English Translation of the parent company only Financial Statements Originally Issued in Chinese

ORIENT SEMICONDUCTOR ELECTRONICS LIMITED

AND SUBSIDIARIES

CONSOLIDATED FINANCIAL STATEMENTS

WITH

REPORT OF INDEPENDENT AUDITORS

FOR THE YEARS ENDED

DECEMBER 31, 2019 AND 2018

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Independent Auditors' Report

English Translation of a Report Originally Issued in Chinese

To Orient Semiconductor Electronics Limited

Opinion

We have audited the accompanying consolidated balance sheets of Orient Semiconductor Electronics Limited (the "Company") and its subsidiaries as of December 31, 2019 and 2018, and the related consolidated statements of comprehensive income, changes in equity and cash flows for the years ended December 31, 2019 and 2018, and notes to the consolidated financial statements, including the summary of significant accounting policies (collectively referred to as "the consolidated financial statements").

In our opinion, based on our audits and the reports of other auditors (please refer to the Other Matter – Making Reference to the Audits of Component Auditors section of our report), the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of the Company and its subsidiaries as of December 31, 2019 and 2018, and their consolidated financial performance and cash flows for the years ended December 31, 2019 and 2018, in conformity with the requirements of the Regulations Governing the Preparation of Financial Reports by Securities Issuers and International Financial Reporting Standards, International Accounting Standards, interpretations developed by the International Financial Reporting Interpretations Committee or the former Standing Interpretations Committee as endorsed 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 Company and its subsidiaries in accordance with the Norm of Professional Ethics for Certified Public Accountant of the Republic of China (the "Norm"), and we have fulfilled our other ethical responsibilities in accordance with the Norm. Based on our audits and the reports of other auditors, 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 2019 consolidated financial statements. 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 matter.

1. Validity of occurrence of sales revenue from main customers

Net sales recognized by the Group amounted to $17,515,145 thousand for the year ended December 31, 2019. This is 15% increase in comparison with net sales of 2018. Among this value, approximately 83% comes from the main customers of the Group. Hence, validity of occurrence of sales revenue from main customers have significant influence on the consolidated financial statement. Therefore, we considered this a key audit matter.

Our audit procedures included, but not limited to, assessing the appropriateness of the accounting policy of revenue recognition; evaluating and testing the design and operating effectiveness of internal controls around revenue recognition; performing cut-off tests by selecting samples of transactions from either side of the balance sheet date and vouching related certificates to verify correctness of the timing of recognizing transaction; obtaining the list of main customers for 2019 and assessing if their backgrounds, transaction amounts were consistent with their scale ; selecting samples to perform test of details and reviewing significant contact terms and conditions to verify the accuracy of sales revenue.

We also considered the appropriateness of the disclosures of sales. Please refer to Notes 4 and 6 to the Company's consolidated financial statements.

2. Deferred tax assets

The Group recognized deferred tax assets in the amount of $1,547,937 thousand, for the year ended December 31, 2019. The recognition of deferred tax assets for the related unused tax losses, unused tax credits, and deductible temporary differences arising from operating entities located in other areas was based on management estimates of its future available taxable profits and the probability that the related deferred tax assets will be realized. As a result, we determined the matter to be a key audit matter.

Our audit procedures include (but are not limited to) understanding and testing the controls surrounding the Company's assessment process for recognition of deferred tax assets; understanding the Company's significant operating entities for which deferred tax assets were recognized and assessing the management estimates for assumptions used in the future cash flow projection and future taxable profits calculation; retrospectively reviewing the accuracy of assumptions used in prior-period estimates of future cash flow projection and assessing whether there were any other matters that will affect the recognition of deferred tax assets; and assessing the adequacy of the Company's disclosures regarding its deferred tax asset recognition policy and other related disclosures.

We also considered the appropriateness of the income tax disclosures. Please refer to Notes 5 and 6 to the Company's consolidated financial statements.

Other Matter – Making Reference to the Audits of Component Auditors

We did not audit the financial statements of certain consolidated subsidiaries, whose statements reflected total assets of $800,395 thousand and $767,296 thousand accounting for 5.03% and 4.58% of consolidated total assets as of December 31, 2019 and 2018, respectively; total operating revenues amounted to $59,130 thousand and $53,080 thousand, constituting 0.34% and 0.35% of consolidated operating revenues for the years ended December 31, 2019 and 2018, respectively. Those financial statements were audited by other auditors, whose reports thereon have been furnished to us, and our opinions expressed herein are based solely on the audit reports of the other auditors.

Emphasis of Matter – Applying New Accounting Standards

Note 3 to the consolidated financial statements stated, that the Company and its subsidiaries applied the International Financial Reporting Standard 16, "Leases" starting from January 1, 2019, and elected not to restate the consolidated financial statements for prior periods. Our conclusion is not modified in respect of this matter.

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 requirements of the Regulations Governing the Preparation of Financial Reports by Securities Issuers and International Financial Reporting Standards, International Accounting Standards, interpretations developed by the International Financial Reporting Interpretations Committee or the former Standing Interpretations Committee as endorsed by 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 ability to continue as a going concern of the Company and its subsidiaries, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Company and its subsidiaries or to cease operations, or has no realistic alternative but to do so.

Those charged with governance, including audit committee or supervisors, are responsible for overseeing the financial reporting process of the Company and its subsidiaries.

Auditor's 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 auditor's 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 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 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 internal control of the Company and its subsidiaries.

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 ability to continue as a going concern of the Company and its subsidiaries. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's 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 auditor's report. However, future events or conditions may cause the Company and its subsidiaries to cease to continue as a going concern.

5. Evaluate the overall presentation, structure and content of the consolidated financial statements, including the accompanying notes, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

6. Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Company and its subsidiaries 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 2019 consolidated financial statements and are therefore the key audit matters. We describe these matters in our auditor's 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.

We have audited and expressed an unqualified opinion on the parent company only financial statements of the Company as of and for the years ended December 31, 2019 and 2018.

Chen, Chih-Chung

Chen, Cheng-Chu

Ernst & Young, Taiwan

March 27, 2020

Notice to Readers

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

Accordingly, the accompanying financial statements and report of independent accountants are not intended for use by those who are not informed about the accounting principles or auditing standards generally accepted in the Republic of China, and their applications in practice. As the financial statements are the responsibility of the management, Ernst & Young cannot accept any liability for the use of, or reliance on, the English translation or for any errors or misunderstandings that may derive from the translation.

English Translation of Financial Statements Originally Issued in Chinese

ORIENT SEMICONDUCTOR ELECTRONICS LIMITED AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS

As of December 31, 2019 and 2018

(Amounts expressed in Thousands of New Taiwan Dollars)

Items	Notes	December 31, 2019		December 31, 2018	
		Amount	%	Amount	%
Current assets					
Cash and cash equivalents	4, 6.(1)	$1,701,412	11	$762,311	5
Contract assets-Current	4, 6.(19)	302,982	2	425,684	3
Notes receivable	4, 6.(2)	1,770	—	10,510	—
Accounts receivable-Non Affiliates	4, 6.(3), 8	2,455,324	16	2,385,100	14
Accounts receivable-Affiliates	4, 6.(3), 7	229,557	1	694,148	4
Other receivable-Non Affiliates	4	31,044	—	44,844	—
Other receivable-Affiliates	4,7	50,435	—	54,767	1
Inventories	4, 6.(4)	1,250,419	8	1,567,469	9
Prepayments	4, 6.(10)	53,122	—	51,448	—
Other current assets		28,179	—	36,377	—
Other financial assets-Current	8	154,226	1	243,615	1
Total current assets		6,258,470	39	6,276,273	37
Non-current assets					
Financial assets at fair value through other comprehensive income-Non current	4, 6.(5)	226,860	1	234,878	1
Investments accounted for using the equity method	4, 6.(6),8	459,383	3	458,078	3
Property, plant, and equipment	4, 6.(7), 8	6,264,246	39	7,063,908	42
Right-of-use assets	4, 6.(21)	253,847	2	—	—
Investment Property	4, 6.(8)	440,433	3	481,619	3
Intangible assets	4, 6.(9)	58,445	—	89,633	1
Deferred income tax assets	4, 6.(25)	1,547,937	10	1,688,163	10
Prepayment for equipment	4, 6.(10)	151,901	1	180,354	1
Refundable deposits	8	157,615	1	201,903	1
Long-term receivables-Affiliates	4, 6.(11), 7	93,315	1	95,300	1
Other non-current assets	4	6,298	—	9,973	—
Total non-current assets		9,660,280	61	10,503,809	63
Total assets		$15,918,750	100	$16,780,082	100

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

English Translation of Financial Statements Originally Issued in Chinese

ORIENT SEMICONDUCTOR ELECTRONICS LIMITED AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS

As of December 31, 2019 and 2018

(Amounts expressed in Thousands of New Taiwan Dollars)

Items	Notes	December 31, 2019		December 31, 2018	
		Amount	%	Amount	%
Current liabilities					
Short-term loans	6.(12), 7	$2,373,766	15	$2,806,857	17
Short-term notes payable	6.(13)	379,210	2	349,610	2
Contract Liabilities-Current	4, 6.(19)	29,439	—	15,821	1
Notes payable	4	14,197	—	49,126	—
Other notes payable	4	40,306	—	13,072	—
Accounts payable-Non Affiliates	4	3,057,906	19	3,295,988	20
Accounts payable-Affiliates	4,7	38,483	—	49,210	—
Accrued expenses		875,613	6	751,041	4
Payables on equipment		147,286	1	239,748	1
Current income tax liabilities	4, 6.(25)	—	—	2,175	—
Lease liabilities-Current	4, 6.(21)	25,725	—	—	—
Current portion of long-term loans	6.(14)	1,190,490	8	1,340,270	8
Lease payable-Current	4, 6.(15)	—	—	2,610	—
Other current liabilities		90,967	1	115,652	1
Total current liabilities		8,263,388	52	9,031,180	54
Non-current liabilities					
Long-term loans	6.(14)	904,836	6	1,713,245	10
Deferred tax liabilities	4, 6.(25)	31,272	—	33,639	—
Lease liabilities-Non current	4, 6.(21)	218,681	1	—	—
Net defined benefit liability-Non current	4, 6.(16)	430,850	3	495,896	3
Other non-current liabilities-Others	4	3,568	—	3,522	—
Total non-current liabilities		1,589,207	10	2,246,302	13
Total liabilities		9,852,595	62	11,277,482	67
Equity attributable to the parent company	4, 6.(17)				
Capital					
Common stock		5,573,285	35	5,523,285	33
Additional paid-in capital		45,711	—	20,104	—
Retained earnings					
Undistributed earings (Retained deficits)		537,191	3	(44,832)	—
Other Components of Equity	4, 6.(18)	(90,032)	—	4,043	—
Equity attributable to stockholders of the parent		6,066,155	38	5,502,600	33
Total stockholders' equity		6,066,155	38	5,502,600	33
Total liabilities and stockholders' equity		$15,918,750	100	$16,780,082	100

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

English Translation of Financial Statements Originally Issued in Chinese

ORIENT SEMICONDUCTOR ELECTRONICS LIMITED AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

For the years ended December 31, 2019 and 2018

(Amounts expressed in Thousands of New Taiwan Dollars)

Items	Notes	2019		2018	
		Amount	%	Amount	%
Net revenue	4, 6.(19), 7	$17,515,145	100	$15,188,192	100
Cost of goods sold	4, 6.(4), 6.(22)	(15,742,203)	(90)	(14,656,055)	(96)
Gross profit		1,772,942	10	532,137	4
Operating expenses	4, 6.(22)				
Selling and administration expenses		(710,778)	(4)	(652,527)	(4)
Research and development expenses		(278,307)	(2)	(270,528)	(2)
Expected credit losses	4, 6.(20)	(7,742)	—	(15,145)	—
Subtotal		(996,827)	(6)	(938,200)	(6)
Net other operating income and expenses		357	—	—	—
Operating income(loss)		776,472	4	(406,063)	(2)
Non-operating income and expenses	6.(23)				
Other income		50,464	—	74,246	—
Other gains and losses		(13,999)	—	26,770	—
Financial costs		(115,732)	—	(125,986)	(1)
Expected credit loss	4, 6.(20)	(1,148)	—	—	—
Share of profit of associates under equity method	4, 6.(6)	40,536	—	68,497	—
Subtotal		(39,879)	—	43,527	(1)
Pretax income (loss)		736,593	4	(362,536)	(3)
Income tax (expense) benefit	4, 6.(25)	(148,633)	(1)	250,988	2
Consolidated net income (loss)		587,960	3	(111,548)	(1)
Other comprehensive income (loss)	4, 6.(24)				
Items that will not be reclassified subsequently to profit or loss :					
Remeasurements of defined benefit plans		(8,772)	—	(42,568)	—
Unrealized gains or losses on financial assets at fair value through other comprehensive income		(8,018)	—	(22,180)	—
Income tax related to items that will not be reclassified		2,170	—	8,780	—
Items that may be reclassified subsequently to profit or loss :					
Exchange differences on translation of foreign operations		(18,965)	—	17,469	—
Share of other comprehensive income of associates and joint ventures		1,081	—	—	—
Income tax related to items that may be reclassified		3,793	—	(7,408)	—
Total other comprehensive income (loss), net of tax		(28,711)	—	(45,907)	—
Total comprehensive income (loss)		$559,249	3	($157,455)	(1)
Consolidated net income (loss) attributable to:					
Common stockholders of the parent		$587,960	3	($111,548)	(1)
Non controlling interests		—	—	—	—
		$587,960	3	($111,548)	(1)
Consolidated comprehensive income attributable to:					
Common stockholders of the parent		$559,249	3	($157,455)	(1)
Non-controlling interests		—	—	—	—
		$559,249	3	($157,455)	(1)
Basic earnings (losses) per share (Expressed in NTD)	4, 6.(26)	$1.06		($0.20)	
Diluted earnings (losses) per share (Expressed in NTD)	4, 6.(26)	$1.06		($0.20)	

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

English Translation of Financial Statements Originally Issued in Chinese

ORIENT SEMICONDUCTOR ELECTRONICS LIMITED AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

For the years ended December 31, 2019 and 2018

(Amounts expressed in Thousands of New Taiwan Dollars)

Items	Equity attributable to stockholders of the parent								Total Equity
	Common stock	Capital surplus	Retained earnings	Other equity				Total	
			Undistributed earnings (Retained deficits)	Exchange differences on translation of foreign operations	Unrealized gains or losses on financial assets measured at fair value through other comprehensive income	Unrealized gains from available-for-sale financial assets	Employee Unearned Benefit		
Balance as of January 1, 2018	$8,060,158	$21,420	($2,536,872)	($30,156)	–	$145,296	–	$5,659,846	$5,659,846
Impact of retroactive applications	–	–	260,065	–	($113,244)	(145,296)	–	1,525	1,525
Adjusted balance as of January 1, 2018	8,060,158	21,420	(2,276,807)	(30,156)	(113,244)	–	–	5,661,371	5,661,371
Share of changes in net assets of associates and joint ventures accounted for using equity method	–	(1,316)	–	–	–	–	–	(1,316)	(1,316)
Loss for the years ended December 31, 2018	–	–	(111,548)	–	–	–	–	(111,548)	(111,548)
Other comprehensive income (loss) for the years ended December 31, 2018	–	–	(31,860)	10,061	(24,108)	–	–	(45,907)	(45,907)
Total comprehensive income (loss)	–	–	(143,408)	10,061	(24,108)	–	–	(157,455)	(157,455)
Captial reduction for cover accumulated deficits	(2,536,873)	–	2,536,873	–	–	–	–	–	–
Proceeds from disposal of equity instruments at fair value through other comprehensive income	–	–	(161,490)	–	161,490	–	–	–	–
Balance as of December 31, 2018	$5,523,285	$20,104	($44,832)	($20,095)	$24,138	–	–	$5,502,600	$5,502,600
Balance as of January 1, 2019	$5,523,285	$20,104	($44,832)	($20,095)	$24,138	–	–	$5,502,600	$5,502,600
Share of changes in net assets of associates and joint ventures accounted for using equity method	–	(122)	–	–	–	–	–	(122)	(122)
Income for the years ended December 31, 2019	–	–	587,960	–	–	–	–	587,960	587,960
Other comprehensive income (loss) for the years ended December 31, 2019	–	–	(5,937)	(15,172)	(7,602)	–	–	(28,711)	(28,711)
Total comprehensive income (loss)	–	–	582,023	(15,172)	(7,602)	–	–	559,249	559,249
Share-based payment transaction	50,000	25,729	–	–	–	–	($71,301)	4,428	4,428
Balance as of December 31, 2019	$5,573,285	$45,711	$537,191	($35,267)	$16,536	–	($71,301)	$6,066,155	$6,066,155

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

English Translation of Financial Statements Originally Issued in Chinese

ORIENT SEMICONDUCTOR ELECTRONICS LIMITED AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS

For the years ended December 31, 2019 and 2018

(Amounts expressed in Thousands of New Taiwan Dollars)

Items	2019 Amount	2018 Amount
Cash flows from operating activities:		
Pretax income (loss)	$736,593	($362,536)
Adjustments to reconcile net income (loss) before tax to net		
The profit or loss items which did not affect cash flows:		
Depreciation	1,491,025	1,414,983
Amortization	65,339	61,792
Expected credit loss	8,890	15,145
Net (gain) of financial assets and liabilities at fair value through profit or loss	－	(7,371)
Interest expense	115,732	125,986
Interest revenue	(5,951)	(8,754)
Compensation costs of share-based payment	4,428	－
Share of (profit) of associates accounted for using the equity method	(40,536)	(68,497)
(Gain) on disposal of property, plant and equipment	(36,367)	(6,187)
Others	105,471	48,841
Changes in operating assets and liabilities:		
Decrease (Increase) in contract assets	122,702	(213,080)
Decrease in notes receivable-non affiliates	8,740	1,440
(Increase) in accounts receivable-non affiliates	(79,162)	(73,314)
Decrease (Increase) in accounts receivable-affiliates	465,791	(457,608)
Decrease in other receivable-non affiliates	10,447	7,483
Decrease in other receivable-affiliates	41,019	23,538
Decrease (Increase) in inventories	211,432	(404,134)
Decrease in prepayments	11,759	11,325
Decrease (Increase) in other current assets	8,228	(5,567)
Decrease in other non-current assets	2,166	2,426
Increase (Decrease) in contract liabilities	13,618	(35,931)
(Decrease) Increase in notes payable-non affiliates	(7,695)	35,833
(Decrease) Increase in accounts payable-non affiliates	(238,082)	118,636
(Decrease) Increase in accounts payable-affiliates	(10,727)	30,763
Increase (Decrease) in other payable	2,696	(2,092)
Increase in other current liabilities	99,887	65,746
(Decrease) in net defined liabilities	(73,818)	(84,455)
Cash generated from operations	3,033,625	234,411
Interest received	5,966	8,761
Income tax (paid)	(4,811)	(7,185)
Net cash provided by operating activities	3,034,780	235,987

Items	2019 Amount	2018 Amount
Cash flows from investing activities:		
Disposal of financial assets at fair value through profit or loss	－	38,184
Acqusition of property, plant and equipment	(728,482)	(772,963)
Disposal of property, plant and equipment	48,897	41,696
Decrease in refundable deposits	44,288	7,066
Acqusition of intangible assets	(32,657)	(63,714)
Decrease (Increase) in long-term receivables	1,985	(2,916)
Other investing activities	－	(879)
Net cash (used in) investing activities	(665,969)	(753,526)
Cash flows from financing activities:		
Increase in short-term loans	－	614,356
(Decrease) in short-term loans	(433,155)	－
Increase in short-term notes payable	379,210	349,610
(Decrease) in short-term notes payable	(349,610)	(398,938)
Increase in long-term loans	1,300,000	1,010,584
Repayment of long-term loans	(2,262,010)	(1,711,897)
Increase in guarantee deposits received	46	－
(Decrease) in guarantee deposits received	－	(52)
Increase in lease payable	－	30,380
(Decrease) in lease payable	－	(52,321)
Repayment of lease liabilities	(30,050)	－
Interest paid	(118,428)	(123,894)
Other financing activities	89,389	267,345
Net cash (used in) financing activities	(1,424,608)	(14,827)
Effect of exchange rate changes on cash and cash equivalents	(5,102)	430
Net Increase (Decrease) in cash and cash equivalents	939,101	(531,936)
Cash and cash equivalents, beginning of period	762,311	1,294,247
Cash and cash equivalents, end of period	$1,701,412	$762,311

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

English Translation of Financial Statements Originally Issued in Chinese
ORIENT SEMICONDUCTOR ELECTRONICS LIMITED AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018
(Unless otherwise stated, all amounts expressed are in thousands of New Taiwan Dollars)

1. ORGANIZATION AND OPERATION

Orient Semiconductor Electronics Limited (the Company) was incorporated as a company limited by shares under the provisions of the Company Law of the Republic of China in June 1971. The Company was registered in Kaohsiung City and the registered address is 9 Central 3Rd St. N.E.P.Z., Kaohsiung, Taiwan, 11, R.O.C. The principal activity of the Company is to engage in the manufacture, assembly, processing and sale of integrated circuits, parts for semiconductors, computer motherboards and related products. The Company's shares commenced trading in the Taiwan stock exchange market in April 1994.

As of the years ended December 31, 2019, the Company and its subsidiaries current liabilities and current assets amounted to $8,263,388 thousand and $6,258,470 thousand, respectively. The current ratio was 75.74%. The Company has devoted to adjusting its product structure. The Company keeps making a profit and improving financial structure.

2. DATE AND PROCEDURES OF AUTHORIZATION OF FINANCIAL STATEMENTS FOR ISSUE

The consolidated financial statements of the Company and its subsidiaries ("the Group") for the years ended December 31, 2019 and 2018 were authorized for issue by the Board of Directors on March 27, 2020.

3. NEWLY ISSUED OR REVISED STANDARDS AND INTERPRETATIONS

(1) Changes in accounting policies resulting from applying for the first time certain standards and amendments.

The Group applied for the first time International Financial Reporting Standards, International Accounting Standards, and Interpretations issued, revised or amended which are recognized by Financial Supervisory Commission ("FSC") and become effective for annual periods beginning on or after January 1, 2019. The nature and the impact of each new standard and amendment that has a material effect on the Group is described below:

A. IFRS 16"Leases"

IFRS 16 "Leases" replaces IAS 17 "Leases", IFRIC 4 "Determining whether an Arrangement contains a Lease", SIC-15 "Operating Leases - Incentives" and SIC-27 "Evaluating the Substance of Transactions Involving the Legal Form of a Lease".

The Group followed the transition provision in IFRS 16 and the date of initial application was January 1, 2019. The impacts arising from the adoption of IFRS 16 are summarized as follows:

(a) Please refer to Note 4 for the accounting policies before or after January 1, 2019.

(b) For the definition of a lease, the Group elected not to reassess whether a contract was, or contained, a lease on 1 January 2019. The Group was permitted to apply IFRS 16 to contracts that were previously identified as leases applying IAS 17 and IFRIC 4 but not to apply IFRS 16 to contracts that were not previously identified as containing a lease applying IAS 17 and IFRIC 4. That is, for contracts entered into (or changed) on or after 1 January 2019, the Group need to assess whether contacts are, or contain, leases applying IFRS 16. In comparing to IAS 17, IFRS 16 provides that a contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. The Group assessed most of the contracts are, or contain, leases and has no significant impact arised.

(c) The Group is a lessee and elects not to restate comparative information in accordance with the transition provision in IFRS 16. Instead, the Group recognized the cumulative effect of initially applying IFRS 16 as an adjustment to the opening balance of retained earnings (or other component of equity, as appropriate) at the date of initial application.

I. Leases previously classified as operating leases

For leases that were previously classified as operating leases applying IAS 17, the Group measured and recognized those leases as lease liability on January 1, 2019 at the present value of the remaining lease payments, discounted using the lessee's incremental borrowing rate on January 1, 2019, and; the Group chose, on a lease-by-lease basis, to measure the right-of-use asset at either:

i. its carrying amount as if IFRS 16 had been applied since the commencement date, but discounted using the lessee's incremental borrowing rate on January 1, 2019; or

ii. an amount equal to the lease liability, adjusted by the amount of any prepaid or accrued lease payments relating to that lease recognized in the balance sheet immediately before January 1, 2019.

On January 1, 2019, the Group's right-of-use asset and lease liability increased by $238,764 thousand and $238,764 thousand, respectively.

In accordance with the transition provision in IFRS 16, the Group used the following practical expedients on a lease-by-lease basis to leases previously classified as operating leases:

i. Apply a single discount rate to a portfolio of leases with reasonably similar characteristics.
ii. Rely on its assessment of whether leases are onerous immediately before January 1, 2019 as an alternative to performing an impairment review.
iii. Elect to account in the same way as short-term leases to leases for which the lease term ends within 12 months of January 1, 2019.
iv. Exclude initial direct costs from the measurement of the right-of-use asset on January 1, 2019.
v. Use hindsight, such as in determining the lease term if the contract contains options to extend or terminate the lease.

II. Leases previously classified as finance leases

For leases that were previously classified as finance leases applying IAS 17, the Group reclassified the lease asset of $25,845 thousand and the lease payable of $2,610 thousand as measured by IAS 17 to the right-of-use asset of $25,845 thousand and the lease liability of $2,610 thousand, respectively, on January 1, 2019.

III. Please refer to Note 4 and Note 6 for additional disclosure of lessee and lessor which required by IFRS 16.

IV. As at January 1, 2019, the impacts arising from the adoption of IFRS 16 are summarized as follows:

i. The weighted average lessee's incremental borrowing rate applied to lease liabilities recognized in the balance sheet on January 1, 2019 was 2.24%.

ii. The explanation for the difference of $174,196 thousand between: 1) operating lease commitments disclosed applying IAS 17 as of December 31, 2019, discounted using the incremental borrowing rate on January 1, 2019; and 2) lease liabilities recognized in the balance sheet as at January 1, 2019 is summarized as follows:

Operating lease commitments disclosed applying IAS 17 as of December 31, 2018	$74,699
Discounted using the incremental borrowing rate on January 1, 2019	$67,230
Add: the carrying value of lease payables as of December 31, 2018	2,610
Add: adjustments to the options to extend or terminate the lease that is reasonably certain to exercise	171,586
The carrying value of lease liabilities recognized as of January 1, 2019	$241,426

(d) The Group is a lessor and has not made any adjustments. Please refer to Note 4 and Note 6 for the information relating to the lessor.

(2) Standards or interpretations issued, revised or amended, by International Accounting Standards Board ("IASB") which are endorsed by FSC, but not yet adopted by the Group as at the end of the reporting period are listed below:

Items	New, Revised or Amended Standards and Interpretations	Effective Date issued by IASB
a	Definition of a Business - Amendments to IFRS 3	January 1, 2020
b	Definition of Material - Amendments to IAS 1 and 8	January 1, 2020
c	Interest Rate Benchmark Reform - Amendments to IFRS 9, IAS 39 and IFRS 7	January 1, 2020

A. Definition of a Business - Amendments to IFRS 3

The amendments clarify the definition of a business in IFRS 3 Business Combinations. The amendments are intended to assist entities to determine whether a transaction should be accounted for as a business combination or as an asset acquisition.

IFRS 3 continues to adopt a market participant's perspective to determine whether an acquired set of activities and assets is a business. The amendments clarify the minimum requirements for a business; add guidance to help entities assess whether an acquired process is substantive; and narrow the definitions of a business and of outputs; etc.

B. Definition of a Material - Amendments to IAS 1 and 8

The main amendment is to clarify new definition of material. It states that "information is material if omitting, misstating or obscuring it could reasonably be expected to influence decisions that the primary users of general purpose financial statements make on the basis of those financial statements, which provide financial information about a specific reporting entity." The amendments clarify that materiality will depend on the nature or magnitude of information. An entity will need to assess whether the information, either individually or in combination with other information, is material in the context of the financial statements.

C. Interest Rate Benchmark Reform - Amendments to IFRS 9, IAS 39 and IFRS 7

The amendments include a number of exceptions, which apply to all hedging relationships that are directly affected by interest rate benchmark reform. A hedging relationship is directly affected if the interest rate benchmark reform gives rise to uncertainties about the timing and or amount of benchmark-based cash flows of the hedged item or the hedging instrument. Hence, the entity shall apply the exceptions to all hedging relationships directly affected by the interest rate benchmark reform.

The amendments include:

(1) highly probable requirement

When determining whether a forecast transaction is highly probable, an entity shall assume that the interest rate benchmark on which the hedged cash flows are based is not altered as a result of the interest rate benchmark reform.

(2) prospective assessments

When performing prospective assessments, an entity shall assume that the interest rate benchmark on which the hedged item, hedged risk and/or hedging instrument are based is not altered as a result of the interest rate benchmark reform.

(3) IAS 39 retrospective assessment

An entity is not required to undertake the IAS 39 retrospective assessment (i.e. the actual results of the hedge are within a range of 80–125%) for hedging relationships directly affected by the interest rate benchmark reform.

(4) separately identifiable risk components

For hedges of a non-contractually specified benchmark component of interest rate risk, an entity shall apply the separately identifiable requirement only at the inception of such hedging relationships.

The amendments also include the end of application of the exceptions requirements and the related disclosures requirements of the amendments.

The abovementioned standards and interpretations were issued by International Accounting Standards Board ("IASB") and endorsed by FSC so that they are applicable for annual periods beginning on or after January 1, 2020. All other standards and interpretations have no material impact on the Group.

(3) Standards or interpretations issued, revised or amended, by International Accounting Standards Board ("IASB") which are not endorsed by FSC, but not yet adopted by the Group as at the end of the reporting period are listed below.:

Items	New, Revised or Amended Standards and Interpretations	Effective Date issued by IASB
a	IFRS 10 "Consolidated Financial Statements" and IAS 28 "Investments in Associates and Joint Ventures" — Sale or Contribution of Assets between an Investor and its Associate or Joint Ventures	To be determined by IASB
b	IFRS 17 "Insurance Contracts"	January 1, 2021
c	Classification of Liabilities as Current or Non-current – Amendments to IAS 1	January 1, 2022

A. IFRS 10"Consolidated Financial Statements" and IAS 28"Investments in Associates and Joint Ventures" — Sale or Contribution of Assets between an Investor and its Associate or Joint Ventures

The amendments address the inconsistency between the requirements in IFRS 10 Consolidated Financial Statements and IAS 28 Investments in Associates and Joint Ventures, in dealing with the loss of control of a subsidiary that is contributed to an associate or a joint venture. IAS 28 restricts gains and losses arising from contributions of non-monetary assets to an associate or a joint venture to the extent of the interest attributable to the other equity holders in the associate or joint ventures. IFRS 10 requires full profit or loss recognition on the loss of control of the subsidiary. IAS 28 was amended so that the gain or loss resulting from the sale or contribution of assets that constitute a business as defined in IFRS 3 between an investor and its associate or joint venture is recognized in full. IFRS 10 was also amended so that the gains or loss resulting from the sale or contribution of a subsidiary that does not constitute a business as defined in IFRS 3 between an investor and its associate or joint venture is recognized only to the extent of the unrelated investors' interests in the associate or joint venture. The effective date of the amendments has been postponed indefinitely, but early adoption is allowed.

B. IFRS 17 "Insurance Contracts"

IFRS 17 provides a comprehensive model for insurance contracts, covering all relevant accounting aspects (including recognition, measurement, presentation and disclosure requirements). The core of IFRS 17 is the General (building block) Model, under this model, on initial recognition, an entity shall measure a group of insurance contracts at the total of the fulfilment cash flows and the contractual service margin. The fulfilment cash flows comprise of the following:

(a) estimates of future cash flows;
(b) Discount rate: an adjustment to reflect the time value of money and the financial risks related to the future cash flows, to the extent that the financial risks are not included in the estimates of the future cash flows; and
(c) a risk adjustment for non-financial risk.

The carrying amount of a group of insurance contracts at the end of each reporting period shall be the sum of the liability for remaining coverage and the liability for incurred claims. Other than the General Model, the standard also provides a specific adaptation for contracts with direct participation features (the Variable Fee Approach) and a simplified approach (Premium Allocation Approach) mainly for short-duration contracts.

C. Classification of Liabilities as Current or Non-current – Amendments to IAS 1

These are the amendments to paragraphs 69-76 of IAS 1 Presentation of Financial statements and the amended paragraphs related to the classification of liabilities as current or non-current.

The abovementioned standards and interpretations issued by IASB have not yet endorsed by FSC at the date when the Group's financial statements were authorized for issue, the local effective dates are to be determined by FSC. All other standards and interpretations have no material impact on the Group.

4. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

(1) Statement of compliance

The consolidated financial statements of the Group for the years ended December 31, 2019 and 2018 have been prepared in accordance with the Regulations Governing the Preparation of Financial Reports by Securities Issuers ("the Regulations") and International Financial Reporting Standards (IFRS), International Accounting Standards, Interpretations developed by the International Financial Reporting Interpretations Committee which are endorsed by Financial Supervisory Commission of the Republic of China.

(2) Basis of preparation

The consolidated financial statements have been prepared on a historical cost basis, except for financial instruments that have been measured at fair value. The consolidated financial statements are expressed in thousands of New Taiwan Dollars ("NT$") unless otherwise stated.

(3) Basis of consolidation

Preparation principle of consolidated financial statement

Control is achieved when the Group is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. Specifically, the Group controls an investee if and only if the Group has:

(a) power over the investee (i.e. existing rights that give it the current ability to direct the relevant activities of the investee)
(b) exposure, or rights, to variable returns from its involvement with the investee, and
(c) the ability to use its power over the investee to affect its returns

When the Group has less than a majority of the voting or similar rights of an investee, the Group considers all relevant facts and circumstances in assessing whether it has power over an investee, including:

(a) the contractual arrangement with the other vote holders of the investee
(b) rights arising from other contractual arrangements
(c) the Group's voting rights and potential voting rights

The Group re-assesses whether or not it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of control.

Subsidiaries are fully consolidated from the acquisition date, being the date on which the Group obtains control, and continue to be consolidated until the date that such control ceases. The financial statements of the subsidiaries are prepared for the same reporting period as the parent company, using uniform accounting policies. All intra-group balances, income and expenses, unrealized gains and losses and dividends resulting from intra-group transactions are eliminated in full.

A change in the ownership interest of a subsidiary, without a change of control, is accounted for as an equity transaction.

Total comprehensive income of the subsidiaries is attributed to the owners of the parent and to the non-controlling interests even if this results in the non-controlling interests having a deficit balance.

If the Group loses control of a subsidiary, it:
(a) derecognizes the assets (including goodwill) and liabilities of the subsidiary;
(b) derecognizes the carrying amount of any non-controlling interest;
(c) recognizes the fair value of the consideration received;
(d) recognizes the fair value of any investment retained;
(e) recognizes any surplus or deficit in profit or loss; and
(f) reclassifies the parent's share of components previously recognized in other comprehensive income to profit or loss.

A. The consolidated entities are listed as follows:

Investor	Name of subsidiaries	Business nature	Percentage of ownership		Remarks
			December 31, 2019	December 31, 2018	
The Company	Orient Semiconductor Electronics Philippines, Inc. (OSE PHILIPPINES , INC.；OSEP)	Manufacture and export of integrated circuits and computers	99.99%	99.99%	1. As of December 31, 2019, the Company owned 93.67% and OSE B.V.I. owned 6.33% of the shares of OSEP, which represented the aggregate a 99.99% ownership of OSEP. 2. OSEP ceased its operation in fourth quarter of 2011.
The Company	OSE INTERNATIONAL, LTD. (OSE B.V.I.)	Investments of various manufacturing businesses	100.00%	100.00%	－

Investor	Name of subsidiaries	Business nature	Percentage of ownership		Remarks
			December 31, 2019	December 31, 2018	
The Company	OSE USA, INC. (OSEU)	Investments of various manufacturing businesses	100.00%	100.00%	OSEA merged with OSEU on February 14, 2006 and assumed OSEU's assets, liabilities and preferred stocks. OSEA changed its name as OSE USA, Inc. after the merger.
The Company	COREPLUS (HK) LIMITED (COREPLUS)	Manufacture of electronics product	100.00%	100.00%	—
COREPLUS (HK) LIMITED (COREPLUS)	VALUE–PLUS TECHNOLOGY (SUZHOU) CO. (VALUE–PLUS (SUZHOU))	Manufacture of electronics product	100.00%	100.00%	—

B. The consolidated financial statements of part of the subsidiaries listed above had not been reviewed by auditors. As of December 31, 2019 and 2018, the related assets of the subsidiaries which were unaudited by auditors amount to $800,395 thousand and $767,296 thousand respectively, and the related liabilities amount to $705,073 thousand and $642,220 thousand, respectively. The comprehensive income of these subsidiaries amount to ($27,743) thousand and ($36,611) thousand for the years ended December 31, 2019 and 2018, respectively.

(4) Foreign currency transactions

The Group's consolidated financial statements are presented in NT$, which is also the Company's functional currency. Each entity in the Group determines its own functional currency and items included in the financial statements of each entity are measured using that functional currency.

Transactions in foreign currencies are initially recorded by the Group entities at their respective functional currency rates prevailing at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies are retranslated at the functional currency closing rate of exchange ruling at the reporting date. Non-monetary items measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value is determined. Non-monetary items that are measured at historical cost in a foreign currency are translated using the exchange rates as at the dates of the initial transactions.

All exchange differences arising on the settlement of monetary items or on translating monetary items are taken to profit or loss in the period in which they arise except for the following:

(a) Exchange differences arising from foreign currency borrowings for an acquisition of a qualifying asset to the extent that they are regarded as an adjustment to interest costs are included in the borrowing costs that are eligible for capitalization.

(b) Foreign currency items within the scope of IAS 39 Financial Instruments: Recognition and Measurement are accounted for based on the accounting policy for financial instruments.

(c) Exchange differences arising on a monetary item that forms part of a reporting entity's net investment in a foreign operation is recognized initially in other comprehensive income and reclassified from equity to profit or loss on disposal of the net investment.

When a gain or loss on a non-monetary item is recognized in other comprehensive income, any exchange component of that gain or loss is recognized in other comprehensive income. When a gain or loss on a non-monetary item is recognized in profit or loss, any exchange component of that gain or loss is recognized in profit or loss.

(5) Translation of financial statements in foreign currency

The assets and liabilities of foreign operations are translated into NT$ at the closing rate of exchange prevailing at the reporting date and their income and expenses are translated at an average rate for the period. The exchange differences arising on the translation are recognized in other comprehensive income. On the disposal of a foreign operation, the cumulative amount of the exchange differences relating to that foreign operation, recognized in other comprehensive income and accumulated in the separate component of equity, is reclassified from equity to profit or loss when the gain or loss on disposal is recognized. The following partial disposals are accounted for as disposals:

(a) when the partial disposal involves the loss of control of a subsidiary that includes a foreign operation; and
(b) when the retained interest after the partial disposal of an interest in a joint arrangement or a partial disposal of an interest in an associate that includes a foreign operation is a financial asset that includes a foreign operation.

On the partial disposal of a subsidiary that includes a foreign operation that does not result in a loss of control, the proportionate share of the cumulative amount of the exchange differences recognized in other comprehensive income is re-attributed to the non-controlling interests in that foreign operation. In partial disposal of an associate or joint arrangement that includes a foreign operation that does not result in a loss of significant influence or joint control, only the proportionate share of the cumulative amount of the exchange differences recognized in other comprehensive income is reclassified to profit or loss.

Any goodwill and any fair value adjustments to the carrying amounts of assets and liabilities arising on the acquisition of a foreign operation are treated as assets and liabilities of the foreign operation and expressed in its functional currency.

(6) Current and non-current distinction

An asset is classified as current when:

(a) The Group expects to realize the asset, or intends to sell or consume it, in its normal operating cycle.
(b) The Group holds the asset primarily for the purpose of trading.
(c) The Group expects to realize the asset within twelve months after the reporting period.
(d) The asset is cash or cash equivalent unless the asset is restricted from being exchanged or used to settle a liability for at least twelve months after the reporting period.

All other assets are classified as non-current.

A liability is classified as current when:

(a) The Group expects to settle the liability in its normal operating cycle.
(b) The Group holds the liability primarily for the purpose of trading.
(c) The liability is due to be settled within twelve months after the reporting period.
(d) The Group does not have an unconditional right to defer settlement of the liability for at least twelve months after the reporting period. Terms of a liability that could, at the option of the counterparty, result in its settlement by the issue of equity instruments do not affect its classification.

(7) Cash and cash equivalents

Cash and cash equivalents comprises cash on hand, demand deposits and short-term, highly liquid time deposits (including ones that have maturity within three months) or investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

(8) Financial instruments

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

Financial assets and financial liabilities within the scope of IFRS 9 Financial Instruments are recognized initially at fair value plus or minus, in the case of investments not at fair value through profit or loss, directly attributable transaction costs.

A. Financial instruments: Recognition and Measurement

The Group accounts for regular way purchase or sales of financial assets on the trade date.

The Group classified financial assets as subsequently measured at amortized cost, fair value through other comprehensive income or fair value through profit or loss considering both factors below:

(a) the Group’s business model for managing the financial assets and
(b) the contractual cash flow characteristics of the financial asset.

Financial assets measured at amortized cost

A financial asset is measured at amortized cost if both of the following conditions are met and presented as note receivables, trade receivables financial assets measured at amortized cost and other receivables etc., on balance sheet as at the reporting date:

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

Such financial assets are subsequently measured at amortized cost (the amount at which the financial asset is measured at initial recognition minus the principal repayments, plus or minus the cumulative amortization using the effective interest method of any difference between the initial amount and the maturity amount and adjusted for any loss allowance) and is not part of a hedging relationship. A gain or loss is recognized in profit or loss when the financial asset is derecognized, through the amortization process or in order to recognize the impairment gains or losses.

Interest revenue is calculated by using the effective interest method. This is calculated by applying the effective interest rate to the gross carrying amount of a financial asset except for:

(a) purchased or originated credit-impaired financial assets. For those financial assets, the Group applies the credit-adjusted effective interest rate to the amortized cost of the financial asset from initial recognition.
(b) financial assets that are not purchased or originated credit-impaired financial assets but subsequently have become credit-impaired financial assets. For those financial assets, the Group applies the effective interest rate to the amortized cost of the financial asset in subsequent reporting periods.

Financial asset measured at fair value through other comprehensive income

A financial asset is measured at fair value through other comprehensive income if both of the following conditions are met:

(a) the financial asset is held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets and

(b) the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Recognition of gain or loss on a financial asset measured at fair value through other comprehensive income are described as below:

(a)A gain or loss on a financial asset measured at fair value through other comprehensive income recognized in other comprehensive income, except for impairment gains or losses and foreign exchange gains and losses, until the financial asset is derecognized or reclassified.
(b)When the financial asset is derecognized the cumulative gain or loss previously recognized in other comprehensive income is reclassified from equity to profit or loss as a reclassification adjustment.
(c)Interest revenue is calculated by using the effective interest method. This is calculated by applying the effective interest rate to the gross carrying amount of a financial asset except for:

i. Purchased or originated credit-impaired financial assets. For those financial assets, the Group applies the credit-adjusted effective interest rate to the amortized cost of the financial asset from initial recognition.

ii. Financial assets that are not purchased or originated credit-impaired financial assets but subsequently have become credit-impaired financial assets. For those financial assets, the Group applies the effective interest rate to the amortized cost of the financial asset in subsequent reporting periods.

Besides, at initial recognition, the Company makes an irrevocable election to present in other comprehensive income subsequent changes in the fair value of an investment in an equity instrument within the scope of IFRS 9 that is neither held for trading nor contingent consideration recognized by an acquirer in a business combination to which IFRS 3 applies. Amounts presented in other comprehensive income are not subsequently transferred to profit or loss (when disposal of such equity instrument, its cumulated amount included in other components of equity is transferred directly to the retained earnings) and should be recorded as financial assets measured at fair value through other comprehensive income on balance sheet. Dividends on such investment are recognized in profit or loss unless the dividends clearly represents a recovery of part of the cost of investment.

<u>Financial asset measured at fair value through profit or loss</u>

Financial assets were measured at amortized cost or measured at fair value through other comprehensive income only if they met particular conditions. All other financial assets were measured at fair value through profit or loss and presented on the balance sheet as financial assets measured at fair value through profit or loss and trade receivables.

Financial assets at fair value through profit or loss are measured at fair value with changes in fair value recognized in profit or loss. Dividends or interests on financial assets at fair value through profit or loss are recognized in profit or loss (including those received during the period of initial investment).

B. Impairment of financial assets

The Group recognizes a loss allowance for expected credit losses on debt instrument investments measured at fair value through other comprehensive income and financial asset measured at amortized cost. The loss allowance on debt instrument investments measured at fair value through other comprehensive income is recognized in other comprehensive income and not reduce the carrying amount in the statement of financial position.

The Group measures expected credit losses of a financial instrument in a way that reflects:

(a) an unbiased and probability-weighted amount that is determined by evaluating a range of possible outcomes;
(b) the time value of money; and
(c) reasonable and supportable information that is available without undue cost or effort at the reporting date about past events, current conditions and forecasts of future economic conditions.

The loss allowance is measures as follow:

(a) At an amount equal to 12-month expected credit losses: the credit risk on a financial asset has not increased significantly since initial recognition or the financial asset is determined to have low credit risk at the reporting date. In addition, the Group measures the loss allowance at an amount equal to lifetime expected credit losses in the previous reporting period, but determines at the current reporting date that the credit risk on a financial asset has increased significantly since initial recognition is no longer met.
(b) At an amount equal to the lifetime expected credit losses: the credit risk on a financial asset has increased significantly since initial recognition or financial asset that is purchased or originated credit-impaired financial asset.
(c) For trade receivables or contract assets arising from transactions within the scope of IFRS 15, the Group measures the loss allowance at an amount equal to lifetime expected credit losses.
(d) For lease receivables arising from transactions within the scope of IFRS 16 (before January 1, 2019: IAS 17), the Group measures the loss allowance at an amount equal to lifetime expected credit losses.

At each reporting date, the Group needs to assess whether the credit risk on a financial asset has increased significantly since initial recognition by comparing the risk of a default occurring at the reporting date and the risk of default occurring at initial recognition. Please refer to Note 12 for further details on credit risk.

C. Derecognition of financial assets

A financial asset is derecognized when:

(a) The rights to receive cash flows from the asset have expired.
(b) The Group has transferred the asset and substantially all the risks and rewards of the asset have been transferred.
(c) The Group has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.

On derecognition of a financial asset in its entirety, the difference between the carrying amount and the consideration received or receivable including any cumulative gain or loss that had been recognized in other comprehensive income, is recognized in profit or loss.

D. Financial liabilities and equity

Classification between liabilities or equity

The Group classifies the instrument issued as a financial liability or an equity instrument in accordance with the substance of the contractual arrangement and the definitions of a financial liability, and an equity instrument.

Equity instruments

An equity instrument is any contract that evidences a residual interest in the assets of an entity after deducting all of its liabilities. The transaction costs of an equity transaction are accounted for as a deduction from equity (net of any related income tax benefit) to the extent they are incremental costs directly attributable to the equity transaction that otherwise would have been avoided.

Financial liabilities

Financial liabilities within the scope of IFRS 9 Financial Instruments are classified as financial liabilities at fair value through profit or loss or financial liabilities measured at amortized cost upon initial recognition.

Financial liabilities at fair value through profit or loss

Financial liabilities at fair value through profit or loss include financial liabilities held for trading and financial liabilities designated upon initial recognition as at fair value through profit or loss. A financial liability is classified as held for trading if:

(a) it is acquired or incurred principally for the purpose of selling or repurchasing it in the near term;

(b) on initial recognition it is part of a portfolio of identified financial instruments that are managed together and for which there is evidence of a recent actual pattern of short-term profit-taking; or
(c) it is a derivative (except for a derivative that is a financial guarantee contract or a designated and effective hedging instrument).

If a contract contains one or more embedded derivatives, the entire hybrid (combined) contract may be designated as a financial liability at fair value through profit or loss; or a financial liability may be designated as at fair value through profit or loss when doing so results in more relevant information, because either:

(a) it eliminates or significantly reduces a measurement or recognition inconsistency; or
(b) group of financial assets, financial liabilities or both is managed and its performance is evaluated on a fair value basis, in accordance with a documented risk management or investment strategy, and information about the group is provided internally on that basis to the key management personnel.

Gains or losses on the subsequent measurement of liabilities at fair value through profit or loss including interest paid are recognized in profit or loss.

Financial liabilities at amortized cost

Financial liabilities measured at amortized cost include interest bearing loans and borrowings that are subsequently measured using the effective interest rate method after initial recognition. Gains and losses are recognized in profit or loss when the liabilities are derecognized as well as through the effective interest rate method amortization process.

Amortized cost is calculated by taking into account any discount or premium on acquisition and fees or transaction costs.

Derecognition of financial liabilities

A financial liability is derecognized when the obligation under the liability is discharged or cancelled or expires.

When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified (whether or not attributable to the financial difficulty of the debtor), such an exchange or modification is treated as a derecognition of the original liability and the recognition of a new liability, and the difference in the respective carrying amounts and the consideration paid, including any non-cash assets transferred or liabilities assumed, is recognized in profit or loss.

E. Offsetting of financial instruments

Financial assets and financial liabilities are offset and the net amount reported in the balance sheet if, and only if, there is a currently enforceable legal right to offset the recognized amounts and there is an intention to settle on a net basis, or to realize the assets and settle the liabilities simultaneously.

(9) Fair value measurement

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value measurement is based on the presumption that the transaction to sell the asset or transfer the liability takes place either:

(a) In the principal market for the asset or liability, or
(b) In the absence of a principal market, in the most advantageous market for the asset or liability

The principal or the most advantageous market must be accessible to by the Group.

The fair value of an asset or a liability is measured using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants in their economic best interest.

A fair value measurement of a non-financial asset takes into account a market participant’s ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use.

The Group uses valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, maximizing the use of relevant observable inputs and minimizing the use of unobservable inputs.

(10) Inventories

Inventories are valued at the lower of cost and net realizable value item by item.

Cost incurred in bringing each product to its present location and condition are accounted for as follows:

Raw materials – Purchase cost on an average basis.

Finished goods and work in progress – Cost of direct materials and labor and a proportion of manufacturing overheads based on normal operating capacity but excluding borrowing costs, on a average basis.

Net realizable value is the estimated selling price in the ordinary course of business, less estimated costs of completion and the estimated costs necessary to make the sale.

Rendering of services is accounted in accordance with IFRS 15 and not within the scope of inventories.

(11) Non-current assets held for sale and discontinued operations

Non-current assets and disposal groups are classified as held for sale if their carrying amounts will be recovered through a sale transaction that is highly probable within one year from the date of classification and the asset or disposal group is available for immediate sale in its present condition. Non-current assets and disposal groups classified as held for sale are measured at the lower of their carrying amount and fair value less costs to sell.

In the consolidated statement of comprehensive income of the reporting period, and of the comparable period of the previous year, income and expenses from discontinued operations are reported separately from income and expenses from continuing operations, down to the level of profit after taxes, even when the Group retains a non-controlling interest in the subsidiary after the sale. The resulting profit or loss (after taxes) is reported separately in the statement of comprehensive income.

Property, plant and equipment and intangible assets once classified as held for sale are not depreciated or amortized.

(12) Investment accounted for using the equity method

The Group's investment in its associate is accounted for using the equity method other than those that meet the criteria to be classified as held for sale. An associate is an entity over which the Group has significant influence. A joint venture is a type of joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the joint venture.

Under the equity method, the investment in the associate or an investment in a joint venture is carried in the balance sheet at cost and adjusted thereafter for the post-acquisition change in the Group's share of net assets of the associate or joint venture. After the interest in the associate or joint venture is reduced to zero, additional losses are provided for, and a liability is recognized, only to the extent that the Group has incurred legal or constructive obligations or made payments on behalf of the associate or joint venture. Unrealized gains and losses resulting from transactions between the Group and the associate or joint venture are eliminated to the extent of the Group's related interest in the associate or joint venture.

When changes in the net assets of an associate or a joint venture occur and not those that are recognized in profit or loss or other comprehensive income and do not affects the Group's percentage of ownership interests in the associate or joint venture, the Group recognizes such changes in equity based on its percentage of ownership interests. The resulting capital surplus recognized will be reclassified to profit or loss at the time of disposing the associate or joint venture on a prorata basis.

When the associate or joint venture issues new stock, and the Group's interest in an associate or a joint venture is reduced or increased as the Group fails to acquire shares newly issued in the associate or joint venture proportionately to its original ownership interest, the increase or decrease in the interest in the associate or joint venture is recognized in Additional Paid in Capital and Investment accounted for using the equity method. When the interest in the associate or joint venture is reduced, the cumulative amounts previously recognized in other comprehensive income are reclassified to profit or loss or other appropriate items. The aforementioned capital surplus recognized is reclassified to profit or loss on a pro rata basis when the Group disposes the associate or joint venture.

The financial statements of the associate or joint venture are prepared for the same reporting period as the Group. Where necessary, adjustments are made to bring the accounting policies in line with those of the Group.

The Group determines at each reporting date whether there is any objective evidence that the investment in the associate or an investment in a joint venture is impaired in accordance with IAS 28 Investments in Associates and Joint Ventures. If this is the case the Group calculates the amount of impairment as the difference between the recoverable amount of the associate or joint venture and its carrying value and recognizes the amount in the 'share of profit or loss of an associate' in the statement of comprehensive income in accordance with IAS 36 Impairment of Assets. In determining the value in use of the investment, the Group estimates:

(a) Its share of the present value of the estimated future cash flows expected to be generated by the associate or joint venture, including the cash flows from the operations of the associate and the proceeds on the ultimate disposal of the investment; or
(b) The present value of the estimated future cash flows expected to arise from dividends to be received from the investment and from its ultimate disposal.

Because goodwill that forms part of the carrying amount of an investment in an associate or an investment in a joint venture is not separately recognized, it is not tested for impairment separately by applying the requirements for impairment testing goodwill in IAS 36 Impairment of Assets.

Upon loss of significant influence over the associate or joint venture, the Group measures and recognizes any retaining investment at its fair value. Any difference between the carrying amount of the associate or joint venture upon loss of significant influence and the fair value of the retaining investment and proceeds from disposal is recognized in profit or loss. Furthermore, if an investment in an associate becomes an investment in a joint venture or an investment in a joint venture becomes an investment in an associate, the entity continues to apply the equity method and does not remeasure the retained interest.

(13) Property, plant and equipment

Property, plant and equipment is stated at cost, net of accumulated depreciation and accumulated impairment losses, if any. Such cost includes the cost of dismantling and removing the item and restoring the site on which it is located and borrowing costs for construction in progress if the recognition criteria are met. Each part of an item of property, plant and equipment with a cost that is significant in relation to the total cost of the item is depreciated separately. When significant parts of property, plant and equipment are required to be replaced in intervals, the Group recognized such parts as individual assets with specific useful lives and depreciation, respectively. The carrying amount of those parts that are replaced is derecognized in accordance with the derecognition provisions of IAS 16 Property, plant and equipment. When a major inspection is performed, its cost is recognized in the carrying amount of the plant and equipment as a replacement if the recognition criteria are satisfied.
All other repair and maintenance costs are recognized in profit or loss as incurred.

Depreciation is calculated on a straight-line basis over the estimated economic lives of the following assets:

Buildings	10～51 years
Machinery and equipment	3～12 years
Transportation equipment	5 years
Office equipment	5 years
Right-of-use assets/leased assets (Note)	2～51 years
Leasehold improvements	5～15 years
Other equipment	5 years

(Note): The Group reclassified the lease assets to right-of-use assets after the adoption of IFRS 16 from January 1, 2019.

An item of property, plant and equipment and any significant part initially recognized is derecognized upon disposal or when no future economic benefits are expected from its use or disposal. Any gain or loss arising on derecognition of the asset is recognized in profit or loss.

The assets' residual values, useful lives and methods of depreciation are reviewed at each financial year end and adjusted prospectively, if appropriate.

(14) Investment property

The accounting policy from January 1, 2019 as follow:

The Group's owned investment properties are measured initially at cost, including transaction costs. The carrying amount includes the cost of replacing part of an existing investment property at the time that cost is incurred if the recognition criteria are met and excludes the costs of day-to-day servicing of an investment property. Subsequent to initial recognition, other than those that meet the criteria to be classified as held for sale (or are included in a disposal group that is classified as held for sale) in accordance with IFRS 5 Non-current Assets Held for Sale and Discontinued Operations, investment properties are measured using the cost model in accordance with the requirements of IAS 16 Property, plant and equipment for that model. If investment properties are held by a lessee as right-of-use assets and is not held for sale in accordance with IFRS 5, investment properties are measured in accordance with the requirements of IFRS 16.

Depreciation is calculated on a straight-line basis over the estimated economic lives of the following assets:

Buildings	40 years

Investment properties are derecognized when either they have been disposed of or when the investment property is permanently withdrawn from use and no future economic benefit is expected from its disposal. The difference between the net disposal proceeds and the carrying amount of the asset is recognized in profit or loss in the period of derecognition.

The Group transfers to or from investment properties when there is a change in use for these assets.

Properties are transferred to or from investment properties when the properties meet, or cease to meet, the definition of investment property and there is evidence of the change in use.

The accounting policy before January 1, 2019 as follow:

The Group's investment properties are measured initially at cost, including transaction costs. The carrying amount includes the cost of replacing part of an existing investment property at the time that cost is incurred if the recognition criteria are met and excludes the costs of day-to-day servicing of an investment property. Subsequent to initial recognition, investment properties are measured using the cost model in accordance with the requirements of IAS 16 Property, plant and equipment for that model, other than those that meet the criteria to be classified as held for sale (or are included in a disposal group that is classified as held for sale) in accordance with IFRS 5 Non-current Assets Held for Sale and Discontinued Operations.

Investment properties are derecognized when either they have been disposed of or when the investment property is permanently withdrawn from use and no future economic benefit is expected from its disposal. The difference between the net disposal proceeds and the carrying amount of the asset is recognized in profit or loss in the period of derecognition.

The Group transfers to or from investment properties when there is a change in use for these assets.

Properties are transferred to or from investment properties when the properties meet, or cease to meet, the definition of investment property and there is evidence of the change in use.

(15) Leases

The accounting policy from January 1, 2019 as follow:

For contracts entered on or after January 1, 2019, the Group assesses whether the contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. To assess whether a contract conveys the right to control the use of an identified asset for a period of time, the Group assesses whether, throughout the period of use, has both of the following:

(a) the right to obtain substantially all of the economic benefits from use of the identified asset; and
(b) the right to direct the use of the identified asset.

The Group elected not to reassess whether a contract is, or contains, a lease on January 1, 2019. The Group is permitted to apply IFRS 16 to contracts that were previously identified as leases applying IAS 17 and IFRIC 4 but not to apply IFRS 16 to contracts that were not previously identified as containing a lease applying IAS 17 and IFRIC 4.

For a contract that is, or contains, a lease, the Group accounts for each lease component within the contract as a lease separately from non-lease components of the contract. For a contract that contains a lease component and one or more additional lease or non-lease components, the Group allocates the consideration in the contract to each lease component on the basis of the relative stand-alone price of the lease component and the aggregate stand-alone price of the non-lease components. The relative stand-alone price of lease and non-lease components shall be determined on the basis of the price the lessor, or a similar supplier, would charge the Group for that component, or a similar component, separately. If an observable stand-alone price is not readily available, the Group estimates the stand-alone price, maximising the use of observable information.

Group as a lessee

Except for leases that meet and elect short-term leases or leases of low-value assets, the Group recognizes right-of-use asset and lease liability for all leases which the Group is the lessee of those lease contracts.

At the commencement date, the Group measures the lease liability at the present value of the lease payments that are not paid at that date. The lease payments are discounted using the interest rate implicit in the lease, if that rate can be readily determined. If that rate cannot be readily determined, the Group uses its incremental borrowing rate. At the commencement date, the lease payments included in the measurement of the lease liability comprise the following payments for the right to use the underlying asset during the lease term that are not paid at the commencement date:

(a) fixed payments (including in-substance fixed payments), less any lease incentives receivable;
(b) variable lease payments that depend on an index or a rate, initially measured using the index or rate as at the commencement date;
(c) amounts expected to be payable by the lessee under residual value guarantees;
(d) the exercise price of a purchase option if the Group is reasonably certain to exercise that option; and
(e) payments of penalties for terminating the lease, if the lease term reflects the lessee exercising an option to terminate the lease.

After the commencement date, the Group measures the lease liability on an amortised cost basis, which increases the carrying amount to reflect interest on the lease liability by using an effective interest method; and reduces the carrying amount to reflect the lease payments made.

At the commencement date, the Group measures the right-of-use asset at cost. The cost of the right-of-use asset comprises:

(a) the amount of the initial measurement of the lease liability;
(b) any lease payments made at or before the commencement date, less any lease incentives received;
(c) any initial direct costs incurred by the lessee; and
(d) an estimate of costs to be incurred by the lessee in dismantling and removing the underlying asset, restoring the site on which it is located or restoring the underlying asset to the condition required by the terms and conditions of the lease.

For subsequent measurement of the right-of-use asset, the Group measures the right-of-use asset at cost less any accumulated depreciation and any accumulated impairment losses. That is, the Group measures the right-of-use applying a cost model.

If the lease transfers ownership of the underlying asset to the Group by the end of the lease term or if the cost of the right-of-use asset reflects that the Group will exercise a purchase option, the Group depreciates the right-of-use asset from the commencement date to the end of the useful life of the underlying asset. Otherwise, the Group depreciates the right-of-use asset from the commencement date to the earlier of the end of the useful life of the right-of-use asset or the end of the lease term.

The Group applies IAS 36 “Impairment of Assets” to determine whether the right-of-use asset is impaired and to account for any impairment loss identified.

Except for those leases that the Group accounted for as short-term leases or leases of low-value assets, the Group presents right-of-use assets and lease liabilities in the balance sheet and separately presents lease-related interest expense and depreciation charge in the statements comprehensive income.

For short-term leases or leases of low-value assets, the Group elects to recognize the lease payments associated with those leases as an expense on either a straight-line basis over the lease term or another systematic basis.

Group as a lessor

At inception of a contract, the Group classifies each of its leases as either an operating lease or a finance lease. A lease is classified as a finance lease if it transfers substantially all the risks and rewards incidental to ownership of an underlying asset. A lease is classified as an operating lease if it does not transfer substantially all the risks and rewards incidental to ownership of an underlying asset. At the commencement date, the Group recognizes assets held under a finance lease in its balance sheet and present them as a receivable at an amount equal to the net investment in the lease.

For a contract that contains lease components and non-lease components, the Group allocates the consideration in the contract applying IFRS 15.

The Group recognizes lease payments from operating leases as rental income on either a straight-line basis or another systematic basis. Variable lease payments for operating leases that do not depend on an index or a rate are recognized as rental income when incurred.

The accounting policy before January 1, 2019 as follow:

Group as a lessee

Finance leases which transfer to the Group substantially all the risks and benefits incidental to ownership of the leased item, are capitalized at the commencement of the lease at the fair value of the leased property or, if lower, at the present value of the minimum lease payments. Lease payments are apportioned between finance charges and reduction of the lease liability so as to achieve a constant rate of interest on the remaining balance of the liability. Finance charges are recognized in profit or loss.

A leased asset is depreciated over the useful life of the asset. However, if there is no reasonable certainty that the Group will obtain ownership by the end of the lease term, the asset is depreciated over the shorter of the estimated useful life of the asset and the lease term.

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

Group as a lessor

Leases in which the Group does not transfer substantially all the risks and benefits of ownership of the asset are classified as operating leases. Initial direct costs incurred in negotiating an operating lease are added to the carrying amount of the leased asset and recognized over the lease term on the same basis as rental income. Contingent rents are recognized as revenue in the period in which they are earned.

(16) Intangible assets

Intangible assets acquired separately are measured on initial recognition at cost. The cost of intangible assets acquired in a business combination is its fair value as at the date of acquisition. Following initial recognition, intangible assets are carried at cost less any accumulated amortization and accumulated impairment losses, if any. Internally generated intangible assets, excluding capitalized development costs, are not capitalized and expenditure is reflected in profit or loss for the year in which the expenditure is incurred.

The useful lives of intangible assets are assessed as either finite or indefinite.

Intangible assets with finite lives are amortized over the useful economic life and assessed for impairment whenever there is an indication that the intangible asset may be impaired. The amortization period and the amortization method for an intangible asset with a finite useful life are reviewed at least at the end of each financial year. Changes in the expected useful life or the expected pattern of consumption of future economic benefits embodied in the asset is accounted for by changing the amortization period or method, as appropriate, and are treated as changes in accounting estimates.

Intangible assets with indefinite useful lives are not amortized, but are tested for impairment annually, either individually or at the cash-generating unit level. The assessment of indefinite life is reviewed annually to determine whether the indefinite life continues to be supportable. If not, the change in useful life from indefinite to finite is made on a prospective basis.

Gains or losses arising from derecognition of an intangible asset are measured as the difference between the net disposal proceeds and the carrying amount of the asset and are recognized in profit or loss when the asset is derecognized.

Research and development costs

Research costs are expensed as incurred. Development expenditures on an individual project are recognized as an intangible asset when the Group can demonstrate:

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

Following initial recognition of the development expenditure as an asset, the cost model is applied requiring the asset to be carried at cost less any accumulated amortisation and accumulated impairment losses. Amortisation of the asset begins when development is complete and the asset is available for use. It is amortised over the period of expected future benefit.

A summary of the policies applied to the Group's intangible assets is as follows:

	Cost of computer software
Useful lives	1～3 years
Amortization method used	Amortized on a straight-line basis
Internally generated or acquired	Acquired

(17) Impairment of non-financial assets

The Group assesses at the end of each reporting period whether there is any indication that an asset in the scope of IAS 36 Impairment of Assets may be impaired. If any such indication exists, or when annual impairment testing for an asset is required, the Group estimates the asset's recoverable amount. An asset's recoverable amount is the higher of an asset's or cash-generating unit's ("CGU") fair value less costs to sell and its value in use and is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets or groups of assets. Where the carrying amount of an asset or CGU exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount.

For assets excluding goodwill, an assessment is made at each reporting date as to whether there is any indication that previously recognized impairment losses may no longer exist or may have decreased. If such indication exists, the Group estimates the asset's or cash-generating unit's recoverable amount. A previously recognized impairment loss is reversed only if there has been an increase in the estimated service potential of an asset which in turn increases the recoverable amount. However, the reversal is limited so that the carrying amount of the asset does not exceed its recoverable amount, nor exceed the carrying amount that would have been determined, net of depreciation, had no impairment loss been recognized for the asset in prior years.

An impairment loss of continuing operations or a reversal of such impairment loss is recognized in profit or loss.

(18) Revenue recognition

The Group's revenue arising from contracts with customers are primarily related to sale of goods and rendering of services. The accounting policies are explained as follow:

<u>Sale of goods</u>

The Group manufactures and sells machinery. Sales are recognized when control of the goods is transferred to the customer and the goods are delivered to the customers. The main products of the Group are integrated circuits, semiconductor devices and computer motherboards, etc and revenue is recognized based on the consideration stated in the contract. For certain sales of goods transactions, they are usually accompanied by volume discounts (based on the accumulated total sales amount for a specified period). Therefore, revenue from these sales is recognized based on the price specified in the contract, net of the estimated volume discounts.

Products manufactured according to customer's agreed specifications if the customer controls the product at the time of creation or enhancement of the product, the Group will gradually recognize revenue over time.

The Group provides its customer with a warranty with the purchase of the products. The warranty provides assurance that the product will operate as expected by the customers. And the warranty is accounted in accordance with IAS 37.

The credit period of the Group 's sale of goods is from 30 to 150 days. For most of the contracts, when the Group transfers the goods to customers and has a right to an amount of consideration that is unconditional, these contracts are recognized as trade receivables. The Group usually collects the payments shortly after transfer of goods to customers; therefore, there is no significant financing component to the contract. For some of the contracts, the Group has transferred the goods to customers but does not has a right to an amount of consideration that is unconditional, these contacts should be presented as contract assets. Besides, in accordance with IFRS 9, the Group measures the loss allowance for a contract asset at an amount equal to the lifetime expected credit losses. However, for some contracts, part of the consideration was received from customers upon signing the contract, then the Group has the obligation to transfer the goods to customers subsequently; accordingly, these amounts are recognized as contract liabilities.

<u>Rendering of services</u>

Revenue is recognized when the Group finishes the processing services.

(19) Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of an asset that necessarily takes a substantial period of time to get ready for its intended use or sale are capitalized as part of the cost of the respective assets. All other borrowing costs are expensed in the period they occur. Borrowing costs consist of interest and other costs that an entity incurs in connection with the borrowing of funds.

(20) Post-employment benefits

All regular employees of the Company and its domestic subsidiaries are entitled to a pension plan that is managed by an independently administered pension fund committee. Fund assets are deposited under the committee's name in the specific bank account and hence, not associated with the Company and its domestic subsidiaries. Therefore fund assets are not included in the Group's consolidated financial statements. Pension benefits for employees of the overseas subsidiaries and the branches are provided in accordance with the respective local regulations.

For the defined contribution plan, the Company and its domestic subsidiaries will make a monthly contribution of no less than 6% of the monthly wages of the employees subject to the plan. The Company recognizes expenses for the defined contribution plan in the period in which the contribution becomes due. Overseas subsidiaries and branches make contribution to the plan based on the requirements of local regulations.

Post-employment benefit plan that is classified as a defined benefit plan uses the Projected Unit Credit Method to measure its obligations and costs based on actuarial assumptions. Re-measurements, comprising of the effect of the actuarial gains and losses, the effect of the asset ceiling (excluding net interest) and the return on plan assets, excluding net interest, are recognized as other comprehensive income with a corresponding debit or credit to retained earnings in the period in which they occur. Past service costs are recognized in profit or loss on the earlier of:

(a) the date of the plan amendment or curtailment, and
(b) the date that the Group recognizes restructuring-related costs

Net interest is calculated by applying the discount rate to the net defined benefit liability or asset, both as determined at the start of the annual reporting period, taking account of any changes in the net defined benefit liability (asset) during the period as a result of contribution and benefit payment.

(21) Share-Based Payment Transactions

The cost of equity-settled transactions between the Group and its subsidiaries is recognized based on the fair value of the equity instruments granted. The fair value of the equity instruments is determined by using an appropriate pricing model.

The cost of equity-settled transactions is recognized, together with a corresponding increase in other capital reserves in equity, over the period in which the performance and/or service conditions are fulfilled. The cumulative expense recognized for equity-settled transactions at each reporting date until the vesting date reflects the extent to which the vesting period has expired and the Group's best estimate of the number of equity instruments that will ultimately vest. The income statement expense or credit for a period represents the movement in cumulative expense recognized as at the beginning and end of that period.

No expense is recognized for awards that do not ultimately vest, except for equity-settled transactions where vesting is conditional upon a market or non-vesting condition, which are treated as vesting irrespective of whether or not the market or non-vesting condition is satisfied, provided that all other performance and/or service conditions are satisfied.

Where the terms of an equity-settled transaction award are modified, the minimum expense recognized is the expense as if the terms had not been modified, if the original terms of the award are met. An additional expense is recognized for any modification that increases the total fair value of the share-based payment transaction, or is otherwise beneficial to the employee as measured at the date of modification.

Where an equity-settled award is cancelled, it is treated as if it vested on the date of cancellation, and any expense not yet recognized for the award is recognized immediately. This includes any award where non-vesting conditions within the control of either the entity or the employee are not met. However, if a new award is substituted for the cancelled award, and designated as a replacement award on the date that it is granted, the cancelled and new awards are treated as if they were a modification of the original award, as described in the previous paragraph.

The dilutive effect of outstanding options is reflected as additional share dilution in the computation of diluted earnings per share.

The cost of restricted stocks issued is recognized as salary expense based on the fair value of the equity instruments on the grant date, together with a corresponding increase in other capital reserves in equity, over the vesting period. The Group recognized unearned employee salary which is a transitional contra equity account; the balance in the account will be recognized as salary expense over the passage of vesting period.

(22) Income taxes

Income tax expense (income) is the aggregate amount included in the determination of profit or loss for the period in respect of current tax and deferred tax.

Current income tax

Current income tax assets and liabilities for the current and prior periods are measured at the amount expected to be recovered from or paid to the taxation authorities, using the tax rates and tax laws that have been enacted or substantively enacted by the end of the reporting period. Current income tax relating to items recognized in other comprehensive income or directly in equity is recognized in other comprehensive income or equity and not in profit or loss.

The income tax for undistributed earnings is recognized as income tax expense in the subsequent year when the distribution proposal is approved by the Shareholders' meeting.

Deferred tax

Deferred tax is provided on temporary differences at the reporting date between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes.

Deferred tax liabilities are recognized for all taxable temporary differences, except:

(a) Where the deferred tax liability arises from the initial recognition of goodwill or of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss
(b) In respect of taxable temporary differences associated with investments in subsidiaries, associates and interests in joint arrangements, where the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future.

Deferred tax assets are recognized for all deductible temporary differences, carry forward of unused tax credits and unused tax losses, to the extent that it is probable that taxable profit will be available against which the deductible temporary differences, and the carry forward of unused tax credits and unused tax losses can be utilized, except:

(a) Where the deferred tax asset relating to the deductible temporary difference arises from the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss.
(b) In respect of deductible temporary differences associated with investments in subsidiaries, associates and interests in joint arrangements, deferred tax assets are recognized only to the extent that it is probable that the temporary differences will reverse in the foreseeable future and taxable profit will be available against which the temporary differences can be utilized.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the year when the asset is realized or the liability is settled, based on tax rates and tax laws that have been enacted or substantively enacted at the reporting date. The measurement of deferred tax assets and deferred tax liabilities 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.

Deferred tax relating to items recognized outside profit or loss is recognized outside profit or loss. Deferred tax items are recognized in correlation to the underlying transaction either in other comprehensive income or directly in equity. Deferred tax assets are reassessed at each reporting date and are recognized accordingly.

Deferred tax assets and deferred tax liabilities are offset, if a legally enforceable right exists to set off current income tax assets against current income tax liabilities and the deferred taxes relate to the same taxable entity and the same taxation authority.

(23) Business combinations and goodwill

Business combinations are accounted for using the acquisition method. The consideration transferred, the identifiable assets acquired and liabilities assumed are measured at acquisition date fair value. For each business combination, the acquirer measures any non-controlling interest in the acquiree either at fair value or at the non-controlling interest’s proportionate share of the acquiree’s identifiable net assets. Acquisition-related costs are accounted for as expenses in the periods in which the costs are incurred and are classified under administrative expenses.

When the Group acquires a business, it assesses the assets and liabilities assumed for appropriate classification and designation in accordance with the contractual terms, economic circumstances and pertinent conditions as at the acquisition date. This includes the separation of embedded derivatives in host contracts by the acquiree.

If the business combination is achieved in stages, the acquisition date fair value of the acquirer’s previously held equity interest in the acquiree is remeasured to fair value at the acquisition date through profit or loss.

Any contingent consideration to be transferred by the acquirer will be recognized at the acquisition-date fair value. Subsequent changes to the fair value of the contingent consideration which is deemed to be an asset or liability, will be recognized in accordance with IAS 39 Financial Instruments: Recognition and Measurement either in profit or loss or as a change to other comprehensive income. However, if the contingent consideration is classified as equity, it should not be remeasured until it is finally settled within equity.

Goodwill is initially measured as the amount of the excess of the aggregate of the consideration transferred and the non-controlling interest over the net fair value of the identifiable assets acquired and the liabilities assumed. If this aggregate is lower than the fair value of the net assets acquired, the difference is recognized in profit or loss.

After initial recognition, goodwill is measured at cost less any accumulated impairment losses. Goodwill acquired in a business combination is, from the acquisition date, allocated to each of the Group's cash-generating units that are expected to benefit from the combination, irrespective of whether other assets or liabilities of the acquiree are assigned to those units. Each unit or group of units to which the goodwill is so allocated represents the lowest level within the Group at which the goodwill is monitored for internal management purpose and is not larger than an operating segment before aggregation.

Where goodwill forms part of a cash-generating unit and part of the operation within that unit is disposed of, the goodwill associated with the operation disposed of is included in the carrying amount of the operation. Goodwill disposed of in this circumstance is measured based on the relative recoverable amounts of the operation disposed of and the portion of the cash-generating unit retained.

5. SIGNIFICANT ACCOUNTING JUDGEMENTS, ESTMATES AND ASSUMPTIONS

The preparation of the Group's consolidated financial statements require management to make judgements, estimates and assumptions that affect the reported amounts of revenues, expenses, assets and liabilities, and the disclosure of contingent liabilities, at the end of the reporting period. However, uncertainty about these assumption and estimate could result in outcomes that require a material adjustment to the carrying amount of the asset or liability affected in future periods.

Judgement

In the process of applying the Group's accounting policies, management has made the following judgements, which have the most significant effect on the amounts recognized in the consolidated financial statements:

Revenue recognition

The Group based on trading patterns and whether the economic substance were expose to the sale of goods or services related to the significant risks and rewards, to determine whether the Group should be classified as the principal of the transaction or agent. When expose to the sale of goods or services related to the significant risks and rewards, the principal of the transaction should recognize the total receivables or received economic benefit as revenue; if determine as the agent, recognize the net transaction as revenue.

The Group provides electronic manufacturing services and integrated circuit packaging and testing manufacturing services, determined as to conform to the following indicators; it is recognized as total revenue collected:

(a) has the primary responsibility to the provision of goods or services provided
(b) assumed inventory risk
(c) assumed customer's credit risk

Estimates and assumptions

The key assumptions concerning the future and other key sources of estimation uncertainty at the reporting date, that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are discussed below.

(1) Fair value of financial instruments

Where the fair value of financial assets and financial liabilities recorded in the balance sheet cannot be derived from active markets, they are determined using valuation techniques including income approach (for example the discounted cash flows model) or market approach. Changes in assumptions about these factors could affect the reported fair value of the financial instruments. Please refer to Note 12 for more details.

(2) Pension benefits

The cost of post-employment benefit and the present value of the pension obligation under defined benefit pension plans are determined using actuarial valuations. An actuarial valuation involves making various assumptions. These include the determination of the discount rate and changes of the future salary etc. Please refer to Note 6 more details.

(3) Income tax

Uncertainties exist with respect to the interpretation of complex tax regulations and the amount and timing of future taxable income. Given the wide range of international business relationships and the long-term nature and complexity of existing contractual agreements, differences arising between the actual results and the assumptions made, or future changes to such assumptions, could necessitate future adjustments to tax income and expense already recorded. The Group establishes provisions, based on reasonable estimates, for possible consequences of audits by the tax authorities of the respective counties in which it operates. The amount of such provisions is based on various factors, such as experience of previous tax audits and differing interpretations of tax regulations by the taxable entity and the responsible tax authority. Such differences of interpretation may arise on a wide variety of issues depending on the conditions prevailing in the respective Group company's domicile.

Deferred tax assets are recognized for all carryforward of unused tax losses and unused tax credits and deductible temporary differences to the extent that it is probable that taxable profit will be available or there are sufficient taxable temporary differences against which the unused tax losses, unused tax credits or deductible temporary differences can be utilized. The amount of deferred tax assets determined to be recognized is based upon the likely timing and the level of future taxable profits and taxable temporary differences together with future tax planning strategies.

(4) Accounts receivables—estimation of impairment loss

The Group estimates the impairment loss of accounts receivables at an amount equal to lifetime expected credit losses. The credit loss is the present value of the difference between the contractual cash flows that are due under the contract (carrying amount) and the cash flows that expects to receive (evaluate forward looking information). However, as the impact from the discounting of short-term receivables is not material, the credit loss is measured by the undiscounted cash flows. Where the actual future cash flows are lower than expected, a material impairment loss may arise. Please refer to Note 6 for more details

(5) Inventories

Estimates of net realisable value of inventories take into consideration that inventories may be damaged, become wholly or partially obsolete, or their selling prices have declined. The estimates are based on the most reliable evidence available at the time the estimates are made. Please refer to Note 6 for more details.

6. CONTENTS OF SIGNIFICANT ACCOUNTS

(1) CASH AND CASH EQUIVALENTS

	Dec. 31, 2019	Dec. 31, 2018
Cash on hand	$207	$226
Demand deposits	1,701,205	762,085
Total	$1,701,412	$762,311

(2) NOTES RECEIVABLES

	Dec. 31, 2019	Dec. 31, 2018
Notes receivables	$1,770	$10,510
Less : loss allowance	(－)	(－)
Total	$1,770	$10,510

Notes receivables were not pledged.

The Group follows the requirement of IFRS 9 to assess the impairment. Please refer to Note 6.(20) for more details on loss allowance and Note 12 for details on credit risk.

(3) ACCOUNTS RECEIVABLES AND ACCOUNTS RECEIVABLES－AFFILIATES

(a) Details are as follows:

	Dec. 31 , 2019	Dec. 31 , 2018
Accounts receivables	$2,481,591	$2,177,906
Add : Pledged accounts receivables	－	224,523
Less : loss allowance	(26,267)	(17,329)
Subtotal	2,455,324	2,385,100
Accounts receivables -affiliates	229,557	695,348
Less : loss allowance	(－)	(1,200)
Subtotal	229,557	694,148
Total	$2,684,881	$3,079,248

(b) Accounts receivables are generally on 30-150 day terms. The total carrying amount as of December 31, 2019 and 2018 were $2,712,918 thousand and $3,108,287 thousand, respectively. Please refer to Note 6.(20) for more details on loss allowance of accounts receivables for the years ended December 31, 2019 and 2018. Please refer to Note 12 for more details on credit risk management.

(c) The Group signed loan agreements with the following banks and used its accounts receivable as securities for the loans. Certain of the Group's accounts receivable were under pledge to the banks.

The details of the loan agreements are as follows:

Dec. 31, 2019

None.

Dec. 31, 2018

Bank	Contract period	Banking facility	Loan amount	Factored amount
Far Eastern Bank	August 20, 2018 ~August 20, 2019	$135,000	$135,000	$224,523

(4) INVENTORIES, NET

(a) Details are as follows:

	Dec. 31, 2019	Dec. 31, 2018
Raw materials	$921,885	$1,280,124
Supplies	76,261	102,425
Work in progress	230,407	130,325
Finished goods	21,866	54,595
Total	$1,250,419	$1,567,469

(b)

	For the years ended December 31	
	2019	2018
Cost of inventories sold	$15,635,374	$14,606,096
Loss on a realizable value and obsolescence of inventories	54,177	—
Loss in inventory write-off	51,651	48,841
Inventory loss	1,001	1,118
Cost of Goods Sold	$15,742,203	$14,656,055

(c) As of December 31, 2019 and 2018, inventories were insured for $13,182,384 thousand and $12,372,050 thousand, respectively.

(d) No inventories were pledged.

(5) FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME-NON CURRENT

	Dec. 31, 2019	Dec. 31, 2018
Equity instrument investments measured at fair value through other comprehensive income-Non-current：		
Unlisted companies stocks	$226,860	$234,878

The Group classified certain of its financial assets as financial assets at fair value through other comprehensive income. Financial assets at fair value through other comprehensive income were not pledged.

(6) INVESTMENTS ACCOUNTED FOR USING THE EQUITY METHOD

(a) The group investments accounted for using the equity method are as follows:

		Dec. 31, 2019		Dec. 31, 2018	
Investee Company	Type of stock	Amount	Ownership	Amount	Ownership
Investments in associates:					
OSE PROPERTIES, INC.	Common stock	—	39.99%	—	39.99%
ATP ELECTRONICS, TAIWAN INC.	Common stock	$448,503	18.31%	$449,790	18.31%
INFOFAB, INC.	Common stock	10,880	13.32%	8,288	13.52%
SCS HIGHTECH INC.	Common stock	—	18.17%	—	18.17%
Total		$459,383		$458,078	

(b) Owing to the continue loss of OSE PROPERTIES, INC., the accumulated investment loss has made the book value of long-term investment declining to zero, the company will no longer recognize the investment loss.

(c) In September 2006, shares of the investee company ATP were exchanged with ATP TAIWAN so that the Company would hold 15.13% ownership of ATP TAIWAN after the exchange. The Group had purchased 1,929 thousand shares of treasury stocks in February 2008. So the Group held 18.31% ownership of ATP TAIWAN.

(d) SCS HIGHTECH INC. was written off as losses in 2004, and the company was rescinded based on the approval granted by Science Park Bureau on March 8, 2007 by Doc No.0960006126.

(e) Part of the shares in long-term equity investments has been pledged to the banks as securities for bank loans granted to the Group. Please refer to Note 8 for the more details.

(f) For the years ended December 31, 2019 and 2018, the related shares of investment income from the associates were $40,536 thousand and $68,497 thousand, respectively. For the years ended December 31, 2019 and 2018, the related shares of other comprehensive income from the associates were $1,081 thousand and $0, respectively.

(g) In year 2019 and 2018, the Group obtained cash dividend from ATP TAIWAN and InfoFab Co.,Ltd., for $35,422 thousand and $1,265 thousand, $33,210 thousand and $0, respectively. They are recorded as credit to “Investments accounted for using the equity method”.

(h)The Group’s investments by using the equity method are not published price quotations, which are not individually material .The aggregate financial information of the Group’s investments is as follows：.

	Dec. 31, 2019	Dec. 31, 2018
Total assets	$599,688	$705,194
Total liabilities	$209,478	$317,074

	For the years ended December 31	
	2019	2018
Revenue	$911,179	$956,895
Profit	40,536	68,497
Other comprehensive income (loss)	(2,177)	2,661
Total comprehensive income	38,359	71,158

(7) PROPERTY, PLANT AND EQUIPMENT

	Dec. 31, 2019	Dec. 31, 2018
Owner occupied property, plant and equipment	$6,123,791	$7,063,908
Property, plant and equipment leased out under operating leases	140,455	(Note)
Total	$6,264,246	$7,063,908

(Note)：The Group adopted IFRS 16 since January 1, 2019. The Group elected not to restate prior periods in accordance with the transition provision in IFRS 16.

(a) Owner occupied property, plant and equipment (applicable under IFRS 16 requirements)

	Land and land Improvements	Buildings	Machinery and equipment	Transportation equipment	Office equipment	Other equipment	Construction in progress and equipment awaiting examination	Total
Cost:								
As of Jan.1, 2019	–	$6,989,653	$16,323,320	$4,446	$67,158	$381,544	$144,197	$23,910,318
Additions	–	–	4,522	–	75	533	285,611	290,741
Disposals	–	–	(2,563,330)	–	(590)	(325)	–	(2,564,245)
Transfers	–	68,897	687,154	–	595	4,437	(336,095)	424,988
Exchange differences	–	–	(11,699)	(121)	(326)	(642)	(21)	(12,809)
As of Dec. 31, 2019	–	$7,058,550	$14,439,967	$4,325	$66,912	$385,547	$93,692	$22,048,993
Depreciation and impairment:								
As of Jan.1, 2019	–	$4,327,874	$12,302,527	$3,659	$64,932	$320,402	–	$17,019,394
Depreciation	–	222,154	1,179,429	247	965	24,913	–	1,427,708
Disposals	–	–	(2,550,837)	–	(585)	(293)	–	(2,551,715)
Transfers	–	–	40,739	–	505	–	–	41,244
Exchange differences	–	–	(10,613)	(101)	(298)	(417)	–	(11,429)
As of Dec. 31, 2019	–	$4,550,028	$10,961,245	$3,805	$65,519	$344,605	–	$15,925,202
Net carrying amount								
As of Jan. 1, 2019	–	$2,661,779	$4,020,793	$787	$2,226	$61,142	$144,197	$6,890,924
As of Dec. 31, 2019	–	$2,508,522	$3,478,722	$520	$1,393	$40,942	$93,692	$6,123,791

(Note)：The Group adopted IFRS 16 since January 1, 2019. The Group elected not to restate prior periods in accordance with the transition provision in IFRS 16.

(b) Property, plant and equipment leased out under operating leases (applicable under IFRS 16 requirements)

	Buildings
Cost:	
As of Jan. 1, 2019	$279,342
Additions	—
Disposals	—
Transfers	—
Exchange differences	—
As of Dec. 31, 2019	$279,342
Depreciation and impairment:	
As of Jan. 1, 2019	$132,203
Depreciation	6,684
Disposals	—
Transfers	—
Exchange differences	—
As of Dec. 31, 2019	$138,887
Net carrying amounts as at:	
As of Jan. 1, 2019	$147,139
As of Dec. 31, 2019	$140,455

(c) Property, plant and equipment (prior to the application of IFRS 16)

	Land and land Improvements	Buildings	Machinery and equipment	Transportation equipment	Office equipment	Rental assets	Leased assets	Other equipment	Construction in progress and equipment awaiting examination	Total
Cost:										
As of Jan. 1, 2018	—	$6,951,055	$15,716,783	$5,216	$67,024	$279,342	$158,211	$368,331	$17,108	$23,563,070
Additions	—	—	3,692	—	105	—	—	3,178	408,298	415,273
Disposals	—	(14,399)	(165,357)	(717)	(129)	—	—	(947)	—	(181,549)
Transfers	—	52,997	764,269	—	—	—	(124,350)	11,377	(281,187)	423,106
Exchange differences	—	—	3,933	(53)	158	—	—	(395)	(22)	3,621
As of Dec. 31, 2018	—	$6,989,653	$16,323,320	$4,446	$67,158	$279,342	$33,861	$381,544	$144,197	$24,223,521
Depreciation and impairment:										
As of Jan. 1, 2018	—	$4,125,549	$11,250,823	$3,914	$63,913	$125,518	$51,565	$295,122	—	$15,916,404
Depreciation	—	216,703	1,122,583	501	962	6,685	16,189	26,321	—	1,389,944
Disposals	—	(14,378)	(130,594)	(717)	(114)	—	—	(875)	—	(146,678)
Transfers	—	—	54,815	—	—	—	(59,738)	—	—	(4,923)
Exchange differences	—	—	4,900	(39)	171	—	—	(166)	—	4,866
As of Dec. 31, 2018	—	$4,327,874	$12,302,527	$3,659	$64,932	$132,203	$8,016	$320,402	—	$17,159,613
Net carrying amount:										
As of Jan. 1, 2018	—	$2,825,506	$4,465,960	$1,302	$3,111	$153,824	$106,646	$73,209	$17,108	$7,646,666
As of Dec. 31, 2018	—	$2,661,779	$4,020,793	$787	$2,226	$147,139	$25,845	$61,142	$144,197	$7,063,908

(d) Affects both the cash and non-cash items of investing activities：

Item	For the years end December 31	
	2019	2018
Acquisition of property, plant, and equipment expenditure:		
Increase of property, plant and equipment	$675,819	$838,379
Transfer to right-of-use assets	(33,861)	—
Increase of prepayment for equipment	(5,938)	118,667
(Increase) Decrease of payables on equipment	92,462	(184,083)
Cash expenditure	$728,482	$772,963

(e) Details of capitalized borrowing costs are as follows:

Item	For the years ended December 31	
	2019	2018
Prepayments for equipment	$4,980	$4,308
Capitalisation rate of borrowing costs	3.04%～3.95%	2.89%～3.78%

(f) As of December 31, 2019 and 2018, fixed assets were insured for $10,399,936 thousand and $11,607,638 thousand, respectively.

(g) Please refer to Note 8 for more details on property, plant and equipment under pledge.

(8) INVESTMENT PROPERTY

	Buildings
Cost：	
As of Jan. 1, 2019	$670,447
Transfer to property, plant and equipment	(39,911)
Exchange difference	(13,967)
As of Dec. 31, 2019	$616,569
As of Jan.1, 2018	$649,932
Exchange difference	20,515
As of Dec.31, 2018	$670,447
Depreciation and impairment:	
As of Jan. 1, 2019	$188,828
Depreciation	24,304

	Buildings
Transfer to property, plant and equipment	(32,542)
Exchange difference	(4,454)
As of Dec. 31, 2019	$176,136
As of Jan.1, 2018	$155,083
Depreciation	23,819
Additions from other non-current assets	4,923
Exchange difference	5,003
As of Dec.31, 2018	$188,828
Net carrying amount：	
As of Dec.31, 2019	$440,433
As of Dec.31, 2018	$481,619

No investment properties were pledged.

The fair value of investment property is $486,819 thousand and $503,470 thousand as of December 31, 2019 and 2018, respectively. The fair value has been determined based on valuations performed by an independent appraiser and on transactions observable in the market. The investment property has no rent revenue.

(9) INTANGIBLE ASSETS

(a) As of December 31, 2019 and 2018, the cost of the computer software, original cost, accumulated amortization and amount of amortization in the book of the Group is listed as below:

	Computer software
Cost:	
As of Jan. 1, 2019	$343,374
Addition	32,657
Transfer	1,519
Other changes	(15)
Exchange differences	—
As of Dec. 31, 2019	$377,535
As of Jan. 1, 2018	$271,625
Addition	63,714
Transfer	—
Other changes	8,035
Exchange differences	—
As of Dec. 31, 2018	$343,374

	Computer software
Amortization and impairment:	
As of Jan. 1, 2019	$253,741
Amortization	65,339
Exchange differences	10
As of Dec. 31, 2019	$319,090
As of Jan. 1, 2018	$191,945
Amortization	61,792
Exchange differences	4
As of Dec. 31, 2018	$253,741
Net carrying amount as of:	
Dec. 31, 2019	$58,445
Dec. 31, 2018	$89,633

(b) Amortization expense of intangible assets under the statement of comprehensive income:

	For the years ended December 31	
	2019	2018
Operating costs	$38,575	$38,371
Operating expenses	$26,764	$23,421

(10) PREPAYMENTS

Detail are as follows :

	Dec. 31, 2019	Dec. 31, 2018
Current assets－prepayments		
Prepaid expenses	$46,696	$46,817
Other prepayments	6,426	4,631
Total	$53,122	$51,448
Non-current assets－prepayments for equipment：		
Prepayment for equipment	$151,901	$180,354

(11) LONG-TERM RECEIVABLES-AFFILIATES

(a) Details are as follows:

	Dec. 31, 2019	Dec. 31, 2018
Loan receivable -PROPERTIES	$93,315	$95,300
Less :loss allowance	(－)	(－)
Net	$93,315	$95,300

(c) OSE PHILIPPINES, INC. lent USD 4,387 thousand to OSE PROPERTIES Inc. in July 31, 1996. OSE PROPERTIES Inc. disposed of part of the land and returned USD 1,285 thousand in the first quarter of 2015. The principal was USD 3,102 thousand as of December 31, 2019. The interest rates for the years ended December 31, 2019 and 2018 were both 2.50%. The contract periods were 10 years and may be extended to another 10 years, if necessary.

(12) SHORT-TERM LOANS

(a) Details are as follows:

Items	Dec. 31, 2019	Dec. 31, 2018
L/C	$315,900	$798,069
Unsecured bank loans	2,057,866	1,924,803
Mortgage loan on machine and equipment	—	83,985
Total	$2,373,766	$2,806,857

(b) The ranges of interest rates and the due dates:

	Dec. 31, 2019	Dec. 31, 2018
Ranges of interest rates	1.55%～3.17%	1.06%～4.25%
Due dates	January 9, 2020～ December 17, 2020	January 14, 2019～ November 30, 2019

(c) As of December 31, 2019 and 2018, the Group's unused short-term lines of credits amount to $1,394,036 thousand and $614,906 thousand, respectively.

(d) Part of property, plant and equipment, stocks, time deposits, and deposits reserved for repayment are pledged as security for the Group's short-term borrowings. Please refer to Note 8 for more details.

(13) SHORT-TERM NOTES PAYABLE

(a) Details are as follows:

	Dec. 31, 2019	Dec. 31, 2018
Par value of commercial papers	$380,000	$350,000
Less : Discount for short-term notes payable	(790)	(390)
Net	$379,210	$349,610

(b) The ranges of interest rates and the due dates:

	Dec. 31, 2019	Dec. 31, 2018
Ranges of interest rates	1.788%～1.858%	1.938%～2.088%
Due dates	January 9, 2020～ February 27, 2020	January 3, 2019～ March 7, 2019

(14) LONG-TERM LOANS

(a) Details are as follows:

Items	Dec. 31, 2019	Dec. 31, 2018
Mortgage loan	$2,095,326	$3,053,515
Less: Due within one year	(1,190,490)	(1,340,270)
Net	$904,836	$1,713,245

(b) The ranges of interest rates and the due dates:

	Dec. 31, 2019	Dec. 31, 2018
Ranges of interest rates	1.80%～3.30%	1.80%～4.65%
Due dates	October 31, 2020～ August 15, 2023	January 26, 2019～ August 15, 2023

(c) Part of property, plant and equipment, and deposits reserved for repayment are pledged as security for the Group’s long-term borrowings. Please refer to Note 8 for more details.

(15) LONG-TERM LEASE PAYABLE

The Group has finance leases contracts for various items of machinery. These leases contain purchase options. Future minimum lease payments under finance leases together with the present value of the net minimum lease payments are as follows:

	Dec. 31, 2019		Dec. 31, 2018	
	Minimum payments	Present value of payments	Minimum payments	Present value of payments
Within one year			$2,617	$2,610
After one year but not more than five years			—	—
Total minimum lease payments			2,617	2,610
Less : finance charges on finance lease			(7)	—
Present value of minimum lease payments			$2,610	$2,610
Current				$2,610
Non-current				—

(16) POST-EMPLOYMENT BENEFITS

(a) Defined contribution plan

The Company and its domestic subsidiaries adopt a defined contribution plan in accordance with the Labor Pension Act of the R.O.C. Under the Labor Pension Act, the Company and its domestic subsidiaries will make monthly contributions of no less than 6% of the employees' monthly wages to the employees' individual pension accounts. The Company and its domestic subsidiaries have made monthly contributions of 6% of each individual employee's salaries or wages to employees' pension accounts.

Subsidiaries located in the People's Republic of China will contribute social welfare benefits based on a certain percentage of employees' salaries or wages to the employees' individual pension accounts.

Pension benefits for employees of overseas subsidiaries and branches are provided in accordance with the local regulations.

Expenses under the defined contribution plan for the years ended December 31, 2019 and 2018 are $113,103 thousand and $102,285 thousand, respectively.

(b) Defined benefits plan

The Company and its domestic subsidiaries adopt a defined benefit plan in accordance with the Labor Standards Act of the R.O.C. The pension benefits are disbursed based on the units of service years and the average salaries in the last month of the service year. Two units per year are awarded for the first 15 years of services while one unit per year is awarded after the completion of the 15th year. The total units shall not exceed 45 units. Under the Labor Standards Act, the Company and its domestic subsidiaries contribute an amount equivalent to 2% of the employees' total salaries and wages on a monthly basis to the pension fund deposited at the Bank of Taiwan in the name of the administered pension fund committee. Before the end of each year, the Company and its domestic subsidiaries assess the balance in the designated labor pension fund. If the amount is inadequate to pay pensions calculated for workers retiring in the same year, the Company and its domestic subsidiaries will make up the difference in one appropriation before the end of March the following year.

Expenses under the defined benefit obligation for the years ended December 31, 2019 and 2018 are $59,735 thousand and $59,828 thousand, respectively.

The Ministry of Labor is in charge of establishing and implementing the fund utilization plan in accordance with the Regulations for Revenues, Expenditures, Safeguard and Utilization of the Labor Retirement Fund. The pension fund is invested in-house or under mandation, based on a passive-aggressive investment strategy for long-term profitability. The Ministry of Labor establishes checks and risk management mechanism based on the assessment of risk factors including market risk, credit risk and liquidity risk, in order to maintain adequate manager flexibility to achieve targeted return without over-exposure of risk. With regard to utilization of the pension fund, the minimum earnings in the annual distributions on the final financial statement shall not be less than the earnings attainable from the amounts accrued from two-year time deposits with the interest rates offered by local banks. Treasury Funds can be used to cover the deficits after the approval of the competent authority. As the Company does not participate in the operation and management of the pension fund, no disclosure on the fair value of the plan assets categorized in different classes could be made in accordance with paragraph 142 of IAS 19. The Group expects to contribute $85,943 thousand to its defined benefit plan during the 12 months beginning after December 31, 2019.

The average duration of the defined benefits plan obligation as of December 31, 2019 and 2018, is the end of the year of 2029 and 2028, respectively.

Pension costs recognized in profit or loss for the years ended December 31, 2019 and 2018:

	For the years ended December 31	
	2019	2018
Current period service costs	$7,116	$7,814
Net interest expense of net defined benefit liability (asset)	5,009	7,475
Expected return on plan assets	—	—
Total	$12,125	$15,289

Changes in the defined benefit obligation and fair value of plan assets are as follows:

	Dec. 31, 2019	Dec. 31, 2018	Jan. 1, 2018
Present value of the defined benefit obligation	$1,007,077	$1,019,883	$1,022,458
Plan assets at fair value	(576,227)	(523,987)	(484,675)
Other non-current liabilities - Accrued pension liabilities recognized on the consolidated balance sheets	$430,850	$495,896	$537,783

Reconciliation of liability (asset) of the defined benefit plan is as follows:

	Present value of the defined benefit obligation	Fair value of plan assets	Net defined benefit liability (asset)
As of Jan. 1, 2018	$1,022,458	($484,675)	$537,783
Current period service costs	7,814	—	7,814
Net interest expense (income)	14,211	(6,737)	7,474
Subtotal	22,025	(6,737)	15,288
Remeasurements of the net defined benefit liability (asset):			
Actuarial gains and losses arising from changes in demographic assumptions	2,674	—	2,674
Actuarial gains and losses arising from changes in financial assumptions	38,784	—	38,784
Experience adjustments	12,752	—	12,752
Return on plan assets	—	(11,642)	(11,642)
Subtotal	54,210	(11,642)	42,568
Payments from the plan	(78,810)	78,810	—
Contribution by employer	—	(99,743)	(99,743)
As of Dec. 31, 2018	1,019,883	(523,987)	495,896
Current period service costs	7,116	—	7,116
Net interest expense (income)	10,301	(5,292)	5,009
Subtotal	17,417	(5,292)	12,125
Remeasurements of the net defined benefit liability (asset):			
Actuarial gains and losses arising from changes in demographic assumptions	(2,761)	—	(2,761)
Actuarial gains and losses arising from changes in financial assumptions	29,224	—	29,224
Experience adjustments	992	—	992
Return on plan assets	—	(18,683)	(18,683)
Subtotal	27,455	(18,683)	8,772
Payments from the plan	(57,678)	57,678	—
Contribution by employer	—	(85,943)	(85,943)
As at Dec. 31, 2019	$1,007,077	($576,227)	$430,850

The following significant actuarial assumptions are used to determine the present value of the defined benefit obligation:

	Dec. 31, 2019	Dec. 31, 2018
Discount rate	0.76%	1.01%
Expected rate of salary increases	1.40%	1.40%

Sensitivity analysis for significant assumption:

	For the years ended December 31			
	2019		2018	
	Increase in defined benefit obligation	Decrease in defined benefit obligation	Increase in defined benefit obligation	Decrease in defined benefit obligation
Discount rate increase by 0.5%	—	$50,693	—	$50,647
Discount rate decrease by 0.5%	$80,888	—	$76,629	—
Future salary increase by 0.5%	$79,937	—	$75,851	—
Future salary decrease by 0.5%	—	$50,633	—	$50,699

The sensitivity analyses above are based on a change in a significant assumption (for example: change in discount rate or future salary), keeping all other assumptions constant. The sensitivity analyses may not be representative of an actual change in the defined benefit obligation as it is unlikely that changes in assumptions would occur in isolation of one another. There was no change in the methods and assumptions used in preparing the sensitivity analyses compared to the previous period.

(17) EQUITY

(a) Common stock

i. The Company had increased capital by cash by $1,800,000 thousand with par value $10 per share and issued price $9.2 on May 30, 2007. The rights and obligations of new shares by private placement are the same as those of common shares. Ownership of shares by private placement cannot be transferred to others within three years since issuance per Security and Exchange regulations.

ii. The board of directors of the Company agreed on June 21, 2011 to increase capital by issuing common stocks for cash in order to repay loan and improve the Company financial structure. A total of 200,000 thousand shares of common stocks, with face value of $10 per share, will be issued for a total of $2,000,000 thousand. Approval has been granted by Financial Supervisory Commission on July 22, 2011 by Doc No. 1000030977. In the event of existing shareholders or employees forfeiting purchasing rights or the event of shortage of subscription of share, the board of directors will authorize the chair of directors to contact a designated person for purchases. As of August 2, 2011, the board of directors agreed stocks will be issued with the issuance price of NTD 6.4 per share with the official issuance date of September 5, 2011. As of September 19, 2011, registration for the issuance of new stocks is complete.

iii. The Board of shareholders' meeting of the Company agreed on June 29, 2018 to reduce capital $2,536,872 thousand for cover accumulated deficits in order to improve the Company's financial structure. The ratio of reduction capital was 31.4742285%, and it was declared effective by Financial Supervisory Commission on August 8, 2018. The record date for reverse split was at September 30, 2018, and the amendment of registration was completed at October 8, 2018.

iv. To reward employees, the Board of shareholders' meeting of the Company agreed on June 29 ,2018 to issue restricted stocks for employees by $50,000 thousand of common stock with par value $10 per share , and it was declared effective by Financial Supervisory Commission on June 10 , 2019.The record date for capital increase was at November 25, 2019, and the amendment of registration was completed at December 10, 2019.

v. As of December 31, 2019, and 2018, the authorized capitals were $20,000,000 thousand. Issued capital were $5,573,285 thousand and $5,523,285 thousand, with 557,328,533 shares and 552,328,533 shares respectively. Each share is at a par value of NT$10.

(b) Additional paid-in capital

	Dec. 31, 2019	Dec. 31, 2018
Form shares of changes in equities of subsidiaries	$5,717	$5,833
The differences between the fair value of consideration paid or received from acquiring or disposing subsidiaries and the carrying amounts of the subsidiaries	16,940	16,940
Share of changes in net assets of associates and joint ventures accounted for using the equity method	(2,675)	(2,669)
Restricted stocks for employees	25,729	—
Total	$45,711	$20,104

i. According to the Company Act, the capital reserve shall not be used except for making good the deficit of the company. When a company incurs no loss, it may distribute the capital reserves related to the income derived from the issuance of new shares at a premium or income from endowments received by the company. The distribution could be made in cash or in the form of dividend shares to its shareholders in proportion to the number of shares being held by each of them. Additional paid-in capital arising from long-term equity investment can not be used for any purpose.

ii. According to the prevailing laws and regulations, each year, the amount of capital increase transferred from capital reserve arising from premiums on issuance of capital stock and donations cannot exceed 10% of the Company's total issued capital.

(c) Retained earnings and dividend policies

According to the Company's original Articles of Incorporation, current year's earnings, if any, shall be distributed in the following order:

i. Payment of all taxes and dues;
ii. Offset prior years' operation losses;
iii. Set aside 10% of the remaining amount as legal reserve;
iv. Set aside or reverse special reserve in accordance with the requirements for operating and law and regulations;

v. The remaining balance combined with the undistributed earnings accumulated during previous years shall be distributed to the shareholders as dividends.

The Company shall take into account the changing environment of the industry and development stage of the Company in meeting the needs of capital in the future and in establishing long-term financial planning together with satisfying the shareholders' demand for cash. The earnings distributed for the current year shall not be lower than 10% of accumulated distributable earnings and shall not be distributed if the accumulated distributable earnings is lower than 1% of contributed capital. Cash dividends distributed shall not be lower than 10% of the dividends distributed.

According to the Company Act, the Company needs to set aside amount to legal reserve unless where such legal reserve amounts to the total authorized capital. The legal reserve can be used to make good the deficit of the Company. When the Company incurs no loss, it may distribute the portion of legal serve which exceeds 25% of the paid-in capital by issuing new shares or by cash in proportion to the number of shares being held by each of the shareholders.

Following the adoption of TIFRS, the FSC on April 6, 2012 issued Order No. Financial-Supervisory-Securities-Corporate-1010012865, which sets out the following provisions for compliance:

On a public company's first-time adoption of the TIFRS, for any unrealized revaluation gains and cumulative translation adjustments (gains) recorded to shareholders' equity that the company elects to transfer to retained earnings by application of the exemption under IFRS 1, the company shall set aside an equal amount of special reserve. Following a company's adoption of the TIFRS for the preparation of its financial reports, when distributing distributable earnings, it shall set aside to special reserve, from the profit/loss of the current period and the undistributed earnings from the previous period, an amount equal to "other net deductions from shareholders' equity for the current fiscal year, provided that if the company has already set aside special reserve according to the requirements in the preceding point, it shall set aside supplemental special reserve based on the difference between the amount already set aside and other net deductions from shareholders' equity. For any subsequent reversal of other net deductions from shareholders' equity, the amount reversed may be distributed.

Details of 2019 and 2018 earnings distribution and dividends per share as approved and resolved by the board of directors' meeting and shareholders' meeting on March 27, 2020 and June 18, 2019, respectively, are as follows :

	Appropriation of earnings		Dividend per share(NT $)	
	2019	2018(Note)	2019	2018(Note)
Legal reserve	$53,719	—		
Special reserve	$18,729	—		
Cash dividends	$82,849	—	$0.15	—

(Note)：The Company still had accumulated deficit in 2018. As a result, the Company did not distribute earnings.

Please refer to Note 6.(22) for further details on employees' compensation and remuneration to directors.

(18) SHARE-BASED PAYMENT PLANS

Restricted stocks plan for employees

The Company issued restricted stocks for employees on November 25, 2019 at $0 per share in the amount of $50,000 thousand, totaling 5,000 thousand shares. The share price at grant date was $15.8 per share.

Restriction on the rights and vesting conditions of restricted stocks for employees is as follows:

a. The restricted stock awards the employees will obtain was kept by the designated trust institution as trustee, which the employee cannot request to return the restricted stock awards for any reasons or ways.
b. Before accomplishing the vesting conditions, the employee cannot sell, pledge, transfer, gift, set or dispose in other ways, and they have no right to be allotted or obtaining dividends. Other rights are similar with the capital that has been issued.
c. Before the employee accomplish the vesting conditions, the attendance, proposal, speaking, right of voting, and other matters associated with shareholders meeting were executed based on the trust custody contracts.
d. From the book closure date of issuance of bonus shares, cash dividends, issuance of common stock for cash, shareholders meeting regulated by Article 165-3 of company law, or other facts that has occurred to the date of rights allocation. The unrestricted stocks of the employees that have accomplished the vesting conditions during the aforementioned period still have no rights to obtain dividends or allotment.

For the years ended December 31, 2019, the Company incurred expenses of $4,428 thousand for the share-based payment transactions.

(19) OPERATING REVENUE

The detail are as follow:

	For the years ended December 31	
	2019	2018
Revenue from contracts with customers		
Sales of IC packaging and testing service	$10,101,028	$8,452,652
Sales of electronics manufacturing service	6,882,860	6,096,146
Other operating revenue	531,257	639,394
Total	$17,515,145	$15,188,192

(a) Disaggregation of revenue

For the year ended December 31, 2019	Semiconductor Group	EMS Group	Total
Sales of IC packaging and testing service	$10,101,028	—	$10,101,028
Sales of electronics manufacturing service	—	$6,882,860	6,882,860
Other operating revenue	426,456	104,801	531,257
Total	$10,527,484	$6,987,661	$17,515,145
Timing of revenue recognition:			
Over time	$10,101,028	—	$10,101,028
At a point in time	426,456	$6,987,661	7,414,117
Total	$10,527,484	$6,987,661	$17,515,145

For the year ended December 31, 2018	Semiconductor Group	EMS Group	Total
Sales of IC packaging and testing service	$8,533,978	—	$8,533,978
Sales of electronics manufacturing service	—	$6,096,146	6,096,146
Other operating revenue	481,795	76,273	558,068
Total	$9,015,773	$6,172,419	$15,188,192
Timing of revenue recognition:			
Over time	$8,533,978	—	$8,533,978
At a point in time	481,795	$6,172,419	6,654,214
Total	$9,015,773	$6,172,419	$15,188,192

(b) Contract balances

i. Contract assets-current

	Dec. 31, 2019	Dec. 31, 2018	Jan. 1, 2018
Sales of IC packaging and testing service	$302,982	$425,684	$212,604

As of December 31, 2019 and 2018, the Group does not have an unconditional right to receive the consideration in the contract and transferred to accounts receivables at the reporting date were $302,982 thousand and $425,684 thousand, respectively.

ii. Contract liabilities-current

	Dec. 31, 2019	Dec. 31, 2018	Jan. 1, 2018
Sales of goods	$29,439	$15,821	$51,752

As of December 31, 2019 and 2018, the Group recognized $3,989 thousand and $16,583 thousand, respectively, in revenues from the contract liabilities balance at the beginning of the period.

iii. Transaction price allocated to unsatisfied performance obligations

None.

iv. Assets recognized from costs to fulfil a contract

None.

(20) EXPECTED CREDIT LOSSES

	For the years ended December 31	
	2019	2018
Operating expenses-expected credit losses		
Accounts receivable and contract assets	$7,742	$15,145
Non-operating income and expenses -expected credit losses		
Other receivable	1,148	—
Total	$8,890	$15,145

Please refer to Note 12 for more details on credit risk.

The Group measures the loss allowance of its contract assets and accounts receivables at an amount equal to lifetime expected credit losses. The assessment of the Group’s loss allowance as of December 31, 2019 and 2018 are as follow:

The Group considers the grouping of contract assets and accounts receivables by counterparties’ credit rating, by geographical region and by industry sector and its loss allowance is measured by using a provision matrix, details are as follow:

As of December 31, 2019

Semiconductor Group

	Not yet due (Note)	Overdue: Within 30 days	31-60 days	61-90 days	91-180 days	After 181 days	Total
Gross carrying amount	$1,613,762	$131,993	$11,053	$11,059	$5,995	$4,139	$1,778,001
Loss ratio	0%~0.35%	0%~2.13%	0%~19.86%	0%~50.03%	0%~69.01%	100%	
Lifetime expected credit losses	3,121	2,608	2,160	5,533	4,137	4,139	21,698
Carrying amount of trade receivables	$1,610,641	$129,385	$8,893	$5,526	$1,858	–	$1,756,303

EMS Group

	Not yet due (Note)	Overdue: Within 30 days	31-60 days	61-90 days	91-180 days	After 181 days	Total
Gross carrying amount	$1,151,163	$50,356	$24,111	$8,818	$2,009	$1,442	$1,237,899
Loss ratio	0%~0.04%	0%~1.55%	0%~4.01%	0%~14.05%	0%~25%	100%	
Lifetime expected credit losses	458	714	769	804	382	1,442	4,569
Carrying amount of trade receivables	$1,150,705	$49,642	$23,342	$8,014	$1,627	–	$1,233,330

As of December 31, 2018

Semiconductor Group

	Not yet due (Note)	Overdue: Within 30 days	31-60 days	61-90 days	91-180 days	After 181 days	Total
Gross carrying amount	$2,103,807	$188,799	$13,441	$1,379	$8,172	$4,483	$2,320,081
Loss ratio	0%~0.19%	0%~2.76%	0%~15.21%	0%~50.26%	0.01%~85.63%	100%	
Lifetime expected credit losses	1,847	1,902	1,306	660	6,964	4,483	17,162
Carrying amount of trade receivables	$2,101,960	$186,897	$12,135	$719	$1,208	–	$2,302,919

EMS Group

	Not yet due (Note)	Overdue: Within 30 days	31-60 days	61-90 days	91-180 days	After 181 days	Total
Gross carrying amount	$1,152,403	$55,746	$1,690	$3,282	$128	$641	$1,213,890
Loss ratio	0%~0.01%	0%~0.13%	0%~10.05%	0%~16.12%	0%~46.39%	100%	
Lifetime expected credit losses	114	65	–	521	26	641	1,367
Carrying amount of trade receivables	$1,152,289	$55,681	$1,690	$2,761	$102	–	$1,212,523

(Note): The Group’s note receivables are not overdue.

The movement in the provision for impairment of contract assets, note receivables and trade receivables for the years ended December 31, 2019 and 2018 is as follows:

	Contract assets	Notes receivables	Accounts receivables
Bal. as of Jan. 1, 2019	–	–	$18,529
Addition/(reversal) for the current period	–	–	7,742
Exchange differences	–	–	(4)
Bal. as of Dec. 31, 2019	–	–	$26,267
Bal. as of Jan. 1, 2018 (in accordance with IAS 39)	–	–	$3,373
Transition adjustment to retained earnings as of Jan. 1, 2018	–	–	–
Beginning balance as of Jan.1 ,2018 (in accordance with IFRS 9)	–	–	3,373
Addition for the current period	–	–	15,145
Exchange differences	–	–	11
Bal. as of Dec. 31, 2018	–	–	$18,529

(21) LEASES

A. Group as a lessee (applicable to the disclosure requirement under IFRS 16)

The Group leases various properties, including real estate such as land and buildings, transportation equipment and other equipment. The lease terms range from 2 to 51 years.

The Group's leases effect on the financial position, financial performance and cash flows are as follow:

(a) Amounts recognized in the balance sheet

I. Right-of-use assets

The carrying amount of right-of-use assets

	Dec. 31, 2019	Dec. 31, 2018 (Note)
Land	$217,504	
Buildings	27,550	
Transportation equipment	8,793	
Other equipment	–	
Total	$253,847	

(Note): The Group adopted IFRS 16 since January 1, 2019. The Group elected not to restate prior periods in accordance with the transition provision in IFRS 16.

For the years ended December 31, 2019, the Group's additions to right-of-use assets amounting to $86,031 thousand.

II. Lease liabilities

	Dec. 31, 2019	Dec. 31, 2018 (Note)
Current	$25,725	
Non-current	218,681	
Lease liabilities	$244,406	

Please refer to Note 6.(23)(c) for the interest on lease liabilities recognized for the years ended December 31, 2019 and refer to Note 12.(5) Liquidity Risk Management for the maturity analysis for lease liabilities as of December 31, 2019.

(Note): The Group adopted IFRS 16 since January 1, 2019. The Group elected not to restate prior periods in accordance with the transition provision in IFRS 16.

(b) Amounts recognized in the statement of profit or loss

Depreciation charge for right-of-use assets

	For the years ended December 31	
	2019	2018 (Note)
Land	$15,255	
Buildings	10,199	
Transportation equipment	4,679	
Other equipment	687	
Total	$30,820	

(Note): The Group adopted IFRS 16 since January 1, 2019. The Group elected not to restate prior periods in accordance with the transition provision in IFRS 16.

(c) Income and costs relating to leasing activities

	For the years ended December 31	
	2019	2018 (Note)
The expenses relating to short-term leases	$10,587	
The expenses relating to leases of low-value assets (Not including the expenses relating to short-term leases of low-value assets)	3,396	

(Note): The Group adopted IFRS 16 since January 1, 2019. The Group elected not to restate prior periods in accordance with the transition provision in IFRS 16.

(d) Cash outflow relating to leasing activities

For the years ended December 31, 2019, the Group's total cash outflows for leases amounting to $44,033 thousand.

B. Operating lease commitments - Group as a lessee (applicable to the disclosure requirement in IAS 17)

The Group has entered into a series of land rental agreements with the government which will expire between January 31, 2020 and April 30, 2025. The Company could apply for lease renewal three months prior to the expiry date. If the Company fails to do so, the land shall be returned to the government and the building on the land shall be sold to another approved exporting enterprise within six months after the expiry date. If the Company fails to complete all the above-mentioned procedures within the prescribed six months, the government has the right to dispose the property on the land on the behalf of the Company. The government has the right to adjust the rent based on the publicly announced land value. The government also has the right to terminate the contract if the Company breaches the contract or fails to pay the rent over four months or violates the civil law or the land law.

According to the non-cancellable operating leases, the future minimum rentals payable as of December 31, 2018 are as follows:

	Dec. 31, 2019 (Note)	Dec. 31, 2018
Within one year		$13,135
After one year but not more than five years		35,425
More than five years		26,139
Total		$74,699

Operating lease expenses recognized are as follows:

	For the years ended December 31	
	2019 (Note)	2018
Minimum lease payments		$13,135

(Note): The Group adopted IFRS 16 since January 1, 2019. The Group elected not to restate prior periods in accordance with the transition provision in IFRS 16.

C. Group as a lessor (applicable to the disclosure requirement in IFRS 16)

Leases of owned investment properties are classified as operating leases as they do not transfer substantially all the risks and rewards incidental to ownership of underlying assets.

	For the years ended December 31	
	2019	2018 (Note)
Lease income for operating leases		
Income relating to fixed lease payments and variable lease payments that depend on an index or a rate	$24,625	

(Note): The Group adopted IFRS 16 since January 1, 2019. The Group elected not to restate prior periods in accordance with the transition provision in IFRS 16.

Please refer to Note 6.(7) for relevant disclosure of property, plant and equipment for operating leases under IFRS 16. For operating leases entered by the Group, the undiscounted lease payments to be received and a total of the amounts for the remaining years as of December 31, 2019 are as follow:

	Dec. 31, 2019	Dec. 31, 2018 (Note)
Not later than one year	$24,092	
Later than one year but not later than two years	21,610	
Later than two years but not later than three years	14,296	
Later than three years but not later than four years	4,254	
Later than four years but not later than five years	3,191	
Later than five years	—	
Total	$67,443	

(Note): The Group adopted IFRS 16 since January 1, 2019. The Group elected not to restate prior periods in accordance with the transition provision in IFRS 16.

D. Operating lease commitments - Group as a lessor (applicable to the disclosure requirement in IAS 17)

The Group has signed non-cancellable operating leases. There are no restrictions placed upon the Group by entering into these leases. Future minimum rentals payable as at December 31, 2018 are as follows:

	Dec. 31, 2019 (Note)	Dec. 31, 2018
Not later than one year		$24,557
Later than one year and not later than five years		64,077
Later than five years		3,190
Total		$91,824

(Note): The Group adopted IFRS 16 since January 1, 2019. The Group elected not to restate prior periods in accordance with the transition provision in IFRS 16.

(22) SUMMARY STATEMENTS OF EMPLOYEE BENEFITS, DEPRECIATION AND AMORTIZATION EXPENSES BY FUNCTION

	For the years ended December 31					
	2019			2018		
	Operating costs	Operating expenses	Total amount	Operating costs	Operating expenses	Total amount
Employee benefits expense						
Salaries	$2,694,262	$493,854	$3,188,116	$2,296,555	$380,040	$2,676,595
Pension	145,355	27,662	173,017	136,089	26,024	162,113
Labor and health insurance	300,198	46,493	346,691	259,697	42,585	302,282
Other employee benefits expense	166,970	55,098	222,068	152,534	50,582	203,116
Depreciation	1,398,951	92,074	1,491,025	1,353,914	61,069	1,414,983
Amortization	38,575	26,764	65,339	38,371	23,421	61,792

According to the resolution, the employee's compensation and remuneration to directors is based on the current year's earnings, which should be used first to cover accumulated deficit, if any, and then the remaining balance shall be distributed: 8%~12% as employees' compensation, and no more than 3% as remuneration to directors.

The distribution ratio of employee's compensation and remuneration to directors and employee's compensation may be made in the form of stocks or cash, which shall be determined by a resolution adopted by a majority vote at a board of directors meeting attended by two-thirds or more of the directors and be reported at a shareholders' meeting. Cash or stock dividends as bonus to employees shall only be given to employees who satisfy certain conditions.

Based on the profit of the years ended December 31, 2019, the Company estimated the employees' compensation and remuneration to directors amounts to $60,921 thousand and $11,423 thousand, respectively, which are accounted for as salary expense.

As of December 31, 2018, the Company still had accumulated deficit. As a result the Company did not estimate the amounts of the employees' compensation and remuneration to directors.

As of December 31, 2019 and 2018, the total number of employees of the Group were 6,757 and 6,529 respectively.

Information on the Board of Directors' resolution regarding the employees' compensation and remuneration to directors can be obtained from the "Market Observation Post System" on the website of the TWSE.

(23) NON-OPERATING INCOME AND EXPENSES

(a) Other income

	For the years ended December 31	
	2019	2018
Rental income	$24,626	$25,167
Interest income	5,951	8,754
Other income	19,887	40,325
Total	$50,464	$74,246

(b) Other gains and losses

	For the years ended December 31	
	2019	2018
Gains on disposal of property, plant and equipment	$36,367	$6,187
Foreign exchange (losses) gains, net	(48,117)	14,222
Gains on financial assets at fair value through profit or loss	—	7,371
Other losses	(2,249)	(1,010)
Total	($13,999)	$26,770

(c) Finance costs

	For the years ended December 31	
	2019	2018
Interest on borrowings from bank	($110,459)	($125,034)
Interest on borrowings from others	(41)	(952)
Interest on lease liabilities	(5,232)	(Note)
Total	($115,732)	($125,986)

(Note): The Group adopted IFRS 16 since January 1, 2019. The Group elected not to restate prior periods in accordance with the transition provision in IFRS 16.

(24) COMPONENTS OF OTHER COMPREHENSIVE INCOME

For the years ended December. 31, 2019

	Arising during the period	Reclassification adjustments during the period	Other comprehensive income, before tax	Income tax relating to components of other comprehensive income	Other comprehensive income, net of tax
Items that will not be reclassified subsequently to profit or loss:					
Remeasurements of defined benefit plans	($8,772)	—	($8,772)	$1,754	($7,018)
Unrealized gains (losses) from equity instruments investment measured at fair value through other comprehensive income	(8,018)	—	(8,018)	416	(7,602)
Items that may be reclassified subsequently to profit or loss:					
Exchange differences arising on translating of foreign operation	(18,965)	—	(18,965)	3,793	(15,172)
Share of other comprehensive income of associates and joint ventures accounted for using the equity method	1,081	—	1,081	—	1,081
Total of other comprehensive income					
For the years ended December 31, 2018	($34,674)	—	($34,674)	$5,963	($28,711)

For the years ended December. 31, 2018

	Arising during the period	Reclassification adjustments during the period	Other comprehensive income, before tax	Income tax relating to components of other comprehensive income	Other comprehensive income, net of tax
Items that will not be reclassified subsequently to profit or loss:					
Remeasurements of defined benefit plans	($42,568)	—	($42,568)	$10,708	($31,860)
Unrealized gains (losses) from equity instruments investment measured at fair value through other comprehensive income	(22,180)	—	(22,180)	(1,928)	(24,108)
Items that may be reclassified subsequently to profit or loss:					
Exchange differences arising on translating of foreign operation	17,469	—	17,469	(7,408)	10,061
Total of other comprehensive income	($47,279)	—	($47,279)	$1,372	($45,907)

(25) INCOME TAX

Based on the amendments to the Income Tax Act announced on February 7, 2018, the Company's applicable corporate income tax rate for the years ended December 31, 2018 has changed from 17% to 20%. The corporate income surtax on undistributed retained earnings has changed from 10% to 5%.

A. The major components of income tax (expense) income are as follows:

(a). Income tax (expense) income recognized in profit or loss

	For the years ended December 31	
	2019	2018
Current income tax (expense) benefit:		
Current income tax charge	($1,617)	($7,306)
Adjustments in respect of current income tax of prior periods	(1,017)	280

	For the years ended December 31	
	2019	2018
Deferred tax income (expense):		
Deferred tax (expense) relating to origination and reversal of temporary differences	(3,764)	(80,207)
Deferred tax (expense) income relating to origination and reversal of tax loss and tax credit	(141,936)	85,235
Deferred tax income relating to change in tax rate	—	253,144
Others	(299)	(158)
Total income tax (expense) benefit	($148,633)	$250,988

(b). Income tax relating to components of other comprehensive income

	For the years ended December 31	
	2019	2018
Deferred tax income:		
Remeasurements of defined benefit plans	$1,754	$8,514
Unrealized (gains) losses from equity instruments investments measured at fair value through other comprehensive income	416	3,324
Exchange differences resulting from translating of a foreign operations	3,793	(3,494)
Deferred tax income relating to change in tax rate	—	(6,972)
Income tax relating to components of other comprehensive income	$5,963	$1,372

B. Reconciliation between tax expense and the product of accounting profit multiplied by applicable tax rates is as follows:

	For the years ended December 31	
	2019	2018
Accounting profit (loss) before tax from continuing operations	$736,593	($362,536)

	For the years ended December 31	
	2019	2018
At parent company statutory income tax rate	(147,319)	72,507
Effect of different tax rates applicable to OSE and its subsidiaries	(1,099)	(5,889)
Tax effect of revenues exempt from taxation	4,013	3,833
Tax effect of deferred tax assets/liabilities	3,042	(70,267)
Other adjustment due to taxation	(6,123)	(2,472)
Adjustments in respect of current income tax of prior periods	(1,017)	280
Deferred tax income relating to change in tax rate	—	253,144
Exchange adjustments	(130)	(148)
Total income tax (expense) benefit recognized in profit or loss	($148,633)	$250,988

C. Deferred tax assets (liabilities) relate to the following:

For the years ended December 31, 2019

	Beginning balance as of Jan. 1, 2019	Deferred tax income (expense) recognized in profit or loss	Deferred tax income (expense) recognized in other comprehensive income	Exchange adjustments	Ending balance as of Dec. 31, 2019
Temporary differences					
Unrealized exchange gains and losses	($1,951)	$2,985	—	—	$1,034
Loss on inventory obsolescence	49,774	11,187	—	—	60,961
Investments accounted for using the equity method	1,139,737	(5,107)	$3,793	—	1,138,423
Unrealized (gains) losses from financial assests measured at fair value through other comprehensive income	(31,688)	—	416	—	(31,272)

	Beginning balance as of Jan. 1, 2019	Deferred tax income (expense) recognized in profit or loss	Deferred tax income (expense) recognized in other comprehensive income	Exchange adjustments	Ending balance as of Dec. 31, 2019
Loss allowance	—	230	—	—	230
Impairment of assets	2,109	—	—	—	2,109
Non-current liability – Defined benefit Liability	99,180	(13,105)	1,754	—	87,829
Compensated absences	4,651	585	—	—	5,236
Other	17,929	(539)	—	—	17,390
Unused tax losses	374,783	(139,998)	—	($60)	234,725
Deferred tax (expense)/income		($143,762)	$5,963	($60)	
Net deferred tax assets/(liabilities)	$1,654,524				$1,516,665
Reflected in balance sheet as follows:					
Deferred tax assets	$1,688,163				$1,547,937
Deferred tax liabilities	$33,639				$31,272

For the years ended December 31, 2018

	Beginning balance as of Jan. 1, 2018	Deferred tax income (expense) recognized in profit or loss	Deferred tax income (expense) recognized in other comprehensive income	Exchange adjustments	Ending balance as of Dec. 31, 2018
Temporary differences					
Unrealized exchange gains and losses	$1,220	($3,171)	—	—	($1,951)
Loss on inventory obsolescence	39,298	10,476	—	—	49,774
Investments accounted for using the equity method	995,821	151,324	($7,408)	—	1,139,737

	Beginning balance as of Jan. 1, 2018	Deferred tax income (expense) recognized in profit or loss	Deferred tax income (expense) recognized in other comprehensive income	Exchange adjustments	Ending balance as of Dec. 31, 2018
Unrealized (gains) losses from financial assets measured at fair value through other comprehensive income	(29,760)	—	(1,928)	—	(31,688)
Unrealized intragroup profits and losses	56	(56)	—	—	—
Impairment of assets	1,793	316	—	—	2,109
Non-current liability – Defined benefit Liability	91,424	(2,952)	10,708	—	99,180
Compensated absences	5,859	(1,208)	—	—	4,651
Other	43,152	(25,223)	—	—	17,929
Unused tax losses	246,116	128,667	—	—	374,783
Deferred tax (expense)/income		$258,173	$1,372	—	
Net deferred tax assets/(liabilities)	$1,394,979				$1,654,524
Reflected in balance sheet as follows:					
Deferred tax assets	$1,424,739				$1,688,163
Deferred tax liabilities	$29,760				$33,639

D. The following table contains information of the unused tax losses of the Group:

Year	Tax losses for the period	Unused tax losses as of Dec. 31, 2019	Unused tax losses as of Dec. 31, 2018	Expiration year	Note
2009	$377,207	—	$305,367	2019	Assessed
2011	155,641	—	155,641	2021	Assessed
2013	52,387	—	52,387	2023	Assessed
2017	1,155,026	$958,742	862,507	2027	Assessed
2018	498,015	498,015	498,015	2028	Non-assessed
2019	7,756	7,756	—	2029	Non-assessed
	Total	$1,464,513	$1,873,917		

E. Unrecognized deferred tax assets

As of December 31, 2019 and 2018, deferred tax assets that have not been recognized as they may not be used to offset taxable profits are $58,732 and $67 thousand respectively.

F. The assessment of income tax returns

As of December 31, 2019 the assessment of the income tax returns of the Company is as follows:

	The assessment of income tax returns
The Company	Assessed and approved up to 2017

(26) EARNINGS PER SHARE

Basic earnings per share amounts are calculated by dividing net profit for the year attributable to ordinary equity holders of the parent entity by the weighted average number of ordinary shares outstanding during the year.

Diluted earnings per share amounts are calculated by dividing the net profit attributable to ordinary equity holders of the parent (after adjusting for interest on the convertible bonds payable) by the weighted average number of ordinary shares outstanding during the period plus the weighted average number of ordinary shares that would be issued on conversion of all the dilutive potential ordinary shares into ordinary shares.

	For the years ended December 31	
	2019	2018
(a) Basic earnings (losses) per share		
Profit (Loss) attributable to ordinary equity holders of the Company (in thousand NT$)	$587,960	($111,548)
Weighted average number of ordinary shares outstanding for basic earnings per share (in thousands)	552,329	552,329
Basic earnings (losses) per share (NT$)	$1.06	($0.20)

	For the years ended December 31	
	2019	2018
(b) Diluted earnings (losses) per share		
Profit (Loss) attributable to ordinary equity holders of the Company (in thousand NT$)	$587,960	($111,548)
Weighted average number of ordinary shares outstanding for basic earnings per share (in thousands)	552,329	552,329
Effect of dilution:		
Employee compensation－stock (in thousands)	4,102	－
Weighted average number of ordinary shares outstanding after dilution (in thousands)	556,431	552,329
Diluted earnings (losses) per share (NT$)	$1.06	($0.20)

There have been no other transactions involving ordinary shares or potential ordinary shares between the reporting date and the date of completion of the financial statements.

7. RELATED PARTY TRANSACTIONS

Information of the related parties that had transactions with the Group during the financial reporting period is as follows:

Name and nature of relationship of the related parties

Name of the related parties	Nature of relationship of the related parties
ATP Electronics Taiwan Inc.(ATP)	Associate
INFOFAB, INC.(INFOFAB)	Associate
OSE PROPERTIES, INC.(PROPERTIES)	Associate
ACTIONTEC ELECTRONICS,INC.(ACTIONTEC)	Other related party
SCREENBEAM ,INC.(SCREENBEAM)	Other related party
InfoAction Technology,Inc.(INFOACTION)	Other related party
GOLFWARE INC.(GOLFWARE)	Other related party
Phison Electronics Corporation(PHISON)	Legal Director of the Company
Longsys Electronics (TAIWAN) Co.,Ltd.(LONGSYS)	Legal Director of the Company(No longer listed as a related party in the third quarter in 2019)
Longsys Electronics (HK) Co., Ltd. (LONGSYS)	Associate of Legal Director of the Company(No longer listed as a related party in the third quarter in 2019)

(1)Significant transactions with related parties:

(a) Sales

	For the years ended December 31	
	2019	2018
Associates	$216,110	$187,869
PHISON	2,332,055	1,521,906
LONGSYS(Note)	748,726	946,231
Other related parties	16,616	7
Total	$3,313,507	$2,656,013

(Note) : No longer listed as a related party in the third quarter in 2019.

The sales price to the above related parties was determined through mutual agreement based on the market rates. The details of credit period are 30～60 days. The outstanding balance at December 31, 2019 and 2018was unsecured, non-interest bearing and must be settled in cash. The receivables from the related parties were not guaranteed.

(b) Purchase

	For the years ended December 31	
	2019	2018
ATP	$1,162	$892
Key management personal of the group	74	—
INFOACTION	8,817	3,799
Total	$10,053	$4,691

The purchase price to the above related parties was determined through mutual agreement based on the market rates. The payment terms from the related party suppliers are comparable with third party suppliers.

(c) Accounts Receivable

	Dec. 31, 2019	Dec. 31, 2018
ATP	$32,904	$45,024
PHISON	194,116	343,356
LONGSYS(Note)	—	306,961
Other related parties	2,537	7
Less : loss allowance	(—)	(1,200)
Total	$229,557	$694,148

(Note) : No longer listed as a related party in the third quarter in 2019.

(d) Other Receivable

	Dec. 31, 2019	Dec. 31, 2018
Associates	$2,778	$1,773
Key management personnel of the Group	—	79
LONGSYS(Note)	—	6,389
PROPERTIES	47,657	46,288
Other related parties	—	238
Total	$50,435	$54,767

(Note) : No longer listed as a related party in the third quarter in 2019.

(e) Accounts Payable

	Dec. 31, 2019	Dec. 31, 2018
INFOFAB (Note)	$36,587	$48,889
Key management personnel of the Group	70	50
Other related parties	1,826	271
Total	$38,483	$49,210

(Note): The payments are the purchase of computer software and information system maintenance.

(f) Lease - related parties

Rental income	For the years ended December 31	
	2019	2018
ATP	$4,258	$4,258
INFOFAB	2,940	2,940
Other related parties	42	42
Total	$7,240	$7,240

(g) Transaction of properties

For the years ended December 31, 2019 :

Counterparty	Property	Amount	Gain (loss) on sales of assets	The basis of transaction price
Purchase				
INFOFAB	Other equipment	$2,224	Not applicable	Negotiate
INFOFAB	Computer software	15,887	Not applicable	Negotiate
	Total	$18,111		

For the years ended December 31, 2018 :

Counterparty	Property	Amount	Gain (loss) on sales of assets	The basis of transaction price
Purchase				
INFOFAB	Other equipment	$3,595	Not applicable	Negotiate
INFOFAB	Computer software	51,168	Not applicable	Negotiate
	Total	$54,763		

Counterparties	Property	Unreduced balance	Sale price	Gain (loss) on sales of assets	The Reference of Trading Price
Sales					
LONGSYS	Machinery and equipment	$1,448	$3,364	$1,916	Negotiate

(h) Intercompany borrowing

Related parties	Dec. 31, 2019 Maximum amount	Amount	Interest rates	Interest income (expense)
Amount lent to: (included in long-term receivables-affiliates accounts)				
PROPERTIES	$93,315 (USD3,102 thousand)	$93,315 (USD3,102 thousand)	2.50%	$2,384

Related parties	Dec. 31, 2018 Maximum amount	Amount	Interest rates	Interest income (expense)
Amount lent to: (included in long-term receivables-affiliates accounts)				
PROPERTIES	$95,300 (USD3,102 thousand)	$95,300 (USD3,102 thousand)	2.50%	$ 2,336

(i) Compensation of key management personnel

	For the years ended December 31 2019	2018
Short-term employee benefits	$64,055	$38,044
Post-employment benefits	879	661
Share-Based Payment	710	—
Total	$65,644	$38,705

For details of total compensation paid to the Company's key management personnel, please refer to the annual report for the Company.

(j) Other disclosures

i. As of December 31, 2019 and 2018, interest receivables from PROPERTIES amounted to $47,657 thousand and $46,288 thousand, respectively, which were included in other receivable-affiliates accounts.

ii. PROPERTIES had borrowed USD$3,102 thousand from subsidiary and provided all of real estates to trust as the mortgage for financing bank.

iii. For the years ended December 31, 2019 and 2018, the Group paid $40,428 thousand and $89,288 thousand, $71,306 thousand and $7,605 thousand service fees to maintain information system of INFOFAB, respectively, which are accounted for as maintenance expenses and computer operating expenses. As of December 31, 2019 and 2018, the unpaid maintenance expenses amounted to $36,587 thousand and $48,889 thousand, respectively, which were recorded under accounts payable – affiliates-account.

8. ASSETS PLEDGED AS SECURITY

The following table lists assets of the Group pledged as security:

	Carrying amount		
Assets pledged for security	Dec. 31, 2019	Dec. 31, 2018	Secured liabilities details
Accounts Receivables–Short-term	—	$224,523	Short-term borrowings
Other financial assets–current–time deposits	$46,214	107,944	Short & Long-term borrowings
Other financial assets–current–deposits reserved for repayment	108,012	135,671	Short & Long-term borrowings
Investments accounted for using the equity method –ATP	388,360	389,474	Short-term borrowings
Property, plant and equipment–Buildings	860,389	890,776	Short & Long-term borrowings
Property, plant and equipment–Machinery and equipment	2,096,755	2,623,647	Short & Long-term borrowings
Property, plant and equipment–Leased assets	—	25,845	Short & Long-term borrowings
Property, plant and equipment–Assets leased to others Buildings	139,225	145,777	Long-term borrowings
Refundable deposits-time deposits	131,500	163,704	Customs Guarantee or others
Total	$3,770,455	$4,707,361	

9. COMMITMENTS AND CONTINGENCIES

(1) Guarantee given by the bank for the payment of input tax imposed for sales from a tax free zone to non-tax free zone amounted to $800,000 thousand.

(2) The Company issued promissory notes of $8,973,768 thousand as guarantees for bank loans.

(3) The Company issued promissory notes of $16,955 thousand as guarantees for payments of raw materials and machineries purchased.

(4) The Company issued promissory notes of $1,428 thousand as guarantee for project.

(5) The Company has acted as a subcontractor for processing electronic products and provided storage services for outsiders. As of December 31, 2019, the Company kept the processed electronic products of $10,736,546 thousand and raw materials of $560,111 thousand on custodian.

(6) As of December 31, 2019, the Company had opened an unused letter of credit amounting to USD 115 thousand.

10. LOSSES DUE TO MAJOR DISASTERS

None.

11. SIGNIFICANT SUBSEQUENT EVENTS

None.

12. FINANCIAL INSTRUMENTS

(1) Categories of financial instruments

Financial assets	Dec. 31, 2019	Dec. 31, 2018
Financial assets at fair value through other comprehensive income	$226,860	$234,878
Financial assets measured at amortized cost:		
Cash and cash equivalents (exclude cash on hand)	1,701,205	762,085
Notes, accounts and other receivables	2,768,130	3,189,369
Other financial assets	154,226	243,615
Long-term receivables-Affiliates	93,315	95,300
Subtotal	4,716,876	4,290,369
Total	$4,943,736	$4,525,247

Financial liabilities

	Dec. 31, 2019	Dec. 31, 2018
Financial liabilities at amortized cost:		
Short-term borrowings	$2,373,766	$2,806,857
Short-term notes payable	379,210	349,610
Notes, accounts and other payable	4,173,791	4,398,185
Long-term loans (including of current portion)	2,095,326	3,053,515
Lease payable (including of current portion)	(Note)	2,610
Lease liabilities	244,406	(Note)
Total	$9,266,499	$10,610,777

(Note): The Group adopted IFRS 16 since January 1, 2019. The Group elected not to restate prior periods in accordance with the transition provision in IFRS 16.

(2) Financial risk management objectives and policies

The Group's principal financial risk management objective is to manage the market risk, credit risk and liquidity risk related to its operating activates. The Group identifies measures and manages the aforementioned risks based on the Group's policy and risk appetite.

The Group has established appropriate policies, procedures and internal controls for financial risk management. Before entering into significant transactions, due approval process by the Board of Directors and Audit Committee must be carried out based on related protocols and internal control procedures. The Group complies with its financial risk management policies at all times.

(3) Market risk

Market risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of the changes in market prices. Market prices comprise currency risk, interest rate risk and other price risk (such as equity risk).

In practice, it is rarely the case that a single risk variable will change independently from other risk variable, there is usually interdependencies between risk variables. However the sensitivity analysis disclosed below does not take into account the interdependencies between risk variables.

(a)Foreign currency risk

The Group's exposure to the risk of changes in foreign exchange rates relates primarily to the Group's operating activities (when revenue or expense are denominated in a different currency from the Group's functional currency) and the Group's net investments in foreign subsidiaries.

The Group has certain foreign currency receivables to be denominated in the same foreign currency with certain foreign currency payables, therefore natural hedge is received. The Group also uses forward contracts to hedge the foreign currency risk on certain items denominated in foreign currencies. Hedge accounting is not applied as they did not qualify for hedge accounting criteria. Furthermore, as net investments in foreign subsidiaries are for strategic purposes, they are not hedged by the Group.

The foreign currency sensitivity analysis of the possible change in foreign exchange rates on the Group's profit is performed on significant monetary items denominated in foreign currencies as at the end of the reporting period. The Group's foreign currency risk is mainly related to the volatility in the exchange rates for foreign currency USD and foreign currency JPY.

(b)Interest rate risk

Interest rate risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The Group's exposure to the risk of changes in market interest rates relates primarily to the Group's loans and receivables at variable interest rates, bank borrowings with fixed interest rates and variable interest rates.

The Group manages its interest rate risk by having a balanced portfolio of fixed and variable loans and borrowings and entering into interest rate swaps. Hedge accounting does not apply to these swaps as they do not qualify for it.

(c)Equity price risk

The Group's listed and unlisted equity securities are susceptible to market price risk arising from uncertainties about future values of the investment securities. The Group's listed equity securities are classified under held for trading financial assets or available-for-sale financial assets, while unlisted equity securities are classified as available-for-sale. The Group manages the equity price risk through diversification and placing limits on individual and total equity instruments. Reports on the equity portfolio are submitted to the Group's senior management on a regular basis. The Group's Board of Directors reviews and approves all equity investment decisions.

(d)Risks of pre-tax Sensitivity analysis are as follows:

For the years ended December 31, 2019

Key risk	Variation	Sensitivity of profit and loss	Sensitivity of equity
Foreign currency risk	NTD/USD Foreign currency +/− 1%	+/− 16,337 thousand	−
	NTD/JPY Foreign currency +/− 1%	+/− 373 thousand	−
Interest rate risk	Market rate +/− 10 fundamental proposition	+/− 4,469 thousand	−
Equity price risk	Market price +/− 10 fundamental proposition	−	+/− 2,269 thousand

For the years ended December 31, 2018

Key risk	Variation	Sensitivity of profit and loss	Sensitivity of equity
Foreign currency risk	NTD/USD Foreign currency +/− 1%	+/− 8,462 thousand	−
	NTD/JPY Foreign currency +/− 1%	−/+ 855 thousand	−
Interest rate risk	Market rate +/− 10 fundamental proposition	+/− 5,860 thousand	−
Equity price risk	Market price +/− 10 fundamental proposition	−	+/− 2,349 thousand

Please refer to Note 12.(7) for sensitivity analysis information of other equity instruments or derivatives that are linked to such equity instruments whose fair value measurement is categorized under Level 3.

(4) Credit risk management

Credit risk is the risk that a counterparty will not meet its obligations under a contract, leading to a financial loss. The Group is exposed to credit risk from operating activities (primarily for accounts receivables and notes receivables) and from its financing activities, including bank deposits and other financial instruments.

Customer credit risk is managed by each business unit subject to the Group’s established policy, procedures and control relating to customer credit risk management. Credit limits are established for all customers based on their financial position, rating from credit rating agencies, historical experience, prevailing economic condition and the Group’s internal rating criteria etc. Certain customer’s credit risk will also be managed by taking credit enhancing procedures, such as requesting for prepayment or insurance.

As of December 31, 2019 and 2018, amounts receivables from top ten customers represent 83.69% and 84.88% of the total accounts receivables of the Group, respectively. The credit concentration risk of other accounts receivables is insignificant.

Credit risk from balances with banks, fixed income securities and other financial instruments is managed by the Group's treasury in accordance with the Group's policy. The Group only transacts with counterparties approved by the internal control procedures, which are banks and financial institutions, companies and government entities with good credit rating and with no significant default risk. Consequently, there is no significant credit risk for these counter parties.

(5) Liquidity risk management

The Group's objective is to maintain a balance between continuity of funding and flexibility through the use of cash and cash equivalents, highly liquid equity investments, bank borrowings, convertible bonds and finance leases. The table below summarizes the maturity profile of the Group's financial liabilities based on the contractual undiscounted payments and contractual maturity. The payment amount includes the contractual interest. The undiscounted payment relating to borrowings with variable interest rates is extrapolated based on the estimated interest rate yield curve as of the end of the reporting period.

Non-derivative financial instruments

	Less than 1 year	2 to 3 years	4 to 5 years	> 5 years	Total
As of Dec. 31, 2019					
Borrowings	$3,567,916	$867,994	$36,842	—	$4,472,752
Short-term notes payable	379,210	—	—	—	379,210
Lease liabilities	31,050	53,997	31,299	189,011	305,357
As of Dec. 31, 2018					
Borrowings	$4,153,483	$1,650,614	$62,631	—	$5,866,728
Short-term notes payable	$349,610	—	—	—	349,610
Lease payable	$2,617	—	—	—	2,617

(6) Reconciliation of liabilities arising from financing activities

Reconciliation of liabilities for the years ended December 31, 2019:

	As of Jan. 1, 2019	Cash flows	Foreign exchange movement	Others	As of Dec. 31, 2019
Short-term borrowings	$2,806,857	($433,155)	—	$64	$2,373,766
Long-term borrowings	3,053,515	(962,010)	—	3,821	2,095,326
Lease liabilities (Note)	241,426	(30,050)	($1,929)	34,959	244,406
Refundable deposits	3,522	46	—	—	3,568
Short-term notes payable	349,610	29,600	—	—	379,210

(Note): The beginning balance that the Group adopted IFRS 16 since January 1, 2019.

Reconciliation of liabilities for the years ended December 31, 2018:

	As of Jan. 1, 2018	Cash flows	Foreign exchange movement	Others	As of Dec. 31, 2018
Short-term borrowings	$2,192,678	$613,297	$1,059	($177)	$2,806,857
Long-term borrowings	3,757,706	(707,191)	6,670	(3,670)	3,053,515
Lease payables	24,551	(21,941)	—	—	2,610
Refundable deposits	3,574	(52)	—	—	3,522
Short-term notes payable	398,938	(49,328)	—	—	349,610

(7)Fair values of financial instruments

(a) The methods and assumptions applied in determining the fair value of financial instruments:

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The following methods and assumptions were used by the Group to measure or disclose the fair values of financial assets and financial liabilities:

i. The carrying amount of cash and cash equivalents, accounts receivables, accounts payable and other current liabilities approximate their fair value due to their short maturities.

ii. For financial assets and liabilities traded in an active market with standard terms and conditions, their fair value is determined based on market quotation price (including listed equity securities, beneficiary certificates, bonds and futures etc.) at the reporting date.

iii. Fair value of equity instruments without market quotations (including private placement of listed equity securities, unquoted public company and private company equity securities) are estimated using the market method valuation techniques based on parameters such as prices based on market transactions of equity instruments of identical or comparable entities and other relevant information (for example, inputs such as discount for lack of marketability, P/E ratio of similar entities and Price-Book ratio of similar entities).

iv. Fair value of debt instruments without market quotations, bank loans, bonds payable and other non-current liabilities are determined based on the counterparty prices or valuation method. The valuation method uses DCF method as a basis, and the assumptions such as the interest rate and discount rate are primarily based on relevant information of similar instrument (such as yield curves published by the GreTai Securities Market, average prices for Fixed Rate Commercial Paper published by Reuters and credit risk, etc.)

v. The fair value of derivatives which are not options and without market quotations, is determined based on the counterparty prices or discounted cash flow analysis using interest rate yield curve for the contract period. Fair value of option-based derivative financial instruments is obtained using on the counterparty prices or appropriate option pricing model (for example, Black-Scholes model) or other valuation method (for example, Monte Carlo Simulation).

(b) Fair value of financial instruments measured at amortized cost

Other than cash and cash equivalents, accounts receivables, accounts payable and other current liabilities whose carrying amount approximate their fair value, the fair value of the Group’s financial assets and financial liabilities measured at amortized cost is listed in the table below:

	Carrying amount	
	Dec. 31, 2019	Dec. 31, 2018
Financial Assets		
Long-term receivables-affiliates	$93,315	$95,300
Financial liabilities		
Long-term borrowings	$2,095,326	$3,053,515
Lease payable	(Note)	$2,610
Lease Liabilities	$244,406	(Note)

	Fair Value	
	Dec. 31, 2019	Dec. 31, 2018
Financial Assets		
Long-term receivables-affiliates	$93,315	$95,300
Financial liabilities		
Long-term borrowings	$2,095,326	$3,053,515
Lease payable	(Note)	$2,610
Lease Liabilities	$244,406	(Note)

(Note): The Group adopted IFRS 16 since January 1, 2019. The Group elected not to restate prior periods in accordance with the transition provision in IFRS 16.

(c) Fair value measurement hierarchy for financial instruments

Please refer to Note 12.(8) for fair value measurement hierarchy for financial instruments of the Group.

(8) Fair value measurement hierarchy

(a) Fair value measurement hierarchy:

All asset and liabilities for which fair value is measured or disclosed in the financial statements are categorized within the fair value hierarchy, based on the lowest level input that is significant to the fair value measurement as a whole. Level 1, 2 and 3 inputs are described as follows:

Level 1: Quoted (unadjusted) market prices in active markets for identical assets or liabilities that the entity can access at the measurement date
Level 2: Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly
Level 3: Unobservable inputs for the asset or liability

For assets and liabilities that are recognized in the financial statements on a recurring basis, the Company determines whether transfers have occurred between Levels in the hierarchy by re-assessing categorization at the end of each reporting period.

(b) Fair value measurement hierarchy of the Group's assets and liabilities:

The Group does not have assets that are measured at fair value on a non-recurring basis. Fair value measurement hierarchy of the Group's assets and liabilities measured at fair value on a recurring basis is as follows:

December 31, 2019

	Level 1	Level 2	Level 3	Total
Financial assets:				
Financial assets at fair value through other comprehensive income				
Equity instrument	—	—	$226,860	$226,860

December 31, 2018

	Level 1	Level 2	Level 3	Total
Financial assets:				
Financial assets at fair value through other comprehensive income				
Equity instrument	—	—	$234,878	$234,878

Transfers between Level 1 and Level 2 during the period

During the years ended December 31, 2019 and 2018, there were no transfers between Level 1 and Level 2 fair value measurements.

Reconciliation for fair value measurements in Level 3 of the fair value hierarchy for movements during the period is as follows:

	At fair value through other comprehensive income
	Stock
Beginning balance as of Jan. 1, 2019	$234,878
Recognized in other comprehensive income	(8,018)
Transfer out of Level 3	—
Ending balance as of Dec. 31, 2019	$226,860

	At fair value through other comprehensive income
	Stock
Beginning balance as of Jan. 1, 2018	$252,505
Recognized in other comprehensive income	(17,627)
Transfer out of Level 3	—
Ending balance as of Dec. 31, 2018	$234,878

Information on significant unobservable inputs to valuation

Description of significant unobservable inputs to valuation of recurring fair value measurements categorized within Level 3 of the fair value hierarchy is as follows:

December 31, 2019

	Valuation techniques	Significant unobservable inputs	Quantitative information	Relationship between inputs and fair value	Sensitivity of the input to fair value
Financial assets :					
Financial assets at fair value through other comprehensive income					
Stocks	(1)Market approach －P/E (2)Market approach －P/S (3)Option	(1)Discount rate (2)Discount for lack of marketability	11.59％ ~25.06％	(1) The higher the discount rate, the lower the fair value of the stocks (2)The higher the discount for lack of marketability, the lower the fair value of the stocks	1% increase (decrease) in the discount for lack of marketability would result in (decrease) increase in the Company’s equity by $2,376 thousand.

December 31, 2018

	Valuation techniques	Significant unobservable inputs	Quantitative information	Relationship between inputs and fair value	Sensitivity of the input to fair value
Financial assets:					
Financial assets at fair value through other comprehensive income	Option-Pricing Model	(1)Discount rate (2)Discount for lack of marketability	13%~19%	(1) The higher the discount rate, the lower the fair value of the stocks (2)The higher the discount for lack of marketability, the lower the fair value of the stocks	1% increase (decrease) in the discount for lack of marketability would result in (decrease) increase in the Company’s equity by $2,365 thousand.

(c) Fair value measurement hierarchy of the Group's assets and liabilities not measured at fair value but for which the fair value is disclosed

December 31, 2019

	Level 1	Level 2	Level 3	Total
Financial assets not measured at fair value but for which the fair value is disclosed:				
Investment properties	－	－	$486,819	$486,819
Financial liabilities not measured at fair value but for which the fair value is disclosed:				
Long-term loans	－	$2,095,326	－	2,095,326
Lease liabilities	－	244,406	－	244,406

December 31, 2018

	Level 1	Level 2	Level 3	Total
Financial assets not measured at fair value but for which the fair value is disclosed:				
Investment properties	－	－	$503,470	$503,470
Financial liabilities not measured at fair value but for which the fair value is disclosed:				
Long-term loans	－	$3,053,515	－	3,053,515
Lease payable	－	2,610	－	2,610

(9) Significant assets and liabilities denominated in foreign currencies

Information regarding the significant assets and liabilities denominated in foreign currencies is listed below:

	Dec. 31, 2019		
	Foreign currencies	Foreign exchange rate	NTD
Financial assets			
Monetary items:			
USD	$132,199	30.08	$3,976,546
JPY	386,287	0.2771	107,040
Non-monetary items:			
USD	7,542	30.08	226,863
Financial liabilities			
Monetary items:			
USD	77,754	30.08	2,338,840
JPY	251,559	0.2771	69,707

	Dec. 31, 2018		
	Foreign currencies	Foreign exchange rate	NTD
Financial assets			
Monetary items:			
USD	$119,977	30.72	$3,685,693
JPY	220,238	0.2784	61,314
Non-monetary items:			
USD	7,652	30.72	235,069
Financial liabilities			
Monetary items:			
USD	92,433	30.72	2,839,542
JPY	527,327	0.2784	146,808

The above information is disclosed based on the carrying amount of foreign currency (after conversion to functional currency).

The Group's entities functional currencies are various, and hence are not able to disclose the information of exchange gains and losses of monetary financial assets and liabilities by each significant asset and liability denominated in foreign currencies. The foreign exchange gains (losses) were ($48,117) thousand and $14,222 thousand for the years ended December 31, 2019 and 2018, respectively.

(10) Capital management

The primary objective of the Group's capital management is to ensure that it maintains a strong credit rating and healthy capital ratios in order to support its business and maximize shareholder value. The Group manages its capital structure and makes adjustments to it, in light of changes in economic conditions. To maintain or adjust the capital structure, the Group may adjust dividend payment to shareholders, return capital to shareholders or issue new shares.

13. SEGMENT INFORMATION

For management purposes, the Company is organized into business units based on its products and services and has two reportable segments as follows:

Semiconductor Group: Mainly provides IC packaging and testing services.
EMS Group: Provides professional electronics manufacturing services.

No operating segments have been aggregated to form the above reportable operating segments.

Management monitors the operating results of its business units separately for the purpose of making decisions about resource allocation and performance assessment. Segment performance is evaluated based on operating profit or loss and is measured consistently with operating profit or loss in the consolidated financial statements. However, group finance costs, finance income and income taxes are managed on a group basis and are not allocated to operating segments.

The transfer prices between operating segments are on an arm's length basis in a manner similar to transactions with third parties.

For the years ended December 31, 2019

	Semiconductor Group	EMS Group	Other	Adjustment and Eliminations (Note 1 and Note 2)	Consolidated
Revenue					
External customer	$10,527,484	$6,987,661	—	—	$17,515,145
Inter-Segment	82,455	831,641	—	($914,096)	—
Total Revenue	$10,609,939	$7,819,302	—	($914,096)	$17,515,145
Segment Profit	$404,048	$325,144	$15,855	($8,454)	$736,593

(Note 1)：Inter-segment revenues are eliminated on consolidation.
(Note 2)：The profit for each operating segment does not include income tax expense.

For the years ended December 31, 2018

	Semiconductor Group	EMS Group	Other	Adjustment and Eliminations (Note 1 and Note 2)	Consolidated
Revenue					
External customer	$9,015,773	$6,172,419	—	—	$15,188,192
Inter-Segment	53,077	736,579	—	($789,656)	—
Total Revenue	$9,068,850	$6,908,998	—	($789,656)	$15,188,192
Segment Profit	($531,564)	$203,271	$249,318	($283,561)	($362,536)

(Note 1)：Inter-segment revenues are eliminated on consolidation.
(Note 2)：The profit for each operating segment does not include income tax expense.

(1) Geographical information:

A. Sales to other than consolidated entities (Sales are presented by customers' country)

	For the years ended December 31	
	2019	2018
Taiwan	$6,000,263	$5,067,475
U.S.A.	3,766,910	4,186,016
China	2,254,742	1,676,305
Others	5,493,230	4,258,396
Total	$17,515,145	$15,188,192

B. Non-current assets

	Dec. 31, 2019	Dec. 31, 2018
Taiwan	$7,061,852	$7,762,808
Philippines	508,450	478,943
U.S.A.	226,783	219,359
China	64,328	57,333
Total	$ 7,861,413	$8,518,443

(2) Major customers

Sales to customers representing over 10% of the Company's consolidated net sales are as follows:

	For the years ended December 31			
	2019		2018	
Customers	Amounts	%	Amounts	%
A	$4,535,396	25.89%	$4,469,670	29.43%
B	$4,288,955	24.49%	$3,242,267	21.35%
C	$2,332,055	13.31%	$1,521,905	10.02%