

Stock Code: 8299

Phison Electronics Corporation 2019 ANNUAL REPORT Annual Report is available in the following websites. Taiwan Stock Exchange Market Observation Post System: http://mops.twse.com.tw Corporation Website: www.phison.com Printedon May 15, 2020

Notice to Readers

For the convenience of readers, the 2019 ANNUAL REPORT has been translated into English from the original Chinese version prepared and used in the Republic of China and is not an official document of the shareholders' meeting. 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 version of the 2018 ANNUAL REPORT shall prevail.

Name, Position, Contact Number, and Email of the Company's Spokesperson:

Name: Zhi Chyang Yu

Position: Senior Special Assistant

Tel: (037) 586-896 ext.1019

Email: antonioyu@phison.comantonioyu

• Name, Position, Contact Number, and Email of the Company's Deputy Spokesperson:

Name: Kuo Ting Lu

Position: Project Manager Tel: (037) 586-896 ext. 2622 Email: kuoting lu@phison.com

Addresses and Phone Numbers of Corporate Headquarter, Subsidiaries, and Plants

Headquarter

Address: 10F-6, No.251, Fuxing 1st St., Zhubei City, Hsinchu County 302

Tel: (03) 657-9299

Zhunan Branch and Plant

Zhunan Branch Address: No.1, Qunyi Rd., Jhunan Township, Miaoli County 350, Taiwan (R.O.C.)

Zhunan Plant 2 Address: No.1-1, Qunyi Rd., Jhunan Township, Miaoli County 350, Taiwan (R.O.C.)

Zhunan Plant 3 Address: No.1-2, Qunyi Rd., Jhunan Township, Miaoli County 350, Taiwan (R.O.C.)/No.1-3, Qunyi Rd., Jhunan Township, Miaoli County 350, Taiwan (R.O.C.)

Tel: (037) 586-896

• Name, Address, E-mail Address, and Telephone Number of the Stock Transfer Agency

Name: Stock Affairs Department, Horizon Securities Corp.

Address: 3F, No. 236, Section 4, Xinyi Road, Da'an District, Taipei City

Website: www.honsec.com.tw

Tel: (02)2326-8818

Name of the CPA who Audited the Financial Statements for the Most Recent Year, and the Name, Address and Telephone Number of the Accounting Firm

Name of CPA: Xin Wei Dai, Li Wen Kuo

CPA Firm: Touche Tohmatsu Limited

Address: 20F, No. 100, Songren Road, Xinyi District, Taipei City

Website: www.deloitte.com.tw Telephone: (02)2725-9988

Name of Offshore Stock Exchange and Method for Accessing Information on Offshore

Securities: None.

Website: www.phison.com

Phison Electronics Corporation

2019 Annual Report Table of Contents

Chapter 1	Lett	ter to Shareholders	1
Chapter 2	Con	npany Profile	4
•	2.1	Date of Incorporation	
	2.2	Company History	.4
Chapter 3	Cor	porate Governance Report	7
•	3.1	Organization	
	3.2	Profile of Directors, Supervisors, and Management Team	
	3.3	Remuneration of Directors, Supervisors, President, and Vice Presidents1	
	3.4	Implementation of Corporate Governance	
	3.5	Information Regarding the Company's Audit Fee and Independence	54
	3.6	Replacement of CPA	55
	3.7	The Company's chairperson, general manager, or any managerial officer in charge of finance or accounting matters has in the most recent year held a	
		position at the accounting firm of its certified public accountant or at an	c =
	2.0	affiliated enterprise of such accounting firm	
	3.8	Stock Transfer and Pledge of Directors, Supervisors, Management Team and	
		Major Shareholders Who Own 10% of the Stock in the Most Recent Year an	
	3.9	as of the Publication Date of the Annual Report	
	3.10	Relationship among the Top Ten Shareholders	
	3.10	Consolidated Number of Shares Owned by Company, Directors, Supervisors Management Team and Businesses Controlled Directly or Indirectly by this	
		Company	
Chanton 1	Can	• •	
Chapter 4	_	ital Overview	
	4.1 4.2	Capital and Shares	
	4.2	Status of Corporate Bonds	
	4.3 4.4	Status of Global Depository Receipts	
	4.5	Status of Employee Stock Option Plan	
	4.6	Issuance of New Restricted Employee Shares	
	4.7	Status of Issuance of New Shares in Connection with Mergers and	,0
	7.7	Acquisitions	30
	4.8	Finance Plans and Implementation	
Chanter 5		eration Overview	
Chapter 5	5.1	Business Activities	
	5.2	Market and Sales Overview.	
	5.3	Human Resources in the Previous Two Years Before the Publication of the	,0
	٠.٥	Annual Report)1
	5.4	Environmental Protection Expenditure	
	5.5	Labor Relations	
	5.6	Important Contracts10	

Chapter 6	Fina	ancial Information	106
•	6.1	Five-Year Financial Summary	106
	6.2	Five-Year Financial Analysis	109
	6.3	2019 Supervisors' Review Report	113
	6.4	2019 Financial Statements (Including CPA Audit Report, Two-year	
		Comparative Balance Sheet, Statement of Comprehensive Income, Statement	
		of Changes in Equity, Cash Flow Chart, and Notes or Attachments)	
	6.5	The Audited Nonconsolidated Financial Statement for the Year of 2019	114
	6.6	Financial Impact on the Company where the Company and its Affiliated	
		Companies Have Incurred any Financial or Cash Flow Difficulties in the	
		Recent Year and as of the Publication Date of the Annual Report	
Chapter 7	Fin	ancial Status and Operating Results Review and Risk Matter	S
	•••••	••••••	
	7.1	Financial Status Analysis	
	7.2	Operating Results Analysis	
	7.3	Analysis of Cash Flow	
	7.4	2019 Major Capital Expenditures and Impact on Financial and Business	
	7.5	2019 Investment Policy, Main Causes for Profits or Losses, Improvement	
		Plans and Investment Plans for 2020	
	7.6	Risk Management and Analysis	
~-	7.7	Other Major Events	
Chapter 8	-	cial Disclosure	
	8.1	Summary of Affiliated Companies	127
	8.2	Private Placement of Securities in the Most Recent Year and as of the	
		Publication Date of the Annual Report	.137
	8.3	Shares in the Company Held or Disposed of by Subsidiaries in the Most	105
	0.4	Recent Year and as of the Publication Date of the Annual Report	
	8.4	Other Necessary Statements	
Chapter 9		terial matters specified by Article 36.3.2 of the Securities and	
		change Act that has a material impact on interests of shareho	lders
	or p	orice of securities over the most recent year and as of the	
	pub	olication date of the annual report	138
	-	-	



Chapter L Letter to Shareholders

Chapter 1 Letter to Shareholders

Dear Shareholders,

Year of 2019 ended smoothly under various disturbances such as the US-China trade war and Brexit. Phison Electronics (TPEx: 8299) has also remained to grow steadily under the impact of various industrial challenges and continues to develop new products to meet market demands. During 2019, faced with the changes in the main raw material prices of the industry and market challenges, Phison Electronics has actively deployed the global market with its technological leadership, allowing Phison Electronics to operate stably in 2019. With the unremitting efforts of all the members of Phison, the consolidated total revenue for 2019 is approximately NT \$ 44.7 billion, the consolidated after-tax surplus is approximately NT \$ 4.5 billion, and the after-tax EPS is NT \$ 23.05.

In 2019, the total shipments of the company's SSD products and embedded memory related controller chips and finished products accounted for 57% of the company's overall revenue, an increase of approximately 37% YoY, and actively developed UFS controller chips to become the best choice for next-generation high-performance embedded storage devices. The R&D team also continues to invest in key IP development and process optimization to provide an updated and more complete product lineup, moving toward the next major industry milestone.

With the gradual realization of global 5G infrastructure and product applications, the linkage has made high-speed cloud services, big data, AI, Internet of Things, etc. more vigorous. Moreover, coupled with the upgrade of various e-sports software and game console specifications, the increasing demand for high-speed data access is expected to continue to rise while the penetration rate of ultra-high-speed solid-state drives (SSDs) maintain rapid growth. Therefore, Phison has launched different NAND Flash controller chips in response to different application markets, including PCIe Gen 3x4 NVMe SSD controller. In addition to the industry-leading PCIe Gen4x4 NVMe SSD controller chip, Phison has further developed the world's first PCIe Gen4x4 SSD solutions with data transfer speed of more than 5GB/s, adding new profits to the company's aggressive approaches on the mainstream NAND application device market.

In the high-end application/enterprise-level SSD application market, Phison's ultra-high-speed, low-latency 8-channel PCIe Gen3x4 controller chips and SSDs of various specifications are recognized by the market. In terms of embedded applications, the company, as one of the few industry leaders in the world that provides complete eMMC and UFS, is committed to lower power consumption and lower heat generation technology, continuously pushing BGA SSD to PCIe NVMe specifications, providing ultra-high speed of data storage for embedded applications, and pushing mobile storage devices into a new, faster, and more energy efficient generation. Additionally, Phison is leading the launch of a new controller chip that supports UFS3.0, especially with the

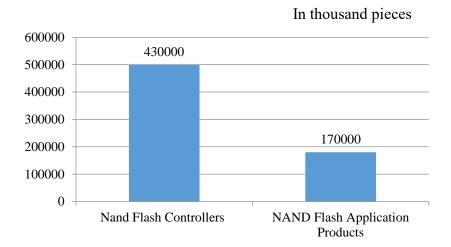
company's own technologies such as StrongECCTM, advance LDPC, CoProcessorTM and RAID architecture, so it not only provides low power consumption, but also demonstrates excellent error correction capabilities approaching SSD-like performance

In terms of memory cards, the company released the latest controller chip for SD & microSD cards that are compatible with the SD 6.0 A2 specification. It has the absolute advantage of high-speed random access and provides up to 1TB of data storage capacity. It is the highest specification in the market and aims at high-storage-capacity application market. Speaking of USB products, Phison's latest portable SSD achieves the highest performance for external SSD market. The iDUO Lightning and C-Thru USB3.1 solutions allow users to charge mobile phones or mobile devices at the same time when using high-speed storage devices. In addition, each product line of Phison Electronics also supports 3D QLC NAND Flash with more competitive prices, which can more fully meet market demand.

The following products have been successfully developed and launched in 2019, including:

- (1) Developed a lower power MIPI Gear 4 PHY as the interface for the UFS Unipro flash memory controller chip.
- (2) Developed the world's first PCIe 4th Gen SSD whose transfer rate is over 5GB/s.
- (3) Developed the latest generation of LDPC+DSP ECC engine, which is able to more effectively support 3D NAND data.
- (4) Developed USB3.1 flash drive that supports high random write performance.
- (5) Developed 2nd generation core-power management system of flash memory which simplifies the firmware operating process and increases data transfer efficiency to lower power-consuming.
- (6) Developed the SD/microSD card with high random read/write performance which can be used to expand the built-in flash memory capacity of handheld devices.
- (7) Developed controller chips and solutions that support 3D QLC NAND.
- (8) Developed a low power-consuming RAID ECC engine for mobile devices.
- (9) Developing low-power yet high performance SSD controllers by supporting HMB feature leveraging host memory buffer.
- (10) Developing SiP(system-in-package) technology of flash memory module.
- (11) Developed design/qualification methodologies and functional modules which comply with automotive specification to support variety of automotive applications.
- (12) Developed highly integrated embedded SSD with high low latency and low WAF.

In 2020, the Company plans to supplement and expand R&D personnel to 1,800 people approximately. The estimated shipment of major products in 2020 years is as follows:



According to the analysis of market demand trend, industry competition strategy, Phison plan to continuously upgrade current product line and develop new products as follows in 2020:

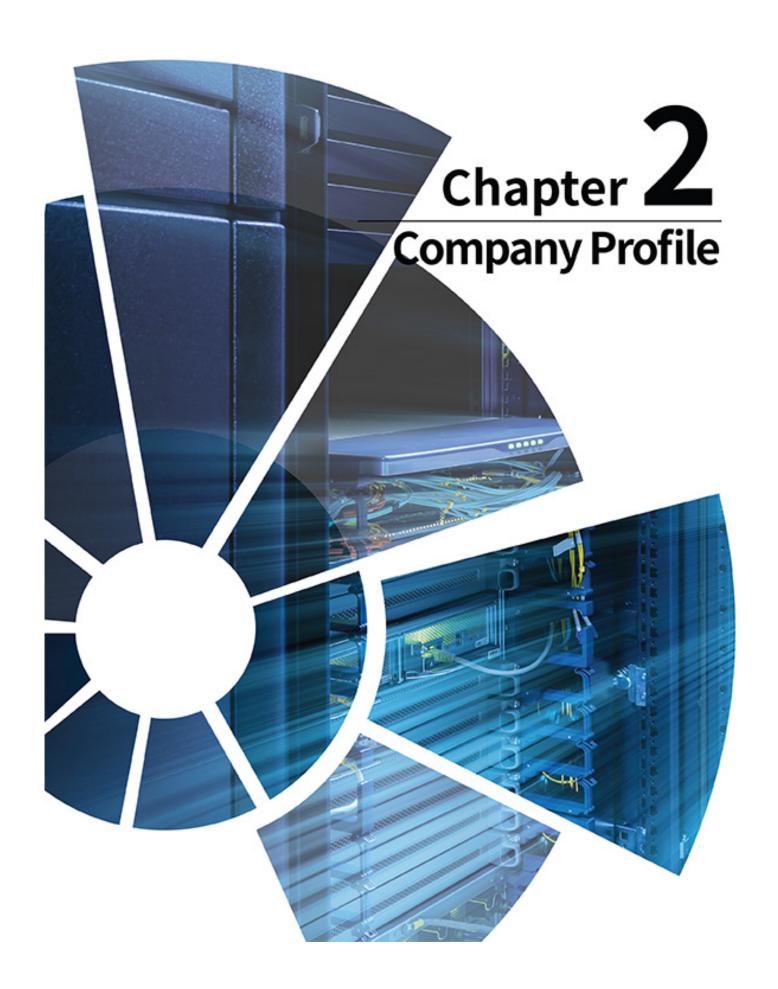
- (1) High speed, high capacity USB 3.2 Gen 2x2 Flash Drive solutions.
- (2) High random write performance SD/microSD card and compliant with SD 7.0.
- (3) The latest generation UFS controller chips that support high data rate of 3D NAND flash.
- (4) High performance SSD that support the latest PCIe/NVMe protocol.
- (5) Next generation PCIe PHYs for advance manufacturing process.
- (6) High-end enterprise and datacenter SSD that support to higher capacity, performance and data error correction.
- (7) New LDPC ECC engines for emerging 3D QLC NAND Flash.
- (8) SiP technology for smaller-size, higher-capacity and power-saving SSDs.
- (9) Automotive SSD solutions compliant with automotive industry standards.
- (10) SiP technology of SSD solutions for variety of embedded application.

Looking ahead, by uphold the cores of the company culture, Phison Electronics is moving forward to comply with the changing global trends for continuously to expand the territory of the market and to stand the leadership in the market to achieve the goal of opearting the company stably.

Respectfully yours

Phison Electronics Corp.

Khein Seng Pua, Chairperson
Cheek Kong Aw Yong, President
Shu Hua Chiu, Accounting Director



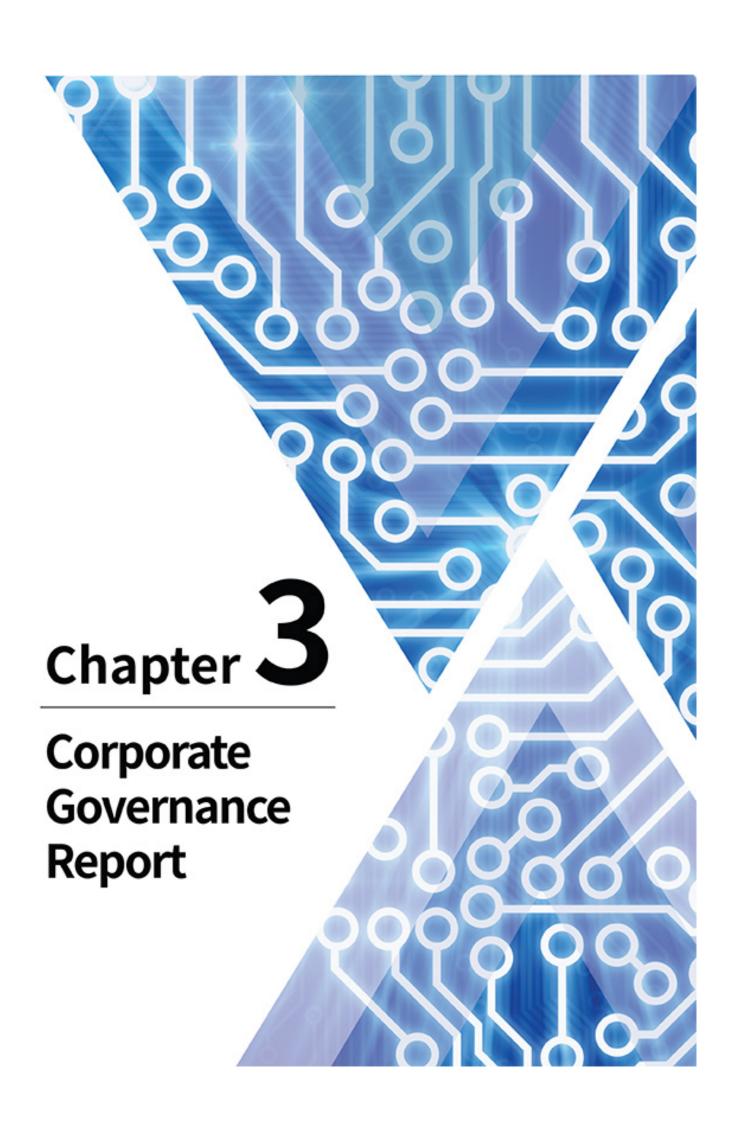
Chapter 2 Company Profile
2.1 Date of Incorporation: Nov. 8th, 2000
TPEx-listed Date: Dec. 6th, 2004

2.2 **Company History**

Year	Important event
Tear	•
Feb, 2010	· Converting the employee stock option of NT\$5,375,000 into the common stock. The paid-in capital was increased to NT\$1,472,647,860.
May, 2010	· Converting the employee stock option of NT\$2,525,000 into the common stock. The paid-in capital was increased to NT\$1,475,172,860.
July, 2010	· Converting the employee stock option of NT\$200,000 into the common stock. The paid-in capital was increased to NT\$1,475,372,860.
Aug, 2010	· Converting the profit of NT\$295,034,570 into the common stock. The paid-in capital was increased to NT\$1,770,407,430.
Aug, 2010	· The Company moved to 10F-6, No. 251, Fuxing 1st St., Zhubei City, Hsinchu County.
Nov, 2010	· Co-founding "Kingston Solutions, Inc." for the product and market development of the embedded memory system with Kingston Technology Corporation.
Nov, 2010	· Converting the employee stock option of NT\$380,000 into the common stock. The paid-in capital was increased to NT\$ 1,770,787,430.
Jan, 2011	· Converting the employee stock option of NT\$2,815,000 into the common stock. The paid-in capital was increased to NT\$1,773,602,430.
Feb, 2012	· Establishing the subsidiary, "Phison Electronics Japan Corp." in Japan.
May, 2011	· Establishing the subsidiary, "EMtops Electronics Corp."
May, 2011	· Converting the employee stock option of NT\$11,660,000 into the common stock. The paid-in capital was increased to NT\$1,785,262,430.
July, 2011	· Converting the employee stock option of NT\$1,075,000 into the common stock. The paid-in capital was increased to NT\$1,786,337,430.
Oct, 2011	· Converting the employee stock option of NT\$1,195,000 into the common stock. The paid-in capital was increased to NT\$1,787,532,430.
Jan, 2012	· Converting the employee stock option of NT\$795,000 into the common stock. The paid-in capital was increased to NT\$1,788,327,430.
May, 2012	· Converting the employee stock option of NT\$11,890,000 into the common stock. The paid-in capital was increased to NT\$1,800,217,430.
May, 2012	· Establishing the subsidiary, " Phisontech Electronics (Malaysia) Sdn. Bhd." in Malaysia
June, 2012	· Establishing the subsidiary, "Global Flash Limited," in Samoa
Aug, 2012	· Converting the employee stock option of NT\$40,000 into the common stock. The paid-in capital was increased to NT\$1,800,257,430.
Dec, 2012	· Establishing the subsidiary, "Phisontech (Shenzhen) Limited" in Shenzen, China
Dec, 2012	· Converting the employee stock option of NT\$1,365,000 into the common stock. The paid-in capital was increased to NT\$ 1,801,622,430.
Feb, 2013	· Converting the employee stock option of NT\$3,117,500 into the common stock. The paid-in capital was increased to NT\$1,804,739,930.
May, 2013	· Establishing the subsidiary, "Phisontech Electronics Taiwan Corp.".
Sep, 2013	• The PS3108 controller from Phison Electronics Corporation was proved with the highest performance in the DramExhcange experiments.
Sep, 2013	· Phison Electronics Corporation announced the fastest DRAM-Less Cache SSD based on PS3109.

Year	Important event
Oct, 2013	· Corsair announced the FORCE LS SSD equipped with PS-3108 as the controller IC.
Feb, 2014	· Phison Inside: MyDigitalSSD OTG Pocket SuperSpeed USB 3.0 mSATA SSD.
May, 2014	· Phison PS3109 M.2 SSD won the editor's choice award.
May, 2014	· Chromebook used PS3109 SATA III controller from Phison Electronics Corporation in the system.
May, 2014	· Kingston announced the M.2 SATA III SSD controller based on the PS3108 from Phison Electronics Corporation.
July, 2014	· Issuing the private common stock of NT\$50,000,000. The paid-in capital was increased to NT\$1,854,739,930.
Aug, 2014	· Phison Electronics Corporation announced the new generation of quad-core SATA3 SSD controller PS3110.
Sep, 2014	· Phison Electronics Corporation announced the ultra-high-speed SDXC 256GB SD card.
Oct, 2014	· Phison Secure USB To Protect Against Newly Identified Cyber Attack
Oct, 2014	· Phison Electronics Corporation announced the UHS-II SD card controller to satisfy the needs of 4K2K UHD resolution.
Oct, 2014	· Winning the second "Laurel Awards"-"Shareholder Remuneration Award" and "Market Contribution Award".
Nov, 2014	· Corsair announced the high-performance Neutron XT SSD equipped with PS3110-S10 as the controller IC.
Jan, 2015	· Phison Electronics Corporation announced the ultra-high-speed USB controller chip to satisfy the needs for small size, large capacity, and ultra-high speed.
Jan, 2015	· Phison Electronics Corporation announced the SATA III TLC SSD, 2TB MLC SSD and power outage protection design in CES 2015.
Mar, 2015	· Issuing the private common stock of NT\$119,000,000. The paid-in capital was increased to NT\$ 1,973,739,930.
June, 2015	· Establishing "Hefei Core Storage Electronic Limited" in China.
Jan, 2016	· Phison Electronics Corporation announced the first controller chip PS5007-E7 which supports PCIe Gen3 x 4 NVMe SSD.
July, 2016	· Top 500 of export and import manufacturers with excellent performance.
Sep, 2016	• Phison Electronics Corporation announced the first solution in the industry for the SD 5.0 specification. This solution led the SD card application into an era of high-speed video recording of Video Speed Class.
Sep, 2016	· Phison Electronics Corporation announced the microSD card of "Max IOPS" product line.
Dec, 2016	· NT\$3,000,000 of treasury shares were annulled. The paid-in capital was decreased to NT\$ 1,970,739,930.
Feb, 2017	· Phison SSD controller passed the BiCS3 testing verification which will help the Company and Toshiba to enhance the 3DNAND application.
Apr, 2017	· The SD 5.1 A1 controller PS8131 introducing BiCS3 technical.
July, 2017	· Top 500 of large enterprises in Taiwan in 2017- Ranking the first of computer peripheral equipment industry/ranking 13th of manufacturing operation performance.
Oct, 2017	· Top 500 of export and import manufacturers with excellent performance.
Apr, 2018	· Launched the world's first 512GB microSD card
June, 2018	· Announcing flagship PCIe Gen3x4 NVMe SSD controller PS5012-E12, targeting

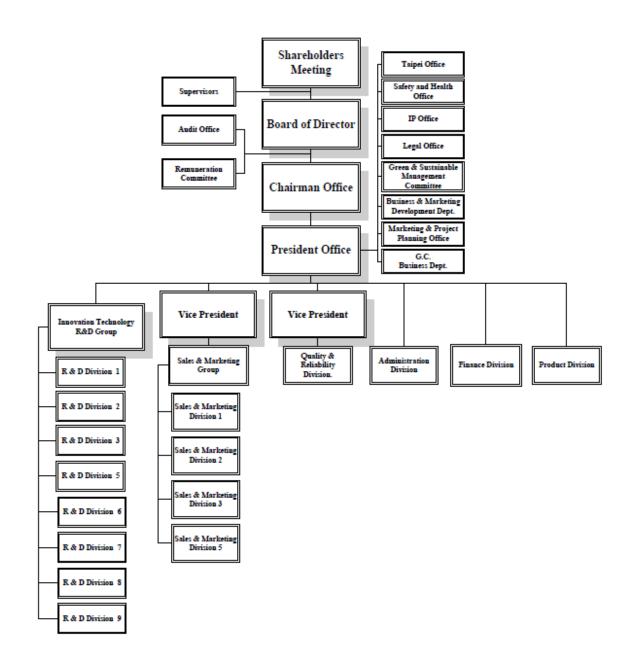
Year	Important event
	high-end NAND storage applications such as servers, gaming, and edge computing
July, 2018	· Top 500 of large enterprises in Taiwan in 2018- Ranking the first of computer peripheral equipment industry/ranking 13th of manufacturing operation performance
Sep, 2018	· Top 500 of export and import manufacturers with excellent performance in 2017
Oct, 2018	· Phison Electronics Corporation won the "15th Taiwan Information Storage Technical Award-Industry Contribution Award" of 2018
Dec, 2018	· Unic Memory signed strategic cooperation agreement with Phison Electronics Corporation, innovation, development, sharing and win-win
Jan, 2019	· Launching the world's first PCIe Gen4x4 NVMe SSD controller PS5106-E16, consistently serving as the leader in the industry
July, 2019	· Top 500 of large enterprises in Taiwan in 2019- Ranking the first in computer peripheral equipment industry/ranking 13th in manufacturing operation performance
Sep, 2019	· Announcing the world's first controller chip PS5019-E19T of PCIe Gen4x4 DRAM- Less NVMe SSD
Oct, 2019	· Top 500 of export and import manufacturers with excellent performance in 2018
Jan, 2020	· Releasing the most complete 3D QLC NAND storage solution at the CES exhibition in the US



Chapter 3 Corporate Governance Report

3.1 Organization

3.1.1 Organization Chart



3.1.2 Business Activities of Main Divisions

Department	Responsibilities
Audit Office	Establishing, amending and reviewing the internal audit system; reviewing and monitoring the internal control system.
President Office	In charge of implementing and completing the jobs assigned by the Board of Directors; establishing the operation guidance and quality policy; in charge of the operating and decision-making of the Company.
Taipei Office	Handling administrative affairs in Taipei area.
Safety and Health Office	In charge of the security and health affairs for the employees; ensuring the security of the work environment and ensuring the law conformance.
IP Office	In charge of the administration and review of the patents, trademarks and lawsuits, etc.
Legal Office	In charge of the administration and review of the contracts, insurances, lawsuits, etc.
Green&Sustainable Management Committee	In charge of the green products and the affairs of sustainability and environment protection, and ensuring the law conformance.
Business&Marketing Development Department	Establishing the pricing strategies for the products, coordinating the manufacturing of products, and managing the inventory.
Marketing&Project Planning Office	In charge of the research, analysis, development strategy and marketing planning of the market, supervise and execute.
Innovation, Technology R&D Group	Confirming the product specification with the marketing and sales department, and evaluating the feasibility of product technology; in charge of the design of software, firmware and hardware development; validating the design of new products and implementing the projects; in charge of the management and supervision of the chip back-end design outsourcing.
Sales and Marketing Group	Establishing the product development of products and the strategies of marketing and sales; establishing the pricing strategies for the products; analysis of the market and competitors; in charge of refunds, replenishments and replacements; exporting affairs.
Quality & Reliability Division	In charge of the acceptance/shipment, manufacturing processes, outsourcing processing, quality examination and analysis; introducing, maintaining and tracking the ISO system; implementing the green industry chain; scheduling the internal and external ISO audits; drafting and publishing the CSR reports.
Administration Division	Supervision and Management of the human resource affairs and general affairs; in charge of the planning, maintenance, security of the computer equipment; in charge of the plant affairs, plant security, employee welfare affairs, etc.
Finance Division	In charge of the operation, administration and management of the accounting, finances, cost, investment and shareholding affairs.
Product Division	Establishing and implementing the manufacturing strategies and operation plans; monitoring, managing and analyzing the yield and quality of products; in charge of procurements.

3.2 Profile of Directors, Supervisors, and Management Team

3.2.1 Profile of Directors and supervisors

Date: April 5, 2020

						Date: April 5, 2020									,					
Position	Nationality/ Place of Incorporation	Name	Gender	Date elected	Term Date first (Years) elected		Shareholding wl	hen elected	Current share	eholding	Spouse & shareho		Sharehold nomin arrangen	ee	Experience (education)	Other position	Super- spouse seco	ves, Dire visors wes or with and degre kinship	thin the ree of	Remarks
							Shares	%	Shares	%	Shares	%	Shares	%			Position	Name	Relation	
Chairperson	Malaysia	Khein Seng Pua	М	2017.06.13	3 years	2000.10.24	4,557,972	2.31	4,557,972	2.31	806,262	0.41	3,400,144	1.73	Master of Institute of Electrical and Control Engineering, National Chiao Tung University, Feiya Technology Corp.	[Note 01]	N/A	N/A	N/A	[Note
Director	Malaysia	Cheek Kong Aw Yong	М	2017.06.13	3 years	2002.02.15	3,355,745	1.70	3,409,745	1.73	36,000	0.02	173,000	0.09	Master of Institute of Electrical and Control Engineering, National Chiao Tung University, Feiya Technology Corp.	[Note 02]	N/A	N/A	N/A	10]
Director	Taiwan	Tzung Horng Kuang	М	2017.06.13	3 years	2008.06.13	1,478,736	0.75	1,408,736	0.71	0	0.00	0	0.00	Master of Business Administration, Greenwich University Kogen Singapore Pte. Ltd	[Note 03]	N/A	N/A	N/A	N/A
Director	Taiwan	Chih Jen Hsu	М	2017.06.13	3 years	2011.06.15	1,080,185	0.55	1,020,301	0.52	0	0.00	0	0.00	Department of Computer Science, Chung Yuan Christian University, Assistant Manager of Winbond Electronics Corporation	[Note 04]	N/A	N/A	N/A	N/A
	Japan	KIOXIA Corporation, (Originally, Toshiba Memory Corporation)	-	2017.09.27	3 years	2017.09.27	19,821,112	10.06	19,821,112	10.06	0	0.00	1,000	0.00	N/A	[Note 05]	N/A	N/A	N/A	N/A
Director	Japan	Hitoro Nakai KIOXIA Corporation, (Originally, Toshiba Memory Corporation) Representative	M	2017.09.27	3 years	2012.01.16	0	0.00	0	0.00	0	0.00	0	0.00	Master of Engineering, Tohoku University in Japan Toshiba Corporation Storage & Electronic Devices Solutions Company, Memory Division, Senior Fellow	[Note 06]	N/A	N/A	N/A	N/A
Independent Director	Taiwan	Chen Wei Wang	М	2017.06.13	3 years	2014.06.17	0	0.00	0	0.00	0	0.00	0	0.00	Department of Electronics Engineering, National Chiao Tung University CEO of Quanta Computer Inc. President of Quanta Computer Inc.	[Note 07]	N/A	N/A	N/A	N/A
Independent Director	Taiwan	Shu Fen Wang	F	2017.06.13	3 years	2003.11.12	0	0.00	0	0.00	0	0.00	0	0.00	Ph.D. in Finance, University of Houston Director of Department of Information and Finance Management Director of EMBA in Taiwan, National ChiaoTung University University of South Australia Review Committee Member of TWSE	[Note 08]	N/A	N/A	N/A	N/A

Position	Nationality/ Place of Name Incorporation		Gender	Date elected	Term (Years)		Shareholding when elected		Current shareholding		Spouse & minor shareholding		Shareholding by nominee arrangement		Experience (education)	Other position	kınshıp			Remarks
							Shares	%	Shares	%	Shares	%	Shares	%			Position	Name 1	Relation	
Supervisor	Taiwan	Jiunn Yeong Yang	М	2017.06.13	3 years	2011.06.15	4,549,114	2.31	4,549,114	2.31	0	0.00	0	0.00	Postdoc of Graduate Institute of Electrical and Computer Engineering Ph.D. of Institute of Electrical and Control Engineering, National Chiao Tung University	N/A	N/A	N/A	N/A	N/A
Supervisor	Taiwan	Huei Ming Wang	М	2017.06.13	3 years	2008.06.13	171,750	0.09	171,750	0.09	0	0.00	0	0.00	MA in Industrial Management from Chung Hua University Executive Director of Taiwan Certified Public Accountant Association Centified Public Accountant Certified Public Accountant Association Member of Discipline Committee of Taiwan Certified Public Accountant Association Member of Discipline Committee of Taipei Certified Public Accountant Association Vice Chairperson of Moral Committee of Taiwan Certified Public Accountant Joint Association	[Note 09]	N/A	N/A	N/A	N/A
Supervisor	Taiwan	Chiun Hsiou Chen	М	2017.06.13	3 years	2014.06.17	0	0.00	0	0.00	0	0.00	0		MBA of Binghamton University, State University of New York Vice President of Rich Father International Holdings Executive Vice President of Expert Business Management Lecturer of Chen An-Chi Educational Training Center Manager of General Management of Ichia Technology Inc. President of Kaechuan Corp. Marketing Specialist of Taiwan IBM Inc. Planner of CSEC	N/A	N/A	N/A	N/A	N/A

[Note 01] CEO of Phison Electronics Corporation; Directors Representative and Chairperson, Lian Xu Dong Investment Corporation, OSTEK Corporation, Phisontech Electronics Taiwan Corp., Memoryexchange Corporation; Directors Representative, Kingston Solutions Inc., Emtops Electronics Corporation, Global Flash Limited, EpoStar Electronics (BVI) Corporation, Core Storage Electronic (Samoa) Limited.

[Note 02] President of Phison Electronics Corporation; Legal representative director, Lian Xu Dong Investment Corporation, Phisontech Electronics Taiwan Corp.; Director, Global Flash Limited, Core Storage Electronic (Samoa) Limited.

- [Note 03] Vice-President of Phison Electronics Corporation; Directors Representative and Chairperson, Emtops Electronics Corporation; Directors Representative, Microtops Design Corporation, OSTEK Corporation; Director, Phison Electronics Japan Corp., Power Flash (Samoa) Limited.
- [Note 04] Vice Technical President of Phison Electronics Corp.
- [Note 05] Director of KIOXIA Semiconductor Taiwan Corporation, KIOXIA Taiwan Corporation, MicroTops Design Corporation, and Solid State System Co., Ltd.
- [Note 06] KIOXIA Corporation, Senior Expert and Assistant to Director Institute Memory Technology Research & Development
- [Note 07] Independent Director of Casetek Holdings Limited, Simplo Technology Co. Ltd. and Innolux Corporation.
- [Note 08] Member of the Chinese Association of Valuation, Member of the Public Debt Management Committee in Hsinchu County, Member of the Public Debt Management Committee in Hsinchu City, United States Beta Gamma Sigma Honorary Member, Securities Analysts of R.O.C, Independent Director, Original Biomedicals Co., Ltd.
- [Note 09] Director of Moores Rowland CPAs; Director of Taiwan Branch of Praxity Global Alliance of Independent Firms, Independent Director, GIGABYTE TECHNOLOGY CO., LTD.
- [Note 10] Related information of reasons, rationality, necessity and countermeasures (e.g. methods like increase the number of seats for Independent Directors, and more than half of directors do not assume as employees or managers concurrently) shall be illustrated where Chairperson, President or equivalents (Top Manager) are the same person, couples or relatives of first degree of kinship: The Chairperson, Khein Seng Pua, and the President, Chee Kong Aw Yong, are not the same person nor spouse or a first-degree relative of each other. In 2019, the Company set seven Directors (including two Independent Directors) in accordance with Article 13 of the Articles of Incorporation of the Company. Nine Directors (including three Independent Directors) are estimated to be established after the full re-election of Directors in 2020, which is better than the number of Independent Directors stipulated in Article 13-1 of the Articles of Incorporation of the Company, with half of the Directors not concurrently serving as employees or Manager of the Company.

3.2.1.2. Major shareholders of the institutional shareholders

Apr. 5, 2020

Name of institutional shareholders	Major shareholders	Shareholding (%)
Kioxia Corporation		
(Originally, Toshiba Memory	Kioxia Holdings Corporation	100
Corporation)		

3.2.1.3_Major Shareholders of Institutional Shareholders with Corporations as Their Major Shareholders

Name of institutional shareholder	Major shareholders	Shareholding (%)
	BCPE Pangea Cayman, L.P.	49.90
Kioxia Holdings Corporation [Note 1]	Toshiba Corporation	40.20
	HOYA Corporation	9.90

[Note 1] The above information is taken from the Kioxia Holdings Corporation website.

3.2.1.4 Professional Qualifications and Independence Analysis of Directors and Supervisors

Date: April 5, 2020

Fulfilling One of The Following Professional Qualification Requirements, Together With At Least Five Years of Work Experience Independence Criteria [Note 1]	
Criteria Criter	Number of Other Public Companies in Which the Individual Is Concurrently Serving as An Independent Director
Khein Seng Pua	N/A
Chee Kong Aw Yong Image: Chee Kong Aw Yong	N/A
Tzung Horng Kuang	N/A
Chih Jen Hsu Image: Chin Jen Hsu	N/A
KIOXIA Corporation, (Originally, Toshiba Memory Corporation)	N/A
KIOXIA Corporation, (Originally, Toshiba Memory Corporation) Representative: Hiroto Nakai	N/A
Chen Wei Wang	3
Shu Fen Wang	2
Huei Ming Wang	1
Jiunn Yeong Yang Image: Control of the co	N/A
Chiun Hsiou Chen	N/A

[Note 1] Please tick the corresponding boxes that apply to the directors or supervisors during the two years prior to being elected or during the term of office.

- (1) Not employed by the Company or any of its related companies.
- (2) Not a director or supervisor of the Company or any of its affiliates. (Not applicable in cases where the person is an Independent Director of the Company, its parent company, or any subsidiary as appointed in accordance with the Act or with the laws of the country of the parent or subsidiary).
- (3) Not a natural-person shareholder who holds shares, together with those held by the person's spouse, minor children, or held by the person under others' names, in an aggregate amount of 1% or ranking in the top ten in holdings.
- (4) Not a spouse, or a relative within the second degree of kinship or lineal relative of third degree of kinship of manager or (2), (3) personnel listed in
- (5) Not serving as a Director, Supervisor or Employee of Judicial Person Shareholder holding a 5% of total issued shares of the Company, holding the top five shares or appointing representatives to assume Director or Supervisor according to Subparagraph 1 and 2, Article 27, Company Act (this does not apply in cases where the person is an Independent Director of the Company, its parent or subsidiary, or subsidiary belonging to the same parent company established in pursuant to this law or local laws).
- (6) Not serving as a Director, Supervisor or Employee of the other companies that their board seats of the Company or more than half of shares that owns voting rights controlled by the same person (this does not apply in cases where the person is an Independent Director of the Company, its parent or subsidiary, or subsidiary belonging to the same parent company established in pursuant to this law or local laws).
- (7) Not serving as a Director, Supervisor or Employee of other companies or agencies that are the same person, or spouse of a Director, GM or Person holding equivalent position of the Company (this does not apply in cases where the person is an Independent Director of the Company, its parent or subsidiary, or subsidiary belonging to the same parent company established in pursuant to this law or local laws).
- (8) Not a Director, Supervisor, Manager or shareholder holding over 5% shares of special company or agency that has financial or business interactions with the Company (this does not apply in cases where the person that special company or agency holding more than 20%, less than 50% of the total issued shares, and is an Independent Director of the Company, its parent or subsidiary, or subsidiary belonging to the same parent company established in pursuant to this law or local laws).
- (9) Not a Professional, Business Owner, Partner, Director, Supervisor, Manager and Spouse of Sole proprietorship, partnership, company or institution in terms of relevant service including commercial, legal, financial, accounting affair providing audit to the Company or affiliated enterprises or whose accumulative amount being no more than NTD 500,000 in recent two years. However, members of the special committee on remuneration, public acquisition review, or merger and acquisition who perform their functions and powers in accordance with the provisions of the Securities Trading Act or Business Mergers and Acquisitions Act and other relevant regulations shall not be subject to this provision.
- (10) Not having a martial relationship, or a relative with the second degree of kinship to other directors.
- (11) Not been a person of any conditions defined in Article 30 of the Company Act.
- (12) Not a governmental, juridical person or its representative elected as defined in Article 27 of the Company Act.

3.2.2 Profile of Directors, Supervisors, and Management Team

Date: April 5, 2020

Position	Nationality	Name	Gender	Date Elected		Shareholding		nor Shareholding	Arrangement		Experience (education)	Other Position	Managers who are Spouses or Within Two Degrees of Kinship			Remarks
					Shares	Shareholding (%)	Shares	Shareholding (%)	Shares	Shareholding (%)			Position	Name	Relation	
CEO	Malaysia	Khein Seng Pua	М	2008.10.01	4,557,972	2.31	806,262	0.41	3,400,144	1.73	Master of Institute of Electrical and Control Engineering, National Chiao Tung University, Feiya Technology Corp.	[Note 01]	N/A	N/A	N/A	[Note
President	Malaysia	Cheek Kong Aw Yong	М	2008.10.01	3,409,745	1.73	36,000	0.02	173,000	0.09	Master of Institute of Electrical and Control Engineering, National Chiao Tung University, Feiya Technology Corp.	[Note 02]	N/A	N/A	N/A	13]
Vice President	Taiwan	Tzung Horng Kuang	М	2002.06.18	1,408,736	0.71	0	0.00	0		Master of Business Administration, Greenwich University Kogen Singapore Pte. Ltd	[Note 03]	N/A	N/A	N/A	N/A
Vice President	Taiwan	Yeou Long Sheng	М	2017.09.20	0	0.00	0	0.00	0	0.00	EMBA of Business, National Taiwan University. Master of University of Houston	[Note 04]	N/A	N/A	N/A	N/A
Vice Technical President	Taiwan	Chih Jen Hsu	М	2012.08.01	1,020,301	0.52	0	0.00	0	0.00	B.S. of Department of Information Engineering, Chung Yuan Christian University Assistant Manager of Winbond Electronics Corporation	N/A	N/A	N/A	N/A	N/A
Director of Administration Division	Taiwan	Hsiu Chin Liu	F	2009.10.31	18,427	0.01	0	0.00	0	0.00	B.S. of Department of Finance Management, Chung Hua University Specialist of Silicon Motion Inc. Specialist of Advanced Scientific Corp.	[Note 05]	N/A	N/A	N/A	N/A
Director of Product Division/R&D Division 3	Malaysia	Wee Kuan Gan	М	2012.02.24	99,052	0.05	5,451	0.00	0	0.00	B.S. of Department of Electrical and Computer Engineering, NCTU	[Note 06]	N/A	N/A	N/A	N/A
Director of Sales & Marketing Division 1	Taiwan	Shu Hui Tsai	F	2012.02.24	18,159	0.01	3,115	0.00	0	0.00	B.S. of Department of Applied English, Fu Jen Catholic University English Teacher of Gram English Center Sales/Production Control of Silicon Motion Inc.	[Note 07]	N/A	N/A	N/A	N/A

Position	Nationality	Name	Gender	Date Elected	Shareh	olding	Spouse & Mir	nor Shareholding		g by Nominee agement	Experience (education)	Other Position	or With		re Spouses Degrees of	Remarks
					Shares	Shareholding (%)	Shares	Shareholding (%)	Shares	Shareholding (%)			Position	Name	Relation	
Director of Sales & Marketing Division 2	Taiwan	Huei Chen Tsay	F	2012.02.24	9,701	0.00	169	0.00	0		B.S. of Department of Automatic Control Engineering, Feng Chia University University of Exeter, UK, MBA in International Management Teaching Assistant, department of Automatic Control Engineering, Feng Chia University Vice Director of Sales Department of Tripod Technology Inc.	[Note 08]	N/A	N/A	N/A	N/A
Director of R&D Division 3	Taiwan	Li Fu Huang	М	2019.11.11	0	0.00	0	0.00	0	0.00	Master of Arts and Sciences, Columbia University Etron Technology, Inc. Sumitomo Shoji Chemicals Co., Ltd.	[Note 09]	N/A	N/A	N/A	N/A
Director of Finance Division	Taiwan	Shu Hua Chiu	F	2012.12.01	0	0.00	0	0.00	0	0.00	B.S. of Department of Economics, National Central University Vice Assistant Officer of Touche Tohmatsu Limited	N/A	N/A	N/A	N/A	N/A
Director of R&D Division 1	Taiwan	Kuo Yi Cheng	М	2012.08.01	24,134	0.01	1,558	0.00	0	0.00	Master of Graduate Institute of Electric Engineering, National Taiwan University of Science and Technology	[Note 10]	N/A	N/A	N/A	N/A
Director of R&D Division 2, 7	Taiwan	Chung Hsun Ma	М	2012.08.01	0	0.00	0	0.00	0	0.00	Master of Graduate Institute of Physics, National Central University Vice President of King Byte Information Corp.	[Note 11]	N/A	N/A	N/A	N/A
Director of R&D Division 5	Taiwan	Jui Chieh Lin	М	2016.05.01	0	0.00	0	0.00	0	0.00	Master of Institute of Electrical and Control Engineering, National Chiao Tung University Vice Manager of Faraday Technology Inc.	N/A	N/A	N/A	N/A	N/A
Director of R&D Division 6	Taiwan	Ching Wen Chan	М	2019.01.25	0	0.00	0	0.00	0	0.00	Doctor of Graduate Institute of Electrical and Computer Engineering, NCKU Project Manager of CED Technology Inc.	N/A	N/A	N/A	N/A	N/A

Position	Position Nationality Name Ge		Gender	Date Elected	i		Spouse & Minor Shareholding		Arrangement		Experience (education)	Other Position	Managers who are Spouses or Within Two Degrees of Kinship			
					Shares	Shareholding (%)	Shares	Shareholding (%)	Shares	Shareholding (%)			Position	Name	Relation	
Director of R&D Division 8	Malaysia	Chieh Chuan Chin	М	2018.10.24	0	0.00	0	0.00	0		Master of Institute of Electrical and Control Engineering, National Chiao Tung University	N/A	N/A	N/A	N/A	N/A
Finance Officer and Accounting Officer	Taiwan	Bao Feng Chen	F	2020.03.27	0	0.00	0	0.00	0	0.00	University of Wales Master of E-commerce Management Department Senior manager of PHISON Electronics Corp.	[Note 12]	N/A	N/A	N/A	N/A

- [Note 01] Legal representative director and Chairperson, Lian Xu Dong Investment Corporation, OSTEK Corporation, Phisontech Electronics Taiwan Corp., Memoryexchange Corporation; Legal representative director, Kingston Solutions Inc., Phisontech Electronics (Malaysia) Sdn. Bhd., Director, Global Flash Limited, EpoStar Electronics (BVI) Corporation, Core Storage Electronic (Samoa) Limited.
- [Note 02] Legal representative director, Lian Xu Dong Investment Corporation, Phisontech Electronics Taiwan Corp., Director, Global Flash Limited, Core Storage Electronic (Samoa) Limited.
- [Note 03] Legal representative director and Chairperson of Phisontech Electronics (Malaysia) Sdn. Bhd.; Legal representative director of Microtops Design Corporation, OSTEK Corporation; Director of Phison Electronics Japan Corp., Power Flash (Samoa) Limited.
- [Note 04] Legal representative director, Phisontech Electronics Taiwan Corp.
- [Note 05] Legal representative supervisor, Lian Xu Dong Investment Corporation.
- [Note 06] Legal representative director, OSTEK Corporation; Legal representative supervisor, Phisontech Electronics Taiwan Corp.
- [Note 07] Director of Power Flash (HK) Limited. Legal representative of Phisontech (Shenzhen) Limited.
- [Note 08] Director of Power Flash (HK) Limited.
- [Note 09] Legal representative director, PMS Technology Corporation.
- [Note 10] Be appointed by EpoStar Electronics (BVI) Corporation as a legal representative director of EpoStar Electronics Corporation, and legal representative of Hefei Ruhan Electronic Technology Limited.
- [Note 11] Supervisor of MicroTops Design Corporation; legal representative director of Emtops Electronics Corporation.
- [Note 12] Legal representative supervisor of Mermorychange Corporation, Super Storage Technology Corporation.
- [Note 13] Related information of reasons, rationality, necessity and countermeasures (e.g. methods like increase the number of seats for Independent Directors, and more than half of directors do not assume as employees or managers concurrently) shall be illustrated where Chairperson, President or equivalents (Top Manager) are the same person, couples or relatives of first degree of kinship: The Chairperson, Khein Seng Pua, and the President, Chee Kong Aw Yong, are not the same person nor spouse or a first-degree relative of each other. In 2019, the Company set seven Directors (including two Independent Directors) in accordance with Article 13 of the Articles of Incorporation of the Company. Nine Directors (including three Independent Directors) are estimated to be established after the full re-election of Directors in 2020, which is better than the number of Independent Directors stipulated in Article 13-1 of the Articles of Incorporation of the Company, with half of the Directors not concurrently serving as employees or Manager of the Company.

3.3 Remuneration of Directors, Supervisors, President, and Vice Presidents

3.3.1 Remuneration of Directors and Independent Directors

Unit: NT\$ thousands

					Remun	neration					of Total	Relev	ant Remune	ration Rec	ceived by Dir	rectors W	Vho are A	dso Emplo	oyees		of Total	Compensation
m: i	N.		ompensation (A)	Severar	ice Pay (B)	Compe	rectors nsation (C) ote 1]	Allow	ances (D)	(A+B+0	uneration C+D) to Net (%) [Note 2]		onuses, and ances(E)		nce Pay (F) lote 3]	Emp		ompensationote 1]	on (G)	to Net Income	+B+C+D+E+F+G) e (%) [Note 2] te 2]	Directors from an
Title	Name	The Company	Illianciai	The Company	Companies in the consolidated financial	The Company	manciai			The Company	111111111111111111111111111111111111111			The Company			ompany	conso fina state	ncial ments	The Company	Companies in the consolidated financial statements	Invested Company Other than the Company's Subsidiary
CI :	WI : C D		statements		statements		statements		statements		statements		statements		statements	Cash	Stock	Cash	Stock			
Director	Khein Seng Pua Chee Kong Aw Yong																					
Director	Tzung Horng Kuang																					
Director	Chih Jen Hsu																					
	KIOXIA Corporation (Originally,																					
Director	Toshiba Memory Corporation)	C	0	a	0	17,500	17,500	0	0	0.39	0.39	54,073	54,073	343	343	47,400	0	47,400	C	2.63	2.63	B N/A
Director	KIOXIA Corporation (Originally, Toshiba Memory																					
Independent Director	Corporation) Chen Wei Wang		200			7,000	7,000			0.14	0.16									0.16	0.16	S N/A
Independent Director	Shu Fen Wang	300	300	0	0	7,000	7,000	0	C	0.16	0.16	0	0	0	0	0	0	0	0	0.16	0.16	6 N/A

^{1.} Please state the payment policy, system, standard and structure of remuneration of Independent Directors, and relevance of remuneration amount based on factors like duties, risks, time: the remuneration of directors and supervisors of the Company is recognized as according to Article 19 of the Articles of Association of the Company and distributed upon resolutions made at the Remuneration Committee and Board of Directors referring to the usual payment of the same trade and time invested and duties undertaken of individuals.

^{2.} Compensation to Directors of the most recent year for services provided for the companies in the financial statements (e.g. non-employee consultant position) except listed above: None.

[[]Note 1] According to the resolutions made at the Board of Directors on Mar 16 of 2020, the Company will remunerate the employees (NT\$650,000 thousand) and the Directors/Supervisors (NT\$35,000 thousand). Up to the publication date of the annual report, the employee list of the remuneration and the amount of remuneration for Directors/Supervisors has not been decided. The table above shows the estimated amount of proposed distribution.

[[]Note 2] Profit after tax: According to the individual financial statements, the profit after tax in 2019 is NT\$4,543,489 thousand.

[[]Note 3] This is the severance pay required by the relevant laws.

Table of Range of Remuneration

		Name of Directors			
n en e	Total of Re	emuneration (A+B+C+D)	Total of Remuneration	(A+B+C+D+E+F+G)	
Range of Remuneration	The Company	Companies in the consolidated financial statements (H)	The Company	Companies in the consolidated financial statements (I)	
Under NT\$1,000,000	0	0	0	0	
NT\$1,000,000 (inclusive) to 2,000,000 (not inclusive)	0	0	0	0	
NT\$2,000,000 (inclusive) to 3,500,000 (not inclusive)	0	0	0	0	
NT\$3,500,000 (inclusive) to 5,000,000 (not inclusive)		Horng Kuang, Chih Jen Hsu, Chen Wei Wang, Shu Fen Wang, riginally, Toshiba Memory Corporation)	Chen Wei Wang, Shu Fen Wang, KIOXIA Corpor	Corporation (Originally, Toshiba Memory ation)	
NT\$5,000,000 (inclusive) to 10,000,000 (not inclusive)	0	0	Chih Je	n Hsu	
NT\$10,000,000 (inclusive) to 15,000,000 (not inclusive)	0	0	Tzung Horng Kuang		
NT\$15,000,000 (inclusive) to 30,000,000 (not inclusive)	0	0	0	0	
NT\$30,000,000 (inclusive) to 50,000,000 (not inclusive)	0	0	Khein Seng Pua, Ch	ee Kong Aw Yong	
NT\$50,000,000 (inclusive) to 100,000,000 (not inclusive)	0	0	0	0	
Over NT\$100,000,000	0	0	0	0	
Total	7	7	7	7	

3.3.2 Remuneration of Supervisors

Hni	t· N	T\$ 1	thou	sands
	II. IN	1 ()		ISAHUS.

				Rem	uneration				of Total	Compensation Paid to
Desidien	NI	Base Com	pensation (A)		Supervisors (B) Note 1]	Allow	rances (C)	Net Incom	on (A+B+C) to e (%) [Note 2]	Directors from an Invested
Position	Name	The Company	Companies in the consolidated financial statements	The Company	Companies in the consolidated financial statements	The Company	Companies in the consolidated financial statements	The Company	Companies in the consolidated financial statements	Company Other than the Company's Subsidiary
Supervisor	Jiunn Yeong Yang									
Supervisor	Huei Ming Wang	0	0	10,500	10,500	0	0	0.23	0.23	N/A
Supervisor	Chiun Hsiou Chen									

[[]Note 1] According to the resolutions made at the Board of Directors on Mar 16 of 2020, the Company will remunerate the directors/supervisors (NT\$35,000 thousand). Up to the publication date of the annual report, the amount of remuneration for individual supervisors has not been decided. The table above shows the estimated amount of proposed distribution.

[Note 2] Profit after tax: according to the individual financial statements, the profit after tax in 2019 is NT\$4,543,489 thousand.

Table of Range of Remuneration

	Nama of	Directors
	111	eration (A+B+C)
Range of Remuneration	Total of Remune	
8	The Company	Companies in the consolidated financial
	The company	statements (D)
Under NT\$1,000,000	0	0
NT\$1,000,000 (inclusive) to 2,000,000 (not inclusive)	0	0
NT\$2,000,000 (inclusive) to 3,500,000 (not inclusive)	0	0
NTD 3,500,000 (inclusive) to 5,000,000 (not inclusive)	Jiunn Yeong Yang, Huei Ming Wang,	Jiunn Yeong Yang, Huei Ming Wang,
	Chiun Hsiou Chen	Chiun Hsiou Chen
NT\$5,000,000 (inclusive) to 10,000,000 (not inclusive)	0	0
NT\$10,000,000 (inclusive) to 15,000,000 (not inclusive)	0	0
NT\$15,000,000 (inclusive) to 30,000,000 (not inclusive)	0	0
NT\$30,000,000 (inclusive) to 50,000,000 (not inclusive)	0	0
NT\$50,000,000 (inclusive) to 100,000,000 (not inclusive)	0	0
Over NT\$100,000,000	0	0
Total	3	3

3.3.3 Remuneration of the President and Vice Presidents

Unit: NT\$ thousands

		Sala	ary (A)		nce Pay (B) [ote 3]		Allowances (C) [ote 4]	Emp	-	mpensation (te 1]	(D)	(A+B+C+D) t	al compensation to net income (%) fote 2]	Compensation Paid to Directors from an Invested Company
Position	Name	The Company	Imanciai	The Company	Imanciai	The Company	Imanciai	The Cor		Staten	d financial nents	The Company	imanciai	Other than the
			statements		statements		statements	Cash	Stock	Cash	Stock		statements	Bubsidiary
CEO	Khein Seng Pua													
President	Chee Kong Aw Yong													
Vice President	Tzung Horng Kuang	20,193	20,193	451	451	38,729	38,729	48,580	0	48,580	0	2.38	2.38	N/A
Vice Technical President	Chih Jen Hsu													
Vice President	Yeou Long Sheng													

[Note 1] According to the resolutions made at the Board of Directors on Mar 16 of 2020, the Company will remunerate the employees total amount of NT\$650,000 thousand. Up to the date of publication of the annual report, the employee list of the remuneration has not been decided. The table above shows the estimated amount of proposed distribution.

[Note 2] Profit after tax: according to the individual financial statements, the profit after tax in 2019 is NT\$4,543,489 thousand.

[Note 3] This is the severance pay required by the relevant laws.

Table of Range of Remuneration

	Name of President	and Vice Presidents
Range of Remuneration	Total of Remune	eration (A+B+C)
	The Company	Companies in the consolidated financial statements
Under NT\$1,000,000	0	0
NT\$1,000,000 (inclusive) to 2,000,000 (not inclusive)	0	0
NT\$2,000,000 (inclusive) to 3,500,000 (not inclusive)	0	0
NT\$3,500,000 (inclusive) to 5,000,000 (not inclusive)	0	0
NT\$5,000,000 (inclusive) to 10,000,000 (not inclusive)	Tzung Horng Kuan, Chih J	en Hsu, Yeou Long Sheng
NT\$10,000,000 (inclusive) to 15,000,000 (not inclusive)	0	0
NT\$15,000,000 (inclusive) to 30,000,000 (not inclusive)	0	0
NT\$30,000,000 (inclusive) to 50,000,000 (not inclusive)	Khein Seng Pua, Ch	nee Kong Aw Yong
NT\$50,000,000 (inclusive) to 100,000,000 (not inclusive)	0	0
Over NT\$100,000,000	0	0
Total	5	5

3.3.4 Remuneration of Management Team

As of 16/3/2019; Unit: NT\$ thousands

	Position	Name	Stock	Cash [Note 1]	Total	Ratio of Total Amount to Net Income (%) [Note 2]
	CEO	Khein Seng Pua				
	President	Chee Kong Aw Yong				
	Vice President	Tzung Horng Kuang				
	Vice President	Yeou Long Sheng				
	Vice Technical President	Chih Jen Hsu				
	Director of Administration Division	Liu Hsiu Chin				
	Director of Product, R&D Division 3	Wee Kuan Gan				
Manager	Director of Sales & Marketing Division 1	Shu Hui Tsai	0	71,500	71,500	1.57
	Director of Sales & Marketing Division 2	Huei Chen Tsay				
	Director of Sales & Marketing Division 3	Li Fu Huang				
	Director of R&D Division 1	Kuo Yi Cheng				
	Director of R&D Division 2,	Chung Hsun Ma				
	Director of R&D Division 5.	Jui Chieh Lin				
	Director of Finance Division	Shu Hua Chiu				
	Director of R&D Division 6	Ching Wen Chan				
	Director of R&D Division 8	Chieh Chuan Chin				

[Note 1] According to the resolutions made at the Board of Directors meeting on Mar 16 of 2020, the Company will remunerate the employees total amount of NT\$650,000 thousand compensation. Up to the publication date of the annual report, the employee list of the remuneration has not been decided. The table above shows the estimated amount of proposed distribution.

[Note 2] Profit after tax: according to the individual financial statements, the profit after tax in 2019 is NT\$4,543,489 thousand.

- 3.3.5 Ratio of total remuneration for directors, supervisors, president and vice presidents of the Company and all the companies in the consolidated Financial Statements in the recent two fiscal years in net profits of individual financial report after tax shall be illustrated, and remuneration payment policy, standard and combination, establishment procedure of remuneration, relevance between performance and the future risk shall be stated.
 - 3.3.5.1 Analysis of ratio of total remuneration for directors, supervisors, president and vice presidents of the Company and all the companies in the consolidated Financial Statements in the recent two fiscal years in net profits of individual financial statement after tax

Unit: %

Item Position		Companies in the consolidated financial statements	on to Net In %) The Company	2019 Companies in the consolidated financial statements	Percentage of change of the Company (%)	Percentage of change of all companies in the consolidated statement (%)
Director	3.11	3.11	2.79	2.79	(0.32)	(0.32)
Supervisor	0.28	0.28	0.23	0.23	(0.05)	(0.05)
President and Vice President	2.62	2.62	2.38	2.38	(0.24)	(0.24)

Note: The profit after tax of 2018 and 2019 are NT\$4,318,119 thousand and NT\$4,543,489 thousand, respectively.

3.3.5.1.1 The Company's Articles of Incorporation regulate the following matters:

• According to the Article 19 of the Articles of Incorporation of the Company, if the Company earns a profit, 8% to 19% of it should be used as the employee remuneration and less than 1.5% of it could be used as the Directors/Supervisors remuneration. If the Company is still in accumulated loss, the profit should be used to compensate this loss first.

The employee remuneration can be rewarded in stocks or cash to the employee if the criteria are met. The Director/Supervisor remuneration can only be rewarded in cash.

In the first section, profit means the pre-tax income before the employee remuneration and the Director/Supervisor remuneration are rewarded.

The employee and Director/Supervisor remuneration distribution should be decided in the Board of Directors with the presence of two-thirds of Directors and the agreement of half of the Directors. These decisions should be reported to the shareholders' meeting.

• The profit of the Company in 2019 is NT\$6,025,446,147 ("profit" as mentioned in the first paragraph refers to pre-tax profits before deducting the distributed employees and directors' remuneration). The Board of Directors on Mar 16, 2020, decided that the Company will remunerate the employees (NT\$650,000,000 in total; 10.79% of the profit) and the directors/supervisors (NT\$35,000,000 in total; 0.58% of the profit). The remuneration will be rewarded in cash and these decisions will be reported to the annual shareholders' meeting on June 3, 2020.

- 3.3.5.1.2 The analysis and comparison of the percentage of total remuneration for Directors, Supervisors, Presidents and Vice Presidents to the net profits after tax in the individual financial reports in the most recent two fiscal years is listed in this section.
- The analysis and comparison of the percentage of total remuneration for Directors and Supervisors to the net profits after tax in the individual financial reports in the most recent two fiscal years is listed in this section.
 - A. According to the Article 19 of the Articles of Incorporation of the Company, if the Company earns a profit, 8% to 19% of it should be used as the employee remuneration and less than 1.5% of it could be used as the Directors/Supervisors remuneration If the Company is still in accumulated loss, the profit should be used to compensate this loss first.
 - B. The percentage of total payment of remuneration of Directors and Supervisors to individual financial statements in 2019 is decreased compared with 2018 is due to the Company increased the net profits after tax in 2019, but the Company did not increase the compensation of Directors and Supervisors.
- The analysis and comparison of the percentage of total remuneration for President and Vice Presidents to the net profits after tax in the individual financial reports in the most recent two fiscal years is listed in theis section.
 - A. The remuneration of the President and Vice Presidents will be reviewed by the remuneration committee and submitted to the Board of Directors for discussion and approval.
 - B. The percentage of total payment of remuneration of President and Vice Presidents to individual financial statements in 2019 is decreased compared with 2018 is due to the Company increased the net profits after tax in 2019, but the Company did not increase the compensation of key management.
- 3.3.5.2 Remuneration payment policy, standard and combination, establishment procedure of remuneration, relevance between performance and the future risk
- The policy of remuneration payment to Directors, Supervisors, standard and combination, establishment procedure of remuneration, relevance between performance and the future risk

Concerning the Director remuneration, Article 19 of the Articles of Incorporation stipulates that if there are profits for the fiscal year, the Company shall allocate no more than 1.5% as the remuneration for directors and supervisors; and there is no other remuneration items other than that. For the establishment procedure of remuneration, apart from referring to the evaluation result of "Self-evaluation or peer-evaluation of the Board of Directors" as a review basis, the Director and Supervisor performance shall be evaluated based on data including evaluation result of director and supervisor performance, attendance and attendance rate of the Board of Directors, and study situation. After reviewing by Remuneration Committee individually, the proposal will be submitted to the Board of Directors and the remuneration system shall be inspected according to operation status and relevant laws at any time to achieve the balance of sustainable operation and risk control.

• Policy of remuneration payment to president and vice presidents, standard and combination, establishment procedure of remuneration, relevance between performance and the future risk

For the policy, standard for remuneration payment to Managers, the remuneration and bonus balance policy shall be adopted, referring to the normal payment of the same trade for the positions, the scope of rights and responsibilities, and contribution degree to the operation goal of the Company. For the establishment procedure, apart from referring to the entire operation performance of the Company, the individual input time, assumed responsibility, personal goal achievement, performance for assuming other posts, salary paid to equivalent positions in recent years by the Company, the achievement of short-term and long-term business goals, and financial status shall be taken as the basis; for the remuneration, after reviewing by Remuneration Committee individually, it will be distributed after the proposal is submitted to the Board of Director for discussion and decision.

Implementation of Corporate Governance 3.4

3.4.1 Board of Directors

A total of 13 meetings (A) of the Board of Directors were held in 2019. The attendance of

director and supervisor were as follows:

Position	Name	Actual Attendance	Commission Letter Attendance	Percentage of Actual Attendance (%)(B/A)	Remark
Chairperson	Khein Seng Pua	13	0	100.00	
Director	Chee Kong Aw Yong	13	0	100.00	
Director	Tzung Horng Kuang	13	0	100.00	
Director	Chih Jen Hsu	13	0	100.00	
Director	KIOXIA Corporation (Originally, Toshiba Memory Corporation) Representative: Hiroto Nakai	10	3	76.92	N/A
Independent Director	Shu Fen Wang	13	0	100.00	
Independent Director	Chen Wei Wang	13	0	100.00	
Supervisor	Jiunn Yeong Yang	13	0	100.00	
Supervisor	Huei Ming Wang	8	0	61.54	
Supervisor	Chiun Hsiou Chen	13	0	100.00	

The attendance of Independent Director in 2019 is as follows:

: Actual Attendance

☆: By Proxy *: Absence

	The 16th	The 17th	The 18th	The 19th	The 20th	The 21st	The 22nd
2019	Meeting						
	of						
	The						
	Eighth						
	Term						
Shu Fen Wang	0	0					
Chen Wei Wang	0	©	©	©	©	0	0

2019	The 23rd Meeting of The Eighth Term	The 24th Meeting of The Eighth Term	The 25th Meeting of The Eighth Term	The 26th Meeting of The Eighth Term	The 27th Meeting of The Eighth Term	The 28th Meeting of The Eighth Term
Shu Fen Wang	0	0	((0	0
Chen Wei	0	(0)	(0)	(0)	(0)	0

Other mentionable items:

- If any of the following circumstances occur, the dates of the meetings, sessions, contents of motion, all Independent Directors' opinions and the Company's response should be specified:
 - (1) Matters referred to in Article 14-3 of the Securities and Exchange Act:

Board of Directors Date	Period	Content of motion	Independent Director's opinion	The Company's handing of the opinions of Independent Directors
2019.01.25	The 16th Meeting of The Eighth Term	The performance evaluation for managerial officers as well as the proposal for the Year-End and Performance Incentive Bonus for managerial officers		
2019.03.21	The 17th Meeting of The Eighth Term	Amendment to part of the "Procedures for Acquisition or Disposal of Assets," "Procedures for Engaging in Derivatives Trading," "Procedures for Lending Funds to Other Parties," "Procedures for Endorsement and Guarantee." Amendment to the "Authorizing Table" To approve the revisions of "Implementation Rules of the Employee Welfare Committee" Proposal for private placement for common shares of the Company The Company replaces CPAs cooperating with the internal adjustment mechanism of Touche Tohmatsu Limited		
2019.05.10	The 18th Meeting of The Eighth Term	Plan on the regular performance evaluation and annual fixed salary adjustment and distribution of managers of the Company Establishment of "Standard Operating Procedures for Handling the Request of Directors" Amendment to part of "Property, Plant and Equipment Cycling" and "Measures for Property, Plant and Equipment Management" Amendment to part of the "Procedures for Acquisition or Disposal of Assets"	Proposal was approved as proposed	The motion was approved.
2019.07.26	The 20th Meeting of The Eighth Term	Review the regular performance evaluation for directors, supervisors and managerial officers as well as the performance incentive bonus of managers and the directors, supervisors and managers remuneration distribution for 2018 Amendment to part of Accounting System of the Company		
2019.08.27	The 21st Meeting of The Eighth Term	Purchase of Land in Jhunan Township, Miaoli County by the Company		
2019.09.17	The 23rd Meeting of The Eighth Term	Amendment to the "Authorizing Table"		

2019.11.11	The 25th Meeting of The Eighth Term	The Company establishes "FY2019 Employee Stock Option Plan" The proposal of the "2019 Annual Audit Plan"	
2019.12.20	The 26th Meeting of The Eighth Term	The Company revises "FY2019 Employee Stock Option Plan" Amendment to part of "Measures for Financial Statement Preparation Procedure Management", "Management Auditing of Financial Statement Preparation Procedures"	
2019.12.20	The 27th Meeting of The Eighth Term	The List of first issuing Employee Stock Option under the "FY2019 Employee Stock Option Plan" for managerial officers The List of first issuing Employee Stock Option under the "FY2019 Employee Stock Option Plan"	

(2) Other matters involving objections or expressed reservations by Independent Directors that were recorded or stated in writing that require a resolution by the Board of Directors: None.

If there are Directors' avoidance of motions in conflict of interest, the Directors' names, contents

of motion, causes for avoidance and voting should be specified:

Date of the Meeting	Content of Motion	Name of Director	Causes for Avoidance	Voting or Not[Note 1]
2019.01.25	The performance evaluation for managerial officers as well as the proposal for the Year-End and Performance Incentive Bonus for managerial officers	Directors: Khein Seng Pua, Chee Kong Aw Yong, Tzung Horng Kuang, and Chih Jen Hsu		
2019.05.10	The regular performance evaluation and proposal for adjustment of the annual fixed salary for managers	Director Chih Jen Hsu		
2019.07.26	Review the Performance Evaluation for Directors, Supervisors, and managerial officers as well as the proposal for the Compensation of Directors, Supervisors in 2018 and the Performance Incentive Bonus and the Employee Compensation in 2018 for managerial officers	Directors: Khein Seng Pua, Chee Kong Aw Yong, Tzung Horng Kuang and Chih Jen Hsu, and Toshiba Memory Corporation; Independent Directors: Shu Fen Wang and Chen Wei Wang	Related Parties of the Motion	No
2019.12.20	The List of first issuing Employee Stock Option under the "FY2019 Employee Stock Option Plan" for managerial officers	Directors: Khein Seng Pua, Chee Kong Aw Yong, Tzung Horng Kuang, and Chih Jen Hsu		

[Note 1] Directors who are in interest conflict have avoided the discussions and voting.

- 3. TWSE/TPEx Listed Companies shall disclose information including the evaluation period and duration, evaluation scope, method and evaluation content of self (or peer) evaluation of the Board of Directors: the Company plans to establish the Measures for "Self-evaluation or Peer-evaluation of the Board of Directors" in 2020 to continue to implement corporate governance and improve functions of the Board.
- 4. Goals of the current and the recent years to improve the functions of Board of Directors (such as establishing audit committee, improving the information disclosure) and evaluation of the implementation:

- (1) Improve the functions of Board of Directors:
 - A. The Board of Directors was operated based on the "Regulations of Board of Directors Proceedings" of the Company.
 - B. Since 2015, the Company started the questionnaire of Directors/Supervisors evaluation based on Article 6 of "Self-evaluation or peer-evaluation of the Board of Directors of oo Co., Ltd." Based on these evaluations, as well as "Performance evaluation of directors/supervisors" "attendance of Directors/Supervisors to Board of Directors," and "Advanced training of Directors/Supervisors," the performance of Directors and Supervisors were evaluated to implement company governance and promote the functions and efficiency of Board of Directors. The Company plans to establish "Self-evaluation or peer-evaluation of the Board of Directors" in 2020 to implement company governance and promote the functions of Board of Directors.
 - C. Advanced training of Directors/Supervisors on corporate governance or related to current affairs: The Company arranges advanced training every year for Directors and Supervisors to obtain relevant information, which benefits their core values, professional advantages and capabilities.
- (2) Evaluation of the implementation:
 - A. The Company reveals its finance and business information on the Taiwan Stock Exchange Market Observation Post System and the Company's website to ensure the information disclosure; the attendance of Directors/Supervisors to Board of Directors and the advanced training of directors/supervisors were also disclosed on the Taiwan Stock Exchange Market Observation Post System, as well as the communication summary of Independent Director and Supervisor and accountant, and meetings between the Independent Director and Supervisor and audit officer to disclose the information and improve the governance of the Company.
 - B. The Company is planned to establish an audit committee to complete the corporate governance and strengthen management mechanism.

3.4.2 Attendance of Supervisors at Board of Directors

A total of 13 meetings of the Board of Directors were held in 2019. The attendance of Supervisors was as follows:

Title	Name	Actual Attendance	Percentage of Actual Attendance (%)	Remark
Supervisor	Jiunn Yeong Yan	13	100.00	
Supervisor	Huei Ming Wang	8	61.54	N/A
Supervisor	Chiun Hsiou Chen	13	100.00	

Other mentionable items:

- 1. Composition and responsibilities of supervisors:
 - (1) Communications between Supervisors and the Company's employees and shareholders: The Supervisor can understand the actual operation of the Company through the Board of Directors or through the audit reports from the audit office or through checking the Company's financial, business information at any time. They can ask the relevant officers to provide the reports. The Company's employees, shareholders, stakeholder, and major shareholders can communicate with supervisors by mails or e-mails.
 - (2) Communications between Supervisors and the Company's chief internal auditor and CPA: the Company internal audit office provides the Supervisors with the internal auditing reports on a regular basis, as well as reporting the latest audit results to the Board

meetings. Supervisors should check the financial and operational status as needed. If Supervisors have any questions about the relevant operations, they should communicate with the departmental managers immediately to find the solutions to review and improve the status. As for the communication with CPAs, if Supervisors have any questions about the financial and operational status, they should communicate with the CPAs of the Company and supervise the departmental managers to find the solutions to review and improve the status. The Company held meetings between the Independent Director and Supervisor and accountant on December 16, 2019, and March 16, 2020, and meetings between the Independent Director and supervisor and audit officer, and disclosed the Company's website.

2. If a Supervisor expresses an opinion during a meeting of the Board of Directors, the dates of the meetings, sessions, contents of motion, resolutions of the directors' meetings and the Company's response to the supervisor's opinion should be specified: None.

3.4.3 Corporate Governance Implementation Status and Deviations from "the Corporate Governance Best-Practice Principles for TWSE/TPEx Listed Companies"

			erpres for 1 vv 5E/11 Ex Elisted Companies	
	Implementation status			Deviations from
Evaluation item	Yes	No	Abstract Illustration	the Corporate Governance Best- Practice Principles for TWSE/TPEx Listed Companies and reasons thereof
1. Does the Company establish and disclose the Corporate Governance Best-Practice Principles" based on "Corporate Governance Best-Practice Principles for TWSE/TPEx Listed Companies"?			"Corporate Governance Best-Practice Principles for TWSE/TPEx-Listed Companies"	Governance Best-
2. Shareholding structure & shareholders' rights				
(1) Does the Company establish an internal operating procedure to deal with shareholders' suggestions, doubts, disputes and litigations, and implement based on the procedure?	V		(1) The Company did not establish an internal operating procedure. However, to protect the shareholders' rights, spokesman, deputy spokesman, shareholders service dept. and legal office have been established to respond to shareholders' suggestions and conflicts.	(1) No major deviation.
(2) Does the Company possess the list of its major shareholders as well as the ultimate owners of those shares?	V		(2) The Company possesses the list of its shareholders from the Stock Transfer Agent to know the shares held by directors, supervisors, management team and major shareholders (over 10% of the stocks). The Company has a good communication with them.	(2) No major deviation.
(3) Does the Company establish and execute the risk management and firewall system within its conglomerate structure?	V			(3) No major deviation.

			Implementation status	Deviations from
Evaluation item	Yes	No	Abstract Illustration	the Corporate Governance Best- Practice Principles for TWSE/TPEx Listed Companies and reasons thereof
(4) Does the Company establish	V		, · · · · · · · · · · · · · · · · · · ·	(4) No major
internal rules against insiders trading with undisclosed information?			of preventing internal transactions" to stop any behaviors of internal transactions. Regular internal training is also held to stop any behaviors of internal transactions.	deviation.
3. Composition and Responsibilities of the Board of Directors				
(1) Does the Board develop and implement a diversified policy for the composition of its members?			diversified policy for the composition of its members. However, in practice, the Company Board of Directors invites professionals with different backgrounds to serve, in order to make the Board members more diversified, the directors of the Company have the necessary knowledge, skills, and literacy to carry out their business, and each has their own special expertise in their respective fields. It has certain benefits for the Company's development and operation. Among the seven Board of Directors members of the Company: 1. There are one female Director and be Independent Director. The female accounted for 14.29% of all Directors; the average age is 68 years old; the male member is 85.71%; the average age is 53.83 years old. The average age of all Directors is 55.71 years old. 2. In addition to Taiwanese Directors, there is a legal person and legal representative in Japan, with the Company's leading position in the industry. 3. Directors Member: Composed of Master of Institute of Electrical and Control Engineering, National Chiao Tung University, Master of Business Administration, Greenwich University, Department of Computer Science, Chung Yuan Christian University, KIOXIA Corp. and Bachelor of Earth Resources Engineering of Tohoku University. 4. Independent Director members: Composed of Ph.D. in Finance, University of Houston and CEO, Quanta Computer Inc.	
(2) Does the Company voluntarily establish other	V		(2) In addition to the remuneration committee required by the relevant laws. Currently	(2) No major deviation.

			Implementation status	Deviations from
Evaluation item	Yes	No	Abstract Illustration	the Corporate Governance Best- Practice Principles for TWSE/TPEx Listed Companies and reasons thereof
functional committees in addition to the Remuneration Committee and the Audit Committee?			setting up a Green and Sustainable Management Committee with the following main functions and powers. We will establish other functional committees based on the operation and actual needs. 1. The promotion and maintenance of ISO9001/ISO14001/OHSAS18001/Sony GP, OEM GP. 2. The head of product design serves as the agent of management representative. 3. Establish the hazardous substance management procedure and audit ISO management activities of the relevant units. 4. The green management team is in charge of reviewing laws and regulations every season to ensure that the Company is in compliance with the law. 5. Temporary meetings may be convened at any time in response to customers' environmental requirements and rules. The appropriateness of the management procedure is also discussed to ensure that company products and services can satisfy customer requirements. 6. Maintenance of internal database and development of standard teaching materials for ISO activities implementation. 7. Outside lab testing of hazardous substance content in Phison's main products is carried out every year. 8. Organize two regular new sales green regulations training classes.	
(3) Does the Company establish evaluation measures and methods, conduct performance evaluation regularly every year, and submit the result of performance evaluation to the Board, and use it in individual director remuneration and nominating successors for reference?	V		(3) The Company reviews the performance of Board of Directors' on a regular basis to improve the governance, but there is no standard policy to do it now. Since 2015, the Company started the questionnaire of directors/supervisors evaluation based on Article 6 of "Self-evaluation or peerevaluation of the Board of Directors' of oo Co., Ltd." Based on these evaluations, as well as "Performance evaluation of Directors/Supervisors," "attendance of Directors,'" and "Advanced training of Directors/Supervisors," the performance of Directors and Supervisors were evaluated to	(3) No major deviation.

			Implementation status	Deviations from
Evaluation item	Yes	No	Abstract Illustration	the Corporate Governance Best- Practice Principles for TWSE/TPEx Listed Companies and reasons thereof
(4) Does the Company regularly evaluate the independence of CPAs?	V		implement company governance and promote the functions and efficiency of Board of Directors.' The Company plans to establish "Self-evaluation or peer-evaluation of the Board of Directors" in 2020 to implement company governance and promote the functions of Board of Directors. (4) The Company evaluates the independence and suitability of the CPAs on a yearly basis and has the CPAs provide disclaimers and relevant documents of indicators such as the independence of the audit service team members, the consecutive service years of the CPAs, audit service quality, relevant industrial experiences, and the interaction with the management and internal audit supervisor, which will then be reviewed by the Board of Directors. The most recent two years' assessments were completed in Jan. 2018 and 2019 respectively.	(4) No major
4. Does the TWSE/TPEx Listed Companies assign appropriate number of administrators and designate corporate governance director to take charge of corporate governance affairs (including but not limited to providing data required by directors, supervisors implementing business, assistance of directors, supervisors in complying with laws, handling relevant matters of the board meeting and shareholders' meeting, and preparing minutes of Board of Directors and shareholders' meeting)?			The Company has some departments to take charge of the following affairs: 1. Handling corporate registration and amendment registration: The Shareholders Service Department will be in charge of company registration and change registration based on the resolutions from the Board of Directors or shareholders meeting and other related laws. 2. Handling matters relating to Board of Directors' and shareholders meetings according to laws, and assisting the Company with compliance with laws and regulations governing such meetings and producing minutes of Board of Directors' and shareholders meetings: According to Article 4 of the Rules of Procedure for Board Meetings, the Shareholders Service Department is the unit to administer the meeting proceedings. Hence, the Shareholders Service Department shall collect all the motions from all other departments and submit them to the Board of Directors for discussion. The Company commits Horizon Securities to conduct the affairs of shareholders' meetings. 3. Update laws and regulations relevant to company operation: The Chairperson of the Company will appoint relevant departments and legal office	

			Implementation status	Deviations from
Evaluation item	Yes	No	Abstract Illustration	the Corporate Governance Best- Practice Principles for TWSE/TPEx Listed Companies and reasons thereof
5. Does the Company establish a communication channel and build a designated section on its website for stakeholders (including but not limited to shareholders, employees, customers, and suppliers), as well as handle all the issues they care for in terms of corporate social responsibilities?	V		1	No major deviation.

			Implementation status	Deviations from
Evaluation item	Yes	No	Abstract Illustration	the Corporate Governance Best- Practice Principles for TWSE/TPEx Listed Companies and reasons thereof
6. Does the Company appoint a	V			No major
professional shareholder service agency to deal with shareholder affairs? 7. Information Disclosure			conduct the stock affairs.	deviation.
(1) Does the Company have a corporate website to disclose both financial standings and the status of corporate governance?	V		(1) The Company posts its financial and business information on the Market Observation Post System and establishes the website (www.phison.com) to disclose relevant information.	(1) No major deviation.
(2) Does the Company have other information disclosure channels (e.g. building an English website, appointing designated people to handle information collection and disclosure, creating a spokesman system, webcasting investor conferences)?	>		 (2) a. The Company has established Chinese, English, Japanese and Simplified Chinese website. b. The website is updated on a regular basis. c. Contact information of spokesman: antonioyu@phison.com kuoting_lu@phison.com d. Refer to Market Observation Post System for relevant information. 	(2) No major deviation.
(3) Does the Company publicize and declare the annual financial report within two months upon the end of the fiscal year, and Q1, Q2, and Q3 Financial Report and operation status of each month prior to the scheduled period?	V		(3) The Company has declared 2019 Financial Report on March 16, 2020, which is half a month earlier than the scheduled time, and has completed the declaration of Q1, Q2 and Q3 Financial Report and operation status of each month.	(3) No major deviation.
8. Is there any other important information to facilitate a better understanding of the Company's corporate governance practices (e.g., including but not limited to employee rights, employee wellness, investor relations, supplier relations, rights of stakeholders, Directors' and Supervisors' training records, the implementation of risk	V			No major deviation.

			Implementation status	Deviations from
Evaluation item	Yes	No	Abstract Illustration	the Corporate Governance Best- Practice Principles for TWSE/TPEx Listed Companies and reasons thereof
management policies and risk evaluation measures, the implementation of customer relations policies, and purchasing insurance for directors and Supervisors)?			appeal committee, pension committee, etc. to protect employees' rights and welfare. Since 2011, the Company has committed the "Hsinchu Lifeline. Association/Employee Assistance Service Center", after Sep 2018 was changed by "Newmind EAP Consultation Co., Ltd" to help employees solving all kinds of problems. (2) Investor Relations: The Company has dedicated personnel to solve the problems for the investors and will hold juridical person seminar to illustrate the business on a regular basis. Investors may contact the IR department of the Company by phone or email for their questions. (3) Supplier Relations: The Company keeps a good relationship with the suppliers and has the policy and regulations to communicate with suppliers. The Company also signs contracts with suppliers to protect rights of both parties. (4) Stakeholders' rights: The Company has established the "Regulations of financial business between affiliated companies" and the "Management operation of transactions with stakeholders to protect the rights of stakeholders and the Company. The Company also signs contracts with suppliers to protect the rights of both parties. (5) Advanced training of Directors and Supervisors: The advanced training of Directors and Supervisors in 2019 was listed on page 54 to 56 of the annual report. Directors and Supervisors of the Company all have their expertise in their area. The Company will arrange advanced training for Directors and Supervisors based on the laws and regulations in Taiwan. (6) Status of risk management policies and risk evaluation: The Company has measures and evaluation standards to manage and evaluate risks. A. Financial risk (Finance and Accounting Department) a. To evaluate the effects of interest, exchange rate, inflation on the net income.	

		Implementation status	Deviations from
Evaluation item	YesNo	Abstract Illustration	the Corporate Governance Best- Practice Principles for TWSE/TPEx Listed Companies and reasons thereof
		 b. To evaluate the policy of high risk and high leverage investment, loan, endorsement and derivative financial products and to evaluate the main causes of profit or loss. B. Legal risk (Legal Affair Office) a. The major risks are lawsuits and contract disputes. b. Reviewing the contracts can lower the risks. C. Intellectual property risk (Intellectual Property Office) a. By extensive patent strategy, the Company protects the rights of itself and customers. b. To abide by the relevant laws of intellectual property and to claim the rights for protecting intellectual rights. D. Information risk (Information Department) a. To plan information security polity and all kinds of information security measures to lower the risk of information security. b. For the purpose of ensuring effective information security will be notified by emails, posts and monthly meetings. c. the Company established the "Information Security Committee" in July 2017 to take charge of information security management, planning, supervision and implementation, and set up "Information Security Management Policy," "QW220010 Information System Change Management Specification," "QW220011 Server Host Management Specifications," "QW220011 Server Host Management Specifications," "QW220010 Information Specifications," "QW220011 Server Host Management Specifications," "CW220011 Server Host Management Specifications," "CW220010 Information Specifications," "CW220011 Server Host Management Specifications," "CW220010 Information Specifications," "CW220011 Server Host Management Specifications," "CW220010 Information Specifications," "CW220011 Server Host Management Specifications," "CW220011	

			Implementation status	Deviations from
Evaluation item	Yes	No	Abstract Illustration	the Corporate Governance Best- Practice Principles for TWSE/TPEx Listed Companies and reasons thereof
			applicability of evaluation, keeps strengthen colleagues and organization over information security protection and establishes joint defense mechanism with vendors or partners in future. E. Environment risk (Plant Affairs Department) a. To evaluate the effects of operations on the natural environment, security and employee health. b. By continuous hazard identifications and risk evaluation, the Company can control the risk at the tolerant level to protect the environment from hazards. (7) Implementation of customer service: The Company's website provides contact information for customers and dedicated area for stakeholders to send complaints. (8) Buying liability insurances for directors and supervisors: According to the Article 16.2 of the Company, "the Company should buy liability insurances for directors and supervisors during their terms to cover the damage due to their business operation", the Company may buy liability insurances for directors and supervisors every year. After buying insurances, this should be reported to the Board of Directors meeting and posted on the Taiwan Stock Exchange Market Observation Post System.	

9. Please explain the improvements which have been made in accordance with the results of the Corporate Governance Evaluation System released by the Corporate Governance Center, Taiwan Stock Exchange, and provide the priority enhancement measures.

(I) The Company plans its predicted improvement index according to the final evaluation result of the 5th

corporate governance evaluation, and its improvement is as follows:

COI	Solate governance evaluation, an	nd its improvement is as follows:	
Number	Evaluation Item	Improvement	Actions to
			improve
2.15	Has the Company disclosed the communication status between the Independent Directors and the internal audit director and CPAs (such as the ways of communication, items, and results of the Company's financial reports, financial and business conditions) on the Company's website?	 The internal audit director held "Communication Meeting between Independent Directors, Supervisors and Audit Directors" on December 16, 2019, and reported and communicated about the auditing business and disclosed it on the Company's website. The CPAs held "Communication Meeting between Independent Directors, Supervisors and Audit Directors" on December 16, 2019 and March 16, 2020 respectively, and the communication matters and results were disclosed on the Company's website. 	None
2.22	Does the Company evaluate the performance of the Board of Directors' on a regular basis (at least once per year) and disclose the result on the Company website or annual report?	Since 2015, the Company started the questionnaire of Directors/Supervisors evaluation based on Article 6 of "Self-evaluation or peer-evaluation of the Board of Directors of oo Co., Ltd." Based on these evaluations, as well as "Performance evaluation of directors/supervisors" "attendance of Directors/Supervisors to Board of Directors," and "Advanced training of Directors/Supervisors," the performance of Directors and Supervisors were evaluated to implement company governance and promote the functions and efficiency of Board of Directors. The Company plans to establish "Self-evaluation or peer-evaluation of the Board of Directors" in 2020 to implement company governance and promote the functions of Board of Directors.	The Company will be improving on the criteria of the assessment indicators.
3.5	7 days before the regular shareholders' meeting?	The Company has upload the English annual financial report 7 days before the 2019 regular shareholders' meeting.	None
3.2	Does the Company invited (self) to hold at least two road shows, and the first two interpretations of the road shows will be separated by more than three months?	The Company has held a road show on March 20, 2020, the two times road shows will be held separating by more than three months.	The Company will be improving on the criteria of the assessment indicators.

3.4.4 Composition, Responsibilities and Operations of the Remuneration Committee

3.4.4.1 Professional Qualifications and Independence Analysis of Remuneration Committee Members

Date: April 5, 2020

	\	Requirements, Togo	ne Following Professiona ether With At Least Five Experience A Judge, Public										2]			
Title [Note 1]	Name	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	Prosecutor, Attorney, Certified Public Accountant, or Other Professional or Technical Specialist Who has Passed a National Examination and been Awarded a Certificate in a Profession Necessary for the Business of the	Has work experience in the areas of commerce, law, finance, or accounting, or otherwise necessary for the business of the Company	1	2	3	4	5	6	7	8	9	10	Number of Other Public Companies in Which the Individual is Concurrently Serving as a Remuneration Committee Member	Remark The End
Independent Director	Shu Fen Wang	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	2	
Independent Director	Chen Wei Wang			✓	✓	✓	✓	~	✓	✓	✓	✓	✓	✓	3	None
Others	Wen Chiu Chung		✓	✓	√	✓	✓	✓	✓	✓	✓	✓	✓	✓	0	

[Note 1] Please fill in the Title box as directors, Independent Directors or other member.

[Note 2] Please tick the corresponding boxes that apply to the members during the two years prior to being elected or during the term of office. ✓

- 1. Not employed by the Company or any of its related companies.
- 2. Not a Director or Supervisor of the Company or any of its affiliates. (Not applicable in cases where the person is an Independent Director of the Company, its parent company, or any subsidiary as appointed in accordance with the Act or with the laws of the country of the parent or subsidiary).
- 3. Not a natural-person shareholder who holds shares, together with those held by the person's spouse, minor children, or held by the person under others' names, in an aggregate amount of 1% or ranking in the top 10 in holdings.
- 4. Not a spouse, or a relative within the second degree of kinship or lineal relative of third degree of kinship of manager or (2), (3) personnel listed in (1).
- 5. Not serving as a Director, Supervisor or Employee of Judicial Person Shareholder holding a 5% of total issued shares of the Company, holding the top five shares or appointing representatives to assume Director or Supervisor according to Subparagraph 1 and 2, Article 27, Company Act (this does not apply in cases where the person is an Independent Director of the Company, its parent or subsidiary, or subsidiary belonging to the same parent company established in pursuant to this law or local laws).
- 6. Not serving as a Director, Supervisor or Employee of the other companies that their board seats of the Company or more than half of shares that owns voting rights controlled by the same person (this does not apply in cases where the person is an Independent Director of the Company, its parent or subsidiary, or subsidiary belonging to the same parent company established in pursuant to this law or local laws).
- 7. Not serving as a Director, Supervisor or Employee of other companies or agencies that are the same person, or spouse of a Director, GM or Person holding equivalent position of the Company (this does not apply in cases where the person is an Independent Director of the Company, its parent or subsidiary, or subsidiary belonging to the same parent company established in pursuant to this law or local laws).
- 8. Not a Director, Supervisor, Manager or shareholder holding over 5% shares of special company or agency that has financial or business interactions with the Company (this does not apply in cases where the person that special company or agency holding more than 20%, less than 50% of the total issued shares, and is an Independent Director of the Company, its parent or subsidiary, or subsidiary belonging to the same parent company established in pursuant to this law or local laws).
- 9. Not a Professional, Business Owner, Partner, Director, Supervisor, Manager and Spouse of Sole proprietorship, partnership, company or institution in terms of relevant service including commercial, legal, financial, accounting affair providing audit to the Company or affiliated enterprises or whose accumulative amount being no more than NTD 500,000 in recent two years. However, members of the special committee on remuneration, public acquisition review, or merger and acquisition who perform their functions and powers in accordance with the provisions of the Securities Trading Act or Business Mergers and Acquisitions Act and other relevant regulations shall not be subject to this provision.
- 10. Not been a person of any conditions defined in Article 30 of the Company Law.

3.4.4.2 Attendance of Members at Remuneration Committee Meetings

There are 3 members in the Remuneration Committee.

The terms of this section of Remuneration Committee: June 21, 2017 to June 12, 2020. A total of 6 Remuneration Committee meetings were held in 2019. The attendance record of the Remuneration Committee members was as follows:

Position	Name	Attendance in Person (B)	By Proxy	Attendance Rate (%) (B/A)	Remarks
Convener	Shu Fen Wang	6	0	100.00	
Committee Member	Chen Wei Wang	6	0	100.00	N/A
Committee Member	Wen Chiu Chung	6	0	100.00	

Other mentionable items:

- 1. If the Board of Directors declines to adopt or modifies a recommendation of the remuneration committee, it should specify the date of the meeting, session, the content of the motion, resolution by the Board of Directors, and the Company's response to the remuneration committee's opinion: None.
- 2. Resolutions of the remuneration committee objected to by members or expressed reservations and recorded or declared in writing, the date of the meeting, session, content of the motion, all members' opinions and the response to members' opinions should be specified: None.

3.4.4.3 If any of the following date of the remuneration committee meetings, discussion proposal, resolution and the Company handles the opinions of remuneration committee meetings' member.

Date	Discussion Proposal	Resolution	The Company handles the opinions of Remuneration Committee Meetings' member	
2019.01.25 (The Eighth Meeting of the Third Term)	Reviewing the new managerial officers, to be submitted by the Company, for the remuneration pre-examination executed by the Remuneration Committee Review the Remuneration of the managerial officers to be newly appointed The performance evaluation for managerial officers as well as the proposal for the Year-End and Performance Incentive Bonus for managerial officers			
(The Ninth Meeting of the Third Term)		After being requested		
(The Tenth Meeting of the Third Term)	managerial officers as well as the proposal for the fixed annual salary adjustment for managerial officers	by the Chairperson of the remuneration committee meeting, all members present	Members have no	
2019.07.26 (The 11th Meeting of the Third Term)	evaluation for directors, supervisors and managerial officers as well as the performance incentive bonus of	Additionally, this motion shall be discussed by the Board	objection	
2019.11.11 (The 12th Meeting of The Third Term)	Reviewing the new managerial officers, to be submitted by the Company, for the remuneration pre-examination executed by the Remuneration Committee Review the Remuneration of the managerial officers to be newly appointed			
2019.12.20 (The 13th Meeting of	The List of first issuing Employee Stock Option under the "FY2019 Employee Stock Option Plan" for managerial officers			

3.4.5 Corporate Social Responsibility and Deviations from "The Corporate Social Responsibility Best-Practice Principles for TWSE/TPEx Listed Companies" and Reasons

			Implementation Status	Deviations from
Evaluation Item	Yes	No	Abstract Explanation	"the Corporate Social Responsibility Best-Practice Principles for TWSE/TPEx Listed Companies" and Reasons
 Has the Company evaluated the environmental, social, and corporate governance risks related to its operations based on the principle of materiality and established related risk management policies or strategies? Does the Company establish exclusively (or concurrently) dedicated first-line managers authorized by the board to be in charge of proposing the corporate social responsibility policies and 	V		The Company has defined the evaluation of environmental, social, and corporate governance risks related to its operations based on the principle of materiality. Including: financial risks, legal risks, intellectual property risks, information risks and environmental risks. Please refer to the corporation website www.phison.com/Company/CSR/2018 Corporate Sustainability Report/5.5. Risk Management (Page 44). The Company has established the dedicated "Green and Sustainability Management Committee" to fulfill corporate social responsibility.	No major deviation
reporting to the Board? 3. Environmental Issues				
(1) Does the Company establish proper environmental management systems based on the characteristics of their industries?	V		(1) The Company has approved the standard of ISO 14001 Environmental management in 2008. The Company also abides by the ISO 14001 standard to build the environmental management system and follow the laws of environmental protection and respect the commitment to customers. Considering the impacts on the environment, the Company has established goals and projects and collaborated with affiliates to improve the environmental protection, save energy and reduce wastes to protect our environment. The Company has approved the standard of OHSAS 18001	(1) No major deviation

			Implementation Status	Deviations from
Evaluation Item	Yes	No	Abstract Explanation	"the Corporate Social Responsibility Best-Practice Principles for TWSE/TPEx Listed Companies" and Reasons
(2) Does the Company endeavor to utilize all resources more efficiently and use renewable materials which have low impact on the environment?	V		Occupational Health and Safety Assessment Series in 2010. the Company abides by the standard of OHSAS 18001 and follows the laws of occupational health and safety and respect the committee to customers. Considering the impacts on environment, the Company has established goals and projects and collaborated with affiliates to lower the risks of occupational health and safety. The Company has an internal protocol of environmental health and safety, such as air pollution control, water pollution control, waste control, chemical control, noise pollution control. These measures can reduce the environmental pollution and the risks of occupational health and safety. (2) The Company has established an ISO committee to enforce all kinds of environment protection policies and measures, environmental health and safety policies, energy management policies, ISO14001 Environment Management system, greenhouse gas examination, green product and green supply chain. All of the reusable items are collected and sent to recycling firms for reuse to protect our environment.	(2) No major deviation
(3) Does the Company evaluate the potential risks and chances of climate change at present and in the future and take response measures?		V	(3) The Company has not conducted chance and risk evaluation on climate change presently.	(3) No major deviation
(4) Has the Company calculated the greenhouse gas emissions, water consumption, and total weight of waste over the past two years and	V		(4) The Company has continuously examined the greenhouse gases since 2011 to investigate the consumed resources and produced greenhouse gases. the Company made great efforts to integrate the ISO management	(4) No major deviation.

			Implementation Status	Deviations from
Evaluation Item	Yes	No	Abstract Explanation	"the Corporate Social Responsibility Best-Practice Principles for TWSE/TPEx Listed Companies" and Reasons
established the policies with regard to energy conservation and carbon reduction, greenhouse gas reductions, water consumption, and waste management?			system and the laws of environmental health and safety into the daily operations, and conduct green product management through systematic operation procedures. In addition, using renewable energy and reducing the usage of lighting devices are also implemented. Please refer to the corporation website www.phison.com/Company/CSR/2018 Corporate Sustainability Report/8. Environmental responsibility (Page 77-Page 87).	
4. Social Issues				
(1) Does the Company formulate appropriate management policies and procedures according to relevant regulations and the International Bill of Human Rights?	V		(1)We abide by the laws of Labor Standards Act and respect the international principles of labor rights, such as freedom of association, group negotiation, prohibiting child labor, eliminating forced labor, eliminating hiring discrimination, establishing labor management regulations and protecting all labor rights. Relevant regulations were established to ensure the appropriate working environment and management system.	(1) No major deviation.
(2) Has the Company established and executed proper employee benefits (including compensation, leave, and other benefits) and reflected the business performance or results in employee compensation appropriately?	V		(2) The Company has established the work rule and the regulations of Payroll, Employee performance, Reward/punishment and other relevant for employees to follow and reward to employees, the Company is indeed implemented.	(2) No major deviation.
(3) Does the Company provide a healthy and safe working environment and organize training on health and safety for its employees on a regular basis?	V		(3) A. As for maintaining the working environment, the Company commits the professional organizations to examine its working environment, including lighting, carbon dioxide, isopropanol, local exhaust, lead, and noise. The drinking water is examined	(3) No major deviation.

			Implementation Status	Deviations from
Evaluation Item	Yes	No	Abstract Explanation	"the Corporate Social Responsibility Best-Practice Principles for TWSE/TPEx Listed Companies" and Reasons
			with E. coli, bacteria colony every month, and the water filters are replaced every month. Elevators are maintained every month. The safety of the building is checked on a regular basis; the central kitchen is checked every month. The heavy metal test is conducted. B. For the purpose of keeping employees healthy, assigning suitable jobs, preventing occupational diseases, and avoiding labor disputes, in addition to conforming to relevant laws (Labor Standards Act, Occupational Safety and Health Act, Labor Health Protection Regulation, etc.), new employee physical examination and regular physical examination are also implemented. For those who have health problems, health management and tracking service are also provided. From 2015, in collaboration with Miaoli Health Department, we obtained health promotion environment certification. We hold many events, such mother classroom, blood donations, healthy breakfast choice and recipe, cancer knowledge, stretching in offices, healthy diet, how to increase basic metabolism and detoxification. Breastfeeding seminars were held. Yoga and weight loss programs are provided every quarter. Massage services twice a week by the blind are provided to relax the muscle and alleviate pressure. Doctors form Mackay Hospital comes to our plant three times a month to provide health counseling. In the annual physical examination, Pap smear, gynecology ultrasonic examination are provided. In collaboration with Liver Disease	

			Implementation Status	Deviations from "the Corporate
Evaluation Item	YesN	No	Abstract Explanation	Social Responsibility Best-Practice Principles for TWSE/TPEx Listed Companies" and Reasons
(4) Does the Company	V		Foundation, digestive functions, cancer screening by blood and abdomen ultrasonic examination are provided. Pap caner and flu vaccines are provided. C. To conform to the law requirements, we have some projects, such mother protection, overwork prevention, musculoskeletal protection, and occupational violence prevention. By questionnaire and interviews, the physical and mental condition of employees is taken care of. D. The Company holds many free health seminars for employees. From 2011, we also collaborate with Hsinchu Lifeline to provide counseling for their problems and pressure and after Sep 2018 was changed by Newmind EAP Consultation Co., Ltd. The welfare Association of the Company has organized many clubs and held many activities, which benefit the physical and mental conditions of our employees. These clubs include hiking, badminton, basketball, yoga, golf, softball, swimming, boxing aerobics, and hand football. E. As for the details of safe and healthy working environment, please refer to the corporation website www.phison.com/Company/CSR/2018 Corporate Sustainability Report/Section 7.6 Workplace Health and Safety (Page 73). (4) The Company has a very good plan of	(4) No major
provide its employees with career development and training sessions?	,		development and is very willing to help employees obtain the necessary knowledge and skills for promotion during his/her current position. As for Cultivation and Education, please refer to the corporation website www.phison.com/Company/CSR/2018	

			Implementation Status	Deviations from
Evaluation Item	Yes	No	Abstract Explanation	"the Corporate Social Responsibility Best-Practice Principles for TWSE/TPEx Listed Companies" and Reasons
			Corporate Sustainability Report/Section 7.4 Cultivation and	
			Education(P68).	
(5) Does the Company advertise and label its goods and services according to relevant regulations and international standards and make relevant consumer protection policies and complaint procedures?	V		(5) The Company labels all necessary information on the packages and user manuals of its products including "manufacturer", "RoHS Mark", "CE safety Mark" and "WEEE recycle Mark" to announce the safety conformity of the products/services and the law conformity of hazardous material.	(5) No major deviation.
(6) Has the Company established the supplier management policies requesting suppliers to comply with laws and regulations related to environmental protection, occupational safety and health or labor rights and supervised their compliance?	V		(6) the Company has attached importance on environmental and social protection, so the Company has requested the supplier to abide by Responsible Business Alliance (RBA), and International Environmental Code through the contract requirement, such as WEEE, RoHS, HF for implementation of sustainable development. Please refer to the corporation website www.phison.com/Company/CSR/2018 Corporate Sustainability Report/8.2 ISO Committee (Page 84).	(6) No major deviation.
5. Has the Company, referring to the International Standards or Guidelines for the Preparation of Reports, prepared the Corporate Social Responsibility Report to disclose nonfinancial information of the Company? Has the Company received assurance or certification of the aforesaid reports from a third party accreditation institution?	V		To ensure the transparency of information disclosure, the 2018 "Corporate Sustainability Report" was published based on the principle of The GRI-101 Content Index and the AA1000 Accountability Principles Standards. The preparation of the report was completed in June of 2020. The 2019 "Corporate Sustainability Report" was published based on the principle of The GRI-101 Content Index and the AA1000 Accountability Principles Standards. The preparation of the report was expected in June of 2020.	No major deviation

		Implementation Status	Deviations from "the Corporate
			Social
			Responsibility
Evaluation Item			Best-Practice
	YesNo	Abstract Explanation	Principles for
			TWSE/TPEx Listed
			Companies" and
			Reasons

- 6. If the Company has established the corporate social responsibility principles based on "the Corporate Social Responsibility Best-Practice Principles for TWSE/TPEx Listed Companies," please describe any discrepancy between the Principles and their implementation: The Company has not established the "The Corporate Social Responsibility Best-Practice Principles for TWSE/TPEx Listed Companies" and will do so in the future based on the actual needs.
- 7. Other important information to facilitate better understanding of the Company's corporate social responsibility practices:
 - (1) Environmental Protection:

The Company focuses on the R&D of green products and asks its suppliers to abide by the regulations of WEEE (Waste Electrical and Electronic Equipment), RoHS (Restriction of Hazardous Substances), REACH (Registration, Evaluation, Authorization and Restriction of Chemicals) and HF (Halogen Free) to realize the ideas of environmental protection and sustainability in its R&D and the management of affiliates. These fulfill the commitment and responsibility of Phison about environmental protection.

As for the responsibility about environmental protection, please refer to the corporation website www.phison.com/Company/CSR/2018 Corporate Sustainability Report/Section 8 Environmental Responsibility (Page 77).

- (2) <u>Community participation, community contributions, social service, social public welfare, human right, health/safety and other social responsibility activities:</u>
 - A. Charitable Donations: Total amount of 2019 Phison's cash donations to academic institutions and social welfare organizations was 16.53 million.

Phison believes that good wills should be sent out to make the society better. The corporate resources and skills should be used to help those who need help and make them realize the importance of good will and willing to help others. The spread of goodwill brings more hopes and make more people willing to help, which can make our society better and warm.

Phison spent most of its donation on the local charity organizations in Hsinchu and Miaoli County because they are those who need help most. Allocating resources to those who need help most is the way to maximize the value of the resources. Phison continuously makes donations to these charity organizations to help them take care of the underprivileged.

In addition to charity organizations, our board Chairperson is very willing to give speeches in schools and charity organizations to share his experience of starting businesses and inspire the young to take actions. He also established many scholarships for poor students and special educations, sponsored the research and training of school associations and donated money to medical research. Besides he also donated money to Chunan elementary school, local farmers' associations, temples and rescuing organizations to improve the equipment or hold relevant events.

B. Caring local community

Phison cared many social vulnerable people organizations in Hsinchu and Miaoli County in recent years, such as nursing home, orphanages, and nursing centers. By visiting these places, Phison can understand the situation in great details and give them proper help

		Implementation Status	Deviations from "the Corporate
			Social
			Responsibility
Evaluation Item			Best-Practice Principles for
	YesNo	Abstract Explanation	
			TWSE/TPEx Listed
			Companies" and
			Reasons

(money or material). Phison also took their management team to these charity events to offer more care and help.

- C. The care for socially vulnerable people
 - For the purpose of supporting socially vulnerable people organizations, Phison established an area on the 7th floor (restaurant) for the disabled to sell their products. These charity sales were held for the socially vulnerable people organizations and our employees showed their passion for these events. There were 21 charity sales in 2019. In our plant, we collect invoices and send-hand material, such as clothes, small home appliances, books, etc. for donations. This activity has been held for years. The e-bulletin is the place we express our care and all charity information such as voluntary activities, charity carnivals, charity fundraising will be posted here.
 - Phison holds charity running events to invite customers and suppliers to join our charity activities. We also invite social vulnerable people to participate, which can make more people understand, accept and support them.
- D. As for the charity events, please refer to the corporation website www.phison.com/Company/CSR/2018 Corporate Sustainability Report/Section 9 Spreading Goodwill (Page 98).

(3) Consumers' rights:

- A. The major products of the Company are flash memory controller, usb drive and flash memory cards. They are sold to the manufacturers or retailers, so we have no business directly with consumers. Our customers can contact us by telephone, emails or mails to file their complaints.
- B. Phison's most important goals are to satisfy customers' needs, establish excellent management of customer relationship and systemize the customer service protocol. These can ensure our consistent service quality and help customers to create values, as well as creating maximal profit.
- C. As for the management of customer relationships, please refer to the corporation website www.phison.com/Company/CSR/2018 Corporate Sustainability Report/Section 4.5 Customer Relationship Management (Page 32).

3.4.6 Ethical Corporate Management and Deviations from "The Ethical Corporate Management Best-Practice Principles for TWSE/TPEx*Listed Companies" and Reasons

			Implementation Status	Deviations from
Evaluation Item	Yes	No	Abstract Illustration	"the Ethical Corporate Management Best- Practice Principles for TWSE/TPEx Listed Companies" and Reasons
1. Establishment of ethical				
corporate management				
policies and programs				
(1) Has the Company established	V		* *	(1) No major
the integrity management			abide by the international	deviation
policies approved by the			regulations and local laws and	
Board of Directors and			moral principles agreed by the	
specified in its rules and external documents the			society, including fair competition, anti-trust, respecting	
ethical corporate			local marketing rules, prohibiting	
management policies and			illegal products protecting	
practices and the			copyrights and all kinds of	
commitment of the Board of			intellectual property. The	
Directors and senior			Company signs confidential	
management to rigorous and			agreements with its directors,	
thorough implementation of			supervisors and management team	
such policies?			and illustrates the rules which	
			should be followed. We will establish the relevant regulations	
			in the future based on the actual	
			needs.	
(2) Has the Company established	V			(2) No major
a risk assessment mechanism			have established the regulations in	
against unethical conduct,			the employment contracts, as well	
analyze and assess on a			as the code of work and the	
regular basis business			regulation of reward/punishment.	
activities within its business			In addition to asking employees to	
scope which are at a higher			notify the Company in case of	
risk of being involved in unethical conduct, and			conflict of interest, we also set up	
establish prevention			an email for reporting such behavior	
programs accordingly, which			(whistleblower@phison.com).	
shall at least include the			(
preventive measures				
specified in Paragraph 2,				
Article 7 of the "Ethical				
Corporate Management Best				
Practice Principles for				
TWSE/GTSM-Listed				
Companies"?				

			Implementation Status	Deviations from
Evaluation Item	Yes	No	Abstract Illustration	"the Ethical Corporate Management Best- Practice Principles for TWSE/TPEx Listed Companies" and Reasons
(3) Has the Company specified in its prevention programs the operating procedures, guidelines, punishments for violations, and a grievance system and implemented them and review the prevention programs on a regular basis? 2. Fulfillment of Integrity	V		(3) The Company asks suppliers, contractors and other affiliates to sign documents for guaranteeing no illegal business activities and no bribes.	(3) No major deviation
Management				
(1) Does the Company evaluate business partners' ethical records and include ethics-related clauses in business contracts?	V		(1) The Company has an internal code of work and the regulation of reward/punishment to avoid unethical behaviors. the Company selects the suppliers based on the principles of integrity and fairness to find the most competitive companies which are ethical. It is strictly prohibited to take a commission or other improper rewards.	(1) No major deviation
(2) Does the Company establish an exclusively (or concurrently) dedicated unit supervised by the Board to be in charge of corporate integrity and regularly report the implementation of the ethical corporate management policies and prevention programs against unethical conduct to it?	V		(2) Integrity is one of the five core values of the Company and is always the basis of the operation of the Company. From Board of Directors to every unit, our operation is based on integrity. All colleagues, management team and Directors should believe and implement this regulation. The management team should take this very seriously and serve as good examples. The Company has established the dedicated "Green and Sustainability Management Committee" to fulfill corporate social responsibility.	(2) No major deviation.
(3) Does the Company establish policies to prevent conflicts of interest and provide appropriate communication channels, and implement it?	V			(3) No major deviation

			Implementation Status	Deviations from
Evaluation Item	Yes	No	Abstract Illustration	"the Ethical Corporate Management Best- Practice Principles for TWSE/TPEx Listed Companies" and Reasons
			Company because of personal rights.	
(4) Has the Company established effective systems for both accounting and internal control to facilitate ethical corporate management, based on the results of assessment of the risk of involvement in unethical conduct, devise relevant audit plans and audit the compliance with the prevention programs accordingly or entrusted a CPA to conduct the audit?			(4) To ensure the ethical operation, this company have established effective systems for both accounting and internal control. Internal auditors approve all kinds of business and report the results to the Board of Directors.	(4) No major deviation
(5) Does the Company regularly hold internal and external educational trainings on operational integrity?	V		(5) Integrity is one of the five core values of the Company and has been in our culture. We also stress this in all meetings to enforce this core value.	(5) No major deviation
3. Operation of the integrity channel				
(1) Does the Company establish both a reward/punishment system and an integrity hotline? Can the accused be reached by an appropriate person for follow-up?	V		(1) The Company has regulations of integrity, regulations of reward/punishment, code of work, etc. for employees to follow. In case of any improper behaviors, please report it to our human resource department by telephone or email (whistleblower@phison.com) or letter.	deviation
(2) Has the Company established the standard operating procedures for investigating reported misconduct, follow-up measures to be adopted after the investigation, and related confidentiality mechanisms?	V		(2) In the communication protocol of the Company, all personnel should keep the informant data confidential.	(2) No major deviation

			Implementation Status	Deviations from
Evaluation Item	Yes	No	Abstract Illustration	"the Ethical Corporate Management Best- Practice Principles for TWSE/TPEx Listed Companies" and Reasons
(3) Does the Company provide proper whistleblower protection?	V		(3) The Company has regulations that the data of the informants should be kept confidential for protection to avoid that the informants are treated unfairly.	(3) No major deviation
4. Strengthening information disclosure				
Does the Company disclose its ethical corporate management policies and the results of its implementation on the Company's website and MOPS?	V		The Company has a website for investors to review the relevant information. The information is posted on the Market Observation Post System for investors to understand governance.	No major deviation

- 5. If the Company has established the ethical corporate management policies based on the Ethical Corporate Management Best-Practice Principles for TWSE/TPEx-Listed Companies, please describe any discrepancy between the policies and their implementation: The Company has not established the "The Ethical Corporate Management Best Practice Principles." It will be established in the future based on the actual needs.
- 6. Other important information to facilitate a better understanding of the Company's ethical corporate management policies (e.g., review and amend its policies).

 The Company has approved the "management operation of avoiding insider trading" and the "auditing of the insider trading" in the Board of Directors on Dec 29, 2009. In the "management operation of avoiding insider trading", the articles of "how to define the internal critical information affecting stock price" and "confidential operation and trading prohibition before the internal critical information is announced" are drafted. the Company revised these regulations according to the requirements on Mar 24, 2011. We will relay the most updated information to the directors, supervisors and management team by documents and emails to avoid insider trading.

3.4.7 Regulations of Governance and Their Disclosure

Important Regulations	Disclosure
Articles of Incorporation Rules of Procedure for Shareholders' Meeting Rules of Procedure for Board Meeting Procedure of Selecting Directors and Supervisors Duty Scope of Independent Director Moral Rule of Director, Supervisors and Managers Organization Articles of Remuneration Committee Procedures for Acquisition or Disposal of Assets Procedures for Endorsement and Guarantee Procedures for Lending Funds to Other Parties Procedures for Engaging in Derivatives Trading The Procedures of Measures to Prevent Insider Trading	MOPS http://mops.twse.com.tw Basic information/E-books/Annual Reports and relevant documents of shareholders' meetings or Corporate Governance/relevant regulations Corporate website: www.phison.com Please check at Investor Relations/Corporate Governance/Major Internal Rules

3.4.8 Other Important Information Regarding Corporate Governance

3.4.8.1 Advanced Training of Directors and Supervisors in 2019

Position	Name	Date	Study Period		Study Period		Study Period		Sponsoring	Course	Training	Training Hours in
1 00111011		Elected	From	То	Organization		Hours	2019				
			2019/06/12	2019/06/12	Taiwan Corporate Governance Association	Analysis of 2019 Amendment to the Company Act of Taiwan	3.0					
Director	Khein Seng Pua	2017 /06/13	2019/06/12	2019/06/12	Taiwan Corporate Governance Association	Corporate Mergers and Acquisitions Practice	3.0	6				
			2019/06/12	2019/06/12	Taiwan Corporate Governance Association	Analysis of 2019 Amendment to the Company Act of Taiwan	3.0					
Director	Chee Kong Aw Yong	2017 /06/13	2019/06/12	2019/06/12	Taiwan Corporate Governance Association	Corporate Mergers and Acquisitions Practice	3.0	6				
Director		2017 /06/13	2019/06/12	2019/06/12	Taiwan Corporate	Analysis of 2019 Amendment to the	3.0	6				

Position	Name	Date	Study	Period	Sponsoring	Course	Training	Training Hours in
		Elected	From	То	Organization		Hours	2019
					Governance	Company Act of		
	T.				Association	Taiwan		
	Tzung				Taiwan	Corporate Mergers and		
	Horng		2010/06/12	2010/06/12	Corporate	Acquisitions Practice	3.0	
Kuang	Kuang		2019/06/12	2019/06/12	Governance		3.0	
					Association			
					Taiwan	Analysis of 2019		
			2010/06/12	2010/06/12	Corporate	Amendment to the	3.0	
			2019/06/12	2019/06/12	Governance	Company Act of	3.0	
Director	Chih Jen	2017			Association	Taiwan		6
Director	Hsu	/06/13			Taiwan	Corporate Mergers and		0
			2019/06/12	2010/06/12	Corporate	Acquisitions Practice	3.0	
			2019/00/12	2019/06/12	Governance		3.0	
					Association			
					Taiwan	Analysis of 2019		
			2010/06/12	2010/06/12	Corporate	Amendment to the	2.0	
T1			2019/06/12	2019/06/12	Governance	Company Act of	3.0	
Legal representative director	Hiroto	2017			Association	Taiwan		
	/06/13			Taiwan	Corporate Mergers and		6	
			2019/06/12/20	22019/06/12	Corporate	Acquisitions Practice	3.0	
					Governance			
					Association			
					Taiwan	Analysis of 2019		
			2010/06/12	.12019/06/12	Corporate	Amendment to the	3.0	
			2019/06/12		Governance	Company Act of	3.0	
Independent	Shu Fen	2017			Association	Taiwan		6
Director	Wang	/06/13			Taiwan	Analysis of 2019		0
			2010/06/12	22019/06/12	Corporate	Amendment to the	3.0	
			2019/00/12		Governance	Company Act of	3.0	
					Association	Taiwan		
						Cayman & BVI		
					Taiwan	government legislation		
					Corporate	introduces new		
			2019/04/29	2019/04/29	Governance	regulations and	3.0	
					Association	solutions for		
Independent C Director					Association	substantive economic		
	Chen Wei	2017				activities		
	Wang	/06/13			Taiwan	Analysis of 2019		12
	vv ang	/00/13	2019/06/12	2019/06/12	Corporate	Amendment to the	3.0	
			2017/00/12	2017/00/12	Governance	Company Act of	3.0	
					Association	Taiwan		
			2019/06/12/2019/		Taiwan	Corporate Mergers and		
				2019/06/12	Corporate	Acquisitions Practice	3.0	
				2017/00/12	Governance			
					Association			

Position	Name	Date	Study	Study Period		Course	Training	Training Hours in
		Elected	From	То	Organization		Hours	2019
			2019/07/30	2019/07/30	Taiwan Corporate Governance Association	Disclosure of Corporate Major Information and Analysis of Director Responsibility Case	3.0	
	Jiunn	2017	2019/07/30	2019/07/30	Taiwan Corporate Governance Association	Analysis of 2019 Amendment to the Company Act of Taiwan	3.0	
Supervisor	Yeong Yang	/06/13	2019/07/30	2019/07/30	Taiwan Corporate Governance Association	Corporate Mergers and Acquisitions Practice	3.0	6
	Huei Ming	2017	2019/07/30	2019/07/30	Taiwan Corporate Governance Association	Analysis of 2019 Amendment to the Company Act of Taiwan	3.0	
Supervisor	Supervisor Wang 2017 /06/13	2019/07/30	2019/07/30	Taiwan Corporate	Corporate Mergers and Acquisitions Practice	3.0	6	
	Chiun	2017	2019/07/30	2019/07/30	Taiwan Corporate Governance Association	Analysis of 2019 Amendment to the Company Act of Taiwan	3.0	
Supervisor	Hsiou Chen	/06/13	2019/07/30	2019/07/30	Taiwan Corporate Governance Association	Corporate Mergers and Acquisitions Practice	3.0	6

3.4.8.2 Advanced Trainings of Management Team on Governance in 2019

Position	Date of Training	Sponsoring Organization	Course	Training Hours
Director	2019/05/16- 2019/05/17	Accounting Research and Development Foundation	Training Program of Principal Accounting Officers of Issuers, Securities Firms, and Securities Exchanges	12 hours
Senior Manager	2019/08/22- 2019/08/23	Accounting Research and Development Foundation	Training Program of Principal Accounting Officers of Issuers, Securities Firms, and Securities Exchanges	12 hours

3.4.8.3 Advanced Trainings of Internal Auditor on Governance in 2019

Position	Date of Training	Sponsoring Organization	Course	Training Hours
Audit Director	2019/09/26	The Institute of Internal Auditors-Chinese Taiwan	Fraud Risk Audit Practice and Management	6 hours
Audit Director	2019/12/09	The Institute of Internal Auditors-Chinese Taiwan	Technique and Instrument: Audit Director II	6 hours
Audit Director	2019/12/10	The Institute of Internal Auditors-Chinese Taiwan	Internal Audit Essentials for Complying with Laws and Regulations	6 hours
Deputy Auditor	2019/07/15- 2019/07/17	The Institute of Internal Auditors-Chinese Taiwan	Pre-job training for corporate internal auditing personnel	18 hours
Deputy Auditor	2019/11/07	The Institute of Internal Auditors-Chinese Taiwan	Significant financial frauds (defalcation of company assets, insider trading, benefits transfer, manipulation of stock price, irregular transactions, etc.) and legal risks.	6 hours
Deputy Auditor	2019/11/27	The Institute of Internal Auditors-Chinese Taiwan	Recent Cases and Development of Trade Secrets and Non- Competition	6 hours

3.4.8.4 Domestic and Overseas Certificate Owned by Finance, Accounting and Stock Personnel

Certificate	Finance, Accounting and Stock Personnel	Auditors
Domestic	Book keeper of general examination	Certificate by Institute of Internal
Certificate	Level B technician for accounting Level C technician for accounting	Auditors Qualification of Internal Control
	Service Personnel Professional	Skills Test
	Competency Test Certificate	
Overseas	None	Certified Internal Auditor (CIA)
Certificate		Certification in Risk Management
Certificate		Assurance (CRMA)

3.4.8.5 Buying Insurances for Directors and Supervisors:

Subject	Insurance company	Insured amount	Term	
All Directors and	Fubon Insurance Co., Ltd.	US\$20,000,000	2018/01/12-2019/01/12	
Supervisors				
All Directors and	Fubon Insurance Co., Ltd.	US\$20,000,000	2019/01/12-2020/01/12	
Supervisors	Pubbli filsurance Co., Ltd.	03\$20,000,000	2019/01/12-2020/01/12	
All Directors and	Fubon Insurance Co., Ltd.	US\$20,000,000	2020/01/12-2021/01/12	
Supervisors	1 doon mourance co., Ltd.	υμμων,000,000	2020/01/12-2021/01/12	

3.4.8.6 Drafting of Corporate Sustainability Report:

To disclose the information, the Company has drafted the Corporate Sustainability Report as follows:

Year	Principles	Remarks
	Conforming to the principles of GRI G3.1A+ and	Certified by the third-party certification
2013	AA1000 AS	organization (bsi, British Standards Institution)
		on Aug 15, 2014.
2014	Conforming to the principles of GRI G4 and	Disclosed on the website in June of 2015.
2014	AA1000	
2017	Conforming to the principles of GRI G4 and	Disclosed on the website in June of 2016.
2015	AA1000	
2011	Conforming to the principles of GRI G4 and	Disclosed on the website in June of 2017.
2016	AA1000	
	Conforming to the principles of GRI-101 and	Disclosed on the website in June of 2018.
2017	AA1000	
	Conforming to the principles of GRI-101 and	Disclosed on the website and MOPS in June of
2018	AA1000	2019.
	Conforming to the principles of GRI-101 and	To be disclosed on the website and MOPS in
2019	AA1000	June of 2020.

3.4.9 Implementation of Internal Control

3.4.9.1 Statement of Internal Control

Phison Electronics Corporation Internal Control System Statement

Date: March 16, 2020

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

- 1. The Company is fully aware that establishing, operating, and maintaining an internal control system are the responsibility of its Board of Directors and management. The Company has established such a system aimed at providing reasonable assurance of the achievement of objectives in the effectiveness and efficiency of operations (including profits, performance, and safeguard of asset security), reliability, timeliness, transparency, and regulatory compliance of reporting, and compliance with applicable laws, regulations, and bylaws.
- 2. An internal control system has inherent limitations. No matter how perfectly designed, an effective internal control system can provide only reasonable assurance of accomplishing the three goals mentioned above. Furthermore, the effectiveness of an internal control system may change along with changes in environment or circumstances. The internal control system of the Company contains self-monitoring mechanisms, however, and the Company takes corrective actions as soon as a deficiency is identified.
- 3. the Company judges the design and operating effectiveness of its internal control system based on the criteria provided in the Regulations Governing the Establishment of Internal Control Systems by Public Companies (hereinbelow, the "Regulations"). The internal control system judgment criteria adopted by the Regulations divide internal control into five elements based on the process of management control: 1. control environment 2. risk assessment 3. control activities 4. information and communications 5. monitoring activities. Each element further contains several items. Please refer to the Regulations for details.
- 4. the Company has assessed the design and operating effectiveness of its internal control system according to the aforesaid criteria.
- 5. Based on the findings of the assessment mentioned in the preceding paragraph, the Company believes that as of December 31, 2019, its internal control system (including its supervision and management of subsidiaries), encompassing internal controls for understanding the degree of achievement of operational effectiveness and efficiency objectives, reporting of the Company reliable, timely, transparent, and complies with applicable rules, and compliance with applicable laws, regulations, and bylaws, is effectively designed and operating, and reasonably assures the achievement of the above-stated objectives.
- 6. This Statement will become a major part of the content of the Company's Annual Report and Prospectus, and will be made public. Any falsehood, concealment, or other illegality in the content made public will entail legal liability under Articles 20, 32, 171, and 174 of the Securities and Exchange Act.
- 7. This statement has been passed by the Board of Directors Meeting of the Company held on March 21, 2019, where none of the seven attending directors expressed dissenting opinions, and the remainder all affirmed the content of this Statement.

PHISON ELECTRONICS CORPORATION

Chairperson: Khein Seng Pua (signature)
President: Chee Kong Aw Yong (signature)

3.4.9.2 For those who commit CPAs to review the internal control system, the CPA review report should be disclosed: none.

3.4.10 Punishment by laws or publication by internal control system before the publication of this annual report, and punishment, major deficiencies and improvements shall be listed where the punishment may have significant impact on shareholders' equity or securities price: None.

3.4.11 Major Resolutions of Shareholders' Meeting and Board of Directors

3.4.11.1 Major Resolutions of Shareholders' Meeting

Date	Resolution	Imple	ementation		
	Recognition Matters (by Board of Directors)				
	Adoption of the 2018 Business Report and Financial Statements	The 2018 individual financial statements and consolidated financial statements have been approved by the accountant Xin-Wei Dai and Yu-Wei Fan of Touche Tohmatsu Limited and have been approved on Mar 21, 2019 in the Board of Directors. The information of the 2018 individual financial statement and consolidated financial statements are as follows: (Unit: Besides EPS (NT\$), others in NT\$ thousands) Comprehensive Consolidated Income Comprehensive Statements Income			
		Operating Revenue	40,804,130	40,788,105	
		Gross Profit	9,151,272	9,131,954	
		Operating Income	4,736,351	4,709,784	
2019.06.12		Net Profit Before Tax	5,000,353	5,005,181	
		Net Profit After Tax	4,318,119	4,318,119	
(Annual		Total Comprehensive Income	4,146,377	4,146,377	
,		Basic EPS (after tax)	21.91	21.91	
shareholders' meeting)	Adoption of the Proposal for Distribution of 2018 Profits	The Ex-Dividend date of the and Cash dividend payment of proportion is NT\$13 per shar	lay is on Jul 26,	2019. (The	
	Discussion Matters (by Board of Directors)			,	
	Proposal for private placement for common shares of the Company	This private stock issuance has been cancelled on Mar 16, 202 in the Board of Directors and will be reported to the 2020 shareholders' meeting.			
	Amendment to part of the "Articles of Association" of the Company.	The resolution has been passed and operated according to the "Articles of Incorporation.", approved by the Ministry of Economic Affairs on June 25, 2019 to be registered and published on the Company's website.			
	Amendment to part of the "Procedures for Acquisition or Disposal of Assets," "Procedures for Engaging in Derivatives Trading," "Procedures for Lending Funds to Other Parties," "Procedures for Endorsement and Guarantee."	This resolution has been implemented and will be publiciz MOPS and the Company's website, handled according to trevised procedures.			

3.4.11.2 Important Resolutions by Board Meetings

Term of meeting	Date	Major Resolutions of Board of Directors
The 19th Meeting of the Eighth Term	2019.07.01	The Company plans to invest in the establishment of a US subsidiary through its subsidiary Emtops Electronics Corporation.
The 20th Meeting of the Eighth Term	2019.07.26	(Proposed by the Remuneration Committee) Review the Performance Evaluation for directors, supervisors and managerial officers as well as the proposal for the Compensation of directors, supervisors during 2018 and the Performance Incentive Bonus and the Employee Compensation during 2018 for managerial officers (Proposed by the Remuneration Committee) The meeting schedule of the Remuneration Committee for the year 2020 Amendment to part of Accounting System of the Company The indirect holding subsidiary, Fast Choice Global Limited (BVI) and Cloud Solution Global Limited (BVI) of the Company plans to handle dissolving and liquidation.
The 21st Meeting of the Eighth Term	2019.08.12	The Company's Q2 2019 Consolidated Financial Statements The credit line of banks for the Company The credit line of foreign exchange and derivatives for the Company
The 22nd Meeting of the Eighth Term	2019.08.27	Purchase of Land in Jhunan Township, Miaoli County by the Company
The 23rd Meeting of the Eighth Term		Amendment to part of the "Authorizing Table" Phison plans to make additional equity investment in cash in 100%-owned subsidiary Global Flash Limited and transfers this fund to invest in Core Storage Electronic (Samoa) Limited and re-investment the subsidiary in China Hefei Core Storage Electronic Limited
The 24th Meeting of the Eighth Term	2019.10.28	The Company plans to handle corporate organization structure adjustment in the group.
The 25th Meeting of the Eighth Term	2019.11.11	(Proposed by the Remuneration Committee) Reviewing the new managerial officers, to be submitted by the Company, for the remuneration pre-examination executed by the Remuneration Committee (Proposed by the Remuneration Committee) Review the Remuneration of the managerial officers to be newly appointed The Company's Q3 2019 Consolidated Financial Statements The Company established "FY2019 Employee Stock Option Plan" The credit line of banks for the Company The credit line of foreign exchange and derivatives for the Company The proposal of the "2019 Annual Audit Plan"

Term of meeting	Date	Major Resolutions of Board of Directors
		The Company revised "FY2019 Employee Stock Option Plan"
		The 100% holding subsidiary, Phisontech Electronics
	2010 12 20	(Malaysia) Sdn. Bhd. of the Company plans to handle
The 26th Meeting of the Eighth Term	2019.12.20	dissolving and liquidation.
		Amendment to part of "Measures for Financial Statement
		Preparation Procedure Management", "Management
		Auditing of Financial Statement Preparation Procedures"
		(Proposed by the Remuneration Committee) The List of
		first issuing Employee Stock Option under the "FY2019
The 27th Meeting of the Eighth Term	2019.12.20	Employee Stock Option Plan" for managerial officers
		The List of first issuing Employee Stock Option under
		the "FY2019 Employee Stock Option Plan" Plan to sign a long-term supply contract from 2020 to
The 28th Meeting of the Fighth Term	2010 12 20	2022, and prepay US\$8,280,000 before the first quarter of
The 20th Meeting of the Eighth Term	2019.12.20	2020 (i.e. 10% of the 2020 payment)
		The performance evaluation for managerial officers as
		well as the proposal for the Year-End and Performance
		Incentive Bonus for managerial officers
		The Company proposed to evaluate the CPA independence
		and suitability
		The credit line of banks for the Company
		The credit line of foreign exchange and derivatives for the
		Company
		The Company engaged in the cash injection increase plan
The 29th Meeting of the Eighth Term	2020 01 17	of "Phisontech Electronics Taiwan Corp."
The 29th Meeting of the Eighth Term	2020.01.17	Amendment to part of "Measures for Financial Statement Preparation Procedure Management", "Management
		Auditing of Financial Statement Preparation Procedures,"
		"Measures for Management of Liability Preparation and
		Contingent Matters," "Auditing of Measures for Liability
		Preparation and Contingent Matters Management," and
		"Authorizing Table"
		Amendment to part of "Financial and Operational
		Information Management," "Auditing of Financial and
		Operational Information Management"
		Jhunan Phase V Plant Building Construction Project
		Remuneration distribution for employees and directors,
		supervisors for 2019
		(Proposed by the Remuneration Committee) Review the
		bonus amount of profit payment to directors, supervisors
		and amount and method rewarded to employees who
The 20th Marking of the Eighth Towns	2020 02 16	assume as directors, supervisors concurrently in employee
The 30th Meeting of the Eighth Term	2020.03.10	(Proposed by the Remuneration Committee) Review the
		special performance evaluation and distribution of special
		performance incentive bonus to managers.
		The annual business report and financial statements of the
		Company for 2019
		The surplus distribution of the Company for 2019
<u> </u>	i	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

Term of meeting	Date	Major Resolutions of Board of Directors
		General re-elections of the directors
		Operation plan of the Company for 2020
		Amendment to "Articles of Association" of the Company
		2019 Internal Control System Statement
		Amendment to part of the Company's "Rules of Procedure
		for Board of Directors Meetings."
		The Company decides the private placement of common
		shares in 2019 regular meeting of shareholders and plans
		not to handle offering and issuance
		The Company handling the private common shares
		The Company convened the 2020 annual shareholders'
		meeting
		(Proposed by the Remuneration Committee) The List of
		second issuing Employee Stock Option under the
		"FY2019 Employee Stock Option Plan" for managerial officers
		The List of second issuing Employee Stock Option under
		the "FY2019 Employee Stock Option Plan"
		Accounting director transaction
The 31st Meeting of the Eighth Term	2020.03.27	The Company buys back and transfers the issued shares of
		the Company to the employees according to Article 28(2)
		of Securities Exchange Act and "Measures for
		TWSE/TPEx-Listed Companies Buying Back the Shares
		of the Company" of Securities and Futures Bureau,
		Financial Supervisory Commission
		The Company establishes "FY2020 Employee Stock
		Option Plan"
		Amendment to "Articles of Association" of the Company
		The Board of Directors nominates and reviews 2020 list of
	n 2020.04.23	candidates for the nine seats of the ninth Board of
		Directors (including three Independent Directors) to be elected
The 32nd Meeting of the Eighth Term		Release newly appointed Directors of the Company from
		non-compete restrictions.
		The credit line of banks for the Company
		The credit line of foreign exchange and derivatives for the
		Company
		Review of the List and Remuneration of the
		Company's New Managers
		The Resolution on the Regular Performance
	2020.05.13	Evaluation and Annual Fixed Remuneration
		Adjustment and Distribution Plan of the Company's
The 33rd Meeting of the Eighth Term		
		The Resolution on the Company's Financial Report for the 1st Overtor in 2020
		for the 1st Quarter in 2020 The Resolution on the Company's Proposal to
		Establish an Audit Committee and Formulate an
		Articles of the Audit Committee
	<u> </u>	randres of the radit Committee

- 3.4.12 Major Issues of Record or Written Statements Made by Any Director or Supervisor Dissenting to Important Resolutions Approved by the Board of Directors up to the Publication Date: None.
- 3.4.13 Resignation or Dismissal of the Company's Key Individuals, Including the Chairperson, CEO, and Heads of Accounting, Finance, Internal Audit and R&D: None.

May 15th, 2020

Position	Name	Date of Assumption of Duty	Date of Dismissal	Reasons for Resignation or Dismissal
Accounting and Finance Director	Shu Hua Chiu	2011/03/24	2020/03/27	Internal job adjustment

3.5 Information Regarding the Company's Audit Fee and Independence

Accounting Firm	Name of CPA		Audit period	Remarks
Touche Tohmatsu Limited	Xin Wei Dai	Li Wen Kuo	2019/1/1-2019/12/31	N/A

Unit: NT\$ thousands

Fee R	Fee Items Range	Audit fee	Non-audit fee	Total
1	Under NT\$2,000 thousand		1,080	1,080
2	NT\$2,000 thousand (inclusive) - NT\$4,000			
	thousand			
3	NT\$4,000 thousand (inclusive) - NT\$6,000			
	thousand			
4	NT\$6,000 thousand (inclusive) - NT\$8,000	7 100		7 100
	thousand	7,100		7,100
5	NT\$8,000 thousand - NT\$10,000 thousand		_	
6	Over NT\$10,000 thousand (inclusive)			

3.5.1 If the non-audit fee for the CPAs, the Firm and the affiliates is more than one-fourth of audit fee, amount and service of non-audit fee shall be disclosed:

Unit: NT\$ thousands

								110. 1 1 1 4 0110	***************************************
Accounting	Name of CPA	Audit fee	System Design	Business registration	Jon-audit fe Human Resource	Others	Subtotal	Audit Period	Remarks
Touche Tohmatsu Limited	Xin Wei Dai Li Wen Kuo	7,100	0	0	0	1,080	1,080	2019/1/1- 2019/12/31	[Note]

[Note] Non audit expenses – Other Major Payments: Country-by-country report, order transfer report, indirect investment on auditing service for companies in the Mainland, supplemental information on the profit-seeking enterprise income tax, service expense for the employee stock option.

- 3.5.2 If the CPAs were replaced and the audit fee is less than that of the previous year, the amount of audit fee and the reasons should be disclosed: not applicable.
- 3.5.3 The audit fee is less than that of the previous year by 10%, the amount of audit fee, ratio and the reasons should be disclosed: Not applicable.
- 3.6 Replacement of CPA: None.
 - 3.6.1 About the former CPA: N/A.
 - 3.6.2 About the successor CPA: N/A.
 - 3.6.3 Where the former CPA holds different opinions about the sending of letter of stipulated matters in 10.6.1 and 10.6.2.3 in the Regulations Governing Information to be Published in Annual Reports of Public Companies to the former CPA, and notification of CPAs, the reply shall be made within ten days. The Company shall disclose the reply of the former CPA: N/A.
- 3.7 The Company's chairperson, general manager, or any managerial officer in charge of finance or accounting matters has in the most recent year held a position at the accounting firm of its certified public accountant or at an affiliated enterprise of such accounting firm: None.
- 3.8 Stock Transfer and Pledge of Directors, Supervisors, Management Team and Major Shareholders Who Own 10% of the Stock in the Most Recent Year and as of the Publication Date of the Annual Report

3.8.1 Equity transfer or changes to equity pledge of directors, supervisors, managerial officers, or shareholders holding more than 10% of company shares

		201	9	Up to April 5, 2020		
Position	Name	Shareholding Increase (Decrease)	Pledged Holding Increase (Decrease)	Shareholding Increase (Decrease)	Pledged Holding Increase (Decrease)	
Director/CEO	Khein Seng Pua	0	0	0	0	
Director/President	Chee Kong Aw Yong	0	0	54,000	0	
Director/Vice President	Tzung Horng Kuang	0	0	0	0	
Director/Technical Vice President	Chih Jen Hsu	(59,884)	0	0	0	
Director/Major shareholders	KIOXIA Corporation (Originally, Toshiba Memory Corporation)	0	0	0	0	

		201	9	Up to Apı	ril 5, 2020
Position	Name	Shareholding Increase (Decrease)	Pledged Holding Increase (Decrease)	Shareholding Increase (Decrease)	Pledged Holding Increase (Decrease)
Director KIOXIA					
Corporation (Originally, Toshiba Memory Corp.)	Hiroto Nakai	0	0	0	0
Representative					
Independent Director	Shu Fen Wang	0	0	0	0
Independent Director	Chen Wei Wang	0	0	0	0
Supervisor	Huei Ming Wang	0	0	0	0
Supervisor	Jiunn Yeong Yang	0	0	0	0
Supervisor	Chiun Hsiou Chen	0	0	0	0
Vice President	Yeou Long Sheng	0	0	0	0
Director of Product, D&R Division 3	Wee Kuan Gan	(5,000)	0	0	0
Director of Sales & Marketing Division 1	Shu Hui Tsai	(189,955)	0	0	0
Director of Sales & Marketing Division 2	Huei Chen Tsay	0	0	0	0
Director of Sales & Marketing Division 3	Li Fu Huang [Note	0	0	0	0
Director of R&D Division 1	Kuo Yi Cheng	0	0	(30,000)	0
Director of R&D Division 2, 7	Chung Hsun Ma	0	0	0	0
Director of R&D Division 5	Jui Chieh Lin	0	0	0	0
Director of R&D Division 6	Ching Wen Chan [Note 2]	(11,000)	0	0	0
Director of R&D Division 8	Chieh Chuan Chin	0	0	0	0
Director of Administration Division	Liu Hsiu Chin	(12,000)	0	0	0
Director of Finance Division	Shu Hua Chiu	0	0	0	0
Finance Officer and Accounting Officer	Bao Feng Chen [Note 3]	N/A	A	0	0

[Note 1] Li Fu Huang was appointed on Nov. 11, 2019.

[Note 2] Ching Wen Chan was appointed on Jan. 25, 2019.

[Note 3] Bao Feng Chen was appointed on Mar. 27, 2020.

3.8.2 Shares Trading with Related Parties: None.

3.9 Relationship among the Top Ten Shareholders

As of April 5, 2020

							As o	f April 5.	, 2020
Name	Current S	hareholding		e's/Minor's reholding		olding by Arrangement	Relat Betw Compa Ten Sha Spot Relative Two D	ne and ionship een the ny's Top reholders, ases or es Within egrees of aship	Remark s
	Shares	Shareholding (%)	Shares	Shareholdin g (%)	Shares	Shareholding (%)	Name	Relation	
Trusted Investment Account of KIOXIA Corporation by First Bank	19,821,112	10.06	N/A	N/A	1,000	0.00	None	None	None
Representative: Hiroto Nakai	0	0.00	0	0.00	0	0.00	None	None	None
Trusted Investment Account of Kingston Technology Inc. by CTBC Bank	7,346,000	3.73	N/A	N/A	N/A	N/A	None	None	None
Employee Prvdnt-EPF MSCI North Asia by HSBC	7,268,000	3.69	N/A	N/A	N/A	N/A	None	None	None
Khein Seng Pua	4,557,972	2.31	806,262	0.41	3,400,144	1.73	None	None	None
Jiunn Yeong Yang	4,549,114	2.31	0	0.00	0	0.00	None	None	None
New Labor Pension Funds	4,277,187	2.17	N/A	N/A	N/A	N/A	None	None	None
Mercuries Life Insurance Co., Ltd.	3,763,000	1.91	0	0.00	0	0.00	None	None	None
Chee Kong Aw Yong	3,409,745	1.73	36,000	0.02	173,000	0.09	None	None	None
Norges Bank - internal - NBIM PF EQ INTERNAL CFD	3,353,504	1.70	N/A	N/A	N/A	N/A	None	None	None
Old labor pension fund	3,033,188	1.54	N/A	N/A	N/A	N/A	None	None	None

3.10 Consolidated Number of Shares Owned by Company, Directors, Supervisors, Management Team and Businesses Controlled Directly or Indirectly by the Company

Date: December 31, 2019 Unit: share; %

	1				Pate: Decembe	er 51, 2019 (Jint: Share; %
Name of the Investment Company	Name of be Reinvested Company	Ву Сс	ompany	Supervisors, Team and Controlled Indirect	By Company, Directors, Supervisors, Management Team and Businesses Controlled Directly or Indirectly by the Company Consolidated Inv		
		Shares	Shareholdin g (%)	Shares	Shareholdin g (%)	Shares	Shareholdin g (%)
The Company	Kingston Technology Corporation	10,605,000	32.91	4,737,000		15,342,000	
The Company	Emtops Electronics Corporation	38,000,000	100.00	0	0.00	38,000,000	100.00
The Company	Lian Xu Dong Investment Corporation	65,000,000	100.00	0	0.00	65,000,000	100.00
The Company	Microtops Design Corporation	2,263,800	49.00	2,356,200	51.00	4,620,000	100.00
The Company	Phison Electronics Japan Corp.	2,000	100.00	0	0.00	2,000	100.00
The Company	Global Flash Limited	37,100,000	100.00	0	0.00	37,100,000	100.00
The Company	Phisontech Electronics (Malaysia) Sdn. Bhd.	10,000,000	100.00	0	0.00	10,000,000	100.00
The Company	EpoStar Electronics (BVI) Corporation	10,600,000	37.82	0	0.00	10,600,000	37.82
The Company	Phisontech Electronics Taiwan Corp.	1,000,000	100.00	0	0.00	1,000,000	100.00
The Company	Power Flash (Samoa) Limited	3,200,000	100.00	0	0.00	3,200,000	100.00
The Company	Everspeed Technology Limited	1,000,000	100.00	0	0.00	1,000,000	100.00
The Company	Regis Investment (Samoa) Limited	13,000,000	100.00	0	0.00	13,000,000	100.00
Lian Xu Dong Investment Corporation	Ostek Corporation	900,000	100.00	0	0.00	900,000	100.00
Lian Xu Dong Investment Corporation	PMS Technology Corporation	200,000	33.33	0	0.00	200,000	33.33
Emtops Electronics Corporation	Phison Technology Inc.	1,000,000	100.00	0	0.00	1,000,000	100.00
Global Flash Limited	Core Storage Electronic (Samoa) Limited	34,150,000	100.00	0	0.00	34,150,000	100.00
Global Flash Limited	Phisontech (Shenzhen) Limited	[Note 1]	100.00	0	0.00	[Note 1]	100.00
Power Flash (Samoa) Limited	Power Flash (HK) Limited	3,000,000	100.00	0	0.00	3,000,000	100.00
Core Storage Electronic (Samoa) Limited	Hefei Core Storage Electronic Limited	[Note 2]	97.69	0	0.00	[Note 2]	97.69
Everspeed Technology Limited	Memoryexchange Corporation	40,950,000	100.00	0	0.00	40,950,000	100.00

Name of the Investment Company	Name of be Reinvested Company	Ву Со	ompany	Supervisors, Team and Controlled Indirect	y, Directors, Management Businesses Directly or ly by the		d Investment
		Shares	Shareholdin g (%)	Shares	Shareholdin g (%)	Shares	Shareholdin g (%)
Regis Investment (Samoa) Limited	RealYou Investment Limited	12,950,000	100.00	0		12,950,000	100.00
RealYou Investment Limited	Hefei Ruhan Electronic Technology Limited	[Note 3]	100.00	0	0.00	[Note 3]	100.00
Hefei Core Storage Electronic Limited	Hefei Yichao Electronics Technology Ltd.	[Note 4]	100.00	0	0.00	[Note 4]	100.00
Hefei Yichao Electronics Technology Ltd.	Hefei Xinpeng Technology Co., Ltd.	[Note 5]	29.08	0	0.00	[Note 5]	29.08
Hefei Ruhan Electronic Technology Limited	Hefei Xinpeng Technology Co., Ltd.	[Note 6]	14.54	0	0.00	[Note 6]	14.54
RealYou Investment Limited	HOSIN Global Electronics Co., Ltd.	40,000,000	30.77	0	0.00	40,000,000	30.77
Hefei Yichao Electronics Technology Ltd.	HOSIN Global Electronics Co., Ltd.	10,000,000	7.69	0	0.00	10,000,000	7.69

[Note 1] Investment of US\$1,790,000/NT\$53,096 thousands.

[Note 2] Investment of CNY 211,595,000/NT\$1,063,215 thousands.

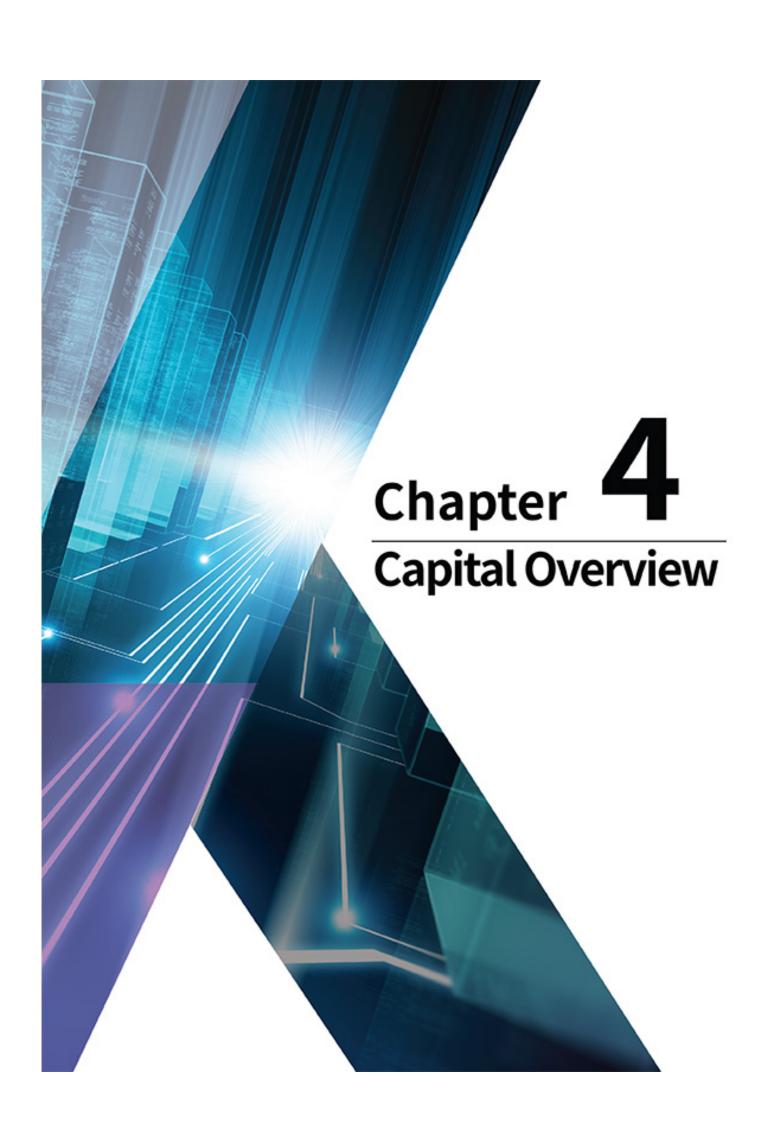
[Note 3] Investment of CNY 40,800,000/NT\$182,825 thousands.

[Note 4] Investment of CNY 62,500,000/NT\$280,387 thousands.

[Note 5] Investment of CNY 40,000,000/NT\$172,200 thousands.

[Note 6] Investment of CNY 20,000,000/NT\$86,103 thousands.

[Note 7] Investment by Equity Method.



Chapter 4 Capital Overview

4.1 **Capital and Shares**

4.1.1 Source of Capital4.1.1.1 Issued Shares

Unit: NT\$; share

		Autho	rized capital	Paid-ii	n capital	Remarks	πι. 1 1 1 ψ	,
		Number of shares (Thousand shares)	Amount (NT\$thousands)	Number of Shares (Shares)	Amount (NT\$)	Sources of capital	Capital increased by assets other than cash	
2000.11	10	12,000	120,000	3,000,000	30,000,000	Founding capital	N.A.	Note 01
2002.03	10	12,000	120,000	5,000,000	50,000,000	N 1 \$20,000,000	N.A.	Note 02
2002.05	38	12,000	120,000	6,407,948	64,079,480	Capital increased by surplus: NT\$6,739,480 and capital increased by cash: NT\$7,340,000	N.A.	Note 03
2003.01	45	12,000	120,000	7,907,948	79,079,480	N1\$15,000,000	N.A.	Note 04
2003.04	10	30,000	300,000	17,329,055		Capital increased by surplus: NT\$66,533,250 and capital increased by capital reserve: NT\$27,677,820	N.A.	Note 05
2003.08	28	30,000	300,000	17,695,055	176,950,550	Capital increased by cash: NT\$3,660,000	N.A.	Note 06
2004.08	10	60,000	600,000	35,751,099	357,510,990	Capital increased by surplus: NT\$180,560,440	N.A.	Note 07
2004.11	10	60,000	600,000	35,958,099	359,580,990	lontion: N X / 11 / 11 11111	N.A.	Note 08
2005.01	10	60,000	600,000	36,232,099	362,320,990	Capital increased by employee stock option: NT\$2,740,000	N.A.	Note 09
2005.06	10	60,000	600,000	36,255,099	362,550,990	option: N 1 \$230,000	N.A.	Note 10
2005.08	10	60,000	600,000	47,155,124	471,551,240	Capital increased by surplus: NT\$108,580,250 and capital increased by employee stock option: NT\$420,000	N.A.	Note 11
2005.11	110	60,000	600,000	51,680,124	516,801,240	Capital increased by cash: NT\$45,000,000 and capital increased by employee stock option: NT\$250,000	N.A.	Note 12
2006.02	10	60,000	600,000	52,212,124	522,121,240	option: N1\$5,320,000	N.A.	Note 13
2006.05	10	60,000	600,000	52,708,124	527,081,240	option: N 1 \$4,900,000	N.A.	Note 14
2006.08	10	80,000	,	70,577,124		Capital increased by surplus: NT\$177,500,000 and capital increased by employee stock option: NT\$1,190,000	N.A.	Note 15
2007.01	120.5	100,000	, ,	72,577,124		Private common stock NT\$20,000,000	N.A.	Note 16
2007.07	10	130,000				Private common stock NT\$40,000,000 Capital increased by surplus: NT\$217,731,370 and capital increased by	N.A.	Note 17 Note 18
2007.11	239	130,000	1 300 000	101 180 261	1 011 802 610	employee stock option: NT\$18,300,000 Private common stock NT\$10,000,000	N.A.	Note 19
2008.06	128	130,000				Private common stock NT\$10,000,000	N.A.	Note 20
2008.06	165	130,000				Private common stock NT\$12,000,000	N.A.	Note 20
2008.09	10	130,000			1,267,663,130	Canital ingressed by surplus	N.A.	Note 21
2009.03	53	180,000	1,800,000	128,466,313	1,284,663,130	Private common stock NT\$17,000,000	N.A.	Note 22
2009.05	117.5	180,000				Private common stock NT\$56,000,000	N.A.	Note 23
2009.08	10	180,000	İ		1,467,272,860	Capital increased by surplus: NT\$126,609,730	N.A.	Note 24
2010.02	10	180,000	1,800,000	147,264,786	1,472,647,860	opuon: N 1 \$5,5 / 5,000	N.A.	Note 25
2010.05	10	180,000			1,475,172,860		N.A.	Note 26
2010.07	10	180,000	1,800,000	147,537,286	1,475,372,860	Capital increased by employee stock option: NT\$200,000	N.A.	Note 27

		Autho	rized capital	Paid-i	n capital	Remarks		
Year and month	Issue price (NT\$)	Number of shares (Thousand shares)	Amount (NT\$thousands)	Number of Shares (Shares)	Amount (NT\$)	Sources of capital	Capital increased by assets other than cash	Other
2010.08	10	230,000	2,300,000	177,040,743	1,770,407,430	N 1 \$ 295,034,5 / 0	N.A.	Note 28
2010.11	10	230,000	2,300,000	177,078,743	1,770,787,430	Capital increased by employee stock option: NT\$380,000	N.A.	Note 29
2011.01	10	230,000	2,300,000	177,360,243	1,773,602,430	Capital increased by employee stock option: NT\$2,815,000	N.A.	Note 30
2011.05	10	230,000	2,300,000	178,526,243	1,785,262,430	Capital increased by employee stock option: NT\$11,660,000	N.A.	Note 31
2011.07	10	230,000	2,300,000	178,633,743	1,786,337,430	Capital increased by employee stock option: NT\$1,075,000	N.A.	Note 32
2011.10	10	230,000	2,300,000	178,753,243	1,787,532,430	Capital increased by employee stock option: NT\$1,195,000	N.A.	Note 33
2012.01	10	230,000	2,300,000	178,832,743	1,788,327,430	Capital increased by employee stock option: NT\$795,000	N.A.	Note 34
2012.05	10	230,000	2,300,000	180,021,743	1,800,217,430	Capital increased by employee stock option: NT\$11,890,000	N.A.	Note 35
2012.08	10	230,000			1,800,257,430	IODITION: IN I 840 000	N.A.	Note 36
2012.11	10	230,000	2,300,000	180,162,243	1,801,622,430	Capital increased by employee stock option: NT\$1,365,000	N.A.	Note 37
2013.02	10	230,000	2,300,000	180,473,993	1,804,739,930	Capital increased by employee stock option: NT\$3,117,500	N.A.	Note 38
2014.07	10	230,000	2,300,000	185,473,993	1,854,739,930	Private common stock NT\$50,000,000	N.A.	Note 39
2015.03	10	230,000				Private common stock NTCof	N.A.	Note 40
2016.12	10	230,000	2,300,000	197,073,993	1,970,739,930	Eliminating treasury stock of NT\$3,000,000	N.A.	Note 41

[Note 01] This capital increase was approved by the Ministry of Economic Affairs on November 8, 2000 with Letter No. Chung 89521752. [Note 02] This capital increase was approved by the Ministry of Economic Affairs on March 25, 2002 with Letter No. Chung 09131849090. [Note 03] This capital increase was approved by the Ministry of Economic Affairs on May 23, 2002 with Letter No. Chung 09132153980. [Note 04] This capital increase was approved by the Ministry of Economic Affairs on January 28, 2003 with Letter No. Chung 09231612830. [Note 05] This capital increase was approved by the Ministry of Economic Affairs on April 28, 2003 with Letter No. Chung 09201127820. [Note 06] This capital increase was approved by the Ministry of Economic Affairs on August 4, 2003 with Letter No. Chung 09232463150. [Note 07] This capital increase was approved by the Ministry of Economic Affairs on August 26, 2004 with Letter No. Chung 09332620870. [Note 08] This capital increase was approved by the Ministry of Economic Affairs on November 12, 2004 with Letter No. Chung 09333010190. [Note 09] This capital increase was approved by the Ministry of Economic Affairs on January 18, 2005 with Letter No. Chung 09431571170. [Note 10] This capital increase was approved by the Ministry of Economic Affairs on April 18, 2005 with Letter No. Chung 09431980500. [Note 11] This capital increase was approved by the Ministry of Economic Affairs on August 31, 2005 with Letter No. Chung 09432758570. [Note 12] This capital increase was approved by the Ministry of Economic Affairs on November 8, 2005 with Letter No. Shan 09401222320. [Note 13] This capital increase was approved by the Ministry of Economic Affairs on February 16, 2006 with Letter No. Shan 09501027990. [Note 14] This capital increase was approved by the Ministry of Economic Affairs on May 22, 2006.05.22 with Letter No. Shan 09501093420. [Note 15] This capital increase was approved by the Ministry of Economic Affairs on August 8, 2006 with Letter No. Shan 09501172160. [Note 16] This capital increase was approved by the Ministry of Economic Affairs on January 12, 2007 with Letter No. Shan 09601006390. [Note 17] This capital increase was approved by the Ministry of Economic Affairs on July 4, 2007 with Letter No. Shan 09601142790. [Note 18] This capital increase was approved by the Ministry of Economic Affairs on August 27, 2007 with Letter No. Shan 09601209920. [Note 19] This capital increase was approved by the Ministry of Economic Affairs on November 16, 2007 with Letter No. Shan 09601280340. [Note 20] This capital increase was approved by the Ministry of Economic Affairs on June 30, 2008 with Letter No. Shan 09701153220. [Note 21] This capital increase was approved by the Ministry of Economic Affairs on September 2, 2008 with Letter No. Shan 09701224760. [Note 22] This capital increase was approved by the Ministry of Economic Affairs on March 6, 2009 with Letter No. Shan 09801042190. [Note 23] This capital increase was approved by the Ministry of Economic Affairs on May 22, 2009 with Letter No. Shan 09801102570. [Note 24] This capital increase was approved by the Ministry of Economic Affairs on July 24, 2009 with Letter No. Shan 09801161440. [Note 25] This capital increase was approved by the Ministry of Economic Affairs on February 24, 2010 with Letter No. Shan 09901035290. [Note 26] This capital increase was approved by the Ministry of Economic Affairs on May 14, 2010 with Letter No. Shan 09901098090.

[Note 27] This capital increase was approved by the Ministry of Economic Affairs on July 19, 2010 with Letter No. Shan 09901160360.

[Note 28] This capital increase was approved by the Ministry of Economic Affairs on August 24, 2010 with Letter No. Shan 09901189940.

[Note 29] This capital increase was approved by the Ministry of Economic Affairs on November 24, 2010 with Letter No. Shan 1090109260.

[Note 30] This capital increase was approved by the Ministry of Economic Affairs on January 17, 2011 with Letter No. Shan 10001009260.

[Note 31] This capital increase was approved by the Ministry of Economic Affairs on May 18, 2011 with Letter No. Shan 10001102080.

[Note 32] This capital increase was approved by the Ministry of Economic Affairs on July 26, 2011 with Letter No. Shan 10001170190.

[Note 33] This capital increase was approved by the Ministry of Economic Affairs on October 18, 2011 with Letter No. Shan 10001239220.

[Note 34] This capital increase was approved by the Ministry of Economic Affairs on January 20, 2012 with Letter No. Shan 10101014700.

[Note 35] This capital increase was approved by the Ministry of Economic Affairs on May 9, 2012 with Letter No. Shan 10101083930.

[Note 36] This capital increase was approved by the Ministry of Economic Affairs on August 15, 2012 with Letter No. Shan 10101167840.

[Note 37] This capital increase was approved by the Ministry of Economic Affairs on February 20, 2013 with Letter No. Shan 10201030590.

[Note 38] This capital increase was approved by the Ministry of Economic Affairs on February 20, 2013 with Letter No. Shan 10301126590.

[Note 40] This capital increase was approved by the Ministry of Economic Affairs on March 11, 2015 with Letter No. Shan 10401035870.

[Note 41] This capital increase was approved by the Ministry of Economic Affairs on December 5, 2016 with Letter No. Shan 10501280670

4.1.1.2 Type of Stock

Date: April 5, 2020; In shares

C1	A	uthorized capita		
Share type	Issued shares	Unissued shares	Total	Remarks
Ordinary Shares	197,073,993	82,926,007	280,000,000	197,073,993 shares are listed in TPEx shares

4.1.2 Shareholder Structure

Date: April 5, 2020; In shares and %

Shareholder Structure Number	Government agencies	institutions	Other institutional shareholders	Domestic natural persons	Foreign institutions & natural persons	Total
Number of	4	28	256	23,458	618	24,364
shareholders						,
Current shareholding	8,726,794	7,561,599	14,937,855	60,277,446	105,570,299	197,073,993
Percentage (%)	4.43	3.84	7.58	30.59	53.56	100.00

4.1.3 Shareholding Distribution Status

Date: April 5, 2020; In shares

Shareholding range	Number of shareholders	Current shareholding	Percentage (%)
1 to 999	9,601	724,734	0.37
1,000 to 5,000	12,548	21,868,601	11.10
5,001 to 10,000	1,018	7,812,597	3.96
10,001 to 15,000	334	4,255,563	2.16
15,001 to 20,000	213	3,927,757	1.99
20,001 to 30,000	193	4,904,006	2.49
30,001 to 50,000	153	6,139,059	3.12
50,001 to 100,000	121	8,813,503	4.47
100,001 to 200,000	72	10,722,212	5.44
200,001 to 400,000	46	13,357,174	6.78
400,001 to 600,000	16	8,208,529	4.17
600,001 to 800,000	9	6,292,826	3.19
800,001 to 1,000,000	11	9,638,668	4.89
>1,000,001	29	90,408,764	45.87
Total	24,364	197,073,993	100.00

[Note 1] All the shares of this Company are common stocks; no preferred stock is issued.

4.1.4 List of Major Shareholders

Date: April 5, 2020; In shares

Shareholding Shareholder's name	Current shareholding	Percentage (%)
Trusted Investment Account of KIOXIA Corporation by First Bank	19,821,112	10.06
Trusted Investment Account of Kingston Technology Inc. by CTBC Bank	7,346,000	3.73
Employee Prvdnt-EPF MSCI North Asia by HSBC	7,268,000	3.69
Khein Seng Pua	4,557,972	2.31
Jiunn Yeong Yang	4,549,114	2.31
New Labor Pension Funds	4,277,187	2.17
Mercuries Life Insurance Co., Ltd.	3,763,000	1.91
Chee Kong Aw Yong	3,409,745	1.73
Norges Bank - internal - NBIM PF EQ INTERNAL CFD	3,353,504	1.70
Old labor pension fund	3,033,188	1.54

4.1.5 Market Price, Net Worth, Earnings, Dividend and Related Information over the Last Two Years

Unit: NT\$

					Omi. Nip
Item		Year	2018	2019	Current year up to March 31, 2020
	Lighagt	Before retrospective application	324.00	348.00	362.50
	Highest	After retrospective application	324.00	348.00	302.30
Market price	Lowest	Before retrospective application	187.00	222.00	202.50
per share	Lowest	After retrospective application	187.00	222.00	202.30
	Average [Note 1]	Before retrospective application	264.25	296.93	304.41
	Average [Note 1]	After retrospective application	264.25	296.93	304.41
Net worth per		Before distribution	136.56	148.11	157.95
share		After distribution	123.56		_
г .	Weighted a	verage shares (thousand shares)	197,074	197,074	197,074
Earnings per	E	Before retrospective application	21.91	23.05	9.63
share	Earnings per share	After retrospective application			_
		Cash dividends	13.00	13.00 [Note 6]	
Dividends per	Free allotment	Dividends from retained earnings	0.00	0.00	_
share	riee anothent	Dividends from capital surplus	0.00	0.00	_
	Cum	ulative unpaid dividends	0.00	0.00	_
Б.	Price	e/Earnings Ratio [Note 3]	12.06	12.88	_
Return on	Price	e/Earnings Ratio [Note 4]	20.33	22.84	_
investment -	Cash Div	idend Yield Rate (%) [Note 5]	4.92	4.38	_

[[]Note 1] Average market price per share is calculated according to the annual turnover value and volume.

[[]Note 2] Adopting IFRS (consolidated statements).

[[]Note 3] P/E Ratio = Average market price/earnings per share.

[[]Note 4] Price/dividend ratio = Average market price/cash dividends per share.

[[]Note 5] Cash dividend yield rate = Cash dividends per share/average market price.

[[]Note 6] It needs to be approved by 2020 shareholders' meeting.

4.1.6 Dividend Policy and Implementation Status

4.1.6.1 Dividends Policy on the Articles of Association of the corporation:

Based on Phison's Article 19.1 of the Company, if there is net profit in the final financial statements, after offsetting any loss from prior year(s), 10% of the profit should be appropriated into capital reserve; however, if the capital reserve is up to the paid-in capital, this requirement is not applicable. In accordance with law or the competent authority, the Company appropriates or reverses special reserves. The remaining surplus, together with unappropriated retained earnings would be reversed appropriately by the Board of Directors based on actual operating conditions, and then a proposal for surplus distribution will be formulated and subsequently be submitted to the meeting of shareholders for its ratification. The Company's dividend distribution policy shall consider the Company's current and future investment environment, capital demands, domestic and foreign competition situations and capital budgets, in order to safeguard the shareholders' interests, balance dividend and cater the long-term financial plan. On an annual basis, the Board of Directors will formulate a distribution plan, and report it to the shareholders' meeting. The dividend distribution of the shareholders of the Company can be distributed in cash or shares, in which the proportion of shareholders' cash dividend distribution is not less than 10% of the total dividends of the shareholders.

4.1.6.2 Distribution of Dividends Proposed in the Shareholders' Meeting:

The surplus distribution of 2019 has been approved by the Board of Directors on Mar 16, 2020 and will submit this surplus distribution to 2020 shareholders' meeting. The Board of Directors plans to cash distribute NT\$2,561,961,909 (NT\$13 per share) to the shareholders who own the stock on the base date. The smallest unit of dividends is NT\$1 and dividends below this unit will be omitted, and the aggregate of cash dividend less than NT\$1 shall be transferred to the Employee Welfare Committee. The paid-in capital shares of the Company before Mar 16, 2020 is 197,073,993 shares. Upon the shareholders' meeting approves this proposal, the Chairperson is authorized to determine the base date of distributing dividends and other affairs. If the number of shares varies, the Chairperson is authorized to adjust the dividends accordingly.

4.1.6.3 Anticipated material changes in dividend policy: None.

4.1.7 Effects of the dividends distribution on the operation performance and EPS of this Company: Not applicable.

4.1.8 Compensation for Employees, Directors and Supervisors

4.1.8.1 Percentage or range of employee, Director, and Supervisor remuneration as set

forth in the Company's Articles of Incorporation

According to Article 19 of the Articles of Association of the Company, "If the Company makes profits in the year, it shall appropriate 8% to 19% for employees' compensation and no more than 1.5% for directors and supervisors' compensations." But the Company shall reserve a portion of profit to make up for accumulated losses, if any. Employee's remuneration may be distributed in shares or cash, and the counterparty to whom shares or cash are distributed to as employee's remuneration may include the employees of its subordinate companies that meet certain criteria. Compensation of directors shall be paid in cash. The term "profit" as mentioned in the first paragraph refers to "pre-tax profits before deducting the distributed employees and directors' remuneration." Employee and director remuneration allocation must be approved by the board of directors in a meeting attended by more than two-thirds of all board members, where half of attending directors approve. The remuneration resolution shall be reported in the annual general meeting.

- 4.1.8.2 The basis for estimating the amount of employee, director, and supervisor compensation, for calculating the number of shares to be distributed as employee compensation, and the accounting treatment of the discrepancy, if any, between the actual distributed amount and the estimated figure, for the 2019.
 - 4.1.8.2.1 Basis of the 2019 Cash Remuneration for Employees, Directors and Supervisors:

The profit of this company in 2019 is NT\$6,025,446,147 (Profit refers to the Profit Before Income Tax and before deducting the remuneration to employees Bonus and Directors' and Supervisors' Remuneration) and the company will remunerate the employees (NT\$650,000,000 in total; 10.79% of the profit) and the directors/supervisors (NT\$35,000,000 in total; 0.58% of the profit). The remuneration will be rewarded in cash.

- 4.1.8.2.2 Basis of the Stock Remuneration for Employees: there is no stock remuneration in 2019.
- 4.1.8.2.3 Difference is Adjusted by Accounting Principles: if difference exists between the actual allocation amount and estimated number, it shall be treated based on accounting estimation changes and adjusted and recorded in the account in the following year. There is no difference in the 2019 employees, Directors' and Supervisors' actual remuneration and estimated amount for the year of recognized expense.
- 4.1.8.3 Proposed compensation approved by the Board of Directors
 - 4.1.8.3.1 The amount of remuneration paid to employees, directors and

supervisors in cash or stocks. If there is any discrepancy between that amount and the estimated figure for the fiscal year these expenses are recognized, the discrepancy, its cause, and the status of treatment shall be disclosed:

On March 16, 2020, the Board of Directors passed the resolution of 2019 remunerations to employees, directors, and supervisors, among which NTD650,000 thousand was distributed to employee remuneration and NTD350,000 thousand to director and supervisor remuneration. If there is any discrepancy between the actual amount and the estimated amount recognized in the fiscal year, the discrepancy shall be handled according to the changes in accounting estimate, and shall be settled into account in the following year.

- 4.1.8.3.2 Amount of stock distributed as employee compensation and as a percentage to net income of parent company only or individual financial statements after tax and to aggregate compensation to employees: There is no employee compensation in the form of stock for 2019.
- 4.1.8.4 Information of distribution of compensation of employees, directors, and supervisors for the previous year, and, if there are any discrepancies between the actual distribution and the recognized employee, director, or supervisor compensation, and the discrepancy, cause, and its treatment:

Employee remuneration and supervisor and director actual distribution for 2018

Unit: NT\$

Distribution Item	Amounts approved in shareholders' meetings	Annual amount estimate recognition	Difference	Reasons for discrepancy and processing method
Employee Bonus	550,000,000	550,000,000	0	
Remunerations of the Directors and Supervisors	40,000,000	40,000,000	0	N.A.

- 4.1.9 Repurchase of shares by the Company: None.
- 4.2 Status of Corporate Bonds: None.
- 4.3 Status of Preferred Stocks: None.
- 4.4 Status of Global Depository Receipts: None.

4.5 Status of Employee Stock Option Plan:

4.5.1 Unexpired employee stock options shall disclose the processing situation up to the publication date of the annual report and the impact on shareholders' rights and interests:

Date: May 15, 2020

				Date: May 13, 2020
Category of employee stock option	First employee stock options in 2018	First employee stock	First employee stock options in 2020	
Date of effective registration	Nov. 28, 2018 Nov. 22, 2019			Apr. 10, 2020
Date of issuance (treatment)		(First issuance) Dec. 30, 2019	Not issued	Not issued
Number of Options Granted		6,000,000 units	2,000,000 units	8,000,000 units
Ratio of subscribable shares to total issued and outstanding shares(%)		3.04 [Note]	Not issued	Not issued
Option Duration	1	3 year	rs	3 years
Method for exercising the warrant		Issued by ne		Issued by new stocks
Conditional conversion periods and percentages (%)	This employee stock option was not issued. In compliance with the	Two years after the emp was issued, 50% of the traded. Two and a half yemployee stock option with the option can be traded restricted when the prec with the book closure date.	Two and half years after	
Converted shares	regulations, it cannot	0	Not issued	Not issued
Exercised amount	be issued after Nov 27,	0	Not issued	Not issued
	2019.	6,000,000 units	Not issued	Not issued
Subscription price per share of the unsubscribed shares		NT\$340.00	Not issued	Not issued
Proportion of unexecuted subscription quantity in total (%)shares issued (%)		3.04 [Note]	Not issued	Not issued
Impact to shareholders' equity		Two years after the emp was issued, 50% of the traded. Two and a half yemployee stock option the option can be traded on the shareholder's rig decreased, so the impact	employee stock option was issued, 50% of the	

[Note] As for the ratio of acquisition numbers of first employee stock subscription to the total issued share numbers, and non-executed stock numbers to the total issued share numbers in 2019, it shall take the number that divides the total issued unit number by total issued number of 197,073,933 as of May 15, 2020, as a calculation basis.

4.5.2 The names, acquisitions, and subscriptions of the managerial officers who have obtained the employee stock options and the top ten employees who have obtained the stock options evidence up to the publication date of the annual report:

Date: May 15, 2020; Unit: NT\$

									ate: May	<u> </u>			
				Ratio (%) of		Options ex			Options unexercised				
	Position	on Name	Number of options shares	subscription number obtained in total issued shares (%) [Note 2]	Shares exercised	Subscription price [Note 1]	Total value of shares exercised	Ratio (%) of number of shares subscribed in total issued shares (%) [Note 2]	Shares exercised	Option price [Note 1]	value of shares	Ratio (%) of number of shares subscribed in total issued shares (%) [Note 2]	
	CEO	Khein Seng Pua											
	General Manager Deputy General Manager Deputy General Manager Vice Technical	Chee Kong Aw Yong Tzung Horng Kuang Yeou Long Sheng Chih Jen Hsu											
	President Director	Kuo Yi Cheng											
Ma	Director	Chung Hsun Ma											
nage	Director	Jui Chieh Lin											
Managerial officers		Ching Wen Chan	2,411,000	1.22	0	0	0	0.00	2,411,000	340.00	0	1.22	
offic	Director	Liu Hsiu Chin											
ers	Director	Shu Hua Chiu											
	Director	Wee Kuan Gan											
	Director	Shu Hui Tsai											
	Director	Huei Chen Tsay											
	Director	Li Fu Huang											
	Finance Manager and Accounting Manager	Bao Feng Chen											
	General Manager (US subsidiary)	Zong Cheng Wu											
	Senior Special Assistant	Zhi Chyang Yu											
	Deputy Director	Chang Guang Lin											
	Deputy Director	Ming Ren Liang											
Employee	Deputy Director	Zhi Gang Ye	411,000	0.21	0	0	0	0.00	411,000	340.00	0	0.21	
oyee	Deputy Director	Zhi Zhong Lin	711,000	0.21	U	U		0.00	711,000	J70.00	U	0.21	
	Deputy Director	Xiao Dong Lin											
	Deputy	Qing Cong Chen											
	Deputy Director	Zhi Ming Chen											
	Deputy Director	Jiang Han Xu											

[Note 1] The Company established "Measures for Issuance and Subscription of Employee Stock Option Certificate in 2019." The first issuance date of employee stock option was Dec 30, 2019, with the issuance price as NT\$340.00 and the issued number of shares as 6,000,000.

[[]Note 2] As for the ratio of acquisition numbers of stock subscription to the total issued share numbers, executed-stock subscription numbers to the total issued share numbers, and non-executed stock numbers to the total issued share numbers, it shall take the number that dividing the total issued unit number by total issued number of 197,073,933 as of May 15, 2020, as a calculation basis.

- 4.6 Issuance of New Restricted Employee Shares: In 2019 and as of the date of publication of the annual report, there is no issuance of new restricted employee shares.
 - 4.6.1 For all new restricted employee shares for which the vesting conditions have not yet been met for the full number of shares, the annual report shall disclose the status up to the date of publication of the annual report and the effect on shareholders' equity: Not applicable.
 - 4.6.2 Names and acquisition status of managerial officers who have acquired new restricted employee shares and of employees who rank among the top ten in the number of new restricted employee shares acquired, cumulative to the date of publication of the prospectus: Not applicable.
- 4.7 Status of Issuance of New Shares in Connection with Mergers and Acquisitions: In 2019 and as of the date of publication of the annual report, there is no issuance of new shares by M&A of shares of other companies.
- 4.8 Finance Plans and Implementation: Not applicable.

Chapter 5 Operation Overview

Chapter 5 Operations Overview

5.1 Business Activities

5.1.1 Business Scope

5.1.1.1 Main areas of business operations

The Company mainly focuses on the controller of flash memory and the design of the peripheral devices integration, descriptions are as follows:

- The design, manufacture and sales of the controllers and modules of SSD.
- The controllers and modules of embedded Flash used on portable application like smartphone and tablet, including eMMC, UFS.
- The design, manufacture and sell of the controllers and modules of USB.
- The design, manufacture and sell of the controllers and modules of memory card (SD/CF).

5.1.1.2 Proportion of main products in net operating income

Unit: NT\$ thousands

Itama	2019					
Item	Amount	Percentage (%)				
Flash memory module product	33,934,931	75.93				
Integrated circuits	2,744,040	6.14				
Controller	7,657,732	17.13				
Others	356,738	0.80				
Total	44,693,441	100.00				

Note: International Financial Reporting Standards (IFRS) is adopted (Consolidated Statements).

5.1.1.3 Current Major Product (Service)

- The controllers and modules of SSD.
- The embedded controller used on portable application, including eMMC, UFS.
- The controllers and modules of USB.
- The memory card controllers and memory card: SD card, microSD card etc.

5.1.1.4 New products (services) to be developed

- High speed, high capacity USB 3.2 Gen 2x2 Flash Drive solutions.
- High random write performance SD/microSD card and compliant with SD 7.0.
- The latest generation UFS controller chips that support high data rate of 3D NAND flash.
- High performance SSD that support the latest PCIe/NVMe protocol.
- Next generation PCIe PHYs for advance manufacturing process.
- High-end enterprise and datacenter SSD that support to higher apacity, performance and data error correction.
- New LDPC ECC engines for emerging 3D QLC NAND Flash.
- SiP technology for smaller-size, higher-capacity and power-saving SSDs.
- Automotive SSD solutions compliant with automotive industry standards.
- SiP technology of SSD solutions for variety of embedded application.

5.1.2 Industry Overview

5.1.2.1 Development status of the industry

The Company focuses on the controller of flash memory and the design of the peripheral device's integration. The current status and development of flash memory and NAND Flash products in this industry are illustrated below:

5.1.2.1.1 Current status and development of flash memory in this industry

NAND Flash Memory is the most suitable storage device for large data storage and its cost per bit is the cheapest of all nonvolatile storage devices, so it can universally be used in portable products to store data, such as USB, memory card and related application, such as smartphone, laptop/desktop computer and server etc.. NAND flash solution is tranferring from 2D MLC to 3D TLC. The 3D TLC NAND is advance on the cheap cost, but it relies on a stronger controller to help its operational efficiency and ensure data reliability. With the supporting of new controllers, 3D TLC NAND have used in embedded memories and SSDs.

With the prosperity of online commerce and services, the market's demand for data storage is increasing and it requires a faster and more reliable solution of data streaming, which makes the penetration rate of SSD and eMMC application on computers and smartphones surge in recent years and even enter into the large data processing servers and cloud applications. In addition, the capacity in single production of memory cards and USB is rapidly increasing while the audio and video information technology improved capacity of the single file, and the requirements for reading speed and stability have also increased. In summary, there are multiple long-term niches and advantages for the NAND Flash industry development.

As the NAND Flash process technology and applications are evolving rapidly, the technology of NAND Flash is more and more difficult because more bits for error correction are needed and the integration with controllers is critical. Most of the technologies for controllers, such as wear leveling and bad block management, are to extend the life cycle of NAND Flash.

Phison Electronics Corporation has been dedicating to the research and development of NAND Flash controllers and its related applications for nearly 20 years. Phison has accumulated solid managing technologies and knowledge of NAND Flash, obtained about 2,000 patents related to NAND Flash technologies, and created a unique operating model. In the line with the concept and culture of "sharing, integrity, efficiency, innovation," all employees of the Company will work together to make continuous progress to keep the Phison Electronics in the leading position of the market.

5.1.2.1.2 NAND Flash memory has been the main-stream storage device and many new applications have been proposed. The Company has developed many solutions in different areas.

Controller for USB 3.2 Drives and Products

USB 3.2 is designed for a fast data transferring of audio and video. It is 10-40 times faster than USB 2.0 and has the advantages of backward compatibility, better power management, and larger power capacity. The theoretic speed of USB 2.0 is 480Mb per second and the theoretic speed of USB 3.2 is greatly promoted to 5-20Gb per second. Therefore, for those USB 2.0 products, the

maximal actual transferring speed is just 28MB ~ 30MB per second. If these products adopt USB 3.2, the transferring speed can be greatly promoted to over 1,800MB per second, which saves a lot of data transferring time. The Company is the first one to propose the USB 3.2 controllers for 4 channels and 8 channels alternating transferring, which improves the power consumption and the heat accumulation, as well as decreasing the PCB dimensionand lowering the total cost. We have developed the USB 3.2 mobile dive with a reading speed 400 MB per second and a writing speed 300 MB per second. Its data accessing performance is almost the same with that of SSD and it can accommodate more than 1TB of NAND Flash in a mobile drive. We also continue to develop USB 3.2 controllers and USB drives with a high performance/price ratio to provide more customers with convenience and performance of USB 3.2.

Controller Chips and Products for SD Cards

SD (Secure Digital) memory card (including microSD card) is the most used storage device in high-resolution DSLR, sports and UAV digital cameras, dashboard cameras, printers, smartphones, and tablets. In recent years, the need for high capacity cards has been increased. TLC NAND with features of low cost and high capacity is widely used in consumer electronics. Because feature phones are gradually replaced by smartphones, high capacity microSD cards have become more and more popular. Phison Electronics Corporation makes efforts to develop new features, support new-generation SD 6.0 specification, provide high capacity cards with better writing/reading performance. We also enter the niche market to provide products with higher value-added to satisfy the needs of premium memory cards. In addition, for the DVR and UAV cameras that need an uninterrupted recording feature, the Company has developed the special and customer-made SD/microSD solution. These products have been verified by the customers and been stably produced.

<u>eMM</u>C

Controllers for eMMC flash memory is developed for the memory needs of smartphones. Because the smartphone market is expanding and needs higher performance, the requirements for controllers are higher and higher, such as high-speed transferring, simultaneous reading and writing, background operation, security, and power-saving. International NAND Flash suppliers, such as Samsung, Kioxia, SanDisk, SK Hynix, and Micron, all make their efforts to develop eMMC. It is a new trend and the growth in the future is enormous because many products need it, such as smartphones, tablets, set-top boxes, and smartTVs. This embedded flash memory does not only satisfy the need of smartphones, but also has higher reliability than other storage cards. Phison Electronics Corporation has been working in this area for a long time. The NAND Flash management technology and our rich experience are the most important basis for developing this product. In addition, Phison Electronics Corporation has sufficient technology patents to lead in the competition and provide competitive products. We have developed the controllers with the specification of eMMC 5.x embedded flash memory, which is established by JEDEC. These products have been adopted by international suppliers and the shipment of these products is very steady. We also make efforts to develop the next generation high-speed eMMC.

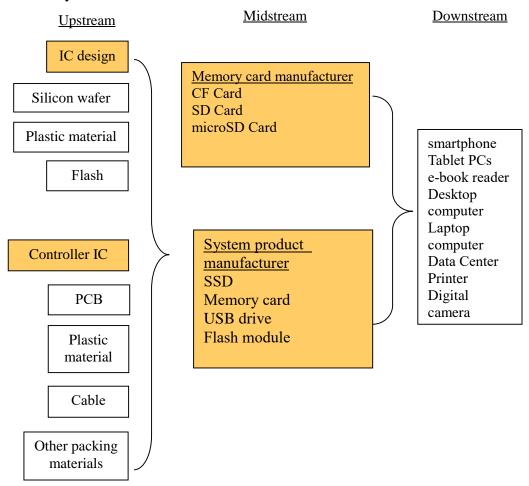
UFS

With the improvement of smartphone functions, the processors are more advanced, more applications are installed and the resolution of cameras is getting higher. All of these improvements need higher performance and higher storage capacity. The data transferring speed of eMMC is limited due to the electrical characteristic, so that is very difficult to be enhanced. Therefore, the industry has established the new interface specification UFS (Universal Flash Storage). Currently, the data transferring speed of UFS3.0 is six times faster than that of eMMC. In the future, higher speed will be developed. In addition, UFS is based on the widely-adopted SCSI architectural model and supports multi-thread data access, which makes good use of the memory features. The Company has completed the verification of prototype products and will continue to put resources into the development of UFS controllers and integration solutions.

SSD

All of traditional IT and electronic products used hard disks as storage device in the past, but the software and hardware in the computer industry have been developed rapidly. Currently, the speed of hard disks cannot catch up with the speed of other software and hardware, so SSD was developed to fix this problem. Unlike traditional magnetic hard disks, SSD uses flash memory as storage media and have the advantages of writing/reading speed, smooth use, power consumption, noise, weight, size, etc. After cloud technology and tablets are more and more popular, the need for SSD becomes more urgent. Hence, Phison Electronics Corporation has dedicated itself to develop new controllers of flash memory and system integration. Currently, we have all kinds of SSD chips for SATA and PCIE interfaces and comprehensive solutions to satisfy the needs of all parties. We will continue to design innovative and advanced products to promote the performance of SSDs and lower the unit cost. Phison Electronics Corporation will create greater values for SSD products.

5.1.2.2 Relationship of Upstream, Midstream and Downstream in this Industry The Company focuses on the controllers of flash memory and the system integration of SSD, eMMC, USB drives and memory cards. We are in the upstream and mid-stream of this industry.



5.1.2.3 Product development trends and competition

5.1.2.3.1 Product development trends

A. Controller:

- a. Controllers for SSD and eMMC: The design is aimed to integrate multiple functions, larger memory, faster transfer rate, random access speed, access stability, longer life cycles, supporting all specifications and transferring interfaces, low voltage, low cost, and single chip.
- b. Controller for flash memory: the design is toward faster speed, access stability, supporting all specifications and transferring interfaces, small size, low voltage, low cost and single chip.
- B. USB drive: the design is toward larger memory, faster speed, small size, data security and software platform integration.
- C. To sum up, the Company will focus on the application of flash memory storage to develop products of single function and products of multiple function integration. We will keep inputting our innovation on the new products.

5.1.2.3.2 Competitions

The of NAND Flash is toward embedded memory application and the technology required in this trend is getting higher and higher. Most of the business opportunities and core technology are in the hands of big NAND Flash suppliers. The controller suppliers in Taiwan are holding fewer and fewer advantages, which leads to continuous market integration or individual suppliers' transformation. If the participants cannot upgrade their technology of controller from USB2.0 drives and SD card to SSD and embedded memory of eMMC and USB3.0, they have been eliminated from this industry. Phison Electronics Corporation invested lots of R&D resources to upgrade all core technologies and enter the areas of SSD and eMMC. We have done great business in retailers and PC OEM market. By strategic alliance, our sales performance is getting better and better. Although there are many IC companies trying to develop embedded memory controllers to join this competition, the most critical factor is the close relationship with the international big NAND Flash suppliers to participate in the supply chain. In the future, Phison Electronics Corporation will continue to develop products, establish a strategic alliance, vertically integrate the industry and build high/middle/low levels SSD/eMMC/UFS product line to maintain our competitiveness.

The core technology of Flash memory products is the controllers and the integration of their firmware and software. Firmware technology is the key to the rapid development of all kinds of flash memory supporting all major specifications and owning high compatibility, which benefit the competitiveness in the market. The Company has great capability of designing controllers for flash memory and firmware, as well as the capability of integrating the technologies for system products. We can provide all technology solutions from ICs to system integrationand have unique and premium competitiveness, which benefit our future growth in the market.

5.1.3 Technology and R&D Overview

5.1.3.1 Technical level of business activities

The Company mainly focuses on the R&D, design, manufacturing, and sales of controllers for flash memory, USB drives, flash memory cards, SSDs, eMMC embedded modules, etc. The core technology of these products is the controllers and the integration of their firmware and software. The Company has great capability of designing controllers for flash memory and firmware, as well as the capability of integrating the technologies for system products. We can provide all technology solutions from ICs to system integration and have unique and premium competitiveness, which benefits our future growth in the market..

5.1.3.2 R&D of the Business

The Company has an excellent R&D team of young, hard-working, creative, and experienced members. They have the experience of developing flash memory products and focuses on the controllers for flash memory and peripheral systems. We are the leader in the development of controllers for flash memory and provide comprehensive technology solutions. The R&D team works very hard to be among the first three suppliers of controllers and peripheral systems.

5.1.3.3 R&D Expenditures of the Most Recent Year and as of the Publication Date of Annual Report

Units: NT\$ thousand; %

Year Item	2019	Mar. 31, 2020
R&D expenditures	4,714,400	1,686,413
Net operating revenue	44,693,441	12,866,703
Percentage of R&D expenditures to net operating revenue	10.55%	13.11%

Note: IFRS is adopted (Consolidated Statements).

5.1.3.4 Successful Technology or Products

• Successful R&D Projects

Year		R&D results
2018	(1)	Developed a lower power MIPI Gear 4 PHY as the host interface for the UFS
		Unipro flash memory controller chip.
	(2)	The advanced process PCIe G3x4 and MIPI PHY were developed for better
		performance and energy efficient.
	(3)	Developed the latest generation of LDPC+ DSP ECC engine, which is able to more effectively support 3D Nand.
	(4)	Developed USB3.1 flash disk that supports high speed random write.
	(5)	Developed core-power management system of flash memory to simplify the
		firmware operation process, increased data transmission efficiency, and reduced power consumption.
	(6)	Developed the SD/microSD card with high random read/write performance
		which can be used to expand the embedded flash memory capacity of handheld devices.
	(7)	Developed various control chips and solutions that support 3D NAND.
	(8)	Develped low power consumption RAID error correction module which supports mobile devices.
	(9)	Combined resources on the Host side to develop high-performance SSD that reduce overall power consumption.
	(10)	For the SSD product line and embedded flash memory modules, we will continue
		to develop products with innovative specifications and technologies in
		conjunction with the application market.
	(11)	Developing System-In-Package of NAND flash memory module.
	(12)	In compliance with industrial standards, including design and verification
		methodologies, developing functional modules for automotive applications.
2019	(1)	Developed a lower power MIPI Gear 4 PHY as the interface for the UFS Unipro
		flash memory controller chip.
	(2)	Dveloped the world's first PCIe 4th Gen SSD whose transfer rate is over 5GB/s.
	(3)	Dveloped the latest generation of LDPC+DSP ECC engine, which is able to more
		effectively support 3D NAND data.
	(4)	Developed USB3.1 flash drive that supports high random write performance.
	(5)	Developed 2nd generation core-power management system of flash memory
		which simplifies the firmware operating process and increases data transfer
		efficiency to lower power-consumin.

Year		R&D results
	(6)	Developed the SD/microSD card with high random read/write performance
		which can be used to expand the built-in flash memory capacity of handheld
		devices.
	(7)	Developed controller chips and solutions that support 3D QLC NAND.
	(8)	Developed a low power-consuming RAID ECC engine for mobile devices.
	(9)	Developing low-power yet high performance SSD controllers by supporting
		HMB feature leveraging host memory buffer.
	(10)	Developing SiP(system-in-package) technology of flash memory module.
	(11)	Developed design/qualification methodologies and functional modules which
		comply with automotive specification to support variety of automotive
		applications.
	(12)	Developed highly integrated embedded SSD with high low latency and low WAF.

Technology Patents of the Company:

The Company makes great efforts to develop the technologies for the flash memory application and has been successful in some critical technologies. We have 270 patent applications and 1,665 approved cases worldwide up till April 30, 2020.

5.1.4 Long-term and Short-term Business Development Plans

5.1.4.1 Short-term Business Development Plans

5.1.4.1.1 Marketing/Sales Strategy

- A. We will leverage strategic alliances to collaborate with large corporations in the industry and expand our market share. These measures could promote our technology status and market share of the products as well as create bigger market demand.
- B. We will establish different sales strategies based on the customer types and global market to satisfy market demands, strengthen customer stability, and promote global sales.
- C. We will explore the markets in China and emerging markets to expand our market share and accommodate various customers.

5.1.4.1.2 R&D

- A. We will continue to improve the functions of the controllers for flash memory to support diverse specifications and integration. The Company's R&D is moving toward high performance, low power consumption, long life cycles, high capacity, and high compatibility.
- B. The products will be more diversified and their functions and specifications will be improved to meet customers' needs.
- C. The R&D will be toward data storage, embedded and data security to develop new products with single function or function integration.

5.4.1.1.3 Production

- A. We will continuously improve the management of the balanced marketing and production and keep expanding outsourcing plants and improve their management.
- B. We will continuously lower the production cost and search for material of

- good quality and lower price. We will also improve the OEM production capability and promote the product yield, which can cut down the cost and maximize profit.
- C. We will improve inventory management to make use of them as much as possible.
- D. We will take the measures of strategic alliance to establish the marketing and production strategies in different regions and markets to effectively lower the production and marketing cost and serve customers in local side.
- E. We will continuously improve the collaboration with the material suppliers to better manage material inventory, production and marketing.

5.4.1.1.4 Management and Finance

- A. We will follow the regulations of self-management and corporate governance. By trading the capital market, we will promote the company reputation and recruit excellent talents.
- B. We will keep a good relationship with banks, strengthen the credibility check to ensure creditor's rights, and check the receipt and payment on a regular basis to improve financial status.
- C. Financial structure improvement: We will continue to lower the operating cost, improve capital management, and hedge exchange rate risks. These measures can secure the financial operations and management to maximize the profit of the Company.
- D. We will make good use of the TIPTOP GP ERP System, AgentFlow system etc to integrate resources, promote business efficiency and improve operation processes.
- E. We will implement human management and robust systems to enhance the internal cohesion. We will improve the educational trainings to promote work efficiency and human resource.
- F. Effective management of human resource and operating process: We will continue to improve the internal operation processes to promote work efficiency, work quality and human resource.

5.1.4.2 Long-term Business Development Plans

- 5.2.1.3.1 Marketing policy: We will continue to improve the training of salespeople, collect comprehensive market information, establish the customer service network, establish agent networks, expand the global market, and enter big economies all over the world.
- 5.2.1.3.2 R&D policy: We will continue to the technologies of the new generation, develop new product lines based on the needs of the market, develop products with high additional value, promote the variety and competitiveness of our products, maintain innovation capability and focus on innovation to maintain our leadership in the market of flash memory application.
- 5.2.1.3.3 Production policy: We will keep good relationships with the current material suppliers and foundries and seek new suppliers to reduce the risks of centralized manufacturing of Flash Memory and wafers, and strengthen the cooperartion with these OEMs. Also, we will continue to use the advanced manufacturing process to cut down costs while improving the production and sales management and quality control procedures to enhance our competitiveness.

5.2.1.3.4 Business management policy: By recruiting new personnel, creating more products, expanding domestic and overseas market share, collaborating with international strategic partners, and integrating resources, By upholding the spriti of sustainable and practical operation, we will continue to boost our business and become the international leader of flash memory applications.

5.2 Market and Sales Overview

5.2.1 Market Analysis

5.2.1.1 Main Sales (Service) Region:

Unit: NT\$ thousands

Year	2018	2019			
Area	Operating revenue	Operating revenue			
Asia	24,336,197	30,003,289			
America	12,646,332	10,225,567			
Europe	3,609,347	4,209,463			
Australia	195,271	254,547			
Others	958	575			
Total	40,788,105	44,693,441			

Note: IFRS is adopted (Consolidated Statements).

5.2.1.2 Market Share and Demand/Supply/Growth in the Future

5.2.1.3.5 Market Share: Not applicable because there is no clear statistical data.

5.2.1.3.6 Demand/Supply/Growth in the Future

A. Supply

The application of flash memory becomes broader and broader, and market demand is growing fast. Therefore, manufacturers without advanced technology will lose their competitiveness. The major suppliers of controller chips are Phison, Marvel, Silicon Motion, Broadcom, Solid State System, Alcor, ITE Tech, WINBOND, IROC, ASolid, JMicron, Gigastone, etc. The manufacturers of Nand flash application products are Sandisk, Kingston and Micron, etc. (overseas) and Phison, Transcend, Apacer, Adata, Silicon Power, DELTA ELECTRONICS, LIWANLI, TONG HSING ELECTRONIC, FORMOSA TAFFETA, SUNNIC, etc. (domestic).

B. Demand

The application of Nand Flash is expanding as the memory chip's price is getting reasonable and multimedia and portable products become commonly used, which leads to the growing products applied with NAND Flash. Besides the current digital and 3C products adopting USB drives and SD Cards, smartphones with embedded memory storage are also

increasing. Also, SSDs with a higher reading/writing speed are applied in PCs, notebooks, and large data centers, gradually replacing hard disk drives. Thus, NAND flash is the most commonly applied and the most stable storage media with stable growth in the market.

C. Growth

In 2019, the sales amount of SSD controllers and products accounted for 46% of the total income, 11% higher than that in the previous year. We also developed UFS controllers for the best choice of next-generation high-performance embedded storage devices. Our R&D team will continue to make efforts in the development of IP and the miniature of manufacturing processes to provide more products and benefit the future development..

The demand for high speed data storage applications such as Cloud Computing, Big Data, Artificial Intelligence and Gaming have pushed SSD penetration rates to a new pace never seen before. Phison has launched varieties of NAND Flash controllers for different markets, including several PCIe Gen3x4 NVMe controllers and the World's 1st PCIe Gen4x4 NVMe SSD controller. For performance-oriented applications and the enterprise SSD market, Phison offers the 8-channel ultra-high speed, low latency PCIe Gen3x4 controller in mass production. For mobile storage, Phison is one of the few companies that carry both eMMC and UFS controllers, where power consumption and temperature are critical. The latest UFS 3.0 controller unveiled by Phison, with in-house technology such as StrongECCTM, advanced LDPC, CoProcessorTM, and RAID, provides optimal power consumption and robust error correction capability while offering SSD-like performance. We also develop the PCIe NVMe BGA SSD as an alternative to high-speed mobile storage. For memory cards, Phison has released the latest SD 6.0 and microSD controllers conforming to the SDA Application Performance Class 2 (A2), boosting the random performances while bumping up the capacity to 1TB. For the USB product line, it has evolved into several portable SSDs with unprecedented performance. For instance, the brand new iDUO Lightning and C-Thru USB 3.1 solutions can support end-users charging mobile devices during operation. In addition, all Phison product lines are supporting the latest 3D TLC NAND Flash from various manufacturers.

With the rapid development of flash memory application products, the development of NAND Flash controller chips are also rising and flourishing. The price of flash memory material was rapidly changed, making the marketing more competitive. Under the highly unpredictable situation, we predict that, in the future, the flash memory application products will be massively

used in the hand-held devices, and other SSD application products will also replace traditional hard disk devices to a great extent wit their higher stability, speed, and the cost trend that will further descend. Therefore, the NAND Flash controller chips will be used more in the future. Phison Electronics Corporation will continue to develop new controller chip applications for NAND Flash products to provide service and products of system integration and application. In response to the technology industry change and the flash product application trend, the Company will also continue to invest new manufacturing processes and new technical specifications to timely provide various application products. We will focus on promoting the application of SSD, eMMC, and new products in all kinds of technology devices. We will also develop a new generation of embedded high-speed eMMC and UFS controller chips for a wide range of hand-held devices, such as smartphones and tablets. In addition, we will continue to develop new SSD products for the ultrabook, industrial computers, and the data storage devices for high-speed corporation application and IoT to provide the technology and service of total solutions to fulfill the market demands. We promise to promote our competitive capability and expand our market share.

5.2.1.3 Competitive Niche

5.2.1.4.1 Professional, Young and Stable R&D Team to Develop New Technology and Products Rapidly

The R&D team of Phison Electronics Corporation has been in the industry of NAND Flash peripheral devices and been one of the pioneers in this area. Our R&D team is young, hard-working, creative, and fast. Since its establishment in November 2000, it has successfully developed controllers for many components, such as USB3.0 NAND flash memory, SD 4.0 UHS-II, eMMC 5.X, SATA SSD, PCIE SSD, and security USB mobile drive. In the future, we will continue to improve the training for R&D personnel, provide benefits to attract and keep the talents, and recruit new talents to promote experience inheritance and technology advancement, make our products more competitive, and create products with differentiation.

5.2.1.4.2 Strong Shareholders and Strategic Alliance

In the market, there are only a few NAND Flash suppliers such as KIOXIA. In addition, there are many specifications for small memory cards. Most of the NAND Flash peripheral products have patent protection. Hence, how to obtain enough NAND Flash memory material and how to obtain relevant patent authorization are critical issues to us.

Since the establishment, the Company made lots of efforts to develop advanced technology and new application areas. We have kept a good relationship with all Flash manufacturers and introduced strategic partner KIOXIA in 2002. KIOXIA has NAND Flash fabs, which can provide us with flash memory. KIOXIA is also the creator of Secure Digital and xD-Picture specifications and has a cross-authorization of many small memory card specifications. Therefore, the partnership with big flash memory manufacturers helps us developing all kinds of flash memory controllers. We introduced strategic partners, Kingston Technology Corporation and Advantech Investment Inc., in 2014-2015 by private stock issuance. We participated in the private stock issuance of Apacer Technology Inc., which benefits us in obtaining stable source of flash material and expanding retailer channels.

We will continue to establish a comprehensive development plan and long-term strategic alliance to integrate all resources and develop new product lines. These can expand our market share and provide the market with more products, as well as benefiting adjustment for the market change and creating competitiveness for us to sustain our business.

5.2.1.4.3 Competitive Advantages of Having Design and Retailer End

The Company has developed NAND Flash controllers and designed many products, such as SSDs, NAND flash application products. Most of the assembly and production process are outsourced to other partner companies. Products are sold by the retailer channel in Taiwan or overseas retailer channels in Europe, America, Japan, etc. Other traditional IC design companies just develop chips and sell the products to the system assembly companies. Once more competitive companies join in this industry, there will be many risks, such as decreased gross profit and increased inventory. We are different from the assembly module companies, which can only make smaller profits. We stand at the two ends of design and sales with higher added values. Our business income is higher than that of IC design companies and our profit is higher than that of the assembly companies. Therefore, we sell controllers to the famous OEM companies, such as Kioxia and Kingston. Because we are quite familiar with controllers, our module products can be developed very fast and then sell to our customers in the US, Europe, and Japan. It is obvious that our business model is very competitive.

5.2.1.4 Advantages, Disadvantages and Responsive Strategy in the Long-term Development

5.2.1.4.1 Advantages:

A. Comprehensive Fragmentation of Production in the Semiconductor Industry

Our country has a very comprehensive fragmentation of production in the semiconductor industry. Fabs, packaging plants, and testing plants have reached an economic scale and can provide professional services. These provide companies with controllers for flash memory with excellent support.

B. Rapid Growth of SSD Market

SSDs have an excellent feature of high performance, low power consumption, and low failure rate, and the price of flash memory in SSDs is greatly reduced because of the advanced manufacturing processes. Traditional hard disk drives have been replaced by SSDs in a great deal of personal and cloud storage devices. The Company has developed high-performance SSD controllers supporting the lastest generation SATA and PCIe NVMe and has the critical technologies to develop new models with faster transferring speed and lower power consumption. These new products make SSDs with higher performance and lower cost. Because the SSD market is rapidly growing, the Company will rapidly satisfy the needs of the market and provide the market with more products to ensure the leadership in this industry.

C. Development of smartphones Promotes Growth of Small Memory Cards

As the NAND Flash manufacturing processes advance, the unit price of flash memory is getting lower and lower, which brings down the price of small memory cards. In addition, the applications of flash memory have been expanded into many home appliances, not just consumer products, such as smartphones. It is expected that the market for small memory cards will be rapidly growing in the future.

D. The application of flash memory has been used in many products, including USB drives, memory cards, cell phones and portable video, and audio devices. It has been further used in SSD products, eMMC of mobile devices, and car GPS products. Its application is still growing and therefore promotes the flash memory product industry.

5.2.1.4.2 Disadvantages and Responsive Strategy:

A. Rapid Growth and More Competitors

Responsive strategy: The Company has excellent technical design capability of NAND Flash controllers and firmware for

faster product development, more added value of products, and function integration, which provide our customers with more diversified and comprehensive solutions. We will continue to enhance our R&D of technologies to keep our leadership in this industry and maximize our profit.

B. Flash Memory in Control of Big International Suppliers

Responsive strategy: We will keep a close partnership with big international flash memory suppliers (such as KIOXIA, Micron, Hynix, etc.) and seek the opportunity of establishing strategic alliances. We will pay close attention to the specification change, market change and price change of flash memory to adjust our inventory accordingly and reduce the risk of inventory.

C. More Product Specifications

Responsive strategy: Since the specification of flash memory is established by big international suppliers and the specification of small memory cards are quite diverse, the Company has to pay close attention to the latest agreements of all kinds of specifications of memory cards and small memory cards and the development of the end markets. By speeding up the development of new technology and new products, adding more major products, and diversifying product functions, the Company can extend the product life cycles and eliminate the impacts resulting from specification changes and the disappointing product development in the end markets.

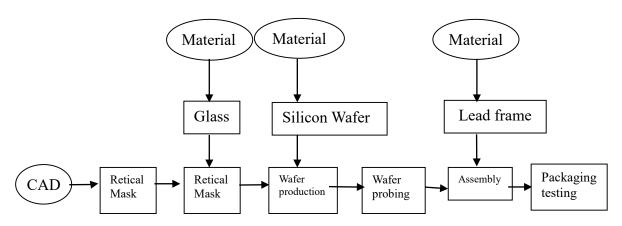
5.2.2 Important Uses of the Main Products and the Production Process

5.2.2.1 Key Applications of Main Products

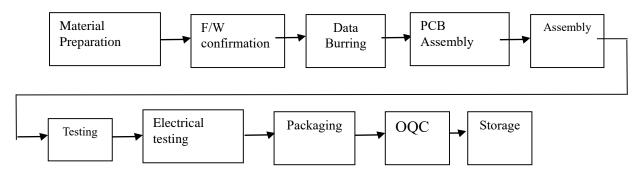
Product Category	Uses
Flash memory modules	These are the storage devices with flash memory (USB drive, flash
	memory card, SSD, and embedded memory). Since USB interfaces,
	cameras, cell phones, and laptop computers become more and more
	popular, these products are convenient for fast data access.
Flash memory controller	These products are used as I/O interface of common system products,
chips	to control and integrate between the firmware instruction set and the
	flash memory, enabling the system products and flash memory to
	translate instruction and transfer data.

5.2.2.2 Manufacturing Process

5.2.2.2.1 Manufacturing Process of Controller IC



5.2.2.2.2 Manufacturing Process of Flash Memory Module



5.2.3 Supply of Primary Raw Materials

The Major materials of our products are flash memory, controller, PCB, case, connector

and cable. The supply status is as follows:

Main material	Major Suppliers	Supply Status
Controller	United Microelectronics	Normal
	Corporation, Taiwan	
	Semiconductor Manufacturing	
	Company (TSMC)	
Flash Memory	Kioxia, Micron	Normal
Printed circuit boards	Taiwan Printed Circuit Board	Normal
	Techvest Co, Ltd., Cheng Mao	
	Electronic Co., Ltd.	
Connector, Case	Liang Meng Plastics share	Normal
	Co.,Ltd., Wei Jeng Industrial Co.,	
	Ltd.	

- 5.2.4 The name and proportion of the suppliers or customers who have occupied more than 10% of the total amount of purchase or operating revenue in any of the past two years and the reasons for the increase or decrease:
 - 5.2.4.1 The Suppliers who Have Occupied More Than 10% of the Total Amount of Purchase in Any of the Past Two Years.

5.2.4.1.1 <u>Information of major suppliers in the most recent two years</u>

Unit: NT\$ thousands

		2	2018				2019		As of March 31, 2020			
Item	Name	Amount	Percentage (%)	Relation with issuer	Name	Amount	Percentage (%)	Relation with issuer	Name	Amount	Percentage (%)	Relation with issuer
1	A	13,871,205	50.72	Subsidiary of a corporate member of the Corporation's board of directors	A	11,432,366	37.17	Subsidiary of a corporate member of the Corporation's board of directors	A	2,464,681	28.06	Subsidiary of a corporate member of the Corporation's board of directors
	В	4,468,490	16.34	Subsidiary of a corporate member of the Corporation's board of directors	C	4,237,008	13.78	-	С	1,894,768	21.57	-
	Others	9,009,854	32.94		Others	15,085,357	49.05		Others	4,423,468	50.37	
	Net purchase	27,349,549	100.00		Net purchase	30,754,731	100.00		Net purchase	8,782,917	100.00	

Note: IFRS is adopted (Consolidated Statements).

5.2.4.1.2 The reasons for the increase or decrease:

The Company's major materials of products are flash memory and controllers. In 2018 and 2019, the percentages of supply from Company A is 50.72% and 37.17% respectively. The percentage of supply from other Kioxia Group is 4.67% in 2019. The total purchase from Kioxia Group in 2019 is around 41.87%; that was 67.06% in 2018, decreasing clearly. The reason lies in that Kioxia adjusted part of raw material supply, in addition, to coordinate multiple requirements of raw materials of customers and strengthen cooperation with major flash memory original factories, the Company also adjusted purchase strategies to cooperate with the growth of business scale by more stable and multiple raw materials supplies. In the first quarter of 2020, the percentage of purchase from Kioxia and other Kioxia Groups was 28.06% and 6.05% respectively. The total purchase from Kioxia Group is 34.11%. The 2019 purchase strategy was maintained.

5.2.4.2 The Customers who Have Occupied More Than 10% of the Total Amount of Purchase in Any of the Past Two Years

5.2.4.2.1 The Major Customers in the Last Two Years

Unit: NT\$ thousands

	2018					2019				As of March 31, 2020			
Item	Name	Amount	Percentage (%)	Relation with issuer	Name	Amount	Percentage (%)	Relation with issuer	Name	Amount	Percentage (%)	Relation with issuer	
1	A	8,928,975	21.89	None	A	5,289,287	11.83	None	A	1,724,364	13.40	None	
2	Others	31,859,130	78.11	None	Others	39,404,154	88.17	None	Others	11,142,339	86.60	None	
	Net sales	40,788,105	100.00		Net sales	44,693,441	100.00		Net sales	12,866,703	100.00		

Note: IFRS is adopted (Consolidated Statements).

5.2.4.2.2 The reasons for the increase or decrease:

In 2018 and 2019, the percentages of sales to Company A are 21.89% and 11.83% respectively. The sales proportion decreased sharply due to the price reduction of flash memory and the increase in customer shipments of other high volume products. In 2020 first quarter, the percentages of sales to Company A was 13.40%.

5.2.5 Production Volume Table in the Last Two Years

Unit: Production volume (thousand pieces)/production value (NT\$ thousands)

Year		2018		2019				
Production amount Major products	Capacity	Quantity	Amount	Capacity	Quantity	Amount		
Flash memory module product	_	112,910	21,077,449	_	149,172	26,772,067		
Integrated circuit	_	102,758	6,192,795	_	55,308	2,369,250		
Controllers	_	427,693	3,986,270	_	411,251	3,981,244		
Others	_		106,614	_		139,840		
Total		643,361	31,363,128	_	615,731	33,262,401		

Note: The Company develops the controllers and has the outsourcing factories produce the chips or system. Then we purchase these chips to produce Nand flash application products or directly sell them. The table only lists the Flash memory controllers that are sold directly, thus the production value (volume) is from the purchase value (volume).

5.2.6 Sales in the Last Two Years

Unit: Production volume (thousand pieces)/production value (NT\$ thousands)

	Year		18	2019		
Major products	Production amount	Quantity	Net operating revenue	Quantity	Net operating revenue	
Flash memory module	Domestic [Note 1]	34,183	7,102,933	45,470	10,511,224	
product	Overseas	79,191	19,124,905	104,598	23,423,708	
Integrated circuit	Domestic [Note 1]	22,907	614,624	42,417	495,832	
	Overseas	178,216	5,948,546	133,268	2,248,208	
Controllers	Domestic [Note 1]	37,324	636,307	128,058	1,416,029	
	Overseas	389,585	7,187,949	281,912	6,241,703	
Others [Note 2]	Domestic [Note 1]	N/A	67,081	N/A	48,913	
	Overseas	N/A	105,760	N/A	307,824	
Total	Domestic [Note 1]	94,414	8,420,945	215,945	12,471,998	
	Overseas	646,992	32,367,160	519,778	32,221,443	

[[]Note 1] Domestic sales refer to the sales to Taiwan.

[[]Note 2] Others refer to the material or products sold other than Nand flash application products and controllers, and the income of patent royalty and labor.

[[]Note 3] IFRS is adopted (Consolidated Statements).

5.3 Human Resources in the Previous Two Years Before the Publication of the Annual Report

Date: April 30, 2020

	Year	2018	2019	As of April 30, 2020
	Supervisor	66	80	82
Number of	Production line staff	51	93	88
employees	General employees	1,595	1,879	1,960
	Total	1,712	2,052	2,130
Average age		34.04	36.83	37.09
Average year	of services	4.88	6.62	6.85
	PhD	0.99	0.19	0.20
Academic	Master	56.31	29.73	29.51
distribution	University	39.26	55.45	55.80
ratio	High school	3.15	14.15	13.99
	Below high school	0.29	0.48	0.50

Note: IFRS is adopted (Consolidated Statements).

5.4 Environmental Protection Expenditures

Our major products are flash memory controllers, flash memory module products, etc. All of our products are produced by qualified manufacturers conforming to laws and regulations of environmental protection in manufacturing processes.

5.4.1 Loss (including indemnity) caused by environmental pollution and the total indemnity amount involved in the most recent year up to the publication date of the annual report; account of future countermeasures (including improvement actions) and possible expenditures (including loss, disposition, and an estimate of indemnity incurred by a failure to implement the countermeasure; if a reasonable estimation cannot be made, the justification shall be provided):

Until the publication of this annual report, there is no loss or penalty by competent authorities due to environmental pollution, so this is not applicable.

5.5 Labor Relations

5.5.1 The Company's employee benefits for studying, training, pension systems and its implementation status as well as labor agreements and measures for preserving employee rights and interests

5.5.1.1 Employee Welfare Measures:

Company:

- Guaranteed salary of 12 months.
- Remuneration for employees to share the profit.
- Salary adjustment each year based on the work performance.
- Year-end bonus of two months (Taiwan).
- Incentive bonus based on the business.
- No promotion barrier.
- Encourage employees to make innovations and high patent bonus will be paid.
- Comprehensive educational trainings and arrangement.
- Encouraging employees to introduce excellent personnel and a high recruiting bonus will be paid.
- Labor Insurance, National Health Insurance, Pension System, Group Insurance, and Travel Insurance.
- Two days off per week and flexible shift arrangement.
- The leave system in the Company is better than the requirement of the Labor Standards Act. Annual leave can be advanced after 3 months of service, while 8 days of annual leave will be given after one year of service.
- Five days of paternity leave and three days for family with pay.
- Nice gifts for senior employees.
- Employees can advance salary for buying cars or emergency help, etc.

Providing employees with comfortable, safe and humanized working environment and rest environment:

Company:

- Self-owned plants of more than 30,000 square meters and equipment.
- Regular free for physical examinations every year and health seminars for our employees.
- Leisure Center (with treadmills, aerobics bikes, gym bikes, mobile boxing target, hand football, etc.), yoga classrooms, and outdoor complex ballpark.
- Life assistance programs for employees. (Supported by experts in different fields, including Psychology, Laws, Financial Management, Management, etc.)
- Medical assistance.
- Three months of housing for new employees.
- Restaurants, coffee bars and parking lot (around 30,000 square meters)
- Meal subsidy.
- Premium farms to provide high quality of organic vegetables and fruits.

Welfare Committee:

- Welfare and leisure activities provided by the Welfare Committee.
- Subsidy for marriage, child birth, death, hospitalization, etc.
- Domestic and overseas travel subsidy every year.
- Family days and irregular events. Party subsidy every half year.
- Bonus/voucher of three festivals and birthday.

- Gift/voucher/bonus of Labor Day.
- Year-end party with interesting activities and plenty of gifts. Even the smallest gifts are nice.
- The Company provides many clubs and funding support. Currently, there are clubs of swimming, aerobics, yoga, softball, basketball, badminton, hiking, etc.
- Discounts in appointed stores.

5.5.1.2 Advanced Education and Trainings for Employees:

To train the personnel for the operation of the Company, we hold yearly educational training based on the needs of our business every year. Employees can select internal training or external training to improve their personnel skills. In addition to promoting the management capability and professional skills for human resources of the Company, we also encourage our employees to serve as training instructors to train their second expertise.

In 2019, the total expenditure of educational training is NT\$3,068,282. There are seven categories of training as listed below:

Category	Times	Persons	Total hours	Total expense (NT\$)
Professional Skills	244	1,785	1,793	399,928
Quality	46	2,405	479	1,019,644
Auxiliary Skills	25	419	399	357,453
Health and Security	22	66	188	58,200
Management	12	445	118	516,477
Self-inspiration	24	9,577	38	187,980
Language	13	144	390	528,600
Total	386	14,841	3,405	3,068,282

5.5.1.3 Pension System and its implementation:

The Company has pension regulations that apply to all full-time employees. It regulates the pension payment.

- 5.5.1.3.1 If the employee chooses the pension system of the Labor Standards Act, the pension will be paid as follows. Based on the years of the service, if it is below 15 years (included), two units per full year will be paid. If it is over 15 years, each full year over the 15 years will add one unit to the pension. However, the maximum number of units is 45. The length below half a year is counted as half a year; the length over half a year but below one year is counted as one year. From Feb of 2001, 3% of the salary is appropriated into the employee pension fund. From Jul of 2016, 2% of the salary is appropriated into the employee pension fund and then transferred to the special account in the Central Trust Bureau under the name of The Supervisory Committee of Workers' Retirement Fund.
- 5.5.1.3.2 If the employee chooses the pension system of Labor Pension Statutes, the pension will be paid as follows. Employees first choose the length of service which applies to this system. From the start date to the leave date, their companies should appropriate no less than 6% of the salary into the personal pension account. In addition to the amount appropriated by the company, employees may deposit less than 6% of the salary into personal pension account. Two times of appropriation percentage change are allowed.
- 5.5.1.4 Agreement Between the Employees and the Company and the Measures to Protect Employees' rights:

The Company values the welfare, career, personal skill improvement and opinions of the employees, so the relationship is always good and there is no dispute in the previous two years.

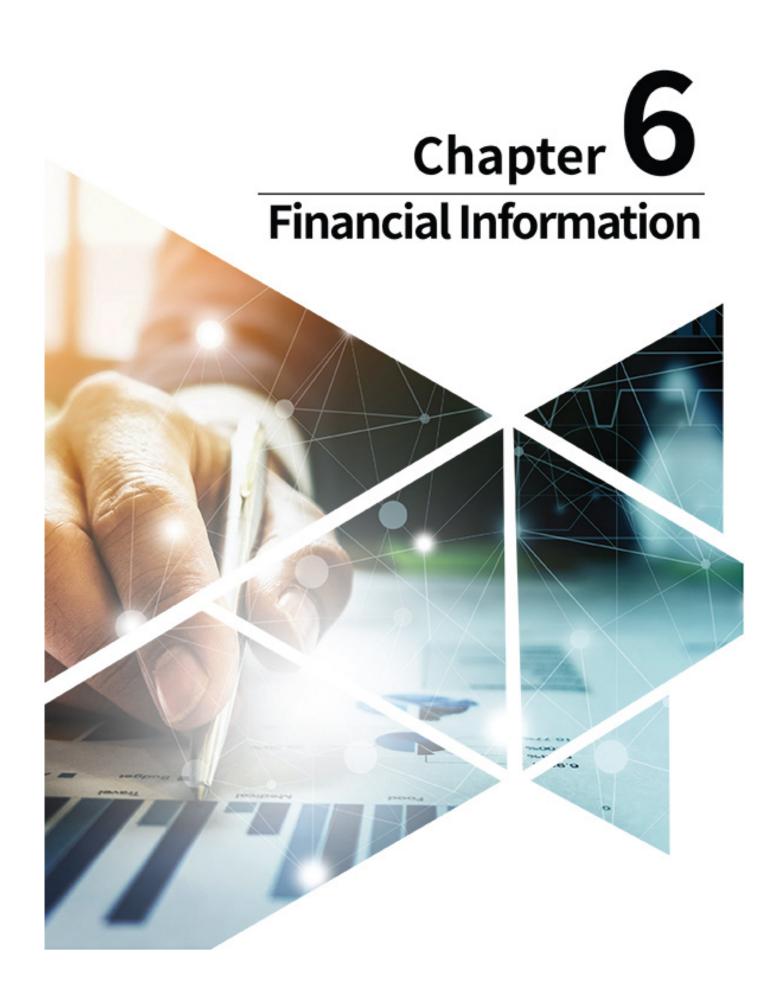
5.5.2 The loss or penalty caused by disputes between the employees and the company during the latest year and up to the printing date of this annual report.

In 2019, before the publication of the annual report, the Company's labor relations are in good harmony without any disputes that cause losses. It is anticipated that there will be no such disputes in the future.

5.6 Material Contract

Below form contains material contracts valid and/or expired within one year form the publication date of this annual report.

Contract Characterization	The Party	Contract Period	Content	Restriction
License Agreement	Synopsys International limited	Dated from 2003/7/16	IP license	Compliance with the clause of permitted use, license scope and liability of confidentiality.
License Agreement	SD-3C LLC	Dated from 2018/11/29 to 2028/11/28	License	Compliance with the clause of permitted use, license scope and liability of confidentiality.
License Agreement	SD Association	Dated from 2015/10/25	License	Compliance with the clause of permitted use, license scope and liability of confidentiality.
License Agreement	4C Entity LLC	Dated from 2003/03/07	4C CPRM/CPPM IP license	Payment of royalty and annual fees
License Agreement	Netac Technology	Dated from 2007/12/20 until patent of both parties expires	Cross-license	Compliance with the clause of permitted use, license scope and liability of confidentiality.
Technical Cooperation Agreement	Intel Corporation	Dated from 2008	Cooperating to build USB 3.0 final specification	Ownership of intellectual property rights and liability of confidentiality.
License Agreement	ARM limited	Dated from 2009/08/10	IP license	Compliance with the clause of permitted use, license scope and liability of confidentiality.
License Agreement	USB Implementers Forum, Inc.	Dated from 2019/10/15	USB-IF trademark license	Member responsibility and confidential liability.
Industry Standard Association & Membership Agreement	USB Implementers Forum, Inc.	Dated from 2019/10/4	USB-IF membership	Member responsibility and confidential liability.
License Agreement	Andes Technology Corp.	Dated from 2012/3/2	IP license	Compliance with the clause of permitted use, license scope and liability of confidentiality.
Industry Standard Association & Membership Agreement	MIPI Alliance Inc.	Dated from 2012/04/18	Membership & related license agreement	Member responsibility and confidential liability.
Industry Standard Association & Membership Agreement	Intel Corp.	Dated from 2012/08/09	Adoption of USB3.0 specification	Terms of use of USB 3.0 specification and liability of confidentiality.
Industry Standard Association & Membership Agreement	Intel Corp.	Dated from 2019/1/14	USB technical contributor	Member responsibility and confidential liability.
Industry Standard Association & Membership Agreement	Serial ATA International Organization (SATA-IO)	Dated from 2013/5/31	Authorization of certification mark	Member responsibility and confidential liability.
License Agreement	Cadence Design Systems (Ire) Ltd	Dated from 2013/1/1	IP license	Compliance with the clause of permitted use, license scope and liability of confidentiality.
Industry Standard Association & Membership Agreement	NVM EXPRESS, INC	Dated from 2014/4/2	Membership & related license agreement	Member responsibility and confidential liability.
License Agreement	PLDA Inc.	Dated from 2015/2/10	IP license	Compliance with the clause of permitted use, license scope and liability of confidentiality.
License Agreement	Intel Corporation	Dated from 2017/7/13	Permitted use and license of Thunderbolt trademark and IP	Compliance with the clause of permitted use, license scope and liability of confidentiality.
License Agreement	Universal Flash Storage Association, Inc.	Dated from 2018/1/18	Permitted use and license of UFSA Logo	Compliance with the terms of use of UFSA logo.



Chapter 6 Financial Summary

6.1 Five-Year Financial Summary

6.1.1 Condensed Balance Sheet and Comprehensive Income Statement

6.1.1.1 Condensed Balance Sheet-Consolidated Financial Statement

Unit: NT\$ thousands Financial information in the most recent five years Current year up to Year March 31, 2020 Item 2015 2017 2018 2019 Financial information [Note 2] 24,823,621 26,755,344 28,809,687 30,605,807 31,959,839 34,614,678 Current assets Property, plant, and equipment 1,637,395 2,426,451 2,822,881 2,990,231 3,282,950 3,391,041 Intangible assets 198,623 222,297 218,130 152,550 268,026 254,553 Other assets 1,759,148 2,571,547 3,275,906 2,689,952 3,125,965 3,660,842 41,921,114 Total asset value 28,418,787 31,975,639 35,126,604 36,438,540 38,636,780 Before distribution 7,799,912 8,904,060 8,963,408 9,419,631 9,306,381 10,587,102 Current After distribution liabilities 10,168,400 11,663,096 12,313,666 11,981,593 [Note 1] [Note 1] 69,013 73,354 104,881 107,039 141,771 206,118 Non-current liabilities Before distribution 7,868,925 8,977,414 9,068,289 9,526,670 9,448,152 10,793,220 Total liabilities After distribution 10,237,413 11,736,450 12,418,547 12,088,632 [Note 1] [Note 1] Equity attributable to shareholders 20,328,329 22,992,825 26,058,315 29,162,320 31,075,128 26,911,870 of the parent company 1,973,740 1,970,740 1,970,740 1,970,740 1,970,740 1,970,740 Share capital Capital surplus 6,514,569 6,652,449 6,660,502 6,674,650 6,724,104 6,804,074 Before distribution 22,540,548 11,951,378 14,395,601 17,390,657 Retained 18,647,407 20,643,601 earnings After distribution 9,582,890 14,040,399 11,636,565 16,085,445 [Note 1] [Note 1] Other equity interest (111,358) (25,965)36,416 (380,927)(176,125)(240,234)Treasury stock 52,766 221,533 Non-controlling interest 5,400 26,308 31,127,894 20,549,862 22,998,225 26,058,315 29,188,628 26,911,870 Total Before distribution

equity

After distribution

22,708,057

24,349,908

[Note 1]

20,239,189

6.1.1.2 Condensed Balance Sheet -Individual Financial Statement

Unit: NT\$ thousands

	Financial information in the most recent five years						
Item	Year	2015	2016	2017	2018	2019	March 31, 2020 Financial information
Current assets		23,059,353	25,128,170	27,076,135	28,840,540	29,491,045	
Property, plant	t, and equipment	1,629,662	2,392,803	2,793,102	2,961,130	3,263,440	
Intangible asse	ets	174,308	217,763	212,108	149,381	267,339	
Other assets		2,792,935	3,687,775	4,496,367	3,997,535	5,258,129	
Total asset val	ue	27,656,258	31,426,511	34,577,712	35,948,586	38,279,953]
Current	Before distribution	7,260,460	8,360,393	8,433,967	8,943,486	8,979,663	
liabilities	After distribution	9,628,948	11,119,429	11,784,225	11,505,448	[Note 1]]
Noncurrent lia	bilities	67,469	73,293	85,430	93,230	137,970	
Total	Before distribution	7,327,929	8,433,686	8,519,397	9,036,716	9,117,633	
liabilities	After distribution	9,696,417	11,192,722	11,869,655	11,598,678	[Note 1]	DT/A
Equity attribut of the parent c	table to shareholders company	20,328,329	22,992,825	26,058,315	26,911,870	29,162,320	N/A
Share capital		1,973,740	1,970,740	1,970,740	1,970,740	1,970,740]
Capital surplus	S	6,514,569	6,652,449	6,660,502	6,674,650	6,724,104]
Retained	Before distribution	11,951,378	14,395,601	17,390,657	18,647,407	20,643,601	
earnings	After distribution	9,582,890	11,636,565	14,040,399	16,085,445	[Note 1]	
Other equities		(111,358)	(25,965)	36,416	(380,927)	(176,125)	
Treasury stock	(0	0	0	0	0	
Non-controllir	ng Interests	0	0	0	0	0]
Total equity	Before distribution	20,328,329	22,992,825	26,058,315	26,911,870	29,162,320	
	After distribution	17,959,841	20,233,789	22,708,057	24,349,908	[Note 1]	

[[]Note 1] Distribution of earnings for 2019 has not been approved by the shareholders' meeting. [Note 2]

[Note 1]

^{18,181,374} Distribution of earnings for 2019 has not been approved by the shareholders' meeting [Note 1]

[[]Note 2] The financial information as of March 31, 2020 is reviewed by the CPAs.

[[]Note 3] In compliance with the Letter No. Jin-Guan-Zheng-Shen-Zi 1050036477 issued by FSC, the Company has restated its consolidated financial statements from 2009 to 2015. The financial information of 2015 is based on the restated consolidated financial statements.

According the Regulations Governing the Preparation of Financial Reports by Securities Issuers, the Company does not need to prepare interim individual financial report.

[[]Note 3] According to the Letter No. Jin-Guan-Zheng-Shen-Zi 1050036477 issued by FSC, the Company has restated its individual financial statements from 2009 to 2015. The financial information of 2015 is based on the restated individual financial statements.

6.1.1.3 Condensed Comprehensive Income Statement-Consolidated Financial Statement

Units: NT\$ thousands (expect for Earnings Per Share: NT\$)

	mts. 1414 mousa	ilius (expect for	Earnings Per Sr	iaic. Nipj		Financial
Year	Year Financial information in the most recent five years					
		manetar mitorina	aron in the most	recent nive year	5	information up to March 31, 2020
Item	2015	2016	2017	2018	2019	[Note 1]
Operating revenue	37,409,177	43,782,512	41,864,759	40,788,105	44,693,441	12,866,703
Gross profit	7,627,464	9,263,738	11,499,622	9,131,954	11,149,275	3,865,621
Operating profit (loss)	4,226,904	4,842,648	6,731,692	4,709,784	5,210,013	1,782,640
Non-operating revenue and expenses	246,360	634,278	(13,822)	295,397	140,921	455,410
Net income before tax	4,473,264	5,476,926	6,717,870	5,005,181	5,350,934	2,238,050
Net income from continuing operations	3,896,693	4,801,843	5,761,290	4,318,119	4,545,837	1,898,152
Loss from discontinued operations	0	0	0	0	0	0
Net income (loss) for the period	3,896,693	4,801,843	5,761,290	4,318,119	4,545,837	1,898,152
Other comprehensive income (loss) for the period (Net value after tax)	(131,438)	82,863	57,409	(171,742)	218,500	(65,498)
Total comprehensive income for the period	3,765,255	4,884,706	5,818,699	4,146,377	4,764,337	1,832,654
Net income attributable to shareholders of the parent company	4,000,009	4,866,992	5,760,972	4,318,119	4,543,489	1,898,049
Net income attributable to non- controlling interests	(103,316)	(65,149)	318	0	2,348	103
Total comprehensive income attributable to owners of the parent	3,875,369	4,950,331	5,816,473	4,146,377	4,762,958	1,832,838
Total comprehensive income attributable to non-controlling interests	(110,114)	(65,625)	2,226	0	1,379	(184)
Earnings per share	20.41	24.67	29.23	21.91	23.05	9.63

The financial information as of March 31, 2020 is reviewed by the CPAs.

In compliance with the Letter No. Jin-Guan-Zheng-Shen-Zi 1050036477 issued by FSC, the Company has restated its consolidated [Note 2] financial statements from 2009 to 2015. The financial information of 2015 is based on the restated consolidated financial statements.

6.1.1.4 Condensed Comprehensive Income Statement-Individual Financial Statement

Unit: NT\$ thousands (expect for Earnings Per Share: NT\$)

Year		Financial information in the most recent five years						
Item	2015	2016	2017	2018	2019	March 31, 2020		
Operating revenue	37,048,926	43,678,547	41,773,532	40,804,130	44,479,275			
Gross profit	7,525,281	9,207,321	11,449,095	9,151,272	11,141,293			
Operating profit (loss)	4,299,367	4,916,446	6,723,101	4,736,351	5,212,694			
Non-operating revenue and expenses	262,008	615,752	(9,896)	264,002	127,752			
Net income before tax	4,561,375	5,532,198	6,713,205	5,000,353	5,340,446			
Net income from continuing operations	4,000,009	4,866,992	5,760,972	4,318,119	4,543,489			
Loss from discontinued operations	0	0	0	0	0			
Net income (loss) for the period	4,000,009	4,866,992	5,760,972	4,318,119	4,543,489			
Other comprehensive income (loss) for the period (Net value after tax)	(124,640)	83,339	55,501	(171,742)	219,469	N/A [Note 1]		
Total comprehensive income for the period	3,875,369	4,950,331	5,816,473	4,146,377	4,762,958			
Net income attributable to shareholders of the parent company	N/A	N/A	N/A	N/A	N/A			
Net income attributable to non-controlling interests	N/A	N/A	N/A	N/A	N/A			
Total comprehensive income attributable to owners of the parent	N/A	N/A	N/A	N/A	N/A			
Total comprehensive income attributable to non-controlling interests	N/A	N/A	N/A	N/A	N/A			
Earnings per share	20.41	24.67	29.23	21.91	23.05			

[[]Note 1]

The Company did not publish the financial information of 2020's first quarter, so it is not applicable.

In compliance with the Letter No. Jin-Guan-Zheng-Shen-Zi 1050036477 issued by FSC, the Company has restated its individual [Note 2] financial statements from 2009 to 2015. The financial information of 2015 is based on the restated individual financial statements.

6.1.2 Names of CPAs for the Last Five Years and Their Audit Opinions

Year	Name of the accounting firm	Names of the CPAs	Audit opinion
2015	Touche Tohmatsu Limited	Xin Wei Dai, You Wei Fan	Modified Unqualified Opinion Audit Report
2016	Touche Tohmatsu Limited	Xin Wei Dai, You Wei Fan	An Unmodified Opinion with a Paragraph of Other Stressed Matters
2017	Touche Tohmatsu Limited	Xin Wei Dai, You Wei Fan	An Unmodified Opinion with a Paragraph of Other Stressed Matters
2018	Touche Tohmatsu Limited	Xin Wei Dai, You Wei Fan	An Unmodified Opinion with a Paragraph of Other Stressed Matters
2019	Touche Tohmatsu Limited	Xin Wei Dai, Li Wen Kuo	An Unmodified Opinion with a Paragraph of Other Stressed Matters

6.2 Five-Year Financial Analysis

6.2.1 Financial Analysis in the Most Recent Five Years-Consolidated Financial Statement that Adopts IFRS

Unit: %

	Year	Financial	analysis	in the mos	st recent f	ive years	
Item		2015	2016	2017	2018	2019	to March 31, 2020
Financial	Ratio of liabilities to assets	27.69	28.08	25.82	26.14	24.45	25.75
structure (%)	Ratio of long-term capital to property, plant, and equipment	1,255.03	947.81	923.11	899.99	889.10	917.95
	Current ratio	318.26	300.48	321.41	324.92	343.42	326.95
Solvency	Quick ratio	250.14		240.85	243.81	216.46	199.90
(%)	Times interest earned ratio		2,668.77		988.22	2,668.46	
	Receivables turnover (times)	8.81	9.48	7.95	7.43	8.00	7.98
	Average days for cash receipts	41.43	38.50	45.91	49.12	45.62	45.73
	Inventory turnover ratio (times)	5.52	6.59	4.89	4.29	3.51	2.90
Operation performance	Payables turnover ratio (times)	7.16	8.51	8.09	7.49	7.94	9.71
	Average days for sale of goods	66.12	55.38	74.64	85.08	103.98	125.86
	PP&E turnover ratio (times)	22.87	21.55	15.95	14.03	14.25	15.42
	Total asset turnover ratio (times)	1.44	1.45	1.25	1.14	1.21	1.28
	Return on assets (%)	14.96	15.91	17.18	12.08	12.11	18.85
	Return on equity (%)	20.88	22.05	23.49	16.30	16.21	25.18
Profitability	Ratio of income before tax to paid-in capital (%)	226.64	277.91	340.88	253.97	271.52	454.26
	Net profit rate (%)	10.42	10.97	13.76	10.59	10.17	14.75
	Earnings per share (NT\$)	20.41	24.67	29.23	21.91	23.05	9.63
	Cash flow ratio (%)	55.68	55.62	43.20	55.34	0.00	0.00
Cash flow	Cash flow adequacy ratio (%)	114.25	116.20	92.61	114.62	83.19	64.97
	Cash re-investment ratio (%)	10.18	11.02	4.18	6.73	(9.17)	(0.03)
Leverage	Degree of operating leverage (DOL)	1.05	1.05	1.05	1.09	1.09	1.10
Leverage	Degree of financial leverage (DFL)	1.00	1.00	1.00	1.00	1.00	1.00

- 1. Explanations on changes in various financial ratios in the most recent two years:
 - (1) The increase of times interest earned ratio was caused by the increase of net profit before tax in 2019.
 - (2) The increase of average days for sale was caused by the increase of ending inventory in 2019.
 - (3) The decrease of cash flow ratio, cash flow adequacy ratio, and cash flow reinvestment ratio was caused by the decrease of net cash flow arising from the increase of ending accounts receivable and inventory and decrease of accounts payable and notes in 2019.

Note: In compliance with the Letter No. Jin-Guan-Zheng-Shen-Zi 1050036477 issued by FSC, the Company has restated its consolidated financial statements from 2009 to 2015. The ratio in the financial information from 2015 is calculated according to the restated consolidated financial statement.

6.2.2 Financial analysis in recent five years-Individual Financial Report that adopts IFRS
Unit: %

	Year	Financi	ial analysis	in the mos	t recent five	years
Item		2015	2016	2017	2018	2019
	Ratio of liabilities to assets	26.50	26.84	24.64	25.14	23.82
Financial structure (%)	Ratio of long-term capital to property, plant, and equipment	1,247.40	960.92	932.95	908.84	893.61
C - 1	Current ratio	317.60	300.56	321.04	322.48	328.42
Solvency	Quick ratio	244.75	237.32	235.51	238.01	197.85
(%)	Times interest earned ratio	1,505.91	2,695.69	1,348.76	987.26	2,663.24
	Receivables turnover (times)	8.61	9.58	8.03	7.50	7.99
	Average days for cash receipts	42.39	38.10	45.45	48.66	45.68
	Inventory turnover ratio (times)	5.55	6.58	4.89	4.31	3.52
Operation performance	Payables turnover ratio (times)	7.17	8.49	8.08	7.50	7.90
	Average days for sale of goods	65.76	55.47	74.64	84.68	103.69
	PP&E turnover ratio (times)	22.74	21.72	16.11	14.18	14.29
	Total asset turnover ratio (times)	1.47	1.48	1.27	1.16	1.20
	Return on assets (%)	15.88	16.48	17.47	12.26	12.25
Profitability	Return on equity attributable to shareholders of parent company (%)	21.71	22.47	23.49	16.30	16.21
Tiontaomity	Ratio of income before tax to paid-in capital (%)	231.10	280.72	340.64	253.73	270.99
	Net profit rate (%)	10.80	11.14	13.79	10.58	10.21
	Earnings per share (NT\$)	20.41	24.67	29.23	21.91	23.05
	Cash flow ratio (%)	64.63	59.01	46.42	58.27	0.00
Cash flow	Cash flow adequacy ratio (%)	112.99	113.88	91.45	109.76	85.39
	Cash re-investment ratio (%)	11.98	10.95	4.35	6.74	(9.10)
Lavaraga	Degree of operating leverage (DOL)	1.05	1.05	1.05	1.09	1.08
Leverage	Degree of financial leverage (DFL)	1.00	1.00	1.00	1.00	1.00

^{1.} Explanations on changes in various financial ratios in the most recent two years:

[Note 1] In compliance with the Letter No. Jin-Guan-Zheng-Shen-Zi 1050036477 issued by FSC, the Company has restated its individual financial statements from 2009 to 2015. The ratio in the financial information from 2015 is calculated according to the restated individual financial statement.

⁽¹⁾ The increase of times interest earned ratio was caused by the increase of net profit before tax in 2019.

⁽²⁾ The increase of average days for sale was caused by the increase of ending inventory in 2019.

⁽³⁾ The decrease of cash flow ratio, cash flow adequacy ratio, and cash flow reinvestment ratio was caused by the decrease of net cash flow arising from the increase of ending accounts receivable and inventory and decrease of accounts payable and notes in 2019.

**The financial ratio calculation formula is as follows:

1. Financial structure

- (1) Liability to asset ratio = Total liabilities/total assets.
- (2) Long-term capital as a proportion of PP&E = (Total equities + non-current liabilities)/ Net value of PP&E.

2. Solvency

- (1) Current ratio = Current assets/current liabilities
- (2) Quick ratio = (Current assets inventory prepaid expenditures)/current liabilities.
- (3) Times interest earned ratio = Income before income tax and interest expenditure/interest expenditures for the period.

3. Operation performance

- (1) Receivables turnover rate (including notes receivable resulting from accounts receivable and business operations) = Net sales/average accounts receivable in various periods (including notes receivable resulting from accounts receivable and business operations).
- (2) Average collection days = 365/receivables turnover ratio.
- (3) Inventory turnover = Sales expense/average inventory value.
- (4) Payables turnover ratio (including notes payable resulting from accounts payable and business operations) = Cost of sales/average accounts payable in various periods (including notes payable resulting from accounts payable and business operations).
- (5) Average sales days = 365/inventory turnover ratio.
- (6) PP&E turnover ratio = Net sale/average PP&E value.
- (7) Total asset turnover ratio = Net sales/average total PP&E value.

4. Profitability

- (1) Return on assets = [Net profit after taxes + interest expense (1–Tax rate)]/average total assets.
- (2) Return on equity = Net gain (loss) after tax/average equity value.
- (3) Net profit ratio = Net gain (loss) after tax/net sales.
- (4) Earnings per share = (Gain (loss) attributable to the shreholders of the parent company dividend for preferred shares)/weighted average of issued shares

5. Cash flow

- (1) Cash flow ratio = Net cash from business activities/current liabilities.
- (2) Net cash flow adequacy ratio = Net cash flow for business activities for the last 5 years/ (Capital expenses + Additional inventory sum + Cash dividend) for the past 5 fiscal years.
- (3) Cash re-investment ratio = (Net cash flow from business activities cash dividend) / (gross amount of PP&E + long-term investments + other non-current assets + business capital).

6. Degree of leverage:

- (1) Degree of operating leverage (DOL) = (Net sales variable operating cost and expense)/operating income
- (2) Degree of Financial Leverage (DFL) = Operating profit / (operating profit interest expenditures).

6.3 2019 Supervisors' Review Report

Supervisors' Review Report

The Board of Directors prepared the Company's business report, financial statements (including consolidated financial statements), and proposal of earnings distribution of the Company for 2019. Of which, the financial statements have been audited by Xin Wei Dai, Li Wen Kuo from Touche Tohmatsu Limited through an entrustment, and an audit report has been issued. Above business reports, financial statements (including consolidated financial statements) and proposal of earnings distribution were audited by Supervisor and found no discrepancy, as reported in accordance with Article 219 of the Company Act, please check.

Sincerely,

2020 Annual Shareholders' Meeting

Phison Electronics Corporation

Supervisor: Yeong Jiunn Yang

Supervisor: Huei Ming Wang

Supervisor: Chiun Hsiou Chen

March 16, 2020

- 6.4 2019 Financial Statements (Including CPA Audit Report, Two-year Comparative Balance Sheet, Statement of Comprehensive Income, Statement of Changes in Equity, Cash Flow Chart, and Notes or Attachments): Please refer to page 139 to page 211.
- The Audited Nonconsolidated Financial Statement for the Year of 2019: Please refer to page 212 to page 279.
- 6.6 Financial Impact on the Company where the Company and its Affiliated Companies Have Incurred any Financial or Cash Flow Difficulties in the Most Recent Year and as of the Publication Date of the Annual Report: None.

Chapter 7

Financial Status and Operating Results Review and Risk Matters



Chapter 7 Financial Status and Operating Results Review and Risk Matters

7.1 Financial Status Analysis

Consolidated Financial Statements

Unit: NT\$ thousands

Year	2010 12 21	2010 12 21	Difference		
Item	2019.12.31	2018.12.31	Amount	%	
Cash and cash equivalents	10,205,257	14,176,396	(3,971,139)	(28.01)	
Financial assets measured at fair value through profit or loss-current	3,440,905	3,077,540	363,365	11.81	
Notes and accounts receivable	5,933,970	5,243,958	690,012	13.16	
Inventories	11,532,724	7,576,721	3,956,003	52.21	
Other current assets	846,983	531,192	315,791	59.45	
Financial assets measured at fair value through profit or loss-non-current	459,306	427,789	31,517	7.37	
Financial assets measured at fair value through other comprehensive profit and loss: Non-current	636,432	450,397	186,035	41.30	
Investment accounted for using equity method	1,644,159	1,494,049	150,110	10.05	
Property, plant, and equipment	3,282,950	2,990,231	292,719	9.79	
Other non-current assets	654,094	470,267	183,827	39.09	
Total assets	38,636,780	36,438,540	2,198,240	6.03	
Notes payables and accounts payables	3,642,659	4,805,547	(1,162,888)	(24.20)	
Other current liabilities	5,663,722	4,614,084	1,049,638	22.75	
Non-current liabilities	141,771	107,039	34,732	32.45	
Total liabilities	9,448,152	9,526,670	(78,518)	(0.82)	
Share capital	1,970,740	1,970,740	0	0.00	
Capital surplus	6,724,104	6,674,650	49,454	0.74	
Retained earnings	20,643,601	18,647,407	1,996,194	10.71	
Other equity interest	(176,125)	(380,927)	204,802	(53.76)	
Total equity attributable to shareholders of the parent company	29,162,320	26,911,870	2,250,450	8.36	
Non-controlling interest	26,308	0	26,308	100.00	
Total equity	29,188,628	26,911,870	2,276,758	8.46	

Cause and impact of the significant increases/decreases (more than 20% and NT\$10 million) of assets, liabilities, and equities in the most recent two years:

- (1) The cash and cash equivalents decrease mainly result from the increased inventory stocks at the end of the period.
- (2) The inventory increase is mainly caused by the increase in customer orders and stocks for the estimation of market needs.
- (3) Other current assets increase is caused by the increase of prepayment of goods and purchase tax.
- (4) The growth of financial assets measured at fair value through other comprehensive income: Non-current assets increase mainly due to the increase of investment and valuation benefits.
- (5) The growth of other non-current assets results from the purchase of intangible assets and deferred tax asset growth.
- (6) The decrease of notes payable and accounts is mainly caused by the increase of stocks and strengthening

- bargaining power, and partial purchase in cash.
- (7) The increase of other current liabilities is generated from the increase of estimated payables and refund liabilities.
- (8) The increase of non-current liabilities is caused by the increase of deferred tax liabilities and lease liabilities.
- (9) The other equity changes are due to the decrease of unrealized evaluation benefits on equity instruments measured at fair value through other comprehensive income.
- (10) The growth of non-controlling interests is mainly caused by the increase of minority interest.

7.2 Operating Results Analysis

7.2.1 Comparison Analysis of Operating Results

Consolidated Statement of Comprehensive Income

Unit: NT\$ thousands

V	2010 (C	2019 (Consolidated)		1:4-4-4)	2019
Year	2019 (Cons	olidated)	2018 (Con	solidated)	Growth rate
Item	Amount	%	Amount	%	%
Operating revenue	44,693,441	100.00	40,788,105	100.00	9.57
Operating costs	33,544,166	75.05	31,656,151	77.61	5.96
Operating gross profit	11,149,275	24.95	9,131,954	22.39	22.09
Marketing expenses	601,933	1.35	513,837	1.26	17.14
Administrative expenses	676,893	1.51	441,225	1.08	53.41
R&D expenses	4,714,400	10.55	3,495,417	8.57	34.87
Reversal of expected credit losses	(53,964)	(0.12)	(28,309)	(0.07)	90.62
Operating expenses	5,939,262	13.29	4,422,170	10.84	34.31
Net operating profit	5,210,013	11.66	4,709,784	11.55	10.62
Non-operating income and expenses	140,921	0.32	295,397	0.72	(52.29)
Net income before tax	5,350,934	11.97	5,005,181	12.27	6.91
Income tax expenses	805,097	1.80	687,062	1.68	17.18
Net income for the period	4,545,837	10.17	4,318,119	10.59	5.27
Other comprehensive income (loss)	218,500	0.49	(171,742)	(0.42)	227.23
Total comprehensive income (loss) for the period	4,764,337	10.66	4,146,377	10.17	14.90
Net income for the period attributable to shareholders of the parent company	4,543,489	10.17	4,318,119	10.59	5.22
Comprehensive income (loss) for the period attributable to shareholders of the parent company	4,762,958	10.66	4,146,377	10.17	14.87

Year	2019 (Cons	olidated)	2018 (Con	solidated)	2019 Growth rate
Item	Amount	%	Amount	%	%
Earnings per share (NT\$)	23.05		21.91		

- Cause and impact of the significant differences (more than 20% and NT\$10 million) of assets, liabilities
 equities in the most recent two years:
 - (1) The growth of operating gross profit mainly results from the increase of operating income and adjustment of product structure.
 - (2) The growth of operating expenses is mainly caused by the increase of the number of employees and of R&D expenses.
 - (3) The decrease of non-operating income and expense is mainly caused by the loss of foreign currency exchange for 2019.
 - (4) The increase of other comprehensive profit or loss is mainly generated by the adjustment of investment evaluation on equity instruments measured at fair value through other comprehensive income.
- 2. Estimated sales volume and the basics of the year 2020, the possible impact on the Company's finance and business, and the response plan in the future:
 - According to the Company's product launch timeline, business plan, market demand forecast, industry competitive situation, and the major customer's business outlook assessment and other estimates, the total shipments of flash memory controllers and related system applications are estimated to reach about 600 million units in 2020. The Company continually enhances the quality of mature products to stabilize market share. Also, new applications are launched to maintain the Company's image of "leading technology and innovative products" to strengthen the Company's competitiveness with a positive effect on its performance.

7.2.2 The Operating Gross Profit Difference Analysis

Unit: NT\$ thousands

		Reasons								
Item	Difference	Price difference	Cost difference	Sales mix difference	Quantity difference					
Operating gross profit	2,017,321	(6,342,479)	6,581,616	3,382,930	(1,604,746)					
Reason	to a decrease 2. Cost different materials can 3. Sales combination portfolio to i	e in the market proceed advantage: No using the cost of mation difference ncrease the ships	rice of products. Mainly due to the good sales going advantage: mainlement of high marg	decrease in r down. y due to the ac gin products ir	material price leads market price of raw djusting of products the period. decline in the total					

7.3 Analysis of Cash Flow

7.3.1 Cash Flow Analysis for the Year of 2019

Unit: NT\$ thousands

Cash balance at the beginning of the period (1)	Net cash flow from operating activities (2)	Cash used in investing and financing activities (3)	Cash balance (inadequacy) (1)+(2)-(3)	Remedy inade Investment plan	quacy
14,176,396	(200,216)	3,770,923	10,205,257	N/A	N/A

Analysis of changes in cash flow for the current fiscal year:

Operating activities: Outflow of net cash, mainly resulting from the increase in inventory and decrease in accounts payable at the end of 2019.

Investing activities: Outflow of net cash, mainly resulting from the Company acquiring the financial assets measured at fair value through profit or loss and purchase of fixed assets and intangible assets.

Financing activities: Outflow of net cash, mainly resulting from the Company distributing cash dividends.

7.3.2 Remedy Action for Estimated Cash Inadequacy: None

7.3.3 Analysis of the Cash Flow Difference of the Next Year:

Unit: NT\$ thousands

Cash balance at the beginning period (1)	Estimated cash flow from operating activities (2)	Estimated cash used in investing and financing activities (3)	Estimated cash balance (inadequacy) (1)+(2)-(3)	Remedy inade Investment plan	
10,205,257		. /	7,564,036	N/A	N/A

^{1.} Analysis of the clash flow difference of the next year:

Operating activities: Mainly resulting from the estimated inventory needs and operation status. Investing activities: Mainly resulting from the construction of new plants, acquisition of fixed assets and intangible assets, and the increase in reinvestment plans.

Financing activities: Mainly resulting from the distribution of cash dividends to shareholders.

Remedy action for estimated cash inadequacy: N/A

7.4 2019 Major Capital Expenditures and Impact on Financial and Business:

7.4.1 Major Capital Expenditure Items and Source of Capital:

Unit: NT\$ thousands

Item		m . 1		Estimated	Capital application	
	Content	Total capital amount	Estimated source of capital	purchase or construction timeline	2020	2021 and future year
Fixed assets- Jhunan Phase III Plant Building Construction Project	Two ground floors and seven ground floors of the plant building are built with a reinforced concrete (RC) structure; the total floor area is around 13,508 flat (1 flat = 3.3057 square meters)	1,398,000	Own funds	-	440,000	958,000

7.4.2 Impact on Financial and Business:

Since the operation of the Company is in good status, the source of major capital expenditure in recent years is mainly the own operating capital. The Company has

evaluated the fund necessity of purchasing land and constructing plant plans prudently and has properly planned the use of operating funds and has not faced the risk of capital shortage; therefore, there is no major adverse impact on the Company and its subsidiaries' financial and business status.

7.4.3 Expected Benefits:

It is expected to expand recruitment and employ more talents so as to reach the established profit and growth goals, improve operation performance, and achieve sustainable development and continuous growth.

7.5 2019 Investment Policy, Main Causes for Profits or Losses, Improvement Plans and Investment Plans for 2020

7.5.1 Investment Policy in the Most Recent Year

The investment policy of the Company is to help the Company improve the NAND Flash system integration technology. The major directions for the investment include strategic investment, diverse operation, and business scope expansion, as well as increasing the investment profit to promote shareholders' interests.

7.5.2 Analysis for Reinvestment Profits and Losses

In 2019, the investment loss by equity method is NT\$243,815 thousand, mainly due to the Company's losses from investments in affiliates using the equity method.

7.5.3 Investment Plans for the Next Year

The investment plans of the next year will focus on strategic investments, which the Company may establish operating branches in Mainland China and major domestic/overseas markets based on the industry environment and the needs of Phison Group's development. Investment plans should be carefully reviewed and submitted to the Board meeting for approval.

7.6 Risk Management and Analysis

7.6.1 Effects of Changes in Interest Rates, Foreign Exchange Rates and Inflation on Corporate Finance, and Future Measures

Interest rate: The assets and liabilities with floating interest rates held by the Company may fluctuate cash flows of the assets and liabilities in the future due to the changes in interest rates and lead to risks. Yet, the Company anticipates that the change of interest rates will not have significant impacts on the Company's cash flow in future.

The interests of the Company and its subsidiary companies in 2018 and 2019 are NT\$5,070 thousand and NT\$2,006 thousand respectively, accounting for 0.0124% and 0.0045% of the net operating revenue of the corresponding year. So, the change in interest rates has no significant

impact on the overall operation of the Company.

The Company used credit loans for its financing without long-term loans in the past years. By the end of 2019, the Company does not have any short-term loan balance. There is no plan for long-term loans in the next year, so the change in interest rates has no significant impact on the net results of the Company. Yet, the Company will continually pay attention to the trend of interest rates and regularly assess the financing policies.

Foreign exchange rate: The Company and its subsidiaries are engaged in the sales and purchase transactions of foreign currency denominations, thus causing the merging company to generate a risk of exchange rate changes. The Company and its subsidiaries are engaged in foreign currency borrowing to hedge the exchange rate risk of some foreign currency net assets or net liabilities. The profit and loss arising from the exchange rate fluctuation are roughly offset against the gains and losses of the hedged items. Therefore,

market risk is not significant.

This company usually quotes the price of the sales by US dollars and quotes the price of purchases by US dollars and NT dollars. Although the risk of foreign exchange rate is partially offset, if the change is in big fluctuations, it can still exert impacts on the revenue and profit of the company. In 2019, the foreign exchange loss is NT\$138,374 thousand, which is the profit resulted from the fluctuation of the foreign exchange rate. The finance department of the Company pays attention to the trend at all times to hedge against risks. In addition, the finance department keeps a good relationship with banks to obtain information and suggestions about the trend of foreign exchange rate. Based on the information and suggestions, the finance department will take actions to reduce the risk of foreign exchange rates.

<u>Inflation:</u> In 2019 and as of the publication date of the annual report, the inflation has no significant impact on the net profit or loss of the Company and its subsidiaries.

7.6.2 Policies, Main Causes of Profit or Loss and Future Measures with Respect to High-risk, High-leverage Investments, Lending or Endorsement Guarantees, and Derivatives Transactions

In 2019 and as of the publication date of the annual report, the Company only makes short-term transactions in foreign currency to hedge against the risk of foreign exchange rate. Besides these transactions, the company did not make any investment with high leverage and high risk. The Company has established internal control regulations, such as "Procedures for acquisition or disposal of assets," "Procedures for Lending Funds to Other Parties," "Procedures for Endorsement and Guarantee," and "Procedures for Engaging in Derivatives Trading." The Company has never loaned money to others and never endorsed for others so far. The Company limits its derivative product trades only to hedge in trades. Therefore, these operations will not affect the profit or loss of the Company.

7.6.3 Future R&D Projects and Estimated Expenditures

- 7.6.3.1 Major R&D Projects in 2020:
 - High speed, high capacity USB 3.2 Gen 2x2 Flash Drive solutions.
 - High random write performance SD/microSD card and compliant with SD 7.0.
 - The latest generation UFS controller chips that support high data rate of 3D NAND flash.
 - High performance SSD that support the latest PCIe/NVMe protocol.
 - Next generation PCIe PHYs for advance manufacturing process.
 - High-end enterprise and datacenter SSD that support to higher apacity, performance and data error correction.
 - New LDPC ECC engines for emerging 3D QLC NAND Flash.
 - SiP technology for smaller-size, higher-capacity and power-saving SSDs.
 - Automotive SSD solutions compliant with automotive industry standards.
 - SiP technology of SSD solutions for variety of embedded application.
- 7.6.3.2 R&D budget: The Company has invested its R&D resources into the development of flash memory controllers and the system products with high-performance functions, and the results have been introduced to the market successfully. In the future, the Company will continually invest in R&D. The R&D expenses will be growing with the increase of operating revenue. As long as the development of new products is completed, they will be put into mass production immediately. The main success factors in the R&D are based on the capability and well knowledge of software and hardware technology of the R&D personnel. The Company is confident that its R&D team will be complete all tasks with their long-term accumulation of experience. The estimated R&D expenditure for the year 2020 is approximately \$ 5.2 billion.

7.6.4 Effects of and Response to Changes in Policies and Regulations Relating to Corporate Finance and Business

The Company abides by the national policy and laws and pays close attention to the new policies and law amendments. Our internal systems and operations will be adjusted according to these changes to ensure the operation of the Company. We will continue to pay attention to domestic/overseas changes on policies and law amendments and evaluate these changes accordingly at all times. There is no impact on the finances of this Company so far because of the changes on policies and law amendments.

7.6.5 Effects of and Response to Changes in Technology and the Industry Relating to Corporate Finance and Business

- 7.6.5.1 In recent years, small IT products are popular in the market and the demand for portable storage is growing rapidly, so more and more application products of built-in flash have been announced. There are many new transfer interfaces to meet the needs of customers. In addition, more and more products are equipped with SSD instead of traditional hard disks. Hence, the demand for small storage media, built-in flash models, and SSD is steadily growing and these products are beneficial to the finance and business of the Company. We will invest more R&D resources in these products to respond to the new challenges from the new technology in the future.
- 7.6.5.2 With the advancement of internet and information technology, information is open to the whole world, and work efficiency is greatly improved by many new tools. We have built an environment for automatic design to promote the effectiveness and efficiency of product development. We have successfully introduced TIPTOP GP ERP System, AgentFlow system, Phison life plaza, and GRM system to effectively integrate the internal control functions, promote productivity and monitor the product quality.
- The important risk assessments such as the assessment and evaluation of information security risks and their response measurement: The Company established the "Information Security Committee" in July 2017 to take charge information security management, planning, supervision implementation, and set up "Information Security Management Policy," "QW220010 Information System Change Management Specification," "QW220011 Server Host Management Specifications," "QW220006 System Development and Maintenance Management Specifications," etc. The committee has obtained the BSI British Standards Association ISO27001 international security certificate, will hold reviewing meetings annually to improve information security and applicability of evaluation, keep strengthening colleagues and organization over information security protection, and establish joint defense mechanism with vendors or partners in future.

7.6.6 The Impact of Changes in Corporate Image on Corporate Risk Management, and the Company's Response Measures

The Company has focused on the flash memory controllers and the relevant application systems to maintain the leadership in IC design technology, new concepts of application products, their production, flash memory peripheral applications, and flash memory controller technology. Many products have been sold all over the world and the Company has received orders from the major OEM and ODM companies. The Company creates the image of "youngest, fastest and strongest in the operation of this industry." So far, the Company keeps a good image and there is no significant change that endangers the Company.

7.6.7 Expected Benefits and Risks Relating to Merger and Acquisition Plans and Response Measures

In consideration of the Group's development strategy, on April 6, 2020, Phisontech Electronics Taiwan Corporation's Board of Directors resolved to acquire a 100% equity interest in Super Storage Technology Corporation for a share conversion at a consideration of NT\$13 per share. The price per share has been approved by independent experts on the basis of a reasonableness opinion. This share conversion is subject to the approval of the shareholders' meeting of Super Storage Technology Corporation.

7.6.8 Expected Benefits and Risks Relating to Plant Expansion Plans and Response Measures

Please refer to "Expected Benefits and Risks Relating to Plant Expansion Plans and Response Measures on page 119 of the annual report.

7.6.9 Risks Relating to Excessive Concentration of Purchasing Sources and Customers and Response Measures

7.6.9.1 Excessive Concentration of Purchasing Sources:

Phison Electronics Corporation is a company focusing on the flash memory controllers and flash memory application system products (i.e. pen drive, memory cards, eMMC, SSD, etc.). The material of all these application system products is flash memory. The major suppliers of flash memory are Samsung in Korea, KIOXIA in Japan (Originally, Toshiba Memory Corporation), Hynix in Korea, Micron, and Sandisk in the US. The development of controllers and system products needs to be implemented based on the specification of flash memory, so the collaboration between controller or system product manufacturers and the flash memory suppliers should be very close. Excessive concentration of purchasing sources is regular in this industry.

The Company's major supplier is KIOXIA Taiwan Corporation (Kioxia KITW), which is a subsidiary of KIOXIA Japan invested in the Company due

to the capability of controller and system product design. KIOXIA Japan invested and closely collaborated with the company to develop various products. The Company coordinates the new flash memory technologies of MLC (Multiple Cell Type), TLC (Triple-level Cell), and 3D Nand from KIOXIA Japan to design the controllers with high performance and high compatibility. We also purchase the relevant flash memory application products from the affiliates of KIOXIA Japan for our system products. The performance of the firmware in controllers by using KIOXIA flash memory is excellent and we have successfully developed many flash memory application products, our partnership with KIOXIA goes closer and smoothly. Those are the reason the company purchased flash memory from the affiliates of KIOXIA Japan in the excessive concentration of purchasing sources.

- 7.6.9.2 Excessive Concentration of Customers: None.
- 7.6.10 Effects of, Risks Relating to and Response to Large Share Transfers or Changes in Shareholdings by Directors, Supervisors, or Shareholders with Shareholdings of over 10%: None.
- 7.6.11 Effects of, Risks Relating to and Response to the Changes in Management Rights: None.

7.6.12 Litigation or Non-litigation Events

7.6.12.1 In the most recent two years and up to the publication date of the prospectus, for the litigation, non-litigation or administrative dispute that has been determined or is currently under litigation, if their results have significant impact on shareholders' equity or securities price, the facts in dispute, target amount, commencement date of litigation, main parties involved and current handling situation shall be disclosed: The Corporation was under statutory investigation by the Taiwan Hsinchu District Prosecutorial Office ("District Prosecutorial Office") on and from August 5, 2016 for alleged violation of the Securities and Exchange Act (the "Case"). The investigation was concluded on August 31, 2017, and the chairman of the Corporation and other defendants were either charged with deferred prosecution or dropped claim for further prosecution by the prosecutor. Then the District Prosecutorial Office ex officio sent the ruling to the Taiwan High Prosecutors Office ("High Prosecutors Office") for reconsideration. On November 18, 2019, High Prosecutors Office partially set aside and dismissed the original ruling, and ordered the District Prosecutorial Office to continue the investigation. On July 30, 2019, the District Prosecutorials Office concluded the investigation and indicted the chairman of the Corporation and others for their alleged violation of the Securities and Exchange Act and related provisions. A trial of the Case would be held in the Hsinchu District Court. The chairman of the Corporation would

strive for a fair judgment in accordance with the law. The Corporation evaluated that its finance and operations had not yet been affected. Following the aforementioned indictment, the Corporation was served with complaints from the Hsinchu District Court on November 8, 2019 and December 13, 2019, that Securities and Futures Investors Protection Center ("Investors Protection Center") had filed two civil actions respectively as follows: (1) the first civil action was to remove Mr. K.S. Pua from director position of the Corporation's board ("Removal Action"); (2) the second civil action was to claim compensation damage of \$697,389 thousand against the Corporation, its board of directors and other co-defendants on behalf of certain investors ("Class Action"). Those two civil actions were derivative litigations arising from the Case. The Corporation has already appointed civil defense attorneys and filed a motion to dismiss those two civil actions with the court. With regard to the aforementioned civil actions filed by Investors Protection Center, the possible consequences or developments resulting from litigations could not be assessed by the Corporation, but it was considered to have no significant influence to its finance and operations at the present stage.

- 7.6.12.2 For Directors, Supervisors, President, the person in charge or shareholders with shareholdings of over 10% and affiliated companies, in the most recent two years and up to the publication date of the annual report, if the litigation, non-litigation or administrative dispute that has been determined or is currently under litigation, the results may have a significant impact on shareholders' equity or securities price: None.
- 7.6.12.3 For Directors, Supervisors, President, the person in charge or shareholders with shareholdings of over 10% and affiliated companies, in the most recent two years and up to the publication date of the annual report, the occurrence of events stipulated by Article 157 in Securities Exchange Act and the Company's current treatment: None

7.6.13 Other Major Risks: None

7.7 Other Major Events: None.

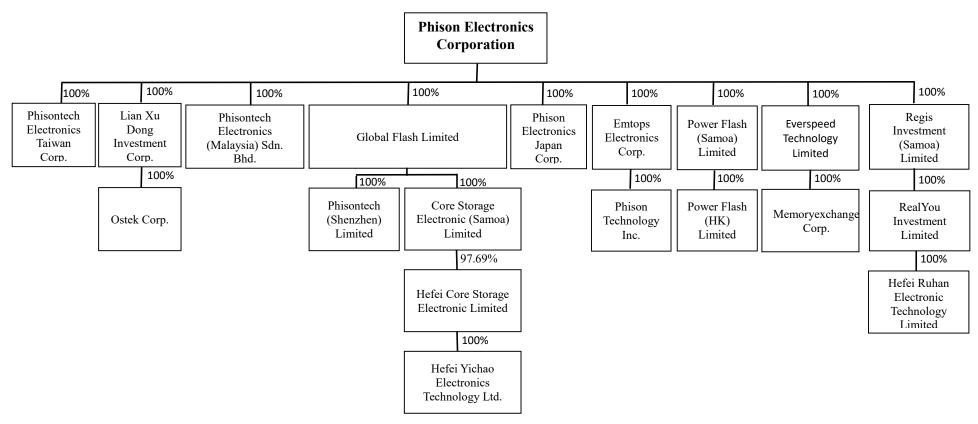


Chapter 8 Special Disclosure

8.1 Summary of Affiliated Companies

- 8.1.1 Consolidated business report of affiliated companies
- 8.1.1.1 Overview of the affiliated companies
 Organizational Structure of Affiliated Companies

Date: December 31, 2019



This company has no other affiliates under the inference by Article 369.3 of Company Act.

8.1.1.2 Basic information of affiliated businesses

Date: December 31, 2019; units: NTD thousand

Name	Date of incorporation	Address	Actual paid-in capital Original NT\$		-	Main Business or Products	Remarks
Line Vo Dono Investment Company		10F6, No.251, Fuxing 1st St., Zhubei		rrency	<u> </u>	Y	Cada ai di a ma
Lian Xu Dong Investment Corporation		City, Hsinchu County 302, Taiwan (R.O.C.)	NTD	650,000		Investment	Subsidiary
Phisontech Electronics (Malaysia) Sdn. Bhd.	2012.04	First Floor, Acctax Corporate Centre, No 2 Jalan Bawasah, 10050 Georgetown, Pulau Pinang, Malaysia	MYR	10,000	93,990	Design, production and sale of flash memory controllers and peripheral system applications	Subsidiary
Global Flash Limited	2012.06	Vistra Corporate Services Centre, Ground Floor NPF Building, Beach Road, Apia, Samoa	USD	37,100	1,158,472	Investment and trade	Subsidiary
Phison Electronics Japan Corp.	2011.02	26th Floor, World Trade Center Building, 2-4-1, Hamamatsu-cho, Minato-ku, Tokyo 105-6126, Japan	JPY	200,000	59,508	Sales and service office	Subsidiary
Emtops Electronics Corp.	2011.03	10F6, No.251, Fuxing 1st St., Zhubei City, Hsinchu County 302, Taiwan (R.O.C.)	NTD	380,000	380,000	Investment	Subsidiary
Power Flash (Samoa) Limited		Portcullis TrustNet Chambers, P.O. Box 1225,Apia,Samoa	USD	3,200	105,440	Investment and trade	Subsidiary
Everspeed Technology Limited	2002.05	Vistra Corporate Services Centre, Ground Floor NPF Building, Beach Road, Apia, Samoa	-	ı	-	Trade of electronic components	Subsidiary
Regis Investment (Samoa) Limited	2018 01	Portcullis Chambers, P.O. Box 1225,Apia,Samoa	USD	13,000	393,214	Investment	Subsidiary
Phisontech Electronics Taiwan Corp.	2013.05	10F6, No.251, Fuxing 1st St., Zhubei City, Hsinchu County 302, Taiwan (R.O.C.)	NTD	10,000	10,000	Design of ASIC and R&D, manufacture, and sale of ASIC for IP and technical support service	Subsidiary
Ostek Corp. [Note 1]	2005.08	10F6, No.251, Fuxing 1st St., Zhubei City, Hsinchu County 302, Taiwan (R.O.C.)	NTD	9,000	9,000	Manufacture and trade of electronic components	Sub- subsidiary

				tual paid-i	n capital		
Name	Date of incorporation	Address	Original ourrency NT\$		NT\$	Main Business or Products	Remarks
Phisontech (Shenzhen) Limited [Note 2]	2012.12	Room. 2508-2509, West block, Great China International Exchange Square, No. 1, Fubua Rd., Futian streets, Futian District. Shenzhen City, China	USD	1,790	53,096	Design, R&D, wholesale, import and export of storage devices and electronics	Sub- subsidiary
Core Storage Electronic (Samoa) Limited [Note 2]	2015.04	Maystar Chambers P.O.Box 3269, Apia, Samoa	USD	34,150	1,068,818	Investment and trade	Sub- subsidiary
Hefei Core Storage Electronic Limited [Note 3]	2015.07	12F/13F, Building F3, Innovation Industrial Park, No. 2800, Innovation Revenue, High-tech Zone, Hefei	USD	33,873	1,063,215	Design, R&D, production and sale of integrated circuits, systems and electronics hardware and software and rendering of related services	Sub- subsidiary
Power Flash (HK) Limited [Note 4]	2015.08	13/F, PICO TOWER, 66 GLOUCESTER ROAD, WANCHAI, HONG KONG	USD	3,000		Sale, trade of electronic products	Sub- subsidiary
Memoryexchange Corp. [Note 5]	2006.05	2F, No.1, Qunyi Rd.,Jhunan Township, Miaoli County 350, Taiwan (R.O.C.)	NTD	409,500	409,500	Design and sale of flash memory related products	Sub- subsidiary
Real You Investment Limited [Note 6]		13/F, PICO TOWER, 66 GLOUCESTER ROAD, WANCHAI, HONG KONG	USD	12,950	391,989	Investment	Sub- subsidiary
Hefei Yichao Electronics Technology Ltd. [Note 7]	2018.07	Room. 1201, Building F3, Innovation Industrial Park Phase II, No. 2800, Innovation Revenue, High-tech Zone, Hefei	CNY	62,500	280,387	Design, R&D, sale of electronics hardware and rendering of related services and investment	Sub- subsidiary
Hefei Ruhan Electronic Technology Limited [Note 8]		Room 2046, Building D8, Hefei Innovation Industrial Park, 2800 Wangjiang West Road, Hefei High-tech Zone	CNY	40,800	182,825	Design, R&D, sale of electronics hardware and rendering of related services and investment	Sub- subsidiary
Phison Technology Inc. [Note 9]	2019.7	2526 Qume Drive, Unit 28 San Jose, CA 95131	USD	1,000	31,415	Sales and service office	Sub- subsidiary

[Note 1] This company is our subsidiary of subsidiary company via Lian Xu Dong Investment Corp.

[Note 2] This company is our subsidiary of subsidiary company via Global Flash Limited.

- [Note 3] This company is our subsidiary of subsidiary company via Core Storage Electronic (Samoa) Limited.
- [Note 4] This company is our subsidiary of subsidiary company via Power Flash (Samoa) Limited.
- [Note 5] This company is our subsidiary of subsidiary company via Everspeed Technology Limited.
- [Note 6] This company is our subsidiary of subsidiary company via Regis Investment (Samoa) Limited.
- [Note 7] This company is our subsidiary of subsidiary company via Hefei Core Storage Electronic Limited.
- [Note 8] This company is our subsidiary of subsidiary company via RealYou Investment Limited.
- [Note 9] This company is our subsidiary of subsidiary company via Emtops Electronics Corp..

- 8.1.1.3 Affiliated companies in a controlling and subordinate relation of the Company with shared shareholder data in compliance with Article 369-3 of Company Act: None.
- 8.1.1.4 Business types of the affiliated companies. If the business operation is interconnected between the affiliated companies, the mission division shall be illustrated.
 - 8.1.1.4.1 Business types of the Company and its affiliated companies:
 - Design, production, and sale of flash memory controllers and peripheral system applications.
 - Investment
 - Investment and trade
 - Design, R&D, wholesale, import and export of storage devices and electronics.
 - Design of ASIC and R&D, manufacture, and sale of ASIC for IP and technical support service.
 - Manufacture and trade of electronic components
 - Design, R&D, production and sale of integrated circuits, systems and electronics hardware and software and rendering of related services.

8.1.1.4.2 Mission Division of the Affiliates with Interconnected Businesses:

Company	Mission division of the affiliates with relationship
	Focus on the design, manufacture, and sale of the flash
Phisontech Electronics (Malaysia) Sdn. Bhd.	memory controller and peripheral application integration in
	Malaysia.
Phison Electronics Japan Corp.	Customer development and service in Japan.
Ostek Corp.	Testing of the flash memory components.
	Design integration service and Silicon IP agent for Phison
Phisontech Electronics Taiwan Corp.	Electronics Corporation and Phisontech Electronics
	(Malaysia) Sdn. Bhd.
Phisontech (Shenzhen) Limited	Customer development and service in Mainland China.
	R&D center in mainland China; focus on the development,
Hefei Core Storage Electronic Limited	sale and relevant technology service of the flash memory
	application products in mainland China.
Hefei Ruhan Electronic Technology Limited	Sales of flash memory peripheral application products.
Power Flash (HK) Limited	Sales of flash memory peripheral application products.
Phison Technology Inc.	Customer development and customer service in US.

8.1.1.5 Profile of Director, Supervisor and President in the Affiliates and Their Shareholding

Date: Dec. 31, 2019; in shares; %

G V	D 111		Shareholdi	
Company Name	Position	Name or Representative	Shares	%
	Director and Supervisor	Phison Electronics Corporation	65,000,000	100.00%
	Legal representative Chairperson	Khein Seng Pua	0	0.00%
Lian Xu Dong Investment Corp.	Legal representative Director	Cheek Kong Aw Yong	0	0.00%
, <i>comient</i>	Legal representative Director	Boon Keat Ang	0	0.00%
	Legal representative Supervisor	Liu Hsiu Chin	0	0.00%
Phisontech Electronics	Parent company	Phison Electronics Corporation	10,000,000	100.00%
(Malaysia) Sdn. Bhd.	Liquidator	Kein Keong Pua	0	0.00%
	Parent company	Phison Electronics Corporation	37,100,000	100.00%
Global Flash Limited	Director	Khein Seng Pua	0	0.00%
	Director	Chee Kong Aw Yong	0	0.00%
	Parent company	Phison Electronics Corporation	2,000	100.00%
	Director	Tzung Horng Kuang	0	0.00%
Japan Corp.	Director	Tanaka Motoji	0	0.00%
	Director and supervisor	Phison Electronics Corporation	38,000,000	100.00%
	Legal representative chairperson	Tzung Horng Kuang	0	0.00%
Emtops Electronics	Legal representative Director	Chia I Fu	0	0.00%
Corp.	Legal representative Director	Chung Hsun Ma	0	0.00%
	Legal representative Supervisor	Zhi Chyang Yu	0	0.00%
	Parent company	Phison Electronics Corporation	3,200,000	100.00%
Power Flash (Samoa) Limited	Legal representative Director	Phison Electronics Corporation	3,200,000	100.00%
	Director	Tzung Horng Kuang	0	0.00%
	Parent company	Phison Electronics Corporation	1,000,000	100.00%
	Legal representative Director	Phison Electronics Corporation	1,000,000	100.00%
Regis Investment	Parent company	Phison Electronics Corporation	13,000,000	100.00%
(Samoa) Limited	Legal representative Director	Phison Electronics Corporation	13,000,000	100.00%
Phisontech	Director and Supervisor	Phison Electronics Corporation	1,000,000	100.00%

Company Name	Position	Position Name or Penracentative			
		Name or Representative	Shares	%	
Electronics Taiwan Corp.	Legal representative Chairperson	Khein Seng Pua	0	0.00%	
	Legal representative Director	Chee Kong Aw Yong	0	0.00%	
	Legal representative Director	Chih Jen Hsu	0	0.00%	
	Legal representative Supervisor	Wee Kuan Gan	0	0.00%	
	Director and Supervisor	Lian Xu Dong Investment Corp.	900,000	100.00%	
	Legal representative Chairperson	Khein Seng Pua	0	0.00%	
Ostek Corp. [Note1]	Legal representative Director	Tzung Horng Kuang	0	0.00%	
	Legal representative Director	Wee Kuan Gan	0	0.00%	
	Legal representative Supervisor	Hsiao Chun Peng	0	0.00%	
D1 1 1	Parent company	Global Flash Limited	USD 1,790,000	100.00%	
Phisontech (Shenzhen) Limited	Executive Director	Shu Hui Tsai	0		
[Note 2]	Supervisor	Chung Lin Wu	0	0.00%	
Core Storage	Parent company	Global Flash Limited	34,150,000	100.00%	
Electronic (Samoa)	Director	Khein Seng Pua	0	0.00%	
Limited [Note 2]	Director	Chee Kong Aw Yong	0	0.00%	
	Parent company	Core Storage Electronic (Samoa) Limited	CNY211,594,900	97.69%	
Hefei Core Storage	Executive Director	Chih Ling Wang	0	0.00%	
Electronic Limited [Note 3]	Director	Wai Lin	0	0.00%	
[Note 3]	Director	Qi Ao Zhu	0	0.00%	
	Supervisor	Wan Xin Liao	0	0.00%	
Power Flash (HK)	Parent company	Power Flash (Samoa) Limited	3,000,000	100.00%	
Limited [Note 4]	Director	Shu Hui Tsai	0	0.00%	

Commons Nome	Position Name or Representative		Shareholdi	ng
Company Name	Position	Name or Representative	Shares	%
	Director	Huei Chen Tsay	0	0.00%
	Director and supervisor	Everspeed Technology Limited	40,950,000	100.00%
	Legal representative Chairperson	Khein Seng Pua	0	0.00%
Memoryexchange Corp. [Note 5]	Legal representative Director	Zhi Chyang Yu	0	0.00%
Corp. [Trote 5]	Legal representative Director	Chen Hao Tsai	0	0.00%
	Legal representative Supervisor	Bao Feng Chen	0	0.00%
RealYou Investment	Parent company	Regis Investment (Samoa) Limited	12,950,000	100.00%
Limited [Note 6]	Director	Yu Chu Chang	0	0.00%
Hefei Yichao Electronics	Parent company	Hefei Core Storage Electronic Limited	CNY62,500,000	100.00%
Technology Ltd.	Executive Director	Chih Ling Wang	0	0.00%
[Note 7]	Supervisor	Liao Wan Hsin	0	0.00%
Hefei Ruhan Electronic	Parent company	Real You Investment Limited	CNY40,800,000	100.00%
Technology Limited	Executive Director	Kuo Yi Cheng	0	0.00%
[Note 8]	Supervisor	Liao Wan Hsin	0	0.00%
Phison Technology	Parent company	Emtops Electronics Corp.	1,000,000	100.00%
Inc. [Note 9]	Director	Zong Cheng Wu	0	0.00%

[Note 1] This company is our subsidiary of subsidiary company via Lian Xu Dong Investment Corp.

[Note 2] This company is our subsidiary of subsidiary company via Global Flash Limited.

[Note 3] This company is our subsidiary of subsidiary company via Core Storage Electronic (Samoa) Limited.

[Note 4] This company is our subsidiary of subsidiary company via Power Flash (Samoa) Limited.

[Note 5] This company is our subsidiary of subsidiary company via Everspeed Technology Limited.

[Note 6] This company is our subsidiary of subsidiary company via Regis Investment (Samoa) Limited.

[Note 7] This company is our subsidiary of subsidiary company via Hefei Core Storage Electronic Limited.

[Note 8] This company is our subsidiary of subsidiary company via RealYou Investment Limited.

[Note 9] This company is our subsidiary of subsidiary company via Emtops Electronics Corp..

8.1.1.6 Operation Summary of the Affiliates

Date: Dec. 31, 2019; Unit: NT\$ thousands

Name of Subsidiary						Date.		9; Unit: N1\$	
Lian XD Dong G80,000 G79,401 2,903 G76,498 12,906 12,647 9,052 0.14 Registrent Corp. G80,000 G79,401 2,903 G76,498 12,906 12,647 9,052 0.14 Registrent Corp. G80,000 G79,401 2,905 G76,498 12,906 12,647 9,052 0.14 G80,000	Name of			Total			Income (loss)		EPS
Lian Xu Dong Investment Corp.		Capıtal	Total Assets		Net Worth	Net Revenue			
Investment Corp. Phisometh Phison Electronics Corp. Phisomethe Phison Electronics							Operation	tax)	tax)
Investment Corp. Phisonethed Electronics (Malaysia) Sdn. Bnd. Global Flash Limited		650,000	679.401	2,903	676.498	12.906	12.647	9.052	0.14
Electronics (Malaysia) Sdn. Bid. Global Flash Limited Li158,472 Li157,998 O Li157,998 O Ci22 36,412 C Flash Limited Linited Li158,472 Li157,998 O Li157,998 O Ci22 36,412 C Flash Linited		000,000	077,101	2,> 00	070,.70	12,500	12,0	,,,,,,	0.1.
Malaysia Sdn. Bind Global Flash Linited Linited Malaysia Sdn. Signature Malaysia Sdn. Signature Malaysia Sdn. Signature Malaysia Sdn. Signature Malaysia Sdn. Ma									
Malaysia San. Bind Global Flash Limited 1.158,472 1.157,998 0 1.157,998 0 (52) 36,412 — Phison Electronics Japan Corp. 59,508 32,560 838 31,722 12,969 (2,603) (2,844) — Drover Flash (Samoa) Limited 105,440 99,223 0 99,223 0 (51) 154 — Drover Flash (Samoa) Limited 105,440 99,223 0 99,223 0 (51) 154 — Drover Flash (Samoa) Limited 105,440 99,223 0 343,601 0 (261) 87,325 — Drover Flash (Samoa) Limited 105,440 99,223 0 50,266 0 (59) 97,960 — Drover Flash (Samoa) Limited 105,440 99,223 0 50,266 0 (59) 97,960 — Drover Flash (Samoa) Limited 10,000 40,951 433 40,518 1,182 (666) (1,118) — Drover Flash 10,000 40,951 433 40,518 1,182 (666) (1,118) — Drover Flash 10,000 40,951 433 40,518 1,182 (666) (1,118) — Drover Flash 10,000 40,951 433 40,518 1,182 (666) (1,118) — Drover Flash 10,000 40,951 433 40,518 1,182 (666) (1,118) — Drover Flash 10,008 1,171,595 67,255 1,104,340 800,102 7,919 48,219 — Drover Flash HK 1,171,595 67,255 1,104,340 800,102 7,919 48,219 — Drover Flash 1,182 1,1	Electronics	02.000	61 627	2 155	50.492	7 016	(4.702)	(4.902)	
Bhd.	(Malaysia) Sdn.	93,990	01,037	2,133	39,482	7,810	(4,702)	(4,803)	_
Global Flash Limited 1,158,472 1,157,998 0 1,157,998 0 (52) 36,412	Bhd.								
Limited (1,188,472 1,197,988 0 1,197,998 0 32, 504,12 —— Phison Electronics	Global Flash	1 150 150	1 155 000	0	1 155 000	0	(50)	25.412	
Phison Electronics Japan Corp. Phison Electronics Japan Corp. Phison Electronics Japan Corp. Solution Electronics Japan Corp. Solution Electronics Japan Corp. Solution Solution Electronics Japan Corp. Solution Solution Electronics Japan Corp. Solution Solution Electronics Japan Corp. Phison Electronics Japan Japan Corp. Phison Electronics Japan Japan Corp. Phison Electronics Taiwan Corp. Corp. Electronics Taiwan Limited Indicate Solution Electronics Limited Indicate Solution Electronic Limited Indicate Solution Electronic Limited Indicate Solution Electronics Indicate Solution Electronics Indicate Solution Solution Indicate		1,158,472	1,157,998	0	1,157,998	0	(52)	36,412	_
Japan Corp. S9,08 32,560 838 31,72 12,969 (2,003) (2,844) —									
Emtops Electronics Corp. Power Flash (Samoa) Limited Everspeed Technology Limited Regis Investment (Samoa) Limited Samoa) Limited Samoa) Limited Samoa) Limited Technology Limited Samoa) Limited Samoa Sam		59,508	32,560	838	31,722	12,969	(2,603)	(2,844)	_
Corp. S80,000 333,23 181 333,070 107 (1,221) 4-25 0.01									
Power Flash (Samoa) Limited Camoa) Camoa) Limited Camoa) Limited Camoa) Limited Camoa) Limited Camoa) Ca		380,000	355,257	181	355,076	107	(1,221)	425	0.01
Samoa Limited 105,440 99,225 0 99,225 0 31 154									
Cashnol Limited Cashnol Cash		105,440	99,223	0	99,223	0	(51)	154	_
Technology Limited 343,601 0 343,601 0 (261) 87,325									
Limited Segis Investment S									
Regis Investment (Samoa) Limited 393,214 502,266 0 502,266 0 (59) 97,960		-	343,601	0	343,601	0	(261)	87,325	_
Samoa Limited S93,214 S02,266 O S92,276 O S93,790 S93,214 S02,266 O S93,790 S94,790 S94,									
Context Corp. [Note 1] Note 1] N		303 214	502.266	0	502 266	0	(50)	97 960	_
1]	(Samoa) Limited	373,214	302,200	U	302,200	O	(37)	77,700	
Phisontech Electronics Taiwan 10,000 40,951 433 40,518 1,182 (666) (1,118)	Ostek Corp. [Note	0.000	(5.522	(720	50 70 <i>5</i>	22 990	(200)	5.041	
Electronics Taiwan 10,000 40,951 433 40,518 1,182 (666) (1,118) — Phisontech (Shenzhen) 53,096 9,304 3,031 6,273 30,799 (2,321) (2,260) — Limited [Note 2] Core Storage Electronic (Samoa) 1,068,818 1,121,055 0 1,121,055 0 (146) 39,315 — Electronic Limited [Note 2] Hefei Core Storage Electronic Limited 1,038,465 1,171,595 67,255 1,104,340 800,102 7,919 48,219 — [Note 3] Power Flash (HK) Limited [Note 4] 98,754 93,381 42 93,339 0 (95) 322 — Memoryexchange Corp. [Note 5] 409,500 471,660 261,443 210,217 0 (206) 93,698 2.29 RealYou Investment Limited 391,989 500,969 114 500,855 0 (262) 97,697 — [Hefei Yichao Electronics Technology Ltd. [Note 7] Hefei Ruhan Electronic Technology Lid. [Note 8] Hefei Ruhan Electronic Technology Limited [Note 8] T14,486 68 174,418 82,139 846 (1,968) — Phison Technology Inc. [Note 9] 31,415 33,437 2,959 30,478 26,439 892 514 —	1]	9,000	05,555	0,/38	38,793	33,889	(290)	5,941	0.0
Electronics Taiwan 10,000 40,951 433 40,518 1,182 (666) (1,118) — Phisontech (Shenzhen) 53,096 9,304 3,031 6,273 30,799 (2,321) (2,260) — Limited [Note 2] Core Storage Electronic (Samoa) 1,068,818 1,121,055 0 1,121,055 0 (146) 39,315 — Electronic Limited [Note 2] Hefei Core Storage Electronic Limited 1,038,465 1,171,595 67,255 1,104,340 800,102 7,919 48,219 — [Note 3] Power Flash (HK) Limited [Note 4] 98,754 93,381 42 93,339 0 (95) 322 — Memoryexchange Corp. [Note 5] 409,500 471,660 261,443 210,217 0 (206) 93,698 2.29 RealYou Investment Limited 391,989 500,969 114 500,855 0 (262) 97,697 — [Hefei Yichao Electronics Technology Ltd. [Note 7] Hefei Ruhan Electronic Technology Lid. [Note 8] Hefei Ruhan Electronic Technology Limited [Note 8] T14,486 68 174,418 82,139 846 (1,968) — Phison Technology Inc. [Note 9] 31,415 33,437 2,959 30,478 26,439 892 514 —	Phisontech								
Corp. Phisontech Corp. Phisontech S3,096 9,304 3,031 6,273 30,799 (2,321) (2,260) —		10.000	40.951	433	40.518	1.182	(666)	(1.118)	_
Phisontech (Shenzhen)		,	,		,	-,	()	(-,)	
Shenzhen S3,096 9,304 3,031 6,273 30,799 (2,321) (2,260)									
Limited [Note 2]		53 096	9 304	3 031	6 273	30 799	(2.321)	(2.260)	_
Core Storage Electronic (Samoa) 1,068,818 1,121,055 0 1,121,055 0 (146) 39,315	` '	33,070	7,504	3,031	0,273	30,777	(2,321)	(2,200)	
Electronic (Samoa) 1,068,818 1,121,055 0 1,121,055 0 (146) 39,315									
Limited [Note 2] Hefei Core Storage Electronic Limited 1,038,465 1,171,595 67,255 1,104,340 800,102 7,919 48,219 —		1 060 010	1 121 055	0	1 121 055	0	(146)	20.215	
Hefei Core Storage Electronic Limited 1,038,465 1,171,595 67,255 1,104,340 800,102 7,919 48,219 —		1,000,010	1,121,033	U	1,121,033	U	(140)	39,313	_
Electronic Limited 1,038,465 1,171,595 67,255 1,104,340 800,102 7,919 48,219									
Note 3 Power Flash (HK) Po						000.40		40.540	
Power Flash (HK) 1		1,038,465	1,171,595	67,255	1,104,340	800,102	7,919	48,219	_
Limited [Note 4] 98,734 93,381 42 93,339 0 (95) 322 — Memoryexchange Corp. [Note 5] 409,500 471,660 261,443 210,217 0 (206) 93,698 2.29 RealYou Investment Limited [Note 6] 391,989 500,969 114 500,855 0 (262) 97,697 — [Note 6] Hefei Yichao Electronics 280,387 259,426 24 259,402 0 (25) (10,522) — [Note 7] Hefei Ruhan Electronic 182,825 174,486 68 174,418 82,139 846 (1,968) — Limited [Note 8] Phison Technology Inc. [Note 9] 31,415 33,437 2,959 30,478 26,439 892 514 —									
Limited [Note 4] Memoryexchange A09,500 A71,660 261,443 210,217 0 (206) 93,698 2.29 RealYou Investment Limited 391,989 500,969 114 500,855 0 (262) 97,697 - Refei Yichao Electronics Technology Ltd. [Note 7] Hefei Ruhan Electronic Technology Ltd. Technology Limited [Note 8] Phison Technology 31,415 33,437 2,959 30,478 26,439 892 514 -		98 754	93 381	42	93 339	0	(95)	322	_
Corp. [Note 5]		70,734	75,501	72	75,557	0	(73)	322	
Corp. [Note 5]		400 500	471.660	261 443	210 217	0	(206)	03 608	2 20
Investment Limited 391,989 500,969 114 500,855 0 (262) 97,697 -	Corp. [Note 5]	409,300	4/1,000	201,443	210,217	U	(200)	93,098	2.29
[Note 6]									
[Note 6]	Investment Limited	391,989	500,969	114	500,855	0	(262)	97,697	_
Hefei Yichao Electronics Technology Ltd. [Note 7] Hefei Ruhan Electronic Technology Limited [Note 8] Totology 182,825 174,486 68 174,418 82,139 846 (1,968) -		,	·		•		` ,	·	
Electronics Technology Ltd. [Note 7] 280,387 259,426 24 259,402 0 (25) (10,522) — Hefei Ruhan Electronic Technology Limited [Note 8] 182,825 174,486 68 174,418 82,139 846 (1,968) — Phison Technology Inc. [Note 9] 31,415 33,437 2,959 30,478 26,439 892 514 —									
Technology Ltd. [Note 7]									
[Note 7]		280,387	259,426	24	259,402	0	(25)	(10,522)	_
Hefei Ruhan Electronic Technology Limited [Note 8]									
Electronic Technology Limited [Note 8] 182,825 174,486 68 174,418 82,139 846 (1,968) — Phison Technology Inc. [Note 9] 31,415 33,437 2,959 30,478 26,439 892 514 —									
Technology Limited [Note 8] Phison Technology Inc. [Note 9] Limited [Note 8] Limited [Note 8] Limited [Note 8] Limited [Note 8] Separate 174,418 82,139 846 (1,908)									
Limited [Note 8] 2,959 Phison Technology Inc. [Note 9] 31,415 33,437 2,959 30,478 26,439 892 514 -		182,825	174,486	68	174,418	82,139	846	(1,968)	_
Phison Technology Inc. [Note 9] 31,415 33,437 2,959 30,478 26,439 892 514 —									
Inc. [Note 9] 31,413 33,437 2,939 30,478 20,439 892 314 —									
Inc. [Note 9]		31,415	33,437	2,959	30,478	26,439	892	514	_
			·	·	,	· ·			

[[]Note 1] This company is our subsidiary of subsidiary company via Lian Xu Dong Investment Corp.

[[]Note 2] This company is our subsidiary of subsidiary company via Global Flash Limited.

[[]Note 3] This company is our subsidiary of subsidiary company via Core Storage Electronic (Samoa) Limited.

[[]Note 4] This company is our subsidiary of subsidiary company via Power Flash (Samoa) Limited.

[[]Note 5] This company is our subsidiary of subsidiary company via Everspeed Technology Limited.

[[]Note 6] This company is our subsidiary of subsidiary company via Regis Investment (Samoa) Limited.

[[]Note 7] This company is our subsidiary of subsidiary company via Hefei Core Storage Electronic Limited.

[[]Note 8] This company is our subsidiary of subsidiary company via RealYou Investment Limited.

[[]Note 9] This company is our subsidiary of subsidiary company via Emtops Electronics Corp..

- 8.1.2 Consolidated financial statement of affiliates: for 2019 (Jan 1, 2019, through to Dec 31, 2019), companies that are required to be included in the consolidated financial statements of affiliates in accordance with "Criteria Governing Preparation of Affiliation Reports, Consolidated Business Reports and Consolidated Financial Statements of Affiliated Enterprises" are identical with those that must be included in the consolidated financial statements of parent and subsidiary under International Accounting Standard No.10. Since matters that must be disclosed by consolidated financial statements of affiliates have been disclosed by consolidated financial statements of parent and subsidiary, no consolidated financial statements of affiliates are separately prepared.
- 8.1.3 Report of affiliates: The Company is not an affiliated company regulated by the Company Act, no such report is prepared.

8.2 Private Placement of Securities in the Most Recent Year and as of the Publication Date of the Annual Report:

Date: May 15, 2020

Item	Date of approval by shareholders' meeting: June 12, 2019			Date of approval by Board of Directors: March 16, 2020						
Tioni -	Approved quantity: Under 18,000,000 shares			Approved quantity: Under 18,000,000 shares						
Securities under private placement	Common		·	, ,		Commo		<u> </u>		
Date of resolution and approved quantity	[Note 1]				[Note 2]	l				
Basis and rationale for price setting	[Note 1]					[Note 2]	.'			
	Order No. Tai-Tasi-Cheng 0910003455 of FSC and be				Article 43-6 of Securities and Exchange Act and the					
Reasons for private placement	Considering the timeliness and feasibility of the capital			Considering the timeliness and feasibility of the capital market, issuance cost, private placement, as well as the limitation of trading within three years to enforce the long-term partnership, the Company issues new shares through private placement by cash.						
Date of payment and completion	N/A					N/A				
Information on contributing parties	Target	Eligibility	Quantity Purchased	Relationship with the Company	Participation in Company Operations	Target	Eligibility	Quantity Purchased	Relationship with the Company	Participation in Company Operations
A -41 D1 (D.T.(A									
Conversion) Price	N/A					N/A				
Difference Between the Actual Purchase (or Conversion) Price and the Reference Price	N/A			N/A						
Impact of Private Placement on Shareholders' Equity	No material impact			No material impact						
Use of funds from private placement and progress of proposed plans	N/A					N/A				
Effectiveness of	N/A					N/A				****

[[]Note 1] The Board of Directors has decided that this private placement is being canceled on Mar 16, 2020. This decision will be reported at the 2020 shareholders' meeting.

8.3 Shares in the Company Held or Disposed of by Subsidiaries in the Most Recent Year and as of the Publication Date of the Annual Report: None.

8.4 Other Necessary Statements: None.

[[]Note 2] This private placement has been approved by the Board of Directors on Mar 16, 2020, and will be discussed at the 2020 shareholders' meeting for approval.

Chapter 9 Material matters specified by Article 36.3.2 of the Securities and Exchange Act that has a material impact on interests of shareholders or price of securities over the most recent year and as of the publication date of the annual report: None.

DECLARATION OF CONSOLIDATION OF FINANCIAL STATEMENTS OF AFFILIATES

The companies required to be included in the consolidated financial statements of affiliates in accordance with the "Criteria Governing Preparation of Affiliation Reports, Consolidated Business Reports and Consolidated Financial Statements of Affiliated Enterprises" for the year ended December 31, 2019 are all the same as the companies required to be included in the consolidated financial statements of parent and subsidiary companies as provided in International Financial Reporting Standard 10 "Consolidated Financial Statements". Relevant information that should be disclosed in the consolidated financial statements of affiliates has all been disclosed in the consolidated financial statements of parent and subsidiary companies. Hence, we did not prepare a separate set of consolidated financial statements of affiliates.

Very truly yours,

PHISON ELECTRONICS CORP.

By

KHEIN SENG PUA Chairman

March 16, 2020

INDEPENDENT AUDITORS' REPORT

The Board of Directors and Shareholders Phison Electronics Corp.

Opinion

We have audited the consolidated financial statements of Phison Electronics Corp. (the "Corporation") and its subsidiaries (collectively referred to as the "Group") which comprise the consolidated balance sheets as of December 31, 2019 and 2018, 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.

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.

The key audit matter of the Group's consolidated financial statements for the year ended December 31, 2019 is stated as follows:

Sales Revenue Recognition

Auditing standards generally accepted in the Republic of China presumes that there is a risk of fraud in the recognition of sales revenue. Management may artificially inflate sales revenue due to pressure in meeting the sales target. The Group's customers are numerous and diverse, and the net sales of the Group for the year ended December 31, 2019 amounted to NT\$44,336,703 thousand. Therefore, there is a high possibility of abnormal sales from transactions with customers and validity of such transactions may have a significant effect on the consolidated financial statements. Thus, the recognition of sales revenue has been identified as a key audit matter.

Our main audit procedures performed in response to this matter, included the following:

- 1. We understood and tested the process of sales revenue recognition and the design and implementation of the relevant internal controls.
- 2. We sampled the original sales orders, shipping documents, export declarations and examined the process for the payment receipts to confirm the validity of sales transaction.
- 3. We checked if there were any instances of simultaneous purchases from and sales to the same entity. Where such situations existed, we further assessed the background of the entity and the goods purchased and sold in order to evaluate the reasonableness of the transactions and to confirm any instances of repeated purchases and sales.

Emphasis of Matter

As stated in Note 32 to the accompanying consolidated financial statements, the Corporation was under statutory investigation by the Taiwan Hsinchu District Prosecutorial Office ("District Prosecutorial Office") on and from August 5, 2016 for alleged violation of the Securities and Exchange Act (the "Case"). The investigation was concluded on August 31, 2017, and the chairman of the Corporation and other defendants were either charged with deferred prosecution or dropped claim for further prosecution by the prosecutor. Then, the District Prosecutorial Office ex officio sent the ruling to the Taiwan High Prosecutors Office ("High Prosecutors Office") for reconsideration. On November 18, 2019, High Prosecutors Office partially set aside and dismissed the original ruling, and ordered the District Prosecutorial Office to continue the investigation. On July 30, 2019, the District Prosecutorial Office concluded the investigation and indicted the chairman of the Corporation and others for their alleged violation of the Securities and Exchange Act and related provisions. A trial of the Case would be held in the Hsinchu District Court. The chairman of the Corporation would strive for a fair judgment in accordance with the law. Following the aforementioned indictment, the Corporation was served with complaints from the Hsinchu District Court on November 8, 2019 and December 13, 2019, that Securities and Futures Investors Protection Center ("Investors Protection Center") had filed two civil actions, respectively, as follows: (1) the first civil action was to remove Mr. K.S. Pua from director position of the Corporation's board ("Removal Action"); (2) the second civil action was to claim compensation damage against the Corporation, its board of directors and other co-defendants on behalf of certain investors ("Class Action"). Those two civil actions were derivative litigations arising from the Case. The Corporation had already appointed civil defense attorneys and filed a motion to dismiss those two civil actions with the court. As such, our audit opinion is not modified in respect of this matter.

Other Matter

We have also audited the parent company only financial statements of Phison Electronics Corp. as of and for the years ended December 31, 2019 and 2018 on which we have issued an unmodified opinion with emphasis of matter paragraph.

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

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

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

Those charged with governance, including the supervisors, 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:

- 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 statements 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 Hsin-Wei Tai and Li-Wen Kuo.

Deloitte & Touche Taipei, Taiwan Republic of China

March 16, 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 accepted and 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 auditors' report and consolidated financial statements shall prevail.

CONSOLIDATED BALANCE SHEETS DECEMBER 31, 2019 AND 2018

(In Thousands of New Taiwan Dollars)

	2019	2018		
ASSETS	Amount	%	Amount	%
CURRENT ASSETS				
Cash and cash equivalents (Note 6)	\$ 10,205,257	27	\$ 14,176,396	39
Financial assets at fair value through profit or loss (FVTPL) (Notes 7 and 26)	3,440,905	9	3,077,540	8
Financial assets at amortized cost (Notes 9 and 28)	56,273	-	67,217	-
Notes and accounts receivable	5,396,821	1.4	4,899,709	1.4
Non-related parties (Note 10) Related parties (Notes 10 and 27)	537,149	14 1	344,249	14 1
Other receivables (Note 10)	427,082	1	273,062	1
Current tax assets (Note 21)	45,499	-	23,448	-
Inventories (Note 11)	11,532,724	30	7,576,721	21
Prepayments	282,396	1	63,194	-
Other current assets	35,733		104,271	
Total current assets	31,959,839	83	30,605,807	<u>84</u>
NON-CURRENT ASSETS				
Financial assets at fair value through profit or loss (FVTPL) (Notes 7 and 26)	459,306	1	427,789	1
Financial assets at fair value through other comprehensive income (FVTOCI) (Notes 8 and 26)	636,432	2	450,397	1
Investments accounted for using the equity method (Note 13)	1,644,159 3,282,950	4 8	1,494,049	4 8
Property, plant and equipment (Note 14) Right-of-use assets (Note 15)	32,840	8	2,990,231	8
Intangible assets (Note 16)	268,026	- 1	152,550	- 1
Deferred tax assets (Note 21)	346,732	1	310,563	1
Guarantee deposits paid	6,496		<u>7,154</u>	
Total non-current assets	6,676,941	<u>17</u>	5,832,733	<u>16</u>
TOTAL	\$ 38,636,780	<u>100</u>	<u>\$ 36,438,540</u>	<u>100</u>
LIABILITIES AND EQUITY				
CURRENT LIABILITIES	400515			
Contract liabilities	\$ 130,615	-	\$ 34,270	-
Notes and accounts payable	2 250 562	6	1 040 402	5
Non-related parties Polated parties (Note 27)	2,258,562 1,384,097	6 4	1,949,403	5 8
Related parties (Note 27) Other payables (Note 17)	4,398,129	11	2,856,144 3,716,898	10
Tax payable (Note 21)	602,714	2	523,854	2
Lease liabilities (Note 15)	12,520	_	323,634	_
Other current liabilities (Note 18)	519,744	1	339,062	1
				
Total current liabilities	9,306,381	24	9,419,631	<u>26</u>
NON-CURRENT LIABILITIES	•4.000			
Deferred tax liabilities (Note 21)	21,930	-	-	-
Lease liabilities (Note 15)	20,702	-	14.060	-
Long-term deferred revenue	4,060	=	14,068	-
Net defined benefit liabilities (Note 19) Guarantee deposits received	94,945 134	-	92,827 144	-
Total non-current liabilities	141,771		107,039	
Total liabilities	9,448,152	24	9,526,670	<u>26</u>
EQUITY ATTRIBUTABLE TO OWNERS OF THE CORPORATION (Notes 20 and 24) Share capital				
Common shares	1,970,740	5	1,970,740	6
Capital surplus	6,724,104	<u> 17</u>	6,674,650	<u>6</u> 18
Retained earnings				
Legal reserve	3,850,715	10	3,418,903	9
Special reserve	380,927	1	, , , <u>-</u>	=
Unappropriated earnings	16,411,959	43	15,228,504	<u>42</u> <u>51</u>
Total retained earnings	20,643,601	<u>43</u> <u>54</u>	18,647,407	51
Other equity	(176,125)		(380,927)	(1)
Total equity attributable to owners of the Corporation	29,162,320	<u>76</u>	26,911,870	<u>74</u>
NON-CONTROLLING INTERESTS	26,308		_	
Total equity	29,188,628	<u>76</u>	26,911,870	<u>74</u>
TOTAL	<u>\$ 38,636,780</u>	<u>100</u>	<u>\$ 36,438,540</u>	<u>100</u>

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

(With Deloitte & Touche auditors' report dated March 16, 2020)

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	%	
ODED ATING DEVENIUE (M. 4, 27)					
OPERATING REVENUE (Note 27)	¢ 44 072 905	101	¢ 40 076 205	101	
Gross sales	\$ 44,973,895	101	\$ 40,976,395	101	
Less: Sales returns and allowances	637,192	2	361,131	100	
Net sales	44,336,703	99	40,615,264	100	
Other operating revenue	356,738	1	172,841		
Total operating revenue	44,693,441	100	40,788,105	100	
OPERATING COSTS (Notes 11, 22 and 27)	33,544,166	<u>75</u>	31,656,151	<u>78</u>	
GROSS PROFIT	11,149,275	<u>25</u>	9,131,954	_22	
OPERATING EXPENSES (Note 22)					
Marketing	601,933	1	513,837	1	
General and administrative	676,893	1	441,225	1	
Research and development	4,714,400	11	3,495,417	9	
Reversal of expected credit losses (Note 10)	(53,964)	11	(28,309)	9	
Reversar or expected credit losses (Note 10)	(33,904)		(28,309)		
Total operating expenses	5,939,262	<u>13</u>	4,422,170	<u>11</u>	
OPERATING INCOME	5,210,013	12	4,709,784	<u>11</u>	
NON-OPERATING INCOME AND EXPENSES					
Other gains and losses (Note 22)	27,872	_	175,624	_	
Share of losses of associates (Note 13)	(243,815)	(1)	(174,654)	_	
Other income (Note 22)	358,870	1	299,497	1	
Financial costs (Note 22)	(2,006)	_	(5,070)	_	
Timanetai costs (Note 22)	(2,000)	<u> </u>	(3,070)	<u> </u>	
Total non-operating income and expenses	140,921		295,397	1	
PROFIT BEFORE INCOME TAX	5,350,934	12	5,005,181	12	
INCOME TAX EXPENSE (Note 21)	805,097	2	687,062	1	
NET PROFIT FOR THE YEAR	4,545,837	<u>10</u>	4,318,119	_11	
OTHER COMPREHENSIVE INCOME (LOSS) FOR THE YEAR, NET OF INCOME TAX Items that will not be reclassified subsequently to profit or loss:					
Remeasurement of defined benefit plan	(1,445)	-	(3,701) (Con	tinued)	

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	%	
Unrealized gain (loss) on investments in equity instruments at fair value through other comprehensive income Income tax relating to items that will not be	\$ 265,956	1	\$ (169,451)	(1)	
reclassified subsequently to profit or loss (Note 21) Items that may be reclassified subsequently to profit or loss:	289	-	2,171	-	
Exchange differences on translating foreign operations Income tax relating to items that may be reclassified subsequently to profit or loss	(59,969)	-	(3,975)	-	
(Note 21)	13,669	_=	3,214		
Other comprehensive income (loss) for the year, net of income tax	218,500	1	(171,742)	_(1)	
TOTAL COMPREHENSIVE INCOME FOR THE YEAR	<u>\$ 4,764,337</u>	<u>11</u>	<u>\$ 4,146,377</u>	<u>10</u>	
NET PROFIT ATTRIBUTED TO: Owners of the Corporation Non-controlling interests	\$ 4,543,489 2,348	10	\$ 4,318,119	11 	
TOTAL COMPREHENSIVE INCOME ATTRIBUTED TO:	<u>\$ 4,545,837</u>	<u>10</u>	\$ 4,318,119	<u>11</u>	
Owners of the Corporation Non-controlling interests	\$ 4,762,958 	11 	\$ 4,146,377 	10	
	\$ 4,764,337	<u>11</u>	\$ 4,146,377	<u>10</u>	
EARNINGS PER SHARE; NEW TAIWAN DOLLARS (Note 23)					
Basic Diluted	\$ 23.05 \$ 22.78		\$ 21.91 \$ 21.60		

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

(With Deloitte & Touche auditors' report dated March 16, 2020)

(Concluded)

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 Corporation									
	Common Shares	Capital Surplus	Legal Reserve	Retained Earnings Special Reserve	Unappropriated Earnings	Exchange Differences on Translating Foreign Operations	Other Equity Unrealized Gain (Loss) on Financial Assets at Fair Value Through Other Comprehensive Income	Total	Non-controlling Interests	Total Equity
BALANCE AT JANUARY 1, 2018	\$ 1,970,740	\$ 6,660,502	\$ 2,842,806	\$ 25,965	\$ 14,984,938	\$ (67,147)	\$ (316,201)	\$ 26,101,603	\$ -	\$ 26,101,603
Appropriation of the 2017 earnings Legal reserve Reversal of special reserve Cash dividends - NT\$17 per share	- - -	- - -	576,097 - -	(25,965)	(576,097) 25,965 (3,350,258)	- - -	- - -	(3,350,258)	- - -	(3,350,258)
Changes in capital surplus from investments in associates and joint ventures accounted for using the equity method	-	14,148	-	-	-	-	-	14,148	-	14,148
Disposal of equity instrument investments at fair value through other comprehensive income	-	-	-	-	(172,633)	-	172,633	-	-	-
Net profit for the year ended December 31, 2018	-	-	-	-	4,318,119	-	-	4,318,119	-	4,318,119
Other comprehensive loss for the year ended December 31, 2018, net of income tax	_	_	_	_	(1,530)	<u>(761</u>)	(169,451)	(171,742)	_	(171,742)
BALANCE AT DECEMBER 31, 2018	1,970,740	6,674,650	3,418,903	-	15,228,504	(67,908)	(313,019)	26,911,870	-	26,911,870
Appropriation of the 2018 earnings Legal reserve Special reserve Cash dividends - NT\$13 per share	- - -	: :	431,812	380,927	(431,812) (380,927) (2,561,962)	- - -	- - -	(2,561,962)	- - -	(2,561,962)
Changes in non-controlling interests	-	-	-	-	-	-	-	-	27,298	27,298
Changes in percentage of ownership interests in subsidiaries	-	2,369	-	-	-	-	-	2,369	(2,369)	-
Changes in capital surplus from investments in associates and joint ventures accounted for using the equity method	-	47,085	-	-	-	-	-	47,085	-	47,085
Disposal of equity instrument investments at fair value through other comprehensive income	-	-	-	-	15,823	-	(15,823)	-	-	-
Net profit for the year ended December 31, 2019	-	-	-	-	4,543,489	-	-	4,543,489	2,348	4,545,837
Other comprehensive income (loss) for the year ended December 31, 2019, net of income tax	<u>-</u> _	-	-	- _	(1,156)	<u>(44,591</u>)	265,216	<u>219,469</u>	<u>(969</u>)	218,500
BALANCE AT DECEMBER 31, 2019	<u>\$ 1,970,740</u>	<u>\$ 6,724,104</u>	\$ 3,850,715	\$ 380,927	<u>\$ 16,411,959</u>	<u>\$ (112,499)</u>	<u>\$ (63,626)</u>	\$ 29,162,320	\$ 26,308	\$ 29,188,628

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

(With Deloitte & Touche auditors' report dated March 16, 2020)

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	\$ 5,350,934	\$ 5,005,181
Adjustments for:	· -))	+ -,, -
Depreciation	293,22	223,830
Amortization	159,94	201,357
Expected credit losses reversed on trade receivables	(53,964	1) (28,309)
Financial costs	2,000	5,070
Interest income	(58,473	3) (54,189)
Dividend income	(81,192	2) (41,698)
Share of losses of associates	243,813	5 174,654
Gains on disposal of property, plant and equipment	(14,90)	
Loss (gain) on disposal of associates	2,960	\ /
(Reversal) write-down of inventories	(63,34)	· · · · · · · · · · · · · · · · · · ·
Net loss (gain) on foreign currency exchange	66,000	\ ' /
Recognition of refund liabilities	363,490	166,648
Net changes related to operating assets and liabilities		
Financial assets at fair value through profit or loss	(154,45)	
Notes and accounts receivable	(718,100	· · · · · · · · · · · · · · · · · · ·
Other receivables	(158,228	· · · · · · · · · · · · · · · · · · ·
Inventories	(3,892,540	
Prepayments	(255,137	
Other current assets	68,538	(, ,
Contract liabilities	96,345	
Notes and accounts payable	(1,129,555	
Other payables	693,799	· · · · /
Deferred revenue	(10,008	
Other current liabilities	(187,786	
Net defined benefit liabilities	673	
Cash generated from operations	564,028	
Interest paid	(2,000	, , , , ,
Income tax paid	(762,238	<u>(1,270,759)</u>
Net cash (used in) generated from operating activities	(200,210	5,213,184
CASH FLOWS FROM INVESTING ACTIVITIES		
Purchase of financial assets at fair value through other		
comprehensive income	(33,160	(134,207)
Proceeds from sale of financial assets at fair value through	(33,100	(151,207)
other comprehensive income	112,653	3 25,586
Proceeds from sale of financial assets at amortized cost	10,944	· · · · · · · · · · · · · · · · · · ·
Purchase of financial assets at fair value through profit or loss	(348,962	· · · · · · · · · · · · · · · · · · ·
Proceeds from sale of financial assets at fair value through	(5.0,502	-, (c,cc=,,,,o)
profit or loss	99,958	3 1,501,263
1	,,,,,,,	(Continued)
		(= 3111111111111)

CONSOLIDATED STATEMENTS OF CASH FLOWS FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018

(In Thousands of New Taiwan Dollars)

	2019	2018
Acquisition of associates Net cash inflow on disposal of associates	(359,878)	(178,880) 398
Payment for property, plant and equipment Proceeds from disposal of property, plant and equipment Decrease (increase) in refundable deposits Payment for intangible assets Interest received	\$ (534,637) 15,008 632 (275,444) 59,240	\$ (370,970) 1,628 (3,374) (135,845) 53,967
Dividends received from others Dividends received from associates	81,192	41,698 233,310
Proceeds from capital reduction of financial assets at fair value through profit or loss	8,730	69,855
Net cash used in investing activities	(1,163,724)	(1,915,044)
CASH FLOWS FROM FINANCING ACTIVITIES Decrease in guarantee deposits Repayment of the principal portion of lease liabilities Dividends paid Increase in non-controlling interests	(10) (10,794) (2,561,962) 27,298	(130) - (3,350,258) -
Net cash used in financing activities	(2,545,468)	(3,350,388)
EFFECT OF EXCHANGE RATE CHANGES ON THE BALANCE OF CASH HELD IN FOREIGN CURRENCIES	(61,731)	86,255
NET (DECREASE) INCREASE IN CASH AND CASH EQUIVALENTS	(3,971,139)	34,007
CASH AND CASH EQUIVALENTS AT THE BEGINNING OF THE YEAR	14,176,396	14,142,389
CASH AND CASH EQUIVALENTS AT THE END OF THE YEAR	<u>\$10,205,257</u>	<u>\$ 14,176,396</u>

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

(With Deloitte & Touche auditors' report dated March 16, 2020)

(Concluded)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018

(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

1. GENERAL INFORMATION

Phison Electronics Corp. (the "Corporation") was incorporated on November 8, 2000 under the Company Act of the Republic of China ("ROC"). The Corporation mainly designs and sells flash memory controllers and peripheral system applications.

The Corporation's shares have been traded on the Taipei Exchange (over-the-counter exchange in Taiwan) since December 6, 2004.

The consolidated financial statements of the Corporation and its subsidiaries, hereinafter collectively referred to as the "Group", are presented in the Corporation's functional currency, the New Taiwan dollar.

2. APPROVAL OF CONSOLIDATED FINANCIAL STATEMENTS

The consolidated financial statements were approved by the Corporation's board of directors on March 16, 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) of the Republic of China.

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:

IFRS 16 "Leases"

IFRS 16 provides a comprehensive model for the identification of lease arrangements and their treatment in the financial statements of both lessee and 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 right-of-use assets and 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 operating 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 Group elected to apply IFRS 16 retrospectively with the cumulative effect of the initial application of this standard recognized in retained earnings on January 1, 2019. Comparative information was not restated.

Lease liabilities were recognized on January 1, 2019 for leases previously classified as operating leases under IAS 17. Lease liabilities were measured at the present value of the remaining lease payments, discounted using the lessee's incremental borrowing rate on January 1, 2019. Right-of-use assets are measured at an amount equal to the lease liabilities. The Group applies IAS 36 to all right-of-use assets.

The Group also applies the following practical expedients:

- 1) The Group applies a single discount rate to a portfolio of leases with reasonably similar characteristics to measure lease liabilities.
- 2) The Group accounts for those leases for which the lease term ends on or before December 31, 2019 as short-term leases.
- 3) The Group excludes initial direct costs from the measurement of right-of-use assets on January 1, 2019.
- 4) The Group uses hindsight, such as in determining lease terms, to measure lease liabilities.

The Group's weighted average incremental borrowing rate applied to lease liabilities recognized on January 1, 2019 was 2.6%. The difference between the lease liabilities recognized and operating lease commitments disclosed under IAS 17 on December 31, 2018 is explained as follows:

The future minimum lease payments of non-cancellable operating lease	
commitments on December 31, 2018	\$ 43,283
Less: Recognition exemption for short-term leases	(15,405)
Less: Recognition exemption for leases of low-value assets	(14)
Undiscounted amounts on January 1, 2019	<u>\$ 27,864</u>
Discounted amounts using the incremental borrowing rate on January 1, 2019	\$ 26,667
Lease liabilities recognized on January 1, 2019	<u>\$ 26,667</u>

The Group as lessor

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

	As Originally Stated on January 1, 2019	Adjustments Arising from Initial Application	Restated on January 1, 2019	
Right-of-use assets Guarantee deposits paid	\$ - 	\$ 26,831 (164)	\$ 26,831 	
Total effect on assets	<u>\$ 7,154</u>	<u>\$ 26,667</u>	<u>\$ 33,821</u>	
Lease liabilities - current Lease liabilities - non-current	\$ - 	\$ 8,277 	\$ 8,277 	
Total effect on liabilities	<u>\$ -</u>	\$ 26,667	<u>\$ 26,667</u>	

b. The IFRSs endorsed by the FSC for application starting from 2020

New IFRSs	Effective Date Announced by IASB
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 aforementioned 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

	Effective Date
New IFRSs	Announced by IASB (Note)
Amendments to IFRS 10 and IAS 28 "Sale or Contribution of	To be determined by IASB
Assets between an Investor and its Associate or Joint Venture"	

IFRS 17 "Insurance Contracts"

Amendments to IAS 1 "Classification of Liabilities as Current or Non-current"

January 1, 2021

January 1, 2022

Note: Unless stated otherwise, the above New IFRSs are effective for annual reporting 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 aforementioned 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 which are measured at fair value and net defined benefit liabilities which are measured at the present value of the defined benefit obligation less the fair value of plan assets.

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

- a. Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities;
- b. Level 2 inputs are 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
- c. Level 3 inputs are unobservable inputs for the asset or liability.

Classification of Current and Non-current Assets and Liabilities

Current assets include:

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

Current liabilities include:

- a. Liabilities held primarily for the purpose of trading;
- b. Liabilities due to be settled within 12 months after the reporting period; and
- c. Liabilities for which the Group does not have an unconditional right to defer settlement for at least 12 months after the reporting period.

All other assets and liabilities are classified as non-current.

Basis of Consolidation

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

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

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

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

Changes in the Group's ownership interests in subsidiaries that do not result in the Group losing control over the subsidiaries are accounted for as equity transactions. The carrying amounts of the 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 Corporation.

When the Group loses control of a subsidiary, a gain or loss is recognized in profit or loss and is calculated as the difference between (1) the aggregate of the fair value of the consideration received and any investment retained in the former subsidiary at its fair value at the date when control is lost and (2) the assets (including any goodwill) and liabilities and any non-controlling interests of the former subsidiary at their carrying amounts at the date when control is lost. The Group accounts for all amounts recognized in other comprehensive income in relation to that subsidiary on the same basis as would be required had the Group directly disposed of the related assets or liabilities.

The fair value of any investment retained in a former subsidiary at the date when control is lost is regarded as the cost on initial recognition of an investment in an associate.

See Note 12 and Tables 5 and 6 following the Notes to Consolidated Financial Statements for detailed information on subsidiaries (including the percentage of ownership and main businesses).

Foreign Currencies

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

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

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

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

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

In relation to a partial disposal of a subsidiary that does not result in the Corporation losing control over the subsidiary, the proportionate share of accumulated exchange differences is re-attributed to noncontrolling interests of the subsidiary and is not recognized in profit or loss. For all other partial disposals, the proportionate share of the accumulated exchange differences recognized in other comprehensive income is reclassified to profit or loss.

Inventories

Inventories consist of raw materials, semifinished goods, work-in-process and finished goods, which 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. The 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 their weighted-average costs on the balance sheet date.

Investment in Associates

An associate is an entity over which the Group has significant influence and which is neither a subsidiary nor an interest in a joint venture.

The Group uses the equity method to account for its investments in associates. Under the equity method, investments in associates are 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.

When the Group subscribes for additional new shares of an 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 - changes in the Group's share of the equity of associates. If the Group's ownership interest is reduced due to the additional subscription of new shares of an 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 using the equity method is insufficient, the shortage is debited to retained earnings.

When the Group's share of losses of an associate and a joint venture equals or exceeds its interest in that associate and joint venture (which includes any carrying amount of the investment accounted for using the equity method and long-term interests that, in substance, form part of the Group's net investment in the associate and joint venture), the Group discontinues recognizing its share of further loss, if any. 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 and joint venture.

When the Group determines impairment loss, the entire carrying amount of an investment in an associate (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 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 the investment's 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 had that associate directly disposed of the related assets or liabilities. If an investment in an associate becomes an investment in a joint venture or an investment in a joint venture becomes an investment in an associate, the Group continues to apply the equity method and does not remeasure the retained interest.

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

Property, Plant and Equipment

Property, plant and equipment are initially measured at cost and subsequently measured at cost less accumulated depreciation and accumulated impairment loss.

Property, plant and equipment in the course of construction are carried at cost, less any recognized impairment loss. Such assets are depreciated and classified to the appropriate categories of property, plant and equipment when completed and ready for their intended uses.

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

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

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. The estimated useful lives, residual values, and amortization methods are reviewed at the end of each reporting period, with the effect of any changes in the estimates accounted for on a prospective basis.

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

Impairment of Tangible, Intangible Assets (Other Than Goodwill), and Assets Related to Contract Costs

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

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

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

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

Financial Instruments

Financial assets and financial liabilities are recognized when the Group 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 issuance 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. Financial assets

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

1) Measurement category

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

a) Financial assets 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 FVTOCI criteria.

Financial assets at FVTPL are subsequently measured at fair value, and any dividends or interest earned on such financial assets are recognized in other income; any remeasurement gains or losses on such financial assets are recognized in other gains or losses. Fair value is determined in the manner described in Note 26.

b) Financial assets at amortized cost

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

- i. The financial asset is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows; and
- ii. The contractual terms of the financial 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, including cash and cash

equivalents and notes and trade receivables, are measured at amortized cost and equal the gross carrying amount determined using the effective interest method less any impairment loss. Exchange differences are recognized in profit or loss.

Interest income is calculated by applying the effective interest rate to the gross carrying amount

of a financial asset, except for:

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

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

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

Cash equivalents include time deposits with original maturities within 3 months from the date of acquisition, which are highly liquid, readily convertible to a known amount of cash and are subject to an insignificant risk of changes in value. These cash equivalents are held for the purpose of meeting short-term cash commitments.

c) Investments in equity instruments at FVTOCI

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

Investments in equity instruments at FVTOCI are subsequently measured at fair value with gains and losses arising from changes in fair value recognized in other comprehensive income and accumulated in other equity. The cumulative gain or loss will not be reclassified to profit or loss on 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.

2) Impairment of financial assets and contract assets

The Group recognizes a loss allowance for expected credit losses on financial assets at amortized cost (including trade receivables) at the end of each reporting period.

The loss allowance for accounts receivable is measured at an amount equal to lifetime expected credit losses. For other financial assets, when the credit risk has not increased significantly since initial recognition, a loss allowance is recognized at an amount equal to the expected credit losses resulting from possible default events of the financial instruments within 12 months after the reporting date. If, on the other hand, there has been a significant increase in credit risk since initial recognition, a loss allowance is recognized at an amount equal to the expected credit losses resulting from possible default events over the expected life of the financial instruments.

Expected credit losses reflect the weighted average of credit losses with the respective risks of default occurring as the weights. The portion of expected credit losses that is expected to result from default events on a financial instrument that are possible within 12 months after the reporting date are 12-month expected credit losses. Lifetime expected credit losses are the expected credit losses that arise if debtors default on their obligations at some time during the life of a financial instrument.

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

- a) Internal or external information shows that the debtor is unlikely to pay its creditors.
- b) When a financial asset is overdue unless the Group has reasonable and corroborative information to support a more lagged default criterion.

The impairment loss of all financial assets is recognized in profit or loss by a reduction in their carrying amounts through a loss allowance account, except for investments in debt instruments that are measured at FVTOCI, for which the loss allowance is recognized in other comprehensive income and the carrying amounts of such financial assets are not reduced.

3) 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 that 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 that had been recognized in other comprehensive income is transferred directly to retained earnings, without recycling through profit or loss.

b. Equity instruments

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

c. Financial liabilities

1) Recognition and measurement

On initial recognition, the transaction costs of financial assets that are neither held for trading nor designated as at FVTPL (including short-term borrowing, trade and notes payables, other payables and guarantee deposits received) which are directly attributable to the acquisition or issue of financial assets and financial liabilities are added to or deducted from the fair value of the financial assets or financial liabilities. Subsequent valuation is measured at amortized cost determined by the effective interest method.

2) Derecognition of financial liabilities

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

Revenue Recognition

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

Revenue from the sale of goods

Revenue from the sale of goods comes from the sale of flash memory controllers, peripheral systems and other applications. Sales of the aforementioned goods are recognized as revenue when the goods are delivered to the customer's specific location or the goods are shipped because it is the time when the customer has full discretion over the manner of distribution and price to sell the goods, has the primary responsibility for sales to future customers, and bears the risks of obsolescence. Trade receivables are recognized concurrently. When the customer initially purchases the goods, the transaction price received is recognized as a contract liability until the goods have been delivered to the customer.

The Group does not recognize sales revenue on materials delivered to subcontractors because this delivery does not involve a transfer of risks and rewards of the materials' ownership.

Leases

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.

Lease payments (less any lease incentives payable) from operating leases are recognized as income on a straight-line basis over the terms of the relevant leases.

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 presented on a separate line in the consolidated balance sheets.

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

Lease liabilities are initially measured at the present value of the lease payments, which comprise fixed payments, in-substance fixed payments, variable lease payments which depend on an index or a rate, 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 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 a lease transfer substantially all the risks and rewards of ownership to the lessee. All other leases are classified as operating leases.

a. The Group as lessor

Rental income from operating leases is recognized on a straight-line basis over the term of the relevant lease.

b. The Group as lessee

Operating lease payments are recognized as an expense on a straight-line basis over the lease term.

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 services.

b. Retirement benefits

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

Defined benefit costs (including service costs, net interest and remeasurement) under the defined benefit retirement plans are determined using the projected unit credit method. Service costs and net interest on net defined benefit liabilities (assets) are recognized as employee benefits expenses in the period that 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 it occurs. Remeasurement recognized in other comprehensive income is reflected immediately in retained earnings and will not be reclassified to profit or loss.

Net defined benefit liabilities (assets) represent the actual deficit (surplus) 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.

c. Termination benefits

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

Share-based Payment Arrangements - Employee Share Options

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

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

Taxation

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

a. Current tax

According to the Income Tax Law, an additional tax on unappropriated earnings is provided 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 and the corresponding tax bases used in the computation of taxable profit. Deferred tax liabilities are generally recognized for all taxable temporary differences. Deferred tax assets are generally recognized for all deductible temporary differences and unused loss carryforwards to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilized.

Deferred tax liabilities are recognized for taxable temporary differences associated with investments in subsidiaries 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 arising from deductible temporary differences associated with such investments and interests are recognized only to the extent that it is probable that there will be sufficient taxable profits against which to utilize the benefits of the temporary differences and that they are expected to reverse in the foreseeable future.

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

Deferred tax liabilities and assets are measured at the tax rates that are expected to apply in the period in which a liability is settled or an asset is 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.

c. Current and deferred tax

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

5. CRITICAL ACCOUNTING JUDGMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY

The application of the Group's accounting policies, management is required to make judgments, estimates and assumptions about the carrying amount 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 estimates are revised if the revisions affect only that period or in the period of the revisions and future periods if the revisions affect both current and future periods.

Key Sources of Estimation Uncertainty

Write-down of inventories

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

6. CASH AND CASH EQUIVALENTS

	December 31			
	20	019	2	2018
Cash on hand	\$	93	\$	109
Checking accounts and demand deposits	7,6	572,079	9,	299,883
Cash equivalents				
Time deposits with original maturities of less than 3 months		33,085	4,	<u>876,404</u>
	<u>\$ 10,2</u>	205,257	<u>\$ 14,</u>	<u>176,396</u>

7. FINANCIAL INSTRUMENTS AT FAIR VALUE THROUGH PROFIT OR LOSS

	December 31		
	2019	2018	
Non-derivative financial assets - current			
Financial assets mandatorily classified as FVTPL Beneficiary certificates - open-end funds Domestic listed shares Convertible bonds	\$ 2,816,597 529,538 <u>94,770</u>	\$ 2,619,258 372,994 85,288	
	<u>\$ 3,440,905</u>	<u>\$3,077,540</u>	
Non-derivative financial assets - non-current			
Financial assets mandatorily classified as FVTPL Private equity funds Domestic unlisted shares Overseas unlisted shares	\$ 45,408 341,618 72,280	\$ 47,366 281,900 98,523	
	<u>\$ 459,306</u>	<u>\$ 427,789</u>	

8. FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME - NON-CURRENT

Investments in Equity Instruments at FVTOCI

	December 31		
	2019	2018	
Domestic investments - unlisted shares Overseas investments - unlisted shares	\$ 230,267 406,165	\$ 132,871 <u>317,526</u>	
	\$ 636,432	\$ 450,397	

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

9. FINANCIAL ASSETS AT AMORTIZED COST - CURRENT

	December 31		
	2019	2018	
Certificates of deposit Time deposits with original maturities of more than 3 months	\$ 20,383 <u>35,890</u>	\$ 56,997 	
	\$ 56,273	<u>\$ 67,217</u>	

As of December 31, 2019 and 2018, the interest rates for time deposits with original maturities of more than 3 months were 0.13%-1.75%. The Group assessed that the expected credit risk of the financial assets was not high and the credit risk has not increased significantly since initial recognition.

Refer to Note 28 for information relating to investments in financial assets at amortized cost pledged as security.

10. NOTES RECEIVABLE, TRADE RECEIVABLES AND OTHER RECEIVABLES

	December 31		
	2019	2018	
Accounts receivable			
At amortized cost Gross carrying amount - non-related parties Gross carrying amount - related parties	\$ 5,494,199 537,149 6 021 248	\$ 5,051,051 344,249 5 305 300	
Less: Loss allowance	6,031,348 <u>97,378</u>	5,395,300 151,342	
	\$ 5,933,970	\$ 5,243,958	
Other receivables			
Income tax refund receivable Convertible bonds redemption receivable Factored accounts receivable Others	\$ 292,145 83,286 30,342 21,309	\$ 176,307 - 74,777 21,978	
	\$ 427,082	<u>\$ 273,062</u>	

Trade Receivables

The average credit period of sales of goods was 30 to 90 days. 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 obtained from independent rating agencies where available or, if not available, the Group uses other publicly available financial information or 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 by the risk management committee annually.

In order to minimize credit risk, the management of the Group has delegated staff 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 an adequate allowance is made for possible irrecoverable amounts. In this regard, the management believes the Group's credit risk is significantly reduced.

The Group applies the simplified approach to allowing for expected credit losses prescribed by IFRS 9, which permits the use of a lifetime expected credit losses allowance for all trade receivables. The expected credit losses on trade receivables are estimated using an allowance matrix by reference to past default experience with the respective debtors and an analysis of each 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 forecasted direction of economic conditions at the reporting date. As the Group's historical credit losses experience does not show significantly different loss patterns for different customer segments, the loss allowance, which is based on the past due status of receivables, is not further distinguished according to different segments of the Group's customer base.

The Group writes off a trade receivable when there is information indicating that the debtor is experiencing severe financial difficulty and there is no realistic prospect of recovery, e.g. the earlier of either when the debtor has been placed under liquidation or when the trade receivables are over two years past due. For trade receivables that have been written off, the Group continues to engage in enforcement activity to attempt to recover the receivables which are due. Where recoveries are made, these are recognized in profit or loss.

The following table details the loss allowance of notes receivables and trade receivables based on the Group's allowance matrix.

December 31, 2019

	Not Past Due	Less than 2 Months	2 to 3 Months	3 to 4 Months	4 to 5 Months	Over 5 Months	Total
Gross carrying amount Loss allowance (lifetime expected	\$ 5,028,970	\$ 426,409	\$ 2,282	\$ 12,802	\$ 667	\$ 23,069	\$ 5,494,199
credit losses)	(23,357)	(41,121)	(1,238)	(8,059)	(534)	(23,069)	(97,378)
Amortized cost	\$ 5,005,613	\$ 385,288	\$ 1,044	\$ 4,743	<u>\$ 133</u>	<u>\$</u>	\$ 5,396,821
<u>December 31, 2018</u>	_						
	Not Past Due	Less than 2 Months	2 to 3 Months	3 to 4 Months	4 to 5 Months	Over 5 Months	Total
Gross carrying amount	\$ 4,592,145	\$ 413,222	\$ 4,813	\$ 6,474	\$ 13,879	\$ 20,518	\$ 5,051,051
Loss allowance (lifetime expected credit losses)	(72,558)	(47,920)	(923)	(1,687)	(8,203)	(20,051)	(151,342)
Amortized cost	\$ 4,519,587	\$ 365,302	\$ 3,890	\$ 4,787	\$ 5,676	\$ 467	\$ 4,899,709

The movements of the loss allowance of trade receivables were as follows:

	2019	2018
Balance, beginning of period	\$ 151,342	\$ 185,393
Less: Reversal of loss allowance	(53,964)	(28,309)
Less: Amounts written off		(5,533)
Foreign exchange gains and losses		(209)
Balance, end of period	\$ 97,378	\$ 151,342

Factored trade receivables that have not yet settled at end of period were as follows:

(In Thousands of Dollars)

Factor	Factor Amount	Reclassified to Other Receivables	Advances Received - Unused	Prepayments	Annual Interest Rates on Advances Received (Used) (%)
For the year ended December 31, 2019					
HSBC Bank	US\$ 16,704	US\$ 1,012	-	-	-
For the year ended December 31, 2018					
HSBC Bank	US\$ 42,640	US\$ 2,435	-	-	-

The factor was HSBC Bank (Taiwan) Limited. This sale was without recourse while the Group shall pay only the necessary related charges.

11. INVENTORIES

	December 31		
	2019	2018	
Raw materials	\$ 6,933,204	\$ 4,264,410	
Work-in-process	2,672,047	2,000,892	
Semi-finished goods	1,762,677	1,273,952	
Finished goods	120,337	37,467	
Merchandise	44,459		
	<u>\$ 11,532,724</u>	\$ 7,576,721	

The costs of inventories recognized as cost of goods sold for the years ended December 31, 2019 and 2018 were \$33,544,166 thousand and \$31,656,151 thousand, respectively.

The costs of goods sold for the years ended December 31, 2019 and 2018 included reversals of inventory write-downs of \$63,347 thousand and write-downs of \$94,910 thousand, respectively. The reversals of previous write-downs resulted from an increase in market selling prices.

12. SUBSIDIARIES

a. Subsidiaries included in the consolidated financial statements

The subsidiaries included in the consolidated financial statements are as follows:

			Proportion	of Ownership	
			Decen	nber 31	
Investor	Investee	Principal Activities	2019	2018	Remark
Phison Electronics Corp.	Lian Xu Dong Investment Corporation	Investment	100.00	100.00	-
	Phison Electronics Japan Corp.	Sales and service office	100.00	100.00	-
	Emtops Electronics Corp.	Investment	100.00	100.00	-
	Phisontech Electronics Taiwan Corp.	Design of ASIC and R&D, manufacture, and sale of ASIC for IP and technical support service	100.00	-	Remark 5
	Phisontech Electronics (Malaysia) Sdn. Bhd.	Design, production and sale of flash memory controllers and peripheral system applications	100.00	100.00	-
	Global Flash Limited	Investment and trade	100.00	100.00	-
	Power Flash (Samoa) Limited	Investment and trade	100.00	100.00	-
	Everspeed Technology Limited	Trade of electronic components	100.00	100.00	-
	Regis Investment (Samoa) Limited	Investment	100.00	100.00	-
Global Flash Limited	Phisontech (Shenzhen) Limited	Design, R&D, import and export of storage devices and electronics	100.00	100.00	-
	Core Storage Electronic (Samoa) Limited	Investment and trade	100.00	100.00	-
Core Storage Electronic (Samoa) Limited	Hefei Core Storage Electronic Limited	Design, R&D, production and sale of integrated circuits, systems and electronics hardware and software and rendering of related services.	97.69	100.00	Note 24
Hefei Core Storage Electronic Limited	Hefei Yichao Electronics Technology Ltd.	Design, R&D and sale of electronic products and technical support service and rendering of related services and investment.	100.00	100.00	Remark 3
Phisontech Electronics (Malaysia) Sdn. Bhd.	Phisontech Electronics Taiwan Corp.	Design of ASIC and R&D, manufacture, and sale of ASIC for IP and technical support service	-	100.00	Remark 5
Lian Xu Dong Investment Corporation	Ostek Corporation	Manufacture and trade of electronic components	100.00	100.00	-
Power Flash (Samoa) Limited	Power Flash (HK) Limited	Sale of electronic products	100.00	100.00	-
Everspeed Technology Limited	Memoryexchange Corporation	Design and sale of flash memory related products	100.00	100.00	-
	Cloud Solution Global Limited	Trade of electronic components	-	100.00	Remark 1
	Fast Choice Global Limited	Trade of electronic components	_	100.00	Remark 1
Regis Investment (Samoa) Limited	RealYou Investment Limited	Investment	100.00	100.00	-
RealYou Investment Limited	Hefei Ruhan Electronic Technology Limited	Design, R&D and sale of electronic products and technical support service and rendering of related services and investment.	100.00	100.00	Remark 4
Emtops Electronics Corp.	Phison Technology Inc.	Sales and service office	100.00	-	Remark 2

- Remark 1: The company ended its operations in August 2019 and completed the liquidation procedures.
- Remark 2: In 2019, the Corporation invested Phison Technology Inc. through sub-company for the operational needs.
- Remark 3: In 2018, the Corporation invested Hefei Yichao Electronics Technology Ltd through sub-company for the operational needs.
- Remark 4: In 2018, the Corporation invested Hefei Ruhan Electronics Technology Limited through sub-company for the operational needs.

Remark 5: The Corporation acquired 100% equity of Phisontech Electronics Taiwan Corp. from its subsidiary, Phisontech Electronics (Malaysia) Sdn. Bhd. in November 2019. This transaction is regarded as a reorganization under common control.

- b. Subsidiaries excluded from the consolidated financial statements: None.
- c. During the preparation of the consolidated financial statements, the substantial transactions between the group entities were fully eliminated.

13. INVESTMENTS ACCOUNTED FOR USING THE EQUITY METHOD

	December 31			
Investments in Associates	2019	2018		
<u>Unlisted shares</u>				
Kingston Solutions Inc.	\$ 965,294	\$ 1,257,971		
Epostar Electronics (BVI) Corporation	-	17,596		
Microtops Design Corporation ("Microtops")	24,403	22,696		
PMS Technology Corporation	17,962	17,929		
Hefei Xinpeng Technology Co., Ltd.	245,507	177,857		
HOSIN Global Electronics Co., Ltd. (SZ)	390,993			
	\$ 1,644,159	\$ 1,494,049		

Refer to Tables 5 and 6 for the nature of activities, principal place of business and country of incorporation of the associates.

Based on operational considerations, the Group invested CNY62,000 thousand in HOSIN Global Electronics Co., Ltd. (SZ) and acquired 38.46% shareholding in 2019.

As of December 31, 2019 and 2018, no investments in associates were individually material to the Group.

Aggregate information of associates that are not individually material

	For the Year Ended December 31		
	2019	2018	
The Group's share of: Net loss for the year Other comprehensive income (loss)	\$(243,815) (37)	\$(174,654) (745)	
Total comprehensive loss for the year	<u>\$(243,852)</u>	<u>\$(175,399)</u>	

The fiscal year end date for Microtops is March 31. For the purpose of applying the equity method of accounting, the consolidated financial statements of Microtops as of March 31, 2019 and 2018 have been used as the Group considers that it is impracticable for Microtops to prepare a separate set of financial statements as of December 31. Appropriate adjustments have been made accordingly for the effects of significant transactions between those dates and December 31, 2019 and 2018.

The calculation of the investments accounted for using the equity method and the Group's share of profit or loss and other comprehensive income of those investments for the years ended December 31, 2019 and 2018 were based on financial statements that have been audited.

The Group's share of losses of an associate is limited to its interest in that associate. The amounts of unrecognized share of losses of those associates extracted from the relevant audited financial statements of associates, both for the period and cumulatively, were as follows:

For the Year Ended December 31, 2019

Unrecognized share of losses of associates for the year Accumulated unrecognized share of losses of associates \$ 4,974 \$ 4,974

All the aforementioned associates are accounted for using the equity method.

14. PROPERTY, PLANT AND EQUIPMENT

	Land	Land Improvements	Buildings	Testing Equipment	Office Equipment	Mechanical Equipment	Other Equipment	Total
Cost								
Balance at January 1, 2018 Additions Disposals Effects of foreign currency exchange difference Reclassification	\$ 813,738 - - -	\$ 28,775 (5,095)	\$ 1,965,976 79,495 - -	\$ 414,707 281,956 (42,359) (923) 	\$ 46,685 15,215 (10,142) (135)	\$ - - - -	\$ 30,322 13,634 (844)	\$ 3,300,203 390,300 (58,440) (1,086) 1,585
Balance at December 31, 2018	<u>\$ 813,738</u>	<u>\$ 23,680</u>	\$ 2,045,471	<u>\$ 654,966</u>	<u>\$ 51,623</u>	<u>s -</u>	<u>\$ 43,084</u>	\$ 3,632,562
Accumulated depreciation								
Balance at January 1, 2018 Disposals Depreciation Effects of foreign currency exchange difference	\$ - - -	\$ 20,926 (5,095) 3,472	\$ 233,074 56,845	\$ 188,492 (42,181) 138,056	\$ 23,543 (10,105) 15,928 (99)	\$ - - -	\$ 11,287 (844) 9,529 (14)	\$ 477,322 (58,225) 223,830 (596)
Balance at December 31, 2018	<u>s -</u>	<u>\$ 19,303</u>	\$ 289,919	\$ 283,884	\$ 29,267	<u>s -</u>	<u>\$ 19,958</u>	\$ 642,331
Balance at December 31, 2018, net	<u>\$ 813,738</u>	<u>\$ 4,377</u>	<u>\$ 1,755,552</u>	\$ 371,082	\$ 22,356	<u>s -</u>	<u>\$ 23,126</u>	\$ 2,990,231
Cost								
Balance at January 1, 2019 Additions Disposals Effects of foreign currency exchange difference Reclassification	\$ 813,738 145,069	\$ 23,680 (14,290)	\$ 2,045,471 21,094 - 25,340	\$ 654,966 300,999 (94,124) (2,045) 10,015	\$ 51,623 15,097 (10,525) (293)	\$ - 48,358 - -	\$ 43,084 8,998 (7,192) (119) 580	\$ 3,632,562 539,615 (126,131) (2,457) 35,935
Balance at December 31, 2019	\$ 958,807	\$ 9,390	\$ 2,091,905	\$ 869,811	\$ 55,902	\$ 48,358	<u>\$ 45,351</u>	\$ 4,079,524
Accumulated depreciation								
Balance at January 1, 2019 Disposals Depreciation Effects of foreign currency exchange difference	\$ - - -	\$ 19,303 (14,290) 1,334	\$ 289,919 - 62,558	\$ 283,884 (94,124) 189,625 (1,443)	\$ 29,267 (10,424) 13,177	\$ - 4,102	\$ 19,958 (7,192) 11,223	\$ 642,331 (126,030) 282,019 (1,746)
Balance at December 31, 2019	\$ <u>-</u>	\$ 6,347	\$ 352,477	\$ 377,942	\$ 31,796	\$ 4,102	\$ 23,910	\$ 796,574
Balance at December 31, 2019, net	\$ 958,807	\$ 3,043	\$ 1,739,428	\$ 491,869	\$ 24,106	\$ 44,256	\$ 21,441	\$ 3,282,950

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

Land improvements	7 years
Buildings	20-50 years
Buildings - electrical engineering	20 years
Testing equipment	3-5 years
Office equipment	3 years
Mechanical equipment	3 years
Other equipment	3-5 years

15. LEASE ARRANGEMENTS

a. Right-of-use assets - 2019

	December 31, 2019
Carrying amounts	
Buildings Transportation equipment	\$ 32,058 <u>782</u>
	<u>\$ 32,840</u>
	For the Year Ended December 31, 2019
Depreciation charge for right-of-use assets Buildings Transportation equipment	\$ 10,575 627
	\$ 11,202

Except for the depreciation recognized on right-of-use assets, the Group had no significant additions, disposals, and impairment of right-of-use assets for the year ended December 31, 2019.

b. Lease liabilities - 2019

	December 31, 2019
Carrying amounts	
Current Non-current	\$\frac{\\$ 12,520}{\\$ 20,702}

Range of discount rate for lease liabilities was as follows:

	December 31, 2019
Buildings	2.55%-2.85%
Transportation equipment	2.6%

c. Material lease-in activities and terms

The Group leases buildings for the use of plants and offices with lease terms from 2017 to 2024. The lease contract for buildings specifies that lease payments will be adjusted from the third year on the basis of changes in the consumer price index. The Group has no options to purchase the equipment for a nominal amount at the end of the lease terms.

d. Other lease information

2019

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

2018

The Group as lessee

The Group's lease contracts for a factory and an office expire on December 31, 2022.

The future minimum lease payments of operating lease commitments are as follows:

	December 31, 2018
Not later than 1 year Later than 1 year and not later than 5 years	\$ 20,260 23,023
	<u>\$ 43,283</u>

16. INTANGIBLE ASSETS

	Computer Software	Technology License Fees	Total
Balance at January 1, 2018	\$ 153,511	\$ 64,619	\$ 218,130
Additions	112,514	23,331	135,845
Amortization	(152,472)	(48,885)	(201,357)
Effects of foreign currency exchange			
differences	(68)	_ _	(68)
Balance at December 31, 2018	<u>\$ 113,485</u>	\$ 39,065	\$ 152,550 (Continued)

	Computer Software	Technology License Fees	Total
Balance at January 1, 2019	\$ 113,485	\$ 39,065	\$ 152,550
Additions	183,011	92,433	275,444
Amortization	(122,989)	(36,952)	(159,941)
Effects of foreign currency exchange			
differences	(27)		(27)
Balance at December 31, 2019	<u>\$ 173,480</u>	<u>\$ 94,546</u>	\$ 268,026 (Concluded)

The above items of intangible assets are amortized on a straight-line basis over the following estimated useful lives of the assets:

Computer software	1-5 years
Technology license fees	1-8 years

17. OTHER PAYABLES

	December 31	
	2019	2018
Other payables		
Salaries and bonuses payable Others	\$ 3,221,135 	\$ 2,452,835
	<u>\$ 4,398,129</u>	<u>\$ 3,716,898</u>

18. OTHER CURRENT LIABILITIES

	December 31	
	2019	2018
Other payables		
Refund liabilities	\$ 419,506	\$ 185,919
Payables for purchases of equipment	35,810	30,832
Receipts under custody	29,245	23,927
Others	<u>35,183</u>	98,384
	<u>\$ 519,744</u>	<u>\$ 339,062</u>

19. RETIREMENT BENEFIT PLANS

a. Defined contribution plan

The Corporation and some subsidiaries of the Group adopted a pension plan under the Labor Pension Act (the "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 Corporation 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 monthly salaries of the six months before retirement. The Corporation contributes amounts equal to 2% of total monthly salaries and wages to a pension fund administered by the pension fund monitoring committee. Pension contributions are deposited in the Bank of Taiwan in the committee's name. Before the end of each year, the Corporation 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 Corporation 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 Corporation has no right to influence the investment policy and strategy.

The amounts included in the consolidated balance sheets in respect of the Corporation's defined benefit plan were as follows:

	December 31	
	2019	2018
Present value of defined benefit obligation Fair value of plan assets	\$ 133,343 (38,398)	\$ 127,656 (34,829)
Net defined benefit liabilities	<u>\$ 94,945</u>	<u>\$ 92,827</u>

Movements in net defined benefit liabilities were as follows:

	Present Value of the Defined Benefit Obligation	Fair Value of the Plan Assets	Net Defined Benefit Liabilities
Balance at January 1, 2018	\$ 116,566	\$ (31,669)	\$ 84,897
Service costs	4054		4.05.4
Current service costs	4,954	- (4.42)	4,954
Net interest expense (income)	1,633	(443)	1,190
Recognized in profit or loss	6,587	(443)	6,144
Remeasurement			
Return on plan assets (excluding amounts included in net interest)	_	(802)	(802)
Actuarial loss - changes in financial	_	(802)	(802)
assumptions	4,695	_	4,695
Actuarial profit - experience adjustments	(192)	_	(192)
Recognized in other comprehensive income	4,503	(802)	3,701
Contributions from the employer		(1,915)	$\frac{-3,751}{(1,915)}$
Balance at December 31, 2018	<u>\$ 127,656</u>	<u>\$ (34,829)</u>	\$ 92,827
Balance at January 1, 2019	\$ 127,656	\$ (34,829)	\$ 92,827
Service costs		- (-))	, , , , , , , , , , , , , , , , , , ,
Current service costs	1,591	_	1,591
Net interest expense (income)	1,532	(418)	1,114
Recognized in profit or loss	3,123	(418)	2,705
Tree-Purpos in broth or 1000			(Continued)

enefit Fai	r Value of	et Defined Benefit Liabilities
- \$	(1,119) §	(1,119)
8,565	-	8,565
<u>(6,001)</u>	<u> </u>	(6,001)
<u>2,564</u>	(1,119)	1,445
<u> </u>	(2,032)	(2,032)
<u>\$3,343</u> <u>\$</u>	(38,398)	S 94,945 (Concluded)
	- \$ 8,565 (6,001)	Fair Value of the Plan Assets - \$ (1,119) \$ 8,565 - (6,001) - (1,119) - (2,032)

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

	For the Year Ended December 31	
	2019	2018
Operating costs Marketing expenses	\$ 433 302	\$ 859 716
Administrative expenses	695	1,597
Research and development expenses	<u>1,275</u>	<u>2,972</u>
	<u>\$ 2,705</u>	<u>\$ 6,144</u>

Recognized in other comprehensive income was an actuarial loss of \$1,156 thousand and \$1,530 thousand in 2019 and 2018, respectively. The cumulative amount of actuarial loss recognized in other comprehensive income as of December 31, 2019 and 2018 was \$42,283 thousand and \$41,127 thousand, respectively.

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

	December 31	
	2019	2018
Discount rate	0.80%	1.20%
Expected rate of salary increase	4.00%	4.00%

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

	December 31	
	2019	2018
Discount rate		
0.25% increase	\$ (5,43 <u>0</u>)	\$ (5,838)
0.25% decrease	\$ 5,670	\$ 6,160
Expected rate of salary increase		
0.25% increase	\$ 5,174	\$ 5,655
0.25% decrease	<u>\$ (4,971</u>)	<u>\$ (5,404</u>)

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

	December 31	
	2019	2018
The expected contributions to the plan for the next year	\$ 2,038	\$ 2,097
The average duration of the defined benefit obligation	17 years	19 years

20. EQUITY

a. Share capital

Common shares

	December 31	
	2019	2018
Number of shares authorized (in thousands)	280,000	230,000
Shares authorized	<u>\$ 2,800,000</u>	<u>\$ 2,300,000</u>
Number of shares issued and fully paid (in thousands)	197,074	197,074
Shares issued	\$ 1,970,740	\$ 1,970,740

On November 13, 2018, an employee share option plan was approved by the Corporation's board of directors which was declared effective on November 28, 2018, after the Financial Supervisory Commission (FSC) approved this plan as shown in the FSC's issued document No. 1070344165. In accordance with Article 56, Section 2 of the Regulations Governing the Offering and Issuance of Securities by Securities Issuers and the regulations of the issuance of employee share options in 2018, shares can be issued as a whole or in parts depending on the actual needs of the Corporation within the year starting from the date the issuer received the notification of approval from the authorities.

On November 11, 2019, an employee share option plan was approved by the Corporation's board of directors which was declared effective on November 22, 2019, after the Financial Supervisory Commission (FSC) approved this plan as shown in the FSC's issued document No. 1080336954. In accordance with Article 56, Section 2 of the Regulations Governing the Offering and Issuance of Securities by Securities Issuers and the regulations of the issuance of employee share options in 2019, shares can be issued as a whole or in parts depending on the actual needs of the Corporation within the year starting from the date the issuer received the notification of approval from the authorities.

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

Of the Corporation's authorized capital shares, 16,000 thousand shares were reserved for the issuance of employee share options.

b. Capital surplus

	December 31	
	2019	2018
May be used to offset a deficit, distributed as cash dividends, or transferred to share capital (1)		
Issuance of common shares	\$ 6,237,434	\$ 6,237,434
The difference between the consideration received or paid and the carrying amount of the subsidiaries' net assets during actual disposal or acquisition	148,758	148,758
May only be used to offset a deficit		
Expired share options	227	227
Changes in percentage of ownership interests in subsidiaries (2) Share of changes in capital surplus of associates or joint ventures	2,369	-
	335,316	288,231
	\$ 6,724,104	<u>\$ 6,674,650</u>

- 1) Such capital surplus may be used to offset a deficit; in addition, when the Corporation has no deficit, such capital surplus may be distributed as cash dividends or transferred to share capital (limited to a certain percentage of the Corporation's capital surplus and once a year).
- 2) Such capital surplus arises from the effects of changes in ownership interests in subsidiaries resulting from equity transactions other than actual disposals or acquisitions or from changes in capital surplus of subsidiaries accounted for using the equity method.

c. Retained earnings and dividend policy

Under the dividends policy as set forth in the amended Articles, where the Corporation made profit in a fiscal year, the profit shall be first utilized for paying taxes, offsetting losses of previous years, setting aside as legal reserve 10% of the remaining profit, setting aside or reversing a special reserve in accordance with the laws and regulations, and then any remaining profit together with any undistributed retained earnings shall be used by the Corporation's board of directors as the basis for proposing a distribution plan, which should be resolved in the shareholders' meeting for the distribution of dividends and bonus to shareholders. For the policies on distribution of employees' compensation and remuneration to directors and supervisors before and after amendment, refer to Note 22(f) "employees' compensation and remuneration of directors and supervisors".

The Corporation's dividend distribution policy takes into consideration the current and future investment environment, capital requirements, domestic and international competition, capital budget plans, shareholders' interests, the balance between retained earnings and dividends, and the Corporation's long-term financial plans. In accordance with the laws and regulations, the board of directors propose a distribution plan on an annual basis, which should be resolved in the shareholder's meeting. Profit may be distributed as cash or share dividends; however, cash dividends should be at least 10% of the total dividends distributed.

The Corporation appropriates or reverses a special reserve in accordance with Rule No. 1010012865 issued by the Financial Supervisory Commission. Distributions can be made out of any subsequent reversal of the debit to other equity items.

A legal reserve may be used to offset deficits. If the Corporation has no deficit and the legal reserve has exceeded 25% of the Corporation's paid-in capital, the excess may be transferred to capital or distributed in cash.

The appropriations of earnings for 2018 and 2017 were approved in the shareholders' meeting on June 12, 2019 and June 8, 2018, respectively, and were as follows:

	Appropriation of Earnings	
	For Year 2018	For Year 2017
Legal reserve	\$ 431,812	\$ 576,097
Special reserve (reversal) Cash dividends	380,927 2,561,962	(25,965) 3,350,258
Cash dividends per share (NT\$)	13	3,330,238 17

The appropriation of earnings for 2019 had been proposed by the Corporation's board of directors on March 16, 2020. The appropriation and dividends per share were as follows:

	Appropriation of Earnings	Dividends Per Share (NT\$)
Legal reserve	\$ 455,816	
Reversal of special reserve	(204,802)	
Cash dividends	2,561,962	\$13

The appropriation of earnings for 2019 are subject to the resolution of the shareholders in the shareholders' meeting to be held on June 3, 2020.

21. INCOME TAXES

a. Income tax recognized in profit or loss

The major components of tax expense were as follows:

	For the Year Ended December 31	
	2019	2018
Current tax		
In respect of the current year	\$ 756,349	\$ 659,411
Adjustments for prior periods	33	(163,086)
Income tax on unappropriated earnings	49,037	185,973
	805,419	682,298
Deferred tax		
In respect of the current year	(322)	54,748
Effect of change in tax rate		<u>(49,984</u>)
	(322)	4,764
Income tax expense recognized in profit or loss	\$ 805,097	<u>\$ 687,062</u>

A reconciliation of accounting profit and income tax expense for 2019 and 2018 is as follows:

	For the Year Ended December 31	
	2019	2018
Profit before tax from continuing operations	\$ 5,350,934	\$ 5,005,181
Income tax expense calculated at the statutory rate	\$ 1,090,690	\$ 1,022,903
Nondeductible expenses in determining taxable income	-	1,107
Unrecognized deductible temporary differences	7,436	(6,690)
Tax-exempt income	(343,304)	(304,852)
Income tax on unappropriated earnings	49,037	185,973
Effect of change in tax rate	-	(49,984)
Effect of different tax rate of group entitles operating in other		,
jurisdictions	1,205	1,691
Adjustments for prior years' tax	33	(163,086)
Income tax expense recognized in profit or loss	\$ 805,097	<u>\$ 687,062</u>

The Income Tax Act in the ROC was amended in 2018, and the corporate income tax rate was adjusted from 17% to 20%. 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. The Group has already deducted the amount of capital expenditure from the unappropriated earnings in 2018 that was reinvested when calculating the tax on unappropriated earnings for the year ended December 31, 2019.

The appropriation of the 2020 earnings is uncertain and is subject to approval at the shareholders'

meeting; thus, the potential consequences of income tax on the 2019 unappropriated earnings are not reliably determinable.

b. Income tax benefit recognized in other comprehensive income

	For the Year Ended December 31	
	2019	2018
Deferred income tax		
Effect of change in tax rate Recognized in other comprehensive income	\$ -	\$ 3,857
Actuarial gain on defined benefit plan Translation of foreign operations	289 13,669	740
Total income tax recognized in other comprehensive income	<u>\$ 13,958</u>	<u>\$ 5,385</u>

c. Current tax assets and liabilities

	December 31		
	2019	2018	
Current tax assets Tax refund receivable Current tax liabilities	<u>\$ 45,499</u>	\$ 23,448	
Income tax payable	<u>\$ 602,714</u>	<u>\$ 523,854</u>	

d. Deferred tax assets and liabilities

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

For the year ended December 31, 2019

	Opening Balance	Recognized in Profit or Loss	Recognized in Other Compre- hensive Income	Exchange Differences	Closing Balance
Deferred tax assets					
Temporary differences					
Allowance for impairment loss	\$ 17,397	\$ (9,913)	\$ -	\$ -	\$ 7,484
Inventory write-downs	80,319	(12,740)	-	-	67,579
Deferred revenue	3,878	(2,745)	-	(44)	1,089
Refund liabilities	37,184	46,717	-	-	83,901
Defined benefit obligation	18,565	135	289	-	18,989
Unrealized exchange losses	85,242	22,423	-	5	107,670
Impairment loss on financial assets	31,801	(6,293)	-	-	25,508
Exchange differences on translating					
foreign operations	16,960	-	13,669	-	30,629
Share of losses of subsidiaries and					
associates	13,110	(13,110)	-	-	-
Property, plant and equipment	2,197	(56)	-	-	2,141
Non-leaving-pay	-	92	-	(2)	90
Unrealized gain on transactions with					
subsidiaries	3,910	(2,258)	-	-	1,652
	<u>\$ 310,563</u>	<u>\$ 22,252</u>	<u>\$ 13,958</u>	<u>\$ (41)</u>	<u>\$ 346,732</u>

	Opening Balance	Recognized in Profit or Loss	Recognized in Other Compre- hensive Income	Exchange Differences	Closing Balance
Deferred tax liabilities					
Temporary differences Share of gains of subsidiaries and associates	<u>\$ -</u>	<u>\$ 21,930</u>	<u>\$</u>	<u>\$</u>	\$ 21,930

For the year ended December 31, 2018

	Opening Balance	Recognized in Profit or Loss	Recognized in Other Compre- hensive Income	Exchange Differences	Closing Balance
Deferred tax assets					
Temporary differences					
Allowance for impairment loss	\$ 21,608	\$ (4,211)	\$ -	\$ -	\$ 17,397
Inventory write-downs	52,567	27,752	-	-	80,319
Deferred revenue	4,928	(967)	-	(83)	3,878
Refund liabilities	49,654	(12,470)	-		37,184
Defined benefit obligation	14,433	1,961	2,171	-	18,565
Unrealized exchange losses	77,475	7,767	-	-	85,242
Impairment loss on financial assets	44,475	(12,674)	-	-	31,801
Exchange differences on translating					
foreign operations	13,746	-	3,214	-	16,960
Share of losses of subsidiaries and					
associates	29,224	(16,114)	-	-	13,110
Property, plant and equipment	1,915	282	-	-	2,197
Unrealized gain on transactions with					
subsidiaries		3,910			3,910
	<u>\$ 310,025</u>	<u>\$ (4,764)</u>	<u>\$ 5,385</u>	<u>\$ (83)</u>	\$ 310,563

e. Income tax assessments

Associate	For the Year Ended
Phison Electronics Corp.	2016
Lian Xu Dong Investment Corporation	2017
Emtops Electronics Corp.	2017
Ostek Corporation	2017
Phisontech Electronics Taiwan Corp.	2017
Memoryexchange Corporation	2017

22. NET PROFIT (LOSS) FROM CONTINUING OPERATIONS

The following items were included in the net profit:

a. Other gains and losses

	For the Year Ended December 31	
	2019	2018
Fair value changes of financial assets and financial liabilities		
Financial assets mandatorily classified as FVTPL	\$ 154,451	\$ (12,148)
Net foreign exchange (losses) gains	(138,374)	185,916
Others	11,795	1,856
	<u>\$ 27,872</u>	<u>\$ 175,624</u>
b. Other income		
	For the Year E	nded December
	3	
	2019	2018
Interest income		
Bank deposits	\$ 52,922	\$ 51,067
Others	5,551	3,122
	58,473	54,189
Rental income	2,478	1,885
Dividend income	81,192	41,698
Others	216,727	201,725
	<u>\$ 358,870</u>	<u>\$ 299,497</u>
c. Finance costs		
	For the Year En	nded December
	3	1
	2019	2018
Interest on bank loans	\$ 1,085	\$ 5,070
Interest on lease liabilities	921	<u> </u>
	<u>\$ 2,006</u>	\$ 5,070

d. Depreciation and amortization

d. Depreciation and amortization	For the Year Ended December 31	
	2019	2018
Property, plant and equipment	\$ 282,019	\$ 223,830
Right-of-use assets	11,202	-
Intangible assets	159,941	201,357
	<u>\$ 453,162</u>	<u>\$ 425,187</u>
An analysis of depreciation by function		
Operating costs	\$ 54,672	\$ 45,945
Operating expenses	238,549	<u>177,885</u>
	<u>\$ 293,221</u>	<u>\$ 223,830</u>
An analysis of amortization by function Operating expenses	<u>\$ 159,941</u>	<u>\$ 201,357</u>
e. Employee benefits expense		
		nded December
	2019	2018
Short-term employee benefits	<u>\$ 4,420,794</u>	\$ 2,939,711
Post-employment benefits	0.6.050	02.200
Defined contribution plan	96,078	82,200
Defined benefit plan	2,705	6,144
Other employee benefits	98,783	88,344
Employee welfare	60,158	55,870
Food stipend	48,902	41,210
1 ood supend	$\frac{10,902}{109,060}$	97,080
Termination benefits	1,160	55
	<u>\$ 4,629,797</u>	\$ 3,125,190
Employee benefits		
Recognized in operating costs	\$ 240,521	\$ 212,504
Recognized in operating expenses	4,389,276	2,912,686
	<u>\$ 4,629,797</u>	\$3,125,190

f. Employees' compensation and remuneration of directors and supervisors

The Corporation accrued employees' compensation and remuneration of directors and supervisors at the rates of 8%-19% and no higher than 1.5%, respectively, of net profit before income tax, employees' compensation, and remuneration of directors and supervisors. The employees' compensation and remuneration of directors and supervisors for the years ended December 31, 2019 and 2018, which have been approved by the Corporation's board of directors on March 16, 2020 and March 21, 2019, respectively, were as follows:

Accrual rate

	For the Year Ended December 31	
	2019	2018
Employees' compensation	10.79%	9.84%
Remuneration of directors and supervisors	0.58%	0.72%

Amount

	For the Year Ended December 31					
	2019		20	2018		
	Cash Dividends	Shar Divide	-	Cash Dividends	Sha Divid	
Employees' compensation Remuneration of directors and	\$ 650,000	\$	-	\$ 550,000	\$	-
supervisors	35,000		_	40,000		_

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

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

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

g. Gains or losses on foreign currency exchange

	For the Year Ended December 31		
	2019	2018	
Foreign exchange gains Foreign exchange losses	\$ 358,481 (496,855)	\$ 589,489 (403,573)	
Net (losses) gains	<u>\$(138,374</u>)	<u>\$ 185,916</u>	

23. EARNINGS PER SHARE

Unit:	NT\$	Per	Share
-------	------	-----	-------

	For the Year Ended December 31		
	2019	2018	
Basic earnings per share Diluted earnings per share	\$ 23.05 \$ 22.78	\$21.91 \$21.60	

The earnings and weighted-average number of ordinary shares outstanding used in the computation of earnings per share were as follows:

Net Profit for the Year

	For the Year Ended December 31	
	2019	2018
Earnings used in the computation of basic earnings per share Profit for the period attributable to owners of the Corporation Earnings used in the computation of diluted earnings per share	\$4,543,489	\$ 4,318,119
Profit for the period attributable to owners of the Corporation	\$ 4,543,489	<u>\$ 4,318,119</u>

Shares

(In Thousands of Shares)

	For the Year Ended December 31	
	2019	2018
Weighted-average number of common shares used in the computation of basic earnings per share	197,074	197,074
Effect of potentially dilutive common shares: Employees' compensation	2,367	2,867
Weighted-average number of common shares used in the computation of dilutive earnings per share	<u>199,441</u>	<u>199,941</u>

If the Group offered to settle compensation or bonuses paid to employees in cash or shares, the Group assumed the entire amount of the compensation or 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, as the effect is dilutive. Such dilutive effect of the potential shares is included in the computation of diluted earnings per share until the number of shares to be distributed to employees is resolved in the following year.

24. EQUITY TRANSACTIONS WITH NON-CONTROLLING INTERESTS

In 2019, the Group subscribed for additional new shares of Hefei Core Storage Electronic Limited at a percentage different from its existing ownership percentage, resulting in a reduction in its ownership percentage from 100% to 97.69%.

The above transactions were accounted for as equity transactions, since the Group did not cease to have control over these subsidiaries.

	For the Year Ended December 31, 2019
Cash consideration received The proportionate share of the comming amount of the not essets of the subsidiary.	\$ 27,250
The proportionate share of the carrying amount of the net assets of the subsidiary transferred to non-controlling interests	(24,881)
Differences recognized from equity transactions	\$ 2,369
Line items adjusted for equity transactions	
Capital surplus - changes in percentage of ownership interests in subsidiaries	\$ 2,369

25. CAPITAL MANAGEMENT

The Group manages its capital to ensure that the Group will be able to continue as a going concern while maximizing the return to shareholders through the optimization of the debt and equity balance.

The capital structure of the Group consists of net debts (borrowings offset by cash and cash equivalents) and equity (comprising share capital, capital surplus, retained earnings and other equities).

The Group is not subject to any externally imposed capital requirements.

Key management personnel of the Group review the capital structure on an annual basis. As part of this review, the key management personnel consider the cost of capital and the risks associated with each class of capital. Based on recommendations of the key management personnel, in order to balance the overall capital structure, the Group may adjust the amount of dividends paid to shareholders and the amount of new debt issued or existing debt redeemed.

26. FINANCIAL INSTRUMENTS

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

The Group's management considers the carrying amounts recognized in the consolidated financial statements for financial assets and financial liabilities not carried at fair value to approximate their fair values or their fair values cannot be reliably measured.

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

1) Fair value hierarchy

December 31, 2019

	Level 1	Level 2	Level 3	Total
Financial assets at FVTPL Domestic listed shares Domestic unlisted shares Overseas unlisted shares Domestic private equity funds Beneficiary certificates - open-end funds	\$ 529,538 - - - 2,816,597	\$ - - - -	\$ - 341,618 72,280 45,408	\$ 529,538 341,618 72,280 45,408 2,816,597
Convertible bonds	\$ 3,346,135	<u> </u>	94,770 \$ 554,076	94,770 \$ 3,900,211
Financial assets at FVTOCI Investments in equity instruments Domestic unlisted shares Overseas unlisted shares	\$ - - <u>\$</u> -	\$ - - \$ -	\$ 230,267 406,165 \$ 636,432	\$ 230,267 406,165 \$ 636,432
December 31, 2018				
2000me 01 0 1; 2010				
Financial assets at FVTPL Domestic listed shares Domestic unlisted shares Overseas unlisted shares Domestic private equity funds Beneficiary certificates - open-end funds Convertible bonds	Level 1 \$ 372,994	Level 2 \$	Level 3 \$ - 281,900 98,523 47,366 - 85,288 \$ 513,077	Total \$ 372,994 281,900 98,523 47,366 2,619,258 85,288 \$ 3,505,329

There were no transfers between Levels 1 and 2 for the years ended December 31, 2019 and 2018.

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

For the year ended December 31, 2019

		Financial Ass	ets at FVTPL	Financial Assets at	
	Derivative -	es Derivatives		- FVTOCI	
Financial Assets	Private Equity Funds	Convertible Bonds	Equity Instruments	Equity Instruments	Total
Balance at January 1, 2019 Recognized in profit or loss	\$ 47,3	\$ 85,288	\$ 380,423	\$ 450,397	\$ 963,474
Other losses Recognized in other comprehensive income	58)	,9 (5,1	(10,072)	-	(17,164)
Unrealized gain on financial assets at FVTOCI Capital reduction and			-	265,956	265,956
refund of shares			(8,730)	-	(8,730)
Purchases		- 92,379 (77,7	52,277	33,160	177,816
Sales		- 63)	-	(112,653)	(190,416)
Effects of foreign currency exchange differences				(428)	(428)
Balance at December 31, 2019	<u>\$ 45,4</u>	<u>\$ 94,770</u>	<u>\$ 413,898</u>	<u>\$ 636,432</u>	<u>\$1,190,508</u>

For the year ended December 31, 2018

		Financial Assets at	FVTPL	Financial Assets at	
	Derivatives	Derivatives	_		
Financial Assets	Private Equity Funds	- Convertible Bonds	Equity Instruments	Equity Instruments	Total
Balance at January 1, 2018					
(IAS 39)	\$ -	\$ 53,722	\$ 434,763	\$ -	\$ 488,485
Transfers into Level 3					
(Application of IFRS 9)	47,032	-	302,656	511,227	860,915
Recognized in profit or loss	224	2.470	124 421		120 222
Other losses Recognized in other comprehensive income Unrealized gain on financial assets at FVTOCI	334	3,478	134,421	(169,451)	138,233
Purchases	_	77,763	13,201	134,207	225,171
		(49,6	(63,	,	,
Sales	-		·) -	- (25,586)	- (75,261)
Capital reduction and refund of shares	-	-	(69,855)	- -	(69,855)
Transfers out of Level 3			<u>(434,763)</u>	_	(434,763)
Balance at December 31, 2018	<u>\$ 47,366</u>	<u>\$ 85,288</u>	<u>\$ 380,423</u>	<u>\$ 450,397</u>	<u>\$ 963,474</u>

- 3) Valuation techniques and inputs applied for the purpose of Level 3 fair value measurement
 - a) The fair values of convertible bonds are determined using the Binary Tree Evaluation Model and option pricing models where the significant unobservable input is historical volatility. As of December 31, 2019 and 2018, the historical volatilities used were 49.88% and 58.61%, respectively.

b) The fair values of unlisted equity securities - domestic and foreign were determined using the market approach. In accordance with the trading prices of analogous subjects, taking the difference of the unlisted equity securities and analogous subjects into consideration, the value of the unlisted equity securities are estimated using the appropriate multiplier. The significant unobservable inputs used are listed in the table below. A decrease of the discount for the lack of marketability used in isolation would result in an increase in fair value.

	Decem	iber 31	
	2019	2018	•
Discount for lack of marketability	15%	15%	

c) The fair values of unlisted equity securities - foreign were determined using the income approach. In this approach, the discounted cash flow method was used to capture the present value of the expected future economic benefits to be derived from the ownership of these investees. The significant unobservable inputs used are listed in the table below. Decreases in the discount for non-controlling interests, the discount for lack of marketability and the weighted-average cost of capital (WACC) would result in increases in fair value. A decrease in sustainable revenue growth rates would result in a decrease in fair value.

	December 31	
	2019	2018
Discount for non-controlling interest	15%	15%
Discount for lack of marketability	15%	15%
Sustainable revenue growth rates	2%	2%
WACC	12.78-14.39%	13.7%

d) The fair values of unlisted equity securities - domestic and foreign and private equity funds were determined using the asset-based approach. In order to reflect the overall value of the Corporation or business, the total market value of the individual assets and individual liabilities of the evaluation target are evaluated. The significant unobservable inputs used are listed in the table below. Decreases in the discount for non-controlling interests and the discount for a lack of marketability would result in increases in fair value.

•	December 31		
	2019	2018	
Discount for non-controlling interests	10%	10%	
Discount for lack of marketability	10%	10%	
c. Categories of financial instruments			
	Decen	iber 31	
	2019	2018	
Financial assets			
Financial assets at FVTPL			
Mandatorily classified as FVTPL	\$ 3,900,211	\$ 3,505,329	
Financial assets at amortized cost (Note 1)	16,622,582	19,760,633	
Financial assets at FVTOCI Equity instruments	636,432	450,397	
Financial liabilities			
Financial liabilities at amortized cost (Note 2)	8,040,788	8,522,445	

- Note 1: The balances include financial assets measured at amortized cost, which comprise cash and cash equivalents, financial assets at amortized cost, notes receivable, accounts receivable and other receivables.
- Note 2: The balances include financial liabilities measured at amortized cost, which comprise notes payable, trade payables, and other payables.

d. Financial risk management objectives and policies

The Group's major financial instruments include equity investments, trade receivables, trade payables, borrowings and lease liabilities. The Group's financial management department provides services to the business unit and coordinates access to domestic and international financial markets. The risks include market risk (including foreign currency risk, interest rate risk and other price risk), credit risk and liquidity risk.

1) Market risk

The Group's activities expose it primarily to the financial risks of changes in foreign currency rates and interest rates.

a) Foreign currency risk

The Group had foreign currency sales and purchases, which exposed the Group to foreign currency risk. To avoid the decrease in foreign currency assets and adverse fluctuations of future cash flows resulting from changes in foreign currency exchange rates, the Group used foreign currency borrowings to hedge risks of foreign currency exchange rates. The gain or loss caused by changes in foreign currency exchange rates will be offset by profit or loss from the hedge. As a result, the market risk is immaterial.

The carrying amounts of the Group's foreign currency denominated monetary assets and monetary liabilities (including those eliminated on consolidation) and of the derivatives exposed to foreign currency risk at the end of the reporting period are referred in Note 31.

Sensitivity analysis

The Group was mainly exposed to the US dollar.

The following table details the Group's sensitivity to a 6% increase and decrease in the New Taiwan dollar (the functional currency) against the relevant foreign currencies. The sensitivity rate used when reporting foreign currency risk internally to key management personnel and represents management's assessment of the reasonably possible change in foreign exchange rates is 6%. The sensitivity analysis included only outstanding foreign currency denominated monetary items and adjusts its translation at the end of the reporting period for a 6% change in foreign currency rates. A positive number below indicates a decrease in pre-tax profit and other equity associated with the New Taiwan dollar strengthens 6% against the relevant currency. For a 6% weakening of the New Taiwan dollar against the relevant currency, there would be an equal and opposite impact on pre-tax profit and other equity and the balances below would be negative.

Impact of USD		
For the Year En	ded December 31	
2019 2018		
\$ 322 088	\$ 256,005	

Profit or loss

b) Interest rate risk

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

	December 31		
	2019	2018	
Fair value interest rate risk			
Financial assets	\$ 2,589,358	\$ 4,943,621	
Financial liabilities	33,222	-	
Cash flow interest rate risk			
Financial assets	7,672,079	9,299,883	

Sensitivity analysis

If interest rates had been 1 basis point higher and all other variables were held constant, the Group's pre-tax profit for the years ended December 31, 2019 and 2018 would increase by \$767 thousand and \$930 thousand, respectively.

c) Other price risk

The Group was exposed to equity price risks through its investments in international and domestic listed stock, convertible bonds, private equity funds and beneficial certificates.

Sensitivity analysis

The sensitivity analysis below was determined based on the Group's exposure to equity price risks at the end of the reporting period.

If equity prices had been 1% higher/lower, pre-tax profit for the year ended December 31, 2019 and 2018 would have increased/decreased by \$39,002 thousand and \$35,053 thousand respectively, as a result of the changes in fair value of financial assets at FVTPL, and the pre-tax other comprehensive income for the years ended December 31, 2019 and 2018 would have increased/decreased by \$6,364 thousand and \$4,504 thousand, respectively, as a result of the changes in fair value of financial assets at FVTOCI.

2) Credit risk

Credit risk refers to the risk that a counterparty will default on its contractual obligations resulting in a financial loss to the Group. As at the end of the reporting period, the Group's maximum exposure to credit risk, which would cause a financial loss to the Group due to a failure of counterparties to discharge an obligation and financial guarantees provided by the Group, comes from the carrying amounts of the respective recognized financial assets as stated in the consolidated balance sheets.

The targets of the aforementioned evaluation are financial assets that could potentially be influenced by the Group's counterparties defaulting on their contractual obligations and contracts with positive fair values as of the balance sheet date. The customers of the Group are financial institutions or manufacturers with good credit ratings; and thus, there is no expected material credit risk.

3) Liquidity risk

The Group manages liquidity risk by monitoring and maintaining a level of cash and cash equivalents deemed adequate to finance the Group's operations and mitigate the effects of fluctuations in cash flows. In addition, management monitors the utilization of bank borrowings and ensures compliance with loan covenants. The Group relies on bank borrowings as a significant source of liquidity. As of December 31, 2019 and 2018, the Group had available unutilized short-term bank loan facilities of \$7,858,400 thousand and \$7,922,200 thousand, respectively.

Liquidity and interest risk rate table for non-derivative financial liabilities

The following tables detail the Group's remaining contractual maturities for its non-derivative financial liabilities with agreed upon repayment periods. The tables have been drawn up based on the undiscounted cash flows of financial liabilities from the earliest date on which the Group can be required to pay.

			December 31, 201	9	
	On Demand or Less Than 1 Month	1-3 Months	3 Months to 1 Year	1-5 Years	More than 5 Years
Non-derivative financial liabilities					
Non-interest bearing liabilities Lease liabilities	\$ 3,172,708 1,110	\$ 1,995,386 2,220	\$ 3,475,408 9,934	\$ - 21,433	\$ - -
	<u>\$ 3,173,818</u>	\$ 1,997,606	<u>\$ 3,485,342</u>	<u>\$ 21,433</u>	<u> </u>

Additional information about the maturity analysis for lease liabilities:

	Less than 1 Year	1-5 Years	5-10 Years	10-15 Years	15-20 Years	20+ Years
Lease liabilities	\$ 13,264	<u>\$ 21,433</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
				December 31, 201	8	
		On Demand or Less Than 1 Month	1-3 Months	3 Months to 1 Year	1-5 Years	More than 5 Years
Non-derivative finan	cial liabilities					
Non-interest bearing	liabilities	<u>\$ 3,848,521</u>	\$ 2,902,468	\$ 2,295,310	\$ -	<u>\$</u>

e. Information on transfers of financial assets

Refer to Note 10 for more information relating to the Group's factored trade receivables.

27. RELATED PARTY TRANSACTIONS

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

Relationship

a. Related parties and their relationships

Related Party

Kelateu Farty	<u> Kelationship</u>
Toshiba International Procurement Hong Kong, Ltd. Kioxia America, Inc. Toshiba Corporation, Japan Toshiba Singapore Pte. Ltd. Dynabook ANZ Pty. Limited Kioxia Corporation Kioxia Singapore Pte. Ltd. Kioxia America, Inc. Kioxia Taiwan Corporation Toshiba Electronic Components Taiwan Corporation Orient Semiconductor Electronics Ltd. Dawning Leading Technology Inc. Apacer Technology Inc. United Power Research Technology Corporation Kingston Solutions Inc. PMS Technology Corporation Microtops Design Corporation Epostar Electronics Corporation Shenzhen EpoStar Electronics Limited Co. HOSIN Global Electronics Co., Ltd. (HK) Hefei DATANG Storage Technology Co., Ltd. SiliTai Electronics Co., Limited HOSIN Global Electronics Co., Ltd. (SZ)	Other related parties (Note 2) Other related parties (Note 3) Other related parties (Note 4) Other related parties (Note 5) Other related parties (Note 6) Other related parties Associates
Shenzhen EpoStar Electronics Limited Co.	Associates
Hefei DATANG Storage Technology Co., Ltd. SiliTai Electronics Co., Limited	Associates Associates
Wang Chih Ling Lin Wai	Associates Board of subsidiary Hefei Core Storage Electronic Limited Board of subsidiary Hefei Core Storage Electronic Limited

- Note 1: Toshiba Memory America, Inc. was renamed as Kioxia America, Inc. on October 1, 2019.
- Note 2: Toshiba Client Solutions ANZ Pty Limited was renamed as Dynabook ANZ Pty. Limited on April 1, 2019.
- Note 3: Toshiba Memory Corporation was renamed as Kioxia Corporation on October 1, 2019.
- Note 4: Toshiba Memory Singapore Pte. Ltd. was renamed as Kioxia Singapore Pte. Ltd. on October 1, 2019.
- Note 5: Toshiba Memory America, Inc. was renamed as Kioxia America, Inc. on October 1, 2019.
- Note 6: Toshiba Memory Taiwan Corporation was renamed as Kioxia Taiwan Corporation on October 1, 2019.
- Note 7: The dissolution of Dawning Leading Technology Inc. was approved in the shareholders' meeting held on August 29, 2018 and the date of merger was set as November 1, 2018; thus, starting from November 1, 2018, Dawning Leading Technology Inc. was no longer a related party of the Group.

b. Operating revenue

	For the Year Ended December 31			
Related Party Categories	2019	2018		
Associates Other related parties	\$ 1,323,270 	\$ 88,762 		
	<u>\$ 3,255,885</u>	<u>\$ 1,919,784</u>		

The terms of sales to related parties were similar to those for third parties.

c. Operating costs

1) Purchase of goods

	For the Year Ended December 31			
Related Party Categories	2019	2018		
Associates Other related parties Kioxia Taiwan Corporation Others	\$ 1,462,239 11,432,366 1,437,493	\$ 689,883 13,871,205 4,477,557		
	<u>\$ 14,332,098</u>	<u>\$19,038,645</u>		

2) Processing costs

	For the Year Ended December 31			
Related Party Categories	2019	2018		
Associates Other related parties	\$ 458 2,385,170	\$ 185 		
	<u>\$ 2,385,628</u>	<u>\$ 1,758,258</u>		

The terms of operating costs from related parties were similar to those for third parties.

d. Receivables from related parties

	December 31			
Related Party Categories	2019	2018		
Associates Other related parties	\$ 246,65 290,49	· · · · · · · · · · · · · · · · · · ·		
	\$ 537,14	9 \$ 344,249		

The outstanding trade receivables from related parties are unsecured. No bad debt expense was recognized for the allowance for impaired trade receivables with respect to the amounts owed by related parties in 2019 and 2018.

e. Payables to related parties

	December 31			
Related Party Categories	2019	2018		
Associates Other related parties	\$ 29,796	\$ 134,362		
Kioxia Taiwan Corporation Others	1,034,293 320,008	2,077,768 644,014		
	<u>\$ 1,384,097</u>	<u>\$ 2,856,144</u>		

The outstanding trade payables from related parties are unsecured.

f. Compensation of key management personnel

	For the Year Ended December 31			
		2019		2018
Short-term employee benefits Post-employment benefits Termination benefits Other employee benefits	\$	279,451 2,624 643 3,442	\$	192,693 1,866 - 4,294
	<u>\$</u>	286,160	<u>\$</u>	198,853

The remuneration of directors and key executives was determined by the remuneration committee based on the performance of individuals and market trends.

g. Issuance of ordinary shares for cash by subsidiary

On February 1, 2019, it was resolved in the shareholders' meeting of Hefei Core Storage Electronic Limited to issue ordinary shares which amounted to \$27,250 thousand (CNY5,950 thousand). The board of directors of Hefei Core Storage Electronic Limited, Wang Chih Ling and Lin Wai, each funded \$8,175 thousand and their shareholding percentages were both 0.69%.

28. ASSETS PLEDGED AS COLLATERAL OR FOR SECURITY

The following assets were provided as collateral for the tariff of imported raw materials:

	Decem	ıber 31
	2019	2018
Refundable deposits for customs duties - certificates of deposit		
(financial assets at amortized cost - current)	<u>\$ 20,383</u>	<u>\$ 56,997</u>

29. SIGNIFICANT CONTINGENT LIABILITIES AND UNRECOGNIZED COMMITMENTS

In addition to those disclosed in other notes, significant commitments and contingencies of the Group as of December 31, 2019 and 2018 were as follows:

Significant Commitments

	Decem	ber 31
	2019	2018
Unused letters of credit	<u>\$ 1,660,000</u>	<u>\$1,670,000</u>

30. SIGNIFICANT EVENTS AFTER THE REPORTING PERIOD

In response to the growth of the operation, the Corporation's board of directors resolved on January 17, 2020 to build a factory building in Zhunan Guangyuan Science and Technology Park by contracting third parties to construct on the land owned by the Corporation. The total price of the project was approximately \$1,398,000 thousand. The Corporation will finance the construction with its own funds. The expected construction period is from March 2020 to December 2021.

31. SIGNIFICANT ASSETS AND LIABILITIES DENOMINATED IN FOREIGN CURRENCIES

The Group entities' monetary financial assets and liabilities denominated in foreign currencies aggregated by the foreign currencies other than functional currencies and the related exchange rates between foreign currencies and respective functional currencies were as follows:

In Thousands of New Taiwan Dollars and Foreign Currencies

	December 31, 2019						
	Foreign	Exchange	New Taiwan				
	Currencies	Rates	Dollars				
Financial assets							
Monetary							
USD (USD:NTD)	\$ 255,830	29.9800	\$ 7,669,784				
USD (USD:CNY)	9,023	6.9762	270,504				
CNY (CNY:NTD)	34,065	4.3050	146,651				
Financial liabilities							
Monetary							
USD (USD:NTD)	85,796	29.9800	2,572,158				

	December 31, 2018						
	Foreign	Exchange	New Taiwan				
	Currencies	Rates	Dollars				
Financial assets							
Monetary							
USD (USD:NTD)	\$ 240,853	30.7150	\$ 7,397,797				
USD (USD:CNY)	4,805	6.8632	147,582				
CNY (CNY:NTD)	33,224	4.4720	148,577				
Financial liabilities							
Monetary							
USD (USD:NTD)	106,744	30.7150	3,278,640				

For the years ended December 31, 2019 and 2018, (realized and unrealized) net foreign exchange losses were \$138,374 thousand and gains \$185,916 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. OTHER SIGNIFICANT EVENT

The Corporation was under statutory investigation by the Taiwan Hsinchu District Prosecutorial Office ("District Prosecutorial Office") on and from August 5, 2016 for alleged violation of the Securities and Exchange Act (the "Case"). The investigation was concluded on August 31, 2017, and the chairman of the Corporation and other defendants were either charged with deferred prosecution or dropped claim for further prosecution by the prosecutor. Then the District Prosecutorial Office ex officio sent the ruling to the Taiwan High Prosecutors Office ("High Prosecutors Office") for reconsideration. On November 18, 2019, High Prosecutors Office partially set aside and dismissed the original ruling, and ordered the District Prosecutorial Office to continue the investigation. On July 30, 2019, the District Prosecutorials Office concluded the investigation and indicted the chairman of the Corporation and others for their alleged violation of the Securities and Exchange Act and related provisions. A trial of the Case would be held in the Hsinchu District Court. The chairman of the Corporation would strive for a fair judgment in accordance with the law. The Corporation evaluated that its finance and operations had not yet been affected. Following the aforementioned indictment, the Corporation was served with complaints from the Hsinchu District Court on November 8, 2019 and December 13, 2019, that Securities and Futures Investors Protection Center ("Investors Protection Center") had filed two civil actions respectively as follows: (1) the first civil action was to remove Mr. K.S. Pua from director position of the Corporation's board ("Removal Action"); (2) the second civil action was to claim compensation damage of \$697,389 thousand against the Corporation, its board of directors and other co-defendants on behalf of certain investors ("Class Action"). Those two civil actions were derivative litigations arising from the Case. The Corporation has already appointed civil defense attorneys and filed a motion to dismiss those two civil actions with the court. With regard to the aforementioned civil actions filed by Investors Protection Center, the possible consequences or developments resulting from litigations could not be assessed by the Corporation, but it was considered to have no significant influence to its finance and operations at the present stage.

33. ADDITIONAL DISCLOSURES

- a. Information about significant transactions and b. investees:
 - 1) Financing provided to others. (None)

- 2) Endorsements/guarantees provided. (None)
- 3) Marketable securities held (excluding investments in subsidiaries, associates and joint ventures). (Table 1)
- 4) Marketable securities acquired or disposed of at costs or prices of at least NT\$300 million or 20% of the paid-in capital. (None)
- 5) Acquisitions of individual real estate at costs of at least NT\$300 million or 20% of the paid-in capital. (None)
- 6) Disposals of individual real estate at prices of at least NT\$300 million or 20% of the paid-in capital. (None)
- 7) Total purchases from or sales to related parties amounting to at least NT\$100 million or 20% of the paid-in capital. (Table 2)
- 8) Receivables from related parties amounting to at least NT\$100 million or 20% of the paid-in capital. (Table 3)
- 9) Trading in derivative instruments. (None)
- 10) Other: Intercompany relationships and significant intercompany transactions. (Table 4)
- 11) Information of investees. (Table 5)
- c. Information on investments in mainland China:
 - 1) Information on any investee company in mainland China, showing the name, principal business activities, paid-in capital, method of investment, inward and outward remittance of funds, ownership percentage, net income of investees, investment income or loss, carrying amount of the investment at the end of the period, repatriations of investment income, and limit on the amount of investments in the mainland China area. (Table 6)
 - 2) Any of the following significant transactions with investee companies in mainland China, either directly or indirectly through a third party, and their prices, payment terms, and unrealized gains or losses. (Table 7)
 - a) The amount and percentage of purchases and the balance and percentage of the related payables at the end of the period.
 - b) The amount and percentage of sales and the balance and percentage of the related receivables at the end of the period.
 - c) The amount of property transactions and the amount of the resultant gains or losses.
 - d) The balance of negotiable instrument endorsements, guarantees or pledges of collateral at the end of the period and their purposes.
 - e) The highest balance, the end of period balance, the interest rate range, and total current period interest with respect to financing of funds.
 - f) Other transactions that have a material effect on the profit or loss for the period or on the financial position, such as the rendering or receipt of services.

34. SEGMENT INFORMATION

Information reported to the chief operating decision maker for the purposes of resource allocation and assessment of segment performance focuses on the types of goods or services delivered or provided. Specifically, the Group's reportable segments include departments that design and sell flash memory controllers and make investments.

a. Segment revenue and results

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

	Segment Revenue		Segment Profit (Loss)				
	For the Year Ended		For the Year Ended				
	Decem	iber 31	Decem	ber 31			
	2019	2018	2019	2018			
Department that designs and sells flash memory							
controllers	\$ 44,693,441	\$ 40,788,105	\$ 5,185,563	\$ 4,710,274			
Investment department		<u> </u>	24,450	(490)			
Total operating segments	\$44,693,441	\$40,788,105	5,210,013	4,709,784			
Other gains and losses			27,872	175,624			
Share of losses of associates			(243,815)	(174,654)			
Other income			358,870	299,497			
Financial costs			(2,006)	(5,070)			
Income before income tax			\$ 5,350,934	\$ 5,005,181			

Segment revenue reported above was generated from external customers. There were no intersegment sales for the years 2019 and 2018.

Segment profit represented the profit before tax earned by each segment without the share of gains or losses of associates, rental income, interest income, gains or losses on the disposal of property, plant and equipment, gains or losses on sales of investments, exchange gains or losses, valuation gains or losses on financial instruments, financial costs and income tax expense.

b. Segment assets and liabilities

The Group does not report segment assets and liabilities or other segment information to the chief operating decision maker. Therefore, no information is disclosed.

c. Revenue from major products and services

The following is an analysis of the Group's revenue of continuing operations from its major products and services:

	_	nded December 31
11 1	2019	2018
Sales of nand flash controller and application products etc. Services income	\$ 44,336,703 <u>356,738</u>	\$ 40,615,264 172,841
	\$ 44,693,441	<u>\$40,788,105</u>

d. Geographical information

The Group's revenue from continuing operations from external customers by location of operations and information about its non-current assets by location of assets are detailed below.

		om External omers	Non-curr	ent Assets
		ear Ended iber 31		ear Ended iber 31
	2019	2018	2019	2018
Asia	\$ 30,003,289	\$ 24,336,197	\$ 3,583,816	\$ 3,142,781
America	10,225,567	12,646,332	-	-
Europe	4,209,463	3,609,347	-	-
Australia	254,547	195,271	-	-
Others	575	958	-	
	<u>\$ 44,693,441</u>	\$40,788,105	\$ 3,583,816	\$ 3,142,781

Revenue was categorized depending on clients' locations. Non-current assets refer to property, plant and equipment, right-of-use assets, and intangible assets.

e. Information about major customers

Included in revenue arising from the sale of nand flash, controller and application products of \$44,336,703 thousand and \$40,615,264 thousand in 2019 and 2018, respectively, is revenue of approximately \$5,289,287 thousand and \$8,928,975 thousand which arose from sales to the Group's largest customer. No other single customer contributed 10% or more to the Group's revenue for both 2019 and 2018.

PHISON ELECTRONICS CORP. AND SUBSIDIARIES

MARKETABLE SECURITIES HELD (EXCLUDING INVESTMENTS IN SUBSIDIARIES) DECEMBER 31, 2019

(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

		Relationship with		December 31, 2019				
Holding Company Name	Marketable Securities Type/ Name and Issuer (Note 1)	the Holding Company	Financial Statement Account	Tharacar I hite		Percentage of Ownership (%)	Market Value	Note
hison Electronics Corp.	Beneficiary certificates							
1	Mega Diamond Money Market Fund	-	Financial assets at FVTPL - current	16,326	\$ 205,565	_	\$ 205,565	Note 3
	FSITC Taiwan Money Market Fund	-	Financial assets at FVTPL - current	13,369	205,391	_	205,391	Note 3
	Franklin Templeton SinoAm Money Market Fund	-	Financial assets at FVTPL - current	20,685	214,691	-	214,691	Note
	Yuanta De-Li Money Market Fund	-	Financial assets at FVTPL - current	9,298	152,208	-	152,208	Note
	Jih Sun Money Market Fund	-	Financial assets at FVTPL - current	13,767	204,813	-	204,813	Note
	Allianz Global Investors Taiwan Money Market Fund	-	Financial assets at FVTPL - current	16,113	202,698	-	202,698	Note
	CTBC Hwa-win Money Market Fund	-	Financial assets at FVTPL - current	18,239	201,762	_	201,762	Note
	Prudential Financial Money Market Fund	-	Financial assets at FVTPL - current	12,070	191,690	_	191,690	Note
	Eastspring Investments Well Pool Money Market Fund	_	Financial assets at FVTPL - current	11,087	151,408	_	151,408	Note
	Taishin 1699 Money Market Fund	-	Financial assets at FVTPL - current	14,809	201,168	_	201,168	Note
	Taishin Ta-Chong Money Market Fund	_	Financial assets at FVTPL - current	14,102	201,111	_	201,111	Note
	TCB Taiwan Money Market Fund	_	Financial assets at FVTPL - current	19,716	201,067	_	201,067	Note
	Capital Money Market Fund	-	Financial assets at FVTPL - current	12,416	201,104	-	201,104	Note
	Convertible bonds							
	Ubitus Inc.	-	Financial assets at FVTPL - current	-	94,770	-	94,770	Note
	Common shares							
	Orient Semiconductor Electronics, Ltd.	-	Financial assets at FVTPL - current	7,336	108,945	1.32	108,945	Note
	Apacer Technology Inc.	_	Financial assets at FVTPL - current	10,050	420,593	9.96	420,593	Note
	JAFCO Asia Technology Fund VI L.P.	-	Financial assets at FVTPL - non-current	1,000	18,849	0.67	18,849	Note
	AppWorks Fund II Co., Ltd.	_	Financial assets at FVTPL - non-current	8,850	232,179	11.11	232,179	Note
	Innorich Venture Capital Corp.	_	Financial assets at FVTPL - non-current	3,000	19,438	5.61	19,438	Note
	AppWorks Fund I Co., Ltd.	-	Financial assets at FVTPL - non-current	1,292	20,201	18.75	20,201	Note
	Aptos Technology Inc.	-	Financial assets at FVTOCI - non-current	529	_	0.60	-	
	Viva Baseball Co., Ltd.	-	Financial assets at FVTOCI - non-current	Note 6	_	8.33	-	-
	Adam Elements International Co., Ltd.	-	Financial assets at FVTOCI - non-current	1,710	37,906	19.00	37,906	Note
	THLight Co., Ltd.	-	Financial assets at FVTOCI - non-current	6,388	_	13.19	-	
	UD INFO Corp.	_	Financial assets at FVTOCI - non-current	741	81,264	17.98	81,264	Note
	GeoThings, Inc.	_	Financial assets at FVTOCI - non-current	150		6.70	_ ´ _	-
	Ironyun Incorporated (preference shares)	_	Financial assets at FVTOCI - non-current	5,000	_	5.64	_	-
	Gospal Ltd.	_	Financial assets at FVTOCI - non-current	811,857	3,156	3.40	3,156	Note
	H3 Platform, Inc.	_	Financial assets at FVTOCI - non-current	18,400	14,141	12.14	14,141	Note
	CAL-COMP INDUSTRIA DE	_	Financial assets at FVTOCI - non-current	11,966	67,208	17.16	67,208	Note
	SEMICONDUCTORES S.A.			,	- · , - · ·		2.,_00	
	Acer Synergy Tech Corp.	_	Financial assets at FVTPL - non-current	900	19,800	8.09	19,800	Note
)	ı	1	1	->,000	1		Conti

202

		Dalationship with		December 31, 2019				
Holding Company Name	Marketable Securities Type/ Name and Issuer (Note 1)	Relationship with the Holding Company	Financial Statement Account	Shares or Units (In Thousands)	Carrying Amount (Note 2)	Percentage of Ownership (%)	Market Value	Note
	Gomore Inc. Taishan Buffalo Investment Co., Ltd. (preference shares)	- -	Financial assets at FVTOCI - non-current Financial assets at FVTPL - non-current	16,925 50,000	10,061 50,000	3.39 1.08	10,061 50,000	Note 8 Note 8
	Private equity fund Fuh Hwa Smart Energy Fund	-	Financial assets at FVTPL - non-current	6,000	\$ 45,408	3.81	\$ 45,408	Note 5
Lian Xu Dong Investment Corporation	Beneficiary certificates FSITC Taiwan Money Market Fund Allianz Global Investors Taiwan Money Market Fund	- -	Financial assets at FVTPL - current Financial assets at FVTPL - current	1,986 2,424	30,513 30,495	- -	30,513 30,495	Note 3 Note 3
	Common shares United Power Research Technology Corp. Fresco Logic, Inc. (preference shares) Translink Capital Partners III, L.P.	- - -	Financial assets at FVTOCI - non-current Financial assets at FVTOCI - non-current Financial assets at FVTPL - non-current	5,616 1,250 1,500	65,188 - 41,954	16.12 2.23 1.18	65,188 - 41,954	Note 5 Note 5
	Translink Capital Partners IV L.P. Liqid, Inc. (preference shares) UMBO CV Inc. (preference shares) Omni Media International Incorporation	- - -	Financial assets at FVTPL - non-current Financial assets at FVTOCI - non-current Financial assets at FVTOCI - non-current Financial assets at FVTOCI - non-current	430 2,111 1,626 1,714	11,477 233,497 28,986 45,909	0.59 7.04 2.51 4.56	11,477 233,497 28,986 45,909	Note 5 Note 8 Note 8 Note 5
Emtops Electronics	RENIAC, INC. (preference shares) Beneficiary certificates - open-end funds	-	Financial assets at FVTOCI - non-current	302	15,956	1.97	15,956	Note 8
Corporation	Mega Diamond Money Market Fund FSITC Money Market Taishin Ta-Chong Money Market Fund Allianz Global Investors Taiwan Money Market Fund	- - - -	Financial assets at FVTPL - current Financial assets at FVTPL - current Financial assets at FVTPL - current Financial assets at FVTPL - current	3,980 280 3,513 815	50,107 50,095 50,099 10,249	- - -	50,107 50,095 50,099 10,249	Note 3 Note 3 Note 3
	Franklin Templeton SinoAm Money Market Fund Preference shares ProGrade Digital, Inc.	-	Financial assets at FVTPL - current Financial assets at FVTOCI - non-current	5,816 1,070	60,363 33,160	15.73	60,363	Note 3
	Common shares My Digital Discount, Inc.	-	Financial assets at FVTOCI - non-current	-	-	19.00	-	-

- Note 1: The marketable securities listed refer to the types of financial instruments within the scope of IFRS 9 "Financial Instruments".
- Note 2: The carrying amount is either the fair value or the original cost net of allowance loss.
- Note 3: The calculation of the market value was based on the net asset value as of December 31, 2019.
- Note 4: The calculation of the market value was based on the closing price as of December 31, 2019.
- Note 5: Refer to Note 26 (b)-3 for market value information.
- Note 6: The issuing company is not limited by shares.
- Note 7: The calculation of the market value was based on the most recent buying price.
- Note 8: The calculation of the market value was based on the most recent acquisition price.
- Note 9: The calculation of the market value was based on the expert evaluation report as of December 31, 2019.
- Note 10: The Group held marketable securities that had not been guaranteed, pledged or mortgaged as collateral or restricted by other commitments.

(Concluded)

PHISON ELECTRONICS CORP. AND SUBSIDIARIES

TOTAL PURCHASES FROM OR SALES TO RELATED PARTIES AMOUNTING TO AT LEAST NT\$100 MILLION OR 20% OF THE PAID-IN CAPITAL FOR THE YEAR ENDED DECEMBER 31, 2019

(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

Company Nama Polated Party		Nation of Delationalis	Transaction Details			Transaction Details		ormal saction			Note
Company Name	any Name Related Party Nature of Relationship		Purchase/ Sale	Amount	% of Total	Payment Terms	Unit Price	Payment Terms	Ending Balance	% of Total	Note
Phison Electronics Corp.	Kingston Solutions Inc.	Investee company accounted for using the equity method	Purchase	\$ 540,495	2	Net 30 days after monthly closing	None	None	\$ (29,796)	(1)	-
	Kioxia America, Inc.	The subsidiary of the Corporation's legal entity board of directors	Purchase	1,435,200	5	Net 30 days after receipt date	None	None	(97,230)	(3)	-
	Kioxia Taiwan Corporation	The subsidiary of the Corporation's legal entity board of directors	Purchase	11,432,366	37	Net 30 days after monthly closing	None	None	(1,034,293)	(28)	-
	HOSIN Global Electronics Co., Ltd. (HK)	The subsidiary of the subsubsidiary's associates	Purchase	917,343	3	Net 7 days after receipt date	None	None	-	-	-
	Orient Semiconductor Electronics, Ltd.	The Corporation is its director	Processing cost	2,371,331	7	Net 30 days after monthly closing	None	None	(195,595)	(5)	-
	Kioxia Corporation	The Corporation's legal entity board of directors	Sale	(710,310)	(2)	Net 60 days after monthly closing	None	None	72,050	1	-
	Kingston Solutions Inc.	Investee company accounted for using the equity method	Sale	(905,565)	(2)	Net 60 days after monthly closing	None	None	195,512	3	-
	Apacer Technology Inc.	The Corporation is its director	Sale	(1,084,131)	(2)	Net 45 days after monthly closing	None	None	182,600	3	-
	Hefei Core Storage Electronic Limited	Sub-subsidiary	Sale	(331,306)	(1)	Net 30 days after monthly closing	None	None	27,487	-	-
	Hefei DATANG Storage Technology Co., Ltd.	The subsidiary of the sub- subsidiary's associates	Sale	(347,372)	(1)	Net 60 days after receipt date	None	None	43,890	1	-

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)

					Ove	erdue	Amount	Allowance	for
Company Name	nme Related Party Relationship		Ending Balance	Turnover Rate	Amount	Action Taken	Received in Subsequent Period (Note)	Impairme	
_	Apacer Technology Inc. Kingston Solutions Inc.	The Corporation is its director Investee company accounted for using the equity method	\$ 182,600 195,512	6.88 6.56	\$ - -		\$ 182,600 195,512	\$	-

Note: As of February 29, 2020.

INTERCOMPANY RELATIONSHIPS AND SIGNIFICANT INTERCOMPANY TRANSACTIONS FOR THE YEAR ENDED DECEMBER 31, 2019

(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

					Transaction Details		Percentage of
Number	Company Name	Counterparty	Counterparty Flow of Transaction		Amount	Transaction Terms	Transaction Amount to Consolidated Operating Revenue or Total Assets (%)
0	Phison Electronics Corp.	Hefei Core Storage Electronic Limited	1	Sales revenue	\$ 331,306	Based on regular terms	1
		Hefei Core Storage Electronic Limited	1	Accounts receivable	27,487	Based on regular terms	_
		Hefei Core Storage Electronic Limited	1	Research expenses	199,849	Based on regular terms	_
		Hefei Core Storage Electronic Limited	1	Other payables	45,681	Based on regular terms	_
		Ostek Corporation	1	Manufacturing expenses	33,889	Based on regular terms	-
		Ostek Corporation	1	Accounts payable	1,883	Based on regular terms	-
		Phison Electronics Japan Corp.	1	Sales expenses	13,032	Based on regular terms	-
		Phison Electronics Japan Corp.	1	Other payables	2,994	Based on regular terms	-
		Phisontech Electronics (Malaysia) Sdn. Bhd.	1	Sales revenue	5,935	Based on regular terms	-
		Phisontech Electronics (Malaysia) Sdn. Bhd.	1	Purchase	1,550	Based on regular terms	-
		Phison Technology Inc.	1	Other payables	12,833	Based on regular terms	_
		Phison Technology Inc.	1	Sales expenses	26,138	Based on regular terms	-
		Hefei Ruhan Electronic Technology Limited	1	Sales revenue	86,241	Based on regular terms	-
1	Hefei Core Storage Electronic Limited	Hefei Ruhan Electronic Technology Limited	2	Purchase	85,327	Based on regular terms	-

Note: The following numerals represent the corresponding directional flow of transactions.

- a. Parent company to subsidiary: 1.
- b. Between subsidiaries: 2.

INFORMATION OF INVESTEES FOR THE YEAR ENDED DECEMBER 31, 2019 (In Thousands of New Taiwan Dollars)

				Investmer	nt Amount	Balance a	s of December	31, 2019	Not (Loss)	Investment	
Investor	Investee	Location	Main Businesses and Products	December 31, 2019	December 31, 2018	Number of Shares	Percentage of Ownership (%)	Carrying Amount	Net (Loss) Income of the Investee	Investment (Loss) Income	Note
Phison Electronics Corp.	Kingston Solutions Inc.	Taiwan	Embedded flash product and market development	\$ 106,050	\$ 106,050	10,605,000	32.91	\$ 965,294	\$ (889,121)	\$ (292,610)	Investee company accounted for using the equity method
	Emtops Electronics Corporation	Taiwan	Investment	380,000	95,000	38,000,000	100.00	355,076	425	425	Subsidiary
	Lian Xu Dong Investment Corporation	Taiwan	Investment	650,000	650,000	65,000,000	100.00	676,498	9,052	9,052	Subsidiary
	Microtops Design Corporation	Taiwan	Research and design of flash memory controllers and related products	22,638	22,638	2,263,800	49.00	24,403	3,484	1,707	Investee company accounted for using the equity method
	Phisontech Electronics Taiwan Corp.	Taiwan	Design of ASIC and R&D, manufacture, and sale of ASIC for IP and technical support service	41,363	-	1,000,000	100.00	40,518	(1,118)	(231)	Subsidiary
	Phison Electronics Japan Corp.	Japan	Sales and service office	59,508	59,508	2,000	100.00	31,722	(2,844)	(2,844)	Subsidiary
	Global Flash Limited Phisontech Electronics (Malaysia) Sdn. Bhd.	Samoa Malaysia	Investment and trade Design, production and sale of flash memory controllers and peripheral system applications	1,158,472 91,422	665,823 91,422	37,100,000 10,000,000	100.00 100.00	1,157,998 59,482	· ·	•	Subsidiary Subsidiary
	Epostar Electronics (BVI) Corporation	British Virgin Islands	Investment	133,988	133,988	10,600,000	37.82	-	(116,273)	(39,000)	Investee company accounted for using the equity method
	Power Flash (Samoa) Limited	Samoa	Investment and trade	105,440	105,440	3,200,000	100.00	99,223			Subsidiary
	Everspeed Technology Limited	Samoa	Trade of electronic components	-	-	1,000,000	100.00	343,601	87,325	87,325	Subsidiary

(Continued)

				Investmen	t Amount	Balance a	s of December	31, 2019			
Investor	Investee	Location	Main Businesses and Products	December 31, 2019	December 31, 2018	Number of Shares	Percentage of Ownership (%)	Carrying Amount	Net (Loss) Income of the Investee	Investment (Loss) Income	Note
	Regis Investment (Samoa) Limited	Samoa	Investment	393,214	199,332	13,000,000	100.00	502,266	97,960	97,960	Subsidiary
Lian Xu Dong Investment Corporation	Ostek Corporation	Taiwan	Manufacture and trade of electronic components	9,000	9,000	900,000	100.00	58,795	5,941	-	Sub-subsidiary
Corporation	PMS Technology Corporation	Taiwan	Research and design of flash memory controllers and related products	2,000	2,000	200,000	33.33	17,962	99	-	Investee company accounted for using the equity method
Emtops Electronics Corporation	Phison Technology Inc.	America	Sales and service office	\$ 31,415	\$ -	1,000,000	100.00	\$ 30,478	\$ 514	\$ -	Sub-subsidiary
Global Flash Limited	Core Storage Electronic (Samoa) Limited	Samoa	Investment and trade	1,068,818	576,229	34,150,000	100.00	1,121,055	39,315	-	Sub-subsidiary
Power Flash (Samoa) Limited	Power Flash (HK) Limited	Hong Kong	Trade of electronic products	98,754	98,754	3,000,000	100.00	93,339	322	-	Sub-subsidiary
Everspeed Technology Limited	Memoryexchange Corporation	Taiwan	Design and sale of flash memory related products	391,986	391,986	40,950,000	100.00	210,217	93,698	-	Sub-subsidiary
Regis Investment (Samoa) Limited	RealYou Investment Limited	Hong Kong	Investment	391,989	197,760	12,950,000	100.00	500,855	97,697	-	Sub-subsidiary

(Concluded)

INFORMATION ON INVESTMENTS IN MAINLAND CHINA FOR THE YEAR ENDED DECEMBER 31, 2019 (In Thousands)

				Accumulated	Investme	ent Flows	Accumulated				Accumulated	
Investee Company	Main Businesses and Products	Total Amount of Paid-in Capital	Method of Investment (Note 1)	Outflow of Investment from Taiwan as of January 1, 2019	Outflow	Inflow	Outflow of Investment from Taiwan as of December 31, 2019	Percentage of Ownership (%)	Investment (Loss) Income (Note 2)	Carrying Amount as of December 31, 2019	Inward Remittance of	f Note
Phisontech (Shenzhen) Limited	Design, R&D, import and export of storage devices and electronics	\$ 53,096	ь	\$ 53,096	\$ -	\$ -	\$ 53,096	100.00	\$ (2,260)	\$ 6,273	\$ -	b (2)
Hefei Core Storage Electronic Limited	Design, R&D, production and sale of integrated circuits, systems and electronics hardware and software and rendering of related services	1,039,083	ь	576,780	486,435	-	1,063,215	97.69	38,775	1,104,340	-	b (2)
Hefei Ruhan Electronic Technology Limited	Design, R&D, sale of electronics hardware and rendering of related services and investment	182,825	ь	182,825	-	-	182,825	100.00	(1,968)	174,418	-	b (1)
Hefei Yichao Electronics Technology Ltd.	Design, R&D, sale of electronics hardware and rendering of related services and investment	280,387	b	-	-	-	-	100.00	(10,522)	259,402	-	b (2)
Hefei Xinpeng Technology Co., Ltd.	Design, R&D, production and sale of integrated circuits and electronics hardware and software and rendering of related services	618,078	b	-	-	-	-	43.62	(13,740)	245,507	-	b (1), b (2)
Hosin Global Electronics Co., Ltd. (SZ)	Design, R&D and sale of integrated circuits and electronics hardware and software and rendering of related services	588,160	ь	-	183,640	-	183,640	38.46	99,795	390,993	-	b (1), b (2)

(Continued)

Accumulated Investments in Mainland China as of December 31, 2019	Investment Amount Authorized by the Investment Commission, MOEA	Limit on investments
\$ 1,482,776 (US\$ 47,608)	\$ 1,514,933 (US\$ 48,790)	\$ 17,513,177

Note 1: Method of investment:

- a. Directly invested in mainland China.
- b. Indirectly invested in mainland China through companies registered in a third region.
 - 1) Indirectly invested in a China-based company through a company located in a third region, Regis Investment Limited, and its subsidiaries.
 - 2) Indirectly invested in a China-based company through a company located in a third region, Global Flash Limited, and its subsidiaries.

Note 2: The amounts were recognized based on audited financial statements.

(Concluded)

SIGNIFICANT TRANSACTIONS WITH INVESTEE COMPANIES IN MAINLAND CHINA, EITHER DIRECTLY OR INDIRECTLY THROUGH A THIRD PARTY, AND THEIR PRICES, PAYMENT TERMS, AND UNREALIZED GAINS OR LOSSES

FOR THE YEAR ENDED DECEMBER 31, 2019

(In Thousands of New Taiwan Dollars)

D	Deleted Bester	Dalati anakin		Tra	nsaction I	Details	Abnorn	nal Transaction	Notes/Acc Receivable (I		Note
Buyer	Related Party	Relationship	Purchase/ Sale	A mount Payment Terms		Unit Price	Payment Terms	Ending Balance	% of Total	11010	
Phison Electronics Corp.	Hefei Core Storage Electronic Limited	Sub-subsidiary	Sale	\$ 331,306	1	Net 30 days after monthly closing	None	None	\$ 27,487	-	-
	Hefei Ruhan Electronic Technology Limited	Sub-subsidiary	Sale	86,241	-	Net 30 days after monthly closing	None	None	-	-	-
	Shenzhen EpoStar Electronics Limited CO.	Associates' subsidiary	Sale	19,999	-	Delivery after receipt	None	None	-	-	-
	Hefei DATANG Storage Technology Co., Ltd.	The subsidiary of the subsidiary's associates	Sale	347,372	1	Net 60 days after receipt date	None	None	43,890	1	-
	Hosin Global Electronics Co., Ltd. (SZ)	The reinvested of the sub- subsidiary	Sale	6,714	-	Delivery after receipt	None	None	-	-	-
Hefei Core Storage Electronic Limited	Hefei Ruhan Electronic Technology Limited	Sister company	Purchase	85,327	18	Net 30 days after monthly closing	None	None	-	-	-
	Hefei DATANG Storage Technology Co., Ltd.	The subsidiary of the subsidiary's associates	Sale	1,494	-	Net 30 days after receipt date	None	None	1	-	-

INDEPENDENT AUDITORS' REPORT

The Board of Directors and Shareholders Phison Electronics Corp.

Opinion

We have audited the financial statements of Phison Electronics Corp. (the "Corporation") which comprise the balance sheets as of December 31, 2019 and 2018, the statements of comprehensive income, changes in equity and cash flows for the years ended December 31, 2019 and 2018, and the notes to the financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of the Corporation 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 audits in accordance with the Regulations Governing Auditing and Attestation of Financial Statements by Certified Public Accountants and auditing standards generally accepted in the Republic of China. Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the Corporation 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.

The key audit matter of the Corporation's financial statements for the year ended December 31, 2019 is stated as follows:

Sales Revenue Recognition

Auditing standards generally accepted in the Republic of China presumes that there is a risk of fraud in the recognition of sales revenue. Management may artificially inflate sales revenue due to pressure in meeting the sales target. The Corporation's customers are numerous and diverse, and the net sales of the Corporation for the year ended December 31, 2019 amounted to NT\$44,149,263 thousand. Therefore, there is a high possibility of abnormal sales from transactions with customers, and validity of such transactions may have a significant effect on the financial statements. Thus, the recognition of sales revenue has been identified as a key audit matter.

Our main audit procedures performed in response to this matter, included the following:

- 1. We understood and tested the process of sales revenue recognition and the design and implementation of the relevant internal controls.
- 2. We sampled the original sales orders, shipping documents, export declarations and examined the process for the payment receipts to confirm the validity of sales transaction.
- 3. We checked if there were any instances of simultaneous purchases from and sales to the same entity. Where such situations existed, we further assessed the background of the entity and the goods purchased and sold in order to evaluate the reasonableness of the transactions and to confirm any instances of repeated purchases and sales.

Emphasis of Matter

As stated in Note 30 to the accompanying financial statements, the Corporation was under statutory investigation by the Taiwan Hsinchu District Prosecutorial Office ("District Prosecutorial Office") on and from August 5, 2016 for alleged violation of the Securities and Exchange Act (the "Case"). The investigation was concluded on August 31, 2017, and the chairman of the Corporation and other defendants were either charged with deferred prosecution or dropped claim for further prosecution by the prosecutor. Then, the District Prosecutorial Office ex officio sent the ruling to the Taiwan High Prosecutors Office ("High Prosecutors Office") for reconsideration. On November 18, 2019, High Prosecutors Office partially set aside and dismissed the original ruling, and ordered the District Prosecutorial Office to continue the investigation. On July 30, 2019, the District Prosecutorial Office concluded the investigation and indicted the chairman of the Corporation and others for their alleged violation of the Securities and Exchange Act and related provisions. A trial of the Case would be held in the Hsinchu District Court. The chairman of the Corporation would strive for a fair judgment in accordance with the law. Following the aforementioned indictment, the Corporation was served with complaints from the Hsinchu District Court on November 8, 2019 and December 13, 2019, that Securities and Futures Investors Protection Center ("Investors Protection Center") had filed two civil actions, respectively, as follows: (1) the first civil action was to remove Mr. K.S. Pua from director position of the Corporation's board ("Removal Action"); (2) the second civil action was to claim compensation damage against the Corporation, its board of directors and other co-defendants on behalf of certain investors ("Class Action"). Those two civil actions were derivative litigations arising from the Case. The Corporation had already appointed civil defense attorneys and filed a motion to dismiss those two civil actions with the court. As such, our audit opinion is not modified in respect of this matter.

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 Corporation'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 Corporation or to cease operations, or has no realistic alternative but to do so.

Those charged with governance, including the supervisors, are responsible for overseeing the Corporation'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 Corporation'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 Corporation'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 Corporation 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 appropriate audit evidence regarding the financial information of the entities or business activities within the Corporation 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 statements 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 Hsin-Wei Tai and Li-Wen Kuo.

Deloitte & Touche Taipei, Taiwan Republic of China

March 16, 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 accepted and 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.

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

	2019		2018	
ASSETS	Amount	%	Amount	%
CURRENT ASSETS				
Cash and cash equivalents (Note 6)	\$ 8,276,554	22	\$ 12,778,312	36
Financial assets at fair value through profit or loss (FVTPL) (Notes 7 and 24)	3,158,984	8	2,979,132	8
Financial assets at amortized cost (Notes 9 and 26)	20,383	-	30,576	-
Notes and accounts receivable	5 222 705	1.4	4.052.207	12
Non-related parties (Note 10) Related parties (Notes 10 and 25)	5,333,785 564,913	14 1	4,853,397 383,602	13
Other receivables (Note 10)	409,011	1	253,105	1
Inventories (Note 11)	11,443,733	30	7,491,072	21
Prepayments	281,215	1	62,823	-
Other current assets	2,467		8,521	<u> </u>
Total current assets	29,491,045	<u>77</u>	28,840,540	_80
NON-CURRENT ASSETS				
Financial assets at fair value through profit or loss (FVTPL) (Notes 7 and 24)	405,875	1	383,497	1
Financial assets at fair value through other comprehensive income (FVTOCI) (Notes 8 and 24)	213,736	1	163,443	1
Investments accounted for using the equity method (Note 12)	4,256,081	11	3,141,430	9 8
Property, plant and equipment (Note 13) Right-of-use assets (Note 14)	3,263,440 32,840	8	2,961,130	0
Intangible assets (Note 15)	267,339	1	149,381	_
Deferred tax assets (Note 20)	345,395	1	306,595	1
Guarantee deposits paid	4,202		2,570	
Total non-current assets	8,788,908	23	7,108,046	
TOTAL	\$ 38,279,953	100	\$ 35,948,586	100
LIABILITIES AND EQUITY				
CURRENT LIABILITIES				
Contract liabilities	\$ 130,615	-	\$ 34,266	-
Notes and accounts payable	2 252 521		1.026.202	-
Non-related parties	2,252,521	6	1,936,292	5 8
Related parties (Note 25) Other payables (Note 16)	1,385,981 4,050,837	4 11	2,861,765 3,290,868	8 9
Tax payable (Note 20)	597,762	2	522,579	2
Lease liabilities (Note 14)	12,520	-	-	-
Other current liabilities (Note 17)	549,427	1	297,716	1
Total current liabilities	8,979,663	24	8,943,486	<u>25</u>
NON-CURRENT LIABILITIES				
Deferred tax liabilities (Note 20)	21,930	_	-	_
Lease liabilities (Note 14)	20,702	-	-	-
Net defined benefit liabilities (Note 18)	94,945	-	92,827	-
Guarantee deposits received	393		403	
Total non-current liabilities	137,970		93,230	
Total liabilities	9,117,633	24	9,036,716	<u>25</u>
EQUITY (Note 19)				
Share capital				
Common shares	1,970,740	5	1,970,740	5
Capital surplus	6,724,104	<u>18</u>	6,674,650	<u>19</u>
Retained earnings	2 950 715	10	2 419 002	10
Legal reserve Special reserve	3,850,715 380,927	10 1	3,418,903	10
Unappropriated earnings	16,411,959	43	15,228,504	42
Total retained earnings	20,643,601	54	18,647,407	<u>42</u> <u>52</u>
Other equity	(176,125)	<u>(1</u>)	(380,927)	<u>(1</u>)
Total equity	29,162,320	<u>76</u>	26,911,870	<u>75</u>
TOTAL	<u>\$ 38,279,953</u>	100	\$ 35,948,586	<u>100</u>

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

(With Deloitte & Touche auditors' report dated March 16, 2020)

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 (Note 25)				
Gross sales	\$ 44,812,822	101	\$ 41,027,588	101
Less: Sales returns and allowances	663,559	2	371,291	1
Net sales	44,149,263	<u></u>	40,656,297	100
Other operating revenue	330,012	1	147,833	<u> </u>
Total operating revenue	44,479,275	100	40,804,130	100
OPERATING COSTS (Notes 11, 21 and 25)	33,337,982	<u>75</u>	31,652,858	<u>78</u>
GROSS PROFIT	11,141,293	<u>25</u>	9,151,272	_22
UNREALIZED LOSS (GAIN) ON				
TRANSACTIONS	11,288		(19,550)	
REALIZED GROSS PROFIT	11,152,581	<u>25</u>	9,131,722	22
OPERATING EXPENSES (Note 21)				
Marketing	636,791	1	525,116	1
General and administrative	618,075	1	384,276	1
Research and development	4,728,405	11	3,525,077	9
Reversal of expected credit losses (Note 10)	(43,384)		(39,098)	
Total operating expenses	5,939,887	<u>13</u>	4,395,371	<u>11</u>
OPERATING INCOME	5,212,694	12	4,736,351	<u>11</u>
NON-OPERATING INCOME AND EXPENSES				
Other income (Note 21)	209,278	_	132,028	_
Other gains and losses (Note 21)	26,933	_	161,238	1
Share of losses of subsidiaries and associates			,	_
(Note 12)	(106,453)	_	(24,194)	_
Financial costs (Note 21)	(2,006)		(5,070)	
Total non-operating income and expenses	127,752	<u> </u>	264,002	1
PROFIT BEFORE INCOME TAX	5,340,446	12	5,000,353	12
INCOME TAX EXPENSE (Note 20)	796,957	2	682,234	1
NET PROFIT FOR THE YEAR	4,543,489	_10	4,318,119	11
			(Con	tinued)

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

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

	2019					
	A	mount	%	A	Amount	%
OTHER COMPREHENSIVE INCOME (LOSS) FOR THE YEAR, NET OF INCOME TAX Items that will not be reclassified subsequently						
to profit or loss Remeasurement of defined benefit plan Unrealized gain (loss) on investments in equity instruments at fair value through	\$	(1,445)	-	\$	(3,701)	-
other comprehensive income Share of the other comprehensive gain (loss) of associates and joint ventures accounted		58,967	-		(106,094)	(1)
for using the equity method Income tax relating to items that will not be reclassified subsequently to profit or loss		206,249	1		(63,357)	-
(Note 20) Items that may be reclassified subsequently to profit or loss:		289	-		2,171	-
Share of other comprehensive loss of subsidiaries and associates Income tax benefit relating to items that may		(58,260)	-		(3,975)	-
be reclassified subsequently to profit or loss (Note 20)		13,669	-		3,214	_
Other comprehensive income (loss) for the year, net of income tax		219,469	1		(171,742)	_(1)
TOTAL COMPREHENSIVE INCOME FOR THE YEAR	\$ 4	4,762,958	11	<u>\$</u>	4,146,377	<u>10</u>
EARNINGS PER SHARE; NEW TAIWAN DOLLARS (Note 22)		Ф 22.05			Ф 21.01	
Basic Diluted		\$ 23.05 \$ 22.78			\$ 21.91 \$ 21.60	

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

(With Deloitte & Touche auditors' report dated March 16, 2020)

(Concluded)

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

						Other	Equity	
				Retained Earnings		Exchange Differences on	Unrealized Gain (Loss) on Financial Assets at Fair Value Through Other	
	Common Shares	Capital Surplus	Legal Reserve	Special Reserve	Unappropriated Earnings	Translating Foreign Operations	Comprehensive Income	Total Equity
BALANCE AT JANUARY 1, 2018	\$ 1,970,740	\$ 6,660,502	\$ 2,842,806	\$ 25,965	\$ 14,984,938	\$ (67,147)	\$ (316,201)	\$ 26,101,603
Appropriation of the 2017 earnings Legal reserve Reversal of special reserve Cash dividends - NT\$17 per share	- - -	- - -	576,097 - -	(25,965)	(576,097) 25,965 (3,350,258)	- - -	- - -	(3,350,258)
Changes in capital surplus from investments in associates and joint ventures accounted for using the equity method	-	14,148	-	-	-	-	-	14,148
Subsidiaries' disposal of the investments in equity instruments designated as at fair value through other comprehensive income	-	-	-	-	(21,785)	-	21,785	-
Disposal of equity instrument investments at fair value through other comprehensive income	-	-	-	-	(150,848)	-	150,848	-
Net profit for the year ended December 31, 2018	-	-	-	-	4,318,119	-	-	4,318,119
Other comprehensive loss for the year ended December 31, 2018, net of income tax	_	-	<u>-</u> _	-	(1,530)	<u>(761</u>)	(169,451)	(171,742)
BALANCE AT DECEMBER 31, 2018	1,970,740	6,674,650	3,418,903	-	15,228,504	(67,908)	(313,019)	26,911,870
Appropriation of the 2018 earnings Legal reserve Special reserve Cash dividends - NT\$ 13 per share	- - -	- - -	431,812	380,927	(431,812) (380,927) (2,561,962)	- - -	- - -	(2,561,962)
Changes in capital surplus from investments in associates and joint ventures accounted for using the equity method	-	47,085	-	-	-	-	-	47,085
Changes in percentages of ownership interests in subsidiaries	-	2,369	-	-	-	-	-	2,369
Subsidiaries' disposal of the investments in equity instruments designated as at fair value through other comprehensive income	-	-	-	-	14,689	-	(14,689)	-
Disposal of equity instrument investments at fair value through other comprehensive income	-	-	-	-	1,134	-	(1,134)	-
Net profit for the year ended December 31, 2019	-	-	-	-	4,543,489	-	-	4,543,489
Other comprehensive income (loss) for the year ended December 31, 2019, net of income tax		_	-	_	(1,156)	(44,591)	<u>265,216</u>	219,469
BALANCE AT DECEMBER 31, 2019	<u>\$ 1,970,740</u>	<u>\$ 6,724,104</u>	\$ 3,850,715	<u>\$ 380,927</u>	<u>\$ 16,411,959</u>	<u>\$ (112,499)</u>	<u>\$ (63,626)</u>	<u>\$ 29,162,320</u>

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

(With Deloitte & Touche auditors' report dated March 16, 2020)

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	\$	5,340,446	\$	5,000,353
Adjustments for:	-	-,,	4	-,,
Depreciation		276,217		208,353
Amortization		157,195		198,436
Expected credit losses reversed on trade receivables		(43,384)		(39,098)
Financial costs		2,006		5,070
Interest income		(52,615)		(49,565)
Dividend income		(77,813)		(41,698)
Share of losses of subsidiaries and associates		106,453		24,194
Gains on disposal of property, plant and equipment		(14,429)		(1,406)
(Reversal) write-down of inventories		(63,700)		92,379
Unrealized (loss) gain on transactions with subsidiaries		(11,288)		19,550
Net loss (gain) on foreign currency exchange		83,862		(69,951)
Recognition of refund liabilities		363,490		166,648
Net changes related to operating assets and liabilities		(4.40.000)		44.60
Financial assets at fair value through profit or loss		(149,990)		11,605
Notes and accounts receivable		(700,786)		431,181
Other receivables		(157,014)		14,114
Inventories		(3,888,961)		(397,448)
Prepayments		(254,327)		(36,962)
Other current assets Contract liabilities		6,054		(2,032)
		96,349		34,266
Notes and accounts payable		(1,126,222) 772,583		1,165,893 44,474
Other payables Other current liabilities		(111,779)		(318,759)
Net defined benefit liabilities		673		4,228
Cash generated from operations		553,020		6,463,825
Interest paid		(2,006)		(5,070)
Income tax paid		(724,686)		(1,246,975)
meone ax paid		(721,000)		(1,210,775)
Net cash (used in) generated from operating activities	_	(173,672)		5,211,780
CASH FLOWS FROM INVESTING ACTIVITIES				
Purchase of financial assets at fair value through other				
comprehensive income		-		(53,712)
Proceeds from sale of financial assets at fair value through other				
comprehensive income		8,674		25,437
Purchase of financial assets at amortized cost		-		(10,027)
Proceeds from sale of financial assets at amortized cost		10,193		-
Purchase of financial assets at fair value through profit or loss Proceeds from sale of financial assets at fair value through profit or		(138,733)		(3,021,042)
loss		77,763		1,498,384
Purchase of investments accounted for using the equity method		(1,012,895)		(229,857)
Payment for property, plant and equipment		(531,390)		(374,975)
			((Continued)

STATEMENTS OF CASH FLOWS FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018

(In Thousands of New Taiwan Dollars)

		2019		2018
Proceeds from disposal of property, plant and equipment Increase in refundable deposits Payment for intangible assets Interest received Dividends received from associates Dividends received from others Proceeds from capital reduction of financial assets at fair value through profit or loss	\$	14,429 (1,658) (275,153) 53,242 - 77,813	\$	1,585 (1,199) (135,709) 49,114 233,310 41,698
Net cash used in investing activities	-	(1,708,985)		(1,907,138)
CASH FLOWS FROM FINANCING ACTIVITIES Decrease in guarantee deposits Repayment of the principal portion of lease liabilities Dividends paid Net cash used in financing activities		(10) (10,794) (2,561,962) (2,572,766)		(130) - (3,350,258) (3,350,388)
EFFECT OF EXCHANGE RATE CHANGES ON THE BALANCE OF CASH HELD IN FOREIGN CURRENCIES		(46,335)		69,482
NET (DECREASE) INCREASE IN CASH AND CASH EQUIVALENTS		(4,501,758)		23,736
CASH AND CASH EQUIVALENTS AT THE BEGINNING OF THE YEAR		12,778,312		12,754,576
CASH AND CASH EQUIVALENTS AT THE END OF THE YEAR	\$	8,276,554	\$	12,778,312
The accompanying notes are an integral part of the financial statements. (With Deloitte & Touche auditors' report dated March 16, 2020)			(Co	oncluded)

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

1. GENERAL INFORMATION

Phison Electronics Corp. (the "Corporation") was incorporated on November 8, 2000 under the Company Act of the Republic of China ("ROC"). The Corporation mainly designs and sells flash memory controllers and peripheral system applications.

The Corporation's shares have been traded on the Taipei Exchange (over-the-counter exchange in Taiwan) since December 6, 2004.

The financial statements are presented in the Corporation's functional currency, the New Taiwan dollar.

2. APPROVAL OF FINANCIAL STATEMENTS

The financial statements were approved by the Corporation's board of directors on March 16, 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) of the Republic of China.

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 Corporation's accounting policies:

IFRS 16 "Leases"

IFRS 16 provides a comprehensive model for the identification of lease arrangements and their treatment in the financial statements of both lessee and 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 Corporation 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 Corporation as lessee

The Corporation recognizes right-of-use assets and 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 Corporation 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 operating 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 Corporation elected to apply IFRS 16 retrospectively with the cumulative effect of the initial application of this standard recognized in retained earnings on January 1, 2019. Comparative information was not restated.

Lease liabilities were recognized on January 1, 2019 for leases previously classified as operating leases under IAS 17. Lease liabilities were measured at the present value of the remaining lease payments, discounted using the lessee's incremental borrowing rate on January 1, 2019. Right-of-use assets are measured at an amount equal to the lease liabilities. The Corporation applies IAS 36 to all right-of-use assets.

The Corporation also applies the following practical expedients:

- 1) The Corporation applies a single discount rate to a portfolio of leases with reasonably similar characteristics to measure lease liabilities.
- 2) The Corporation accounts for those leases for which the lease term ends on or before December 31, 2019 as short-term leases.
- 3) The Corporation excludes initial direct costs from the measurement of right-of-use assets on January 1, 2019.
- 4) The Corporation uses hindsight, such as in determining lease terms, to measure lease liabilities.

The Corporation's weighted average incremental borrowing rate applied to lease liabilities recognized on January 1, 2019 was 2.6%. The difference between the lease liabilities recognized and operating lease commitments disclosed under IAS 17 on December 31, 2018 is explained as follows:

The future minimum lease payments of non-cancellable operating lease	
commitments on December 31, 2018	\$ 28,286
Less: Recognition exemption for short-term leases	(407)
Less: Recognition exemption for leases of low-value assets	(14)
Undiscounted amounts on January 1, 2019	<u>\$ 27,865</u>
Discounted amounts using the incremental borrowing rate on January 1, 2019	<u>\$ 26,667</u>
Lease liabilities recognized on January 1, 2019	<u>\$ 26,667</u>

The Corporation as lessor

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

	As Originally Stated on January 1, 2019	Adjustments Arising from Initial Application	Restated on January 1, 2019
Right-of-use assets Guarantee deposits paid	\$ - <u>2,570</u>	\$ 26,831 (164)	\$ 26,831 2,406
Total effect on assets	<u>\$ 2,570</u>	<u>\$ 26,667</u>	<u>\$ 29,237</u>
Lease liabilities - current Lease liabilities - non-current	\$ - -	\$ 8,277 	\$ 8,277
Total effect on liabilities	<u>\$</u>	<u>\$ 26,667</u>	<u>\$ 26,667</u>

b. The IFRSs endorsed by the FSC for application starting from 2020

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

- Note 1: The Corporation 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 Corporation shall apply these amendments retrospectively for annual reporting periods beginning on or after January 1, 2020.
- Note 3: The Corporation 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 Corporation is continuously assessing the possible impact that the application of aforementioned standards and interpretations will have on the Corporation'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

Effective Date Announced by IASB (Note)
To be determined by IASB
January 1, 2021
January 1, 2022

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

As of the date the financial statements were authorized for issue, the Corporation is continuously assessing the possible impact that the application of aforementioned standards and interpretations will have on the Corporation'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 parent company only financial statements have been prepared in accordance with the Regulations Governing the Preparation of Financial Reports by Securities Issuers (the "Regulations").

Basis of Preparation

The financial statements have been prepared on the historical cost basis, except for financial instruments which are measured at fair value and net defined benefit liabilities which are measured at the present value of the defined benefit obligation less the fair value of plan assets.

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

- a. Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities;
- b. Level 2 inputs are 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
- c. Level 3 inputs are unobservable inputs for the asset or liability.

When preparing its parent company only financial statements, the Corporation used the equity method to account for its investments in subsidiaries, associates and joint ventures. In order for the amounts of the net profit for the year, other comprehensive income for the year and total equity in the parent company only financial statements to be the same as the amounts attributable to the owners of the Corporation in its consolidated financial statements, adjustments arising from the differences in the accounting treatment between the parent company only basis and the consolidated basis were made to investments accounted for using the equity method, share of profit or loss of subsidiaries and associates and share of other comprehensive income of subsidiaries and associates, as appropriate, in the parent company only financial statements.

Classification of Current and Non-current Assets and Liabilities

Current assets include:

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

Current liabilities include:

- a. Liabilities held primarily for the purpose of trading;
- b. Liabilities due to be settled within 12 months after the reporting period; and
- c. Liabilities for which the Corporation does not have an unconditional right to defer settlement for at least 12 months after the reporting period.

All other assets and liabilities are classified as non-current.

Foreign Currencies

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

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

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

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

For the purpose of presenting financial statements, the functional currencies of the Corporation and its foreign operations are translated into the presentation currency, the New Taiwan dollar, as follows: Assets and liabilities are translated at the exchange rates prevailing at the end of the reporting period; and income and expense items are translated at the average exchange rates for the period. The resulting currency translation differences are recognized in other comprehensive income.

Inventories

Inventories consist of raw materials, semi-finished goods, work-in-process and finished goods, which 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. The 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 their weighted-average costs on the balance sheet date.

Investments Accounted for Using the Equity Method

The Corporation uses the equity method to account for its investments in subsidiaries and associates.

<u>Investments in subsidiaries</u>

A subsidiary is an entity that is controlled by the Corporation.

Under the equity method, an investment in a subsidiary is initially recognized at cost and the carrying amount is increased or decreased to recognize the Corporation's share of the profit or loss and other comprehensive income of the subsidiary after the date of acquisition. The Corporation also recognizes the changes in the Corporation's share of equity of the subsidiary.

Changes in the Corporation's ownership interests in subsidiaries that do not result in the Corporation's loss of control over the subsidiaries are accounted for as equity transactions. The Corporation recognizes directly in equity any difference between the carrying amount of the investment and the fair value of the consideration paid or received.

The Corporation assesses its investment for any impairment by comparing the carrying amount with the estimated recoverable amount as assessed based on the financial statements of the subsidiary as a whole. An impairment loss is recognized when the carrying amount exceeds the recoverable amount. If the recoverable amount of the investment subsequently increases, the Corporation recognizes a reversal of the impairment loss; the adjusted post-reversal carrying amount should not exceed the carrying amount that would have been recognized (net of amortization) had no impairment loss been recognized in prior years. An impairment loss recognized on goodwill cannot be reversed in a subsequent period.

Profits and losses resulting from any downstream transactions are eliminated in full only in the parent company's financial statements. Profits and losses resulting from upstream transactions and transactions between subsidiaries are recognized only in the parent company's financial statements only to the extent of interests in the subsidiaries that are not related to the Corporation.

Investments in associates

An associate is an entity over which the Corporation has significant influence and which is neither a subsidiary nor an interest in a joint venture.

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

When the Corporation subscribes for additional new shares of an associate at a percentage different from its existing ownership percentage, the resulting carrying amount of the investment differs from the amount of the Corporation's proportionate interest in the associate. The Corporation records such a difference as an adjustment to investments with the corresponding amount charged or credited to capital surplus. If the Corporation's ownership interest is reduced due to the additional subscription of new shares of an 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 using the equity method is insufficient, the shortage is debited to retained earnings.

When the Corporation's share of losses of an associate and a joint venture equals or exceeds its interest in that associate and joint venture (which includes any carrying amount of the investment accounted for using the equity method and long-term interests that, in substance, form part of the Corporation's net investment in the associate and joint venture), the Corporation discontinues recognizing its share of further loss, if any. Additional losses and liabilities are recognized only to the extent that the Corporation has incurred legal obligations, or constructive obligations, or made payments on behalf of that associate and joint venture.

When the Corporation determines impairment loss, the entire carrying amount of an investment in an associate (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 Corporation 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 the investment's 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 Corporation accounts for all amounts previously recognized in other comprehensive income in relation to that associate on the same basis as would be required had that associate directly disposed of the related assets or liabilities. If an investment in an associate becomes an investment in a joint venture or an investment in a joint venture becomes an investment in an associate, the Corporation continues to apply the equity method and does not remeasure the retained interest.

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

Property, Plant and Equipment

Property, plant and equipment are initially measured at cost and subsequently measured at cost less accumulated depreciation and accumulated impairment loss.

Property, plant and equipment in the course of construction are carried at cost less any recognized impairment loss. Such assets are depreciated and classified to the appropriate categories of property, plant and equipment when completed and ready for their intended uses.

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

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

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. The estimated useful lives, residual values, and amortization methods are reviewed at the end of each reporting period, with the effect of any changes in the estimates accounted for on a prospective basis.

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

Impairment of Tangible, Intangible Assets (Other Than Goodwill), and Assets Related to Contract Costs

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

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

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

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

Financial Instruments

Financial assets and financial liabilities are recognized when the Corporation 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 issuance 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. Financial assets

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

1) Measurement category

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

a) Financial assets 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 FVTOCI criteria.

Financial assets at FVTPL are subsequently measured at fair value, and any dividends or interest earned on such financial assets are recognized in other income; any remeasurement gains or losses on such financial assets are recognized in other gains or losses. Fair value is determined in the manner described in Note 24.

b) Financial assets at amortized cost

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

- i. The financial asset is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows; and
- ii. The contractual terms of the financial 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, including cash and cash

equivalents and notes and trade receivables, are measured at amortized cost and equal the gross carrying amount determined using the effective interest method less any impairment loss. Exchange differences are recognized in profit or loss.

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

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

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

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

Cash equivalents include time deposits with original maturities within 3 months from the date of acquisition, which are highly liquid, readily convertible to a known amount of cash and are subject to an insignificant risk of changes in value. These cash equivalents are held for the purpose of meeting short-term cash commitments.

c) Investments in equity instruments at FVTOCI

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

Investments in equity instruments at FVTOCI are subsequently measured at fair value with gains and losses arising from changes in fair value recognized in other comprehensive income and accumulated in other equity. The cumulative gain or loss will not be reclassified to profit or loss on 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 Corporation's right to receive the dividends is established, unless the dividends clearly represent a recovery of part of the cost of the investment.

2) Impairment of financial assets and contract assets

The Corporation recognizes a loss allowance for expected credit losses on financial assets at amortized cost (including trade receivables) at the end of each reporting period.

The loss allowance for accounts receivable is measured at an amount equal to lifetime expected credit losses. For other financial assets, when the credit risk has not increased significantly since initial recognition, a loss allowance is recognized at an amount equal to the expected credit losses resulting from possible default events of the financial instruments within 12 months after the reporting date. If, on the other hand, there has been a significant increase in credit risk since initial recognition, a loss allowance is recognized at an amount equal to the expected credit losses resulting from possible default events over the expected life of the financial instruments.

Expected credit losses reflect the weighted average of credit losses with the respective risks of default occurring as the weights. The portion of expected credit losses that is expected to result from default events on a financial instrument that are possible within 12 months after the reporting date are 12-month expected credit losses. Lifetime expected credit losses are the expected credit losses that arise if debtors default on their obligations at some time during the life of a financial instrument.

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

- a) Internal or external information shows that the debtor is unlikely to pay its creditors.
- b) When a financial asset is overdue unless the Corporation has reasonable and corroborative information to support a more lagged default criterion.

The impairment loss of all financial assets is recognized in profit or loss by a reduction in their carrying amounts through a loss allowance account, except for investments in debt instruments that are measured at FVTOCI, for which the loss allowance is recognized in other comprehensive income and the carrying amounts of such financial assets are not reduced.

3) Derecognition of financial assets

The Corporation 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 that 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 that had been recognized in other comprehensive income is transferred directly to retained earnings, without recycling through profit or loss.

b. Equity instruments

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

c. Financial liabilities

1) Recognition and measurement

On initial recognition, the transaction costs of financial assets that are neither held for trading nor designated as at FVTPL (including trade and notes payables, other payables and guarantee deposits received) which are directly attributable to the acquisition or issue of financial assets and financial liabilities are added to or deducted from the fair value of the financial assets or financial liabilities. Subsequent valuation is measured at amortized cost determined by the effective interest method.

2) Derecognition of financial liabilities

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

Revenue Recognition

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

Revenue from the sale of goods

Revenue from the sale of goods comes from the sale of flash memory controllers, peripheral systems and other applications. Sales of the aforementioned goods are recognized as revenue when the goods are delivered to the customer's specific location or the goods are shipped because it is the time when the customer has full discretion over the manner of distribution and price to sell the goods, has the primary responsibility for sales to future customers, and bears the risks of obsolescence. Trade receivables are recognized concurrently. When the customer initially purchases the goods, the transaction price received is recognized as a contract liability until the goods have been delivered to the customer.

The Corporation does not recognize sales revenue on materials delivered to subcontractors because this delivery does not involve a transfer of risks and rewards of the materials' ownership.

Leases

2019

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

a. The Corporation 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.

Lease payments (less any lease incentives payable) from operating leases are recognized as income on a straight-line basis over the terms of the relevant leases.

b. The Corporation as lessee

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

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

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

Lease liabilities are initially measured at the present value of the lease payments, which comprise fixed payments, in-substance fixed payments, variable lease payments which depend on an index or a rate, 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 Corporation 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 future lease payments resulting from a change in an index or a rate used to determine those payments, the Corporation 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.

<u>201</u>8

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.

a. The Corporation as lessor

Rental income from operating leases is recognized on a straight-line basis over the term of the relevant lease.

b. The Corporation as lessee

Operating lease payments are recognized as an expense on a straight-line basis over the lease term.

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 services.

b. Retirement benefits

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

Defined benefit costs (including service costs, net interest and remeasurement) under the defined benefit retirement plans are determined using the projected unit credit method. Service costs and net interest on net defined benefit liabilities (assets) are recognized as employee benefits expenses in the period that 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 it occurs. Remeasurement recognized in other comprehensive income is reflected immediately in retained earnings and will not be reclassified to profit or loss.

Net defined benefit liabilities (assets) represent the actual deficit (surplus) in the Corporation'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.

c. Termination benefits

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

Share-based Payment Arrangements - Employee Share Options

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

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

Taxation

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

a. Current tax

According to the Income Tax Law, an additional tax on unappropriated earnings is provided 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 parent company only financial statements and the corresponding tax bases used in the computation of taxable profit. Deferred tax liabilities are generally recognized for all taxable temporary differences. Deferred tax assets are generally recognized for all deductible temporary differences and unused loss carryforwards to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilized.

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

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

Deferred tax liabilities and assets are measured at the tax rates that are expected to apply in the period in which a liability is settled or an asset is 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 Corporation expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

c. Current and deferred tax

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

5. CRITICAL ACCOUNTING JUDGMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY

The application of the Corporation's accounting policies, management is required to make judgments, estimates and assumptions about the carrying amount 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 estimates are revised if the revisions affect only that period or in the period of the revisions and future periods if the revisions affect both current and future periods.

Key Sources of Estimation Uncertainty

Write-down of inventories

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

6. CASH AND CASH EQUIVALENTS

	December 31			
	2	019	2	018
Cash on hand	\$	60	\$	60
Checking accounts and demand deposits	5,9	10,829	7,9	956,746
Cash equivalents				
Time deposits with original maturities of less than 3 months	2,3	<u>865,665</u>	4,8	<u>821,506</u>
	<u>\$ 8,2</u>	276,554	<u>\$ 12,7</u>	778,312

7. FINANCIAL INSTRUMENTS AT FAIR VALUE THROUGH PROFIT OR LOSS

	December 31		
	2019	2018	
Non-derivative financial assets - current			
Financial assets mandatorily classified as FVTPL			
Beneficiary certificates - open-end funds	\$ 2,534,676	\$ 2,520,850	
Domestic listed shares	529,538	372,994	
Convertible bonds	94,770	85,288	
	<u>\$ 3,158,984</u>	\$ 2,979,132	
Non-derivative financial assets - non-current			
Financial assets mandatorily classified as FVTPL			
Private equity funds	\$ 45,408	\$ 47,366	
Domestic unlisted shares	341,618	281,900	
Overseas unlisted shares	18,849	54,231	
	\$ 405,875	\$ 383,497	

8. FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME - NON-CURRENT

Investments in Equity Instruments at FVTOCI

	December 31		
	2019	2018	
Domestic investments - unlisted shares Overseas investments - unlisted shares	\$ 119,170 94,566	\$ 70,134 <u>93,309</u>	
	<u>\$ 213,736</u>	<u>\$ 163,443</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 Corporation's strategy of holding these investments for long-term purposes.

9. FINANCIAL ASSETS AT AMORTIZED COST - CURRENT

	December 31		
	2019	2018	
Certificates of deposit Time deposits with original maturities of more than 3 months	\$ 20,383	\$ 20,356 	
	\$ 20,383	<u>\$ 30,576</u>	

As of December 31, 2018, the interest rate for time deposits with original maturities of more than 3 months was 0.13%. The Corporation assessed that the expected credit risk of the financial assets was not high and the credit risk has not increased significantly since initial recognition.

Refer to Note 26 for information relating to investments in financial assets at amortized cost pledged as security.

10. NOTES RECEIVABLE, TRADE RECEIVABLES AND OTHER RECEIVABLES

	December 31		
	2019	2018	
Accounts receivable			
At amortized cost			
Gross carrying amount - non-related parties	\$ 5,431,163	\$ 4,994,159	
Gross carrying amount - related parties	564,913	383,602	
	5,996,076	5,377,761	
Less: Loss allowance	97,378	140,762	
Accounts receivable, net	<u>\$ 5,898,698</u>	\$ 5,236,999	
Other receivables			
Income tax refund receivable	\$ 292,145	\$ 176,010	
Convertible bonds redemption receivable	83,286	· ,	
Factored accounts receivable	30,342	74,777	
Others	3,238	2,318	
	<u>\$ 409,011</u>	<u>\$ 253,105</u>	

Trade Receivables

The average credit period of sales of goods was 30 to 90 days. The Corporation 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 obtained from independent rating agencies where available or, if not available, the Corporation uses other publicly available financial information or its own trading records to rate its major customers. The Corporation'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 by the risk management committee annually.

In order to minimize credit risk, the management of the Corporation has delegated staff 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 Corporation reviews the recoverable amount of each individual trade debt at the end of the reporting period to ensure that an adequate allowance is made for possible irrecoverable amounts. In this regard, the management believes the Corporation's credit risk is significantly reduced.

The Corporation applies the simplified approach to allowing for expected credit losses prescribed by IFRS 9, which permits the use of a lifetime expected credit losses allowance for all trade receivables. The expected credit losses on trade receivables are estimated using an allowance matrix by reference to past default experience with the respective debtors and an analysis of each 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 forecasted direction of economic conditions at the reporting date. As the Corporation's historical credit losses experience does not show significantly different loss patterns for different customer segments, the loss allowance, which is based on the past due status of receivables, is not further distinguished according to different segments of the Corporation's customer base.

The Corporation writes off a trade receivable when there is information indicating that the debtor is experiencing severe financial difficulty and there is no realistic prospect of recovery, e.g. the earlier of either when the debtor has been placed under liquidation or when the trade receivables are over two years past due. For trade receivables that have been written off, the Corporation continues to engage in enforcement activity to attempt to recover the receivables which are due. Where recoveries are made, these are recognized in profit or loss.

The following table details the loss allowance of notes receivables and trade receivables based on the Corporation's allowance matrix.

<u>December 31, 2019</u>

	Not Past Due	Less than 2 Months	2 to 3 Months	3 to 4 Months	4 to 5 Months	Over 5 Months	Total
Gross carrying amount Loss allowance (lifetime expected	\$ 4,965,897	\$ 426,446	\$ 2,282	\$ 12,802	\$ 667	\$ 23,069	\$ 5,431,163
credit losses)	(23,357)	(41,121)	(1,238)	(8,059)	(534)	(23,069)	(97,378)
Amortized cost	\$ 4,942,540	\$ 385,325	\$ 1,044	<u>\$ 4,743</u>	<u>\$ 133</u>	<u>\$</u>	\$ 5,333,785
<u>December 31, 2018</u>							
	Not Past Due	Less than 2 Months	2 to 3 Months	3 to 4 Months	4 to 5 Months	Over 5 Months	Total
Gross carrying amount	\$ 4,548,162	\$ 410,894	\$ 4,813	\$ 6,474	\$ 13,879	\$ 9,937	\$ 4,994,159
Loss allowance (lifetime expected credit losses)	(72,558)	(47,920)	(923)	(1,687)	(8,203)	(9,471)	(140,762)
Amortized cost	\$ 4,475,604	\$ 362,974	\$ 3,890	<u>\$ 4,787</u>	\$ 5,676	<u>\$ 466</u>	\$ 4,853,397

The movements of the loss allowance of trade receivables were as follows:

	December 31		
	2019	2018	
Balance, beginning of period Less: Reversal of loss allowance Less: Amounts written off	\$ 140,762 (43,384)	\$ 185,393 (39,098) (5,533)	
Balance, end of period	<u>\$ 97,378</u>	<u>\$ 140,762</u>	

Factored trade receivables that have not yet settled at end of period were as follows:

(In Thousands of Dollars)

Factor	Factor Amount	Reclassified to Other Receivables	Advances Received - Unused	Prepayments	Annual Interest Rates on Advances Received (Used) (%)
For the year ended December 31, 2019					
HSBC Bank	US\$ 16,704	US\$ 1,012	\$ -	\$ -	-
For the year ended December 31, 2018					
HSBC Bank	US\$ 42,640	US\$ 2,435	\$ -	\$ -	-

The factor was HSBC Bank (Taiwan) Limited. This sale was without recourse while the Corporation shall pay only the necessary related charges.

11. INVENTORIES

	December 31	
	2019	2018
Raw materials	\$ 6,906,706	\$ 4,239,740
Work-in-process	2,665,101	1,942,660
Semi-finished goods	1,751,589	1,271,222
Finished goods	120,337	37,450
	<u>\$ 11,443,733</u>	<u>\$ 7,491,072</u>

The costs of inventories recognized as cost of goods sold for the years ended December 31, 2019 and 2018 were \$33,337,982 thousand and \$31,652,858 thousand, respectively.

The costs of goods sold for the years ended December 31, 2019 and 2018 included reversals of inventory write-downs of \$63,700 thousand and write-downs of \$92,379 thousand, respectively. The reversals of previous write-downs resulted from an increase in market selling prices.

12. INVESTMENTS ACCOUNTED FOR USING THE EQUITY METHOD

	Decem	December 31		
	2019	2018		
Investments in subsidiaries	<u>\$ 3,266,384</u>	\$ 1,843,167		
Investments in associates	<u>\$ 989,697</u>	<u>\$1,298,263</u>		

a. Investments in subsidiaries

	December 31	
	2019	2018
<u>Unlisted shares</u>		
Global Flash Limited	\$ 1,157,998	\$ 628,701
Lian Xu Dong Investment Corporation	676,498	484,367
Emtops Electronics Corp.	355,076	71,102
Phisontech Electronics Taiwan Corp.	40,518	-
Phisontech Electronics (Malaysia) Sdn. Bhd.	59,482	64,275
Power Flash (Samoa) Limited	99,223	101,359
Everspeed Technology Limited	343,601	252,981
Phison Electronics Japan Corp.	31,722	34,764
Regis Investment (Samoa) Limited	502,266	205,618
	\$ 3,266,384	\$ 1,843,167

At the end of the reporting period, the proportions of ownership and voting rights in subsidiaries held by the Corporation were as follows:

	December 31		
Name of Subsidiaries	2019	2018	
Global Flash Limited	100%	100%	
Lian Xu Dong Investment Corporation	100%	100%	
Emtops Electronics Corp.	100%	100%	
Phisontech Electronics Taiwan Corp.	100%	-	
Phisontech Electronics (Malaysia) Sdn. Bhd.	100%	100%	
Power Flash (Samoa) Limited	100%	100%	
Everspeed Technology Limited	100%	100%	
Phison Electronics Japan Corp.	100%	100%	
Regis Investment (Samoa) Limited	100%	100%	

The Corporation acquired 100% equity of Phisontech Electronics Taiwan Corp. from its subsidiary, Phisontech Electronics (Malaysia) Sdn. Bhd. in November 2019. This transaction is regarded as a business combinations involving entities under common control.

In March 2018, the Corporation invested in Regis Investment (Samoa) Limited, which is principally engaged in investment services.

Except for Global Flash Limited, Power Flash (Samoa) Limited, Everspeed Technology Limited and Regis Investment (Samoa) Limited, which were calculated based on the financial statements which have not been audited, other investments accounted for using the equity method and the share of profit or loss and other comprehensive income of those investments held by the Corporation were calculated based on the financial statements which have been audited. Management believes there will be no material impact on the equity method of accounting or the calculation of the share of profit or loss and other comprehensive income if the financial statements of Global Flash Limited, Power Flash (Samoa) Limited, Everspeed Technology Limited and Regis Investment (Samoa) Limited were to be audited.

b. Investments in associates

	December 31		
	2019	2018	
<u>Unlisted shares</u>			
Kingston Solutions Inc. Epostar Electronics (BVI) Corporation Microtops Design Corporation ("Microtops")	\$ 965,294 	17,596	
	\$ 989,697	\$ 1,298,263	

Refer to Table 4 for the nature of activities, principal place of business and country of incorporation of the associates.

As of December 31, 2019 and 2018, no investments in associates were individually material to the Corporation.

Aggregate information of associates that are not individually material

	For the Year Ended December 31		
	2019	2018	
The Corporation's share of: Net loss for the year Other comprehensive income (loss)	\$(329,903) (37)	\$(174,924) (745)	
Total comprehensive loss for the year	<u>\$(329,940</u>)	<u>\$(175,669</u>)	

The fiscal year end date for Microtops is March 31. For the purpose of applying the equity method of accounting, the financial statements of Microtops as of March 31, 2019 and 2018 have been used as the Corporation considers that it is impracticable for Microtops to prepare a separate set of financial statements as of December 31. Appropriate adjustments have been made accordingly for the effects of significant transactions between those dates and December 31, 2019 and 2018.

All the aforementioned associates are accounted for using the equity method.

The calculation of the investments accounted for using the equity method and the Corporation's share of profit or loss and other comprehensive income of those investments for the years ended December 31, 2019 and 2018 were based on financial statements that have been audited.

The Corporation's share of losses of an associate is limited to its interest in that associate. The amount of unrecognized share of losses of those associates extracted from the relevant audited financial statements of associates, both for the period and cumulatively, were as follows:

	For the Year Ended December 31, 2019
Unrecognized share of losses of associates for the year	\$ 4,974
Accumulated unrecognized share of losses of associates	\$ 4,974

13. PROPERTY, PLANT AND EQUIPMENT

	Land	Land Improvements	Buildings	Testing Equipment	Office Equipment	Mechanical Equipment	Other Equipment	Total
Cost								
Balance at January 1, 2018 Additions Disposals Reclassification	\$ 813,738 - - -	\$ 28,775 (5,095)	\$ 1,965,976 79,495 -	\$ 378,049 267,500 (42,359) 1,585	\$ 40,194 14,623 (9,994)	\$ - - -	\$ 26,966 13,357 (188)	\$ 3,253,698 374,975 (57,636)
Balance at December 31, 2018	\$ 813,738	\$ 23,680	\$ 2,045,471	\$ 604,775	\$ 44,823	<u>s -</u>	\$ 40,135	\$ 3,572,622
Accumulated depreciation								
Balance at January 1, 2018 Disposals Depreciation	\$ - - -	\$ 20,926 (5,095) 3,472	\$ 233,073 - 56,845	\$ 176,109 (42,180) 125,299	\$ 20,156 (9,994) 14,085	\$ - - -	\$ 10,332 (188) <u>8,652</u>	\$ 460,596 (57,457) 208,353
Balance at December 31, 2018	<u>s -</u>	\$ 19,303	\$ 289,918	\$ 259,228	\$ 24,247	<u>s -</u>	\$ 18,796	\$ 611,492
Balance at December 31, 2018, net	\$ 813,738	\$ 4,377	\$ 1,755,553	\$ 345,547	\$ 20,576	<u>\$</u>	\$ 21,339	\$ 2,961,130
Cost								
Balance at January 1, 2019 Additions Disposals Reclassification	\$ 813,738 145,069	\$ 23,680 (14,290)	\$ 2,045,471 21,094 25,340	\$ 604,775 294,541 (94,124) 10,015	\$ 44,823 13,679 (10,171)	\$ - 48,238 - -	\$ 40,135 8,769 (7,192) 580	\$ 3,572,622 531,390 (125,777) 35,935
Balance at December 31, 2019	<u>\$ 958,807</u>	\$ 9,390	\$ 2,091,905	<u>\$ 815,207</u>	<u>\$ 48,331</u>	<u>\$ 48,238</u>	\$ 42,292	<u>\$ 4,014,170</u>
Accumulated depreciation								
Balance at January 1, 2019 Disposals Depreciation	\$ - - -	\$ 19,303 (14,290) 1,334	\$ 289,918 - 62,558	\$ 259,228 (94,124) 174,823	\$ 24,247 (10,171) 11,916	4,099	\$ 18,796 (7,192) 10,285	\$ 611,492 (125,777) 265,015
Balance at December 31, 2019	<u>s -</u>	\$ 6,347	<u>\$ 352,476</u>	\$ 339,927	\$ 25,992	<u>\$ 4,099</u>	<u>\$ 21,889</u>	\$ 750,730
Balance at December 31, 2019, net	\$ 958,807	\$ 3,043	<u>\$ 1,739,429</u>	\$ 475,280	\$ 22,339	<u>\$ 44,139</u>	\$ 20,403	\$ 3,263,440

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

Land improvements	7 years
Buildings	20-50 years
Buildings - electrical engineering	20 years
Testing equipment	3 years
Office equipment	3 years
Mechanical equipment	3 years
Other equipment	3-5 years

14. LEASE ARRANGEMENTS

a. Right-of-use assets - 2019

	December 31, 2019
Carrying amounts	
Buildings Transportation equipment	\$ 32,058
	\$ 32,840

	For the Year Ended December 31, 2019
Depreciation charge for right-of-use assets	
Buildings	\$ 10,575
Transportation equipment	627
	<u>\$ 11,202</u>

Except for the depreciation recognized on right-of-use assets, the Corporation had no significant additions, disposals, and impairment of right-of-use assets for the year ended December 31, 2019.

b. Lease liabilities - 2019

December 31, 2019

Carrying amounts

 Current
 \$ 12,520

 Non-current
 \$ 20,702

Range of discount rate for lease liabilities was as follows:

December 31, 2019

Buildings 2.55%-2.85% Transportation equipment 2.6%

c. Material lease-in activities and terms

The Corporation leases buildings for the use of plants and offices with lease terms from 2017 to 2024. The lease contract for buildings specifies that lease payments will be adjusted from the third year on the basis of changes in the consumer price index. The Corporation has no options to purchase the equipment for a nominal amount at the end of the lease terms.

d. Other lease information

2019

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

2018

The Corporation as lessee

The Corporation's lease contracts for a factory and an office expire on December 31, 2022.

The future minimum lease payments of operating lease commitments are as follows:

	December 31, 2018
Not later than 1 year Later than 1 year and not later than 5 years	\$ 9,294
	<u>\$ 28,286</u>

15. INTANGIBLE ASSETS

		Decem	ber 31
		2019	2018
Computer software Technology license fees		\$ 172,793 <u>94,546</u>	\$ 110,317 39,064
		<u>\$ 267,339</u>	<u>\$ 149,381</u>
	Computer Software	Technology License Fees	Total
Balance at January 1, 2018 Additions Amortization	\$ 147,490 112,378 (149,551)	\$ 64,618 23,331 (48,885)	\$ 212,108 135,709 (198,436)
Balance at December 31, 2018	<u>\$ 110,317</u>	\$ 39,064	<u>\$ 149,381</u>
Balance at January 1, 2019 Additions Amortization	\$ 110,317 182,719 (120,243)	\$ 39,064 92,434 (36,952)	\$ 149,381 275,153 _(157,195)
Balance at December 31, 2019	\$ 172,793	<u>\$ 94,546</u>	\$ 267,339

The above items of intangible assets are amortized on a straight-line basis over the following estimated useful lives of the assets:

Computer software 1-5 years
Technology license fees 1-8 years

16. OTHER PAYABLES

	December 31		
	2019	2018	
Salaries and bonuses payable Others	\$ 3,143,229 907,608	\$ 2,386,479 904,389	
	<u>\$4,050,837</u>	\$ 3,290,868	

17. OTHER CURRENT LIABILITIES

	December 31	
	2019	2018
Other payables		
Refund liabilities	\$ 419,506	\$ 185,919
Payables for purchases of equipment	35,711	30,295
Receipts under custody	31,395	31,029
Others	62,815	50,473
	\$ 549,427	<u>\$ 297,716</u>

18. RETIREMENT BENEFIT PLANS

a. Defined contribution plan

The Corporation adopted a pension plan under the Labor Pension Act (the "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 Corporation 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 monthly salaries of the six months before retirement. The Corporation contributes amounts equal to 2% of total monthly salaries and wages to a pension fund administered by the pension fund monitoring committee. Pension contributions are deposited in the Bank of Taiwan in the committee's name. Before the end of each year, the Corporation 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 Corporation 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 Corporation has no right to influence the investment policy and strategy.

The amounts included in the balance sheets in respect of the Corporation's defined benefit plan were as follows:

	December 31		
	2019	2018	
Present value of defined benefit obligation Fair value of plan assets	\$ 133,343 (38,398)	\$ 127,656 (34,829)	
Net defined benefit liabilities	<u>\$ 94,945</u>	<u>\$ 92,827</u>	

Movements in net defined benefit liabilities were as follows:

	Present Value of the Defined Benefit Obligation	Fair Value of the Plan Assets	Net Defined Benefit Liabilities
Balance at January 1, 2018	<u>\$ 116,566</u>	<u>\$ (31,669)</u>	<u>\$ 84,897</u>
Service costs			
Current service costs	4,954	-	4,954
Net interest expense (income)	1,633	(443)	1,190
Recognized in profit or loss	6,587	(443)	6,144
Remeasurement			
Return on plan assets (excluding amounts			
included in net interest)	-	(802)	(802)
Actuarial loss - changes in financial			
assumptions	4,695	-	4,695
Actuarial profit - experience adjustments	(192)	<u>-</u>	(192)
Recognized in other comprehensive income	4,503	(802)	3,701
Contributions from the employer	_	(1,915)	<u>(1,915</u>)
Balance at December 31, 2018	<u>\$ 127,656</u>	<u>\$ (34,829)</u>	\$ 92,827
Balance at January 1, 2019	\$ 127,656	\$ (34,82 <u>9</u>)	\$ 92,827
Service costs		· · · · · · · · · · · · · · · · · · ·	
Current service costs	1,591	_	1,591
Net interest expense (income)	1,532	(418)	1,114
Recognized in profit or loss	3,123	(418)	2,705
Remeasurement			
Return on plan assets (excluding amounts			
included in net interest)	-	(1,119)	(1,119)
Actuarial loss - changes in financial			
assumptions	8,565	_	8,565
Actuarial profit - experience adjustments	(6,001)	_	(6,001)
Recognized in other comprehensive income	2,564	(1,119)	1,445
Contributions from the employer		(2,032)	(2,032)
1 7			
Balance at December 31, 2019	<u>\$ 133,343</u>	<u>\$ (38,398)</u>	<u>\$ 94,945</u>

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

	For the Year Ended December 31	
	2019	2018
Operating costs	\$ 433	\$ 859
Marketing expenses	302	716
Administrative expenses	695	1,597
Research and development expenses	1,275	<u>2,972</u>
	<u>\$ 2,705</u>	<u>\$ 6,144</u>

Recognized in other comprehensive income was an actuarial loss of \$1,156 thousand and \$1,530 thousand in 2019 and 2018, respectively. The cumulative amount of actuarial loss recognized in other comprehensive income as of December 31, 2019 and 2018 was \$42,283 thousand and \$41,127 thousand, respectively.

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

	December 31	
	2019	2018
Discount rate	0.80%	1.20%
Expected rate of salary increase	4.00%	4.00%

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

	December 31	
	2019	2018
Discount rate		
0.25% increase	\$ (5,430)	\$ (5,838)
0.25% decrease	\$ 5,670	\$ 6,160
Expected rate of salary increase		
0.25% increase	\$ 5,174	\$ 5,655
0.25% decrease	<u>\$ (4,971</u>)	\$ (5,404)

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

	December 31	
	2019	2018
The expected contributions to the plan for the next year	\$ 2,038	\$ 2,097
The average duration of the defined benefit obligation	17 years	19 years

19. EQUITY

a. Share capital

Common shares

	December 31	
	2019	2018
Number of shares authorized (in thousands)	<u>280,000</u>	230,000
Shares authorized	<u>\$ 2,800,000</u>	<u>\$ 2,300,000</u>
Number of shares issued and fully paid (in thousands)	<u>197,074</u>	<u>197,074</u>
Shares issued	<u>\$1,970,740</u>	<u>\$ 1,970,740</u>

On November 13, 2018, an employee share option plan was approved by the Corporation's board of directors which was declared effective on November 28, 2018, after the Financial Supervisory Commission (FSC) approved this plan as shown in the FSC's issued document No. 1070344165. In accordance with Article 56, Section 2 of the Regulations Governing the Offering and Issuance of Securities Issuers and the regulations of the issuance of employee share options in 2018, shares can be issued as a whole or in parts depending on the actual needs of the Corporation within the year starting from the date the issuer received the notification of approval from the authorities.

On November 11, 2019, an employee share option plan was approved by the Corporation's board of directors which was declared effective on November 22, 2019, after the Financial Supervisory Commission (FSC) approved this plan as shown in the FSC's issued document No. 1080336954. In accordance with Article 56, Section 2 of the Regulations Governing the Offering and Issuance of Securities by Securities Issuers and the regulations of the issuance of employee share options in 2019, shares can be issued as a whole or in parts depending on the actual needs of the Corporation within the year starting from the date the issuer received the notification of approval from the authorities.

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

Of the Corporation's authorized capital shares, 16,000 thousand shares were reserved for the issuance of employee share options.

b. Capital surplus

	December 31	
	2019	2018
May be used to offset a deficit, distributed as cash dividends, or transferred to share capital (1)		
Issuance of common shares The difference between the consideration received or paid and the carrying amount of the subsidiaries' net assets during	\$ 6,237,434	\$ 6,237,434
actual disposal or acquisition	148,758	148,758
May only be used to offset a deficit		
Expired share options Changes in percentage of ownership interests in subsidiaries (2) Share of changes in capital surplus of associates or joint	227 2,369	227
ventures	335,316	288,231
	\$ 6,724,104	<u>\$ 6,674,650</u>

- 1) Such capital surplus may be used to offset a deficit; in addition, when the Corporation has no deficit, such capital surplus may be distributed as cash dividends or transferred to share capital (limited to a certain percentage of the Corporation's capital surplus and once a year).
- 2) Such capital surplus arises from the effects of changes in ownership interests in subsidiaries resulting from equity transactions other than actual disposals or acquisitions or from changes in capital surplus of subsidiaries accounted for using the equity method.

c. Retained earnings and dividend policy

Under the dividends policy as set forth in the amended Articles, where the Corporation made profit in a fiscal year, the profit shall be first utilized for paying taxes, offsetting losses of previous years, setting aside as legal reserve 10% of the remaining profit, setting aside or reversing a special reserve in accordance with the laws and regulations, and then any remaining profit together with any undistributed retained earnings shall be used by the Corporation's board of directors as the basis for proposing a distribution plan, which should be resolved in the shareholders' meeting for the distribution of dividends and bonus to shareholders. For the policies on distribution of employees' compensation and remuneration to directors and supervisors before and after amendment, refer to Note 21(f) "employees' compensation and remuneration of directors and supervisors".

The Corporation's dividend distribution policy takes into consideration the current and future investment environment, capital requirements, domestic and international competition, capital budget plans, shareholders' interests, the balance between retained earnings and dividends, and the Corporation's long-term financial plans. In accordance with the laws and regulations, the board of directors propose a distribution plan on an annual basis, which should be resolved in the shareholder's meeting. Profit may be distributed as cash or share dividends; however, cash dividends should be at least 10% of the total dividends distributed.

The Corporation appropriates or reverses a special reserve in accordance with Rule No. 1010012865 issued by the Financial Supervisory Commission. Distributions can be made out of any subsequent reversal of the debit to other equity items.

A legal reserve may be used to offset deficits. If the Corporation has no deficit and the legal reserve has exceeded 25% of the Corporation's paid-in capital, the excess may be transferred to capital or distributed in cash.

The appropriations of earnings for 2018 and 2017 were approved in the shareholders' meeting on June 12, 2019 and June 8, 2018, respectively, and were as follows:

	Appropriation of Earnings	
	For Year 2018	For Year 2017
Legal reserve	\$ 431,812	\$ 576,097
Special reserve (reversal)	380,927	(25,965)
Cash dividends	2,561,962	3,350,258
Cash dividends per share (NT\$)	13	17

The appropriation of earnings for 2019 had been proposed by the Corporation's board of directors on March 16, 2020. The appropriation and dividends per share were as follows:

	Appropriation of Earnings	Dividends Per Share (NT\$)
Legal reserve	\$ 455,816	
Reversal of special reserve	(204,802)	
Cash dividends	2,561,962	\$13

The appropriation of earnings for 2019 are subject to the resolution of the shareholders in the shareholders' meeting to be held on June 3, 2020.

20. INCOME TAXES

a. Income tax recognized in profit or loss:

The major components of tax expense were as follows:

	For the Year Ended December 31	
	2019	2018
Current tax		
In respect of the current year	\$ 752,924	\$ 657,085
Income tax expense of unappropriated earnings	46,945	185,370
Adjustments for prior periods		(163,846)
	799,869	678,609
Deferred tax		
In respect of the current year	(2,912)	53,562
Effect of change in tax rate	<u>-</u>	<u>(49,937</u>)
	(2,912)	3,625
Income tax expense recognized in profit or loss	<u>\$ 796,957</u>	\$ 682,234

A reconciliation of accounting profit and income tax expense for 2019 and 2018 is as follows:

	For the Year Ended December 31	
	2019	2018
Profit before tax from continuing operations	<u>\$ 5,340,446</u>	<u>\$ 5,000,353</u>
Income tax expense calculated at the statutory rate	\$ 1,068,089	\$ 1,000,071
Tax-exempt income	(322,687)	(289,424)
Income tax on unappropriated earnings	46,945	185,370
	4,610	-
Effect of change in tax rate	-	(49,937)
Adjustments for prior years' tax	-	(163,846)
Income tax expense recognized in profit or loss	<u>\$ 796,957</u>	\$ 682,234

The Income Tax Act in the ROC was amended in 2018, and the corporate income tax rate was adjusted from 17% to 20%. 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. The Corporation has already deducted the amount of capital expenditure from the unappropriated earnings in 2018 that was reinvested when calculating the tax on unappropriated earnings for the year ended December 31, 2019.

The appropriation of the 2020 earnings is uncertain and is subject to approval at the shareholders' meeting; thus, the potential consequences of income tax on the 2019 unappropriated earnings are not reliably determinable.

b. Income tax benefit recognized in other comprehensive income

	For the Year Ended December 31	
	2019	2018
Deferred income tax		
Effect of change in tax rate	\$ -	\$ 3,857
In respect of the current period		•
Share of other comprehensive income of subsidiaries and		
associates	13,669	788
Actuarial gain on defined benefit plan	289	<u>740</u>
Total income tax expense recognized in other comprehensive income	<u>\$ 13,958</u>	<u>\$ 5,385</u>
c. Current tax assets and liabilities		
	Decer	nber 31
	2019	2018
Current tax liabilities Income tax payable	\$ 597 762	\$ 522 579
Income tax payable	<u>\$ 597,762</u>	<u>\$ 522,579</u>

d. Deferred tax assets and liabilities

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

For the year ended December 31, 2019

	Opening Balance	Recognized in Profit or Loss	Recognized in Other Comprehensive Income	Closing Balance	
Deferred tax assets					
Temporary differences					
Allowance for impairment					
loss	\$ 17,397	\$ (9,913)	\$ -	\$ 7,484	
Inventory write-downs	80,319	(12,740)	-	67,579	
Refund liabilities	37,184	46,717	-	83,901	
Defined benefit obligation	18,565	135	289	18,989	
Unrealized exchange				•	
losses	85,152	22,360	_	107,512	
Impairment loss on	,	,		,	
financial assets	31,801	(6,293)	_	25,508	
Exchange differences on	,	())		,	
translating foreign					
operations	16,960	_	13,669	30,629	
1	-)		,	(Continued)	

	Opening Balance	Recognized in Profit or Loss	Recognized in Other Comprehensive Income	Closing Balance		
Share of losses of subsidiaries and associates Unrealized gain on	\$ 13,110	\$ (13,110)	\$ -	\$ -		
transactions with subsidiaries	3,910	(2,258)	-	1,652		
Property, plant and equipment	2,197	(56)	-	2,141		
<u>Deferred tax liabilities</u>	<u>\$ 306,595</u>	<u>\$ 24,842</u>	<u>\$ 13,958</u>	<u>\$ 345,395</u>		
Share of gains of subsidiaries and associates	<u>\$</u>	<u>\$ 21,930</u>	<u>\$</u>	\$ 21,930 (Concluded)		
For the year ended December	r 31, 2018					
	Opening	Recognized in	Recognized in Other Comprehensive	Closing		
	Balance	Profit or Loss	Income	Balance		
<u>Deferred tax assets</u>						
Temporary differences Allowance for impairment						
loss	\$ 21,608	\$ (4,211)	\$ -	\$ 17,397		
Inventory write-downs	52,567	27,752	-	80,319		
Refund liabilities	49,654	(12,470)	-	37,184		
Defined benefit obligation	14,433	1,961	2,171	18,565		
Unrealized exchange losses	77,212	7,940	-	85,152		
Impairment loss on financial						
assets	44,475	(12,674)	-	31,801		
Exchange differences on translating foreign	13,746		3,214	16,960		
operations Share of losses of	13,740	-	3,214	10,900		
subsidiaries and associates Unrealized gain on	29,225	(16,115)	-	13,110		
transactions with						
subsidiaries		• • • •		2 2 4 2		
Linear outry as least one d	-	3,910	-	3,910		
Property, plant and equipment	1,915	3,910 282	<u>-</u>	3,910 		

e. Income tax assessments

Income tax returns through 2016 have been assessed by the tax authorities.

21. NET PROFIT (LOSS) FROM CONTINUING OPERATIONS

The following items were included in the net profit:

a. Other gains and losses

a. Other gams and losses		
	For the Year End	ded December 31
	2019	2018
Fair value changes of financial assets and financial liabilities		
Financial assets mandatorily classified as FVTPL	\$ 149,990	\$ (11,605)
Net foreign exchange (losses) gains	(137,486)	171,439
Others	14,429	1,404
	<u>\$ 26,933</u>	<u>\$ 161,238</u>
b. Other income		
	For the Year En	ded December 31
	2019	2018
Interest income		
Bank deposits	\$ 47,065	\$ 46,443
Others	5,550	3,122
Rental income	<u>52,615</u>	49,565
Dividend income	3,451 77,813	2,964 41,698
Others	75,399	37,801
Others	<u> </u>	<u> </u>
	<u>\$ 209,278</u>	<u>\$ 132,028</u>
c. Finance costs		
		ded December 31
	2019	2018
Interest on bank loans	\$ 1,085	\$ 5,070
Interest on lease liabilities	921	-
	<u>\$ 2,006</u>	<u>\$ 5,070</u>

d. Depreciation and amortization

	For the Year En	ded December 31
	2019	2018
Property, plant and equipment	\$ 265,015	\$ 208,353
Right-of-use assets	11,202	-
Intangible assets	157,195	<u>198,436</u>
	<u>\$ 433,412</u>	\$ 406,789
An analysis of depreciation by function		
Operating costs	\$ 54,413	\$ 45,880
Operating expenses	221,804	162,473
	<u>\$ 276,217</u>	\$ 208,353
An analysis of amortization by function Operating expenses	<u>\$ 157,195</u>	<u>\$ 198,436</u>
e. Employee benefits expense		
	For the Year En	ded December 31
	For the Year En	ded December 31 2018
Short-term employee benefits	2019	2018
Short-term employee benefits Post-employment benefits		
Short-term employee benefits Post-employment benefits Defined contribution plan	2019	2018
Post-employment benefits	2019 \$ 4,186,750	2018 \$ 2,767,933
Post-employment benefits Defined contribution plan Defined benefit plan	2019 \$ 4,186,750 94,799	2018 \$ 2,767,933 80,851
Post-employment benefits Defined contribution plan Defined benefit plan Other employee benefits	2019 \$ 4,186,750 94,799 2,705 97,504	\$2,767,933 \$0,851 6,144 86,995
Post-employment benefits Defined contribution plan Defined benefit plan Other employee benefits Employee welfare	2019 \$ 4,186,750 94,799 2,705 97,504 57,867	\$2,767,933 \$0,851 6,144 86,995 53,016
Post-employment benefits Defined contribution plan Defined benefit plan Other employee benefits	2019 \$ 4,186,750 94,799 2,705 97,504 57,867 47,547	\$2,767,933 80,851 6,144 86,995 53,016 39,684
Post-employment benefits Defined contribution plan Defined benefit plan Other employee benefits Employee welfare	2019 \$ 4,186,750 94,799 2,705 97,504 57,867	\$2,767,933 \$0,851 6,144 86,995 53,016
Post-employment benefits Defined contribution plan Defined benefit plan Other employee benefits Employee welfare	2019 \$ 4,186,750 94,799 2,705 97,504 57,867 47,547	\$2,767,933 80,851 6,144 86,995 53,016 39,684
Post-employment benefits Defined contribution plan Defined benefit plan Other employee benefits Employee welfare Food stipend Employee benefits	\$4,186,750 94,799 2,705 97,504 57,867 47,547 105,414	\$2,767,933 80,851 6,144 86,995 53,016 39,684 92,700
Post-employment benefits Defined contribution plan Defined benefit plan Other employee benefits Employee welfare Food stipend Employee benefits Recognized in operating costs	\$4,186,750 94,799 2,705 97,504 57,867 47,547 105,414 \$4,389,668 \$ 202,519	\$2,767,933 80,851 6,144 86,995 53,016 39,684 92,700 \$2,947,628
Post-employment benefits Defined contribution plan Defined benefit plan Other employee benefits Employee welfare Food stipend Employee benefits	\$ 4,186,750 94,799 2,705 97,504 57,867 47,547 105,414 \$ 4,389,668	\$2,767,933 80,851 6,144 86,995 53,016 39,684 92,700 \$2,947,628

f. Employees' compensation and remuneration of directors and supervisors

The Corporation accrued employees' compensation and remuneration of directors and supervisors at the rates of 8%-19% and no higher than 1.5%, respectively, of net profit before income tax, employees' compensation, and remuneration of directors and supervisors. The employees' compensation and remuneration of directors and supervisors for the years ended December 31, 2019 and 2018, which have been approved by the Corporation's board of directors on March 16, 2020 and March 21, 2019, respectively, were as follows:

Accrual rate

	For the Year Ended December 31			
	2019	2018		
Employees' compensation	10.79%	9.84%		
Remuneration of directors and supervisors	0.58%	0.72%		

Amount

For the Year Ended December 31

		- 0						
	20	19		2018				
	Cash Dividends		are dends	Cash Dividends	Share Dividends			
Employees' compensation Remuneration of directors and	\$ 650,000	\$	-	\$ 550,000	\$	-		
supervisors	35,000		-	40,000		-		

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

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

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

g. Gains or losses on foreign currency exchange

	For the Year Ended December 31			
	2019	2018		
Foreign exchange gains Foreign exchange losses	\$ 351,696 _(489,182)	\$ 572,646 (401,207)		
Net (losses) gains	<u>\$(137,486)</u>	<u>\$ 171,439</u>		

22. EARNINGS PER SHARE

Unit: NT\$ Per Share

For the Year Ended December

197,074

2,367

199,441

197,074

2,867

199,941

	For the Year E	nded December 1
	2019	2018
Basic earnings per share Diluted earnings per share	\$23.05 \$22.78	\$21.91 \$21.60

The earnings and weighted-average number of ordinary shares outstanding used in the computation of earnings per share were as follows:

Net Profit for the Year

	31		
	2019	2018	
Earnings used in the computation of basic earnings per share			
Profit for the period attributable to owners of the Corporation Earnings used in the computation of diluted earnings per share	<u>\$ 4,543,489</u>	<u>\$ 4,318,119</u>	
Profit for the period attributable to owners of the Corporation	<u>\$4,543,489</u>	<u>\$ 4,318,119</u>	
Shares			
	(In Th	ousands of Shares)	
		nded December 31	
	2019	2018	
Weighted-average number of common shares used in the	40-0-4	40-0-4	

If the Corporation offered to settle compensation or bonuses paid to employees in cash or shares, the Corporation assumed 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, as the effect is dilutive. Such dilutive effect of the potential shares is included in the computation of diluted earnings per share until the number of shares to be distributed to employees is resolved in the following year.

23. CAPITAL MANAGEMENT

Employees' compensation

computation of basic earnings per share

Effect of potentially dilutive common shares:

computation of dilutive earnings per share

Weighted-average number of common shares used in the

The Corporation manages its capital to ensure that the Corporation will be able to continue as a going concern while maximizing the return to shareholders through the optimization of the debt and equity balance. The capital structure of the Corporation consists of net debts (borrowings offset by cash and cash equivalents) and equity (comprising share capital, capital surplus, retained earnings and other equities).

The Corporation is not subject to any externally imposed capital requirements.

Key management personnel of the Corporation review the capital structure on an annual basis. As part of this review, the key management personnel consider the cost of capital and the risks associated with each class of capital. Based on recommendations of the key management personnel, in order to balance the overall capital structure, the Corporation may adjust the amount of dividends paid to shareholders and the amount of new debt issued or existing debt redeemed.

24. FINANCIAL INSTRUMENTS

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

The Corporation's management considers the carrying amounts recognized in the financial statements for financial assets and financial liabilities not carried at fair value to approximate their fair values or their fair values cannot be reliably measured.

- b. Fair value of financial instruments measured at fair value on a recurring basis
 - 1) Fair value hierarchy

<u>December 31, 2019</u>

	Level 1	Level 1 Level 2		Total
Financial assets at FVTPL				
Domestic listed shares	\$ 529,538	\$ -	\$ -	\$ 529,538
Domestic unlisted shares	-	-	341,618	341,618
Overseas unlisted shares	-	-	18,849	18,849
Domestic private equity funds	-	-	45,408	45,408
Beneficiary certificates - open-				
end funds	2,534,676	-	-	2,534,676
Convertible bonds		_	94,770	94,770
	<u>\$ 3,064,214</u>	<u>\$</u> _	\$ 500,645	\$ 3,564,859
Financial assets at FVTOCI Investments in equity instruments				
Domestic unlisted shares	\$ -	\$ -	\$ 119,170	\$ 119,170
Overseas unlisted shares			94,566	94,566
	<u>\$</u> _	<u>\$</u>	<u>\$ 213,736</u>	<u>\$ 213,736</u>

December 31, 2018

	Level 1	Level 2	Level 3	Total	
Financial assets at FVTPL					
Domestic listed shares	\$ 372,994	\$ -	\$ -	\$ 372,994	
Domestic unlisted shares	-	-	281,900	281,900	
Overseas unlisted shares	-	-	54,231	54,231	
Domestic private equity funds	-	-	47,366	47,366	
Beneficiary certificates - open-					
end funds	2,520,850	-	-	2,520,850	
Convertible bonds		_	85,288	85,288	
	\$ 2,893,844	\$ -	\$ 468,785	\$ 3,362,629	
Financial assets at FVTOCI Investments in equity instruments					
Domestic unlisted shares	\$ -	\$ -	\$ 70,134	\$ 70,134	
Overseas unlisted shares	<u> </u>	<u>-</u>	93,309	93,309	
	<u>\$</u> _	<u>\$</u>	<u>\$ 163,443</u>	\$ 163,443	

There were no transfers between Levels 1 and 2 for the years ended December 31, 2019 and 2018.

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

For the year ended December 31, 2019

	Financial Assets at FVTPL					Financial Assets at		
Financial Assets		rivatives - vate Equity Funds		rivatives - onvertible Bonds	Ir	Equity estruments	 FVTOCI Equity astruments	Total
Balance at January 1, 2019	\$	47,366	\$	85,288	\$	336,131	\$ 163,443	\$ 632,228
Recognized in profit or loss Other losses Recognized in other comprehensive income		(1,958)		(5,134)		(13,288)	-	(20,380)
Unrealized gain on financial assets at FVTOCI		_		_		_	58,967	58,967
Purchases		-		92,379		46,354		138,733
Sales		-		(77,763)		-	(8,674)	(86,437)
Capital reduction and refund of shares				<u>-</u>		(8,730)	 	 (8,730)
Balance at December 31, 2019	\$	45,408	\$	94,770	\$	360,467	\$ 213,736	\$ 714,381

For the year ended December 31, 2018

		Fin	Financial Assets Financial Assets at FVTPL at							
Financial Assets	Privat	Derivatives - Private Equity Funds		Derivatives - Convertible Bonds		Equity Instruments		FVTOCI Equity Instruments		Total
Balance at January 1, 2018 (IAS 39)	\$	_	\$	53,722	\$	434,763	\$	_	\$	488,485
Transfers into Level 3	Ψ		Ψ	00,722	Ψ	.5 .,, 05	Ψ		Ψ	.00,.00
(Application of IFRS 9)	4	47,032		-		268,580	24	11,262		556,874
Recognized in profit or loss										
Other gains		334		3,478		135,952		-		139,764
Recognized in other comprehensive income										
Unrealized loss on financial										
assets at FVTOCI		-		-		-	`	06,094)		(106,094)
Purchases		-		77,763		1,454		53,712		132,929
Sales		-		(49,675)		-	(2	25,437)		(75,112)
Capital reduction and refund of										/
shares		-		-		(69,855)		-		(69,855)
Transfers out of Level 3				<u> </u>		(434,763)		<u> </u>		(434,763)
Balance at December 31, 2018	\$ 4	<u> 47,366</u>	\$	85,288	\$	336,131	\$ 16	53,443	\$	632,228

Financial Assets

- 3) Valuation techniques and inputs applied for the purpose of Level 3 fair value measurement
 - a) The fair values of convertible bonds are determined using the Binary Tree Evaluation Model and option pricing models where the significant unobservable input is historical volatility. As of December 31, 2019 and 2018, the historical volatilities used were 49.88% and 58.61%, respectively.
 - b) The fair values of unlisted equity securities domestic and foreign were determined using the market approach. In accordance with the trading prices of analogous subjects, taking the difference of the unlisted equity securities and analogous subjects into consideration, the value of the unlisted equity securities are estimated using the appropriate multiplier. The significant unobservable inputs used are listed in the table below. A decrease of the discount for the lack of marketability used in isolation would result in an increase in fair value.

	Decem	December 31		
	2019	2018		
Discount for lack of marketability	15%	15%		

c) The fair values of unlisted equity securities - foreign were determined using the income approach. In this approach, the discounted cash flow method was used to capture the present value of the expected future economic benefits to be derived from the ownership of these investees. The significant unobservable inputs used are listed in the table below. Decreases in the discount for non-controlling interests, the discount for lack of marketability and the weighted-average cost of capital (WACC) would result in increases in fair value. A decrease in sustainable revenue growth rates would result in a decrease in fair value.

	December 31		
	2019	2018	
Discount for non-controlling interest	15%	15%	
Discount for lack of marketability	15%	15%	
Sustainable revenue growth rates	2%	2%	
WACC	12.78-14.39%	13.7%	

d) The fair values of unlisted equity securities - domestic and foreign and private equity funds were determined using the asset-based approach. In order to reflect the overall value of the Corporation or business, the total market value of the individual assets and individual liabilities of the evaluation target are evaluated. The significant unobservable inputs used are listed in the table below. Decreases in the discount for non-controlling interests and the discount for a lack of marketability would result in increases in fair value.

December 31

	Decem	cember 51		
	2019	2018		
Discount for non-controlling interests	10%	10%		
Discount for lack of marketability	10%	10%		
c. Categories of financial instruments				
	Decen	nber 31		
	2019	2018		
Financial assets				
Financial assets at FVTPL				
Mandatorily classified as FVTPL	\$ 3,564,859	\$ 3,362,629		
Financial assets at amortized cost (Note 1)	14,604,646	18,298,992		
Financial assets at FVTOCI				
Equity instruments	213,736	163,443		
Financial liabilities				
Financial liabilities at amortized cost (Note 2)	7,689,339	8,088,925		

Note 1: The balances include financial assets measured at amortized cost, which comprise cash and cash equivalents, financial assets at amortized cost, notes receivable, accounts receivable and other receivables.

Note 2: The balances include financial liabilities measured at amortized cost, which comprise notes payable, trade payables, and other payables.

d. Financial risk management objectives and policies

The Corporation's major financial instruments include equity investments, trade receivables, trade payables, borrowings and lease liabilities. The Corporation's financial management department provides services to the business unit and coordinates access to domestic and international financial markets. The risks include market risk (including foreign currency risk, interest rate risk and other price risk), credit risk and liquidity risk.

1) Market risk

The Corporation's activities expose it primarily to the financial risks of changes in foreign currency rates and interest rates.

a) Foreign currency risk

The Corporation had foreign currency sales and purchases, which exposed the Corporation to foreign currency risk. To avoid the decrease in foreign currency assets and adverse fluctuations of future cash flows resulting from changes in foreign currency exchange rates, the Corporation used foreign currency borrowings to hedge risks of foreign currency exchange rates. The gain or loss caused by changes in foreign currency exchange rates will be offset by profit or loss from the hedge. As a result, the market risk is immaterial.

The carrying amounts of the Corporation's foreign currency denominated monetary assets and monetary liabilities (including those eliminated on consolidation) and of the derivatives exposed to foreign currency risk at the end of the reporting period are referred in Note 29.

Sensitivity analysis

The Corporation was mainly exposed to the US dollar.

The following table details the Corporation's sensitivity to a 6% increase and decrease in the New Taiwan dollar (the functional currency) against the relevant foreign currencies. The sensitivity rate used when reporting foreign currency risk internally to key management personnel and represents management's assessment of the reasonably possible change in foreign exchange rates is 6%. The sensitivity analysis included only outstanding foreign currency denominated monetary items and adjusts its translation at the end of the reporting period for a 6% change in foreign currency rates. A positive number below indicates a decrease in pre-tax profit and other equity associated with the New Taiwan dollar strengthens 6% against the relevant currency. For a 6% weakening of the New Taiwan dollar against the relevant currency, there would be an equal and opposite impact on pre-tax profit and other equity and the balances below would be negative.

Impact of USD						
For the Year Ended December 31						
2019	2018					
\$ 293,806	\$ 235,207					

Profit or loss

b) Interest rate risk

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

	December 31		
	2019	2018	
Fair value interest rate risk			
Financial assets	\$ 2,386,048	\$ 4,852,082	
Financial liabilities	33,222	-	
Cash flow interest rate risk			
Financial assets	5,910,829	7,956,746	

Sensitivity analysis

If interest rates had been 1 basis point higher and all other variables were held constant, the Corporation's pre-tax profit for the years ended December 31, 2019 and 2018 would increase by \$591 thousand and \$796 thousand, respectively.

c) Other price risk

The Corporation was exposed to equity price risks through its investments in international and domestic listed stock, convertible bonds, private equity funds and beneficial certificates.

Sensitivity analysis

The sensitivity analysis below was determined based on the Corporation's exposure to equity price risks at the end of the reporting period.

If equity prices had been 1% higher/lower, pre-tax profit for the years ended December 31, 2019 and 2018 would have increased/decreased by \$35,649 thousand and \$33,626 thousand, respectively, as a result of the changes in fair value of financial assets at FVTPL, and the pre-tax other comprehensive income for the years ended December 31, 2019 and 2018 would have increased/decreased by \$2,137 thousand and \$1,634 thousand, respectively, as a result of the changes in fair value of financial assets at FVTOCI.

2) Credit risk

Credit risk refers to the risk that a counterparty will default on its contractual obligations, resulting in a financial loss to the Corporation. As at the end of the reporting period, the Corporation's maximum exposure to credit risk, which would cause a financial loss to the Corporation due to a failure of counterparties to discharge an obligation and financial guarantees provided by the Corporation, comes from the carrying amounts of the respective recognized financial assets as stated in the parent company only balance sheets.

The targets of the aforementioned evaluation are financial assets that could potentially be influenced by the Corporation's counterparties defaulting on their contractual obligations and contracts with positive fair values as of the balance sheet date. The customers of the Corporation are financial institutions or manufacturers with good credit ratings; and thus, there is no expected material credit risk.

3) Liquidity risk

The Corporation manages liquidity risk by monitoring and maintaining a level of cash and cash equivalents deemed adequate to finance the Corporation's operations and mitigate the effects of fluctuations in cash flows. In addition, management monitors the utilization of bank borrowings and ensures compliance with loan covenants. The Corporation relies on bank borrowings as a significant source of liquidity. As of December 31, 2019 and 2018, the Corporation had available unutilized short-term bank loan facilities of \$7,838,400 thousand and \$7,887,200 thousand, respectively.

Liquidity and interest risk rate table for non-derivative financial liabilities

The following tables detail the Corporation's remaining contractual maturities for its non-derivative financial liabilities with agreed upon repayment periods. The tables have been drawn up based on the undiscounted cash flows of financial liabilities from the earliest date on which the Corporation can be required to pay.

				December 31, 201	9	
		On Demand or Less Than 1 Month	1-3 Months	3 Months to 1 Year	1-5 Years	More than 5 Years
Non-derivative financial	<u>liabilities</u>					
Non-interest bearing liab Lease liabilities	ilities	\$ 3,110,774 1,110	\$ 1,975,254 2,220	\$ 3,201,073 9,934	\$ <u>-</u> 21,433	\$ - -
		<u>\$ 3,111,884</u>	<u>\$ 1,977,474</u>	\$ 3,211,007	<u>\$ 21,433</u>	<u>\$</u>
Additional is	nformation abou	it the maturity ar	nalysis for leas	e liabilities:		
	Less than 1 Year	1-5 Years	5-10 Years	10-15 Years	15-20 Years	20+ Years
Lease liabilities	<u>\$ 13,264</u>	<u>\$ 21,433</u>	<u>\$ -</u>	<u>\$</u>	<u>\$ -</u>	<u>\$ -</u>
			·	December 31, 201	8	
		On Demand or Less Than		3 Months to		More than

e. Information on transfers of financial assets

Non-derivative financial liabilities

Non-interest bearing liabilities

Refer to Note 10 for more information relating to the Corporation's factored trade receivables.

1-3 Months

\$ 2,845,240

1 Year

\$ 1,938,378

1-5 Years

5 Years

1 Month

\$ 3,827,886

25. RELATED PARTY TRANSACTIONS

Besides information disclosed elsewhere in the other notes, details of transactions between the Corporation and other related parties are disclosed below.

a. Related parties and their relationships

Related Party	Relationship		
Toshiba International Procurement Hong Kong, Ltd.	Other related parties		
Kioxia America, Inc.	Other related parties (Note 1)		
Toshiba Singapore Pte. Ltd.	Other related parties		
Toshiba Corporation, Japan	Other related parties		
Dynabook ANZ Pty. Limited	Other related parties (Note 2)		
Kioxia Corporation	Other related parties (Note 3)		
Kioxia Taiwan Corporation	Other related parties (Note 4)		
Toshiba Electronic Components Taiwan Corporation	Other related parties		
Orient Semiconductor Electronics Ltd.	Other related parties		
Dawning Leading Technology Inc.	Other related parties (Note 5)		
Apacer Technology Inc.	Other related parties		
United Power Research Technology Corporation	Other related parties		
Kingston Solutions Inc.	Associates		
PMS Technology Corporation	Associates		
Microtops Design Corporation	Associates		
Epostar Electronics Corporation	Associates		
Shenzhen EpoStar Electronics Limited Co.	Associates		
HOSIN Global Electronics Co., Ltd. (HK)	Associates		
Hefei DATANG Storage Technology Co., Ltd.	Associates		
SiliTai Electronics Co., Limited	Associates		
HOSIN Global Electronics Co., Ltd. (SZ)	Associates		
Lian Xu Dong Investment Corporation	Subsidiary		
Phisontech Electronics (Malaysia) Sdn. Bhd.	Subsidiary		
Phison Electronics Japan Corp.	Subsidiary		
Phison Technology Inc.	Subsidiary		
Hefei Ruhan Electronic Technology Limited	Subsidiary		
Emtops Electronics Corp.	Subsidiary		
Ostek Corporation	Subsidiary		
Phisontech Electronics Taiwan Corp.	Subsidiary		
Hefei Core Storage Electronic Limited	Subsidiary		
Memoryexchange Corporation	Subsidiary		

- Note 1: Toshiba Memory America, Inc. was renamed as Kioxia America, Inc. on October 1, 2019.
- Note 2: Toshiba Client Solutions ANZ Pty Limited was renamed as Dynabook ANZ Pty. Limited on April 1, 2019.
- Note 3: Toshiba Memory Corporation was renamed as Kioxia Corporation on October 1, 2019.
- Note 4: Toshiba Memory Taiwan Corporation was renamed as Kioxia Taiwan Corporation on October 1, 2019.

Note 5: The dissolution of Dawning Leading Technology Inc. was approved in the shareholders' meeting held on August 29, 2018 and the date of merger was set as November 1, 2018; thus, starting from November 1, 2018, Dawning Leading Technology Inc. was no longer a related party of the Corporation.

b. Operating revenue

	For the Year En	For the Year Ended December 31			
	2019	2018			
Related Party Categories					
Subsidiaries Associates Other related parties	\$ 424,638 1,321,776 	\$ 399,107 88,762 			
	<u>\$ 3,679,029</u>	<u>\$ 2,318,891</u>			

The terms of sales to related parties were similar to those for third parties.

c. Operating costs

1) Purchase of goods

	For the Year Ended December 31		
	2019	2018	
Related Party Categories			
Subsidiaries Associates Other related parties	\$ 1,550 1,462,239	\$ 6,643 689,883	
Kioxia Taiwan Corporation Others	11,432,366 	13,871,205 4,472,843	
2) Processing costs	\$ 14,333,648 For the Year En	\$ 19,040,574 ded December 31	
	2019	2018	
Related Party Categories			
Subsidiaries Associates Other related parties	\$ 24,457 458 2,385,170	\$ 24,977 185 	
	<u>\$ 2,410,085</u>	<u>\$ 1,783,235</u>	

The terms of operating costs from related parties were similar to those for third parties.

d. Receivables from related parties

	December 31			
		2019		2018
Related Party Categories				
Subsidiaries Associates Other related parties	\$	27,764 246,653 290,496	\$	39,353 81,354 262,895
•	<u>\$</u>	564,913	\$	383,602

The outstanding trade receivables from related parties are unsecured. No bad debt expense was recognized for the allowance for impaired trade receivables with respect to the amounts owed by related parties in 2019 and 2018.

e. Payables to related parties

	December 31			
	2019		2018	
Related Party Categories				
Subsidiaries	\$	1,884	\$	5,621
Associates		29,796		134,362
Other related parties				
Kioxia Taiwan Corporation	1	1,034,293 2,077.		
Others		320,008		644,014
	<u>\$ 1</u>	,385,981	<u>\$ 2</u>	2,861,765

The outstanding trade payables from related parties are unsecured.

f. Compensation of key management personnel

	For the Year Ended December 31								
	2019	2018							
Short-term employee benefits Post-employment benefits Other employee benefits	*	749 \$ 188,245 561 1,803 436 4,288							
	<u>\$ 279,</u>	<u>\$ 194,336</u>							

The remuneration of directors and key executives was determined by the remuneration committee based on the performance of individuals and market trends.

26. ASSETS PLEDGED AS COLLATERAL OR FOR SECURITY

The following assets were provided as collateral for the tariff of imported raw materials:

	Decen	ıber 31
	2019	2018
Refundable deposits for customs duties - certificates of deposit		
(financial assets at amortized cost - current)	\$ 20,383	\$ 20,356

27. SIGNIFICANT CONTINGENT LIABILITIES AND UNRECOGNIZED COMMITMENTS

In addition to those disclosed in other notes, significant commitments and contingencies of the Corporation as of December 31, 2019 and 2018 were as follows:

Significant Commitments

	Decem	ber 31
	2019	2018
Unused letters of credit	<u>\$ 1,660,000</u>	<u>\$1,670,000</u>

28. SIGNIFICANT EVENTS AFTER THE REPORTING PERIOD

In response to the growth of the operation, the Corporation's board of directors resolved on January 17, 2020 to build a factory building in Zhunan Guangyuan Science and Technology Park by contracting third parties to construct on the land owned by the Corporation. The total price of the project was approximately \$1,398,000 thousand. The Corporation will finance the construction with its own funds. The expected construction period is from March 2020 to December 2021.

29. SIGNIFICANT ASSETS AND LIABILITIES DENOMINATED IN FOREIGN CURRENCIES

The Corporation's monetary financial assets and liabilities denominated in foreign currencies aggregated by the foreign currencies other than functional currencies and the related exchange rates between foreign currencies and respective functional currencies were as follows:

In Thousands of New Taiwan Dollars and Foreign Currencies

	I	December 31, 201	9
	Foreign Currencies	Exchange Rates	New Taiwan Dollars
Financial assets			
Monetary USD CNY	\$ 249,130 24,144	29.980 4.305	\$ 7,468,930 103,938
Financial liabilities			
Monetary USD	85,796	29.980	2,572,158

	I	December 31, 20 1	18
	Foreign Currencies	Exchange Rates	New Taiwan Dollars
Financial assets			
Monetary USD CNY	\$ 234,373 23,545	30.715 4.472	\$ 7,198,760 105,292
Financial liabilities			
Monetary USD	106,744	30.715	3,278,640

30. OTHER SIGNIFICANT EVENT

The Corporation was under statutory investigation by the Taiwan Hsinchu District Prosecutorial Office ("District Prosecutorial Office") on and from August 5, 2016 for alleged violation of the Securities and Exchange Act (the "Case"). The investigation was concluded on August 31, 2017, and the chairman of the Corporation and other defendants were either charged with deferred prosecution or dropped claim for further prosecution by the prosecutor. Then the District Prosecutorial Office ex officio sent the ruling to the Taiwan High Prosecutors Office ("High Prosecutors Office") for reconsideration. On November 18, 2019, High Prosecutors Office partially set aside and dismissed the original ruling, and ordered the District Prosecutorial Office to continue the investigation. On July 30, 2019, the District Prosecutorials Office concluded the investigation and indicted the chairman of the Corporation and others for their alleged violation of the Securities and Exchange Act and related provisions. A trial of the Case would be held in the Hsinchu District Court. The chairman of the Corporation would strive for a fair judgment in accordance with the law. The Corporation evaluated that its finance and operations had not yet been affected. Following the aforementioned indictment, the Corporation was served with complaints from the Hsinchu District Court on November 8, 2019 and December 13, 2019, that Securities and Futures Investors Protection Center ("Investors Protection Center") had filed two civil actions, respectively, as follows: (1) the first civil action was to remove Mr. K.S. Pua from director position of the Corporation's board ("Removal Action"); (2) the second civil action was to claim compensation damage of \$697,389 thousand against the Corporation, its board of directors and other co-defendants on behalf of certain investors ("Class Action"). Those two civil actions were derivative litigations arising from the Case. The Corporation had already appointed civil defense attorneys and filed a motion to dismiss those two civil actions with the court. With regard to the aforementioned civil actions filed by Investors Protection Center, the possible consequences or developments resulting from litigations could not be assessed by the Corporation, but it was considered to have no significant influence to finance and operations at the present stage.

31. ADDITIONAL DISCLOSURES

- a. Information about significant transactions and investees:
 - 1) Financing provided to others. (None)
 - 2) Endorsements/guarantees provided. (None)
 - 3) Marketable securities held (excluding investments in subsidiaries, associates and joint ventures). (Table 1)
 - 4) Marketable securities acquired or disposed of at costs or prices of at least NT\$300 million or 20% of the paid-in capital. (None)

- 5) Acquisitions of individual real estate at costs of at least NT\$300 million or 20% of the paid-in capital. (None)
- 6) Disposals of individual real estate at prices of at least NT\$300 million or 20% of the paid-in capital. (None)
- 7) Total purchases from or sales to related parties amounting to at least NT\$100 million or 20% of the paid-in capital. (Table 2)
- 8) Receivables from related parties amounting to at least NT\$100 million or 20% of the paid-in capital. (Table 3)
- 9) Trading in derivative instruments. (None)
- 10) Information of investees. (Table 4)
- b. Information on investments in mainland China:
 - 1) Information on any investee company in mainland China, showing the name, principal business activities, paid-in capital, method of investment, inward and outward remittance of funds, ownership percentage, net income of investees, investment income or loss, carrying amount of the investment at the end of the period, repatriations of investment income, and limit on the amount of investments in the mainland China area. (Table 5)
 - 2) Any of the following significant transactions with investee companies in mainland China, either directly or indirectly through a third party, and their prices, payment terms, and unrealized gains or losses. (Table 6)
 - a) The amount and percentage of purchases and the balance and percentage of the related payables at the end of the period.
 - b) The amount and percentage of sales and the balance and percentage of the related receivables at the end of the period.
 - c) The amount of property transactions and the amount of the resultant gains or losses.
 - d) The balance of negotiable instrument endorsements, guarantees or pledges of collateral at the end of the period and their purposes.
 - e) The highest balance, the end of period balance, the interest rate range, and total current period interest with respect to financing of funds.
 - f) Other transactions that have a material effect on the profit or loss for the period or on the financial position, such as the rendering or receipt of services.

MARKETABLE SECURITIES HELD (EXCLUDING INVESTMENTS IN SUBSIDIARIES) DECEMBER 31, 2019

(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

				December 31, 2019					
Holding Company Name	Marketable Securities Type/ Name and Issuer (Note 1)	Relationship with the Holding Company	Financial Statement Account	Shares or Units (In Thousands)	Carrying Amount (Note 2)	Percentage of Ownership (%)	Market Value	Note	
Phison Electronics Corp.	Beneficiary certificates								
rmson Electionics Corp.	Mega Diamond Money Market Fund	_	Financial assets at FVTPL - current	16,326	\$ 205,565	_	\$ 205,565	Note 3	
	FSITC Taiwan Money Market Fund	_	Financial assets at FVTPL - current	13,369	205,391		205,391	Note 3	
	Franklin Templeton SinoAm Money Market Fund	_	Financial assets at FVTPL - current	20,685	214,691	_	214,691	Note 3	
	Yuanta De-Li Money Market Fund	_	Financial assets at FVTPL - current	9,298	152,208	-	152,208	Note 3	
	Jih Sun Money Market Fund	_	Financial assets at FVTPL - current	13,767	204,813	-	204,813	Note 3	
	Allianz Global Investors Taiwan Money Market Fund	_	Financial assets at FVTPL - current	16,113	202,698	-	204,813	Note 3	
	CTBC Hwa-win Money Market Fund	_	Financial assets at FVTPL - current	18,239	202,098	-	202,098	Note 3	
	Prudential Financial Money Market Fund		Financial assets at FVTPL - current	12,070	191,690	_	191,690	Note 3	
	Eastspring Investments Well Pool Money Market Fund	_	Financial assets at FVTPL - current	11,087	151,408	_	151,408	Note 3	
	Taishin 1699 Money Market Fund	_	Financial assets at FVTPL - current	14,809	201,168	_	201,168	Note 3	
	Taishin Ta-Chong Money Market Fund		Financial assets at FVTPL - current	14,102	201,108	_	201,108	Note 3	
	TCB Taiwan Money Market Fund		Financial assets at FVTPL - current	19,716	201,111	-	201,111	Note 3	
	Capital Money Market Fund		Financial assets at FVTPL - current	12,416	201,104	-	201,007	Note 3	
	Convertible bonds								
	Ubitus Inc.		Financial assets at FVTPL - current	-	94,770	-	94,770	Note 9	
	Common shares								
	Orient Semiconductor Electronics, Ltd.	-	Financial assets at FVTPL - current	7,336	108,945	1.32	108,945	Note 4	
	Apacer Technology Inc.	-	Financial assets at FVTPL - current	10,050	420,593	9.96	420,593	Note 4	
	JAFCO Asia Technology Fund VI L.P.	-	Financial assets at FVTPL - non-current	1,000	18,849	0.67	18,849	Note 5	
	AppWorks Fund II Co., Ltd.		Financial assets at FVTPL - non-current	8,850	232,179	11.11	232,179	Note 5	
	Innorich Venture Capital Corp.		Financial assets at FVTPL - non-current	3,000	19,438	5.61	19,438	Note 5	
	AppWorks Fund I Co., Ltd.	-	Financial assets at FVTPL - non-current	1,292	20,201	18.75	20,201	Note 5	
	Aptos Technology Inc.	-	Financial assets at FVTOCI - non-current	529	-	0.60	-	-	
	Viva Baseball Co., Ltd.	-	Financial assets at FVTOCI - non-current	Note 6	-	8.33	-	-	
	Adam Elements International Co., Ltd.	-	Financial assets at FVTOCI - non-current	1,710	37,906	19.00	37,906	Note 5	
	THLight Co., Ltd.	-	Financial assets at FVTOCI - non-current	6,388	-	13.19	-	-	
	UD INFO Corp.	-	Financial assets at FVTOCI - non-current	741	81,264	17.98	81,264	Note 5	
	GeoThings, Inc.	-	Financial assets at FVTOCI - non-current	150	-	6.70	_	-	

(Continued)

				December 31, 2019				
Holding Company Name	Marketable Securities Type/ Name and Issuer (Note 1)	Relationship with the Holding Company	Financial Statement Account	Shares or Units (In Thousands)	Carrying Amount (Note 2)	Percentage of Ownership (%)	Market Value	Note
	Ironyun Incorporated (preference shares)	_	Financial assets at FVTOCI - non-current	5,000	\$ -	5.64	\$ -	_
	Gospal Ltd.	_	Financial assets at FVTOCI - non-current	811,857	3,156	3.40	3,156	Note 5
	H3 Platform, Inc.	_	Financial assets at FVTOCI - non-current	18,400	14,141	12.14	14,141	Note 5
	CAL-COMP INDUSTRIA DE SEMICONDUCTORES S.A.	-	Financial assets at FVTOCI - non-current	11,966	67,208	17.16	67,208	Note 5
	Acer Synergy Tech Corp.	_	Financial assets at FVTPL - non-current	900	19,800	8.09	19,800	Note 7
	Gomore Inc.	-	Financial assets at FVTOCI - non-current	16,925	10,061	3.39	10,061	Note 8
	Taishan Buffalo Investment Co., Ltd. (preference shares)	-	Financial assets at FVTPL - non-current	50,000	50,000	1.08	50,000	Note 8
	Private equity fund Fuh Hwa Smart Energy Fund	_	Financial assets at FVTPL - non-current	6,000	45,408	3.81	45,408	Note 5
Lian Xu Dong Investment	Beneficiary certificates			3,000	15,100	3.01	12,100	
Corporation	FSITC Taiwan Money Market Fund	-	Financial assets at FVTPL - current	1,986	30,513	_	30,513	Note 3
1	Allianz Global Investors Taiwan Money Market Fund	-	Financial assets at FVTPL - current	2,424	30,495	-	30,495	Note 3
	Common shares United Power Research Technology Corp. Fresco Logic, Inc. (preference shares) Translink Capital Partners III, L.P. Translink Capital Partners IV L.P Liqid, Inc. (preference shares) UMBO CV Inc. (preference shares) Omni Media International Incorporation RENIAC, INC. (preference shares)	- - - - -	Financial assets at FVTOCI - non-current Financial assets at FVTOCI - non-current Financial assets at FVTPL - non-current Financial assets at FVTPL - non-current Financial assets at FVTOCI - non-current	5,616 1,250 1,500 430 2,111 1,626 1,714 302	65,188 41,954 11,477 233,497 28,986 45,909 15,956	16.12 2.23 1.18 0.59 7.04 2.51 4.56 1.97	65,188 41,954 11,477 233,497 28,986 45,909 15,956	Note 5 Note 5 Note 8 Note 8 Note 5 Note 8 Note 8
Emtops Electronics Corporation	Beneficiary certificates - open-end funds Mega Diamond Money Market Fund FSITC Money Market Taishin Ta-Chong Money Market Fund Allianz Global Investors Taiwan Money Market Fund Franklin Templeton SinoAm Money Market Fund	- - -	Financial assets at FVTPL - current Financial assets at FVTPL - current	3,980 280 3,513 815 5,816	50,107 50,095 50,099 10,249 60,363	- - - -	50,107 50,095 50,099 10,249 60,363	Note 3 Note 3 Note 3 Note 3 Note 3
	Preference shares ProGrade Digital, Inc.	-	Financial assets at FVTOCI - non-current	1,070	33,160	15.73	33,160	Note 7
	Common shares My Digital Discount, Inc.	-	Financial assets at FVTOCI - non-current	-	-	19.00	-	-

Note 1: The marketable securities listed refer to the types of financial instruments within the scope of IFRS 9 "Financial Instruments". Note 2: The carrying amount is either the fair value or the original cost net of allowance loss.

(Continued)

Note 3: The calculation of the market value was based on the net asset value as of December 31, 2019.

Note 4: The calculation of the market value was based on the closing price as of December 31, 2019.

- Note 5: Refer to Note 24 (b)-3 for market value information.
- Note 6: The issuing company is not limited by shares.
- Note 7: The calculation of the market value was based on the most recent buying price.
- Note 8: The calculation of the market value was based on the most recent acquisition price.
- Note 9: The calculation of the market value was based on the expert evaluation report as of December 31, 2019.
- Note 10: The Corporation held marketable securities that had not been guaranteed, pledged or mortgaged as collateral or restricted by other commitments.

(Concluded)

TOTAL PURCHASES FROM OR SALES TO RELATED PARTIES AMOUNTING TO AT LEAST NT\$100 MILLION OR 20% OF THE PAID-IN CAPITAL FOR THE YEAR ENDED DECEMBER 31, 2019

(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

Commons Nome	Deleted Deuter	Nature of Deletionship		Tra	ansactio	n Details		ormal saction	Notes/Acco Payable or Rec		Note
Company Name	Related Party	Nature of Relationship	Purchase/ Sale	Amount	% of Total	Payment Terms	Unit Price	Payment Terms	Ending Balance	% of Total	% of
Phison Electronics Corp.	Kingston Solutions Inc.	Investee company accounted for using the equity method	Purchase	\$ 540,495	2	Net 30 days after monthly closing	None	None	\$ (29,796)	(1)	-
	Kioxia America, Inc.	The subsidiary of the Corporation's legal entity board of directors	Purchase	1,435,200	5	Net 30 days after receipt date	None	None	(97,230)	(3)	-
	Kioxia Taiwan Corporation	The subsidiary of the Corporation's legal entity board of directors	Purchase	11,432,366	37	Net 30 days after monthly closing	None	None	(1,034,293)	(28)	-
	HOSIN Global Electronics Co., Ltd. (HK) The subsidiary of the subsubsidiary's associates		Purchase	917,343	3	Net 7 days after receipt date	None	None	-	-	-
	Orient Semiconductor Electronics, Ltd.	The Corporation is its director	Processing cost	2,371,331	7	Net 30 days after monthly closing	None	None	(195,595)	(5)	-
	Kioxia Corporation	The Corporation's legal entity board of directors	Sale	(710,310)	(2)	Net 60 days after monthly closing	None	None	72,050	1	-
	Kingston Solutions Inc.	Investee company accounted for using the equity method	Sale	(905,565)	(2)	Net 60 days after monthly closing	None	None	195,512	3	-
	Apacer Technology Inc.	The Corporation is its director	Sale	(1,084,131)	(2)	Net 45 days after monthly closing	None	None	182,600	3	-
	Hefei Core Storage Electronic Limited	Sub-subsidiary	Sale	(331,306)	(1)	Net 30 days after monthly closing	None	None	27,487	-	-
	Hefei DATANG Storage Technology Co., Ltd.	The subsidiary of the subsubsidiary's associates	Sale	(347,372)	(1)	Net 60 days after receipt date	None	None	43,890	1	-

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)

					Ove	erdue	Amount	Allowance	o for
Company Name Related Party		Relationship	Ending Balance	Turnover Rate	Amount	Action Taken	Received in Subsequent Period (Note)	Impairm	ent
	Apacer Technology Inc. Kingston Solutions Inc.	The Corporation is its director Investee company accounted for using the equity method	\$ 182,600 195,512	6.88 6.56	\$ - -		\$ 182,600 195,512	\$	-

Note: As of February 29, 2020.

INFORMATION OF INVESTEES FOR THE YEAR ENDED DECEMBER 31, 2019 (In Thousands of New Taiwan Dollars)

				Investmen	nt Amount	Balance a	s of December	31, 2019	Not (Loss)	T	
Investor	Investee	Location	Main Businesses and Products	December 31, 2019	December 31, 2018	Number of Shares	()wnershin ° °		Net (Loss) Income of the Investee	Investment (Loss) Income	Note
Phison Electronics Corp.	Kingston Solutions Inc.	Taiwan	Embedded flash product and market development	\$ 106,050	\$ 106,050	10,605,000	32.91	\$ 965,294	\$ (889,121)	\$ (292,610)	Investee company accounted for using the equity method
	Emtops Electronics Corporation	Taiwan	Investment	380,000	95,000	38,000,000	100.00	355,076	425	425	Subsidiary
	Lian Xu Dong Investment Corporation	Taiwan	Investment	650,000	650,000	65,000,000	100.00	676,498	9,052	9,052	Subsidiary
	Microtops Design Corporation	Taiwan	Research and design of flash memory controllers and related products	22,638	22,638	2,263,800	49.00	24,403	3,484	1,707	Investee company accounted for using the equity method
	Phisontech Electronics Taiwan Corp.	Taiwan	Design of ASIC and R&D, manufacture, and sale of ASIC for IP and technical support service	41,363	-	1,000,000	100.00	40,518	(1,118)	(231)	Subsidiary
	Phison Electronics Japan Corp.	Japan	Sales and service office	59,508	59,508	2,000	100.00	31,722	(2,844)	(2,844)	Subsidiary
	Global Flash Limited Phisontech Electronics (Malaysia) Sdn. Bhd.	Samoa Malaysia	Investment and trade Design, production and sale of flash memory controllers and peripheral system applications	1,158,472 91,422	665,823 91,422	37,100,000 10,000,000	100.00 100.00	1,157,998 59,482	· · · · · · · · · · · · · · · · · · ·		Subsidiary Subsidiary
	Epostar Electronics (BVI) Corporation	British Virgin Islands	Investment	133,988	133,988	10,600,000	37.82	-	(116,273)	(39,000)	Investee company accounted for using the equity method
	Power Flash (Samoa) Limited	Samoa	Investment and trade	105,440	105,440	3,200,000	100.00	99,223	154		Subsidiary
	Everspeed Technology Limited	Samoa	Trade of electronic components	-	-	1,000,000	100.00	343,601	87,325	87,325	Subsidiary (Continued)

(Continued)

		W : D :		Investmen	t Amount	Balance a	s of December	31, 2019	Net (Loss)	Investment	
Investor	Investee	Location	Main Businesses and Products	December 31, 2019	December 31, 2018	Number of Shares	Percentage of Ownership (%)	Carrying Amount	Income of the Investee	(Loss) Income	Note
	Regis Investment (Samoa) Limited	Samoa	Investment	393,214	199,332	13,000,000	100.00	502,266	97,960	97,960	Subsidiary
Lian Xu Dong Investment Corporation	Ostek Corporation	Taiwan	Manufacture and trade of electronic components	9,000	9,000	900,000	100.00	58,795	5,941	-	Sub-subsidiary
	PMS Technology Corporation	Taiwan	Research and design of flash memory controllers and related products	2,000	2,000	200,000	33.33	17,962	99	-	Investee company accounted for using the equity method
Emtops Electronics Corporation	Phison Technology Inc.	America	Sales and service office	\$ 31,415	\$ -	1,000,000	100.00	\$ 30,478	\$ 514	\$ -	Sub-subsidiary
Global Flash Limited	Core Storage Electronic (Samoa) Limited	Samoa	Investment and trade	1,068,818	576,229	34,150,000	100.00	1,121,055	39,315	-	Sub-subsidiary
Power Flash (Samoa) Limited	Power Flash (HK) Limited	Hong Kong	Trade of electronic products	98,754	98,754	3,000,000	100.00	93,339	322	-	Sub-subsidiary
Everspeed Technology Limited	Memoryexchange Corporation	Taiwan	Design and sale of flash memory related products	391,986	391,986	40,950,000	100.00	210,217	93,698	-	Sub-subsidiary
Regis Investment (Samoa) Limited	RealYou Investment Limited	Hong Kong	Investment	391,989	197,760	12,950,000	100.00	500,855	97,697	-	Sub-subsidiary

(Concluded)

INFORMATION ON INVESTMENTS IN MAINLAND CHINA FOR THE YEAR ENDED DECEMBER 31, 2019 (In Thousands)

				Accumulated	Investme	ent Flows	Accumulated				Accumulated	
Investee Company	Main Businesses and Products	Total Amount of Paid-in Capital	Method of Investment (Note 1)	Outflow of Investment from Taiwan as of January 1, 2019	Outflow	Inflow	Outflow of Investment from Taiwan as of December 31, 2019	Percentage of Ownership (%)	Investment (Loss) Income (Note 2)	Carrying Amount as of December 31, 2019	Inward Remittance of Earnings as of December 31, 2019	Note
Phisontech (Shenzhen) Limited	Design, R&D, import and export of storage devices and electronics	\$ 53,096	ь	\$ 53,096	\$ -	\$ -	\$ 53,096	100.00	\$ (2,260)	\$ 6,273	\$ -	b (2)
Hefei Core Storage Electronic Limited	Design, R&D, production and sale of integrated circuits, systems and electronics hardware and software and rendering of related services	1,039,083	ь	576,780	486,435	-	1,063,215	97.69	38,775	1,104,340	-	b (2)
Hefei Ruhan Electronic Technology Limited	Design, R&D, sale of electronics hardware and rendering of related services and investment	182,825	ь	182,825	-	-	182,825	100.00	(1,968)	174,418	-	b (1)
Hefei Yichao Electronics Technology Ltd.	Design, R&D, sale of electronics hardware and rendering of related services and investment	280,387	ь	-	-	-	-	100.00	(10,522)	259,402	-	b (2)
Hefei Xinpeng Technology Co., Ltd.	Design, R&D, production and sale of integrated circuits and electronics hardware and software and rendering of related services	618,078	ь	-	-	-	-	43.62	(13,740)	245,507	-	b (1), b (2)
Hosin Global Electronics Co., Ltd. (SZ)	Design, R&D and sale of integrated circuits and electronics hardware and software and rendering of related services	588,160	ь	-	183,640	-	183,640	38.46	99,795	390,993	-	b (1), b (2)

(Continued)

Accumulated Investments in Mainland China as of December 31, 2019	Investment Amount Authorized by the Investment Commission, MOEA	Limit on Investments			
\$ 1,482,776 (US\$ 47,608)	\$ 1,514,933 (US\$ 48,790)	\$ 17,513,177			

Note 1: Method of investment:

- a. Directly invested in mainland China.
- b. Indirectly invested in mainland China through companies registered in a third region.
 - 1) Indirectly invested in a China-based company through a company located in a third region, Regis Investment Limited, and its subsidiaries.
 - 2) Indirectly invested in a China-based company through a company located in a third region, Global Flash Limited, and its subsidiaries.

Note 2: The amounts were recognized based on audited financial statements.

(Concluded)

SIGNIFICANT TRANSACTIONS WITH INVESTEE COMPANIES IN MAINLAND CHINA, EITHER DIRECTLY OR INDIRECTLY THROUGH A THIRD PARTY, AND THEIR PRICES, PAYMENT TERMS, AND UNREALIZED GAINS OR LOSSES

FOR THE YEAR ENDED DECEMBER 31, 2019

(In Thousands of New Taiwan Dollars)

Buyer	Related Party	Relationship	Transaction Details				Abnormal Transaction		Notes/Accounts Receivable (Payable)		Note
			Purchase/ Sale	Amount	% of Total	Payment Terms	Unit Price	Payment Terms	Ending Balance	% of Total	Note
Phison Electronics Corp.	Hefei Core Storage Electronic Limited	Sub-subsidiary	Sale	\$ 331,306	1	Net 30 days after monthly closing	None	None	\$ 27,487	-	-
	Hefei Ruhan Electronic Technology Limited	Sub-subsidiary	Sale	86,241	-	Net 30 days after monthly closing	None	None	-	-	-
	Shenzhen EpoStar Electronics Limited CO.	Associates' subsidiary	Sale	19,999	-	Delivery after receipt	None	None	-	-	-
	Hefei DATANG Storage Technology Co., Ltd.	The subsidiary of the sub-subsidiary's associates	Sale	347,372	1	Net 60 days after receipt date	None	None	43,890	1	-
	Hosin Global Electronics Co., Ltd. (SZ)		Sale	6,714	-	Delivery after receipt	None	None	-	-	-
Hefei Core Storage Electronic Limited	Hefei Ruhan Electronic Technology Limited	Sister company	Purchase	85,327	18	Net 30 days after monthly closing	None	None	-	-	-
	Hefei DATANG Storage Technology Co., Ltd.	The subsidiary of the subsidiary's associates	Sale	1,494	-	Net 30 days after receipt date	None	None	-	-	-

Phison Electronics Corporation

Chairperson: Khein Seng Pua

