

eMemory Technology Inc. and Subsidiary

**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 a parent and its subsidiaries 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 a parent and its subsidiaries. Hence, we have not prepared a separate set of consolidated financial statements of affiliates.

Very truly yours,

eMemory Technology Inc.

By:

Charles Hsu
Chairman

February 19, 2020

INDEPENDENT AUDITORS' REPORT

The Board of Directors and Shareholders
eMemory Technology Inc.

Opinion

We have audited the accompanying consolidated financial statements of eMemory Technology Inc. and its subsidiaries (collectively referred to as the "Group"), which comprise the consolidated balance sheets as of December 31, 2019 and 2018, and the consolidated statements of comprehensive income, changes in equity and cash flows for the years then ended, and the notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as of December 31, 2019 and 2018, and its consolidated financial performance and its consolidated cash flows for the years then ended in accordance with the Regulations Governing the Preparation of Financial Reports by Securities Issuers and International Financial Reporting Standards (IFRS), International Accounting Standards (IAS), IFRIC Interpretations (IFRIC), and SIC Interpretations (SIC) endorsed and issued into effect by the Financial Supervisory Commission of the Republic of China.

Basis for Opinion

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

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements for the year ended December 31, 2019. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

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

1. The major revenue source of the Group is royalty revenue, refer to Note 20 for related information. To elaborate, when IC design houses' products with the silicon intellectual property of the Group are expected to be mass produced and shipped from the wafer foundries, the wafer foundries will pay a certain percentage of royalty fee based on the wafer price.

2. The Group recognizes royalty revenue based on the contracts and the time when the royalty reports are signed back. The related risks may exist if the royalty revenue from wafer foundries is not recognized at the appropriate time.
3. To verify the accuracy and recognition timing of the royalty revenue, we established the revenue recognition policy of the Group, assessed the reasonableness of the revenue recognition timing, performed relevant control tests and analytical procedures, as well as traced a certain number of royalty revenue transactions before and after the end of reporting period with relevant supporting documents and accounting records.

Other Matter

We have also audited the parent company only financial statements of eMemory 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 IFRS, IAS, IFRIC and SIC endorsed and issued into effect by the Financial Supervisory Commission of the Republic of China, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

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

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

Auditors' Responsibilities for the Audit of the Consolidated Financial Statements

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

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

1. Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
2. Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
3. Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

4. Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the Group to cease to continue as a going concern.
5. Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
6. Obtain sufficient and appropriate audit evidence regarding the financial information of entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision, and performance of the group audit. We remain solely responsible for our audit opinion.

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

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

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

The engagement partners on the audit resulting in this independent auditors' report are Yu-Feng Huang and Su-Li Fang.

Deloitte & Touche
Taipei, Taiwan
Republic of China

February 19, 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.

EMEMORY TECHNOLOGY INC. AND SUBSIDIARY

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

	2019		2018		2019		2018	
	Amount	%	Amount	%	Amount	%	Amount	%
ASSETS								
CURRENT ASSETS								
Cash (Notes 4, 6 and 26)	\$ 1,263,858	62	\$ 1,302,003	62	\$ 32,837	2	\$ 37,822	2
Accounts receivable - net (Notes 4, 9, 20 and 26)	126,812	7	158,335	8	80,914	4	94,104	5
Other receivables (Notes 4 and 26)	1,929	-	225	-	125,120	6	138,092	7
Other receivables - related parties (Notes 4, 26 and 27)	410	-	251	-	4,861	-	6,241	-
Prepayments (Note 15)	19,472	1	19,889	1	56,576	3	71,897	3
Other current assets (Notes 4, 15 and 26)	4,275	-	2,902	-	3,114	-	-	-
Total current assets	1,416,756	70	1,483,605	71	1,731	-	1,616	-
NON-CURRENT ASSETS					305,153	15	349,772	17
Financial assets at fair value through other comprehensive income - noncurrent (Notes 4, 7 and 26)	15,530	1	19,180	1	4,246	-	-	-
Financial assets at amortized cost - noncurrent (Notes 4, 8, 26 and 28)	33,613	2	33,612	2	21,384	1	20,334	1
Investment accounted for using equity method (Notes 4 and 11)	5,382	-	6,046	-	530	-	530	-
Property, plant and equipment (Notes 4 and 12)	477,171	23	491,533	23	26,160	1	20,864	1
Right-of-use assets (Notes 3, 4 and 13)	7,287	-	-	-	331,313	16	370,636	18
Intangible assets (Notes 4 and 14)	73,805	4	67,162	3	-	-	-	-
Deferred tax assets (Notes 4 and 22)	3,434	-	2,708	-	-	-	-	-
Refundable deposits	349	-	331	-	-	-	-	-
Total non-current assets	616,571	30	620,572	29	758,336	37	757,908	36
					404,446	20	416,537	20
EQUITY ATTRIBUTABLE TO SHAREHOLDERS OF THE COMPANY (Notes 4, 18 and 19)								
Ordinary shares					401,471	20	340,160	16
Capital surplus					61,932	3	926	-
Retained earnings					545,653	27	684,180	32
Legal reserve					1,009,056	50	1,025,266	48
Special reserve					-	-	-	-
Unappropriated earnings					(4)	-	-	-
Total retained earnings					(65,582)	(3)	(61,932)	(3)
Other equity					(65,586)	(3)	(61,932)	(3)
Exchange differences on translating the financial statements of foreign operations					(404,238)	(20)	(404,238)	(19)
Unrealized gain (loss) on financial assets at fair value through other comprehensive income					1,702,014	84	1,733,541	82
Total other equity								
Treasury shares								
Total equity								
TOTAL	\$ 2,033,327	100	\$ 2,104,177	100	\$ 2,033,327	100	\$ 2,104,177	100

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

EMEMORY TECHNOLOGY INC. AND SUBSIDIARY

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

	2019		2018	
	Amount	%	Amount	%
OPERATING REVENUE (Notes 4, 20 and 27)	\$ 1,410,085	100	\$ 1,476,516	100
OPERATING COSTS	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
GROSS PROFIT	<u>1,410,085</u>	<u>100</u>	<u>1,476,516</u>	<u>100</u>
OPERATING EXPENSES (Notes 4, 13, 21 and 27)				
Selling and marketing expenses	122,545	9	120,678	8
General and administrative expenses	162,986	11	169,610	11
Research and development expenses	506,215	36	505,475	34
Expected credit (gain) loss (Notes 4 and 9)	<u>(2,984)</u>	<u>-</u>	<u>8,018</u>	<u>1</u>
Total operating expenses	<u>788,762</u>	<u>56</u>	<u>803,781</u>	<u>54</u>
OPERATING INCOME	<u>621,323</u>	<u>44</u>	<u>672,735</u>	<u>46</u>
NON-OPERATING INCOME AND EXPENSES				
Other income (Notes 4, 13, 21 and 27)	19,760	1	25,024	2
Other gains and losses (Notes 4, 21, 24 and 27)	(3,384)	-	5,428	-
Financial costs (Note 21)	(179)	-	-	-
Share of loss of associates (Notes 4 and 11)	<u>(4,336)</u>	<u>-</u>	<u>(4,356)</u>	<u>-</u>
Total non-operating income and expenses	<u>11,861</u>	<u>1</u>	<u>26,096</u>	<u>2</u>
PROFIT BEFORE INCOME TAX	633,184	45	698,831	48
INCOME TAX EXPENSE (Notes 4 and 22)	<u>91,112</u>	<u>7</u>	<u>85,725</u>	<u>6</u>
NET PROFIT FOR THE YEAR	<u>542,072</u>	<u>38</u>	<u>613,106</u>	<u>42</u>
OTHER COMPREHENSIVE INCOME				
Items that will not be reclassified subsequently to profit or loss:				
Remeasurement of defined benefit plans (Notes 4 and 17)	(1,604)	-	(1,650)	-
Unrealized (loss) gain on investments in equity instruments at fair value through other comprehensive income (Notes 4 and 18)	(3,650)	-	1,060	-

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EMEMORY TECHNOLOGY INC. AND SUBSIDIARY

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	%
Items that may be reclassified subsequently to profit or loss:				
Share of the other comprehensive income of associates accounted for using the equity method (Notes 4 and 18)	\$ (4)	-	\$ -	-
Other comprehensive loss for the year	(5,258)	-	(590)	-
TOTAL COMPREHENSIVE INCOME FOR THE YEAR	<u>\$ 536,814</u>	<u>38</u>	<u>\$ 612,516</u>	<u>42</u>
NET PROFIT ATTRIBUTABLE TO:				
Owners of the Company	\$ 542,072	38	\$ 613,106	42
Non-controlling interests	-	-	-	-
	<u>\$ 542,072</u>	<u>38</u>	<u>\$ 613,106</u>	<u>42</u>
TOTAL COMPREHENSIVE INCOME ATTRIBUTABLE TO:				
Owners of the Company	\$ 536,814	38	\$ 612,516	42
Non-controlling interests	-	-	-	-
	<u>\$ 536,814</u>	<u>38</u>	<u>\$ 612,516</u>	<u>42</u>
EARNINGS PER SHARE (Note 23)				
Basic	<u>\$ 7.30</u>		<u>\$ 8.13</u>	
Diluted	<u>\$ 7.26</u>		<u>\$ 8.07</u>	

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

(Concluded)

EMEMORY TECHNOLOGY INC. AND SUBSIDIARY

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

	Ordinary Shares		Retained Earnings				Other Equity			Total Equity	
	Shares (In Thousands)	Amount	Capital Surplus	Legal Reserve	Special Reserve	Unappropriated Earnings	Total	Exchange Differences on Translating the Financial Statements of Foreign Operations	Unrealized Gain (Loss) on Financial Assets at Fair Value Through Other Comprehensive Income		Treasury Shares
BALANCE, JANUARY 1, 2018	75,783	\$ 757,823	\$ 427,496	\$ 280,298	\$ 926	\$ 671,322	\$ 952,546	\$ -	\$ (62,992)	\$ -	\$ 2,074,873
Appropriation of 2017 earnings	-	-	-	59,862	-	(59,862)	(59,862)	-	-	-	-
Legal reserve	-	-	-	-	-	(538,736)	(538,736)	-	-	-	(538,736)
Cash dividends distributed by the Company	-	-	-	-	-	-	-	-	-	-	-
Change in capital surplus from investments in associates accounted for by using equity method	-	-	9	-	-	-	-	-	-	-	9
Issuance of cash dividends from capital surplus	-	-	(29,631)	-	-	-	-	-	-	-	(29,631)
Net profit for the year ended December 31, 2018	-	-	-	-	-	613,106	613,106	-	-	-	613,106
Other comprehensive income (loss) for the year ended December 31, 2018	-	-	-	-	-	(1,650)	(1,650)	-	1,060	-	(590)
Total comprehensive income for the year ended December 31, 2018	-	-	-	-	-	611,456	611,456	-	1,060	-	612,516
Issuance of ordinary shares under employee share options	8	85	2,794	-	-	-	-	-	-	-	2,879
Buy-back of ordinary shares	-	-	-	-	-	-	-	-	-	(404,238)	(404,238)
Share-based payment	-	-	15,869	-	-	-	-	-	-	-	15,869
BALANCE, DECEMBER 31, 2018	75,791	757,908	416,537	340,160	926	684,180	1,025,266	-	(61,932)	(404,238)	1,733,541
Appropriation of 2018 earnings	-	-	-	61,311	-	(61,311)	-	-	-	-	-
Legal reserve	-	-	-	-	61,006	(61,006)	-	-	-	-	-
Special reserve	-	-	-	-	-	(556,678)	(556,678)	-	-	-	(556,678)
Cash dividends distributed by the Company	-	-	-	-	-	-	-	-	-	-	-
Change in capital surplus from investments in associates accounted for by using equity method	-	-	3,676	-	-	-	-	-	-	-	3,676
Issuance of cash dividends from capital surplus	-	-	(37,112)	-	-	-	-	-	-	-	(37,112)
Net profit for the year ended December 31, 2019	-	-	-	-	-	542,072	542,072	-	-	-	542,072
Other comprehensive loss for the year ended December 31, 2019	-	-	-	-	-	(1,604)	(1,604)	(4)	(3,650)	-	(5,258)
Total comprehensive income (loss) for the year ended December 31, 2019	-	-	-	-	-	540,468	540,468	(4)	(3,650)	-	536,814
Issuance of ordinary shares under employee share options	43	428	13,554	-	-	-	-	-	-	-	13,982
Share-based payment	-	-	7,791	-	-	-	-	-	-	-	7,791
BALANCE, DECEMBER 31, 2019	75,834	758,336	404,446	401,471	61,922	545,653	1,009,056	(4)	(65,582)	(404,238)	1,702,014

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

EMEMORY TECHNOLOGY INC. AND SUBSIDIARY

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

	2019	2018
CASH FLOWS FROM OPERATING ACTIVITIES		
Profit before income tax	\$ 633,184	\$ 698,831
Adjustments for:		
Depreciation expenses	40,678	37,402
Amortization expenses	14,495	13,202
Expected credit (gain) loss	(2,984)	8,018
Finance costs	179	-
Interest income	(9,631)	(10,663)
Dividend income	(291)	(943)
Share-based payment	7,791	15,869
Share of loss of associates	4,336	4,356
Loss on disposal of property, plant and equipment	-	278
Intangible asset reclassified as operating expenses	10	-
Gain on disposal of investments	(95)	(79)
Net loss (gain) on foreign currency exchange	4,321	(1,015)
Changes in operating assets and liabilities		
Accounts receivable	32,484	(83,763)
Other receivables	(1,691)	-
Other receivables - related parties	(159)	326
Prepayments	426	(1,895)
Other current assets	(1,373)	(879)
Contract liabilities	(4,985)	4,351
Other payables	(13,204)	13,176
Other current liabilities	115	165
Net defined benefit liabilities	(554)	(558)
Bonuses payable to employees and directors	(12,972)	4,467
Cash generated from operations	690,080	700,646
Interest received	9,618	10,676
Income tax paid	(107,168)	(75,900)
Net cash generated from operating activities	<u>592,530</u>	<u>635,422</u>
CASH FLOWS FROM INVESTING ACTIVITIES		
Acquisition of financial assets at amortized cost	(1)	(1)
Acquisition of financial assets at fair value through profit or loss	(592,000)	(600,000)
Proceeds from disposal of financial assets at fair value through profit or loss	592,095	600,079
Acquisition of property, plant and equipment	(24,601)	(11,335)
Increase in refundable deposits	(18)	(16)
Acquisition of intangible assets	(21,148)	(17,934)
Dividend received	291	943
Net cash used in investing activities	<u>(45,382)</u>	<u>(28,264)</u>

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EMEMORY TECHNOLOGY INC. AND SUBSIDIARY

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 FINANCING ACTIVITIES		
Repayment of the principal portion of lease liabilities	\$ (3,022)	\$ -
Dividends paid	(593,780)	(568,353)
Exercise of employee share options	13,982	2,879
Payments for buy-back of ordinary shares	-	(404,238)
Interest paid	<u>(179)</u>	<u>-</u>
Net cash used in financing activities	<u>(582,999)</u>	<u>(969,712)</u>
EFFECTS OF EXCHANGE RATE CHANGES ON THE BALANCE OF CASH HELD IN FOREIGN CURRENCIES	<u>(2,294)</u>	<u>873</u>
NET DECREASE IN CASH	(38,145)	(361,681)
CASH AT THE BEGINNING OF THE YEAR	<u>1,302,003</u>	<u>1,663,684</u>
CASH AT THE END OF THE YEAR	<u>\$ 1,263,858</u>	<u>\$ 1,302,003</u>

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

(Concluded)

EMEMORY TECHNOLOGY INC. AND SUBSIDIARY

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

1. GENERAL INFORMATION

eMemory Technology Inc. (the “Company”) was incorporated in Hsinchu City, Republic of China, and commenced business in September 2000. The Company’s main business activities include researching, developing, manufacturing and selling embedded flash memory products, etc.

The Company’s shares have been listed on the TPEX since January 2011.

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

2. APPROVAL OF FINANCIAL STATEMENTS

The consolidated financial statements were approved by the board of directors and authorized for issue on February 19, 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), IFRIC Interpretations (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 accounting policies of the Company and entities controlled by the Company (collectively, the “Group”):

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

The Group as lessee

The Group recognizes right-of-use assets and lease liabilities for all leases on the consolidated balance sheets except for those whose payments under low-value asset and short-term leases are

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

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 that is equal to the lease liabilities. The Group applies IAS 36 to all right-of-use assets.

The Group also applies the following practical expedients:

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

The weighted average lessee's incremental borrowing rate applied to lease liabilities recognized on January 1, 2019 is 2.2%. The difference between the (i) lease liabilities recognized and (ii) the future minimum lease payments of non-cancellable operating lease commitments on December 31, 2018 is explained as follows:

The future minimum lease payments of non-cancellable operating lease commitments on December 31, 2018	\$ 2,099
The future minimum lease payments of cancellable operating lease commitments on December 31, 2018	<u>7,217</u>
Undiscounted amounts on January 1, 2019	<u>\$ 9,316</u>
Discounted amounts using the incremental borrowing rate on January 1, 2019	<u>\$ 8,986</u>
Lease liabilities recognized on January 1, 2019	<u>\$ 8,986</u>

The Group as lessor

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

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

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

	As Originally Stated on January 1, 2019	Adjustments Arising from Initial Application	Restated on January 1, 2019
Right-of-use assets	\$ -	\$ 8,986	\$ 8,986
Total effect on assets	<u>\$ -</u>	<u>\$ 8,986</u>	<u>\$ 8,986</u>
Lease liabilities - current	\$ -	\$ 2,781	\$ 2,781
Lease liabilities - noncurrent	<u>-</u>	<u>6,205</u>	<u>6,205</u>
Total effect on liabilities	<u>\$ -</u>	<u>\$ 8,986</u>	<u>\$ 8,986</u>

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

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

Note 1: The Group shall apply these amendments to business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after January 1, 2020 and to asset acquisitions that occur on or after the beginning of that period.

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

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

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

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

<u>New, Amended or Revised Standards and Interpretations</u>	<u>Effective Date Announced by IASB (Note 1)</u>
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.

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

4. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

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 net defined benefit liabilities which are measured at the present value of the defined benefit obligation less the fair value of plan assets.

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

- 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 Group 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 Company and the entities controlled by the Company (i.e., its subsidiaries).

Income and expenses of subsidiaries acquired or disposed of during the period are included in the consolidated statement of 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 Company.

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

Changes in the Group's ownership interests in subsidiaries that do not result in the Group losing control over the subsidiaries are accounted for as equity transactions. The carrying amounts of the interests of the Group and the non-controlling interests are adjusted to reflect the changes in their relative interests in the subsidiaries. Any difference between the amount by which the non-controlling interests are adjusted and the fair value of the consideration paid or received is recognized directly in equity and attributed to the owners of the Company.

See Note 10 for detailed information on subsidiaries (including percentages of ownership and main businesses).

e. Foreign currencies

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

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

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

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

For the purpose of presenting consolidated financial statements, the functional currencies of the Group's foreign operations (including subsidiaries, associates, joint ventures and branches in other countries that use currencies which are different from the currency of the Group) are translated into the presentation currency, the New Taiwan dollar, as follows: Assets and liabilities are translated at the exchange rates prevailing at the end of the reporting period; and income and expense items are translated at the average exchange rates for the period. The resulting currency translation differences are recognized in other comprehensive income.

f. Investments in associates

An associate is an entity over which the Group has significant influence and which is neither a subsidiary nor an interest in a joint venture. The Group uses the equity method to account for its investments in associates.

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

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

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

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

g. Property, plant and equipment

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

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

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

h. Intangible assets

1) Intangible assets acquired separately

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

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

Expenditures on research activities are recognized as expenses in the period in which they are incurred.

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

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

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

3) Derecognition of intangible assets

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

i. Impairment of tangible and intangible assets

At the end of each reporting period, the Group reviews the carrying amounts of its tangible and intangible assets for any indication of 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 a corporate asset, the asset is tested for impairment in the context of the cash-generating unit (CGU) to which the asset belongs. If a portion of the carrying amount of the asset can be allocated on a reasonable and consistent basis to the CGU, the Group compares the carrying amount of the CGU, including the portion of the asset's carrying amount allocated to the CGU, with the recoverable amount of the CGU to which the asset belongs. If this reasonable and consistent basis of allocation cannot be applied to the CGU to which the asset belongs and can be applied instead to the smallest group of CGUs to which the CGU belongs, this smallest group is used for impairment testing.

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

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

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

j. Financial instruments

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

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 fair value through profit or loss (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 categories

Financial assets are classified into the following categories: Financial assets at amortized cost and equity instruments at fair value through other comprehensive income (FVTOCI).

i. 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, accounts receivable, other receivables and other current assets 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 such 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 is highly liquid, and readily convertible to a known amount of cash, and is subject to an insignificant risk of changes in value. The Group's cash is held for the purpose of meeting short-term cash commitments.

ii. Investments in equity instruments at FVTOCI

On initial recognition, the Group may make an irrevocable election to designate investments in equity instruments as at FVTOCI. Designation 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 Group's right to receive the dividends is established, unless the dividends clearly represent a recovery of part of the cost of the investment.

b) Impairment of financial assets

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

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

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

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

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

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

c) Derecognition of financial assets

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

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

2) Equity instruments

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

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

3) Financial liabilities

a) Subsequent measurement

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

b) Derecognition of financial liabilities

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

k. Revenue recognition

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

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

1) Authorized revenue

a) Technical service revenue

The Group identifies performance obligations from contracts with customers and recognizes revenue when performance obligations are satisfied.

b) Royalty revenue

Revenue received from the intellectual property that remains operational without updated authorization or technical support is the royalty revenue. While customers use the intellectual property in mass production at the foundries, the royalty prices are determined based on production, sales or other measures and the revenue is recognized with reference to the underlying arrangements.

l. Leases

2019

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

1) The Group as lessor

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

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

Lease payments from operating leases are recognized as income on a straight-line basis over the terms of the relevant leases.

2) The Group as lessee

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

Right-of-use assets are initially measured at cost, which comprises the initial measurement of lease liabilities adjusted for lease payments made at or before the commencement date, less any lease incentives received, and plus any initial direct costs incurred and an estimate of costs needed to restore the underlying assets. 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 Group uses the lessee's incremental borrowing rate.

Subsequently, lease liabilities are measured at amortized cost using the effective interest method, with interest expense recognized over the lease terms. When there is a change in a lease term, or a change in future lease payments resulting from a change in an index or a rate used to determine those payments, the Group remeasures the lease liabilities with a corresponding adjustment to the right-of-use-assets. However, if the carrying amount of the right-of-use assets is reduced to zero, any remaining amount of the remeasurement is recognized in profit or loss. Lease liabilities are presented on a separate line in the consolidated balance sheets.

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

2018

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

1) The Group as lessor

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

2) The Group as lessee

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

m. Government grants

Government grants are not recognized until there is reasonable assurance that the Group will comply with the conditions attached to them and that the grants will be received.

Government grants are recognized in profit or loss on a systematic basis over the periods in which the Group recognizes as expenses the related costs for which the grants are intended to compensate. Specifically, government grants whose primary conditions are that the Group should purchase, construct or otherwise acquire non-current assets are recognized as deferred revenue and transferred to profit or loss on a systematic basis over the useful lives of the related assets.

Government grants that are receivable as compensation for expenses or losses already incurred or for the purpose of giving immediate financial support to the Group with no future related costs are recognized in profit or loss in the period in which they are received.

n. 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 expenses when employees have rendered services entitling them to the contributions.

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

Net defined benefit liabilities (assets) represent the actual deficit (surplus) in the Group's defined benefit plans. Any surplus resulting from this calculation is limited to the present value of any refunds from the plans or reductions in future contributions to the plans.

3) Other long-term employee benefits

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

o. Share-based payment arrangements

Employee share options granted to employees

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

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

p. 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, research and development expenditures to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilized.

Deferred tax liabilities are recognized for taxable temporary differences associated with investments in subsidiaries and associates, except where the Group is able to control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred tax assets arising from deductible temporary differences associated with such investments and interests are 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 assets to be recovered. A previously unrecognized deferred tax asset is also reviewed at the end of each reporting period and recognized to the extent that it has become probable that future taxable profit will allow the deferred tax asset to be recovered.

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

3) Current and deferred taxes

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

5. CRITICAL ACCOUNTING JUDGMENTS AND KEY SOURCES OF ESTIMATION AND UNCERTAINTY

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

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

Critical Accounting Judgements

a. Business model assessment for financial assets

The Group determines the business model at a level that reflects how groups of financial assets are managed together to achieve a particular business objective. This assessment includes judgment about all relevant evidence including how the performance of the assets is evaluated and the risks that affect the performance of the assets. The Group monitors financial assets measured at amortized cost when assets are derecognized prior to their maturity, the Group understands the reasons for their disposal and whether the reasons are consistent with the objective of the business for which the assets were held. Monitoring is part of the Group's continuous assessment of whether the business model for which the remaining financial assets are held continues to be appropriate and, if it is not appropriate, whether there has been a change in the business model such that a prospective change to the classification of those assets is proper.

b. Lease terms - 2019

In determining a lease term, the Group 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 Group occur.

Key Sources of Estimation and Uncertainty

a. Estimated impairment of financial assets

The provision for impairment of accounts receivables (include related parties) is based on assumptions about risk of default and expected loss rates. The Group uses judgment in making these assumptions and in selecting the inputs to the impairment calculation, based on the Group's historical experience, existing market conditions and industrial economic trends. Where the actual future cash inflows are less than expected, a material impairment loss may arise.

b. 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

	December 31	
	2019	2018
Bank deposits	\$ 1,263,823	\$ 1,301,978
Cash on hand	<u>35</u>	<u>25</u>
	<u>\$ 1,263,858</u>	<u>\$ 1,302,003</u>

The market rates of cash in bank at the end of the reporting period were as follows:

	<u>December 31</u>	
	2019	2018
Bank deposits	0.001%-2.75%	0.001%-3.55%

7. FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME

	<u>December 31</u>	
	2019	2018
<u>Non-current</u>		
Investments in equity instruments at FVTOCI	<u>\$ 15,530</u>	<u>\$ 19,180</u>
Domestic investments		
Unlisted shares		
Ordinary shares - Powerchip Technology Corporation	\$ 8,540	\$ 12,260
Ordinary shares - Syntronix Corporation	<u>6,990</u>	<u>6,920</u>
	<u>\$ 15,530</u>	<u>\$ 19,180</u>

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

8. FINANCIAL ASSETS AT AMORTIZED COST

	<u>December 31</u>	
	2019	2018
<u>Non-current</u>		
Domestic investments		
Time deposit with original maturity of more than 1 year	\$ 33,500	\$ 33,500
Pledged time deposits	<u>113</u>	<u>112</u>
	<u>\$ 33,613</u>	<u>\$ 33,612</u>

- a. The ranges of interest rates for time deposits with original maturities of more than 1 year were approximately 1.015%-1.09% and 1.015%-1.09% per annum as of December 31, 2019 and 2018, respectively.
- b. Refer to Note 26 for information relating to the credit risk management and impairment of financial assets at amortized cost.
- c. Refer to Note 28 for information relating to investments in financial assets at amortized cost pledged as security.

9. ACCOUNTS RECEIVABLE, NET

	<u>December 31</u>	
	<u>2019</u>	<u>2018</u>
Accounts receivable	\$ 133,917	\$ 168,424
Less: Allowance for impairment loss	<u>(7,105)</u>	<u>(10,089)</u>
	<u>\$ 126,812</u>	<u>\$ 158,335</u>

The average credit term was 30 to 60 days. No interest was charged on accounts receivable. The Group uses other publicly available financial information or its own trading records to rate its major customers. The Group's exposure and the credit ratings of its counterparties are continuously monitored.

Credit exposure is controlled by counterparty limits that are reviewed and approved.

The Group applies the simplified approach to provide expected credit losses prescribed by IFRS 9, which permits the use of lifetime expected loss provision for all accounts receivable. The lifetime expected credit losses are estimated considering past default experience and current financial position of the customers as well as industrial economic conditions. The Group's expected credit loss rates are set by individual customer based on historical credit loss experience.

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

December 31, 2019

	Not Past Due	1 to 30 Days	31 to 90 Days	91 to 180 Days	Over 181 Days	Total
Gross carrying amount	\$ 109,000	\$ 6,146	\$ 14,214	\$ 1,679	\$ 2,878	\$ 133,917
Loss allowance (lifetime ECL)	<u>(1,559)</u>	<u>(1,349)</u>	<u>(1,919)</u>	<u>(839)</u>	<u>(1,439)</u>	<u>(7,105)</u>
Amortized cost	<u>\$ 107,441</u>	<u>\$ 4,797</u>	<u>\$ 12,295</u>	<u>\$ 840</u>	<u>\$ 1,439</u>	<u>\$ 126,812</u>

December 31, 2018

	Not Past Due	1 to 30 Days	31 to 90 Days	91 to 180 Days	Over 181 Days	Total
Gross carrying amount	\$ 119,728	\$ 11,010	\$ 28,318	\$ 9,368	\$ -	\$ 168,424
Loss allowance (lifetime ECL)	<u>(3,165)</u>	<u>-</u>	<u>(5,542)</u>	<u>(1,382)</u>	<u>-</u>	<u>(10,089)</u>
Amortized cost	<u>\$ 116,563</u>	<u>\$ 11,010</u>	<u>\$ 22,776</u>	<u>\$ 7,986</u>	<u>\$ -</u>	<u>\$ 158,335</u>

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

	<u>For the Year Ended December 31</u>	
	<u>2019</u>	<u>2018</u>
Balance at January 1	\$ 10,089	\$ 2,071
Add: Net remeasurement of loss allowance	-	8,018
Less: Net remeasurement of loss allowance	<u>(2,984)</u>	<u>-</u>
Balance at December 31	<u>\$ 7,105</u>	<u>\$ 10,089</u>

10. SUBSIDIARIES

Subsidiaries included in the consolidated financial statements

Investor	Investee	Nature of Activities	Proportion of Ownership (%)		Remark
			December 31		
			2019	2018	
eMemory Technology Inc.	PUFsecurity Corporation	Product designing, software services, data processing services, intellectual property, etc.	100%	-	1

Remarks:

- 1) eMemory Technology Inc. invested and established PUFsecurity Corporation in May 2019. The authorized capital and the total paid-up capital of PUFsecurity Corporation were NT\$ 500,000 thousand and NT\$ 50,000 thousand, respectively, divided into 50,000 thousand shares with a par value of NT\$ 1.

11. INVESTMENTS ACCOUNTED FOR USING EQUITY METHOD

Investments in associates

	December 31	
	2019	2018
Associates that are not individually material		
iMQ Technology Inc.	\$ 5,382	\$ 6,046
	Proportion of Ownership and Voting Rights	
	December 31	
Name of Associate	2019	2018
iMQ Technology Inc.	3.38%	4.25%
	Year Ended December 31	
	2019	2018
The Company's share of :		
Loss from continuing operations	\$ (4,336)	\$ (4,356)
Other comprehensive income (loss)	(4)	-
Total comprehensive income (loss) for the period	\$ (4,340)	\$ (4,356)

Although the shareholding ratio is less than 20%, the Company is able to exercise significant influence over iMQ Technology Inc. since the chairman of the Company is the same person as the chairman of iMQ Technology Inc. and the Company acts as the director of iMQ Technology Inc.

As the information about business nature, main operation location and the registered country. Refer to Table 3.

The investments in associates accounted for using the equity method, and the share of profit or loss and other comprehensive income (loss) of those investments for the years ended December 31, 2019 and 2018 was based on the audited financial statements.

12. PROPERTY, PLANT AND EQUIPMENT

	December 31, 2019
Assets used by the Group	\$ 446,708
Assets leased under operating leases	<u>30,463</u>
	<u>\$ 477,171</u>

a. Assets used by the Group - 2019

	Freehold Land	Buildings	Research and Development Equipment	Office Equipment	Total
<u>Cost</u>					
Balance at January 1, 2019	\$ 124,019	\$ 383,910	\$ 102,728	\$ 10,451	\$ 621,108
Additions	-	3,751	16,550	2,920	23,221
Disposals	-	(3,747)	(12,374)	(3,567)	(19,688)
Transfers to assets leased under operating leases	<u>(10,289)</u>	<u>(23,927)</u>	<u>-</u>	<u>-</u>	<u>(34,216)</u>
Balance at December 31, 2019	<u>\$ 113,730</u>	<u>\$ 359,987</u>	<u>\$ 106,904</u>	<u>\$ 9,804</u>	<u>\$ 590,425</u>
<u>Accumulated depreciation</u>					
Balance at January 1, 2019	\$ -	\$ 78,766	\$ 45,500	\$ 5,309	\$ 129,575
Depreciation expenses	-	10,529	24,721	1,864	37,114
Disposals	-	(3,747)	(12,374)	(3,567)	(19,688)
Transfers to assets leased under operating leases	<u>-</u>	<u>(3,284)</u>	<u>-</u>	<u>-</u>	<u>(3,284)</u>
Balance at December 31, 2019	<u>\$ -</u>	<u>\$ 82,264</u>	<u>\$ 57,847</u>	<u>\$ 3,606</u>	<u>\$ 143,717</u>
Carrying amounts at December 31, 2019	<u>\$ 113,730</u>	<u>\$ 277,723</u>	<u>\$ 49,057</u>	<u>\$ 6,198</u>	<u>\$ 446,708</u>

b. Assets leased under operating leases - 2019

	Freehold Land	Buildings	Total
<u>Cost</u>			
Balance at January 1, 2019	\$ -	\$ -	\$ -
Transfers from assets used by the Group	<u>10,289</u>	<u>23,927</u>	<u>34,216</u>
Balance at December 31, 2019	<u>\$ 10,289</u>	<u>\$ 23,927</u>	<u>\$ 34,216</u>
<u>Accumulated depreciation</u>			
Balance at January 1, 2019	\$ -	\$ -	\$ -
Transfers from assets used by the Group	-	3,284	3,284
Depreciation expenses	<u>-</u>	<u>469</u>	<u>469</u>
Balance at December 31, 2019	<u>\$ -</u>	<u>\$ 3,753</u>	<u>\$ 3,753</u>
Carrying amounts at December 31, 2019	<u>\$ 10,289</u>	<u>\$ 20,174</u>	<u>\$ 30,463</u>

Operating leases are related to leases of buildings with lease terms between 1 to 3 years. The lessees do not have bargain purchase options to acquire the assets at the expiry of the lease periods.

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

	December 31, 2019
Year 1	\$ 3,363
Year 2	<u>1,666</u>
	<u>\$ 5,029</u>

c. 2018

	Freehold Land	Buildings	Research and Development Equipment	Office Equipment	Total
<u>Cost</u>					
Balance at January 1, 2018	\$ 124,019	\$ 384,646	\$ 97,007	\$ 9,785	\$ 615,457
Additions	-	368	20,350	3,158	23,876
Disposals	<u>-</u>	<u>(1,104)</u>	<u>(14,629)</u>	<u>(2,492)</u>	<u>(18,225)</u>
Balance at December 31, 2018	<u>\$ 124,019</u>	<u>\$ 383,910</u>	<u>\$ 102,728</u>	<u>\$ 10,451</u>	<u>\$ 621,108</u>
<u>Accumulated depreciation</u>					
Balance at January 1, 2018	\$ -	\$ 68,676	\$ 35,723	\$ 5,721	\$ 110,120
Depreciation expense	-	10,968	24,354	2,080	37,402
Disposals	<u>-</u>	<u>(878)</u>	<u>(14,577)</u>	<u>(2,492)</u>	<u>(17,947)</u>
Balance at December 31, 2018	<u>\$ -</u>	<u>\$ 78,766</u>	<u>\$ 45,500</u>	<u>\$ 5,309</u>	<u>\$ 129,575</u>
Carrying amounts at December 31, 2018	<u>\$ 124,019</u>	<u>\$ 305,144</u>	<u>\$ 57,228</u>	<u>\$ 5,142</u>	<u>\$ 491,533</u>

The future minimum lease payments of non-cancellable operating leases are as follows:

	December 31, 2018
Not later than 1 year	<u>\$ 3,363</u>

There was no indication of impairment for the years ended December 31, 2019 and 2018, respectively.

The Group's property, plant and equipment are depreciated on a straight-line basis over the following estimated useful life:

Buildings	
Office main buildings	35-50 years
Electrical power equipment	5-10 years
Air-conditioning	5-8 years
Extinguishment equipment	5 years
Research and development equipment	3-8 years
Office equipment	3-5 years

13. LEASE ARRANGEMENTS

a. Right-of-use assets - 2019

	December 31, 2019
<u>Carrying amounts</u>	
Buildings	\$ 5,679
Office equipment	15
Transportation equipment	<u>1,593</u>
	<u>\$ 7,287</u>
	For the Year Ended December 31, 2019
Additions to right-of-use assets	<u>\$ 1,396</u>
Depreciation charge for right-of-use assets	
Buildings	\$ 1,790
Office equipment	30
Transportation equipment	<u>1,275</u>
	<u>\$ 3,095</u>
Income from the subleasing of right-of-use assets (presented in other income)	<u>\$ (1,301)</u>

b. Lease liabilities - 2019

	December 31, 2019
<u>Carrying amounts</u>	
Current	<u>\$ 3,114</u>
Non-current	<u>\$ 4,246</u>
Range of discount rate for lease liabilities was as follows:	
	December 31, 2019
Buildings	1.68%
Office equipment	3.05%
Transportation equipment	3.25%

c. Other lease information

Lease arrangements under operating leases for the leasing out of freehold property, plant and equipment are set out in Notes 12.

2019

	For the Year Ended December 31, 2019
Expenses relating to short-term leases	\$ <u>1,444</u>
Total cash outflow for leases	\$ <u>(4,466)</u>

The Group leases certain parking space and machine room which qualify as short-term leases. The Group has elected to apply the recognition exemption and thus, did not recognize right-of-use assets and lease liabilities for these leases.

2018

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

	December 31, 2018
Not later than 1 year	\$ 1,549
Later than 1 year and not later than 5 years	<u>550</u>
	<u>\$ 2,099</u>

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

	For the Year Ended December 31, 2018
Minimum lease payments	<u>\$ 1,596</u>

14. INTANGIBLE ASSETS

	Patents	Software	Trademark	Total
<u>Cost</u>				
Balance at January 1, 2019	\$ 112,921	\$ 11,695	\$ 4,418	\$ 129,034
Additions	18,169	2,801	178	21,148
Disposals	<u>(2,067)</u>	<u>(4,898)</u>	<u>(1,466)</u>	<u>(8,431)</u>
Balance at December 31, 2019	<u>\$ 129,023</u>	<u>\$ 9,598</u>	<u>\$ 3,130</u>	<u>\$ 141,751</u>

(Continued)

	Patents	Software	Trademark	Total
<u>Accumulated amortization</u>				
Balance at January 1, 2019	\$ 51,793	\$ 6,556	\$ 3,523	\$ 61,872
Amortization expense	11,222	2,893	380	14,495
Disposals	<u>(2,057)</u>	<u>(4,898)</u>	<u>(1,466)</u>	<u>(8,421)</u>
Balance at December 31, 2019	<u>\$ 60,958</u>	<u>\$ 4,551</u>	<u>\$ 2,437</u>	<u>\$ 67,946</u>
Carrying amounts at December 31, 2019	<u>\$ 68,065</u>	<u>\$ 5,047</u>	<u>\$ 693</u>	<u>\$ 73,805</u>
<u>Cost</u>				
Balance at January 1, 2018	\$ 97,611	\$ 11,387	\$ 4,411	\$ 113,409
Additions	15,310	2,617	7	17,934
Disposals	<u>-</u>	<u>(2,309)</u>	<u>-</u>	<u>(2,309)</u>
Balance at December 31, 2018	<u>\$ 112,921</u>	<u>\$ 11,695</u>	<u>\$ 4,418</u>	<u>\$ 129,034</u>
<u>Accumulated amortization</u>				
Balance at January 1, 2018	\$ 42,311	\$ 5,571	\$ 3,097	\$ 50,979
Amortization expense	9,482	3,294	426	13,202
Disposals	<u>-</u>	<u>(2,309)</u>	<u>-</u>	<u>(2,309)</u>
Balance at December 31, 2018	<u>\$ 51,793</u>	<u>\$ 6,556</u>	<u>\$ 3,523</u>	<u>\$ 61,872</u>
Carrying amounts at December 31, 2018	<u>\$ 61,128</u>	<u>\$ 5,139</u>	<u>\$ 895</u>	<u>\$ 67,162</u>
				(Concluded)

The Company's major products are NeoBit®, NeoFuse®, NeoPUF®, NeoEE® and NeoMTP®, etc. There are 967 patents currently owned or applied in progress for the products mentioned above. According to the requirements of IAS 38, the research and development costs were recognized as research and development expenses, instead of capitalized, in the periods when incurred. The costs of the patents and the trademarks mentioned above were the costs of the relevant fees and professional service expenses for legal right applications.

The above intangible assets with finite useful lives are amortized on a straight-line basis over the following estimated useful life:

Patents	5 years
Software	3 years
Trademark	5 years

15. OTHER ASSETS

	<u>December 31</u>	
	<u>2019</u>	<u>2018</u>
<u>Current</u>		
Prepayments		
Prepayment for software	\$ 10,979	\$ 12,559
Prepayment for annual fee on the patents	4,866	4,680
Prepayment for software maintenance	1,503	1,107
Others	<u>2,124</u>	<u>1,543</u>
	<u>\$ 19,472</u>	<u>\$ 19,889</u>
Other assets		
Temporary payment	<u>\$ 4,275</u>	<u>\$ 2,902</u>

16. OTHER LIABILITIES

	<u>December 31</u>	
	<u>2019</u>	<u>2018</u>
<u>Current</u>		
Other payables		
Bonus	\$ 45,126	\$ 62,917
Payable for annual leave	3,436	3,343
Payable for professional service fee	1,526	1,056
Others	<u>30,826</u>	<u>26,788</u>
	<u>\$ 80,914</u>	<u>\$ 94,104</u>
Other liabilities		
Receipt under custody	\$ 1,159	\$ 1,008
Receipt in advance	550	550
Temporary receipt	<u>22</u>	<u>58</u>
	<u>\$ 1,731</u>	<u>\$ 1,616</u>

17. RETIREMENT BENEFIT PLANS

a. Defined contribution plans

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

b. Defined benefit plans

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

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

The amounts based on the actuary report of the Company's defined benefit plans were as follows:

	December 31	
	2019	2018
Present value of funded defined benefit obligation	\$ 31,041	\$ 28,793
Fair value of plan assets	<u>(9,657)</u>	<u>(8,459)</u>
Net defined benefit liability	<u>\$ 21,384</u>	<u>\$ 20,334</u>

Movements in net defined benefit liabilities were as follows:

	Present Value of the Defined Benefit Obligation	Fair Value of the Plan Assets	Net Defined Benefit Liabilities
Balance at January 1, 2018	<u>\$ 26,575</u>	<u>\$ (7,333)</u>	<u>\$ 19,242</u>
Net interest expense (income)	<u>398</u>	<u>(116)</u>	<u>282</u>
Recognized in profit or loss	<u>398</u>	<u>(116)</u>	<u>282</u>
Remeasurement			
Return on plan assets (excluding amounts included in net interest)	-	(170)	(170)
Actuarial loss			
Changes in demographic assumptions	352	-	352
Changes in financial assumptions	538	-	538
Experience adjustments	<u>930</u>	<u>-</u>	<u>930</u>
Recognized in other comprehensive loss (income)	<u>1,820</u>	<u>(170)</u>	<u>1,650</u>
Contributions from the employer	<u>-</u>	<u>(840)</u>	<u>(840)</u>
Balance at December 31, 2018	<u>28,793</u>	<u>(8,459)</u>	<u>20,334</u>
Net interest expense (income)	<u>396</u>	<u>(122)</u>	<u>274</u>
Recognized in profit or loss	<u>396</u>	<u>(122)</u>	<u>274</u>
Remeasurement			
Return on plan assets (excluding amounts included in net interest)	-	(248)	(248)
Actuarial loss (gain)			
Changes in demographic assumptions	375	-	375
Changes in financial assumptions	1,630	-	1,630
Experience adjustments	<u>(153)</u>	<u>-</u>	<u>(153)</u>
Recognized in other comprehensive loss (income)	<u>1,852</u>	<u>(248)</u>	<u>1,604</u>
Contributions from the employer	<u>-</u>	<u>(828)</u>	<u>(828)</u>
Balance at December 31, 2019	<u>\$ 31,041</u>	<u>\$ (9,657)</u>	<u>\$ 21,384</u>

Through the defined benefit plans under the Labor Standards Law, the Company is exposed to the following risks:

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

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

	December 31	
	2019	2018
Discount rate	1.00%	1.375%
Expected rate of salary increase	4.00%	4.00%

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

	December 31	
	2019	2018
Discount rate		
0.25% increase	<u>\$ (1,102)</u>	<u>\$ (1,071)</u>
0.25% decrease	<u>\$ 1,152</u>	<u>\$ 1,121</u>
Expected rate of salary increase		
0.25% increase	<u>\$ 1,103</u>	<u>\$ 1,077</u>
0.25% decrease	<u>\$ (1,061)</u>	<u>\$ (1,035)</u>

The sensitivity analysis presented above may not be representative of the actual changes in the present value of the defined benefit obligation as it is unlikely that changes 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 plans for the next year	<u>\$ 863</u>	<u>\$ 890</u>
Average duration of the defined benefit obligation	14.5 years	15.3 years

18. EQUITY

a. Ordinary shares

	<u>December 31</u>	
	<u>2019</u>	<u>2018</u>
Numbers of shares authorized (in thousands)	<u>100,000</u>	<u>100,000</u>
Shares authorized	<u>\$ 1,000,000</u>	<u>\$ 1,000,000</u>
Number of shares issued and fully paid (in thousands)	<u>75,834</u>	<u>75,791</u>
Shares issued	<u>\$ 758,336</u>	<u>\$ 757,908</u>

For the year Ended December 31, 2019, the shares increased due to the employees' exercise of their employee share options.

b. Capital surplus

	<u>December 31</u>	
	<u>2019</u>	<u>2018</u>
<u>May be used to offset a deficit, distributed as cash dividends, or transferred to share capital (1)</u>		
Arising from issuance of ordinary shares	\$ 287,201	\$ 310,759
<u>May be used to offset a deficit only</u>		
Arising from share of changes in capital surplus of associates	45,060	41,384
Arising from issuance of ordinary-exercised/invalid employee share options	9,160	2,445
<u>May not be used for any purpose</u>		
Arising from employee share options	<u>63,025</u>	<u>61,949</u>
	<u>\$ 404,446</u>	<u>\$ 416,537</u>

1) Such capital surplus may be used to offset a deficit; in addition, when the Company has no deficit, such capital surplus may be distributed as cash dividends or transferred to share capital (limited to a certain percentage of the Company's capital surplus and to once a year).

c. Retained earnings and dividend policy

The Company's Articles of Incorporation state that, where the Company made profit in a fiscal year, the profit shall be first utilized for paying taxes, offsetting accumulated losses, setting aside as legal reserve 10% of the remaining profit, setting aside or reversing a special reserve in accordance with the laws and regulations, and then any remaining profit together with any undistributed retained earnings shall be used by the Company's board of directors as the basis for proposing a distribution plan, which should be resolved in the shareholders' meeting for the distribution of dividends and bonuses to shareholders. For the policies on the distribution of employees' compensation and remuneration of directors after the amendment, refer to "Employees' compensation and remuneration of directors" in Note 21 (f).

The Company shall distribute dividend with considerations of the market situation and development stage, as well as future capital needs, long-term corporate development and the shareholders' cash flow needs. The Company's dividend policy, in principle, shall not be less than 50% of distributable earnings, of which at least 10% will be paid as cash dividend and the remainder will be in the form of stock dividend. The board of directors shall map out the distribution proposal in consideration of future operation and capital expenditure, and present the proposal at the shareholders' meeting for approval.

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

Items referred to under Rule No. 1010012865, Rule No. 1010047490 and Rule No. 1030006415 issued by the FSC and the directive titled "Questions and Answers for Special Reserves Appropriated Following Adoption of IFRSs" should be appropriated to or reversed from a special reserve by the Company.

The appropriations of earnings for 2018 and 2017 which had been approved in the shareholders' meetings on June 13, 2019 and June 14, 2018, respectively, were as follows:

	Appropriation of Earnings	
	For the Year Ended December 31	
	2018	2017
Legal reserve	<u>\$ 61,311</u>	<u>\$ 59,862</u>
Special reserve	<u>\$ 61,006</u>	<u>\$ -</u>
Cash dividends	<u>\$ 556,678</u>	<u>\$ 538,736</u>
Cash dividends per share (NT\$)	\$ 7.50	\$ 7.109

The Company's shareholders also resolved to issue cash dividends from capital surplus of \$37,112 thousand and \$29,631 thousand in the shareholders' meetings on June 13, 2019 and June 14, 2018, respectively.

The appropriations of earnings for 2019 had been proposed by the Company's board of directors on February 19, 2020. The appropriations and dividends per share were as follows:

	For the Year Ended December 31, 2019
Legal reserve	<u>\$ 54,047</u>
Special reserve	<u>\$ 3,654</u>
Cash dividends	<u>\$408,466</u>
Cash dividends per share (NT\$)	\$ 5.5

Issuance of cash dividends from capital surplus of \$111,400 thousand also had been proposed by the Company's board of directors on February 19, 2020.

The appropriations of earnings for 2019 are subject to the resolution of the shareholders' meeting to be held on June 10, 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	\$ _____ -	\$ _____ -
Recognized for the year		
Share from associates accounted for using the equity method	_____ (4)	_____ -
Other comprehensive loss recognized for the year	_____ (4)	_____ -
Balance at December 31	<u>\$ _____ (4)</u>	<u>\$ _____ -</u>

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

	For the Year Ended December 31	
	2019	2018
Balance at January 1	\$ (61,932)	\$ (62,992)
Recognized for the year		
Unrealized (loss) gain - equity instruments	_____ (3,650)	_____ 1,060
Other comprehensive (loss) income recognized for the year	_____ (3,650)	_____ 1,060
Balance at December 31	<u>\$ (65,582)</u>	<u>\$ (61,932)</u>

e. Treasury shares

Purpose of Buy-Back	Unit: In Thousands of Shares			
	Number of Shares at January 1	Increase During the Year	Decrease During the Year	Number of Shares at December 31
<u>2019</u>				
Shares transferred to employees	<u>1,567</u>	_____ -	_____ -	<u>1,567</u>
<u>2018</u>				
Shares transferred to employees	_____ -	<u>1,567</u>	_____ -	<u>1,567</u>

In September 2018, for shares transferred to employees, the Company's board of directors resolved to buy back 2,500 thousand shares of the Company's ordinary shares from the TPEX market from September 14, 2018 to November 13, 2018 with the price interval ranging from NT\$177.80 to NT\$400 per share. The Company has bought back 1,567 thousand shares with total cost of NT\$404,238 thousand.

Under the Securities and Exchange Act, the Company shall neither pledge treasury shares nor exercise shareholders' rights on these shares, such as the rights to dividends and to vote.

19. SHARE-BASED PAYMENT

Employee share option plan of the Company

Qualified employees of the Company were granted 500 options in February, 2016. Each option entitles the holder to subscribe for one thousand ordinary shares of the Company. The options granted are valid for 10 years and exercisable at certain percentages after the second anniversary from the grant date. The options were granted at an exercise price equal to the closing price of the Company's ordinary shares listed on the TPEX on the grant date. For any subsequent changes in the Company's ordinary shares or for any cash dividends issued in excess of the ratio required in the issuance rule, the exercise price is adjusted accordingly.

The information of employee share options was as follows:

	Year Ended December 31			
	2019		2018	
	Number of Options (In Thousands)	Weighted- average Exercise Price (NT\$)	Number of Options (In Thousands)	Weighted- average Exercise Price (NT\$)
Balance at January 1	470	\$ 331.6	487	\$ 338.7
Options exercised	(43)	326.7	(8)	338.7
Options forfeited	(7)	324.2	(9)	338.7
Balance at December 31	<u>420</u>	324.2	<u>470</u>	331.6
Options exercisable, end of period	<u>231</u>	324.2	<u>135</u>	331.6

The weighted-average share prices on the exercise date of the share options for the years ended December 31, 2019 and 2018 were \$369 and \$378, respectively.

Information on outstanding options is as follows:

	December 31	
	2019	2018
Range of exercise price (NT\$)	\$ 324.2	\$ 331.6
Weighted-average remaining contractual life (in years)	6.15 years	7.15 years

Options granted in February 2016 were priced using the Black-Scholes pricing model and the inputs in the model were as follows:

Grant-date share price (NT\$)	\$351
Exercise price (NT\$)	\$351
Expected volatility	43.24%
Expected life (in years)	6-7 years
Expected dividend yield	-
Risk-free interest rate	0.71-0.75%

Compensation costs recognized were NT\$7,791 thousand and NT\$15,869 thousand for the years ended December 31, 2019 and 2018, respectively.

20. REVENUE

	<u>Year Ended December 31</u>	
	2019	2018
Royalty revenue	\$ 979,822	\$ 1,026,710
Technical service revenue	<u>430,263</u>	<u>449,806</u>
	<u>\$ 1,410,085</u>	<u>\$ 1,476,516</u>

a. Contract balances

	December 31, 2019	December 31, 2018	January 1, 2018
Accounts receivables (Note 9)	<u>\$ 126,812</u>	<u>\$ 158,335</u>	<u>\$ 82,457</u>
Contract liabilities			
Technical service revenue	<u>\$ 32,837</u>	<u>\$ 37,822</u>	<u>\$ 33,471</u>

The changes in the balance of contract liabilities primarily result from the timing difference between the Group's performance and the respective customer's payment.

Revenue of the reporting period recognized from the beginning contract liabilities in the previous periods is as follows:

	<u>Year Ended December 31</u>	
	2019	2018
From the beginning contract liabilities		
Technical service revenue	<u>\$ 25,764</u>	<u>\$ 22,390</u>

b. Partially completed contracts

	<u>Year Ended December 31</u>	
	2019	2018
Taiwan (Company located)	\$ 805,649	\$ 880,511
China	300,474	267,184
Singapore	122,869	128,410
Korea	54,698	72,705
United States of America	40,378	36,755
Others	<u>86,017</u>	<u>90,951</u>
	<u>\$ 1,410,085</u>	<u>\$ 1,476,516</u>

21. NET PROFIT FROM CONTINUING OPERATIONS

a. Other income

	<u>Year Ended December 31</u>	
	2019	2018
Interest income		
Bank deposits	\$ 9,631	\$ 10,663
Remuneration of directors received	5,142	10,023
Rental income - operating lease (Note 13)	4,696	3,395
Dividend income	<u>291</u>	<u>943</u>
	<u>\$ 19,760</u>	<u>\$ 25,024</u>

b. Other gains and losses

	<u>Year Ended December 31</u>	
	2019	2018
Net foreign exchange (loss) gain	\$ (5,290)	\$ 5,615
Government grants income (Note 24)	1,691	-
Gain on disposal of investment	95	79
Loss on disposal of property, plant and equipment	-	(278)
Others	<u>120</u>	<u>12</u>
	<u>\$ (3,384)</u>	<u>\$ 5,428</u>

c. Finance costs

	<u>Year Ended December 31</u>	
	2019	2018
Interest on lease liabilities	<u>\$ 179</u>	<u>\$ -</u>

d. Depreciation and amortization

	<u>Year Ended December 31</u>	
	2019	2018
An analysis of depreciation by function		
Operating expenses	<u>\$ 40,678</u>	<u>\$ 37,402</u>
An analysis of amortization by function		
Selling and marketing expenses	\$ -	\$ -
General and administrative expenses	1,944	2,130
Research and development expenses	<u>12,551</u>	<u>11,072</u>
	<u>\$ 14,495</u>	<u>\$ 13,202</u>

e. Employee benefits expense

	<u>Year Ended December 31</u>	
	2019	2018
Post-employment benefits (see Note 17)		
Defined contribution plans	\$ 16,387	\$ 15,328
Defined benefit plans	<u>274</u>	<u>282</u>
	<u>16,661</u>	<u>15,610</u>
Share-based payments (see Note 19)		
Equity-settled	<u>7,791</u>	<u>15,869</u>
Other employee benefits	<u>584,092</u>	<u>597,535</u>
	<u>\$ 608,544</u>	<u>\$ 629,014</u>
An analysis of employee benefits expense by function		
Operating expenses	<u>\$ 608,544</u>	<u>\$ 629,014</u>

f. Employees' compensation and remuneration of directors

According to the Articles of Incorporation of the Company, the Company accrued employees' compensation and remuneration of directors at rates of 1-25% and no higher than 2%, respectively, of net profit before income tax, employees' compensation, and remuneration of directors. The employees' compensation and the remuneration of directors for the years ended December 31, 2019 and 2018, which were approved by the Company's board of directors on February 19, 2020 and February 26, 2019, respectively, are as follows:

Accrual rate

	<u>Year Ended December 31</u>	
	2019	2018
Employees' compensation	15%	15%
Remuneration of directors	1.5%	1.5%

Amount

	<u>Year Ended December 31</u>	
	2019	2018
Employees' compensation	<u>\$ 113,746</u>	<u>\$ 125,538</u>
Remuneration of directors	<u>\$ 11,374</u>	<u>\$ 12,554</u>

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 Company's board of directors in 2020 and 2019 is available at the Market Observation Post System website of the Taiwan Stock Exchange.

22. INCOME TAXES RELATING TO CONTINUING OPERATIONS

a. Income tax recognized in profit or loss

The major components of tax expense (income) were as follows:

	Year Ended December 31	
	2019	2018
Current tax		
In respect of the current year	\$ 91,829	\$ 87,079
Adjustments for prior periods	<u>9</u>	<u>(754)</u>
	91,838	86,325
Deferred tax		
In respect of the current year	(726)	(228)
Adjustments to deferred tax attributable to changes in tax rates and laws	<u>-</u>	<u>(372)</u>
	-	(372)
Income tax expense recognized in profit or loss	<u>\$ 91,112</u>	<u>\$ 85,725</u>

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

	Year Ended December 31	
	2019	2018
Profit before tax	<u>\$ 633,184</u>	<u>\$ 698,831</u>
Income tax expense calculated at the statutory rate	\$ 126,637	\$ 139,766
Nondeductible expenses in determining taxable income	5,333	741
Tax-exempt income	(84,175)	(93,488)
Additional income tax under the Alternative Minimum Tax Act	31,304	36,614
Unrecognized deductible temporary differences and investment credits	12,004	3,218
Adjustments to deferred tax attributable to changes in tax rates and laws	-	(372)
Adjustments for prior years' tax	<u>9</u>	<u>(754)</u>
Income tax expense recognized in profit or loss	<u>\$ 91,112</u>	<u>\$ 85,725</u>

The Income Tax Act in the ROC was amended in 2018, and the corporate income tax rate was adjusted from 17% to 20%. In addition, the rate of the corporate surtax applicable to the 2018 unappropriated earnings was reduced from 10% to 5%.

In July 2019, the President of the ROC announced the amendments to the Statute for Industrial Innovation, which stipulate that the amounts of unappropriated earnings in 2018 and thereafter that are reinvested in the construction or purchase of certain assets or technologies are allowed as deduction when computing the income tax on unappropriated earnings.

b. Current tax liabilities

	<u>December 31</u>	
	2019	2018
Current tax liabilities		
Income tax payable	<u>\$ 56,576</u>	<u>\$ 71,897</u>

c. Deferred tax assets

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

Year ended December 31, 2019

	Opening Balance	Recognized in Profit or Loss	Closing Balance
<u>Deferred tax assets</u>			
Temporary differences	<u>\$ 2,708</u>	<u>\$ 726</u>	<u>\$ 3,434</u>

Year ended December 31, 2018

	Opening Balance	Recognized in Profit or Loss	Closing Balance
<u>Deferred tax assets</u>			
Temporary differences	<u>\$ 2,108</u>	<u>\$ 600</u>	<u>\$ 2,708</u>

d. Information about tax-exemption

As of December 31, 2019, profits attributable to the following expansion projects were exempted from income tax for a five-year period:

<u>Expansion of Construction Project</u>	<u>Tax-exemption Period</u>
Fifth expansion of the manufacturing plant	January 1, 2015-December 31, 2019
Sixth expansion of the manufacturing plant	January 1, 2016-December 31, 2020

e. Income tax assessments

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

23. EARNINGS PER SHARE

Unit: NT\$ Per Share

	<u>Year Ended December 31</u>	
	2019	2018
Basic earnings per share	<u>\$ 7.30</u>	<u>\$ 8.13</u>
Diluted earnings per share	<u>\$ 7.26</u>	<u>\$ 8.07</u>

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

Net Profit for the Year

	<u>Year Ended December 31</u>	
	2019	2018
Earnings used in the computation of basic earnings per share	\$ 542,072	\$ 613,106
Effect of potentially dilutive ordinary shares:		
Employees' compensation	-	-
Employee share options	<u>-</u>	<u>-</u>
Earnings used in the computation of diluted earnings per share	<u>\$ 542,072</u>	<u>\$ 613,106</u>

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

	<u>Year Ended December 31</u>	
	2019	2018
Weighted average number of ordinary shares used in the computation of basic earnings per share	74,247	75,425
Effect of potentially dilutive ordinary shares:		
Employees' compensation	387	528
Employee share options	<u>14</u>	<u>-</u>
Weighted average number of ordinary shares used in the computation of diluted earnings per share	<u>74,648</u>	<u>75,953</u>

Since the Company can offer to settle bonus to employees in cash or shares, the Company assumes the entire amount of the bonus would be settled in shares and the resulting potential shares are included in the weighted average number of shares outstanding used in the computation of diluted earnings per share, if the effect is dilutive. Such dilutive effect of the potential shares is included in the computation of diluted earnings per share until the shareholders resolve the number of shares to be distributed to employees at their meeting in the following year.

Since the exercise price of the options or warrants issued by the Company exceeded the average market price of the shares during 2018, they are anti-dilutive and excluded from the computation of diluted earnings per share.

24. GOVERNMENT GRANTS

The Company applied for the AI on chip R&D subsidy program "The Industrial Technology Foresight Research Program of Reconfigurable Analog Artificial Intelligence Chip", proposed by the Ministry of Economic Affairs, and the program was approved on December 18, 2019. The total funds approved were NT\$ 85,750 thousand, and the subsidies were NT\$ 34,300 thousand. As of December 31, 2019, the accumulated government grants income recognized was NT\$ 1,691 thousand. The collateral provided by the Group included cashier checks whose drawees are banking industries and guarantee letters and the amounts were NT\$ 34,300 thousand and NT\$ 10,080 thousand, respectively.

25. CAPITAL MANAGEMENT

The Group manages its capital to ensure that entities in the Group will be able to continue a going concern while maximizing the return to shareholders through the optimization of the debt and equity balance. The Group's overall strategy has no significant changes.

The capital structure of the Group consists of issued ordinary shares, capital surplus, retained earnings and other equity.

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

26. FINANCIAL INSTRUMENTS

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

The management believes the carrying amounts of financial assets and financial liabilities not carried at fair value approximate their fair values or their fair values cannot be reliably measured.

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 FVTOCI				
Investments in equity instruments at FVTOCI				
Unlisted shares	\$ _____ -	\$ _____ -	\$ <u>15,530</u>	\$ <u>15,530</u>

December 31, 2018

	Level 1	Level 2	Level 3	Total
Financial assets at FVTOCI				
Investments in equity instruments at FVTOCI				
Unlisted shares	\$ _____ -	\$ _____ -	\$ <u>19,180</u>	\$ <u>19,180</u>

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

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

Financial Assets	Financial Assets at FVTOCI Equity Instruments	
	2019	2018
Balance at January 1	\$ 19,180	\$ 18,120
Recognized in other comprehensive income (included in unrealized valuation gain (loss) on financial assets at FVTOCI)	<u>(3,650)</u>	<u>1,060</u>
Balance at December 31	\$ <u>15,530</u>	\$ <u>19,180</u>

3) Valuation techniques and inputs applied for Level 3 fair value measurement

<u>Financial Instruments</u>	<u>Valuation Techniques and Inputs</u>
Unlisted shares - ROC	Estimate the value of the target by estimating the assets and liabilities items or use the observable stocks price company comparing items of balance sheet or income statement, calculate the implied value multiplier for the price and evaluate the value of the target at balance sheet dates.

c. Categories of financial instruments

	<u>December 31</u>	
	2019	2018
<u>Financial assets</u>		
Financial asset at amortized cost (Note 1)	\$ 1,430,865	\$ 1,497,322
Investment in equity instrument at FVTOCI	15,530	19,180
<u>Financial liabilities</u>		
Amortized cost (Note 2)	26,326	24,171

Note 1: The balances include financial assets measured at amortized cost, which comprise cash, accounts receivables, other receivables, other receivables-related parties and other current assets.

Note 2: The balances included financial liabilities measured at amortized cost, which comprise other payables and payables on equipment.

d. Financial risk management objectives and policies

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

The Group's main financial plans are reviewed by the board of directors in accordance with relevant regulations and internal control system.

1) Market risk

The Group'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).

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

a) Foreign currency risk

The Group's operating activities are partially denominated in foreign currencies and apply the natural hedge. The purpose of the Group's management of the foreign currency risk is to hedge the risk instead of making a profit.

The carrying amounts of the Group's foreign currency denominated monetary assets and monetary liabilities are set out in Note 29.

Sensitivity analysis

The Group is mainly exposed to the exchange rate fluctuation of USD, CNY and JPY.

The sensitivity analysis included only outstanding foreign currency denominated monetary items and adjusts their translation at the end of the reporting period for a 5% change in foreign currency rates. A positive number below indicates an increase in pre-tax profit associated with the New Taiwan dollar weakening 5% against the relevant currency. For a 5% strengthening of the New Taiwan dollar against the relevant currency, there would be an equal and opposite impact on pre-tax profit and the balances below would be negative. The sensitivity analysis included cash, accounts receivable, other receivables, payables on equipment and other payables.

	USD Impact		CNY Impact		JPY Impact	
	Year Ended December 31		Year Ended December 31		Year Ended December 31	
	2019	2018	2019	2018	2019	2018
Profit or loss	\$ 10,367	\$ 10,954	\$ 434	\$ 1,131	\$ 20	\$ 15

b) Interest rate risk

The Group is exposed to interest rate risk arising from financial assets both at fixed and floating interest rates.

The carrying amounts of the Group's financial assets with exposure to interest rates at the end of the reporting periods were as follows.

	December 31	
	2019	2018
Fair value interest rate risk		
Financial assets	\$ 804,513	\$ 843,230
Cash flow interest rate risk		
Financial assets	492,923	492,360

Sensitivity analysis

The sensitivity analyses below are determined based on the Group's exposure to interest rates for non-derivative instruments at the end of the reporting period. For floating rate assets, the analysis was prepared assuming the amount of the asset outstanding at the end of the reporting period was outstanding for the whole year.

If the market interest rates had increased/decreased by 0.1% and all other variables were held constant, the Group's pre-tax profit for the years ended December 31, 2019 and 2018 would increase/decrease by \$493 thousand and \$492 thousand, respectively, mainly due to the Group's exposure to floating interest rate assets.

2) Credit risk management

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

In order to minimize credit risk, the Group has made credit and receivable management regulations to ensure that follow-up action is taken to recover overdue debts. In addition, the Group reviews the recoverable amount of each individual trade debt at the end of the reporting period to ensure that adequate allowances are made for irrecoverable amounts. In this regard, management believes the Group's credit risk was significantly reduced.

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

Apart from the customers whose balances exceeded 5% of the accounts receivable, the Group did not have significant credit risk exposure to any single counterparty or any group of counterparties having similar characteristics.

The customers whose balances exceeded 5% of the accounts receivable are creditworthy counterparties. Therefore, the credit risk is limited.

3) Liquidity risk

The Group manages liquidity risk by monitoring and maintaining a level of cash deemed adequate to finance the Group's operations and mitigate the effects of fluctuations in cash flows.

Liquidity and interest risk rate tables

The following table details the Group's remaining contractual maturity 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 Group can be required to pay. The tables included both interest and principal cash flows.

December 31, 2019

	On Demand or Less than 1 Month	1-3 Months	3 Months to 1 Year	1+Years	Total
<u>Non-derivative financial liabilities</u>					
Non-interest bearing	\$ 8,808	\$ 17,140	\$ 908	\$ -	\$ 26,856
Lease liabilities	<u>270</u>	<u>540</u>	<u>2,414</u>	<u>4,343</u>	<u>7,567</u>
	<u>\$ 9,078</u>	<u>\$ 17,680</u>	<u>\$ 3,322</u>	<u>\$ 4,343</u>	<u>\$ 34,423</u>

Additional information about the maturity analysis for lease liabilities:

	Less than 1 Year	1-5 Years	5+ Years
Lease liabilities	<u>\$ 3,224</u>	<u>\$ 4,343</u>	<u>\$ -</u>

December 31, 2018

	On Demand or Less than 1 Month	1-3 Months	3 Months to 1 Year	Total
<u>Non-derivative financial liabilities</u>				
Non-interest bearing	<u>\$ 8,106</u>	<u>\$ 15,759</u>	<u>\$ 836</u>	<u>\$ 24,701</u>

27. TRANSACTIONS WITH RELATED PARTIES

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

a. Related party name and category

<u>Related Party Name</u>	<u>Related Party Category</u>
iMQ Technology Inc.	Associates
Powerchip Technology Corporation	Substantive related parties before May 24, 2018
Powerchip Semiconductor Manufacturing Corp.	Substantive related parties before May 24, 2018
HeFeChip Corporation Limited	Substantive related parties
SecuX Technology Inc.	Substantive related parties
Li-Jeng Chen	Key management personnel
T.C. Chen	Key management personnel
Evans Yang	Key management personnel
Chris Lu	Key management personnel

b. Operating revenue

Line Items	Related Party Category	Year Ended December 31	
		2019	2018
Sales	Substantive related parties	\$ 1,815	\$ 44,707
	Associates	<u>452</u>	<u>1,802</u>
		<u>\$ 2,267</u>	<u>\$ 46,509</u>

The prices that the Group transferred and granted the professional technology to related parties were decided by the two sides. The payment term was open account 30 days.

c. Operating expense

Line Items	Related Party Category	Year Ended December 31	
		2019	2018
Other expense	Substantive related parties	<u>\$ 11</u>	<u>\$ -</u>

d. Other income

Line Items	Related Party Category	Year Ended December 31	
		2019	2018
Remuneration of directors received	Substantive related parties		
	Powerchip Technology Corporation	\$ -	\$ 10,000
	Others	-	23
		<u>\$ -</u>	<u>\$ 10,023</u>
Other income	Key management personnel	<u>\$ 95</u>	<u>\$ -</u>

e. Receivables from related parties (excluding loans to related parties)

Line Items	Related Party Category	December 31	
		2019	2018
Other receivables - related parties	Substantive related parties HeFeChip Corporation Limited	<u>\$ 410</u>	<u>\$ 251</u>

The outstanding trade receivables from related parties are unsecured. For the years ended December 31, 2019 and 2018, no impairment losses were recognized for trade receivables from related parties.

f. Contract liabilities

Related Party Category	December 31	
	2019	2018
Substantive related parties	\$ -	\$ 1,312
Associates	-	452
	<u>\$ -</u>	<u>\$ 1,764</u>

g. Other current liabilities

Line Items	Related Party Category	December 31	
		2019	2018
Receipt in advance	Substantive related parties HeFeChip Corporation Limited	<u>\$ 550</u>	<u>\$ 550</u>
Temporary receipt	Key management personnel	<u>\$ 10</u>	<u>\$ 25</u>

h. Guarantee deposits received

Line Items	Related Party Category	December 31	
		2019	2018
Guarantee deposits received	Substantive related parties HeFeChip Corporation Limited	<u>\$ 520</u>	<u>\$ 520</u>

i. Lease arrangements

The Group is lessor under operating leases

The Group leases out offices, parking spaces and dormitories to its substantive related parties - HeFeChip Corporation Limited and key management personnel under operating leases with lease terms of 1 to 3 years. As of December 31, 2019 and 2018, the balance of operating lease receivable was \$6,191 thousand and \$8,331 thousand, respectively. Lease income recognized for the years ended December 31, 2019 and 2018 was \$3,692 thousand and \$3,345 thousand, respectively.

Lease income was as follows:

Related Party Category	For the Year Ended December 31	
	2019	2018
Substantive related parties		
HeFeChip Corporation Limited	\$ 3,335	\$ 3,335
Key management personnel	<u>357</u>	<u>10</u>
	<u>\$ 3,692</u>	<u>\$ 3,345</u>

j. Compensation of key management personnel

The compensation to directors and the key management personnel were as follows:

	Year Ended December 31	
	2019	2018
Short-term employee benefits	\$ 81,131	\$ 85,100
Post-employment benefits	1,012	1,002
Share-based payment transactions	<u>2,564</u>	<u>4,696</u>
	<u>\$ 84,707</u>	<u>\$ 90,798</u>

The remuneration of directors and key management personnel, as determined by the remuneration committee, was based on the performance of individuals and market trends.

28. ASSETS PLEDGED AS COLLATERAL OR FOR SECURITY

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

	December 31	
	2019	2018
Pledged time deposits (classified as financial assets at amortized cost)	<u>\$ 113</u>	<u>\$ 112</u>

29. SIGNIFICANT ASSETS AND LIABILITIES DENOMINATED IN FOREIGN CURRENCIES

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

December 31, 2019

	Foreign Currencies	Exchange Rate	Carrying Amount
<u>Financial assets</u>			
Monetary items			
USD	\$ 6,916	29.980	\$ 207,345
CNY	2,015	4.305	8,673
JPY	1,440	0.276	<u>398</u>
			<u>\$ 216,416</u>

December 31, 2018

	Foreign Currencies	Exchange Rate	Carrying Amount
<u>Financial assets</u>			
Monetary items			
USD	\$ 7,158	30.715	\$ 219,843
CNY	5,057	4.472	22,614
JPY	1,087	0.2782	<u>302</u>
			<u>\$ 242,759</u>

Financial liabilities

Monetary items			
USD	25	30.715	<u>\$ 754</u>

The significant unrealized foreign exchange gains (losses) were as follows:

	Year Ended December 31			
	2019		2018	
Foreign Currencies	Exchange Rate	Net Foreign Exchange Gains (Losses)	Exchange Rate	Net Foreign Exchange Gains (Losses)
USD	29.980 (USD:NTD)	<u>\$ (3,595)</u>	30.715 (USD:NTD)	<u>\$ 2,070</u>

30. SEPARATELY DISCLOSED ITEMS

Except for the following, the Group has no other significant transactions. In the preparation of the consolidated financial statements, major transactions between the parent and its subsidiaries and their balances have been completely eliminated.

- a. Information about significant transactions and investees:
 - 1) Marketable securities held (excluding investment in subsidiaries, associates and jointly controlled entities). (Table 1)
 - 2) Intercompany relationships and significant intercompany transactions. (Table 2)
 - 3) Information on investees. (Table 3)
- b. Information on investments in mainland China: (None)

31. SEGMENT INFORMATION

- a. Segment revenue, operating results and segment assets

For resources allocation and performance assessment, the Group's chief operating decision maker reviews the operating results regularly. The Group's segments are aggregated into a single reportable segment.

The measurement basis of segment information presented to the chief operating decision maker is consistent with the consolidated financial statements. The segment revenues and operating results for the years ended December 31, 2019 and 2018 can be referred to the consolidated statements of comprehensive income for the years ended December 31, 2019 and 2018. The segment assets as of December 31, 2019 and 2018 can be referred to the consolidated balance sheets as of December 31, 2019 and 2018.

- b. Revenue from major products and services

The following is an analysis of the Group's revenue from its major products and services:

	Year Ended December 31	
	2019	2018
Royalty revenue	\$ 979,822	\$ 1,026,710
Revenue from technical service	<u>430,263</u>	<u>449,806</u>
	<u>\$ 1,410,085</u>	<u>\$ 1,476,516</u>

- c. Geographical information

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

	Revenue from External Customers		Non-current Assets	
	Year Ended December 31		December 31	
	2019	2018	2019	2018
Taiwan (Company located)	\$ 805,649	\$ 880,511	\$ 484,458	\$ 491,533
China	300,474	267,184	-	-
Singapore	122,869	128,410	-	-
Korea	54,698	72,705	-	-
United States of America	40,378	36,755	-	-
Others	<u>86,017</u>	<u>90,951</u>	<u>-</u>	<u>-</u>
	<u>\$1,410,085</u>	<u>\$1,476,516</u>	<u>\$ 484,458</u>	<u>\$ 491,533</u>

Non-current assets include property, plant and equipment and right-of-use assets.

d. Information about major customers

Single customers contributing 10% or more to the Group's Royalty revenue were as follows:

	Year Ended December 31			
	2019	%	2018	%
Company A	\$ 519,446	53	\$ 565,878	55
Company B	133,873	14	97,479	9

EMEMORY TECHNOLOGY INC. AND SUBSIDIARY

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

Holding Company Name	Type and Name of Marketable Securities	Relationship with the Holding Company	Financial Statement Account	Shares (In Thousands)	December 31, 2019			Note
					Carrying Value	Percentage of Ownership (%)	Market Value or Net Asset Value	
eMemory Technology Inc.	Shares Powerchip Technology Corporation	-	Financial assets at fair value through other comprehensive income - noncurrent	758	\$ 8,540	0.02	\$ 8,540	Note 2
	Syntronix Corporation	-	Financial assets at fair value through other comprehensive income - noncurrent	1,210	6,990	2.81	6,990	Note 2
	PowerFlash Technology Corp.	The Company is its director.	Financial assets at fair value through other comprehensive income - noncurrent	40	-	3.99	-	Note 2

Note 1: Marketable securities mentioned in the table include shares, bonds, beneficiary certificates and the derivative securities from aforementioned items, which is under the definition of IFRS 9.

Note 2: The market value was based on the fair value as of December 31, 2019.

Note 3: As of December 31, 2019, the above marketable securities had not been pledged or mortgaged.

EMEMORY TECHNOLOGY INC. AND SUBSIDIARY
INTERCOMPANY RELATIONSHIPS AND SIGNIFICANT INTERCOMPANY TRANSACTIONS
FOR THE YEAR ENDED DECEMBER 31, 2019
(In Thousands of New Taiwan Dollars)

No. (Note 1)	Investee Company	Counterparty	Relationship (Note 2)	Transaction Details			% of Total Sales or Assets (Note 3)
				Financial Statement Accounts	Amount	Payment Terms	
0	eMemory Technology Inc.	PUFsecurity Corporation	1	Sales	\$ 756	-	-
			1	Accounts receivable - related parties	787	-	-
			1	Other receivables	9	-	-
			1	Temporary payment	3	-	-
1	PUFsecurity Corporation	eMemory Technology Inc.	2	Other payables - related parties	799	-	-

Note 1: Information about intercompany relationships should be indicated in the "No." column, and the method of filling in the number is as follows:

NO 1. Parent Company is numbered as 0 in the "No." column.

NO 2. Subsidiaries are numbered sequentially according to their company name and the number starts from 1.

Note 2: There are three types of "Relationship":

NO 1. Parent company to subsidiaries

NO 2. Subsidiaries to parent company

NO 3. Subsidiaries to subsidiaries

Note 3: If financial statement accounts are classified as items in the balance sheets, the calculation of the ratio is that ending balance divides by total assets. If the financial statement accounts are classified as items in the income statement, the calculation of the ratio is that the accumulated amount in the interim period divides by total sales.

EMEMORY TECHNOLOGY INC. AND SUBSIDIARY

INFORMATION ON INVESTEEES
 FOR THE YEAR ENDED DECEMBER 31, 2019
 (In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

Investor Company	Investee Company	Location	Main Businesses and Products	Original Investment Amount		Balance as of December 31, 2019			Net Income (Loss) of the Investee	Share of Profits (Loss)	Note
				December 31, 2019	December 31, 2018	Shares (In Thousands)	Percentage of Ownership (%)	Carrying Amount			
eMemory Technology Inc.	PUFsecurity Corporation	Hsinchu County	Product designing, software services, data processing etc.	\$ 50,000	\$ -	50,000	100.00	\$ 27,673	\$ (22,384)	Subsidiary	
	iMQ Technology Inc.	Hsinchu City	Electronic parts and components manufacturing	27,900	27,900	2,057	3.38	5,382	(108,225)	Investment accounted for using equity method	