100%
	Director	Winbond Electronics Corp. Representative - Hsiang Yun Fan		
	Director	Winbond Electronics Corp. Representative – You-yi Zhu		
	Director	Winbond Electronics Corp. Representative - Ruo-Wei Fu		
	Director	Winbond Electronics Corp. Representative - Zi-Kai Chiao		
	President	Zi-Kai Chiao	-	-
Callisto Technology Limited	Director	Winbond Electronics Corp. Representative - Cheng-Kung Lin	1,000,000 (Note 1)	100%
	Director	Winbond Electronics Corp. Representative - Ruo-Wei Fu		
	Director	Winbond Electronics Corp. Representative - Zi-Kai Chiao		
	President	Zi-Kai Chiao	-	-
Nuvoton Technology Corp	Chairman	Winbond Electronics Corp. Representative –Pei-Ming Chen	177,000,000	62%
	Director	Arthur Yu-Cheng Chiao	-	-
	Director	Chin Xin Investment Corp. Representative - Yung Chin	1,230,816	0%
	Director	Ken-Shew Lu	-	-
	Director	Chi-Lin Wea	-	-
	Independent director	Yu-Chun Hong	-	-
	Independent director	Allen Hsu	-	-
	Independent director	David Shu-Chyuan Tu	-	-
	Independent director	Jerry Hsu	-	-
	President	Sean Tai	100,000	0%



Marketplace Management Limited	Director	Nuvoton Technology Corp. Representative - Arthur Yu-Cheng Chiao	8,842,789 (Note 1)	100%
	Director	Nuvoton Technology Corp. Representative - Tung-Yi Chan		
	Director	Nuvoton Technology Corp. Representative - Hung-Wen Huang		
Goldbond LLC	Manager (Note 3)	Marketplace Management Limited Representative - Arthur Yu-Cheng Chiao	(Note 2)	100%
	Manager (Note 3)	Marketplace Management Limited Representative - Jessica C. Huang		
	Manager (Note 3)	Marketplace Management Limited Representative - Hung-Wen Huang		
Nuvoton Electronics Technology (Shanghai) Ltd.	Chairman	Goldbond LLC Representative - Sean Tai	(Note 2)	100%
	Director	Goldbond LLC Representative - Jen-Lieh Lin		
	Director	Goldbond LLC Representative - Pei-Ming Chen		
	Director	Goldbond LLC Representative - Patrick Wang		
	Director	Goldbond LLC Representative - Hung-Wen Huang		
	Supervisor	Goldbond LLC Representative - Yung Chin		
	President	Ruo-Wei Fu		
Winbond Technology (Nanjing) Ltd.	Chairman	Goldbond LLC Representative - Jen-Lieh Lin	(Note 2)	100%
	Director	Goldbond LLC Representative - Sean Tai		
	Director	Goldbond LLC Representative - James Wen		
	President	Bosco Chi-Sing Law		
Nuvoton Technology Corporation America	Chairman	Nuvoton Technology Corp. Representative – Wei-Chan Hsu	60,500 (Note 1)	100%
	Director	Nuvoton Technology Corp. Representative – Hsi-Jung Tsai		
	Director	Nuvoton Technology Corp. Representative - Sean Tai		
	Director	Nuvoton Technology Corp. Ltd. Representative - Jen-Lieh Lin		
	Director	Nuvoton Technology Corp. Ltd. Representative - Pei-Ming Chen		
	Director	Nuvoton Technology Corp. Ltd. Representative - Hung-Wen Huang		
	President	Aditya Raina		
Nuvoton Electronics Technology (H.K.) Ltd.	Chairman	Nuvoton Technology Corp. Representative - Sean Tai	107,400,000 (Note 1)	100%
	Director	Nuvoton Technology Corp. Representative - Pei-Ming Chen		
	Director	Nuvoton Technology Corp. Representative - Yung Chin		
	Director	Nuvoton Technology Corp. Representative - Patrick Wang		
	Director	Nuvoton Technology Corp. Representative - Hung-Wen Huang		
	President	Patrick Wang		
Nuvoton Electronics Technology (Shenzhen) Ltd.	Chairman	Nuvoton Electronics Tech. (H.K.) Ltd. Representative - Sean Tai	(Note 2)	100%
	Director	Nuvoton Electronics Tech. (H.K.) Ltd. Representative - Pei-Ming Chen		
	Director	Nuvoton Electronics Tech. (H.K.) Ltd. Representative - Hung-Wen Huang		
	Supervisor	Nuvoton Electronics Tech. (H.K.) Ltd. Representative - Jen-Lieh Lin		
	President	Ruo-Wei Fu		
Nuvoton Investment Holding Ltd.	Director	Nuvoton Technology Corp. Representative - Arthur Yu-Cheng Chiao	17,960,000 (Note 1)	100%
	Director	Nuvoton Technology Corp. Representative - Jessica Huang		
	Director	Nuvoton Technology Corp. Representative - Hung-Wen Huang		
Nuvoton Technology Israel Ltd.	Chairman	Nuvoton Investment Holding Ltd. Representative - Hsin-Lung Yang	1,000 (Note 1)	100%
	Director	Nuvoton Investment Holding Ltd. Representative - Jen-Lieh Lin		
	Director	Nuvoton Investment Holding Ltd. Representative - Sean Tai		
	Director	Nuvoton Investment Holding Ltd. Representative - Pei-Ming Chen		
	Director	Nuvoton Investment Holding Ltd. Representative - Hung-Wen Huang		
	Director	Nuvoton Investment Holding Ltd. Representative - Biranit Levany		
	Director	Nuvoton Investment Holding Ltd. Representative - Erez Naory		
	President	Biranit Levany		
Song Yong Investment Corporation	Chairman	Nuvoton Technology Corp. Representative - Hsiang-Yun Fan	3,850,000 (Note 1)	100%
	Director	Nuvoton Technology Corp. Representative - Arthur Yu-Cheng Chiao		
	Director	Nuvoton Technology Corp. Representative - Sean Tai		
	Supervisor	Nuvoton Technology Corp. Representative - Jen-Lieh Lin		
Nuvoton Technology India Private Limited	Chairman	Nuvoton Technology Corp. Representative - Hsi-Jung Tsai	600,000 (Note 1)	100%
	Director	Nuvoton Technology Corp. Representative - Jitendra Patil		
	Director	Nuvoton Technology Corp. Representative - Hung-Wen Huang		
	President	Jitendra Patil		

Note 1: Shares held by Institutional shareholder.

Note 2: Winbond Electronics (Suzhou) Ltd., Goldbond LLC, Nuvoton Technology (Shanghai) Ltd, Winbond Technology (Nanjing) Ltd., and Nuvoton Technology (Shenzhen) Ltd. are not companies limited by shares.

Note 3: Goldbond LLC adopts the professional management system

## 5. Businesses covered by the affiliates' operations

Business activities covered by affiliates' operations are primarily the research, design, development, production, sale and service of integrated circuits, semiconductor parts and components and other system products. A few affiliates engage in investment business only. Overall, the affiliates support each other through technology, marketing and services to turn Winbond into a highly competitive company with its own product lines.

## 6. Business overview of affiliates

December 31, 2019; Unit: NT\$1,000; Earning (loss) per share (NT\$)

Name of enterprise	Capital	Total Assets	Total Liabilities	Net Worth	Net Revenues	Operating profit (loss)	Net Income (loss)	Net earnings (loss) per share (NTD)
Winbond Electronics Corporation	39,800,002	98,248,931	37,228,309	61,020,622	37,884,848	379,841	1,256,387	0.32
Landmark Group Holdings Ltd.	160,183	423,132	13,385	409,747	50,315	48,422	48,422	9.06
Winbond Electronics Corporation Japan	40,986	953,855	531,917	421,938	5,258,505	74,520	48,109	16,198.17
Peaceful River Corporation	169,687	906	12,209	(11,303)	2,341	2,204	2,204	0.39
Winbond International Corporation	2,860,392	1,657,607	31,711	1,625,896	49,534	49,421	49,421	0.52
Winbond Electronics Corporation America	1,766,338	1,527,145	94,584	1,432,561	1,340,685	44,094	49,528	16,148.62
Great Target Development Ltd	133,711	117,372	0	117,372	285	250	250	0.06
GLMTD Technology Private Limited	117,740	117,538	253	117,285	0	(663)	285	0.01
Winbond Electronics (H.K.) Ltd.	273,856	1,451,421	1,029,473	421,948	8,619,851	103,316	106,527	1.50
Winbond Electronics (Suzhou) Ltd.	269,820	343,589	62,118	281,471	1,488,207	27,039	21,618	(Note 1)
Pine Capital Investment Ltd.	3,002	7,404	123	7,281	1,498	967	967	1.24
Winbond Technology Ltd	9	108,554	38,441	70,113	291,900	20,435	16,739	167.39
Winbond Electronics Germany GmbH	28,552	28,552	0	28,552	0	0	0	0.00
Callisto Holding Limited	153,960	143,201	408	142,793	104	(7,689)	(10,586)	(0.26)
Callisto Technology Limited	29,980	30,296	161	30,135	0	(196)	165	0.16
Nuvoton Technology Corp	2,875,544	10,872,120	3,480,089	7,392,031	10,123,801	494,017	558,459	2.53
Marketplace Management Limited	265,107	78,095	258	77,837	1,268	951	951	0.11
Goldbond LLC	1,341,660	79,617	2,084	77,533	1,623	1,267	1,267	(Note 1)
Nuvoton Electronics Technology (Shanghai) Ltd.	71,268	86,516	7,630	78,886	61,939	633	1,623	(Note 1)
Winbond Technology (Nanjing) Ltd.	17,416	1,303	3,013	(1,710)	0	(1)	(1)	(Note 1)
Nuvoton Technology Corporation America	181,379	237,649	51,589	186,060	450,335	16,848	(1,287)	(21.28)
Nuvoton Electronics Technology (H.K.) Ltd.	413,383	567,110	104,159	462,951	3,987,282	16,989	21,929	0.20
Nuvoton Electronics Technology (Shenzhen) Ltd.	199,898	254,529	44,577	209,952	131,923	1,182	6,354	(Note 1)
Nuvoton Investment Holding Ltd.	538,441	279,779	2,040	277,739	41,403	38,840	38,840	2.23
Nuvoton Technology Israel Ltd.	9	591,266	312,501	278,765	797,355	55,335	41,401	41,401.00
Song Yong Investment Corporation	38,500	78,989	155	78,834	3,846	3,632	3,632	0.94
Nuvoton Technology India Private Limited	25,230	22,325	98	22,227	5,086	242	1,411	2.35

Note 1: Winbond Electronics (Suzhou) Ltd., Goldbond LLC, Nuvoton Technology (Shanghai) Ltd., Winbond Technology (Nanjing) Ltd. and Nuvoton Technology (Shenzhen) Ltd. are not companies limited by shares and thus are not applicable.

Note 2: Exchange rates used for assets and liabilities items: 1 USD= 29.98 NTD; 1JPY= 0.2782 NTD; 1RMB= 4.305 NTD; 1 ILS= 8.6652 NTD; 1EUR= 33.59 NTD; 1INR= 0.4205 NTD

Note 3: Exchange rates used for profit and loss items: 1 USD= 30.91 NTD; 1JPY= 0.2823 NTD; 1RMB= 4.4699 NTD; 1 ILS= 8.6732 NTD; 1INR= 0.4408 NTD

B. Consolidated financial statements for Affiliates: Please see p. 76–149

C. Affiliation report: Not applicable (the Company is not a subsidiary of another company.)

- II. Private placement activities: None
- III. Holding or disposal of stocks of the Company by subsidiaries in the past year and up to the date of report: None
- IV. Other necessary supplemental information: None
- V. Corporate events with material impact on shareholders' equity or stock prices set forth in Subparagraph 2, Paragraph 3, Article 36 of the Securities and Exchange Act in the past year and up to the date of report: None

# ***winbond***

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