Powertech Technology Inc. and Subsidiaries

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

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 under 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 have not prepared a separate set of consolidated financial statements of affiliates.

Very truly yours,

POWERTECH TECHNOLOGY INC.

By:

____

TSAI DUH-KUNG
Chairman

March 10, 2020

INDEPENDENT AUDITORS' REPORT

The Board of Directors and Shareholders
Powertech Technology Inc.

Opinion

We have audited the accompanying consolidated financial statements of Powertech Technology Inc. and its subsidiaries (the Corporation), 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 Corporation 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 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 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 matters of the consolidated financial statements of the Corporation for the year ended December 31, 2019, are described as follows:

<u>Contract assets and revenue recognition</u>

1. The sales revenue of the Corporation is material to the Corporation. Refer to Note 22 to the accompanying consolidated financial statements for details of sales revenue. The major type of revenue is subcontracting revenue. The types of subcontracting transactions are as follows:

    1) Wafer level testing;

    2) Wafer level packaging;

3) IC packaging; and

4) IC testing.

2. Packaging services: Since the customers have ownership of the assets, assume significant risks and rewards of ownership of the assets, have the right to determine the disposal of the assets and can prevent the Corporation from obtaining the benefits of the assets, revenue should be recognized over time in accordance with the requirements of paragraph 35(b) of International Financial Reporting Standards No. 15.

3. Testing services: In accordance with the requirements of paragraph 35(a) of International Financial Reporting Standards No. 15., as the Corporation conducts testing services, the customers obtain and consume the benefits provided by the Corporation's testing services at the same time. Therefore, revenue should also be recognized over time.

4. The Corporation recognizes the contract assets and revenue of packaging and testing services at the end of each month based on the completion schedule. Since the above-mentioned process includes estimates and manual controls, there is a risk that contract assets and revenue may not be recognized correctly as a result of human error.

5. We reviewed the Corporation's revenue recognition policy, assessed the reasonableness of its contract assets and revenue recognition, and confirmed against relevant supporting documents and accounts records to verify the accuracy of the monetary amounts of contract assets and revenue recognition.

<u>Capitalization of property, plant and equipment</u>

1. The capital expenditure of the Corporation relating to property, plant and equipment is significant to its consolidated financial statements. Refer to Note 13 of the accompanying consolidated financial statements for details on property, plant and equipment.

2. To ensure the accuracy of the cost amounts, the requisition, purchasing, verification and record-keeping of the Corporation's property, plant and equipment are all subject to appropriate sign-off procedures. According to the list of newly acquired, un-capitalized items and unit acceptance forms, the Corporation's accounting department will record the items that should be capitalized into the computer system of fixed assets every month. The Corporation will regularly examine items that were not capitalized for more than three months after their purchase date and request the department utilizing the items to provide an explanation as to why the items which should already have been capitalized have not yet been capitalized.

3. Because of the significance of such capital expenditure amounts, delays in capitalization or errors in cost amounts thereof may lead to misstatement of the consolidated financial statements

4. We reviewed the Corporation's property, plant and equipment capital expenditure policy, assessed the reasonableness of the timing of capitalization, and conducted the following procedures:

   1) We selected samples of newly acquired items from the record of property, plant and equipment to verify whether the costs are recognized in the appropriate period.

   2) We selected samples from the list of advance payments and construction in progress at the end of the year and performed an on-site inventory count to observe whether such items were not yet ready for their intended use.

   3) We selected samples of items that were not capitalized for more than three months after their purchase date from the list of advance payments and construction in progress to examine whether the reasons of such items remaining un-capitalized had been explained by applicants or users and were approved by supervisors.

Other Matter

We have also audited the parent company only financial statements of Powertech Technology Inc. as of and for the years ended December 31, 2019 and 2018 on which we have issued an unmodified opinion.

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

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with the Regulations Governing the Preparation of Financial Reports by Securities Issuers, and 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 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 audit committee, are responsible for overseeing the Corporation's financial reporting process.

Auditors' Responsibilities for the Audit of the Consolidated Financial Statements

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

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

1. Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

2. Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the 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 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 Corporation 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 Corporation to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision, and performance of the Corporation audit. We remain solely responsible for our audit opinion.

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

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

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements for the year ended December 31, 2019 and are therefore the key audit matters. We describe these matters in our auditors' report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

The engagement partners on the audit resulting in this independent auditors' report are Yu-Feng Huang and Cheng Chih Lin.

Deloitte & Touche
Taipei, Taiwan
Republic of China

March 10, 2020

Notice to Readers

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

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

POWERTECH TECHNOLOGY INC. AND SUBSIDIARIES

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 (Notes 4 and 6)	$ 21,800,048	20	$ 18,544,142	18
Financial assets at fair value through profit or loss - current (Notes 4 and 7)	71,207	-	56,217	-
Financial assets at amortized cost - current (Notes 4, 9 and 29)	549,732	-	548,917	-
Contract assets - current (Notes 22 and 28)	2,170,456	2	1,671,214	2
Notes and accounts receivable (Notes 4 and 10)	9,518,972	9	8,966,825	9
Receivables from related parties (Notes 4, 10 and 28)	4,252,488	4	2,879,308	3
Other receivables (Note 4)	312,508	-	309,115	-
Other receivables from related parties (Notes 4 and 28)	6,525	-	16,081	-
Inventories (Notes 4 and 11)	3,879,025	4	3,822,960	4
Prepaid expenses	227,082	-	261,915	-
Other current assets (Notes 4 and 16)	554,790	1	812,848	1
Total current assets	43,342,833	40	37,889,542	37
NON-CURRENT ASSETS				
Financial assets at fair value through other comprehensive income - non-current (Notes 4 and 8)	26,093	-	26,803	-
Financial assets at amortized cost - non-current (Notes 4, 9 and 29)	1,501,145	2	2,041,110	2
Property, plant and equipment (Notes 4, 13, 28 and 29)	58,779,789	55	61,980,853	60
Right-of-use assets (Notes 3, 4, 5 and 14)	1,925,903	2	-	-
Intangible assets (Notes 4 and 15)	1,059,626	1	1,162,204	1
Deferred income tax assets (Notes 4 and 24)	384,507	-	357,829	-
Other non-current assets (Notes 4, 16 and 20)	126,085	-	137,160	-
Total non-current assets	63,803,148	60	65,705,959	63
TOTAL	$ 107,145,981	100	$ 103,595,501	100

	2019		2018	
LIABILITIES AND EQUITY	**Amount**	**%**	**Amount**	**%**
CURRENT LIABILITIES				
Short-term bank loans (Note 17)	$ 1,182,283	1	$ 843,953	1
Financial liabilities at fair value through profit or loss - current (Notes 4 and 7)	3,953	-	2,223	-
Contract liabilities - current (Note 22)	62,458	-	39,323	-
Notes and accounts payable	5,785,178	5	4,969,810	5
Accounts payable to related parties (Note 28)	120,603	-	-	-
Accrued employees' compensation and remuneration of directors (Note 23)	792,121	1	959,978	1
Payables to equipment suppliers	4,252,127	4	2,443,343	2
Other payables to related parties (Note 28)	17,447	-	569	-
Current income tax liabilities (Notes 4 and 24)	778,495	1	1,603,899	2
Lease liabilities - current (Notes 3, 4, 5,and 14)	211,549	-	-	-
Accrued expenses and other current liabilities (Notes 4, 19 and 28)	7,015,882	7	7,224,942	7
Current portion of long-term debt (Notes 17 and 29)	182,305	-	361,637	-
Finance lease payables - current (Notes 3, 4 and 18)	-	-	130,994	-
Total current liabilities	20,404,401	19	18,580,671	18
NON-CURRENT LIABILITIES				
Long-term debt (Notes 17 and 29)	29,456,112	28	30,872,339	30
Deferred income tax liabilities (Notes 4 and 24)	114,476	-	115,906	-
Lease liabilities - non-current (Notes 3, 4, 5 and 14)	1,546,096	2	-	-
Finance lease payables - non-current (Notes 3, 4 and 18)	-	-	163,439	-
Net defined benefit liabilities - non-current (Notes 4 and 20)	395,785	-	404,530	1
Other non-current liabilities (Note 19)	331,148	-	381,249	-
Total non-current liabilities	31,843,617	30	31,937,463	31
Total liabilities	52,248,018	49	50,518,134	49
EQUITY ATTRIBUTABLE TO SHAREHOLDERS OF THE CORPORATION (Notes 4 and 21)				
Capital stock				
Common shares	7,791,466	7	7,791,466	7
Capital surplus	209,852	-	127,734	-
Retained earnings				
Legal reserve	7,045,884	7	6,422,456	6
Special reserve	195,070	-	337,628	-
Unappropriated earnings	28,206,664	26	26,601,327	26
Total retained earnings	35,447,618	33	33,361,411	32
Other equity	(324,741)	-	(195,070)	-
Treasury share	(96,467)	-	(82,315)	-
Total equity attributable to shareholders of the Corporation	43,027,728	40	41,003,226	39
NON-CONTROLLING INTERESTS (Notes 12 and 21)	11,870,235	11	12,074,141	12
Total equity	54,897,963	51	53,077,367	51
TOTAL	$ 107,145,981	100	$ 103,595,501	100

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

POWERTECH TECHNOLOGY INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018
(In Thousands of New Taiwan Dollars, Except Earnings Per Share)

	2019		2018	
	Amount	**%**	**Amount**	**%**
NET SALES (Notes 4, 22 and 28)	$ 66,525,144	100	$ 68,039,379	100
OPERATING COSTS (Notes 4, 11, 23 and 28)	53,848,249	81	54,209,337	80
GROSS PROFIT	12,676,895	19	13,830,042	20
OPERATING EXPENSES (Notes 23 and 28)				
Marketing	326,433	-	380,531	-
General and administrative	1,711,601	3	1,801,639	3
Research and development	1,905,221	3	1,864,218	3
Expected credit loss (Note 10)	21,400	-	-	-
Total operating expenses	3,964,655	6	4,046,388	6
OPERATING INCOME	8,712,240	13	9,783,654	14
NONOPERATING INCOME AND EXPENSES				
Other gains and losses (Notes 4, 23 and 28)	17,167	-	(417,992)	-
Other income (Notes 4, 23 and 28)	234,703	-	204,861	-
Finance costs (Notes 4 and 23)	(346,444)	-	(350,525)	-
Foreign exchange (loss) gain, net (Notes 4 and 23)	(110,148)	-	215,339	-
Total nonoperating income and expenses	(204,722)	-	(348,317)	-
INCOME BEFORE INCOME TAX	8,507,518	13	9,435,337	14
INCOME TAX EXPENSE (Notes 4 and 24)	1,628,226	3	1,922,775	3
NET INCOME	6,879,292	10	7,512,562	11
OTHER COMPREHENSIVE INCOME (LOSS) (Notes 4 and 21)				
Items not reclassified subsequently to profit or loss:				
Remeasurement of defined benefit plans (Note 20)	(22,442)	-	(20,445)	-
Unrealized loss on investments in equity instruments at fair value through other comprehensive income	(710)	-	(32,193)	-
Items reclassified subsequently to profit or loss:				
Exchange differences on translating foreign operations	(334,121)	-	239,529	-
Total other comprehensive (loss) income	(357,273)	-	186,891	-
TOTAL COMPREHENSIVE INCOME	$ 6,522,019	10	$ 7,699,453	11
NET INCOME ATTRIBUTABLE TO				
Shareholders of the Corporation	$ 5,838,650	9	$ 6,234,276	9
Non-controlling interests	1,040,642	1	1,278,286	2
	$ 6,879,292	10	$ 7,512,562	11

(Continued)

POWERTECH TECHNOLOGY INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018
(In Thousands of New Taiwan Dollars, Except Earnings Per Share)

	2019		2018	
	Amount	**%**	**Amount**	**%**
TOTAL COMPREHENSIVE INCOME ATTRIBUTABLE TO				
Shareholders of the Corporation	$ 5,696,440	9	$ 6,369,021	9
Non-controlling interests	825,579	1	1,330,432	2
	$ 6,522,019	10	$ 7,699,453	11
EARNINGS PER SHARE (Note 25)				
Basic	$ 7.52		$ 8.02	
Diluted	$ 7.47		$ 7.95	

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

POWERTECH TECHNOLOGY INC. AND SUBSIDIARIES

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

	Equity Attributable to Shareholders of the Corporation											
							Other Equity					
	Capital Stock - ordinary shares			Retained Earnings			Exchange Differences on Translating Foreign Operations	Unrealized Gain (Loss) on Investments in Equity Instruments Designated Through Other Comprehensive Income				
	Number of Shares (In Thousands)	Amount	Capital Surplus	Legal Reserve	Special Reserve	Unappropriated Earnings			Treasury Share	Total	Noncontrolling Interests	Total Equity
BALANCE, JANUARY 1, 2018	779,147	$ 7,791,466	$ 119,593	$ 5,837,530	$ -	$ 24,803,578	$ (319,150)	$ (18,478)	$ (68,099)	$ 38,146,440	$ 11,676,332	$ 49,822,772
Appropriation of the 2017 earnings												
Legal reserve	-	-	-	584,926	-	(584,926)	-	-	-	-	-	-
Special reserve	-	-	-	-	337,628	(337,628)	-	-	-	-	-	-
Cash dividends distributed by the Corporation	-	-	-	-	-	(3,506,160)	-	-	-	(3,506,160)	-	(3,506,160)
Cash dividends distributed by subsidiaries	-	-	-	-	-	-	-	-	-	-	(1,037,884)	(1,037,884)
Donations from shareholders	-	-	41	-	-	-	-	-	-	41	55	96
Distribution of cash dividends from capital surplus	-	-	-	-	-	-	-	-	-	-	-	-
Net income for the year ended December 31, 2018	-	-	-	-	-	6,234,276	-	-	-	6,234,276	1,278,286	7,512,562
Other comprehensive income (loss) for the year ended December 31, 2018	-	-	-	-	-	(7,813)	148,425	(5,867)	-	134,745	52,146	186,891
Total comprehensive income (loss) for the year ended December 31, 2018	-	-	-	-	-	6,226,463	148,425	(5,867)	-	6,369,021	1,330,432	7,699,453
The Corporation's shares held by its subsidiary treated as treasury shares	-	-	-	-	-	-	-	-	(14,216)	(14,216)	(18,915)	(33,131)
Adjustment of capital surplus due to dividends distributed to subsidiaries	-	-	8,100	-	-	-	-	-	-	8,100	-	8,100
Increase in non-controlling interests	-	-	-	-	-	-	-	-	-	-	124,121	124,121
BALANCE, DECEMBER 31, 2018	779,147	7,791,466	127,734	6,422,456	337,628	26,601,327	(170,725)	(24,345)	(82,315)	41,003,226	12,074,141	53,077,367
Appropriation of the 2018 earnings												
Legal reserve	-	-	-	623,428	-	(623,428)	-	-	-	-	-	-
Special reserve	-	-	-	-	(142,558)	142,558	-	-	-	-	-	-
Cash dividends distributed by the Corporation	-	-	-	-	-	(3,739,904)	-	-	-	(3,739,904)	-	(3,739,904)
Cash dividends distributed by subsidiaries	-	-	-	-	-	-	-	-	-	-	(939,230)	(939,230)
Donations from shareholders	-	-	57	-	-	-	-	-	-	57	75	132
Other changes in capital surplus changes in percentage of ownership interests in subsidiaries	-	-	71,501	-	-	-	-	-	-	71,501	(71,501)	-
Net income for the year ended December 31, 2019	-	-	-	-	-	5,838,650	-	-	-	5,838,650	1,040,642	6,879,292
Other comprehensive loss for the year ended December 31, 2019	-	-	-	-	-	(12,539)	(128,961)	(710)	-	(142,210)	(215,063)	(357,273)
Total comprehensive income (loss) for the year ended December 31, 2019	-	-	-	-	-	5,826,111	(128,961)	(710)	-	5,696,440	825,579	6,522,019
The Corporation's shares held by its subsidiary treated as treasury shares	-	-	-	-	-	-	-	-	(14,152)	(14,152)	(18,829)	(32,981)
Adjustment of capital surplus due to dividends distributed to subsidiaries	-	-	10,560	-	-	-	-	-	-	10,560	-	10,560
BALANCE, DECEMBER 31, 2019	779,147	$ 7,791,466	$ 209,852	$ 7,045,884	$ 195,070	$ 28,206,664	$ (299,686)	$ (25,055)	$ (96,467)	$ 43,027,728	$ 11,870,235	$ 54,897,963

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

POWERTECH TECHNOLOGY INC. AND SUBSIDIARIES

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

	2019	2018
CASH FLOWS FROM OPERATING ACTIVITIES		
Income before income tax	$ 8,507,518	$ 9,435,337
Adjustments for:		
Depreciation	12,711,268	12,512,745
Amortization	137,554	144,040
Expected credit loss recognized on trade receivables	21,400	-
Net (gain) loss on fair value change of financial assets designated as at fair value through profit or loss	(14,990)	2,744
Finance costs	346,444	350,525
Premium amortization of financial assets at amortized cost	1,146	1,770
Interest revenue	(116,330)	(84,749)
Net loss on disposal of property, plant and equipment	196,472	719,969
Property, plant and equipment transfer to expenses	7,876	1,202
Net loss on disposal of intangible assets	-	20,024
Impairment loss on non-financial assets	527,327	437,609
Net loss (gain) on foreign currency exchange, net	170,365	(196,902)
Changes in operating assets and liabilities:		
(Increase) decrease in contract assets	(499,242)	11,857
Increase in notes and accounts receivable	(654,534)	(596,797)
(Increase) decrease in accounts receivable from related parties	(1,410,714)	1,144,186
Increase in other receivables	(11,226)	(56,493)
(Increase) decrease in other receivables from related parties	(24,230)	11,258
Increase in inventories	(56,065)	(1,253,822)
Decrease (increase) in prepayments	34,833	(1,724)
Decrease (increase) in other current assets	258,058	(91,469)
Increase (decrease) in financial liabilities held for trading	1,730	(3,664)
Increase (decrease) in contract liabilities	23,135	(4,419)
Increase (decrease) in accounts payable	868,860	(19,760)
Increase in accounts payable to related parties	122,136	2,617
Decrease in accrued employees' compensation and remuneration of directors	(167,857)	(8,646)
Increase in other payables to related parties	16,878	569
(Decrease) increase in accrued expenses and other current liabilities	(200,230)	377,577
(Decrease) increase in net defined benefit liabilities	(21,284)	222
Decrease in other payables	(47,188)	(652,299)
Cash generated from operations	20,729,110	22,203,507
Interest received	118,900	79,177
Interest paid	(411,192)	(449,692)
Income tax paid	(2,481,738)	(1,625,894)
Net cash generated from operating activities	17,955,080	20,207,098

(Continued)

POWERTECH TECHNOLOGY INC. AND SUBSIDIARIES

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

	2019	2018
CASH FLOWS FROM INVESTING ACTIVITIES		
Acquisition of financial assets at amortized cost	$ (100,228)	$ (395,971)
Proceeds from sale of financial assets at amortized cost	645,594	644,627
Proceeds from disposal of non-current assets held for sale	-	1,024,362
Acquisition of property, plant and equipment	(8,715,717)	(17,689,500)
Disposal of property, plant and equipment	199,395	202,000
(Increase) decrease in refundable deposits	(19,460)	18,025
Increase in intangible assets	(32,061)	(33,090)
Increase in non-current assets	(8,700)	-
(Decrease) increase in prepayments for equipment	(33,009)	35,311
Decrease in other prepayments	-	2,613
Net cash used in investing activities	(8,064,186)	(16,191,623)
CASH FLOWS FROM FINANCING ACTIVITIES		
Increase (decrease) in short-term bank loans	338,330	(2,998,396)
Proceeds from long-term debt	21,490,668	25,832,486
Repayments of long-term debt	(23,085,580)	(21,764,125)
(Decrease) increase in guarantee deposits	(2,913)	3,611
Decrease in finance lease payables	-	(11,806)
Repayment of the principal portion of lease liabilities	(289,500)	-
Dividends paid to shareholders of the Corporation	(3,729,344)	(3,498,060)
Payments for buy-back of treasury share	(32,981)	(33,131)
Dividends paid to non-controlling interests	(939,230)	(1,037,884)
Donations from shareholders	132	96
Increase in non-controlling interests	-	124,121
Net cash used in financing activities	(6,250,418)	(3,383,088)
EFFECTS OF EXCHANGE RATE CHANGES ON THE BALANCE OF CASH HELD IN FOREIGN CURRENCIES	(384,570)	195,173
NET INCREASE IN CASH AND CASH EQUIVALENTS	3,255,906	827,560
CASH AND CASH EQUIVALENTS, BEGINNING OF THE YEAR	18,544,142	$ 17,716,582
CASH AND CASH EQUIVALENTS, END OF THE YEAR	$ 21,800,048	$ 18,544,142

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

1. GENERAL INFORMATION

Powertech Technology Inc. (the PTI) was incorporated in the Republic of China ("ROC") on May 15, 1997 and commenced business on September 3, 1997. The PTI is mainly engaged in the manufacturing, packaging, testing, researching and developing, designing, assembling and sale of various integrated circuit products. The PTI also provides semiconductor testing and assembly services on a turnkey basis, in which the PTI buys fabricated wafers and sells tested and assembled semiconductors. The PTI's registered office and principal place of business is in Hsin-chu Industrial Park, Hukou, Hsin-chu.

The PTI's shares were initially listed and started trading on the Taipei Exchange ("TPEx") on April 3, 2003, after which the PTI's shares were transferred for listing and started trading on the Taiwan Stock Exchange ("TWSE") on November 8, 2004. The PTI also issued Global Depositary Shares ("GDS"), which are listed on the Luxembourg Stock Exchange and trading on the Euro MTF Market. The GDS were accepted for quotation on the International Order Book of the London Stock Exchange.

The consolidated financial statements are presented in the PTI's functional currency, the New Taiwan dollar. For greater comparability and consistency of financial reporting, the consolidated financial statements are presented in New Taiwan dollars since the PTI's shares are listed on the Taiwan Stock Exchange.

2. APPROVAL OF FINANCIAL STATEMENTS

The consolidated financial statements were approved by the board of directors and issued on March 10, 2020.

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

a. Initial application of the amendments to the Regulations Governing the Preparation of Financial Reports by Securities Issuers and the International Financial Reporting Standards (IFRS), International Accounting Standards (IAS), Interpretations of IFRS (IFRIC), and Interpretations of IAS (SIC) (collectively, the "IFRSs") endorsed and issued into effect by the Financial Supervisory Commission (FSC)

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

   1) IFRS 16 "Leases"

      IFRS 16 provides a comprehensive model for the identification of lease arrangements and their treatment in the financial statements of both 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 consolidated 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 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. Prepaid lease payments for land use rights for land in the People's Republic of China were recognized as prepayments for leases. Cash flows for operating leases were classified within operating activities on the consolidated statements of cash flows. Leased assets and finance lease payables were recognized on the consolidated balance sheets for contracts classified as finance leases.

The Corporation elects 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 is 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, adjusted by the amount of any prepaid or accrued lease payments. The Corporation applies IAS 36 to all right-of-use assets.

The Corporation also applies the following practical expedients:

a) The Corporation applies a single discount rate to a portfolio of leases with reasonably similar characteristics to measure lease liabilities.

b) The Corporation accounts for those leases for which the lease term ends on or before December 31, 2019 as short-term leases.

c) The Corporation excludes initial direct costs from the measurement of right-of-use assets on January 1, 2019.

d) The Corporation uses hindsight, such as in determining lease terms, to measure lease liabilities.

For leases previously classified as finance leases under IAS 17, the carrying amounts of right-of-use assets and lease liabilities on January 1, 2019 are determined as at the carrying amounts of the respective leased assets and finance lease payables on December 31, 2018.

The lessee's weighted average incremental borrowing rate applied to lease liabilities recognized on January 1, 2019 is 1.71%. The difference between the (i) lease liabilities recognized and (ii) 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	$ 393,632
The future minimum lease payments of cancellable operating lease commitments on December 31, 2018	1,847,294
Undiscounted amount on January 1, 2019	$ 2,240,926
Discounted amount using the incremental borrowing rate on January 1, 2019	$ 1,663,368
Add: Finance lease payables on December 31, 2018	294,433
Lease liabilities recognized on January 1, 2019	$ 1,957,801

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
Prepayments for leases - current	$ 2,566	$ (2,566)	$ -
Property, plant and equipment	61,980,853	(369,999)	61,610,854
Prepayments for leases - non-current	63,520	(63,520)	-
Right-of-use assets	-	2,099,453	2,099,453
Total effect on assets	$ 62,046,939	$ 1,663,368	$ 63,710,307
Lease liabilities - current	$ -	$ 259,743	$ 259,743
Finance lease payables - current	130,994	(130,994)	-
Lease liabilities - non-current	-	1,698,058	1,698,058
Finance lease payables - non-current	163,439	(163,439)	-
Total effect on liabilities	$ 294,433	$ 1,663,368	$ 1,957,801
Retained earnings	$ 26,601,327	$ -	$ 26,601,327

2) IFRIC 23 "Uncertainty over Income Tax Treatments"

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

Corporation expects to better predict the resolution of the uncertainty. The Corporation has to reassess its judgments and estimates if facts and circumstances change.

Upon initial application of IFRIC 23, the Corporation determined that there was no effect on assets, liabilities and equity.

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 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 prospectively 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.

Except for the above impact, as of the date the consolidated financial statements were authorized for issue, the Corporation is continuously assessing the possible impact that the application of other 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

New IFRSs	Effective Date Announced by IASB (Note 1)
Amendments to IFRS 10 and IAS 28 “Sale or Contribution of Assets between an Investor and its Associate or Joint Venture”	To be determined by IASB
IFRS 17 “Insurance Contracts”	January 1, 2021
Amendments to IAS 1 “Classification of Liabilities as Current or Non-current”	January 1, 2022

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

Except for the above impact, as of the date the consolidated financial statements were authorized for issue, the Corporation is continuously assessing the possible impact that the application of other 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

a. Statement of compliance

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

b. Basis of preparation

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

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

1) Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities;

2) Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for an asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices); and

3) Level 3 inputs are unobservable inputs for an asset or liability.

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

Current assets include:

1) Assets held primarily for the purpose of trading;

2) Assets expected to be realized within 12 months after the reporting period; and

3) Cash and cash equivalents unless the asset is restricted from being exchanged or used to settle a liability for at least 12 months after the reporting period.

Current liabilities include:

1) Liabilities held primarily for the purpose of trading;

2) Liabilities due to be settled within 12 months after the reporting period, and

3) Liabilities for which the Corporation does not have an unconditional right to defer settlement for at least 12 months after the reporting period.

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

d. Basis of consolidation

The consolidated financial statements incorporate the financial statements of the PTI and the entities controlled by the PTI (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 PTI.

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 PTI and to the non-controlling interests even if this results in the non-controlling interests having a deficit balance.

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

See Notes 12 and 32 k for detailed information on subsidiaries (including the percentages of ownership and main businesses).

e. Business combinations

Acquisitions of businesses are accounted for using the acquisition method. Acquisition-related costs are generally recognized in profit or loss as incurred.

Goodwill is measured as the excess of the sum of the consideration transferred, the amount of any non-controlling interests in the acquiree, and the fair value of the acquirer's previously held equity interests in the acquiree over the net of the acquisition-date amounts of the identifiable assets acquired and the liabilities assumed. If, after re-assessment, the net of the acquisition-date amounts of the identifiable assets acquired and liabilities assumed exceeds the sum of the consideration transferred, the amount of any non-controlling interests in the acquiree, and the fair value of the acquirer's previously held interests in the acquiree, the excess is recognized immediately in profit or loss as a bargain purchase gain.

Non-controlling interests that are present ownership interests and entitle their holders to a proportionate share of the entity's net assets in the event of liquidation may be initially measured at the non-controlling interests' proportionate share of the recognized amounts of the acquiree's identifiable net assets.

f. 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, 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 translated using the exchange rate at the date of the transaction.

For the purposes of presenting the consolidated financial statements, the assets and liabilities of the Corporation's foreign operations (including the subsidiaries and associates in other countries or subsidiaries that use currencies different from the PTI) are translated into New Taiwan dollars using exchange rates prevailing at the end of each reporting period. Income and expense items are translated at the average exchange rates for the period. Exchange differences arising are recognized in other comprehensive income (attributed to the owners of the PTI and non-controlling interests as appropriate).

g. Inventories

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

h. Property, plant, and equipment

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

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

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 method are reviewed at the end of each reporting period, with the effect of any changes in estimate 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.

i. Goodwill

Goodwill arising from the acquisition of a business is carried at cost as established at the date of acquisition of the business less accumulated impairment loss.

For the purposes of impairment testing, goodwill is allocated to each of the Corporation's cash-generating units (referred to as cash-generating units) that are expected to benefit from the synergies of the combination.

A cash-generating unit to which goodwill has been allocated is tested for impairment annually, or more frequently when there is an indication that the unit may be impaired, by comparing its carrying amount, including the attributable goodwill, with its recoverable amount. However, if the goodwill allocated to a cash-generating unit was acquired in a business combination during the current annual period, that unit shall be tested for impairment before the end of the current annual period. If the recoverable amount of the cash-generating unit is less than its carrying amount, the impairment loss is allocated first to reduce the carrying amount of any goodwill allocated to the unit and then to the other assets of the unit pro rata based on the carrying amount of each asset in the unit. Any impairment loss is recognized directly in profit or loss. An impairment loss recognized for goodwill is not reversed in subsequent periods.

If goodwill has been allocated to a cash-generating unit and the entity disposes of an operation within that unit, the goodwill associated with the operation disposed of is included in the carrying amount of the operation when determining the gain or loss on disposal, and is measured on the basis of the relative values of the operation disposed of and the portion of the cash-generating unit retained.

j. Intangible assets

1) Intangible assets acquired separately

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

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

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

3) Intangible assets acquired in a business combination

Intangible assets acquired in a business combination and recognized separately from goodwill are initially recognized at their fair value at the acquisition date (which is regarded as their cost). Subsequent to initial recognition, they are measured on the same basis as intangible assets that are acquired separately.

4) Derecognition of intangible assets

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

k. Impairment of tangible and 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 individual cash-generating units on a reasonable and consistent basis of allocation if corporate assets could be allocated to the individual cash-generating units, otherwise, corporate assets are allocated to the smallest group of cash-generating units on a reasonable and consistent basis of allocation.

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.

Before the Corporation recognizes an impairment loss from assets related to contract costs, any impairment loss on inventories related to the contract shall be recognized in accordance with applicable standards. Then, impairment loss from the assets related to the contract costs is recognized to the extent that the carrying amount of the assets exceeds the remaining amount of consideration that the Corporation expects to receive in exchange for related goods or services less the costs which relate directly to providing those goods or services and which have not been recognized as expenses. The assets related to the contract costs are then included in the carrying amount of the cash-generating unit to which they belong for the purpose of evaluating impairment of that cash-generating unit.

When an impairment loss is subsequently reversed, the carrying amount of the corresponding 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 for 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.

l. 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.

1) Financial assets

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

a) 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.

i. Financial assets at FVTPL

A financial asset is classified as at FVTPL when the financial asset is mandatorily classified as at FVTPL.

Financial assets at FVTPL are subsequently measured at fair value, with any gains or losses arising on remeasurement recognized in profit or loss. The net gain or loss recognized in profit or loss incorporates any dividend or interest earned on the financial asset. Fair value is determined in the manner described in Note 27.

ii. 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, debt investments, time deposits with original maturities of more than 3 months, notes and accounts receivable (included related parties), other receivables (included related parties), pledged time deposits and refundable deposits, are measured at amortized cost, which equals the gross carrying amount determined using the effective interest method less any impairment loss. Exchange differences are recognized in profit or loss.

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

i) Purchased or originated credit-impaired financial assets, for which interest income is calculated by applying the credit-adjusted effective interest rate to the amortized cost of such financial assets; and

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

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.

iii. 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, it 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.

b) Impairment of financial assets and contract assets

The Corporation recognizes a loss allowance for expected credit losses on financial assets at amortized cost (including accounts receivable) and contract assets.

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

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

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

i. Internal or external information show that the debtor is unlikely to pay its creditors.

ii. When a financial asset is more than 90 days past due unless the 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.

c) 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. 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.

2) Equity instruments

Equity instruments issued by the Corporation are classified as equity in accordance with the substance of the contractual arrangements and the definitions of an equity instrument.

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

Repurchase of the Corporation’s own equity instruments is recognized in and deducted directly from equity. No gain or loss is recognized in profit or loss on the purchase, sale, issue or cancellation of the Corporation’s own equity instruments.

3) Financial liabilities

a) Subsequent measurement

Except for the following situation, all financial liabilities are measured at amortized cost using the effective interest method.

Financial liabilities at FVTPL

A financial liability is classified as at FVTPL when such a financial liability is held for trading.

Financial liabilities held for trading are stated at fair value, with any gains or losses arising on remeasurement recognized in profit or loss. The net gain or loss recognized in profit or loss incorporates any interest or dividends paid on such financial liability. Fair value is determined in the manner described in Note 27.

b) Derecognition of financial liabilities

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

4) Derivative financial instruments

The Corporation enters into foreign exchange forward contracts to manage its exposure to foreign exchange rate risks.

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

m. Revenue recognition

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

For contracts where the period between the date the Corporation transfers a promised good or service to a customer and the date the customer pays for that good or service is one year or less, the Corporation does not adjust the promised amount of consideration for the effects of a significant financing component.

Revenue from the rendering of services

As the Corporation fulfills the obligations in the contract for testing services, the customer simultaneously receives and consumes the benefits provided by the Corporation. The Corporation has the right to revenue collection for the portion of testing services that have been fulfilled, and the revenue from testing services is recognized over time. The Corporation fulfills the obligations in the contract for packaging services when the customer creates or enhances the goods they have control of. The Corporation has the right to revenue collection for the portion of packaging services that have been fulfilled, and the revenue from packaging services is recognized over time. Contract assets are recognized during the process of semiconductor assembling and testing, and are reclassified to accounts receivable at the point the bills were issued. If the payment exceeds the revenue recognized to date, the Corporation recognizes the difference as a contract liability. It is recognized as contract asset before the Corporation satisfies its performance obligations.

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

n. Leases

2019

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

1) 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. Initial direct costs incurred in obtaining operating leases are added to the carrying amounts of the underlying assets and recognized as expenses on a straight-line basis over the lease terms.

2) 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 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. 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 a lease term, 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 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.

1) The Corporation as lessor

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

2) The Corporation as lessee

Assets held under finance leases are initially recognized as assets of the Group at their fair value at the inception of the lease or, if lower, at the present value of the minimum lease payments. The corresponding liability to the lessor is included in the consolidated balance sheets as a finance lease obligation.

Finance expenses implicit in lease payments for each period are recognized immediately in profit or loss, unless they are directly attributable to qualifying assets, in which case they are capitalized.

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

o. Borrowing costs

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

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

p. Employee benefits

1) Short-term employee benefits

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

2) Retirement benefits

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

Defined benefit costs (including service cost, net interest and remeasurement) under the defined benefit retirement benefit plans are determined using the projected unit credit method. Service cost (including current service cost, past service cost, as well as gains and losses on settlements) and net interest on the net defined benefit liabilities (assets) are recognized as employee benefits expense in the period in which they occur, or when the plan amendment, curtailment or settlement occurs. Remeasurement, comprising actuarial gains and losses, the effect of the changes to the asset ceiling and the return on plan assets (excluding interest), is recognized in other comprehensive income in the period in which 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.

3) Termination benefits

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

q. Treasury shares

The parent company's shares held by its subsidiaries are reclassified to treasury shares from investments accounted for using the equity method and are recognized based on the original investment cost. Cash dividends earned by subsidiaries are written-off from investment income and adjusted to capital surplus - treasury share transactions.

r. Taxation

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

1) 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.

2) Deferred tax

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

Deferred tax liabilities are generally recognized for all taxable temporary differences. Deferred tax assets are generally recognized for all deductible temporary differences 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 only recognized to the extent that it is probable that there will be sufficient taxable profits against which to utilize the benefits of the temporary differences and they are expected to reverse in the foreseeable future.

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

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

3) Current and deferred tax for the year

Current and deferred tax 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

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

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

Critical Accounting Judgments

a. Lease terms - 2019

In determining a lease term, the Corporation considers all facts and circumstances that create an economic incentive to exercise or not to exercise an option, including any expected changes in facts and circumstances from the commencement date until the exercise date of the option. Main factors considered include contractual terms and conditions for the optional periods, significant leasehold improvements undertaken over the contract term, the importance of the underlying asset to the lessee's operations, etc. The lease term is reassessed if a significant change in circumstances that are within control of the Corporation occur.

Key Sources of Estimation Uncertainty

a. Lessees' incremental borrowing rates

In determining a lessee's incremental borrowing rate used in discounting lease payments, a risk-free rate for the same currency and relevant duration is selected as a reference rate, and the lessee's credit spread adjustments and lease specific adjustments (such as asset type, secured position, etc.) are also taken into account.

6. CASH AND CASH EQUIVALENTS

	December 31	
	2019	**2018**
Checking accounts and demand deposits	$ 21,798,976	$ 18,543,547
Cash on hand	1,072	595
	$ 21,800,048	$ 18,544,142

The market rate intervals of cash in bank and cash equivalents at the end of the reporting period were as follows:

	December 31	
	2019	2018
Bank deposits	0%-2.92%	0%-3.10%

7. FINANCIAL INSTRUMENTS AT FAIR VALUE THROUGH PROFIT OR LOSS

	December 31	
	2019	2018
Financial assets at FVTPL - current		
Financial assets mandatorily classified as at FVTPL		
Derivative financial assets (not under hedge accounting)		
Foreign exchange forward contracts	$ 20,555	$ 5,841
Non-derivative financial assets		
Mutual funds	50,652	50,376
	$ 71,207	$ 56,217
Financial liabilities at FVTPL - current		
Financial liabilities held for trading		
Derivative financial liabilities (not under hedge accounting)		
Foreign exchange forward contracts	$ 3,953	$ 2,223

At the end of the year, outstanding foreign exchange forward contracts not under hedge accounting were as follows:

	Currency	Maturity Date	Contract Amount (In Thousands)
December 31, 2019			
Sell foreign exchange forward contracts	USD to NTD	2020.01.02-2020.03.17	USD 64,491
	USD to JPY	2020.01.06-2020.05.11	USD 22,037
December 31, 2018			
Sell foreign exchange forward contracts	USD to NTD	2019.01.03-2019.03.13	USD 58,190
	USD to JPY	2019.01.02-2019.05.10	USD 10,618
	USD to CNY	2019.01.04-2019.01.08	USD 1,168

The Corporation entered into foreign exchange forward contracts to manage exposures to exchange rate fluctuations of foreign currency denominated assets and liabilities. However, those contracts did not meet the criteria of hedge effectiveness and therefore were not accounted for using hedge accounting.

8. FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME

Investments in equity instruments at FVTOCI

	December 31	
	2019	**2018**
Non-current		
Domestic investments		
Listed shares		
Ordinary shares - Solid State System Co., Ltd.	$ 26,093	$ 26,803

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

	December 31	
	2019	**2018**
Current		
Domestic investments		
Corporate bonds - 02 Taiwan Power Company 1B Bond	$ 150,388	$ -
Corporate bonds - P04 FENC 4 Bond	100,000	-
Corporate bonds - 01 TSMC 1B Bond	-	100,015
Corporate bonds - P04 Hon Hai 4C Bond	-	100,000
Time deposits with original maturities of more than 3 months	8,429	8,605
Pledged time deposits	21,712	21,763
Restricted deposits	269,203	318,534
	$ 549,732	$ 548,917
Non-current		
Domestic investments		
Corporate bonds - P06 Taiwan Power Company 1A Bond	$ 300,001	$ 300,001
Corporate bonds - P07 Taiwan Power Company 1A Bond	200,001	200,001
Corporate bonds - P08 Taiwan Power Company 3A Bond	100,001	-
Corporate bonds - P06 Taiwan Power Company 3A Bond	100,000	100,001
Corporate bonds - P06 FPC 1A Bond	100,000	100,000
Corporate bonds - 02 Taiwan Power Company 1B Bond	-	151,518
Corporate bonds - P04 FENC 4 Bond	-	100,000
Time deposits with original maturities of more than 3 months	612,268	992,774
Pledged time deposits	88,874	96,815
	$ 1,501,145	$ 2,041,110

On October 20, 2015, the Corporation bought corporate bonds issued by TSMC, which have an effective interest rate of 0.91%; a premium value of $101,740 thousand (par value $100,000 thousand); and maturity on January 11, 2019.

On October 23, 2015, the Corporation bought corporate bonds issued by HON HAI PRECISION IND. CO., LTD., which have an effective interest rate of 1.15%; a premium value of $100,001 thousand (par value $100,000 thousand); and maturity on September 29, 2019.

On November 16, 2015, the Corporation bought corporate bonds issued by Far Eastern New Century Corporation, which have an effective interest rate of 1.25%; a premium value of $100,001 thousand (par value $100,000 thousand); and maturity date of November 16, 2020.

On September 26, 2016, the Corporation bought corporate bonds issued by Taiwan Power Company with an effective interest rate of 0.63%, a premium value of $154,054 thousand (par value $150,000 thousand) and a maturity date of May 6, 2020.

On April 21, 2017, the Corporation bought corporate bonds issued by Taiwan Power Company with an effective interest rate of 1.13%, a premium value of $300,002 thousand (par value $300,000 thousand) and a maturity date of April 21, 2022.

On May 19, 2017, the Corporation bought corporate bonds issued by Formosa Plastics Corporation with an effective interest rate of 1.09%, a premium value of $100,001 thousand (par value $100,000 thousand) and maturity dates of May 19, 2021 and May 19, 2022 with par value $50,000 thousand due on both dates.

On December 15, 2017, the Corporation bought corporate bonds issued by Taiwan Power Company with an effective interest rate of 0.88%, a premium value of $100,001 thousand (par value $100,000 thousand) and maturity dates of December 15, 2021 and December 15, 2022 with par value $50,000 thousand due on both dates.

On May 14, 2018, the Corporation bought corporate bonds issued by Taiwan Power Company with an effective interest rate of 0.70% at premium value $200,001 thousand (par value $200,000 thousand) and a maturity date of May 14, 2021.

On September 12, 2019, the Corporation bought corporate bonds issued by Taiwan Power Company with an effective interest rate of 0.72% at premium value $100,001 thousand (par value $100,000 thousand) and maturity dates of September 12, 2023 and September 12, 2024 at par value of $50,000 thousand, respectively.

The ranges of interest rates for time deposits with original maturities of more than 3 months were approximately 0.001%-2.42% and 0.001%-1.92% per annum as of December 31, 2019 and 2018, respectively.

Refer to Note 27 for information relating to their credit risk management and impairment.

Refer to Note 29 for information relating to investments in financial assets at amortized cost pledged as security.

10. NOTES AND ACCOUNTS RECEIVABLE

	December 31 2019	December 31 2018
Notes receivable		
Notes receivable - operating	$ 63,517	$ 78,037
Accounts receivable		
At amortized cost		
Gross carrying amount	9,514,936	8,926,869
Less: Allowance for impairment loss	(59,481)	(38,081)
	9,455,455	8,888,788
	$ 9,518,972	$ 8,966,825

At amortized cost

The average credit period of sales of goods was 30 days to 150 days. No interest was charged on accounts receivable. In order to minimize credit risk, the management of the Corporation has delegated a team responsible for determining credit limits, credit approvals and other monitoring procedures to ensure that follow-up action is taken to recover overdue debt. In addition, the Corporation reviews the recoverable amount of each individual trade debt at the end of the reporting period to ensure that adequate allowance is made for possible irrecoverable amounts. In this regard, the management believes the Corporation's credit risk was significantly reduced.

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

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

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

December 31, 2019

	Not Past Due	Up to 60 Days	61 to 90 Days	91 to 120 Days	Over 120 Days	Total
Gross carrying amount	$ 9,369,105	$ 110,544	$ 2,473	$ 2,934	$ 29,880	$ 9,514,936
Loss allowance (Lifetime ECLs)	(6,820)	(17,525)	(2,322)	(2,934)	(29,880)	(59,481)
Amortized cost	$ 9,362,285	$ 93,019	$ 151	$ -	$ -	$ 9,455,455

December 31, 2018

	Not Past Due	Up to 60 Days	61 to 90 Days	91 to 120 Days	Over 120 Days	Total
Gross carrying amount	$ 8,668,966	$ 184,436	$ 57,213	$ 10,235	$ 6,019	$ 8,926,869
Loss allowance (Lifetime ECLs)	(6,133)	(15,943)	(4,093)	(8,029)	(3,883)	(38,081)
Amortized cost	$ 8,662,833	$ 168,493	$ 53,120	$ 2,206	$ 2,136	$ 8,888,788

The movements of the loss allowance of accounts receivable were as follows:

	For the Year Ended December 31	
	2019	2018
Balance at January 1	$ 38,081	$ 39,473
Add: Impairment loss	21,400	-
Less: Amounts written off	-	(1,392)
Balance at December 31	$ 59,481	$ 38,081

11. INVENTORIES

	December 31	
	2019	2018
Raw materials	$ 3,458,332	$ 3,402,888
Supplies	420,693	420,072
	$ 3,879,025	$ 3,822,960

The nature of the cost of goods sold was as follows:

	For the Year Ended December 31	
	2019	2018
Cost of inventories sold	$ 53,848,249	$ 54,209,337
(Reversal) write-downs of inventories	$ (16,056)	$ 103,083
Unallocated production overhead	$ 3,345,202	$ 3,327,060
Sales of scrap	$ 119,655	$ 146,515

12. SUBSIDIARIES

a. Subsidiaries included in the consolidated financial statements

Investor	Investee	Nature of Activities	Proportion of Ownership (%) December 31 2019	2018	Remark
Powertech Technology Inc.	Powertech Holding (BVI) Inc.	Investment business	100	100	-
	Greatek Electronics Inc. (“GEI”)	Semiconductor assembly and testing services	43	43	Notes 1 and 2
	Powertech Technology (Singapore) Pte. Ltd.	Integrated circuit testing and assembly services	100	100	-
	Powertech Technology (Xian) Ltd.	Semiconductor testing design, manufacturing, sales business and assembly services	36	36	-

(Continued)

Investor	Investee	Nature of Activities	Proportion of Ownership (%) December 31 2019	2018	Remark
Powertech Technology Inc.	Powertech Technology Japan Ltd.	Investment business	100	100	-
	Tera Probe, Inc.	Wafer probing test services	12	12	Note 2
	TeraPower Technology Inc.	Wafer probing test services	49	49	-
Powertech Holding (BVI) Inc.	PTI Technology (Singapore) Pte. Ltd.	Investment business	100	100	-
PTI Technology (Singapore) Pte. Ltd.	Powertech Technology (Suzhou) Ltd.	Semiconductor testing design, manufacturing, sales business and assembly services	100	100	-
Powertech Technology (Singapore) Pte. Ltd.	Powertech Technology (Xian) Ltd.	Semiconductor testing design, manufacturing, sales business and assembly services	64	64	-
Powertech Technology Japan Ltd.	Tera Probe, Inc.	Wafer probing test services	49	47	Notes 2 and 3
	Powertech Technology Akita Inc.	Semiconductor assembly and testing service	100	100	-
Tera Probe, Inc.	TeraPower Technology Inc.	Wafer probing test services	51	51	-
	Tera Probe Aizu, Inc.	Wafer probing test services	100	100	-

(Concluded)

Note 1: On the reelection of the directors and supervisors of Greatek Electronics Inc., the PTI obtained the majority of the board seats and Greatek Electronics Inc., became a subsidiary of the PTI even though the PTI has only 43% ownership of Greatek Electronics Inc.

Note 2: Subsidiaries that have material non-controlling interests.

Note 3: Powertech Technology Japan Ltd.’s shareholding in Tera Probe, Inc. changed to 49% after Tera Probe, Inc.’s repurchase of treasury shares in 2019.

b. Details of subsidiaries that have material non-controlling interests

Name of Subsidiary	Principal Place of Business	Proportion of Ownership and Voting Rights Held by Non-controlling Interests December 31 2019	2018
Greatek Electronics Inc.	Zhunan Township, Miaoli County	57%	57%
Tera Probe, Inc.	Japan	39%	41%

Name of Subsidiary	Profit Allocated to Non-controlling Interests For the Year Ended December 31 2019	2018	Accumulated Non-controlling Interests December 31 2019	2018
Greatek Electronics Inc.	$ 1,061,051	$ 1,334,852	$ 9,485,870	$ 9,326,563
Tera Probe, Inc.	$ (20,409)	$ (56,566)	$ 2,384,365	$ 2,747,578

Summarized financial information in respect of each of the Corporation’s subsidiaries that has material non-controlling interests is set out below. The summarized financial information below represents amounts before intragroup eliminations.

Greatek Electronics Inc.

	December 31	
	2019	2018
Current assets	$ 8,177,381	$ 7,351,080
Non-current assets	11,338,830	11,473,480
Current liabilities	(2,610,535)	(2,369,720)
Non-current liabilities	(251,046)	(235,776)
Equity	$ 16,654,630	$ 16,219,064
Equity attributable to:		
Owners of the Corporation	$ 7,146,699	$ 6,958,819
Non-controlling interests	9,508,931	9,260,245
	$ 16,654,630	$ 16,219,064

	For the Year Ended December 31	
	2019	2018
Operating revenue	$ 12,030,481	$ 12,356,434
Net income for the year	$ 1,895,899	$ 2,375,453
Other comprehensive income (loss) for the year	75,419	(67,552)
Total comprehensive income for the year	$ 1,971,318	$ 2,307,901
Net income attributable to:		
Owners of the Corporation	$ 813,439	$ 1,019,192
Non-controlling interests	1,082,460	1,356,261
	$ 1,895,899	$ 2,375,453
Total comprehensive income attributable to:		
Owners of the Corporation	$ 845,797	$ 990,208
Non-controlling interests	1,125,521	1,317,693
	$ 1,971,318	$ 2,307,901
Net cash inflow (outflow) from :		
Operating activities	$ 4,161,216	$ 4,504,087
Investing activities	(2,042,449)	(3,103,917)
Financing activities	(1,537,014)	(1,706,442)
Net cash inflow (outflow)	$ 581,753	$ (306,272)
Dividends paid to non-controlling interests		
Greatek Electronics Inc.	$ 876,910	$ 974,345

Tera Probe, Inc.

	December 31	
	2019	2018
Current assets	$ 2,423,564	$ 3,111,580
Non-current assets	4,954,776	5,566,923
Current liabilities	(973,622)	(1,844,532)
Non-current liabilities	(662,624)	(845,862)
Equity	$ 5,742,094	$ 5,988,109
Equity attributable to:		
Owners of the Corporation	$ 3,482,580	$ 3,559,332
Non-controlling interests	2,259,514	2,428,777
	$ 5,742,094	$ 5,988,109

	For the Year Ended December 31	
	2019	2018
Operating revenue	$ 1,836,339	$ 2,474,427
Net loss for the year	$ (141,923)	$ (214,235)
Other comprehensive loss for the year	(37,479)	(148,799)
Total comprehensive loss for the year	$ (179,402)	$ (363,034)
Net loss attributable to:		
Owners of the Corporation	$ (85,834)	$ (127,341)
Non-controlling interests	(56,089)	(86,894)
	$ (141,923)	$ (214,235)
Total comprehensive loss attributable to:		
Owners of the Corporation	$ (108,422)	$ (215,787)
Non-controlling interests	(70,980)	(147,247)
	$ (179,402)	$ (363,034)
Cash flow inflow (outflow) from:		
Operating activities	$ (680,593)	$ 1,189,726
Investing activities	1,789,890	(2,429,457)
Financing activities	(1,093,887)	1,860,481
Net cash inflow	$ 15,410	$ 620,750

The share of profit or loss and other comprehensive income of those subsidiaries for the years ended December 31, 2019 and 2018 was based on the subsidiaries' financial statements audited by the auditors for the same years.

13. PROPERTY, PLANT AND EQUIPMENT

	December 31, 2019
Assets used by the Corporation	$ 58,779,789

a. 2019

	Land	Building	Machinery and Equipment	Office Equipment	Leasehold Improvements	Other Equipment	Construction in Progress	Advance Payments	Spare parts	Total
Cost										
Balance at January 1, 2019	$ 3,322,250	$ 26,944,810	$ 91,234,066	$ 2,343,814	$ 362,214	$ 3,650,775	$ 907,019	$ 6,016,130	$ 147,694	$ 134,928,772
Additions	121,366	39,369	1,245,105	10,539	9,072	27,804	1,470,754	7,316,366	394,774	10,635,149
Disposals	-	(135,390)	(3,054,507)	(212,021)	(313)	(61,174)	(5,329)	(1,465)	(380,789)	(3,850,988)
Reclassified	-	445,886	7,390,120	248,795	63,792	94,398	(954,249)	(8,051,723)	75	(762,906)
Effect of foreign currency exchange differences	(306)	(74,586)	(240,619)	(25,360)	(8,576)	(6,083)	(4,981)	(4,576)	(337)	(365,424)
Balance at December 31, 2019	3,443,310	27,220,089	96,574,165	2,365,767	426,189	3,705,720	1,413,214	5,274,732	161,417	140,584,603
Accumulated deprecation										
Balance at January 1, 2019	-	9,698,433	57,403,617	1,658,423	228,673	3,091,424	-	-	13,277	72,093,847
Depreciation expense	-	1,510,944	10,060,200	276,419	22,050	227,539	-	-	383,442	12,480,594
Disposals	-	(122,769)	(2,720,480)	(187,267)	(313)	(55,396)	-	-	(380,789)	(3,467,014)
Reclassified	-	6,841	(372,035)	-	(6,841)	(11,503)	-	-	-	(383,538)
Effect of foreign currency exchange differences	-	(40,510)	(175,897)	(19,418)	(4,992)	(5,312)	-	-	(341)	(246,470)
Balance at December 31, 2019	-	11,052,939	64,195,405	1,728,157	238,577	3,246,752	-	-	15,589	80,477,419
Accumulated impairment										
Balance at January 1, 2019	1,762	260,090	353,465	112,819	80,298	-	45,638	-	-	854,072
Recognition (revolution) of Impairment loss	-	186,737	327,828	(8,024)	-	-	-	-	-	506,541
Disposals	-	(5)	-	(1,299)	-	-	-	-	-	(1,304)
Effect of foreign currency exchange differences	(9)	(12,729)	(14,832)	(2,496)	(1,635)	-	(213)	-	-	(31,914)
Balance at December 31, 2019	1,753	434,093	666,461	101,000	78,663	-	45,425	-	-	1,327,395
Carrying amounts at December 31, 2019 and January 1, 2020	$ 3,441,557	$ 15,733,057	$ 31,712,299	$ 536,610	$ 108,949	$ 458,968	$ 1,367,789	$ 5,274,732	$ 145,828	$ 58,779,789

Powertech Technology Akita Inc. and Tera Probe, Inc. expects a decrease in the future cash flows of buildings, machinery and equipment and office equipment. Therefore, impairment losses of $506,541 thousand was recognized in other gains and losses for the year ended December 31, 2019.

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

Buildings	
Main plants	3-51 years
Mechanical and electrical power equipment	1-26 years
Wafer fab	10-16 years
Fire control equipment	10-26 years
Others	2-51 years
Machinery and equipment	1-15 years
Office equipment	1-15 years
Leasehold improvements	10-50 years
Other equipment	1-16 years
Spare parts	0.5-2 years

Property, plant and equipment used by the Corporation and pledged as collateral for bank borrowings are set out in Note 29.

b. 2018

	Land	Building	Machinery and Equipment	Office Equipment	Leasehold Improvements	Other Equipment	Construction in Progress	Advance Payments	Spare parts	Total
Cost										
Balance at January 1, 2018	$ 3,317,858	$ 23,246,329	$ 83,927,064	$ 2,729,624	$ 407,994	$ 3,647,390	$ 872,522	$ 8,257,379	$ 121,581	$ 126,527,741
Additions	3,203	223,013	2,231,604	12,332	18,044	64,574	2,560,902	11,585,158	351,928	17,050,758
Disposals	-	(545,656)	(7,352,301)	(696,224)	(95,175)	(159,598)	(185,285)	(7,500)	(326,281)	(9,368,020)
Reclassified	-	4,020,150	11,739,880	259,481	18,073	88,110	(2,354,305)	(13,828,008)	-	(56,619)
Effect of foreign currency exchange differences	1,189	974	687,819	38,601	13,278	10,299	13,185	9,101	466	774,912
Balance at December 31, 2018	3,322,250	26,944,810	91,234,066	2,343,814	362,214	3,650,775	907,019	6,016,130	147,694	134,928,772
Accumulated deprecation										
Balance at January 1, 2018	-	8,708,794	53,515,329	2,023,118	265,799	2,912,733	-	-	11,149	67,436,922
Depreciation expense	-	1,473,068	10,066,565	277,308	55,488	312,270	-	-	328,046	12,512,745
Disposals	-	(483,870)	(6,730,724)	(668,062)	(94,025)	(137,910)	-	-	(326,281)	(8,440,872)
Reclassified	-	6,832	9,244	41	(6,873)	(19)	-	-	-	9,225
Effect of foreign currency exchange differences	-	(6,391)	543,203	26,018	8,284	4,350	-	-	363	575,827
Balance at December 31, 2018	-	9,698,433	57,403,617	1,658,423	228,673	3,091,424	-	-	13,277	72,093,847
Accumulated impairment										
Balance at January 1, 2018	-	207,722	56,697	85,568	77,811	-	-	-	-	427,798
Recognition of impairment loss	1,733	56,259	289,034	41,271	176	-	44,851	-	-	433,324
Disposals	-	(122)	-	(13,735)	-	-	-	-	-	(13,857)
Effect of foreign currency exchange differences	29	(3,769)	7,734	(285)	2,311	-	787	-	-	6,807
Balance at December 31, 2018	1,762	260,090	353,465	112,819	80,298	-	45,638	-	-	854,072
Carrying amounts at December 31, 2018	$ 3,320,488	$ 16,986,287	$ 33,476,984	$ 572,572	$ 53,243	$ 559,351	$ 861,381	$ 6,016,130	$ 134,417	$ 61,980,853

Tera Probe, Inc. and Powertech Technology Akita Inc. expected a decrease in the future cash flows of land, buildings, machinery and equipment, office equipment, leasehold improvements and construction in progress. Therefore, impairment losses of $433,324 thousand were recognized in other gains and losses for the year ended December 31, 2018. Tera Probe, Inc. determined the recoverable amount of the relevant assets on the basis of their value in use, and the discount rate used in measuring value in use was 3.30% per annum; Powertech Technology Akita Inc. evaluated that the carrying amount of some machinery and equipment could not be recovered.

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

Buildings	
Main plants	3-51 years
Mechanical and electrical power equipment	1-26 years
Wafer fab	6-16 years
Fire control equipment	2-26 years
Others	1-56 years
Machinery and equipment	1-20 years
Office equipment	1-25 years
Leasehold improvements	4-8 years
Other equipment	1-16 years
Spare parts	0.5-2 years

Property, plant and equipment used by the Corporation and pledged as collateral for bank borrowings are set out in Note 29.

14. LEASE ARRANGEMENTS

a. Right-of-use assets - 2019

	December 31, 2019
Carrying amounts	
Land	$ 1,449,085
Buildings	121,589
Machinery and equipment	354,892
Transportation equipment	337
	$ 1,925,903

	For the Year Ended December 31, 2019
Additions to right-of-use assets	$ 69,231
Depreciation charge for right-of-use assets	
Land	$ 37,113
Buildings	97,250
Machinery and equipment	96,000
Transportation equipment	311
	$ 230,674

b. Lease liabilities - 2019

	December 31, 2019
Carrying amounts	
Current	$ 211,549
Non-current	$ 1,546,096

Range of discount rate for lease liabilities was as follows:

	December 31, 2019
Land	1.10%-1.69%
Buildings	0.69%-3.77%
Machinery and equipment	0.80%-2.32%
Transportation equipment	1.13%

c. Other lease information

2019

	For the Year Ended December 31, 2019
Expenses relating to short-term leases	$ 36,923
Total cash (outflow) for leases	$ (326,423)

The Corporation leases certain land, office, machines, vehicles and office equipment which qualify as short-term 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 PTI leases land from Tang Eng Iron Works Co., Ltd. under a renewable agreement that will expire before December 2023.

The future minimum lease payments of non-cancellable operating lease commitments were as follows:

	December 31, 2018
Not later than 1 year	$ 16,697
Later than 1 year and not later than 5 years	66,788
	$ 83,485

The lease payments recognized in profit or loss were as follows:

	For the Year Ended December 31, 2018
Minimum lease payments	$ 16,697

Powertech Technology (Singapore) Pte. Ltd. leased equipment and office space from IBM and Cambridge Industrial Trust under a renewable agreement which will expire in May 2021.

The future minimum lease payments of non-cancellable operating lease commitments were as follows:

	December 31, 2018
Not later than 1 year	$ 45,155
Over 1 year and up to 5 years	63,544
	$ 108,699

The lease payments recognized in profit or loss were as follows:

	For the Year Ended December 31, 2018
Minimum lease payments	$ 43,921

Tera Probe, Inc. leased equipment and office space from Micron Memory Japan, Inc., Advantest Finance Inc., Aizu Fujitsu Semiconductor Limited and Hitachi Capital Corporation, etc. under renewable agreements which expired before May 2019.

The future minimum lease payments of non-cancellable operating lease commitments were as follows:

	December 31, 2018
Not later than 1 year	$ 201,448

The lease payments recognized in profit or loss were as follows:

	For the Year Ended December 31, 2018
Minimum lease payments	$ 190,075

15. INTANGIBLE ASSETS

	Computer Software	Goodwill	Core Techniques	Client Relationships	Royalty	Technical Services	Total
Cost							
Balance at January 1, 2019	$ 661,534	$ 979,819	$ 250,103	$ 220,775	$ 1,765	$ 88,894	$ 2,202,890
Additions	23,730	-	-	-	8,331	-	32,061
Disposals	(69,598)	-	-	-	-	-	(69,598)
Reclassifications	24,339	-	-	-	-	-	24,339
Effect of foreign currency exchange differences	(2,667)	-	(744)	-	(8)	-	(3,419)
Balance at December 31, 2019	637,338	979,819	249,359	220,775	10,088	88,894	2,186,273
Accumulated amortization							
Balance at January 1, 2019	523,810	-	250,103	172,165	1,354	88,894	1,036,326
Amortization expense	110,117	-	-	25,231	2,206	-	137,554
Disposals	(69,598)	-	-	-	-	-	(69,598)
Effect of foreign currency exchange differences	(1,588)	-	(744)	-	(9)	-	(2,341)
Balance at December 31, 2019	562,741	-	249,359	197,396	3,551	88,894	1,101,941
Accumulated impairment							
Balance at January 1, 2019	4,360	-	-	-	-	-	4,360
Recognition of Impairment loss	20,786	-	-	-	-	-	20,786
Effect of foreign currency exchange differences	(440)	-	-	-	-	-	(440)
Balance at December 31, 2019	24,706	-	-	-	-	-	24,706
Carrying amounts at December 31, 2019	$ 49,891	$ 979,819	$ -	$ 23,379	$ 6,537	$ -	$ 1,059,626

(Continued)

	Computer Software	Goodwill	Core Techniques	Client Relationships	Royalty	Technical Services	Total
Cost							
Balance at January 1, 2018	$ 615,883	$ 979,819	$ 285,501	$ 220,775	$ 1,679	$ 88,894	$ 2,192,551
Additions	33,090	-	-	-	-	-	33,090
Disposals	(50,667)	-	-	-	-	-	(50,667)
Reclassifications	47,976	-	-	-	-	-	47,976
Effect of foreign currency exchange differences	15,252	-	(35,398)	-	86	-	(20,060)
Balance at December 31, 2018	661,534	979,819	250,103	220,775	1,765	88,894	2,202,890
Accumulated amortization							
Balance at January 1, 2018	424,757	-	285,501	146,933	1,174	84,537	942,902
Amortization expense	114,333	-	-	25,232	118	4,357	144,040
Disposals	(30,643)	-	-	-	-	-	(30,643)
Reclassifications	3,195	-	-	-	-	-	3,195
Effect of foreign currency exchange differences	12,168	-	(35,398)	-	62		(23,168)
Balance at December 31, 2018	523,810	-	250,103	172,165	1,354	88,894	1,036,326
Accumulated impairment							
Balance, beginning of year	-	-	-	-	-	-	-
Impairment loss	4,285	-	-	-	-	-	4,285
Disposals	-	-	-	-	-	-	-
Effects of foreign currency exchange differences	75	-	-	-	-	-	75
Balance, end of year	4,360	-	-	-	-	-	4,360
Carrying amounts at December 31, 2018	$ 133,364	$ 979,819	$ -	$ 48,610	$ 411	$ -	$ 1,162,204

(Concluded)

Powertech Technology Akita Inc. and Tera Probe, Inc. expects a decrease in the future cash flows of computer software. Therefore, impairment losses of $20,786 thousand was recognized in other gains and losses for the year ended December 31, 2019.

Tera Probe, Inc. expected that the estimated future cash flows of computer software would decrease. Therefore, an impairment loss of $4,285 thousand was recognized for the year ended December 31, 2018. Tera Probe, Inc. determined the recoverable amount of the relevant assets on the basis of their value in use, and the discount rate used in measuring the value in use was 3.30 % per annum.

The above items of intangible assets were amortized on a straight-line basis over their estimated useful lives as follows:

Computer software	2-10 years
Core techniques	5 years
Client relationships	9 years
Royalty	1-10 years
Technical services	2-4 years

16. OTHER ASSETS

	December 31	
	2019	2018
Current		
Tax refund receivables	$ 400,846	$ 467,876
Payment on behalf of others	77,934	284,195
Lease prepayments	-	2,566
Others	76,010	58,211
	$ 554,790	$ 812,848

(Continued)

	December 31	
	2019	2018
Non-current		
Lease prepayments	$ -	$ 63,520
Refundable deposits	65,095	45,635
Prepayments for equipment	59,843	4,060
Other	1,147	23,945
	$ 126,085	$ 137,160

(Concluded)

Lease prepayments include land use rights for land in mainland China.

17. BORROWINGS

a. Short-term bank loans

	December 31	
	2019	2018
Unsecured borrowings		
Working capital loan	$ 1,182,283	$ 843,953

The effective interest rate ranges on the working capital loan was 0.68%-5.00% and 0.68%-4.40% as of December 31, 2019 and 2018, respectively.

b. Long-term debt

The long-term debt of the Corporation are all floating rate debt, which include:

	December 31	
	2019	2018
1) Secured borrowings (Note 29)	$ 12,948,198	$ 13,534,928
2) Unsecured borrowings	16,690,219	17,699,048
	29,638,417	31,233,976
Less: Current portions	(182,305)	(361,637)
	$ 29,456,112	$ 30,872,339

1) Repayable continually from November 2021 to December 2038; interest rate range was 1.11%-1.21% as of December 31, 2019 and 1.14%-1.25% as of December 31, 2018.

2) Repayable continually from July 2020 to September 2024; interest rate range was 0.69%-3.90% as of December 31, 2019 and 0.69%-3.77% as of December 31, 2018.

For the PTI's long-term debt, the financing banks required the PTI to show compliance with requirements to maintain the current ratio, fixed ratio, liability ratio, financial liability ratio, equity ratio, interest coverage ratio, tangible assets and net asset value as well as the ability to repay the current portion of long-term liabilities in its annual and semiannual consolidated financial statements. As of December 31, 2019, the PTI was in compliance with these ratio requirements.

18. FINANCE LEASE PAYABLES - 2018

	December 31, 2018
Minimum lease payments	
Not later than 1 year	$ 133,422
Later than 1 year and not later than 5 years	166,085
	299,507
Less: Future finance charges	(5,074)
Present value of minimum lease payments	$ 294,433
Present value of minimum lease payments	
Not later than 1 year	$ 130,994
Later than 1 year and not later than 5 years	163,439
	$ 294,433

Powertech Technology (Singapore) Pte. Ltd., Tera Probe, Inc. and TeraPower Technology Inc. leased some of its manufacturing equipment under finance leases. The average lease terms were between three and five years.

Interest rates for all obligations under finance leases were fixed at their respective contract dates ranging from 0.40% to 5.19% per annum.

19. OTHER LIABILITIES

	December 31	
	2019	2018
Current		
Accrued expenses and other current liabilities		
Salaries and bonuses	$ 1,963,983	$ 2,001,199
Payables for insurance	209,634	201,643
Payables for utilities	200,331	185,893
Agency receipts	154,335	133,357
Indemnification payables (a)	55,787	99,321
Payables for annual leave	62,966	24,621
Others	4,368,846	4,578,908
	$ 7,015,882	$ 7,224,942

(Continued)

	December 31	
	2019	2018
Non-current		
Other liabilities		
Guarantee deposits	$ 1,347	$ 4,260
Others	329,801	376,989
	$ 331,148	$ 381,249

(Concluded)

a. Indemnification payables are measured at the best estimate of the consideration required to settle the present obligation at the end of the reporting period, taking into account the risks and uncertainties surrounding the obligation.

20. RETIREMENT BENEFIT PLANS

a. Defined contribution plan

The PTI, GEI and TeraPower Technology Inc. adopted a pension plan under the Labor Pension Act (the LPA), which is a state-managed defined contribution plan. Under the LPA, the Corporation 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's subsidiaries the PTI, GEI and TeraPower Technology Inc. in accordance with the Labor Standards Law belongs to the defined benefit plan administered 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 PTI, GEI and TeraPower Technology Inc. contribute 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 plans were as follows:

	December 31	
	2019	2018
Present value of defined benefit obligation	$ 1,015,642	$ 1,119,258
Fair value of plan assets	(621,650)	(716,466)
Net defined benefit liabilities	$ 393,992	$ 402,792
Net defined benefit assets	$ (1,793)	$ (1,738)
Net defined benefit liabilities	395,785	404,530
	$ 393,992	$ 402,792

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	$ 1,052,260	$ (656,262)	$ 395,998
Service cost			
Current service cost	46,199	-	46,199
Net interest expense (income)	11,186	(7,058)	4,128
Recognized in profit or loss	57,385	(7,058)	50,327
Remeasurement			
Return on plan assets (excluding amounts included in net interest)	-	(23,281)	(23,281)
Actuarial loss - changes in demographics assumptions	4,959	-	4,959
Actuarial loss - changes in financial assumptions	25,592	-	25,592
Actuarial loss - experience adjustments	21,244	(5,234)	16,010
Others	(2,835)	-	(2,835)
Recognized in other comprehensive income	48,960	(28,515)	20,445
Contributions from the employer	-	(54,918)	(54,918)
Benefits paid	(57,337)	42,721	(14,616)
Effects of foreign currency exchange differences	17,990	(12,434)	5,556
Balance at December 31, 2018	1,119,258	(716,466)	402,792
Service cost			
Current service cost	41,899	-	41,899
Past service cost and gain on settlements	(8,561)	-	(8,561)
Net interest expense (income)	9,896	(6,612)	3,284
Recognized in profit or loss	43,234	(6,612)	36,622
Remeasurement			
Return on plan assets (excluding amounts included in net interest)	-	(22,261)	(22,261)
Actuarial loss - changes in demographics assumptions	46	-	46
Actuarial loss - changes in financial assumptions	12,447	-	12,447
Actuarial loss - experience adjustments	32,030	(6,763)	25,267
Others	6,943	-	6,943
Recognized in other comprehensive income	51,466	(29,024)	22,442
Contributions from the employer	-	(47,233)	(47,233)
Benefits paid	(193,809)	177,878	(15,931)
Liabilities extinguished on settlement	(698)	-	(698)
Effects of foreign currency exchange differences	(3,809)	(193)	(4,002)
Balance at December 31, 2019	$ 1,015,642	$ (621,650)	$ 393,992

Through the defined benefit plans 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 shall not be below the interest rate for a 2-year time deposit with local banks.

2) Interest risk: A decrease in the government/corporate bond interest rate will increase the present value of the defined benefit obligation; however, this will be partially offset by an increase in the return on the plan's debt investments.

3) Salary risk: The present value of the defined benefit obligation is calculated using the future salaries of plan participants. As such, an increase in the salaries 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 rates	0.38%-1.38%	0.43%-1.38%
Expected rates of salary increase	2.25%-4.88%	2.25%-5.00%
Return on plan assets	0.80%	1.00%-1.10%

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		
0.50% increase	$ (57,284)	$ (56,964)
0.50% decrease	$ 60,665	$ 60,394
Expected rate of salary increase		
0.50% increase	$ 48,405	$ 48,166
0.50% decrease	$ (45,818)	$ (45,518)

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**
Expected contributions to the plan for the next year	$ 41,376	$ 48,643
Average duration of the defined benefit obligation	8-17 years	8-18 years

21. EQUITY

a. Capital stock

1) Common shares

	December 31	
	2019	2018
Shares authorized (in thousands of shares)	1,500,000	1,500,000
Shares authorized (in thousands of dollars)	$ 15,000,000	$ 15,000,000
Shares issued and fully paid (in thousands of shares)	779,147	779,147
Shares issued (in thousands of dollars)	$ 7,791,466	$ 7,791,466

Fully paid common shares, which have a par value of $10, carry 1 vote per share and carry a right to dividends.

Out of the shares authorized, 15,000 thousand shares were reserved for the issuance of employee share options.

As of December 31, 2019, 82 thousand units of GDSs of the PTI were trading on the Luxembourg Stock Exchange. The number of common shares represented by the GDSs was 163 thousand shares (one GDS represents 2 common shares).

b. Capital surplus

	December 31	
	2019	2018
May be used to offset a deficit, distributed as cash dividends, or transferred to capital stock (1)		
Share premium	$ 1,929	$ 1,929
May be used to offset a deficit only		
Arising from treasury share transactions	136,272	125,712
Changes in percentage of ownership interests in subsidiaries (2)	71,651	93
	$ 209,852	$ 127,734

1) The premium from shares issued in excess of par 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 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 PTI's Articles of Incorporation, the PTI should make appropriations from its net income in the following order:

1) Offset deficits.

2) Set aside as legal reserve 10% of the remaining profit.

3) Appropriate as special reserve.

4) After the above-mentioned amounts have been deducted, any remaining profit from the previous years and the current year's undistributed retained earnings shall be used by the PTI's board of directors as the basis for proposing a distribution plan, which should be resolved by the shareholders as to whether the amount should be distributed as dividends or retained within the PTI.

Dividends are distributed in the form of cash, common shares or a combination of cash and common shares. In consideration of the PTI being in a capital-intensive industry as well as the present and future investment environment, capital demand, market competition, capital budget, shareholders' interests, balanced dividend considerations and long-term financial plans, the PTI's Articles of Incorporation provide that the total cash dividends paid in any given year should be at least 20% of total dividends distributed.

For the policies on the distribution of employees' compensation and remuneration of directors after the amendment, refer to employees' compensation and remuneration of directors in Note 23(f).

Items referred to under Rule No. 1010012865 and Rule No. 1010047490 issued by the FSC and in the directive titled "Questions and Answers for Special Reserves Appropriated Following Adoption of IFRSs" should be appropriated to or reversed from a special reserve by the PTI. Distributions can be made out of any subsequent reversal of the debit to other equity items.

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

The appropriations of earnings for 2018 and 2017, which were approved in the shareholders' meetings on May 31, 2019 and June 8, 2018, respectively, were as follows:

	Appropriation of Earnings For the Year Ended December 31	
	2018	**2017**
Legal reserve	$ 623,428	$ 584,926
Special reserve	$ (142,558)	$ 337,628
Cash dividends	$ 3,739,904	$ 3,506,160
Cash dividends per share (NT$)	$ 4.8	$ 4.5

The appropriation of earnings for 2019 had been proposed by the PTI's board of directors on March 10, 2020. The appropriations and dividends per share were as follows:

	For the Year Ended December 31, 2019
Legal reserve	$ 582,611
Special reserve	$ 129,671
Cash dividends	$ 3,506,160
Cash dividends per share (NT$)	$ 4.5

The appropriation of earnings for 2019 is subject to the resolution of the shareholders in the shareholders' meeting to be held on May 28, 2020.

d. Other equity items

1) Exchange differences on translating the financial statements of foreign operations

	For the Year Ended December 31	
	2019	2018
Balance at January 1	$ (170,725)	$ (319,150)
Recognized for the year		
Exchange differences on translating the financial statements of foreign operations	(128,961)	148,425
Other comprehensive income recognized for the year	(128,961)	148,425
Balance at December 31	$ (299,686)	$ (170,725)

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

	For the Year Ended December 31	
	2019	2018
Balance at January 1	$ (24,345)	$ (18,478)
Recognized for the year		
Unrealized loss - equity instruments	(710)	(5,867)
Other comprehensive income recognized for the year	(710)	(5,867)
Balance at December 31	$ (25,055)	$ (25,055)

e. Non-controlling interests

	For the Year Ended December 31	
	2019	2018
Balance at January 1	$ 12,074,141	$ 11,676,332
Share in profit for the year	1,040,642	1,278,286
Other comprehensive income (loss) for the year		
Exchange differences on translating the financial statements of foreign entities	(205,160)	91,104
Unrealized loss on financial assets at FVTOCI	-	(26,326)
Remeasurement on defined benefit plans	(9,903)	(12,632)
Donations from shareholders	75	55
Cash dividends to shareholders from subsidiaries	(939,230)	(1,037,884)
The Corporation's shares held by its subsidiaries treated as treasury shares	(18,829)	(18,915)
Changes in ownership interest in subsidiaries	(71,501)	-
Increase in non-controlling interests	-	124,121
Balance at December 31	$ 11,870,235	$ 12,074,141

f. Treasury shares

Purpose of Buy-Back	Share Held by Subsidiary (In Thousands of Shares)
Number of shares at January 1, 2018	1,800
Increase during the year	400
Number of shares at December 31, 2018	2,200
Increase during the year	450
Number of shares at December 31, 2019	2,650

The PTI's shares held by its subsidiaries at the end of the reporting period were as follows:

Name of Subsidiary	Number of Shares Held (In Thousands of Shares)	Carrying Amount	Market Price
December 31, 2019			
Greatek Electronics Inc	2,650	$ 264,470	$ 264,470
December 31, 2018			
Greatek Electronics Inc.	2,200	$ 145,420	$ 145,420

The PTI's shares held by its subsidiary are treated as treasury shares.

22. REVENUE

	For the Year Ended December 31	
	2019	2018
Revenue from contracts with customers		
Revenue from packaging services	$ 43,629,693	$ 45,521,205
Revenue from testing services	22,474,733	22,091,275
Others	420,718	426,899
	$ 66,525,144	$ 68,039,379

a. Contract information

As the Corporation fulfills its obligations in the contract for testing services, the customer simultaneously receives and consumes the benefits provided by the Corporation. The Corporation has the right to revenue collection for the portion of testing services that have been fulfilled, and the revenue from testing services is recognized over time. The Corporation fulfills its obligations in the contract for packaging services when the customer creates or enhances the goods they have control of. The Corporation has the right to revenue collection for the portion of packaging services that have been fulfilled, and the revenue from packaging services is recognized over time.

b. Contract balances

	December 31, 2019	December 31, 2018	January 1, 2018
Notes and accounts receivable (including related parties) (Note 10)	$ 13,771,460	$ 11,846,133	$ 12,412,484
Contract assets			
Revenue from services	$ 2,170,456	$ 1,671,214	$ 1,683,071
Contract liabilities			
Revenue from services	$ 62,458	$ 39,323	$ 43,742

The changes in the contract asset and the contract liability balances primarily result from the timing difference between the Corporation's performance and the respective customer's payment.

Revenue recognized in the current reporting period from the contract liabilities at the beginning of the year and from the performance obligations which were satisfied in the previous periods is as follows:

	For the Year Ended December 31	
	2019	2018
From the contract liabilities at the beginning of the year		
Revenue from processing services	$ 25,549	$ 28,183

c. Disaggregation of revenue from contracts with customers

	For the Year Ended December 31	
	2019	2018
Type of goods or services		
Revenue from packaging services	$ 43,629,693	$ 45,521,205
Revenue from testing services	22,474,733	22,091,275
Others	420,718	426,899
	$ 66,525,144	$ 68,039,379
Primary geographical markets		
Japan	$ 23,245,391	$ 22,270,182
Singapore	13,147,802	14,947,281
Taiwan (The principal place of business of the Corporation)	13,401,920	13,752,607
America	12,634,897	13,167,078
Europe	2,367,141	2,052,881
China and Hong Kong	1,133,562	1,381,878
Others	594,431	467,472
	$ 66,525,144	$ 68,039,379

23. NET PROFIT FROM CONTINUING OPERATIONS

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 at FVTPL	$ 66,647	$ 20,933
Financial liabilities classified as held for trading	(49,979)	(98,205)
Impairment loss of non-financial assets	(527,327)	(437,609)
Others	527,826	96,889
	$ 17,167	$ (417,992)

b. Other income

	For the Year Ended December 31	
	2019	2018
Rental income		
Operating lease rental income	$ 118,373	$ 120,112
Interest income		
Bank deposits	106,239	72,226
Financial assets measured at amortized cost	10,059	11,298
Repurchase agreements collateralized by bonds	32	879
Others	-	346
	$ 234,703	$ 204,861

c. Finance costs

	For the Year Ended December 31	
	2019	2018
Interest on bank loans	$ 379,720	$ 448,034
Interest on lease liabilities	28,787	-
Capitalized interest	(62,077)	(97,509)
Others	14	-
	$ 346,444	$ 350,525

Information about capitalized interest was as follows:

	For the Year Ended December 31	
	2019	2018
Capitalized interest	$ 62,077	$ 97,509
Capitalization rate	1.144%-1.190%	1.19%-2.66%

d. Depreciation and amortization

	For the Year Ended December 31	
	2019	2018
Property, plant and equipment	$ 12,480,594	$ 12,510,177
Right-of-use assets	230,674	-
Intangible assets	137,554	144,040
Total	$ 12,848,822	$ 12,654,217
An analysis of depreciation by function		
Operating costs	$ 12,087,485	$ 11,967,746
Operating expenses	623,783	542,431
	$ 12,711,268	$ 12,510,177
An analysis of amortization by function		
Operating costs	$ 122,083	$ 132,955
Marketing	92	137
General and administrative	7,473	7,979
Research and development	7,906	2,969
	$ 137,554	$ 144,040

e. Employee benefit expense

	For the Year Ended December 31	
	2019	2018
Post-employment benefits (Note 20)		
Defined contribution plans	$ 548,453	$ 529,814
Defined benefit plans	36,622	50,327
	585,075	580,141
Termination benefits	1,201	-
Other employee benefits	14,873,927	15,358,217
Total employee benefit expense	$ 15,460,203	$ 15,938,358
An analysis of employee benefit expense by function		
Operating costs	$ 13,081,461	$ 13,379,685
Operating expenses	2,378,742	2,558,673
	$ 15,460,203	$ 15,938,358

f. Employees' compensation and remuneration of directors

According to the Articles of Incorporation of the PTI, the PTI accrued employees' compensation and remuneration of directors at the rates between 5% and 7.5% and no higher than 1.5%, respectively, of net profit before income tax, employees' compensation, and remuneration of directors. However, if the PTI has accumulated deficits (including adjustment of unappropriated earnings), the PTI should retain the net profit in advance for deducting accumulated deficits. The employees' compensation and remuneration of directors for the years ended December 31, 2019 and 2018 which were approved by the PTI's board of directors on March 10, 2020 and March 14, 2019, respectively, are as follows:

Accrual rate

	For the Year Ended December 31	
	2019	2018
Employees' compensation	5.39%	5.37%
Remuneration of directors	1.08%	1.07%

Amount

	For the Year Ended December 31	
	2019	2018
	Cash	Cash
Employees' compensation	$ 394,109	$ 420,813
Remuneration of directors	78,822	84,163

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

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

Information on the employees' compensation and remuneration of directors resolved by the PTI'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	$ 459,530	$ 991,709
Foreign exchange losses	(569,678)	(776,370)
Net (losses) gains	$ (110,148)	$ 215,339

24. INCOME TAXES

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

	For the Year Ended December 31	
	2019	**2018**
Current tax		
In respect of the current year	$ 1,646,674	$ 1,937,697
Income tax on unappropriated earnings	32,864	227,862
Adjustments for prior years	(23,204)	(44,052)
	1,656,334	2,121,507
Deferred tax		
In respect of the current year	(28,108)	(207,356)
Adjustments to deferred tax attributable to changes in tax rates and laws	-	8,624
	(28,108)	(198,732)
Income tax expenses recognized in profit or loss	$ 1,628,226	$ 1,922,775

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

	For the Year Ended December 31	
	2019	**2018**
Profit before income tax	$ 8,507,518	$ 9,435,337
Income tax expense calculated at the statutory rate	$ 2,000,569	$ 2,410,983
Nondeductible expenses in determining taxable income	(210,554)	(303,934)
Tax-exempt income	-	(90,421)
Income tax on unappropriated earnings	32,864	227,862
Generation of temporary differences	(194,592)	(194,367)
Unrecognized loss carryforwards	-	(112,952)
Adjustments to deferred tax attributable to changes in tax rates and laws	-	8,624
Adjustments for prior years' tax	(23,204)	(44,052)
Others	23,143	21,032
Income tax expense recognized in profit or loss	$ 1,628,226	$ 1,922,775

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 2019.

b. Current tax liabilities

	December 31	
	2019	**2018**
Current tax liabilities		
Tax payable	$ 778,495	$ 1,603,899

c. Deferred tax assets and liabilities

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

For the year ended December 31, 2019

	Balance, Beginning of Year	**Movements in the Year**	**Balance, End of Year**
Deferred tax assets			
Temporary differences	$ 357,829	$ 26,678	$ 384,507
Deferred tax liabilities			
Temporary differences	$ 115,906	$ (1,430)	$ 114,476

For the year ended December 31, 2018

	Balance, Beginning of Year	**Movements in the Year**	**Balance, End of Year**
Deferred tax assets			
Temporary differences	$ 172,963	$ 184,866	$ 357,829
Deferred tax liabilities			
Temporary differences	$ 203,163	$ (87,257)	$ 115,906

d. Items for which no deferred tax assets have been recognized in the consolidated balance sheets

	December 31	
	2019	2018
Loss carryforwards		
Expiry in 2020	$ 25,158	$ 26,057
Expiry in 2021	29,735	30,799
Expiry in 2022	12,274	-
Expiry in 2023	2,580	-
Expiry in 2024	4,644	-
	$ 74,391	$ 56,856
Deductible temporary differences	$ -	$ 26,504

e. Income tax assessments

Income tax returns through 2016 have been assessed by the tax authorities.

25. EARNINGS PER SHARE

Unit: NT$ Per Share

	For the Year Ended December 31	
	2019	2018
Basic earnings per share	$ 7.52	$ 8.02
Diluted earnings per share	$ 7.47	$ 7.95

The earnings and weighted average number of common 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
Profit for the year attributable to the owner of the Corporation	$ 5,838,650	$ 6,234,276
Effect of potentially dilutive common shares:		
Employees' compensation	-	-
Earnings used in the computation of diluted earnings per share	$ 5,838,650	$ 6,234,276

Weighted average number of common shares outstanding (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	776,772	776,846
Effect of potentially dilutive common shares:		
Employees' compensation	5,143	7,222
Weighted average number of common shares used in the computation of dilutive earnings per share	781,915	784,068

If the PTI offered to settle compensation paid to employees in cash or shares, the PTI assumed the entire amount of the compensation 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.

26. CAPITAL MANAGEMENT

The Corporation manages its capital to ensure its ability to continue as a going concern while maximizing the return to stakeholders. The Corporation's overall strategy remains unchanged from the previous year.

The capital structure of the Corporation consists of net debt (borrowings offset by cash and cash equivalents) and equity of the Corporation (comprising issued capital, reserves, retained earnings, other equity and non-controlling interests).

27. FINANCIAL INSTRUMENTS

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

December 31, 2019

	Carrying Amount	Fair Value			
		Level 1	Level 2	Level 3	Total
Financial assets					
Financial assets at amortized cost					
Domestic corporate bonds	$ 1,050,391	$ -	$ 1,054,730	$ -	$ 1,054,730

December 31, 2018

	Carrying Amount	Fair Value			
		Level 1	Level 2	Level 3	Total
Financial assets					
Financial assets at amortized cost					
Domestic corporate bonds	$ 1,151,536	$ -	$ 1,156,991	$ -	$ 1,156,991

The above-mentioned level 2 fair value measurement was based on quoted prices from the Taipei Exchange.

b. Fair value of financial instruments that are 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				
Mutual funds	$ 50,652	$ -	$ -	$ 50,652
Derivative instruments	-	20,555	-	20,555
	$ 50,652	$ 20,555	$ -	$ 71,207
Financial assets at FVTOCI				
Investments in equity instruments				
Domestic listed shares and emerging market shares	$ 2,093	$ 24,000	$ -	$ 26,093
Financial liabilities at FVTPL				
Derivative instruments	$ -	$ 3,953	$ -	$ 3,953

December 31, 2018

	Level 1	Level 2	Level 3	Total
Financial assets at FVTPL				
Mutual funds	$ 50,376	$ -	$ -	$ 50,376
Derivative instruments	-	5,841	-	5,841
	$ 50,376	$ 5,841	$ -	$ 56,217
Financial assets at FVTOCI				
Investments in equity instruments				
Domestic listed shares and emerging market shares	$ 2,303	$ 24,500	$ -	$ 26,803
Financial liabilities at FVTPL				
Derivative instruments	$ -	$ 2,223	$ -	$ 2,223

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

2) Valuation techniques and inputs applied for the purpose of Level 2 fair value measurement

Financial Instruments	Valuation Techniques and Inputs
Derivatives - foreign currency forward contracts	Discounted cash flow: Future cash flows are estimated based on observable forward exchange rates at the end of the reporting period and contract forward rates, discounted at a rate that reflects the credit risk of various counterparties.
Unlisted securities	Using the market approach and the binomial option pricing model to calculate the fair value.

c. Categories of financial instruments

	December 31	
	2019	**2018**
<u>Financial assets</u>		
Financial assets at fair value through profit or loss (FVTPL)		
Mandatorily classified as at FVTPL	$ 71,207	$ 56,217
Financial assets at amortized cost (Note 1)	37,978,171	33,352,629
Financial assets at FVTOCI		
Equity instruments	26,093	26,803
<u>Financial liabilities</u>		
Financial liabilities at fair value through profit or loss (FVTPL)		
Held for trading	3,953	2,223
Financial liabilities at amortized cost (Note 2)	41,191,156	40,652,073

Note 1: The balances include financial assets measured at amortized cost, which comprise cash and cash equivalents, debt investments, time deposits with original maturities of more than 3 months, notes and accounts receivable (including related parties), other receivables (including related parties), pledged time deposits and refundable deposits.

Note 2: The balances include financial liabilities measured at amortized cost, which comprise short-term loans, notes and accounts payable (including related parties), other payables (including related parties), accrued expenses and other current liabilities and long-term debt (including current portion).

d. Financial risk management objectives and policies

The Corporation's major financial instruments include equity investments, accounts receivable, accounts payable, and borrowings. The Corporation's corporate treasury function provides services to the business, coordinates access to domestic and international financial markets, monitors and manages the financial risks relating to the operations of the Corporation through internal risk reports which analyze exposures by degree and magnitude of risks. These risks include market risk (including currency risk, interest rate risk and other price risk), credit risk and liquidity risk.

The Corporation sought to minimize the effects of these risks by using derivative financial instruments to hedge risk exposures. The use of financial derivatives was governed by the Corporation's policies approved by the board of directors, which provided written principles on foreign exchange risk, interest rate risk, credit risk, the use of financial derivatives and non-derivative financial instruments, and the investment of excess liquidity. Compliance with policies and exposure limits was reviewed by the internal auditors on a continuous basis. The Corporation did not enter into or trade financial instruments, including derivative financial instruments, for speculative purposes.

The corporate treasury function, an independent body that monitors risks and policies implemented to mitigate risk exposures, reports quarterly to the Corporation's board of directors.

1) Market risk

The Corporation's activities exposed it primarily to the financial risks of changes in foreign currency exchange rates (see (a) below) and interest rates (see (b) below). The Corporation entered into a variety of derivative financial instruments (included forward exchange contracts) to manage its exposure to foreign currency risk.

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

a) Foreign currency risk

The Corporation's operating activities are partially denominated in foreign currencies and thus have natural hedging effects. The Corporation's management of foreign currency risk is for risk hedging instead of speculative purposes.

The strategy of foreign currency risk management is to review the net position exposed to foreign currency risk and manage the risk of the net position. The Corporation selects the instruments to hedge against currency exposure taking into consideration the hedging cost and period. The Corporation currently utilizes derivative financial instruments, including buy/sell foreign exchange forward contracts, to hedge against foreign currency exchange risk.

For the carrying amounts of the Corporation's foreign currency denominated monetary assets and monetary liabilities at the end of the reporting period, refer to Note 31.

The Corporation uses forward exchange contracts to reduce foreign currency risk exposure. It is the Corporation's policy to negotiate the terms of the hedge derivatives to match the terms of the hedged item to maximize hedge effectiveness.

As net investments in foreign operations are for strategic purposes, they are not hedged by the Corporation.

Sensitivity analysis

The Corporation was mainly exposed to the USD and JPY.

The following table details the Corporation's sensitivity to a 5% increase and decrease in the functional currency against the relevant foreign currencies. The sensitivity analysis included outstanding foreign currency denominated monetary items and foreign currency forward contracts designated as cash flow hedges, and adjusted their translation at the end of the reporting period for a 5% change in foreign currency rates. The sensitivity analysis included cash and cash equivalents, accounts receivable, other receivables, accounts payable, other payables, short-term bank loans and long-term debt. The number below indicates the decrease/increase in pre-tax profit when the functional currency strengthens 5% against the relevant currency.

	USD Impact		**JPY Impact**	
	For the Year Ended December 31		**For the Year Ended December 31**	
	2019	**2018**	**2019**	**2018**
Profit or loss	$ (461,897)	$ (408,898)	$ 108,585	$ 18,485

b) Interest rate risk

As the Corporation owns assets at both fixed and floating interest rates, the Corporation is exposed to interest rate risk. The Corporation's interest rate risk also comes from borrowings at floating interest rates. Since the Corporation's bank borrowings are at floating interest rates, fluctuations in interest rates will affect cash flow in the future but will not affect the fair value.

The carrying amounts of the Corporation's financial assets and financial liabilities with exposure to interest rate risk at the end of the reporting period were as follows.

	December 31	
	2019	**2018**
Fair value interest rate risk		
Financial assets	$ 8,338,326	$ 9,445,057
Financial liabilities	1,429,181	1,049,454
Cash flow interest rate risk		
Financial assets	14,460,789	10,536,721
Financial liabilities	29,391,519	31,322,908

Sensitivity analysis

The sensitivity analysis below was determined based on the Corporation's exposure to interest rate risk for non-derivative instruments at the end of the reporting period. For floating rate assets and liabilities, the analysis was prepared assuming the amount of both the assets and the liabilities outstanding at the end of the reporting period was outstanding for the whole year.

If interest rates had been 0.1% higher/lower and all other variables were held constant, the Corporation's pre-tax loss for the year ended December 31, 2019 and 2018 would decrease/increase by $14,931 thousand and $20,786 thousand, respectively, which was mainly attributable to the Corporation's exposure to interest rate risk on its variable-rate net liabilities.

c) Other price risk

The Corporation was exposed to equity price risk through its investments in listed equity securities. Equity investments are held for strategic rather than trading purposes. The Corporation does not actively trade these investments. The Corporation's equity price risk was mainly concentrated on equity instruments in the electronics industry sector listed on the Tokyo Stock Exchange and the Taipei Exchange.

Sensitivity analysis

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

If equity prices had been 5% higher/lower, pre-tax profit for the years ended December 31, 2019 and 2018 would have increased/decreased by $2,533 thousand and $2,519 thousand, respectively, as a result of the changes in fair value of financial assets at FVTPL, and the post-tax other comprehensive income for the year ended December 31, 2019 and 2018 would have increased/decreased by $1,305 thousand and $1,340 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 will cause a financial loss to the Corporation due to failure of the counterparty to discharge an obligation arises from the carrying amount of the respective recognized financial assets as stated in the consolidated balance sheets.

In order to minimize credit risk, the management of the Corporation has established rules for credit and accounts receivable management to ensure that follow-up action is taken to recover overdue debt. In addition, the Corporation reviews the recoverable amount of each individual trade debt at the end of the reporting period to ensure that adequate impairment losses are made for irrecoverable amounts.

In this regard, the directors of the Corporation consider that the Corporation's credit risk was significantly reduced.

The credit risk on liquid funds and derivatives was limited because the counterparties are banks with good credit ratings.

The counterparties of trade receivables cover a large number of customers, spread across diverse industries and geographical areas. Ongoing credit evaluation is performed on the financial condition of trade receivables.

The Corporation's concentration of credit risk was related to the three largest customers within the Corporation. Besides the aforementioned customers, there was no other customer that accounted for 10% of total gross accounts receivable at any time during the years 2019 and 2018. The three largest customers are creditworthy counterparties; therefore, the Corporation believes the concentration of credit risk is insignificant.

Credit risk management for investments in debt instruments

The Corporation only invests in debt instruments that are rated the equivalent of investment grade or higher and have low credit risk for the purpose of impairment assessment. The credit rating information is supplied by independent rating agencies. The Corporation's exposure and the external credit ratings are continuously monitored. The Corporation reviews changes in bond yields and other public information and makes an assessment whether there has been a significant increase in credit risk since the last period to the reporting date.

The Corporation considers the historical default rates of each credit rating supplied by external rating agencies, the current financial condition of debtors, and industry forecasts to estimate 12-month or lifetime expected credit losses. The Corporation's current credit risk grading framework comprises the following categories:

Category	**Description**	**Basis for Recognizing Expected Credit Losses**	**Expected Loss Rate**
Performing	The counterparty has a low risk of default and a strong capacity to meet contractual cash flows	12m ECL	-

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.

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 approximately $7,999,617 thousand and $6,578,487 thousand, respectively.

a) Liquidity and interest rate risk tables for non-derivative financial liabilities

The following table details the Corporation's remaining contractual maturities for its non-derivative financial liabilities with agreed repayment periods. The tables had 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. The tables include both interest and principal cash flows.

Specifically, bank loans with a repayment on demand clause were included in the earliest time band regardless of the probability of the banks choosing to exercise their rights. The maturity dates for other non-derivative financial liabilities were based on the agreed repayment dates.

December 31, 2019

	On Demand or Less than 1 Month	1-3 Months	3 Months to 1 Year	1-5 Years	5+ Years
Non-interest bearing liabilities	$ 3,603,185	$ 5,490,588	$ 1,266,398	$ 5,385	$ 4,900
Lease liabilities	23,740	45,572	169,487	360,036	1,712,721
Fixed interest rate liabilities	424,202	531,564	165,834	307,581	-
Variable interest rate liabilities	-	-	242,989	26,560,882	2,587,648
	$ 4,051,127	$ 6,067,724	$ 1,844,708	$27,233,884	$ 4,305,269

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	$ 238,799	$ 360,036	$ 237,228	$ 235,048	$ 233,688	$1,006,757

December 31, 2018

	On Demand or Less than 1 Month	1-3 Months	3 Months to 1 Year	1-5 Years	5+ Years
Non-interest bearing liabilities	$ 3,437,665	$ 3,947,536	$ 1,188,943	$ -	$ -
Fixed interest rate liabilities	-	136,277	276,458	636,719	-
Variable interest rate liabilities	-	707,330	216,519	26,601,190	3,797,869
	$ 3,437,665	$ 4,791,143	$ 1,681,920	$27,237,909	$ 3,797,869

b) Liquidity and interest rate risk table for derivative financial liabilities

The following table details the Corporation's liquidity analysis of its derivative financial instruments. The table is based on the undiscounted gross inflows and outflows on those derivatives that require gross settlement.

December 31, 2019

	On Demand or Less than 1 Month	1-3 Months	3 Months to 1 Year
Gross settled			
Foreign exchange forward contracts			
Inflows	$ 1,265,547	$ 763,849	$ 74,267
Outflows	(1,254,065)	(758,166)	(74,830)
	$ 11,482	$ 5,683	$ (563)

December 31, 2018

	On Demand or Less than 1 Month	1-3 Months	3 Months to 1 Year
Gross settled			
Foreign exchange forward contracts			
Inflows	$ 1,656,354	$ 409,507	$ 88,180
Outflows	(1,655,351)	(408,106)	(86,966)
	$ 1,003	$ 1,401	$ (1,214)

c) Financing facilities

	December 31 2019	2018
Secured bank loan facilities which may be mutually extended:		
Amount used	$ 12,948,198	$ 13,534,928
Amount unused	2,030,000	-
	$ 14,978,198	$ 13,534,928

28. TRANSACTIONS WITH RELATED PARTIES

Balances and transactions between the PTI and its subsidiaries, which were related parties of the PTI, had been eliminated on consolidation and are not disclosed in this note. Details of transactions between the PTI and other related parties are disclosed below.

a. Related Party Name and Relationship

Related Party Name	Relationship with the Corporation
Toshiba Corporation	Substantial related party
Kioxia Corporation (known as Toshiba Memory Corporation before October 1, 2019)	Substantial related party
Toshiba International Procurement Hong Kong, Ltd.	Substantial related party

(Continued)

Related Party Name	Relationship with the Corporation
Toshiba Information Systems (Japan) Corporation	Substantial related party
Kingston Technology International Ltd.	Substantial related party
Kingston Digital International Ltd.	Substantial related party
Kingston Solution, Inc.	Substantial related party
Kingston Technology Far East Corp.	Substantial related party
Realtek Singapore Private Limited	Substantial related party
Realtek Semiconductor Corp.	Substantial related party
Weltrend Semiconductor, Inc. (No longer the related party of the Group since May 29, 2018.)	Substantial related parties

(Concluded)

b. Sales of goods

Line Item	Related Party Category/Name	For the Year Ended December 31 2019	2018
Sales of goods	Substantial related parties		
	Kioxia Corporation	$ 17,934,247	$ 14,821,258
	Other	2,793,805	2,196,783
		$ 20,728,052	$ 17,018,041

Sales transactions with related parties were based on normal commercial prices and terms. In general, the payment terms for the sales of the Corporation is from 30 days to 150 days starting from the first day of the month following the invoice date.

c. Purchases

Related Party Category	For the Year Ended December 31 2019	2018
Substantial related parties	$ 410,346	$ 31,724

The purchase prices and payment terms were based on negotiations and thus not comparable with those in the market.

d. Operating costs

Related Party Category	For the Year Ended December 31 2019	2018
Substantial related parties	$ -	$ 273

Operating costs from transactions with related parties include subcontracting costs and other costs. The terms of the transactions with related parties were made under a subcontracting cooperation agreement with terms not comparable with those in the market.

e. Miscellaneous income

Related Party Category	For the Year Ended December 31 2019	2018
Substantial related parties	$ -	$ 120

The rental amount and payment terms with related parties were based on cooperation agreements and were thus not comparable with those in the market.

f. Other gains and losses

Related Party Category	For the Year Ended December 31 2019	2018
Substantial related parties	$ (15,218)	$ 10

Other gains and losses mainly includes the compensation, difference from collections and payment transfers. The compensation with related parties were based on negotiations and were thus not comparable with those in the market.

g. Contract assets

Related Party Category/Name	December 31 2019	2018
Substantial related parties		
Kioxia Corporation	$ 725,270	$ 511,952
Other	97,462	64,763
	$ 822,732	$ 576,715

For the years ended December 31, 2019 and 2018, no impairment loss was recognized for contract assets from related parties.

h. Accounts receivable from related parties (excluding loans to related parties and contract assets)

Line Item	Related Party Category/Name	December 31 2019	2018
Accounts receivable from related parties	Substantial related parties		
	Kioxia Corporation	$ 3,685,943	$ 2,451,389
	Realtek Semiconductor Corp.	311,225	227,774
	Kingston Technology International Ltd.	213,896	143,561
	Others	41,424	56,584
		$ 4,252,488	$ 2,879,308

The outstanding accounts receivable from related parties are unsecured. For the years ended December 31, 2019 and 2018, no impairment loss was recognized for accounts receivable from related parties.

i. Payables to related parties (excluding loans from related parties)

Line Item	Related Party Category/Name	December 31 2019	2018
Accounts payable - related parties	Substantial related parties		
	Toshiba International Procurement Hong Kong, Ltd.	$ 120,603	$ -

The outstanding accounts payable from related parties are unsecured.

j. Acquisition of property, plant and equipment

Related Party Category	Purchase Price For the Year Ended December 31 2019	2018
Substantial related parties	$ -	$ 1,101

The transactions of property, plant and equipment with related parties were based on negotiations of cooperation agreements for which there were no comparable terms under the agreements.

k. Other receivables from related parties

Related Party Category / Name	December 31 2019	2018
Substantial related parties		
Kioxia Corporation	$ 5,363	$ 15,773
Realtek Singapore Pte. Ltd.	1,152	-
Other	10	308
	$ 6,525	$ 16,081

l. Other payables from related parties

Related Party Category	December 31 2019	2018
Substantial related parties		
Kioxia Corporation	$ 17,447	$ 569

m. Payable expenses and other current liabilities

Related Party Category	December 31 2019	2018
Substantial related parties	$ -	$ 7,301

n. Compensation of key management personnel

	For the Year Ended December 31 2019	2018
Short-term benefits	$ 363,692	$ 366,469
Post-employment benefits	6,249	1,836
	$ 369,941	$ 368,305

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

29. ASSETS PLEDGED AS COLLATERAL OR FOR SECURITY

The following assets had been pledged or mortgaged as collateral mainly for long-term debt, guarantee deposits for exports, L/C, guarantees for settlement and bonded inventories.

	December 31	
	2019	2018
Property, plant and equipment	$ 16,818,916	$ 19,333,168
Pledged deposits (classified as financial assets at amortized cost - current)	21,712	21,763
Restricted deposits (classified as financial assets at amortized cost - current)	269,203	318,534
Pledged deposits (classified as financial assets at amortized cost - non-current)	88,874	96,815
	$ 17,198,705	$ 19,770,280

30. SIGNIFICANT CONTINGENT LIABILITIES AND UNRECOGNIZED COMMITMENTS

The Corporation's significant commitments and contingencies as of December 31, 2019 were as follows:

a. From September 2017 to September 2018, the PTI signed contracts worth $1,811,372 thousand with Jian Ming Contractor Co., Ltd. for factory engineering. As of December 31, 2019, the PTI has paid a total of $683,947 thousand.

b. From September 2017 to June 2018 and January 2019 to December 2019, the PTI signed the purchase agreements of equipment worth $2,254,499 thousand and $704,996 with Advantest Corporation, respectively. As of December 31, 2019, the PTI has paid $2,254,499 thousand and $140,404 thousand, respectively.

c. From October 2018 to October 2019 and October 2019 to November 2019, the PTI signed the purchase agreements of equipment worth $507,766 thousand and $588,182 thousand with Fasford Technology Co., Ltd., respectively. As of December 31, 2019, the PTI has paid $136,303 thousand and $0, respectively.

d. From November 2018 to October 2019, the PTI signed the purchase agreements of equipment worth $506,086 thousand with DISCO Corporation. As of December 31, 2019, the PTI has paid a total of $258,906 thousand.

e. From January 2019 to January 2020, the PTI signed the purchase agreements of equipment worth $502,923 thousand with Nextest Systems Corporation. As of December 31, 2019, the PTI has paid a total of $138,223 thousand.

f. The unused credit amounts were as follows:

	December 31	
	2019	2018
JPY	$ -	$ 483,640

31. SIGNIFICANT FINANCIAL ASSETS AND LIABILITIES DENOMINATED IN FOREIGN CURRENCIES

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

	December 31, 2019		
	Foreign Currency	Exchange Rate	Carrying Amount
Financial assets			
Monetary items			
USD	$ 467,634	30.106 (USD:NTD)	$ 14,078,589
USD	10,440	6.9662 (USD:RMB)	314,307
USD	14,807	108.6400 (USD:JPY)	445,780
JPY	422,851	0.2771 (JPY:NTD)	117,172
JPY	28,647	0.0641 (JPY:RMB)	7,938
JPY	825,187	0.0092 (JPY:USD)	228,659
SGD	3,270	0.7429 (SGD:USD)	73,135
RMB	31,585	0.1435 (RMB:USD)	136,501
RMB	9,480	4.3217 (RMB:NTD)	40,970
EUR	18	33.7488 (EUR:NTD)	607
			$ 15,443,658
Non-monetary items			
USD	593	30.106 (USD:NTD)	$ 17,865
JPY	9,708	0.2771 (JPY:NTD)	2,690
			$ 20,555
Financial liabilities			
Monetary items			
USD	169,180	30.106 (USD:NTD)	$ 5,093,333
USD	8,099	6.9662 (USD:RMB)	243,828
USD	8,755	108.6400 (USD:JPY)	263,578
EUR	457	33.7488 (EUR:NTD)	15,423
JPY	7,842,529	0.2771 (JPY:NTD)	2,173,165
JPY	185,421	0.0641 (JPY:RMB)	51,380
JPY	1,085,952	0.0092 (JPY:USD)	300,917
RMB	43,912	0.1435 (RMB:USD)	189,774
RMB	89	4.3217 (RMB:NTD)	385
SGD	1,734	0.7429 (SGD:USD)	38,782
			$ 8,370,565
Non-monetary items			
USD	8	30.106 (USD:NTD)	$ 252
JPY	13,356	0.2771 (JPY:NTD)	3,701
			$ 3,953

	December 31, 2018		
	Foreign Currency	Exchange Rate	Carrying Amount
Financial assets			
Monetary items			
USD	$ 381,991	30.733 (USD:NTD)	$ 11,739,729
USD	7,530	6.8658 (USD:RMB)	231,419
USD	24,290	110.4 (USD:JPY)	746,505
JPY	1,018,342	0.2784 (JPY:NTD)	283,506
JPY	2,197	0.0622 (JPY:RMB)	612
JPY	1,662,052	0.0091 (JPY:USD)	462,715
SGD	3,379	0.7316 (SGD:USD)	75,978
RMB	14,023	0.1456 (RMB:USD)	62,770
RMB	4,517	4.4762 (RMB:NTD)	20,219
EUR	40	35.2031 (EUR:NTD)	1,408
			$ 13,624,861
Non-monetary items			
USD	101	30.733 (USD:NTD)	$ 3,116
JPY	9,787	0.2784 (JPY:NTD)	2,725
			$ 5,841
Financial liabilities			
Monetary items			
USD	110,319	30.733 (USD:NTD)	$ 3,390,434
USD	18,638	6.8658 (USD:RMB)	572,802
USD	18,757	110.4 (USD:JPY)	576,459
EUR	1,245	35.2031 (EUR:NTD)	43,828
JPY	2,459,309	0.2784 (JPY:NTD)	684,672
JPY	27,248	0.0622 (JPY:RMB)	7,586
JPY	1,523,956	0.0091 (JPY:USD)	424,269
RMB	36,914	0.1456 (RMB:USD)	165,234
SGD	1,944	0.7316 (SGD:USD)	43,712
			$ 5,908,996
Non-monetary items			
USD	34	30.733 (USD:NTD)	$ 1,047
JPY	3,999	0.2784 (JPY:NTD)	1,113
RMB	14	4.4762 (RMB:NTD)	63
			$ 2,223

For the years ended December 31, 2019 and 2018, realized and unrealized net foreign exchange (losses) gains were $(110,148) thousand and $215,339 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 currencies of the Corporation.

32. SEPARATELY DISCLOSED ITEMS

Except for the following, the Corporation has no other significant transactions, investees and investments in mainland China that need to be disclosed as required by the Securities and Futures Bureau.

a. Financing provided to others: Table 1 (attached)

b. Endorsements/guarantees provided: Table 2 (attached)

c. Marketable securities held: Table 3 (attached)

d. Marketable securities acquired or disposed of at costs or prices amounting to at least NT$300 million or 20% of the paid-in capital: None.

e. Acquisition of individual real estate at costs of at least NT$300 million or 20% of the paid-in capital: None.

f. Disposal of individual real estate at prices of at least NT$300 million or 20% of the paid-in capital: None.

g. Total purchases from or sales to related parties of at least NT$100 million or 20% of the paid-in capital: Table 4 (attached)

h. Receivables from related parties amounting to at least NT$100 million or 20% of the paid-in capital: Table 5 (attached)

i. Derivative transactions: Note 7.

j. Intercompany relationships and significant intercompany transactions: Table 6 (attached).

k. Information of investees: Table 7 (attached)

l. Information on investments in mainland China: Table 8 (attached)

   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 investments at the end of the period, repatriations of investment income, and limit on the amount of investments in the mainland China area: Note 32 (j).

33. SEGMENT INFORMATION

a. The revenues, operating results and financial information of each plant presented to the chief operating decision maker are consistent with the information in the consolidated financial statements. The segment revenues and operating results for the years ended December 31, 2019 and 2018 are shown in the consolidated income statements for the years ended December 31, 2019 and 2018. The segment assets as of December 31, 2019 and 2018 are shown in the consolidated balance sheets as of December 31, 2019 and 2018.

b. Geographical information

The Corporation's revenue from continuing operations from external customers and information about its non-current assets by geographical location are detailed below.

	Revenue For the Year Ended December 31		Non-current Assets December 31	
	2019	**2018**	**2019**	**2018**
Japan	$ 23,245,391	$ 22,270,182	$ 2,047,337	$ 4,039,712
Singapore	13,147,802	14,947,281	834,420	850,875
Taiwan	13,401,920	13,752,607	56,253,554	55,173,147
America	12,634,897	13,167,078	-	-
Europe	2,367,141	2,052,881	-	-
China and Hong Kong	1,133,562	1,381,878	2,630,007	3,079,323
Others	594,431	467,472	-	-
	$ 66,525,144	$ 68,039,379	$ 61,765,318	$ 63,143,057

Non-current assets exclude financial instruments, deferred tax assets, and other assets.

c. Major customers

Sales to customers amounting to at least 10% of total gross sales:

	For the Year Ended December 31			
	2019		**2018**	
Customer	**Amount**	**% of Total**	**Amount**	**% of Total**
A	$ 17,934,998	27	$ 14,923,812	22
B	14,818,184	22	18,482,277	27
C	9,319,159	14	8,673,567	13

TABLE 1

POWERTECH TECHNOLOGY INC. AND SUBSIDIARIES

FINANCING PROVIDED TO OTHERS
FOR THE YEAR ENDED DECEMBER 31, 2019
(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

No.	Lender	Borrower	Financial Statement Account	Related Party	Highest Balance for the Period	Ending Balance	Actual Amount Borrowed	Interest Rate	Nature of Financing	Business Transaction Amounts	Reasons for Short-term Financing	Allowance for Impairment Loss	Collateral		Financing Limit for Each Borrower (Notes 3 and 4)	Aggregate Financing Limits (Notes 3 and 4)	Note
													Item	Value			
0	POWERTECH TECHNOLOGY INC.	Powertech Technology (Singapore) Pte. Ltd.	Other receivables	Note 1	$ 1,806,360	$ 903,180	$ 903,180	2.0%-2.8%	For short-term financing	$ -	Working capital	$ -	-	$ -	$ 2,151,386	$ 4,302,773	-
		Powertech Technology (Suzhou) Ltd.	Other receivables	Note 2	1,445,088	722,544	-	2.0%-2.8%	For short-term financing	-	Working capital	-	-	-	2,151,386	4,302,773	-
1	Tera Probe, Inc.	Tera Probe Aizu, Inc.	Other receivables	Note 1	210,596	210,596	182,886	1%	For short-term financing	-	Working capital	-	-	-	287,105	574,209	-

Note 1: Direct investments, the Corporation's 100%-owned subsidiary.

Note 2: Indirect investments, the Corporation's 100%-owned subsidiary.

Note 3: The amount of financing provided by the PTI to any individual shall not exceed five percent of the PTI's net worth. The aggregate amount available for financing not exceed ten percent of the PTI's net worth.

Note 4: The amount of financing provided by Tera Probe, Inc. to any individual shall not exceed five percent of Tera Probe, Inc.'s net worth. The aggregate amount available for financing shall not exceed ten percent of Tera Probe, Inc.'s net worth.

POWERTECH TECHNOLOGY INC. AND SUBSIDIARIES

ENDORSEMENTS/GUARANTEES PROVIDED
FOR THE YEAR ENDED DECEMBER 31, 2019
(In Thousands of New Taiwan Dollars)

No.	Endorser/Guarantor	Endorsee/Guarantee		Limits on Endorsement/ Guarantee Given on Behalf of Each Party (Note 3)	Maximum Amount Endorsed/ Guaranteed During the Period	Outstanding Endorsement/ Guarantee at the End of the Period	Actual Borrowing Amount	Amount Endorsed/ Guaranteed by Collaterals	Ratio of Accumulated Endorsement/ Guarantee to Net Equity In Latest Financial Statements (%)	Aggregate Endorsement/ Guarantee Limit (Note 3)	Endorsement /Guarantee Given by Parent on Behalf of Subsidiaries	Endorsement /Guarantee Given by Subsidiaries on Behalf of Parent	Endorsement /Guarantee Given on Behalf of Companies in Mainland China	Note
		Name	Relationship											
0.	Powertech Technology Inc.	Powertech Technology (Singapore) Pte. Ltd.	Note 1	$ 4,302,773	$ 903,180	$ 903,180	$ 161,669	$ -	2.1	$ 21,513,864	Yes	-	-	-
		Powertech Technology (Suzhou) Ltd.	Note 2	4,302,773	602,120	602,120	223,580	-	1.4	21,513,864	Yes	-	Yes	-

Note 1: Direct investment; the Corporation's 100%-owned subsidiary.

Note 2: Indirect investment; the Corporation's 100%-owned subsidiary.

Note 3: The amount of guarantee provided by the PTI to any individual entity shall not exceed ten percent of the PTI's net worth. The aggregate guarantee amount shall not exceed fifty percent of the PTI's net worth.

TABLE 3

POWERTECH TECHNOLOGY INC. AND SUBSIDIARIES

MARKETABLE SECURITIES HELD
DECEMBER 31, 2019
(In Thousands of New Taiwan Dollars)

Holding Company Name	Type and Name of Marketable Securities	Relationship with the Holding Company	Financial Statement Account	December 31, 2019				Note
				Number of Shares (In Thousands)	Carrying Value	% of Ownership	Fair Value	
Powertech Technology Inc.	Stock							
	Solid state system Co., Ltd.	-	Financial assets at fair value through other comprehensive profit or loss - non-current	2,617	$ 26,093	-	$ 26,093	Note 3
Greatek Electronics Inc.	Fund							
	FSITC Money Market Fund	-	Financial assets at fair value through profit or loss - current	283	50,652	-	50,652	Note 4
	Bond							
	P08 Taipower 3A	-	Financial assets at amortized cost. - non-current	100	100,001	-	99,999	Note 2
	P06 Taipower 1A	-	Financial assets at amortized cost. - non-current	300	300,001	-	302,697	Note 2
	P07 Taipower 1A	-	Financial assets at amortized cost. - non-current	200	200,001	-	199,999	Note 2
	02 Taipower 1B	-	Financial assets at amortized cost. - current	150	150,388	-	150,362	Note 2
	P06 Taipower 3A	-	Financial assets at amortized cost. - non-current	100	100,000	-	100,497	Note 2
	P04 FENC 4	-	Financial assets at amortized cost. - current	100	100,000	-	100,444	Note 2
	P06 FPC 1A	-	Financial assets at amortized cost. - non-current	100	100,000	-	100,732	Note 2
	Stock							
	POWERTECH TECHNOLOGY INC.	Greatek Electronics Inc.'s parent company	Financial assets at fair value through other comprehensive profit or loss - non-current	2,650	264,470	-	264,470	Note 1
	SAMHOP Microelectronics Corp.	-	Financial assets at fair value through profit or loss - non-current	268	-	3	-	Note 5
	Terawins Inc.	-	Financial assets at fair value through profit or loss - non-current	643	-	2	-	Note 5
	Airwave Technologies Inc.	-	Financial assets at fair value through profit or loss - non-current	93	-	1	-	Note 5

Note 1: The fair value was based on stock closing price as of December 31, 2019.

Note 2: The fair value was based on trading market in hundreds of new Taiwan dollars as of December 31, 2019.

Note 3: The fair value of common stock was based on stock closing price, and the fair value of privately placed shares was determined using valuation techniques as of December 31, 2019.

Note 4: The fair value was based on the net asset value of the fund as of December 31, 2019.

Note 5: The fair value was based on the carrying value as of December 31, 2019.

Note 6: As of December 31, 2019, the above marketable securities had not been pledged or mortgaged.

POWERTECH TECHNOLOGY INC. 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 Name	Related Party	Nature of Relationship	Transaction Details				Abnormal Transaction		Notes/Accounts (Payable) Receivable		Note
			Purchase/ Sale	Amount	% of Total	Payment Terms	Unit Price	Payment Terms	Ending Balance	% of Total	
Powertech Technology Inc.	Kioxia Corporation	Corporate director’s parent company	Sale	$17,628,210	41	Note 1	$ -	-	$ 3,601,484	44	-
	Kingston Solution, Inc.	The parent company of the related party is the juristic-person director of the the Corporation.	Sale	129,090	-	Note 1	-	-	24,644	-	-
	Kingston Technology International Ltd.	The ultimate parent company of the related party is the juristic-person director of the the Corporation.	Sale	1,338,159	3	Note 1	-	-	213,896	3	-
	Toshiba International Procurement Hong Kong, Ltd.	Corporate director’s sister company.	Purchase	410,197	2.83	Note 1	-	-	120,603	3	-
Greatek Electronics Inc.	Realtek Semiconductor Corp.	Parent company of Greatek Electronics Inc.’s corporate supervisor.	Sale	1,023,929	9	Net 60 days from monthly closing dates	Note 2	-	311,225	10	-
	Realtek Singapore Private Limited	Same parent company as the Corporate's director.	Sale	301,036	3	Net 60 days from monthly closing dates	Note 2	-	16,059	1	-
TeraPower Technology Inc.	Kioxia Corporation	Parent company of corporate director of TeraPower Technology Inc.’s ultimate parent company.	Sale	306,037	11	Net 90 days from monthly closing dates	-	-	-	-	-

Note 1: Mainly paid on the 30th to 90th days after the month of the invoice date.

Note 2: The sales price of Greatek Electronics Inc. sold to related parties is determined based on general trading practices.

POWERTECH TECHNOLOGY INC. AND SUBSIDIARIES

RECEIVABLES FROM RELATED PARTIES AMOUNTING TO AT LEAST NT$100 MILLION OR 20% OF THE PAID-IN CAPITAL
DECEMBER 31, 2019
(In Thousands of New Taiwan Dollars)

Company Name	Related Party	Nature of Relationship	Ending Balance	Turnover Rate	Overdue		Amounts Received in Subsequent Period	Allowance for Bad Debt
					Amount	Action Taken		
Powertech Technology Inc.	Kioxia Corporation	Corporate director’s parent company	$ 3,601,484	5.85	$ -	-	$ 3,601,484	$ -
	Kingston Technology International Ltd.	The ultimate parent company of the related party is the juristic-person director of the the Corporation.	213,896	7.49	-	-	213,896	-
Greatek Electronics Inc.	Realtek Semiconductor Corp.	Parent company of Greatek Electronics Inc.’s corporate supervisor	311,225	3.80	-	-	203,302	-

TABLE 6

POWERTECH TECHNOLOGY INC. AND SUBSIDIARIES

INTERCOMPANY RELATIONSHIPS AND SIGNIFICANT INTERCOMPANY TRANSACTIONS
FOR YEAR ENDED DECEMBER 31, 2019
(In Thousands of New Taiwan Dollars)

Company Name	Counterparty	Transaction Flow	Intercompany Transactions			
			Financial Statement Item	Amount	Terms	Percentage to Consolidated Total Gross Sales or Total Assets
Powertech Technology Inc.	Powertech Technology (Suzhou) Ltd.	1	Sales	$ 16,621	Note 3	-
	TeraPower Technology Inc.	1	Sales	27,255	Note 3	-
	Powertech Technology Akita Inc.	1	Sales	14,492	Note 3	-
	Tera Probe, Inc.	1	Sales	750	Note 3	-
	Greatek Electronics Inc.	1	Sales	60	Note 3	-
	Powertech Technology (Singapore) Pte. Ltd.	1	Sales	497	Note 3	-
	Powertech Technology (Suzhou) Ltd.	1	Purchase	2,763	Note 2	-
	Powertech Technology (Singapore) Pte. Ltd.	1	Purchase	510	Note 2	-
	Powertech Technology (Suzhou) Ltd.	1	Subcontract costs	684,712	Note 2	1%
	Greatek Electronics Inc.	1	Subcontract costs	44,723	Note 2	-
	TeraPower Technology Inc	1	Subcontract costs	5,592	Note 2	-
	Powertech Technology (Suzhou) Ltd.	1	Rent income	8,483	Note 2	-
	TeraPower Technology Inc	1	Rent income	1,178	Note 2	-
	Tera Probe, Inc.	1	Rent	16,989	Note 2	-
	TeraPower Technology Inc.	1	Rent	3,482	Note 2	-
	TeraPower Technology Inc	1	Other gains and losses	2,854	Note 2	-
	Powertech Technology (Suzhou) Ltd.	1	Other gains and losses	1,204	Note 2	-
	Greatek Electronics Inc.	1	Other gains and losses	57,209	Note 2	-
	Powertech Technology (Xian) Ltd.	1	Other gains and losses	22,300	Note 2	-
	Powertech Technology Akita Inc.	1	Other gains and losses	8,042	Note 2	-
	Powertech Technology (Singapore) Pte. Ltd.	1	Other gains and losses	1,038	Note 2	-
	Powertech Technology (Suzhou) Ltd.	1	Interest income	7,707	Note 2	-
	Powertech Technology (Singapore) Pte. Ltd.	1	Interest income	18,619	Note 2	-
	TeraPower Technology Inc.	1	Accounts receivable from related parties	2,611	Note 3	-
	Powertech Technology (Xian) Ltd.	1	Other receivable from related parties	198,679	Note 2	-
	TeraPower Technology Inc.	1	Other receivable from related parties	664	Note 2	-
	Greatek Electronics Inc.	1	Other receivable from related parties	499	Note 2	-
	Powertech Technology (Suzhou) Ltd.	1	Other receivable from related parties	12,751	Note 2	-
	Powertech Technology (Singapore) Pte. Ltd.	1	Other receivable from related parties	905,616	Note 2	1%
	Powertech Technology Akita Inc.	1	Other receivable from related parties	8,777	Note 2	-
	Tera Probe, Inc.	1	Other receivable from related parties	301	Note 2	-
	Powertech Technology Akita Inc.	1	Disposal of property, plant and equipment	11,806	Note 2	-
	Powertech Technology (Suzhou) Ltd.	1	Disposal of property, plant and equipment	960	Note 2	-
	Powertech Technology (Xian) Ltd.	1	Purchase of property, plant and equipment	267	Note 2	-
	Powertech Technology (Xian) Ltd.	1	Disposal of property, plant and equipment	6,572	Note 2	-
	TeraPower Technology Inc.	1	Other payable to related parties	13,719	Note 2	-
	Powertech Technology (Suzhou) Ltd.	1	Other payable to related parties	79,931	Note 2	-
	Greatek Electronics Inc.	1	Other payable to related parties	21,786	Note 2	-
	Powertech Technology (Japan) Ltd.	1	Other payable to related parties	5,558	Note 2	-
	Powertech Technology Akita Inc.	1	Other payable to related parties	3,907	Note 2	-
	Tera Probe, Inc.	1	Other payable to related parties	5,041	Note 2	-

(Continued)

Company Name	Counterparty	Transaction Flow	Intercompany Transactions			
			Financial Statement Item	Amount	Terms	Percentage to Consolidated Total Gross Sales or Total Assets
Tera Probe, Inc.	TeraPower Technology Inc.	1	Other receivable from related parties	$ 2,707	Note 2	-
Powertech Technology (Singapore) Pte. Ltd.	Greatek Electronics Inc.	2	Sales	1,220	Note 4	-
	Greatek Electronics Inc.	2	Accounts receivable from related parties	546	Note 4	-

Note 1: No. 1 - from the parent company to the subsidiary. No. 2 - from the subsidiary to the subsidiary.

Note 2: The transactions for related parties were negotiated and thus not comparable with those in the market.

Note 3: The selling prices with subsidiaries were negotiated and thus not comparable with those in the market, and the collection period with subsidiaries was same as common customer.

Note 4: The selling prices with sister companies were negotiated and thus not comparable with those in the market, and the collection period with sister companies was same as common customer.

(Concluded)

POWERTECH TECHNOLOGY INC. AND SUBSIDIARIES

INFORMATION OF INVESTEES
DECEMBER 31, 2019
(In Thousands of New Taiwan Dollars)

Investor	Investee	Location	Main Businesses and Products	Investment Amount		Balance as of December 31, 2019			Net Income (Loss) of the Investee	Investment Gain (Loss)	Note
				December 31, 2019	December 31, 2018	Number of Shares (In Thousands)	% of Ownership	Carrying Value			
Powertech Technology Inc.	TeraPower Technology Inc.	Hsinchu	Wafer probing test services	$ 1,153,964	$ 1,153,964	73,386	49	$ 2,206,573	$ 13,001	$ 99,156	Notes 1 and 2
	Powertech Holding (BVI) Inc.	British Virgin Islands	Investment business	1,679,370	1,679,370	50	100	749,033	(10,621)	(10,621)	Notes 1 and 2
	Greatek Electronics Inc.	Miaoli	Semiconductor assembly and testing services	6,169,948	6,169,948	244,064	43	8,071,185	1,895,899	785,996	Notes 1 and 2
	Powertech Technology (Singapore) Pte. Ltd.	Singapore	Integrated circuit testing and assembly services	USD 85,000	USD 85,000	85,000	100	1,465,300	27,645	27,645	Notes 1 and 2
	Powertech Technology Japan Ltd.	Japan	Investment business	USD 103,052	USD 103,052	-	100	2,969,362	(168,819)	(148,668)	Note 1
	Tera Probe, Inc.	Japan	Wafer probing test services	$ 230,616	$ 230,616	1,077	12	366,394	(141,923)	(7,708)	Note 1
Powertech Holding (BVI) Inc.	PTI Technology (Singapore) Pte. Ltd.	Singapore	Investment business	USD 51,000	USD 51,000	103	100	USD 23,754	USD (351)	USD (351)	Note 1
Powertech Technology Japan Ltd.	Tera Probe, Inc.	Japan	Wafer probing test services	USD 43,963	USD 43,963	4,440	49	USD 93,098	USD (4,551)	USD (2,209)	Note 1
	Powertech Technology Akita Inc.	Japan	Semiconductor assembly and testing services	USD 48,917	USD 48,917	6	100	USD 18,218	USD (24,452)	USD (24,452)	Note 1
Tera Probe, Inc.	TeraPower Technology Inc.	Hsinchu	Wafer probing test services	JPY 4,348,056	JPY 4,348,056	76,381	51	JPY 4,348,056	JPY 43,827	JPY 22,352	Note 1
	Tera Probe Aizu, Inc.	Japan	Wafer probing test services	JPY 221,616	JPY 221,616	180	100	JPY 221,616	JPY (331,578)	JPY (331,578)	Note 1

Note 1: Amount was recognized on the basis of reviewed financial statements.

Note 2: Including unrealized intercompany gains (losses).

POWERTECH TECHNOLOGY INC. AND SUBSIDIARIES

INFORMATION ON INVESTMENTS IN MAINLAND CHINA
DECEMBER 31, 2019
(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

Investee Company accounted for using the equity method	Main Businesses and Products	Total Amount of Paid-in Capital	Investment Type	Accumulated Outflow of Investments from Taiwan as of January 1, 2019	Investment Flows		Accumulated Outflow of Investments from Taiwan as of December 31, 2019	Net Income (Loss) of the Investee	Percentage of Ownership in Investment	Investment Gain (Loss) (Note 2)	Carrying Value as of December 31, 2019 (Note 2)	Accumulated Inward Remittance of Earnings as of December 31, 2019	Note
					Outflow	Inflow							
Powertech Technology (Suzhou) Ltd.	Semiconductor testing and assembly services	$ 2,167,632 (US$ 72,000)	Note 1	$ 1,535,406 (US$ 51,000)	$ -	$ -	$ 1,535,406 (US$ 51,000)	$ (11,159) (US$ (349))	100%	$ (11,159) (US$ (349))	$ 714,955 (US$ 23,748)	$ -	-
Powertech Technology (Xian) Ltd.	Semiconductor testing and assembly services	2,107,420 (US$ 70,000)	Note 1	1,993,469 (US$ 66,215)	-	-	1,993,469 (US$ 66,215)	533,418 (US$ 17,246)	100%	533,418 (US$ 17,246)	3,174,527 (US$ 105,445)	116,324 (US$ 3,785)	-

Investee Company accounted for using the equity method	Accumulated Investment in Mainland China as of December 31, 2019 (US$ in Thousands)	Investment Amounts Authorized by the Investment Commission, MOEA (US$ in Thousands)	Ceiling Amount on of the Corporation's Investment in Mainland China
Powertech Technology (Suzhou) Ltd.	US$ 51,000	US$ 51,000	$ 25,816,637
Powertech Technology (Xian) Ltd.	US$ 66,215	US$ 70,000	

Note 1: Indirect investments through Powertech Holding (BVI) Inc., the Corporation's 100%-owned subsidiary.

Note 2: Amount was recognized on the basis of reviewed financial statements.

Note 3: Based on the exchange rate as of December 31, 2019.