Winbond Electronics Corporation and Subsidiaries

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

INDEPENDENT AUDITORS' REPORT

The Board of Directors and Shareholders
Winbond Electronics Corporation

Opinion

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

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

Basis for Opinion

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

Key Audit Matters

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

Occurrence of Sales Revenues

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

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

Other Matter

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

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

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

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

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

Auditors' Responsibilities for the Audit of the Consolidated Financial Statements

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

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

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

2. Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.

3. Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

4. Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the Group to cease to continue as a going concern.

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

6. Obtain sufficient and appropriate audit evidence regarding the financial information of entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision, and performance of the group audit. We remain solely responsible for our audit opinion.

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

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

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

The engagement partners on the audit resulting in this independent auditors' report are Wen-Yea Shyu and Hung-Bin Yu.

Wen-yea Shyu   Hung-Bin Yu

Deloitte & Touche
Taipei, Taiwan
Republic of China

February 7, 2020

<u>*Notice to Readers*</u>

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

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

WINBOND ELECTRONICS CORPORATION AND SUBSIDIARIES

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

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

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

WINBOND ELECTRONICS CORPORATION AND SUBSIDIARIES

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

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

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WINBOND ELECTRONICS CORPORATION AND SUBSIDIARIES

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

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

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

WINBOND ELECTRONICS CORPORATION AND SUBSIDIARIES

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

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

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

WINBOND ELECTRONICS CORPORATION AND SUBSIDIARIES

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

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

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WINBOND ELECTRONICS CORPORATION AND SUBSIDIARIES

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

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

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

WINBOND ELECTRONICS CORPORATION AND SUBSIDIARIES

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

1. GENERAL INFORMATION

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

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

2. APPROVAL OF FINANCIAL STATEMENTS

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

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

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

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

   1) IFRS 16 “Leases”

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

      <u>Definition of a lease</u>

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

The Group as lessee

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

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

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

The Group as lessor

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

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

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

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

2) IFRIC 23 “Uncertainty over Income Tax Treatments”

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

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

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

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

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

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

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

c. New IFRSs in issue but not yet endorsed and issued into effect by the FSC

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

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

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

4. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Statement of Compliance

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

Basis of Preparation

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

Basis of Consolidation

a. Principles for preparing consolidated financial statements

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

<u>Attribution of total comprehensive income to non-controlling interests</u>

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

<u>Changes in the Group’s ownership interests in existing subsidiaries</u>

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

b. Subsidiaries included in consolidated financial statements

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

(Continued)

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

(Concluded)

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

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

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

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

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

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

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

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

Classification of Current and Non-current Assets and Liabilities

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

Foreign Currencies

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

In preparing the financial statements of each individual group entity, transactions in currencies other than the entity's foreign currencies are recognized at the rates of exchange prevailing at the dates of the transactions. At the end of each reporting period, monetary items denominated in foreign currencies are retranslated at the rates prevailing at that date. Exchange differences on monetary items arising from settlement are recognized in profit or loss in the period they arise.

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

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

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

Cash Equivalents

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

Financial Instruments

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

Financial assets and financial liabilities are initially measured at fair value. Transaction costs that are directly attributable to the acquisition or issue of financial assets and financial liabilities other than financial assets and financial liabilities at FVTPL are added to or deducted from the fair value of the financial assets or financial liabilities, as appropriate, on initial recognition. Transaction costs directly attributable to the acquisition of financial assets or financial liabilities at FVTPL are recognized immediately in profit or loss.

a. Measurement category

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

   1) Financial asset at FVTPL

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

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

   2) Financial assets at amortized cost

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

      a) The financial asset is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows; and

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

      Subsequent to initial recognition, financial assets at amortized cost are measured at amortized cost, which equals to gross carrying amount determined by the effective interest method less any impairment loss. Exchange differences are recognized in profit or loss.

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

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

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

3) Investments in equity instruments at FVTOCI

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

Investments in equity instruments at FVOCI are subsequently measured at fair value with gains and losses arising from changes in fair value recognized in other comprehensive income and accumulated in other equity. The cumulative gain or loss will not be reclassified to profit or loss on disposal of the equity investments, instead, they will be transferred to retained earnings.

Dividends on these investments in equity instruments are recognized in profit or loss when the Group's right to receive the dividends is established, unless the dividends clearly represent a recovery of part of the cost of the investment.

b. Impairment of financial assets

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

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

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

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

c. Derecognition of financial assets

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

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

d. Financial liabilities

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

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

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

e. Derecognition of financial liabilities

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

f. Derivative financial instruments

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

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

g. Information about fair value of financial instruments

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

1) The fair values of financial assets and liabilities which have standard terms and conditions and traded in active market are determined by reference to quoted market price. If there is no quoted market price in active market, valuation techniques are applied.

2) The fair value of foreign-currency derivative financial instrument could be determined by reference to the price and discount rate of currency swap quoted by financial institutions. Foreign exchange forward contracts use individual maturity rate to calculate the fair value of each contract.

3) The fair values of other financial assets and financial liabilities are determined by discounted cash flow analysis in accordance with generally accepted pricing models.

Inventories

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

Investments in Associates

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

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

Any excess of the cost of acquisition over the Group's share of the net fair value of the identifiable assets and liabilities of an associate recognized at the date of acquisition is recognized as goodwill, which is included within the carrying amount of the investment and is not amortized. Any excess of the Group's share of the net fair value of the identifiable assets and liabilities over the cost of acquisition, after reassessment, is recognized immediately in profit or loss.

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

When the Group's share of losses of an associate equals or exceeds its interest in that associate (which includes any carrying amount of the investment accounted for by the equity method and long-term interests that, in substance, form part of the Group's net investment in the associate), the Group discontinues recognizing its share of further losses. Additional losses and liabilities are recognized only to the extent that the Group has incurred legal obligations, or constructive obligations, or made payments on behalf of that associate.

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

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

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

Property, Plant and Equipment

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

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

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

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

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

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

Investment Properties

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

Intangible Assets

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

Impairment of Tangible and Intangible Assets (Except Goodwill)

At the end of each reporting period, the Group reviews the carrying amounts of its tangible and intangible assets to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss.

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

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

Non-current assets classified as held for sale

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

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

Provisions

Provisions are recognized when the Group has a present obligation as a result of a past event and at the best estimate of the consideration required to settle the present obligation at the end of the reporting period, taking into account the risks and uncertainties surrounding the obligation. For potential product risk, the Group accrues reserve for products guarantee based on commitment to specific customers.

Revenue Recognition

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

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

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

Leasing

2019

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

a. The Group as lessor

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

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

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

b. The Group as lessee

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

Right-of-use assets are initially measured at cost, which comprises the initial measurement of lease liabilities adjusted for lease payments made at or before the commencement date, plus any initial direct costs incurred and an estimate of costs needed to restore the underlying assets, and less any lease incentives received. Right-of-use assets are subsequently measured at cost less accumulated depreciation and impairment losses and adjusted for any remeasurement of the lease liabilities.

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

Lease liabilities are initially measured at the present value of the lease payments, which comprise fixed payments, in-substance fixed payments, variable lease payments which depend on an index or a rate, residual value guarantees, the exercise price of a purchase option if the Group is reasonably certain to exercise that option, and payments of penalties for terminating a lease if the lease term reflects such termination, less any lease incentives receivable. The lease payments are discounted using the interest rate implicit in a lease, if that rate can be readily determined. If that rate cannot be readily determined, the Group uses the lessee's incremental borrowing rate.

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

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

<u>2018</u>

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

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

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

Borrowing Costs

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

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

Employee Benefits

a. Short-term employee benefits

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

b. Retirement benefits

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

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

   Net defined benefit liability represents the actual deficit in the Group's defined benefit plan. Any surplus resulting from this calculation is limited to the present value of any refunds from the plans or reductions in future contributions to the plans.

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

Share-based Payments Agreements

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

Taxation

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

a. Current tax

   According to the Income Tax Law in the ROC, an additional tax of unappropriated earnings is recognized for as income tax in the year the shareholders approve to retain earnings. Adjustments of prior years' tax liabilities are added to or deducted from the current year's tax provision.

b. Deferred tax

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

Deferred tax liabilities are recognized for taxable temporary differences associated with investments in subsidiaries and associates, except where the Group is able to control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future.

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

5. CRITICAL ACCOUNTING JUDGMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY

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

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimate is revised if the revision affects only that period or in the period of the revision and future periods if the revision affects both current and future periods.
The Group's critical accounting judgments and key sources of estimation uncertainty is below:

a. Valuation of inventory

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

b. Impairment of financial assets

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

6. CASH AND CASH EQUIVALENTS

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

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

	December 31 2019	December 31 2018
Time deposits	$ 207,903	$ 201,414

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

	December 31 2019	December 31 2018
Time deposits	$ 447,725	$ 145,654

7. FINANCIAL INSTRUMENTS AT FAIR VALUE THROUGH PROFIT OR LOSS

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

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

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

(Continued)

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

(Concluded)

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

8. FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME

Equity instruments at FVTOCI:

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

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

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

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

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

a. Each Preferred E shares grants its holder a number of votes equal to the number of votes per ordinary share.

b. The Preferred E shares shall be prior to all other equity securities of Autotalks Ltd. in the event of liquidation.

c. The holders of the Preferred E shares shall be entitled to receive non-cumulative cash dividends at the rate of eight percent.

d. The investors shall have the right to appoint one non-voting observer ("Observer") to attend Autotalks Ltd.'s board meetings.

e. The holders of the Preferred E shares shall be entitled to preemptive right with respect to future issuance of new securities of Autotalks Ltd.

f. The investors have the rights to obtain the annual financial statements, quarterly financial statements and etc.

9. NOTES AND ACCOUNTS RECEIVABLE

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

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

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

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

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

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

December 31, 2019

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

December 31, 2018

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

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

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

10. INVENTORIES

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

a. Operating costs for the years ended December 31, 2019 and 2018 included inventory write-downs for the decline in market value, obsolescence and scrap of inventories of $1,146,371 thousand and $113,910 thousand, respectively.

b. Unallocated fixed manufacturing costs recognized as cost of sales in the years ended December 31, 2019 and 2018, were $1,223,784 thousand and $329,373 thousand, respectively.

11. INVESTMENTS ACCOUNTED FOR USING EQUITY METHOD

Investments in Associates

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

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

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

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

12. PROPERTY, PLANT AND EQUIPMENT

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

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

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

b. Information about capitalized interest

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

13. LEASE ARRANGEMENTS

2019

a. Right-of-use assets

	December 31, 2019
Carrying amounts	
Land	$ 1,914,889
Buildings	334,224
Other equipment	49,280
	$ 2,298,393

	For the Year Ended December 31, 2019
Additions to right-of-use assets	$ 109,701
Depreciation charge for right-of-use assets	
Land	$ 106,870
Buildings	99,242
Other equipment	15,679
	$ 221,791
Income from the subleasing of right-of-use assets (recorded as “other income”)	$ (1,941)

b. Lease liabilities

	December 31, 2019
Carrying amounts	
Current	$ 186,556
Non-current	$ 2,096,115

Range of discount rate for lease liabilities was as follows:

	December 31, 2019
Land	1.76%-2.47%
Buildings	1.34%-3.75%
Other equipment	1.34%-3.61%

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

c. Material lease-in activities and terms

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

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

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

d. Subleases

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

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

	December 31, 2019
Year 1	$ 1,985
Year 2	1,985
Year 3	1,985
Year 4	1,985
	$ 7,940

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

e. Other lease information

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

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

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

2018

Prepayments for lease obligations

	December 31, 2018
Current (recorded as "other current assets")	$ 3,463
Non-current (recorded as "other non-current assets")	35,129
	$ 38,592

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

Lease expense

	For the Year Ended December 31, 2018
Lease expense	$ 298,063

14. INVESTMENT PROPERTIES

	December 31	
	2019	2018
Investment properties, net	$ 44,207	$ 50,527

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

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

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

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

	December 31, 2019
Year 1	$ 7,913
Year 2	4,163
Year 3	2,294
	$ 14,370

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

15. INTANGIBLE ASSETS

	December 31	
	2019	2018
Deferred technical assets, net	$ 371,074	$ 225,717
Other intangible assets, net	36,648	3,478
	$ 407,722	$ 229,195

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

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

16. BORROWINGS

a. Short-term borrowings

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

b. Long-term borrowings

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

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

a) On July 7, 2014, the Company entered into a syndicated loan, with a group of financial institutions to procure equipment for 12-inch fab and repay bank loans, credit line was divided into part A and B, which amounted to $6.5 billion and $2.5 billion, respectively; the total line of credit $9 billion.

b) Part A will be repaid every six months from November 27, 2017 until maturity, part B will be repaid every six months from November 27, 2016 until maturity.

c) Refer to Note 12 for collateral on bank borrowings.

d) On August 26, 2019, the loan be repaid in advance.

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

3) Bank of Taiwan Syndicated Loan (IV)

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

b) Part A will be repaid every six months from December 29, 2019 until maturity, and part B will be repaid every six months from December 29, 2018 until maturity.

c) Refer to Note 12 for collateral on bank borrowings.

4) Bank of Taiwan Syndicated Loan (V)

a) On January 14, 2019, the Company entered into a syndicated loan, with a group of financial institutions, to procure equipment for fab. The credit line amounted to $42 billion. The principal will be repaid every six months from September 19, 2022 until maturity.

b) Refer to Note 12 for collateral on bank borrowings.

5) The Company is required to maintain certain financial covenants, including current ratio, debt ratio and tangible net equity, on June 30 and December 31 during the tenors of the loans. Additionally, the principal and interest coverage should be also maintained on June 30 and December 31 during the tenors of the loans except for the Bank of Taiwan secured medium - term loan. The computations of financial ratios mentioned above are done based on the audited consolidated financial statements.

6) The proceeds of the NTC's unsecured loan from the Export-Import Bank of ROC was invested in Autotalks Ltd. The principal will be repaid every six months from September 20, 2023 until maturity and the interest rate will be reviewed and may be adjusted every six months.

17. BONDS PAYABLE

	December 31	
	2019	**2018**
Domestic secured bonds	$ 10,000,000	$ 10,000,000
Less: Discounts on bonds payable	(68,254)	(80,221)
	$ 9,931,746	$ 9,919,779

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

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

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

18. RETIREMENT BENEFIT PLANS

a. Defined contribution plan

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

The employees of the Group's subsidiaries in the United States, Japan, Hong Kong, Israel and China are required to contribute a specified percentage of payroll costs to the retirement benefit scheme to fund the benefits. The only obligation of the Group with respect to the retirement benefit plan is to make the specified contributions.

b. Defined benefit plan

The defined benefit plans adopted by the Company, MMDC and NTC in accordance with the Labor Standards Law is operated by the government of the ROC. Pension benefits are calculated on the basis of the length of service and average of monthly salaries of the 6 months before retirement. The Company contributed amounts equal to 2% of total monthly salaries and wages; NTC and MMDC contributed amounts equal to 15% of total monthly salaries and wages to a pension fund administered by the pension fund monitoring committee of the Company. Pension contributions are deposited in the Bank of Taiwan in the committee's name. Before the end of each year, the Company assesses the balance in the pension fund. If the amount of the balance in the pension fund is inadequate to pay retirement benefits for employees who conform to retirement requirements in the next year, the Company is required to fund the difference in one appropriation that should be made before the end of March of the next year. The pension fund is managed by the Bureau of Labor Funds, Ministry of Labor ("the Bureau"); the Company has no right to influence the investment policy and strategy.

The payables for employee turnover of WTL and NTIL are calculated on the basis of the length of service and the last month's salary under a defined benefit plan.

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

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

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

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

(Continued)

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

(Concluded)

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

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

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

1) Investment risk: The plan assets are invested in domestic/and foreign/equity and debt securities, bank deposits, etc. The investment is conducted at the discretion of the Bureau or under the mandated management. However, in accordance with relevant regulations, the return generated by plan assets should not be below the interest rate for a 2-year time deposit with local banks.

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

3) Salary risk: The present value of the defined benefit obligation is calculated by reference to the future salaries of plan participants. As such, an increase in the salary of the plan participants will increase the present value of the defined benefit obligation.

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

	December 31	
	2019	**2018**
Discount rates	0.75%-4.18%	1.25%-3.65%
Expected rates of salary increase	1.00%-3.46%	1.00%-3.58%

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

	December 31	
	2019	**2018**
Discount rates		
0.25%-0.50% increase	$ (114,858)	$ (104,428)
0.25%-0.50% decrease	$ 125,741	$ 113,484
Expected rates of salary increase		
0.25%-0.50% increase	$ 120,099	$ 109,407
0.25%-0.50% decrease	$ (109,476)	$ (101,073)

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

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

19. EQUITY

a. Share capital

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

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

b. Capital surplus

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

The capital surplus generated from the excess of the issuance price over the par value of capital stock (including the stock issued for new capital, mergers and convertible bonds) may be used to offset a deficit; in addition, when the Company has no deficit, such capital surplus may be distributed as cash dividends or stock dividends up to a certain percentage of the Company's paid-in capital. The capital surplus from share of changes in equities of subsidiaries and associates may be used to offset a deficit; however, when generated from issuance of restricted shares for employees, such capital surplus may not be used for any purpose.

c. Retained earnings and dividend policy

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

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

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

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

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

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

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

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

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

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

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

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

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

d. Other equity items

1) Exchange differences on translation of foreign financial statements

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

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

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

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

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

e. Non-controlling interests

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

20. REVENUE

Refer to Note 33 for the Group's revenue.

21. EMPLOYEE BENEFITS EXPENSE, DEPRECIATION, AND AMORTIZATION

	For the Year Ended December 31, 2019			
	Classified as Operating Costs	**Classified as Operating Expenses**	**Classified as Non-operating Income and Losses**	**Total**
Short-term employee benefits	$ 2,635,857	$ 5,479,081	$ -	$ 8,114,938
Post-employment benefits	$ 131,266	$ 327,166	$ -	$ 458,432
Compensation costs of employee share options	$ 16,667	$ 33,253	$ -	$ 49,920
Depreciation	$ 7,847,263	$ 811,480	$ 7,648	$ 8,666,391
Amortization	$ 33,506	$ 58,214	$ 19,720	$ 111,440

	For the Year Ended December 31, 2018			
	Classified as Operating Costs	**Classified as Operating Expenses**	**Classified as Non-operating Income and Losses**	**Total**
Short-term employee benefits	$ 3,206,420	$ 5,740,847	$ -	$ 8,947,267
Post-employment benefits	$ 130,861	$ 290,835	$ -	$ 421,696
Depreciation	$ 6,751,457	$ 721,820	$ 7,384	$ 7,480,661
Amortization	$ 33,330	$ 54,851	$ 14,020	$ 102,201

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

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

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

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

	For the Year Ended December 31	
	2018	2017
Employees' compensation	$ 163,650	$ 67,881
Remuneration of directors	$ 81,825	$ 67,881

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

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

22. INCOME TAXES RELATING TO CONTINUING OPERATIONS

a. Income tax recognized in profit or loss

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

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

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

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

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

b. Current tax assets and liabilities

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

c. Deferred tax assets

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

d. Operating loss carryforwards and tax exemptions

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

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

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

Operating Loss Carryforwards	Expiry Year
$ 51,000	2022

e. Information about investment credits

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

f. Tax return assessments

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

23. EARNINGS PER SHARE

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

If the Company offered to settle the compensation or bonuses paid to employees by cash or shares, the Company assumed that the entire amount of the compensation or bonuses will be settled in shares, and the resulting potential shares were included in the weighted average number of shares outstanding used in the computation of diluted earnings per share (EPS), if the shares have a dilutive effect. Such dilutive effect of the potential shares is included in the computation of diluted EPS until the number of shares to be distributed to employees is resolved in the following year.

24. BUSINESS COMBINATIONS

a. Subsidiaries acquired and consideration transferred

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

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

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

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

c. Goodwill recognized on acquisitions

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

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

d. Net cash outflow on acquisition of subsidiaries

	GTD
Consideration paid in cash	$ 155,367
Less: Cash and cash equivalent balances acquired	(27,853)
	$ 127,514

25. CAPITAL MANAGEMENT

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

26. FINANCIAL INSTRUMENT

a. Fair value of financial instruments

1) Valuation techniques and assumptions used in fair value measurement

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

- The fair values of financial assets and financial liabilities with standard terms and conditions and traded on active liquid markets are determined with reference to quoted market prices (includes publicly traded stock and mutual funds).

- Forward exchange contracts and foreign exchange swap contracts are measured using quoted forward exchange rates and yield curves derived from quoted interest rates matching maturities of the contracts.

- Domestic and overseas unlisted equity instrument at FVTOCI were all measured based on Level 3. Fair values of the above equity instruments were determined using comparable listed company approach, refer to strike price of similar business at active market, implied value multiple of the price and relevant information. Significant unobservable inputs included PE ratio, value multiple and market liquidity discount.

2) Fair value measurements recognized in the consolidated balance sheets

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

- Level 1 fair value measurements are those derived from quoted prices (unadjusted) in active markets for identical assets or liabilities;

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

- Level 3 fair value measurements are those derived from valuation techniques that include inputs for the asset or liability that are not based on observable market data (unobservable inputs).

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

Fair value hierarchy as at December 31, 2019

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

Fair value hierarchy as at December 31, 2018

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

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

Fair value hierarchy as at December 31, 2019

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

Fair value hierarchy as at December 31, 2018

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

b. Categories of financial instruments

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

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

c. Financial risk management objectives and policies

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

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

1) Market risk

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

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

a) Foreign currency risk

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

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

b) Interest rate risk

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

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

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

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

2) Credit risk

Credit risk refers to the risk that counterparty will default on its contractual obligations resulting in financial loss to the Group.

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

3) Liquidity risk

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

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

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

Additional information about the maturity analysis for lease liabilities:

	Less than 2 Years	2-5 Years	5-10 Years	10-15 Years	Over 15 Years
Lease liabilities	$ 460,636	$ 538,384	$ 651,067	$ 526,818	$ 621,627

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

27. RELATED PARTY TRANSACTIONS

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

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

b. Operating activities

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

	December 31	
	2019	**2018**
6) Accounts receivable due from related parties		
Related party in substance	$ 45,903	$ 44,297

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

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

c. Lease arrangements

	December 31, 2019
Lease liabilities	
Related party in substance	$ 32,869
Investor that exercises significant influence over the Group	5,160
	$ 38,029

	For the Year Ended December 31, 2019
Interest expense	
Related party in substance	$ 604
Investor that exercises significant influence over the Group	100
	$ 704

d. Guarantee

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

e. Compensation of key management personnel

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

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

28. PLEDGED AND COLLATERALIZED ASSETS

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

29. SIGNIFICANT CONTINGENT LIABILITIES AND UNRECOGNIZED COMMITMENTS

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

b. Signed construction contract

	Total Contract Price	Payment as of December 31, 2019
TASA Construction Corporation	$ 8,530,699	$ 6,103,853

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

30. SIGNIFICANT CONTRACTS

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

31. SIGNIFICANT ASSETS AND LIABILITIES DENOMINATED IN FOREIGN CURRENCIES

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

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

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

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

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

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

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

32. ADDITIONAL DISCLOSURE

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

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

c. Information on investment in mainland China

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

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

33. SEGMENT INFORMATION

a. Basic information about operating segment

1) Classification of operating segments

The Group’s reportable segments under IFRS 8 “Operating Segments” was as follows:

a) Segment of DRAM IC product

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

b) Segment of Flash Memory product

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

c) Segment of Logic IC product

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

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

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

b. Segment revenues and operating results

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

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

(Continued)

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

(Concluded)

c. Geographical information

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

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

d. Major customer information

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

TABLE 1

WINBOND ELECTRONICS CORPORATION AND SUBSIDIARIES

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

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

(Continued)

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

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

(Concluded)

WINBOND ELECTRONICS CORPORATION AND SUBSIDIARIES

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

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

Note 1: Include adjustment for equity method.

Note 2: Cash dividends.

Note 3: Include adjustments for change in value of financial assets at fair value through other comprehensive income.

WINBOND ELECTRONICS CORPORATION AND SUBSIDIARIES

ACQUISITION OF INDIVIDUAL REAL ESTATE AT COSTS OF AT LEAST NT$300 MILLION OR 20% OF THE PAID-IN CAPITAL
FOR THE YEAR ENDED DECEMBER 31, 2019
(In Thousands of New Taiwan Dollars)

Company Name	Property	Event Date	Transaction Amount	Payment Term	Counterparty	Relationship	Information on Previous Title Transfer If Counterparty Is A Related Party				Pricing Reference	Purpose of Acquisition	Other Terms
							Property Owner	Relationship	Transaction Date	Amount			
WEC	Buildings	2019.01.04-2019.12.23	$ 4,872,879	Monthly settlement by the construction progress and acceptance	TASA Construction Corporation	None	N/A	N/A	N/A	N/A	Price comparison and price negotiation	Business purpose	None
	Buildings	2019.01.15-2019.11.21	553,992	Monthly settlement by the construction progress and acceptance	Continental Engineering Corporation	None	N/A	N/A	N/A	N/A	Price comparison and price negotiation	Business purpose	None

WINBOND ELECTRONICS CORPORATION AND SUBSIDIARIES

TOTAL PURCHASES FROM OR SALES TO RELATED PARTIES OF AT LEAST NT$100 MILLION OR 20% OF THE PAID-IN CAPITAL
FOR THE YEAR ENDED DECEMBER 31, 2019
(In Thousands of New Taiwan Dollars and Foreign Currencies)

Company Name	Related Party	Relationship	Transaction Details				Abnormal Transaction		Notes/Accounts Payable or Receivable		Note
			Purchase/ Sale	Amount	% of Total	Payment Terms	Unit Price	Payment Terms	Ending Balance	% to Total	
WEC	WEHK	Direct subsidiary with 100% ownership	Sales	$ 8,417,086	22	Net 90 days from invoice date	N/A	N/A	$ 984,183	22	
	WECJ	Indirect subsidiary with 100% ownership	Sales	4,607,248	12	Net 90 days from invoice date	N/A	N/A	425,678	10	
	WECN	Indirect subsidiary with 100% ownership	Sales	1,381,178	4	Net 90 days from invoice date	N/A	N/A	42,550	1	
	WECA	Indirect subsidiary with 100% ownership	Sales	677,958	2	Net 90 days from invoice date	N/A	N/A	-	-	
	NTC	Direct subsidiary with 62% ownership	Sales	132,125	-	Net 30 days from invoice date	N/A	N/A	24,726	1	
WEHK	WEC	Parent company	Purchases	USD 272,650	100	Net 90 days from invoice date	N/A	N/A	USD (32,776)	(100)	
WECJ	WEC	Parent company	Purchases	JPY 16,425,963	98	Net 90 days from invoice date	N/A	N/A	JPY (1,555,555)	(95)	
WECN	WEC	Parent company	Purchases	RMB 309,793	100	Net 90 days from invoice date	N/A	N/A	RMB (9,884)	(100)	
WECA	WEC	Parent company	Purchases	USD 22,292	100	Net 90 days from invoice date	N/A	N/A	-	-	
NTC	WEC	Parent company	Purchases	131,874	4	Net 30 days from invoice date	N/A	N/A	(24,535)	(2)	
	NTHK	Subsidiary	Sales	3,792,364	37	Net 90 days from invoice date	N/A	N/A	56,121	7	
	NTCA	Subsidiary	Sales	101,972	1	Net 90 days from invoice date	N/A	N/A	17,640	2	
	Nyquest Technology Co., Ltd.	Indirect 5% ownership through NTC's subsidiary	Sales	246,292	2	Net 45 days from invoice date	N/A	N/A	45,883	5	
NTHK	NTC	Parent company	Purchases	USD 122,713	100	Net 90 days from invoice date	N/A	N/A	USD (1,872)	(100)	
NTCA	NTC	Parent company	Purchases	USD 3,277	100	Net 90 days from invoice date	N/A	N/A	USD (588)	(100)	

TABLE 5

WINBOND ELECTRONICS CORPORATION

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

Company Name	Related Party	Relationship	Ending Balance	Turnover Rate	Overdue		Amount Received in Subsequent Period	Allowance for Impairment Loss
					Amount	Action Taken		
WEC	WEHK	Direct subsidiary with 100% ownership	$ 984,183	9.20	$ -	-	$ 410,422	$ -
	WECJ	Indirect subsidiary with 100% ownership	425,678	13.29	-	-	-	-

WINBOND ELECTRONICS CORPORATION

NAMES, LOCATIONS, AND RELATED INFORMATION OF INVESTEES OVER WHICH THE COMPANY EXERCISES SIGNIFICANT INFLUENCE (EXCLUDING INFORMATION ON INVESTMENT IN MAINLAND CHINA)
FOR THE YEAR ENDED DECEMBER 31, 2019
(In Thousands of New Taiwan Dollars and Foreign Currencies)

Investor Company	Investee Company	Location	Main Businesses and Products	Original Investment Amount		As of December 31, 2019			Net Income (Loss) of the Investee	Share of Profit (Loss)	Note
				December 31, 2019	December 31, 2018	Number of Shares	%	Carrying Amount			
Winbond Electronics Corp.	Nuvoton Technology Corporation	Taiwan	Research, development, design, manufacture and marketing of Logic IC, 6 inch wafer product, test, and OEM	$ 2,994,644	$ 727,548	177,000,000	62	$ 4,528,887	$ 558,459	$ 349,373	
	Winbond Int’l Corporation	British Virgin Islands	Investment holding	2,992,157	2,992,157	95,410,000	100	1,625,896	49,421	49,421	
	Landmark Group Holdings Ltd.	British Virgin Islands	Investment holding	168,755	186,126	5,343,000	100	409,747	48,422	48,422	
	Mobile Magic Design Corporation	Taiwan	Design, development and marketing of Pseudo SRAM	-	50,000	-	-	-	7,848	7,848	(Note 1)
	Winbond Electronics (HK) Limited	Hong Kong	Sales of semiconductor and investment holding	278,158	278,158	71,150,000	100	421,958	106,518	106,528	
	Pine Capital Investment Limited	Hong Kong	Investment holding	2,967	2,967	780,000	100	7,281	967	967	
	Winbond Technology Ltd.	Israel	Design and service of semiconductor	21,242	21,242	100,000	100	70,113	16,739	16,739	
	Chin Xin Investment Co., Ltd.	Taiwan	Investment holding	1,874,825	1,874,825	182,840,999	38	4,548,224	639,834	241,042	
	Hwa Bao Botanic Conservation Corp.	Taiwan	Agriculture and forestry botanic conservation	750	750	75,000	15	715	(56)	(8)	
	Techdesign Corporation	Taiwan	Electronic commerce and product marketing	-	50,000	-	-	-	(1,530)	(1,285)	(Note 2)
	Callisto Holding Limited	Hong Kong	Electronic commerce and investment holding	156,292	156,292	40,000,000	100	142,793	(10,586)	(10,586)	
	Great Target Development Ltd.	Seychelles	Investment Holding	155,367	-	4,460,000	100	147,019	250	118	(Note 3)
	Winbond Electronics Germany GmbH	Germany	Sales and service of semiconductor	28,679	-	850,000	100	28,551	-	-	(Note 4)
Winbond Int’l Corporation	Winbond Electronics Corporation America	United States of America	Design, sales and after-sales service of semiconductor	1,683,207	1,683,207	3,067	100	1,432,562	49,528	49,528	
Landmark Group Holdings Ltd.	Winbond Electronics Corporation Japan	Yokohama, Japan	Research, development, sales and after-sales service of semiconductor	112,644	112,644	2,970	100	421,938	48,109	48,109	
	Peaceful River Corp.	British Virgin Islands	Investment holding	20,044	21,789	5,660,000	100	(13,195)	2,204	2,204	(Note 5)
Callisto Holding Limited	Callisto Technology Limited	Hong Kong	Electronic commerce and investment holding	30,895 USD 1,000	-	1,000,000	100	30,130 USD 1,005	165 USD 5	165 USD 5	(Note 6)
Great Target Development Ltd.	GLMTD Technology Private Limited	India	Sales and service of semiconductor	135,415	-	27,998,400	99.99	117,284	285	285	(Note 3)
Nuvoton Technology Corporation	Nuvoton Electronics Technology (H.K.) Limited	Hong Kong	Sales of semiconductor	427,092	427,092	107,400,000	100	459,960	21,929	21,929	
	Pigeon Creek Holding Co., Ltd.	British Virgin Islands	Investment holding	-	439,651	-	-	-	-	-	(Note 7)
	Marketplace Management Limited	British Virgin Islands	Investment holding	273,418	271,798	8,842,789	100	77,837	951	951	
	Nuvoton Investment Holding Ltd.	British Virgin Islands	Investment holding	590,953	574,296	17,960,000	100	277,739	38,840	38,840	
	Song Yong Investment Corporation	Taiwan	Investment holding	38,500	38,500	3,850,000	100	78,834	3,632	3,632	
	Nuvoton Technology India Private Limited	India	Design, sales and after-sales service of semiconductor	30,211	30,211	600,000	100	22,228	1,411	1,411	
	Nuvoton Technology Corp. America	United States of America	Design, sales and after-sales service of semiconductor	190,862	190,862	60,500	100	186,060	(1,287)	(1,287)	(Note 8)
Marketplace Management Limited	Goldbond LLC	United States of America	Investment holding	1,472,903	1,472,124	-	100	77,533	1,267	1,267	
Nuvoton Investment Holding Ltd.	Nuvoton Technology Israel Ltd.	Israel	Design and service of semiconductor	46,905	46,905	1,000	100	278,765	41,401	41,401	

Note 1: MMDC conducted a short-form merger with the Company on the effective date on October 1, 2019. The Company is the surviving company after the short-form merger.
Note 2: TDC filed for liquidation in June 2019 and the date of dissolution was set on June 10, 2019. The liquidation and legal procedures were not completed as of December 31, 2019.
Note 3: The Company purchased GTD in July 2019 and indirectly held GLMTD with 99.99% ownership.
Note 4: A capital was injected in WEG, which was incorporated in November 2019.
Note 5: PRC has a negative net carrying amount as of December 31, 2019, which is reclassified to other non-current liabilities.
Note 6: CTL was incorporated in October 2018, and Callisto has injected a capital in CTL in April 2019.
Note 7: PCH completed the liquidation and legal procedures in January 2019.
Note 8: Since PCH completed the liquidation, NTC directly owned 100% of interest in NTCA.
Note 9: Refer to Table 7 for information on investment in mainland China.

WINBOND ELECTRONICS CORPORATION

INFORMATION ON INVESTMENT IN MAINLAND CHINA
FOR THE YEAR ENDED DECEMBER 31, 2019
(In Thousands of New Taiwan Dollars and Foreign Dollars)

1. Information on any investee company in mainland China, main businesses and procedures, paid-in capital, method of investment, inward and outward remittance of funds, ownership percentage, investment income or loss, carrying amount of the investment at the end of the period and repatriations of investment income:

Investor Company	Investee Company	Main Businesses and Products	Paid-in Capital	Method of Investment	Accumulated Outward Remittance for Investment from Taiwan as of January 1, 2019	Remittance of Funds		Accumulated Outward Remittance for Investment from Taiwan as of December 31, 2019	Net Income of the Investee	% Ownership of Direct or Indirect Investment	Investment Gain (Note 1)	Carrying Amount as of December 31, 2019	Accumulated Repatriation of Investment Income as of December 31, 2019
						Outward	Inward						
WEC	Winbond Electronics (Suzhou) Limited	Design, development and marketing of VLSI integrated ICs	$ 276,435 USD 9,000	Through investing in WEHK in the third area, which then invested in the investee in mainland China indirectly	$ 276,435 USD 9,000	$ -	$ -	$ 276,435 USD 9,000	$ 21,618	100	$ 21,618	$ 292,909	$ 35,880
NTC	Nuvoton Electronics Technology (Shanghai) Limited	Provide project of sale in China and repair, test and consult of software	68,036 USD 2,000	Through investing in MML in the third area in British Virgin Islands, which then invested in the investee in mainland China indirectly	68,036 USD 2,000	-	-	68,036 USD 2,000	1,623	62	999	48,554	-
	Winbond Electronics (Nanjing) Ltd.	Computer software service (except I.C. design)	16,429 USD 500	Through investing in MML in the third area in British Virgin Islands, which then invested in the investee in mainland China indirectly	16,429 USD 500	-	-	16,429 USD 500	(1)	62	(1)	(1,053) (Note 2)	-
	Nuvoton Electronics Technology (Shenzhen) Limited	Computer software service (except I.C. design), wholesale business for computer, supplement and software	197,670 USD 6,000	Through investing in NTHK in the third area, which then invested in the investee in mainland China indirectly	197,670 USD 6,000	-	-	197,670 USD 6,000	6,354	62	3,911	127,386	-

Note 1: Investment profit or loss for the year ended December 31, 2019 was recognized under the basis of the financial statements audited by the Company's auditor.

Note 2: WENJ has a negative net book value as of December 31, 2019, which is reclassified to other non-current liabilities.

2. Information on any investee company in mainland China, main businesses and procedures, paid-in capital, method of investment, inward and outward remittance of funds, ownership percentage, investment income or loss, carrying amount of the investment at the end of the period and repatriations of investment income:

Company	Accumulated Outward Remittance for Investment in Mainland China as of December 31, 2019	Investment Amounts Authorized by Investment Commission, MOEA	Upper Limit on the Amount of Investment Stipulated by Investment Commission, MOEA (Note 3)
WEC	$ 276,435 (USD9,000)	$ 276,435 (USD9,000)	$ 36,612,373
NTC	282,135 (USD8,500)	282,135 (USD8,500)	4,435,219

Note 3: Upper limit on the amount of 60% of the investee's net book value.

3. Refer to Table 4 for significant transactions with the investee in mainland China directly and indirectly through investing in companies in the third area.

4. Handling endorsement, guarantee and collateral to the investee in mainland China directly and indirectly through investing in companies in the third area: None.

5. Financing of funds to investee in mainland China directly and indirectly through investing in companies in the third area: None.

6. Other transactions with significant influence on profit or loss for the period or financial performance: None.

TABLE 8

WINBOND ELECTRONICS CORPORATION AND SUBSIDIARIES

INTERCOMPANY RELATIONSHIPS AND SIGNIFICANT INTERCOMPANY TRANSACTIONS
FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018
(In Thousands of New Taiwan Dollars)

No.	Company Name	Related Party	Nature of Relationship	Transaction Details			Percentage of Consolidated Total Gross Sales or Total Assets (%)
				Financial Statement Account	Amount	Terms	
	2019						
0	WEC	WEHK	Transactions between parent company and subsidiaries	Operating revenue	$ 8,417,086	-	17
		WEHK	Transactions between parent company and subsidiaries	Accounts receivable due from related parties	984,183	-	1
		WECA	Transactions between parent company and subsidiaries	Operating revenue	677,958	-	1
		WECA	Transactions between parent company and subsidiaries	Research and development expenses	366,646	-	-
		WECA	Transactions between parent company and subsidiaries	Selling expenses	184,945	-	-
		WECA	Transactions between parent company and subsidiaries	Other payables	129,510	-	-
		WECJ	Transactions between parent company and subsidiaries	Research and development expenses	347,631	-	1
		WECJ	Transactions between parent company and subsidiaries	Accounts receivable due from related parties	425,678	-	-
		WECJ	Transactions between parent company and subsidiaries	Other payables	55,675	-	-
		WECJ	Transactions between parent company and subsidiaries	Operating revenue	4,607,248	-	9
		WECJ	Transactions between parent company and subsidiaries	Selling expenses	4,312	-	-
		WECN	Transactions between parent company and subsidiaries	Operating revenue	1,381,178	-	3
		WECN	Transactions between parent company and subsidiaries	Accounts receivable due from related parties	42,550	-	-
		NTC	Transactions between parent company and subsidiaries	Operating revenue	132,125	-	-
		NTC	Transactions between parent company and subsidiaries	Accounts receivable due from related parties	24,726	-	-
		NTC	Transactions between parent company and subsidiaries	Other receivables	2,553	-	-
		NTC	Transactions between parent company and subsidiaries	Other non-current assets	545	-	-
		NTC	Transactions between parent company and subsidiaries	Other income	7,408	-	-
		NTC	Transactions between parent company and subsidiaries	Other payables	434	-	-
		NTC	Transactions between parent company and subsidiaries	Interest expense	204	-	-
		NTC	Transactions between parent company and subsidiaries	General and administrative expenses	4,223	-	-
		NTC	Transactions between parent company and subsidiaries	Other non-current liabilities	1,780	-	-
		NTC	Transactions between parent company and subsidiaries	Right-of-use assets	11,168	-	-
		NTC	Transactions between parent company and subsidiaries	Lease liabilities	11,254	-	-
		MMDC	Transactions between parent company and subsidiaries	Research and development expenses	137,231	-	-
		MMDC	Transactions between parent company and subsidiaries	Other income	297	-	-
		WTL	Transactions between parent company and subsidiaries	Research and development expenses	291,378	-	1
		WTL	Transactions between parent company and subsidiaries	Other payables	54,516	-	-
		TDC	Transactions between parent company and subsidiaries	Selling expenses	37	-	-
		Callisto	Transactions between parent company and subsidiaries	Accounts receivable due from related parties	176	-	-
		Callisto	Transactions between parent company and subsidiaries	Selling expenses	74	-	-

(Continued)

No.	Company Name	Related Party	Nature of Relationship	Transaction Details			Percentage of Consolidated Total Gross Sales or Total Assets (%)
				Financial Statement Account	Amount	Terms	
1	WEHK	WECN	Transactions between subsidiaries	Other payables	$ 8,395	-	-
		WECN	Transactions between subsidiaries	Selling expenses	34,300	-	-
		NTHK	Transactions between subsidiaries	Other payables	320	-	-
		NTHK	Transactions between subsidiaries	Right-of-use assets	523	-	-
		NTHK	Transactions between subsidiaries	Lease liabilities	532	-	-
		NTHK	Transactions between subsidiaries	General and administrative expenses	1,617	-	-
		NTHK	Transactions between subsidiaries	Interest expense	49	-	-
2	WECA	NTCA	Transactions between subsidiaries	Other income	8,346	-	-
3	TDC	NTC	Transactions between subsidiaries	Operating revenue	1	-	-
		Callisto	Transactions between subsidiaries	Other income	19	-	-
		Callisto	Transactions between subsidiaries	General and administrative expenses	10	-	-
4	Callisto	NTC	Transactions between subsidiaries	Operating revenue	15	-	-
		NTC	Transactions between subsidiaries	Other current liabilities	39	-	-
5	NTC	WECJ	Transactions between subsidiaries	Operating revenue	90,302	-	-
		WECJ	Transactions between subsidiaries	Accounts receivable due from related parties	21,490	-	-
		NTHK	Transactions between parent company and subsidiaries	Operating revenue	3,792,364	-	1
		NTHK	Transactions between parent company and subsidiaries	Accounts receivable due from related parties	56,121	-	-
		NTCA	Transactions between parent company and subsidiaries	Operating revenue	101,972	-	-
		NTCA	Transactions between parent company and subsidiaries	Research and development expenses	275,223	-	-
		NTCA	Transactions between parent company and subsidiaries	General and administrative expenses	38,049	-	-
		NTCA	Transactions between parent company and subsidiaries	Accounts receivable due from related parties	17,640	-	-
		NTCA	Transactions between parent company and subsidiaries	Other payables	4,406	-	-
		NTIL	Transactions between parent company and subsidiaries	Research and development expenses	742,819	-	1
		NTIL	Transactions between parent company and subsidiaries	General and administrative expenses	55,613	-	-
		NTIL	Transactions between parent company and subsidiaries	Other payables	154,348	-	-
		NTSZ	Transactions between parent company and subsidiaries	Operating revenue	24,495	-	-
		NTSZ	Transactions between parent company and subsidiaries	Accounts receivable due from related parties	3,531	-	-
		NTIPL	Transactions between parent company and subsidiaries	Selling expenses	5,078	-	-
		NTIPL	Transactions between parent company and subsidiaries	Other current liabilities	731	-	-
6	NTHK	NTSZ	Transactions between parent company and subsidiaries	Selling expenses	91,494	-	-
		NTSZ	Transactions between parent company and subsidiaries	Other current assets	1,019	-	-
		NTSH	Transactions between subsidiaries	Selling expenses	61,975	-	-
		NTSH	Transactions between subsidiaries	Other payables	4,467	-	-

(Continued)

No.	Company Name	Related Party	Nature of Relationship	Transaction Details			Percentage of Consolidated Total Gross Sales or Total Assets (%)
				Financial Statement Account	Amount	Terms	
	2018						
0	WEC	WEHK	Transactions between parent company and subsidiaries	Operating revenue	$ 7,485,855	-	15
		WEHK	Transactions between parent company and subsidiaries	Accounts receivable due from related parties	846,501	-	1
		WECA	Transactions between parent company and subsidiaries	Operating revenue	1,072,653	-	2
		WECA	Transactions between parent company and subsidiaries	Research and development expenses	367,089	-	1
		WECA	Transactions between parent company and subsidiaries	Selling expenses	182,790	-	-
		WECA	Transactions between parent company and subsidiaries	Accounts receivable due from related parties	19,389	-	-
		WECA	Transactions between parent company and subsidiaries	Other payables	125,609	-	-
		WECJ	Transactions between parent company and subsidiaries	Research and development expenses	320,486	-	1
		WECJ	Transactions between parent company and subsidiaries	Accounts receivable due from related parties	267,477	-	-
		WECJ	Transactions between parent company and subsidiaries	Other payables	58,758	-	-
		WECJ	Transactions between parent company and subsidiaries	Operating revenue	4,864,471	-	10
		WECJ	Transactions between parent company and subsidiaries	Selling expenses	4,300	-	-
		WECN	Transactions between parent company and subsidiaries	Operating revenue	1,304,397	-	3
		WECN	Transactions between parent company and subsidiaries	Accounts receivable due from related parties	63,232	-	-
		NTC	Transactions between parent company and subsidiaries	Operating revenue	103,684	-	-
		NTC	Transactions between parent company and subsidiaries	Accounts receivable due from related parties	15,844	-	-
		NTC	Transactions between parent company and subsidiaries	Other receivables	3,071	-	-
		NTC	Transactions between parent company and subsidiaries	Other non-current assets	545	-	-
		NTC	Transactions between parent company and subsidiaries	Other income	7,817	-	-
		NTC	Transactions between parent company and subsidiaries	Other payables	347	-	-
		MMDC	Transactions between parent company and subsidiaries	Other payables	42,080	-	-
		MMDC	Transactions between parent company and subsidiaries	Research and development expenses	190,279	-	-
		MMDC	Transactions between parent company and subsidiaries	Other income	396	-	-
		WTL	Transactions between parent company and subsidiaries	Research and development expenses	257,478	-	1
		WTL	Transactions between parent company and subsidiaries	Other payables	18,702	-	-
		TDC	Transactions between parent company and subsidiaries	Accounts receivable due from related parties	765	-	-
		TDC	Transactions between parent company and subsidiaries	Selling expenses	208	-	-
		PCI	Transactions between parent company and subsidiaries	Other receivables	277,470	-	-
		Callisto	Transactions between parent company and subsidiaries	Accounts receivable due from related parties	5	-	-
1	WEHK	WECN	Transactions between subsidiaries	Other payables	9,273	-	-
		WECN	Transactions between subsidiaries	Selling expenses	39,626	-	-
		NTHK	Transactions between subsidiaries	Other payables	336	-	-
2	WECA	WTL	Transactions between subsidiaries	Other receivables	12	-	-
		NTCA	Transactions between subsidiaries	Other income	8,141	-	-
		NTCA	Transactions between subsidiaries	Other receivables	216	-	-
3	TDC	NTC	Transactions between subsidiaries	Other payables	7	-	-
		NTC	Transactions between subsidiaries	Other income	2	-	-
		Callisto	Transactions between subsidiaries	Other income	2,464	-	-
		Callisto	Transactions between subsidiaries	Other receivables	2,465	-	-

(Continued)

No.	Company Name	Related Party	Nature of Relationship	Transaction Details			Percentage of Consolidated Total Gross Sales or Total Assets (%)
				Financial Statement Account	Amount	Terms	
4	NTC	NTHK	Transactions between parent company and subsidiaries	Operating revenue	$ 3,790,977	-	7
		NTHK	Transactions between parent company and subsidiaries	Accounts receivable due from related parties	233,440	-	-
		NTCA	Transactions between parent company and subsidiaries	Operating revenue	106,538	-	-
		NTCA	Transactions between parent company and subsidiaries	Research and development expenses	257,911	-	1
		NTCA	Transactions between parent company and subsidiaries	General and administrative expenses	34,202	-	-
		NTCA	Transactions between parent company and subsidiaries	Accounts receivable due from related parties	33,522	-	-
		NTCA	Transactions between parent company and subsidiaries	Other payables	850	-	-
		WECJ	Transactions between subsidiaries	Operating revenue	85,611	-	-
		WECJ	Transactions between subsidiaries	Accounts receivable due from related parties	18,008	-	-
		NTIL	Transactions between parent company and subsidiaries	Research and development expenses	604,928	-	1
		NTIL	Transactions between parent company and subsidiaries	General and administrative expenses	49,582	-	-
		NTIL	Transactions between parent company and subsidiaries	Other payables	100,770	-	-
		NTSZ	Transactions between parent company and subsidiaries	Operating revenue	15,631	-	-
		NTSZ	Transactions between parent company and subsidiaries	Accounts receivable due from related parties	2,760	-	-
		NTIPL	Transactions between parent company and subsidiaries	Selling expenses	2,092	-	-
		NTIPL	Transactions between parent company and subsidiaries	Other payables	703	-	-
5	NTHK	NTSZ	Transactions between parent company and subsidiaries	Selling expenses	94,460	-	-
		NTSZ	Transactions between parent company and subsidiaries	Other payables	2,764	-	-
		NTSH	Transactions between subsidiaries	Selling expenses	65,787	-	-
		NTSH	Transactions between subsidiaries	Other current assets	4,884	-	-

Note: The sales prices and payment terms to related parties were not significantly different from those of sales to third parties. For other related party transactions, price and terms were determined in accordance with mutual agreements.

(Concluded)