Nuvoton Technology Corporation and Subsidiaries

Consolidated Financial Statements for the Years Ended December 31, 2020 and 2019 and Independent Auditors' Report

INDEPENDENT AUDITORS' REPORT

The Board of Directors and Shareholders
Nuvoton Technology Corporation

Opinion

We have audited the accompanying consolidated financial statements of Nuvoton Technology Corporation and its subsidiaries (collectively referred to as the "Group"), which comprise the consolidated balance sheets as of December 31, 2020 and 2019, 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, 2020 and 2019, 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), International Financial Reporting Interpretations Committee (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, 2020. 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

Revenue from the sale of goods is recognized when the customer received the goods and bear the risk. 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 ten largest customers with changes in credit limits and temporary increase in credit limits in 2020 as a key audit matter for the year ended December 31, 2020. Refer to Note 4 to the consolidated financial statements for the Group's revenue recognition policies.

Our audit procedures in response to the occurrence 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.

Business combination

As mentioned in Note 27, Nuvoton Technology Corporation acquired the semiconductor business of Panasonic Corporation. Because this business combination was a significant transaction in 2020 and the decision made by the management were about complicated calculations of transferred consideration and the fair value of underlying assets and the reasonableness of the purchase price allocation, we considered the combination transaction as a key audit matter for the year ended December 31, 2020.

Our audit procedures in response to the business combination transaction were as follows:

a. Review the meeting minutes of the board of directors to confirm the business combination proposal has been properly assessed and approved.

b. Review the payment voucher of NTC to confirm whether it is consistent with the terms of the agreement.

c. Review and evaluate the reasonableness of the purchase price allocation report, issued by experts due to the business combination transaction, and the accounting treatment on the acquisition date.

Other Matter

We have also audited the parent company only financial statements of Nuvoton Technology Corporation as of and for the years ended December 31, 2020 and 2019 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 members of the audit committee) are responsible for overseeing the Group's financial reporting process.

Auditors' Responsibilities for the Audit of the Consolidated Financial Statements

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

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

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

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

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

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

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

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

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

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

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements for the year ended December 31, 2020 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 Shu-Lin Liu and Hung-Bin Yu.

Shu Lin Liu Hung-Bin Yu

Deloitte & Touche
Taipei, Taiwan
Republic of China

February 18, 2021

<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.

NUVOTON TECHNOLOGY CORPORATION AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS
DECEMBER 31, 2020 AND 2019
(In Thousands of New Taiwan Dollars)

	2020		2019	
ASSETS	**Amount**	**%**	**Amount**	**%**
CURRENT ASSETS				
Cash and cash equivalents (Notes 4 and 6)	$ 5,881,733	18	$ 4,859,223	44
Financial assets at fair value through profit or loss - current (Notes 4 and 7)	13,223	-	6,037	-
Notes and accounts receivable, net (Notes 4 and 8)	4,155,816	13	1,010,722	9
Accounts receivable from related parties, net (Notes 4, 8 and 30)	90,577	-	67,394	1
Other receivables (Notes 9 and 30)	1,710,051	5	496,881	4
Inventories (Notes 4 and 10)	6,250,131	20	1,604,658	14
Other current assets	259,015	1	142,442	1
Total current assets	18,360,546	57	8,187,357	73
NON-CURRENT ASSETS				
Financial assets at fair value through other comprehensive income - non-current (Notes 4 and 11)	1,806,580	6	1,117,410	10
Property, plant and equipment (Notes 4 and 12)	6,547,107	20	760,321	7
Right-of-use assets (Notes 4, 13 and 30)	1,498,888	5	600,288	5
Investment properties (Notes 4 and 14)	2,466,667	8	44,207	1
Intangible assets (Notes 4 and 15)	802,691	2	261,230	2
Deferred tax assets (Notes 4 and 23)	188,397	-	97,919	1
Refundable deposits (Note 6)	651,497	2	86,879	1
Other non-current assets	328	-	618	-
Total non-current assets	13,962,155	43	2,968,872	27
TOTAL	$ 32,322,701	100	$ 11,156,229	100
LIABILITIES AND EQUITY				
CURRENT LIABILITIES				
Short-term borrowings (Note 17)	$ 1,821,210	6	$ -	-
Financial liabilities at fair value through profit or loss - current (Notes 4 and 7)	3,191	-	-	-
Notes payable	365,870	1	-	-
Accounts payable	2,653,008	8	1,104,840	10
Accounts payable to related parties (Note 30)	827,543	3	24,535	-
Other payables (Notes 18 and 30)	3,949,773	12	951,058	8
Current tax liabilities (Notes 4 and 23)	279,913	1	78,732	1
Provisions - current (Note 19)	928,719	3	-	-
Lease liabilities - current (Notes 4 and 13)	300,067	1	114,308	1
Other current liabilities	421,034	1	68,411	1
Total current liabilities	11,550,328	36	2,341,884	21
NON-CURRENT LIABILITIES				
Bonds payable (Note 16)	1,207,820	4	-	-
Long-term borrowings (Note 17)	1,500,000	5	500,000	4
Provisions - non-current (Note 19)	3,120,468	10	101,891	1
Deferred tax liabilities (Notes 4 and 23)	52,132	-	-	-
Lease liabilities - non-current (Notes 4 and 13)	1,474,041	4	452,715	4
Net defined benefit liabilities - non-current (Notes 4 and 20)	1,780,008	5	287,565	3
Other non-current liabilities	116,536	-	80,143	1
Total non-current liabilities	9,251,005	28	1,422,314	13
Total liabilities	20,801,333	64	3,764,198	34
EQUITY ATTRIBUTABLE TO OWNERS OF THE COMPANY				
Share capital (Note 21)	3,759,616	12	2,875,544	26
Certificates of bond-to-stock conversion (Note 21)	124,320	-	-	-
Capital surplus (Note 21)	5,796,731	18	2,906,976	26
Retained earnings (Note 21)				
Legal reserve	596,905	2	541,722	5
Unappropriated earnings	1,103,083	3	917,229	8
Exchange differences on translation of foreign financial statements of foreign operations (Notes 4 and 21)	(128,352)	-	(18,984)	-
Unrealized gains (losses) on financial assets at fair value through other comprehensive income (Notes 4 and 21)	269,065	1	169,544	1
Total equity	11,521,368	36	7,392,031	66
TOTAL	$ 32,322,701	100	$ 11,156,229	100

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

NUVOTON TECHNOLOGY CORPORATION AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
FOR THE YEARS ENDED DECEMBER 31, 2020 AND 2019
(In Thousands of New Taiwan Dollars, Except Earnings Per Share)

	2020		2019	
	Amount	**%**	**Amount**	**%**
OPERATING REVENUE (Note 22)	$ 20,668,056	100	$ 10,367,269	100
OPERATING COST (Notes 10, 24 and 30)	12,961,144	62	6,239,380	61
GROSS PROFIT	7,706,912	38	4,127,889	39
OPERATING EXPENSES (Notes 24 and 30)				
Selling expenses	507,929	2	249,968	2
General and administrative expenses	1,358,393	7	468,518	5
Research and development expenses	5,516,242	27	2,822,825	27
Expected credit loss (gain)	2,066	-	2,257	-
Total operating expenses	7,384,630	36	3,543,568	34
PROFIT FROM OPERATIONS	322,282	2	584,321	5
NON-OPERATING INCOME AND EXPENSES (Notes 4, 27 and 30)				
Interest expense	(70,228)	-	(14,279)	-
Interest income	22,330	-	17,777	-
Dividend income	67,746	-	70,529	1
Gain on the bargain purchase	218,968	1	-	-
Other gains and losses	114,345	1	12,203	-
Gains (losses) on disposal of property, plant and equipment	40,433	-	62	-
Foreign exchange gains (losses)	(6,417)	-	(2,791)	-
Gains (losses) on financial instruments at fair value through profit or loss	33,966	-	(253)	-
Total non-operating income and expenses	421,143	2	83,248	1
PROFIT BEFORE INCOME TAX	743,425	4	667,569	6
INCOME TAX EXPENSE (Notes 4 and 23)	(210,640)	(1)	(109,110)	(1)
NET PROFIT FOR THE YEAR	532,785	3	558,459	5

(Continued)

NUVOTON TECHNOLOGY CORPORATION AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
FOR THE YEARS ENDED DECEMBER 31, 2020 AND 2019
(In Thousands of New Taiwan Dollars, Except Earnings Per Share)

	2020		2019	
	Amount	**%**	**Amount**	**%**
OTHER COMPREHENSIVE INCOME (LOSS) (Note 21)				
Items that will not be reclassified subsequently to profit or loss:				
Remeasurement of defined benefit plans (Notes 4 and 20)	$ (29,082)	-	$ (56,330)	-
Unrealized gains (losses) on investments in equity instruments at fair value through other comprehensive income	181,920	1	39,393	-
Items that may be reclassified subsequently to profit or loss:				
Exchange differences on translation of the financial statements of foreign operations	(109,368)	(1)	(8,449)	-
Other comprehensive income (loss)	43,470	-	(25,386)	-
TOTAL COMPREHENSIVE INCOME FOR THE YEAR	$ 576,255	3	$ 533,073	5
EARNINGS PER SHARE (Notes 4 and 26)				
From continuing operations				
Basic	$ 1.81		$ 2.53	
Diluted	$ 1.72		$ 2.52	

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

NUVOTON TECHNOLOGY CORPORATION AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY
FOR THE YEARS ENDED DECEMBER 31, 2020 AND 2019
(In Thousands of New Taiwan Dollars)

	Equity Attributable to Owners of the Company							
				Retained Earnings		Other Equity		
	Ordinary Share	Certificates of Bond-to-Stock Conversion	Capital Surplus	Legal Reserve	Unappropriated Earnings	Exchange Differences on Translation of Foreign Financial Statements of Foreign Operations	Unrealized Gains (Losses) on Financial Assets at Fair Value Through Other Comprehensive Income	Total Equity
BALANCE AT JANUARY 1, 2019	$ 2,075,544	$ -	$ 63,498	$ 470,659	$ 955,346	$ (10,535)	$ 179,854	$ 3,734,366
Appropriation of 2018 earnings (Note 21)								
Legal reserve	-	-	-	71,063	(71,063)	-	-	-
Cash dividends	-	-	-	-	(518,886)	-	-	(518,886)
Net profit for the year ended December 31, 2019	-	-	-	-	558,459	-	-	558,459
Other comprehensive income (loss) for the year ended December 31, 2019, net of income tax	-	-	-	-	(56,330)	(8,449)	39,393	(25,386)
Total comprehensive income (loss) for the year ended December 31, 2019	-	-	-	-	502,129	(8,449)	39,393	533,073
Compensation cost of employee share options (Notes 21 and 25)	-	-	49,920	-	-	-	-	49,920
Unclaimed dividends from claims extinguished by prescriptions	-	-	52	-	-	-	-	52
Disposal of investments in equity instruments designated as at fair value through other comprehensive income (Notes 11 and 21)	-	-	-	-	49,703	-	(49,703)	-
Issuance of ordinary shares for cash (Note 21)	800,000	-	2,793,506	-	-	-	-	3,593,506
BALANCE AT DECEMBER 31, 2019	2,875,544	-	2,906,976	541,722	917,229	(18,984)	169,544	7,392,031
Appropriation of 2019 earnings (Note 21)								
Legal reserve	-	-	-	55,183	(55,183)	-	-	-
Cash dividends	-	-	-	-	(345,065)	-	-	(345,065)
Net profit for the year ended December 31, 2020	-	-	-	-	532,785	-	-	532,785
Other comprehensive income (loss) for the year ended December 31, 2020, net of income tax	-	-	-	-	(29,082)	(109,368)	181,920	43,470
Total comprehensive income (loss) for the year ended December 31, 2020	-	-	-	-	503,703	(109,368)	181,920	576,255
Convertible bonds converted to ordinary shares (Note 16)	84,072	124,320	596,347	-	-	-	-	804,739
Compensation cost of employee share options (Notes 21 and 25)	-	-	62,240	-	-	-	-	62,240
Disposal of investments in equity instruments designated as at fair value through other comprehensive income (Notes 11 and 21)	-	-	-	-	82,399	-	(82,399)	-
Issuance of ordinary shares for cash (Note 21)	800,000	-	2,231,168	-	-	-	-	3,031,168
BALANCE AT DECEMBER 31, 2020	$ 3,759,616	$ 124,320	$ 5,796,731	$ 596,905	$ 1,103,083	$ (128,352)	$ 269,065	$ 11,521,368

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

NUVOTON TECHNOLOGY CORPORATION AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2020 AND 2019
(In Thousands of New Taiwan Dollars)

	2020	2019
CASH FLOWS FROM OPERATING ACTIVITIES		
Profit before income tax	$ 743,425	$ 667,569
Adjustments for:		
Depreciation expense	602,985	290,277
Amortization expense	179,513	89,569
Interest expense	70,228	14,279
Expected credit loss (gain) recognized on accounts receivable	2,066	2,257
Interest income	(22,330)	(17,777)
Dividend income	(67,746)	(70,529)
Compensation cost of employee share options	62,240	49,920
(Gains) losses on disposal of property, plant and equipment	(40,433)	(62)
Gain on the bargain purchase	(218,968)	-
Other income	(5)	-
Changes in operating assets and liabilities		
(Increase) decrease in financial assets at fair value through profit or loss	(3,570)	(5,274)
(Increase) decrease in notes and accounts receivable	99,420	(78,012)
(Increase) decrease in accounts receivable from related parties	3,023	(5,088)
(Increase) decrease in other receivables	382,463	(6,845)
(Increase) decrease in inventories	(32,371)	(43,720)
(Increase) decrease in other current assets	98,794	26,911
(Increase) decrease in other non-current assets	952	356
(Increase) decrease in notes payable	(49,851)	-
Increase (decrease) in accounts payable	(582,411)	240,675
Increase (decrease) in other payables	(130,220)	6,315
Increase (decrease) in other current liabilities	294,988	5,225
Increase (decrease) in net defined benefit liabilities	2,405	(63,192)
Increase (decrease) in other non-current liabilities	36,393	8,337
Cash flows from operations	1,430,990	1,111,191
Income tax paid	(79,348)	(103,362)
Interest received	27,426	11,101
Interest paid	(50,438)	(12,240)
Dividend received	67,746	70,529
Net cash flows generated from (used in) operating activities	1,396,376	1,077,219
CASH FLOWS FROM INVESTING ACTIVITIES		
Acquisition of intangible assets	(443,458)	(163,513)
Proceeds from disposal of intangible assets	736	-
Proceeds from disposal of financial assets at fair value through other comprehensive income	402,003	87,266
Acquisition of financial assets at fair value through other comprehensive income	-	(630,000)
Proceeds from capital reduction of financial assets at fair value through other comprehensive income	2,250	4,000

(Continued)

NUVOTON TECHNOLOGY CORPORATION AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2020 AND 2019
(In Thousands of New Taiwan Dollars)

	2020	2019
Acquisition of property, plant and equipment	$ (364,747)	$ (214,755)
Proceeds from disposal of property, plant and equipment	46,884	233
(Increase) decrease in refundable deposits paid	(560,641)	(5,444)
Net cash outflow on acquisition of subsidiaries (Note 27)	(6,928,207)	-
(Increase) decrease in other receivables - time deposits	250,236	(302,071)
Net cash flows generated from (used in) investing activities	(7,594,944)	(1,224,284)
CASH FLOWS FROM FINANCING ACTIVITIES		
Increase in short-term borrowings	1,821,210	-
Proceeds from long-term borrowings	2,800,000	500,000
Repayments of long-term borrowings	(1,800,000)	-
Repayments of the principal portion of lease liabilities	(187,753)	(102,217)
Proceeds from issuance of bonds	1,998,428	-
Dividends paid to owners of the Company	(345,065)	(518,886)
Proceeds from issuance of ordinary shares	3,031,168	3,593,506
Other financing activities	-	52
Net cash flows generated from (used in) financing activities	7,317,988	3,472,455
EFFECTS OF EXCHANGE RATE CHANGES ON THE BALANCE OF CASH HELD IN FOREIGN CURRENCIES	(96,910)	(10,085)
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	1,022,510	3,315,305
CASH AND CASH EQUIVALENTS, BEGINNING OF YEAR	4,859,223	1,543,918
CASH AND CASH EQUIVALENTS, END OF YEAR	$ 5,881,733	$ 4,859,223

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

1. GENERAL INFORMATION

Nuvoton Technology Corporation (the "Company") was incorporated in the Republic of China ("ROC") in April 2008 and commenced business in July 2008. The Company is engaged mainly in the research, design, development, manufacture, and sale of logic integrated circuits ("ICs") and the manufacturing, testing and OEM of 6-inch wafers.

For the specialization and division of labor and the reinforcement of core competitive ability, the Company's parent company, Winbond Electronics Corporation (WEC), spun off its Logic IC business into the Company on July 1, 2008 in accordance with the Business Mergers and Acquisitions Act and the Company commenced business in July 2008. WEC held approximately 55% and 62% of the ownership interest in the Company as of December 31, 2020 and 2019, respectively.

The Company's shares have been listed on the Taiwan Stock Exchange since September 27, 2010.

2. APPROVAL OF FINANCIAL STATEMENTS

The consolidated financial statements were approved by the Company's Board of Directors and authorized for issue on February 18, 2021.

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

a. Initial application of the amendments to the International Financial Reporting Standards (IFRS), International Accounting Standards (IAS), International Financing Reporting Interpretation Committee (IFRIC), and SIC Interpretations (SIC) (collectively, the "IFRSs") endorsed and issued into effect by the Financial Supervisory Commission (FSC)

   Except for the following, the initial application of the IFRSs endorsed and issued into effect by the FSC did not have material impact on the Group's accounting policies:

   Amendments to IAS 1 and IAS 8 "Definition of Material"

   The Group adopted the amendments starting from January 1, 2020. The threshold for materiality influencing users has been changed to "could reasonably be expected to influence" and, therefore, the disclosures in the consolidated financial report have been adjusted and immaterial information that may obscure material information has been deleted.

   Amendment to IFRS 16 "Covid-19 - Related Rent Concessions"

   The Group elected to apply the practical expedient provided in the amendment to IFRS 16 with respect to rent concessions negotiated with the lessor as a direct consequence of the COVID-19. Related accounting policies are stated in Note 4. Prior to the application of the amendment, the Group shall determine whether or not the abovementioned rent concessions need to be accounted for as lease modifications.

   The Group applied the amendment from January 1, 2020. Retrospective application of the amendment has no impact on the retained earnings as of January 1, 2020.

b. The IFRSs endorsed by the Financial Supervisory Commission (FSC) for application starting from 2021

New IFRSs	Effective Date Announced by IASB
Amendments to IFRS 4 “Extension of the Temporary Exemption from Applying IFRS 9”	Effective immediately upon promulgation by the IASB
Amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16 “Interest Rate Benchmark Reform - Phase 2”	January 1, 2021

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

New IFRSs	Effective Date Announced by IASB (Note 1)
“Annual Improvements to IFRS Standards 2018-2020”	January 1, 2022 (Note 2)
Amendments to IFRS 3 “Reference to the Conceptual Framework”	January 1, 2022 (Note 3)
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, 2023
Amendments to IFRS 17	January 1, 2023
Amendments to IAS 1 “Classification of Liabilities as Current or Non-current”	January 1, 2023
Amendments to IAS 16 “Property, Plant and Equipment - Proceeds before Intended Use”	January 1, 2022 (Note 4)
Amendments to IAS 37 “Onerous Contracts - Cost of Fulfilling a Contract”	January 1, 2022 (Note 5)

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

Note 2: The amendments to IFRS 9 are applied prospectively to modifications and exchanges of financial liabilities that occur on or after the annual reporting periods beginning on or after January 1, 2022. The amendments to IFRS 1 “First-time Adoptions of IFRSs” are applied retrospectively for annual reporting periods beginning on or after January 1, 2022.

Note 3: The amendments are applicable to business combinations for which the acquisition date is on or after the beginning of the annual reporting period beginning on or after January 1, 2022.

Note 4: The amendments are applicable to property, plant and equipment that are brought to the location and condition necessary for them to be capable of operating in the manner intended by management on or after January 1, 2021.

Note 5: The amendments are applicable to contracts for which the entity has not yet fulfilled all its obligations on January 1, 2022.

As of the date the financial statements were authorized for issue, the Company is continuously assessing the possible impact that the application of other standards and interpretations will have on the Company’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 values. Historical cost is generally based on the fair value of the consideration given in exchange for assets.

Basis of Consolidation

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.

Subsidiary included in the consolidated financial statements:

			% of Ownership	
			December 31	
Investor	**Investee**	**Main Business**	**2020**	**2019**
The Company	Nuvoton Electronics Technology (H.K.) Limited ("NTHK")	Sales of semiconductor	100	100
	Marketplace Management Limited ("MML")	Investment holding	100	100
	Nuvoton Investment Holding Ltd. ("NIH")	Investment holding	100	100
	Song Yong Investment Corporation ("SYI")	Investment holding	100	100
	Nuvoton Technology India Private Limited ("NTIPL")	Design, sales and after-sales service of semiconductor	100	100
	Nuvoton Technology Corporation America ("NTCA")	Design, sales and after-sales service of semiconductor	100	100
	Nuvoton Technology Holding Japan ("NTHJ") (Note)	Investment holding	100	-
	Nuvoton Technology Singapore Pte. Ltd ("NTSPL")	Design, sales and after-sales service of semiconductor	100	-
	Nuvoton Technology Korea Limited ("NTKR")	Design, sales and after-sales service of semiconductor	100	-
NTHK	Nuvoton Electronics Technology (Shenzhen) Limited ("NTSZ")	Computer software service (except I.C. design), wholesale business for computer, supplement and software	100	100
MML	Goldbond LLC ("GLLC")	Investment holding	100	100
GLLC	Nuvoton Electronics Technology (Shanghai) Limited ("NTSH")	Provides projects for sale in China and repairing, testing and consulting of software and leasing business	100	100
	Winbond Electronics (Nanjing) Ltd. ("WENJ")	Computer software service (except I.C. design)	100	100
NIH	Nuvoton Technology Israel Ltd. ("NTIL")	Design and service of semiconductor	100	100
NTHJ	Nuvoton Technology Corporation Japan ("NTCJ", former PSCS company) (Note)	Design, sales and after-sales service of semiconductor	100	-
NTCJ	Atfields Manufacturing Technology Corporation ("AMTC", former PIDE company) (Note)	Design and service of semiconductor	100	-
NTCJ	Miraxia Edge Technology Corporation ("METC", former PIDST company) (Note)	Design and service of semiconductor	100	-

Note: The Group acquired the semiconductor business of Panasonic Corporation on September 1, 2020 and held NTHJ, NTCJ (formerly “PSCS”), AMTC (formerly “PIDE”), and METC (formerly “PIDST”) with 100% ownership, refer to Note 27.

Classification of Current and Non-current Assets and Liabilities

Current assets include:

a. Assets held primarily for the purpose of trading;

b. Assets expected to be realized within 12 months after the reporting period; and

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

Current liabilities include:

a. Liabilities held primarily for the purpose of trading;

b. Liabilities due to be settled within 12 months after the reporting period, even if an agreement to refinance, or to reschedule payments, on a long-term basis is completed after the reporting period and before the consolidated financial statements are authorized for issue; and

c. Liabilities for which the Group does not have an unconditional right to defer settlement for at least 12 months after the reporting period. Terms of a liability that could, at the option of the counterparty, result in its settlement by the issue of equity instruments do not affect its classification.

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

Business Combinations

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

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

Where the consideration the Group transfers in a business combination includes assets or liabilities resulting from a contingent consideration arrangement, the contingent consideration is measured at its acquisition-date fair value and considered as part of the consideration transferred in a business combination. Changes in the fair value of the contingent consideration that qualify as measurement period adjustments are adjusted retrospectively, with the corresponding adjustments being made against goodwill or gains on bargain purchases. Measurement period adjustments are adjustments that arise from additional information obtained during the measurement period about facts and circumstances that existed as of the acquisition date. The measurement period does not exceed 1 year from the acquisition date.

The subsequent accounting for changes in the fair value of the contingent consideration that do not qualify as measurement period adjustments depends on how the contingent consideration is classified. Contingent consideration that is classified as equity and included in capital surplus - options is not remeasured at the end of the subsequent reporting period and its subsequent settlement is accounted for within equity and transferred to capital surplus - share premiums. Other contingent consideration is remeasured at fair value at the end of subsequent reporting period with any gain or loss recognized in profit or loss.

If the initial accounting for a business combination is incomplete by the end of the reporting period in which the combination occurs, the Group reports provisional amounts for the items for which the accounting is incomplete. Those provisional amounts are adjusted retrospectively during the measurement period, or additional assets or liabilities are recognized, to reflect new information obtained about facts and circumstances that existed as of the acquisition date that, if known, would have affected the amounts recognized as of that date.

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.

Non-monetary items measured at fair value that are denominated in foreign currencies are retranslated at the rates prevailing at the date when fair value was determined. Exchange differences arising from 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 item denominated in a foreign currency and measured at historical cost is stated at the reporting currency as originally translated from the foreign currency.

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 the Group becomes a party to the contractual provisions of the instruments.

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

a. Financial assets

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

Measurement categories

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

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 29.

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.

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

Derecognition of financial assets

The Group derecognizes a financial asset only when the contractual rights to the cash flows from the financial asset expire or when it transfers the financial asset and substantially all the risks and rewards of ownership of the financial asset to another entity. On derecognition of a financial asset at amortized cost in its entirety, the difference between the asset's carrying amount and the sum of the consideration received and receivable is recognized in profit or loss. However, on derecognition of an investment in an equity instrument at FVTOCI, the cumulative gain or loss which had been recognized in other comprehensive income is transferred directly to retained earnings, without recycling through profit or loss.

b. Financial liabilities

1) Subsequent measurement

Financial liabilities are classified as at FVTPL when such financial liabilities are either held for trading or are designated as at FVTPL. Financial liabilities at fair value through profit or loss are stated at fair value, with any interest paid on such financial liabilities is recognized in finance costs, and any gains or losses arising on remeasurement recognized in profit or loss.

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

2) Derecognition of financial liabilities

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

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

d. Convertible bonds

The component parts of compound instruments (i.e., convertible bonds) issued by the Group are classified separately as financial liabilities and equity in accordance with the substance of the contractual arrangements and the definitions of a financial liability and an equity instrument.

On initial recognition, the fair value of the liability component is estimated using the prevailing market interest rate for similar non-convertible instruments. This amount is recorded as a liability on an amortized cost basis using the effective interest method until extinguished upon conversion or upon the instrument's maturity date. Any embedded derivative liability is measured at fair value.

The conversion option classified as equity is determined by deducting the amount of the liability component from the fair value of the compound instrument as a whole. This is recognized and included in equity, net of income tax effects, and is not subsequently remeasured. In addition, the conversion option classified as equity will remain in equity until the conversion option is exercised; in which case, the balance recognized in equity will be transferred to capital surplus - share premiums. When the conversion option remains unexercised at maturity, the balance recognized in equity will be transferred to capital surplus - share premiums.

Transaction costs that relate to the issuance of the convertible notes are allocated to the liability and equity components in proportion to the allocation of the gross proceeds. Transaction costs relating to the equity component are recognized directly in equity. Transaction costs relating to the liability component are included in the carrying amount of the liability component.

Inventories

Inventories consist of raw materials, supplies, finished goods and work-in-process. The cost of raw materials and supplies are recognized using moving-average method and finished goods and work-in-process are recorded at standard cost and adjusted to approximate weighted-average cost at the end of the reporting period. Inventories are stated at the lower of cost or net realizable value; evaluation and recognition of appropriate allowance for value decline are based on the amount of inventories and sales situation. 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.

Property, Plant and Equipment

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

Property, plant and equipment in the course of construction are measured 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 over the following estimated useful life after considering residual values: buildings 8-20 years, machinery and equipment 3-5 years and other equipment 5 years. The estimated useful lives, residual values and depreciation method are reviewed at the end of each reporting period, with the effect of any changes in estimate accounted for on a prospective basis.

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

Investment Properties

Investment properties are properties held to earn rentals and/or for capital appreciation. Investment properties are initially measured 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 life after considering residual values, using the straight-line method. On derecognition of an investment property, the difference between the net disposal proceeds and the carrying amount of the asset is included in profit or loss.

Intangible Assets

Intangible assets with finite useful lives that are acquired separately are initially measured at cost and subsequently measured at cost less accumulated amortization and accumulated impairment loss. Amortization is recognized on a straight-line method over the following estimated useful life of the assets: Deferred technical assets - economic life or contract period and other intangible assets 3-5 years. 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.

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

Impairment of Property, Plant and Equipment, Right-of-use Asset, Intangible Assets Other Than Goodwill

At the end of each reporting period, the Group reviews the carrying amounts of its property, plant and equipment, right-of-use assets 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. The recoverable amount is the higher of fair value less costs to sell and value in use.

If the recoverable amount of an asset or cash-generating unit is estimated to be less than its carrying amount, the carrying amount of the asset or cash-generating unit is reduced to its recoverable amount, with the resulting impairment loss recognized in profit or loss.

When an impairment loss is subsequently reversed, the reversed carrying amount should not exceed the carrying amount (after amortization or depreciation) that would have been determined had no impairment loss been recognized on the asset or cash-generating unit in prior years. A reversal of an impairment loss is recognized in profit or loss.

Products Guarantee Based on Commitment

The Group will estimate guarantee provision by using appropriate ratio at the time the related product is sold.

Revenue Recognition

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

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.

Leases

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 finance leases, the lease payments 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 lessee 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 payable. The net investment in a lease is measured at (a) the present value of the sum of the lease payments receivable by a lessor and any unguaranteed residual value accrued to the lessor plus (b) initial direct costs, and is presented as a finance lease receivable. Finance lease income is allocated to the relevant accounting periods so as to reflect a constant, periodic rate of return on the Group's net investment outstanding in respect of leases.

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.

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.

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 lessee's incremental borrowing rate will be used.

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.

The Group negotiates with the lessor for rent concessions as a direct consequence of the Covid-19 to change the lease payments originally due by June 30, 2021, that results in the revised consideration for the lease substantially less than the consideration for the lease immediately preceding the change. There is no substantive change to other terms and conditions. The Group elects to apply the practical expedient to all of these rent concessions and, therefore, does not assess whether the rent concessions are lease modifications. Instead, the Group recognizes the reduction in lease payment in profit or loss, in the period in which the events or conditions that trigger the concession occur, and makes a corresponding adjustment to the lease liability.

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.

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.

b. Retirement benefits

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

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

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

Share-based Payment Arrangements

Cash-settled share-based payment is a liability in which the entity receives goods or services and the fair value of the amount payable is initially measured at cost. The amount is remeasured at each reporting date and at settlement based on the fair value. Any changes in the liabilities are recognized in profit or loss, with a corresponding adjustment to capital surplus - employee share options.

Taxation

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

a. Current tax

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

b. Deferred tax

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

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

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 Group considers the economic implications of the COVID-19 when making its critical accounting estimates. The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimates are revised if the revisions affect only that period or in the period of the revisions and future periods if the revisions affect both current and future periods.

6. CASH AND CASH EQUIVALENTS

	December 31	
	2020	**2019**
Cash and deposits in banks	$ 4,898,733	$ 4,650,223
Repurchase agreements collateralized by bonds	983,000	209,000
	$ 5,881,733	$ 4,859,223

a. The Group has time deposits pledged to secure land leases, customs tariff obligations and borrowings which are reclassified as "refundable deposits" as follows:

	December 31	
	2020	**2019**
Time deposits	$ 636,102	$ 75,988

b. The Group has time deposits which are not held for the purpose of meeting short-term cash commitments and are reclassified to "other receivables" as follows (Note 9):

	December 31	
	2020	2019
Time deposits	$ 197,489	$ 447,725

7. FINANCIAL INSTRUMENTS AT FAIR VALUE THROUGH PROFIT OR LOSS

	December 31	
	2020	2019
Financial assets at FVTPL - current		
Foreign exchange forward contracts	$ -	$ 6,037
Cross-currency swap contracts	4,128	-
Right of redemption of convertible bonds	9,095	-
	$ 13,223	$ 6,037
Financial liabilities at FVTPL - current		
Foreign exchange forward contracts	$ 3,191	$ -

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

	Currencies	Maturity Date	Contract Amount (In Thousands)
December 31, 2020			
Sell forward exchange contracts	USD/NTD	2021.01.21-2021.02.25	USD21,000/NTD594,889
Cross-currency swap contracts	USD/NTD	2021.01.22	USD16,000/NTD459,808
December 31, 2019			
Sell forward exchange contracts	USD/NTD	2020.01.03-2020.03.05	USD20,000/NTD604,050

The Group entered into foreign exchange forward and cross-currency swap contracts to manage exposures to exchange rate fluctuations of foreign currency denominated assets and liabilities. These forward exchange and cross-currency swap contracts did not meet the criteria for hedge accounting, therefore, the Group did not apply hedge accounting treatment.

8. NOTES AND ACCOUNTS RECEIVABLE

	December 31	
	2020	2019
Notes receivable	$ -	$ 21
Accounts receivable (including related parties)		
At amortized cost		
Gross carrying amount	4,271,490	1,100,661
Less: Allowance for impairment loss	(25,097)	(22,566)
	$ 4,246,393	$ 1,078,116

The average credit period of sales of goods was 30-60 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. 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. Credit exposure is controlled by counterparty limits that are reviewed and approved by financial department 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 accounts receivable. The expected credit losses on accounts receivable are estimated using a provision matrix by reference to past default experience of the customer and the customer's current financial position, adjusted for economic conditions of the industry in which the customer operates, as well as the GDP forecast and industry outlooks. 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 a accounts receivable when there is information indicating that the debtor is in severe financial difficulty and there is no realistic prospect of recovery. For accounts receivable that have been written off, the 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 accounts receivable based on the Group's provision matrix.

December 31, 2020

	Not Overdue	Overdue under 30 Days	Overdue 31-90 Days	Overdue 91-180 Days	Over 180 Days	Total
Expected credit loss rate	0.1-2%	2%	10%	20%	50%	
Gross carrying amount	$ 4,250,939	$ 3,931	$ -	$ 16,620	$ -	$ 4,271,490
Loss allowance (lifetime ECL)	(21,694)	(79)	-	(3,324)	-	(25,097)
Amortized cost	$ 4,229,245	$ 3,852	$ -	$ 13,296	$ -	$ 4,246,393

December 31, 2019

	Not Overdue	Overdue under 30 Days	Overdue 31-90 Days	Overdue 91-180 Days	Over 180 Days	Total
Expected credit loss rate	2%	2%	10%	20%	50%	
Gross carrying amount	$ 1,093,869	$ 6,813	$ -	$ -	$ -	$ 1,100,682
Loss allowance (lifetime ECL)	(22,430)	(136)	-	-	-	(22,566)
Amortized cost	$ 1,071,439	$ 6,677	$ -	$ -	$ -	$ 1,078,116

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

	For the Year Ended December 31	
	2020	2019
Balance at January 1	$ 22,566	$ 20,499
Add: Acquired through business combinations	806	-
Add: Net remeasurement of loss allowance	2,066	2,257
Effect of foreign currency exchange differences	(341)	(190)
Balance at December 31	$ 25,097	$ 22,566

The Group's provision for losses on accounts receivable was recognized on a collective basis.

Refer to Note 29 for details of the factoring agreements for accounts receivable.

9. OTHER RECEIVABLES

	December 31	
	2020	2019
Receivables for acquisition price adjustment	$ 520,890	$ -
Royalty receivable	425,453	-
Business tax refund receivable	165,647	34,611
Time deposits (Note 6)	197,489	447,725
Technical service receivable	156,641	-
Others	243,931	14,545
	$ 1,710,051	$ 496,881

10. INVENTORIES

	December 31	
	2020	2019
Raw materials and supplies	$ 301,764	$ 105,937
Work-in-process	4,008,947	1,181,653
Finished goods	1,934,294	308,869
Inventories in transit	5,126	8,199
	$ 6,250,131	$ 1,604,658

a. As of December 31, 2020 and 2019, the allowance for inventory value decline was NT$356,915 thousand and NT$362,717 thousand, respectively.

b. The operating cost for the years ended December 31, 2020 and 2019 was NT$12,961,144 thousand and NT$6,239,380 thousand, respectively. The inventory write-downs, obsolescence and abandonment of inventories for the years ended December 31, 2020 and 2019 were NT$60,828 thousand and NT$58,550 thousand, respectively.

11. FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME

Investments in equity instruments at FVTOCI:

	December 31	
	2020	**2019**
Listed shares and emerging market shares		
Nyquest Technology Co., Ltd.	$ 80,685	$ 60,720
Brightek Optoelectronic Co., Ltd.	894	485
Tower Semiconductor Ltd.	232,110	-
Unlisted shares		
United Industrial Gases Co., Ltd.	396,000	440,000
Yu-Ji Venture Capital Co., Ltd.	14,479	16,605
Autotalks Ltd. - Preferred E. Share	569,600	599,600
Tower Partners Semiconductor Co., Ltd. (TPSCo.)	512,812	-
Symetrix Corporation - Preferred A. Share	-	-
	$ 1,806,580	$ 1,117,410

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

In 2020 and 2019, the Group sold part of its shares in Tower Semiconductor Ltd. and Nyquest Technology Co., Ltd. in order to manage credit concentration risk. The shares sold had a fair value of NT$401,356 thousand and NT$87,266 thousand, respectively. Their related unrealized valuation gain of NT$82,399 thousand and NT$49,703 thousand was transferred from other equity to retained earnings. Refer to Note 21 for related information.

Dividends of NT$67,746 thousand and NT$70,529 thousand were recognized during 2020 and 2019, respectively. The dividends related to investments derecognized during 2020 and 2019 were NT$0 and NT$4,006 thousand, respectively, and those related to investments held at December 31, 2020 and 2019 were NT$67,746 thousand and NT$66,523 thousand, respectively.

In September 2020, the Company acquired the Preferred A Share of the Symetrix Corporation through the combination of Panasonic semiconductor business. The entitled rights of the Preferred A Share were as follows:

a. Each Preferred A Shares grants its holder a number of votes equal to the number of votes per Ordinary Share.

b. In the event of liquidation, the Preferred A Shares shall be prior to Ordinary Shares.

c. The investor shall have the right to nominate board directors.

d. The conversion rights (Each Preferred A share converts ten Ordinary Shares).

In August 2019, the Company resolved to invest in the Preferred E Share of the non-related party communication chip maker in Israel, Autotalks Ltd. 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. In the event of liquidation, the Preferred E Shares shall be prior to all other equity securities of Autotalks Ltd.

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.

12. PROPERTY, PLANT AND EQUIPMENT

	December 31	
	2020	2019
Land	$ 2,203,639	$ -
Buildings	2,374,032	189,755
Machinery and equipment	1,574,487	465,033
Other equipment	256,600	104,117
Construction in progress and prepayments for purchase of equipment	138,349	1,416
	$ 6,547,107	$ 760,321

	Land	Buildings	Machinery and Equipment	Other Equipment	Construction in Progress and Prepayments for Purchase of Equipment	Total
Cost						
Balance at January 1, 2020	$ -	$ 3,662,145	$ 11,557,247	$ 405,918	$ 1,416	$ 15,626,726
Additions	-	48,810	141,324	75,791	136,484	402,409
Acquired through business combinations	2,223,578	19,911,591	52,834,858	3,543,897	110,089	78,624,013
Disposals	-	(9,672)	(903,884)	(160,157)	-	(1,073,713)
Reclassified	-	3,387	74,474	(3,968)	(73,893)	-
Effects of foreign currency exchange differences	(19,939)	(178,572)	(453,848)	(30,225)	(1,276)	(683,860)
Balance at December 31, 2020	2,203,639	23,437,689	63,250,171	3,831,256	172,820	92,895,575

(Continued)

	Land	Buildings	Machinery and Equipment	Other Equipment	Construction in Progress and Prepayments for Purchase of Equipment	Total
Accumulated depreciation and impairment						
Balance at January 1, 2020	$ -	$ 3,472,390	$ 11,092,214	$ 301,801	$ -	$ 14,866,405
Disposals	-	(9,543)	(900,382)	(157,337)	-	(1,067,262)
Depreciation expense	-	91,828	214,766	75,107	-	381,701
Acquired through business combinations	-	17,667,303	51,732,718	3,384,282	36,176	72,820,479
Reclassified	-	-	1,388	-	(1,388)	-
Effects of foreign currency exchange differences	-	(158,321)	(465,020)	(29,197)	(317)	(652,855)
Balance at December 31, 2020	-	21,063,657	61,675,684	3,574,656	34,471	86,348,468
Carrying amounts at December 31, 2020	$ 2,203,639	$ 2,374,032	$ 1,574,487	$ 256,600	$ 138,349	$ 6,547,107
Cost						
Balance at January 1, 2019	$ -	$ 3,649,663	$ 11,403,272	$ 381,190	$ -	$ 15,434,125
Additions	-	16,446	172,191	48,188	1,416	238,241
Disposals	-	(3,964)	(45,210)	(2,664)	-	(51,838)
Reclassified	-	-	23,735	(23,735)	-	-
Effects of foreign currency exchange differences	-	-	3,259	2,939	-	6,198
Balance at December 31, 2019	-	3,662,145	11,557,247	405,918	1,416	15,626,726
Accumulated depreciation and impairment						
Balance at January 1, 2019	-	3,450,850	11,009,989	275,369	-	14,736,208
Disposals	-	(3,964)	(45,158)	(2,545)	-	(51,667)
Depreciation expense	-	25,504	124,974	28,395	-	178,873
Reclassified	-	-	-	-	-	-
Effects of foreign currency exchange differences	-	-	2,409	582	-	2,991
Balance at December 31, 2019	-	3,472,390	11,092,214	301,801	-	14,866,405
Carrying amounts at December 31, 2019	$ -	$ 189,755	$ 465,033	$ 104,117	$ 1,416	$ 760,321

(Concluded)

13. LEASE ARRANGEMENTS

a. Right-of-use assets

	December 31 2020	December 31 2019
Carrying amounts		
Land	$ 198,547	$ 226,581
Buildings	326,004	333,255
Machinery and equipment	940,671	-
Other equipment	33,666	40,452
	$ 1,498,888	$ 600,288

	For the Year Ended December 31	
	2020	2019
Additions to right-of-use assets	$ 73,933	$ 117,417
Acquired through business combinations	$ 997,787	$ -
Depreciation for right-of-use assets		
Land	$ 25,211	$ 25,408
Buildings	91,830	72,722
Machinery and equipment	24,792	-
Other equipment	20,203	8,669
	$ 162,036	$ 106,799
Income from the subleasing of right-of-use assets (presented in other income)	$ (7,010)	$ (7,600)

b. Lease liabilities

	December 31	
	2020	2019
Carrying amounts		
Current	$ 300,067	$ 114,308
Non-current	$ 1,474,041	$ 452,715

Range of discount rate for lease liabilities was as follows:

	December 31	
	2020	2019
Land	1.76%-2.06%	1.76%-2.06%
Buildings	0.33%-3.75%	1.44%-3.75%
Machinery and Equipment	0.33%-0.80%	-
Other equipment	0.33%-3.61%	0.73%-3.61%

For the year ended December 31, 2020 and 2019, the interest expense under lease liabilities amounted to $14,007 thousand and $11,361 thousand, respectively.

c. Material lease-in activities and terms

The Group leases low-voltage protection equipment from others in Japan, and the lease term will expire in 2021 to 2035 years.

The Group leased parcels of land from Science Park Administration, and the lease term will expire in December 2027, which can be extended after the expiration of the lease periods.

The Group leased parcels of land from Taiwan Sugar Corporation under a twenty-year term from October 2014 to September 2034, which is allowed to extend after the expiration of lease. The chairman of the Company, is a joint guarantor of such lease (refer to Note 30).

The Group leased some of the offices in the United States, China, Israel, India, Korea and 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 was as follows:

	December 31	
	2020	2019
Year 1	$ 6,816	$ 6,244
Year 2	5,041	5,795
Year 3	1,224	5,881
Year 4	-	1,985
Year 5	-	-
Year 6 onwards	-	-
	$ 13,081	$ 19,905

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	
	2020	2019
Expenses relating to short-term leases	$ 133,468	$ 13,493
Total cash outflow for leases	$ (332,380)	$ (125,190)

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

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

14. INVESTMENT PROPERTIES

	December 31	
	2020	2019
Investment properties, net	$ 2,466,667	$ 44,207

The Group acquired investment properties through business combinations in Niigata and Toyama, Japan on September 1, 2020. The fair value of investment properties was NT$2,503,591 thousand on the purchase price allocation report. The Group’s management team evaluated the fair value of investment properties and determined that the fair value of the investment properties had not changed significantly, compared to the fair value of the investment properties as of December 31, 2020.

The remaining investment properties are located in Shenzhen, China. As of December 31, 2020 and 2019, the fair value of such investment properties was both approximately NT$200,000 thousand, which used as reference the neighboring area transactions.

	December 31	
	2020	2019
Cost		
Balance at January 1	$ 98,511	$ 102,333
Acquired through business combinations	9,072,159	-
Effects of foreign currency exchange differences	(79,702)	(3,822)
Balance at December 31	9,090,968	98,511
Accumulated depreciation and impairment		
Balance at January 1	54,304	51,806
Acquired through business combinations	6,568,568	-
Depreciation expense	59,248	4,605
Effects of foreign currency exchange differences	(57,819)	(2,107)
Balance at December 31	6,624,301	54,304
Carrying amount at December 31	$ 2,466,667	$ 44,207

The investment properties were leased out for 3 to 5 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 at December 31, 2020 was as follows:

	December 31	
	2020	2019
Year 1	$ 265,390	$ 7,832
Year 2	203,485	4,120
Year 3	178,214	2,270
Year 4	159,218	-
Year 5	102,231	-
Year 6 on wards	741,175	-
	$ 1,649,713	$ 14,222

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 2020	December 31 2019
Deferred technical assets	$ 537,497	$ 260,837
Other intangible assets	265,194	393
	$ 802,691	$ 261,230

	Deferred Technical Assets	Other Intangible Assets	Total
Cost			
Balance at January 1, 2020	$ 1,202,455	$ 3,426	$ 1,205,881
Additions	435,378	203,101	638,479
Acquired through business combinations	-	1,200,865	1,200,865
Disposals	-	(35,705)	(35,705)
Effects of foreign currency exchange differences	2,410	(10,718)	(8,308)
Balance at December 31, 2020	1,640,243	1,360,969	3,001,212
Accumulated amortization and impairment			
Balance at January 1, 2020	941,618	3,033	944,651
Disposals	-	(34,969)	(34,969)
Amortization expense	159,518	19,995	179,513
Acquired through business combinations	-	1,117,819	1,117,819
Effects of foreign currency exchange differences	1,610	(10,103)	(8,493)
Balance at December 31, 2020	1,102,746	1,095,775	2,198,521
Carrying amounts at December 31, 2020	$ 537,497	$ 265,194	$ 802,691
Cost			
Balance at January 1, 2019	$ 1,043,189	$ 3,558	$ 1,046,747
Additions	206,283	-	206,283
Disposals	(53,844)	-	(53,844)
Effects of foreign currency exchange differences	6,827	(132)	6,695
Balance at December 31, 2019	1,202,455	3,426	1,205,881
Accumulated amortization and impairment			
Balance at January 1, 2019	899,145	2,848	901,993
Disposals	(53,844)	-	(53,844)
Amortization expense	89,267	302	89,569
Effects of foreign currency exchange differences	7,050	(117)	6,933
Balance at December 31, 2019	941,618	3,033	944,651
Carrying amounts at December 31, 2019	$ 260,837	$ 393	$ 261,230

16. BONDS PAYABLE

	December 31	
	2020	2019
Unsecured domestic convertible bonds	$ 1,207,820	$ -

In May 2020, the Company issued 20 thousand units, $100,000 per unit, 0% NTD-denominated unsecured convertible bonds in Taiwan, with an aggregate principal amount of $2,000,000 thousand. The terms of issuance, amounts and interest rate as follows:

a. The conversion price was set at $39.9 per share at the time of issuance. When meeting certain criteria, adjustments on the conversion price are made in accordance with the terms and conditions. Since the Company issued ordinary shares in December 2020, the conversion price should be adjusted according to issuance and conversion measures, the conversion price was adjusted to $38.2 since December 10, 2020.

b. After the first three months of the issuance and forty days before the maturity date, if the closing price of the Company’s common shares listed on the Taiwan Stock Exchange exceeds or equals 30% of the conversion price or the outstanding balance of the bonds is less than 10% in principal amount of the bonds originally outstanding for thirty consecutive business days, the Company may redeem the bonds in cash at the principal amount.

c. After the bonds has been issued for over five years, the bondholders may request the Company to redeem the bonds at 106.41% of the principal amount (annual rate of return 1.25%). The right of the redemption was recognized as financial instruments at fair value through profit or loss - current. The fair value was $9,095 thousand on December 31, 2020.

d. Except for the bonds that have been redeemed, sold back, converted or bought back by the Company in the market, the principal will be repaid in cash upon maturity at a rate of 109.09% (annual rate of return 1.25% upon maturity).

The effective interest rate of the convertible bonds liability component was 1.22% per annum on initial recognition.

Proceeds from issuance (less transaction costs of $6,426 thousand)	$ 1,998,428
The right of redemption	5,200
Liability component at the date of issue	2,003,628
Convertible bonds converted into ordinary shares	(809,516)
Interest charged at an effective interest rate of 1.22%	13,708
Liability component at December 31, 2020	$ 1,207,820

17. BORROWINGS

a. Short-term borrowings

	December 31			
	2020		2019	
	Interest Rate	Amount	Interest Rate	Amount
Secured borrowings				
Bank of Taiwan (Note 6)	4.35%	$ 1,544,910	-	$ -
Chinatrust Commercial Bank Co., Ltd. (Note 30)	1.29%	276,300	-	-
		$ 1,821,210		$ -

The short-term borrowings of Chinatrust Commercial Bank Co., Ltd are secured and guaranteed by the parent company (refer to Note 30).

b. Long-term borrowings

	Period	Interest Rate	December 31 2020	December 31 2019
Unsecured borrowings				
The Export-Import Bank of ROC	2019.09.20-2026.09.21	0.92%	$ 500,000	$ 500,000
The Export-Import Bank of ROC	2020.08.25-2027.08.25	0.92%	1,000,000	-
			$ 1,500,000	$ 500,000

The proceeds of the Group's unsecured loan was invested in Autotalks Ltd and acquired Panasonic's semiconductor business in Japan.

18. OTHER PAYABLES

	December 31 2020	December 31 2019
Payable for salaries or employee benefits	$ 1,035,436	$ 367,537
Payable for royalties	421,639	129,494
Payable for software	320,223	58,540
Payable for investment	242,960	-
Payable for purchase of equipment	131,281	93,619
Payable for maintenance	199,508	35,135
Payable for utilities	172,638	-
Payable for service	169,828	41,106
Others	1,256,260	225,627
	$ 3,949,773	$ 951,058

19. PROVISIONS

	December 31 2020	December 31 2019
Current		
Decommissioning costs	$ 612,281	$ -
Employee benefits	316,438	-
	$ 928,719	$ -
Non-current		
Employee benefits	$ 1,765,833	$ -
Decommissioning costs	750,983	-
Warranties	603,652	101,891
	$ 3,120,468	$ 101,891

	Decommissioning Costs	Employee Benefits	Warranties	Total
Balance at January 1, 2020	$ -	$ -	$ 101,891	$ 101,891
Acquired through business combinations	1,375,599	2,098,249	506,301	3,980,149
Effects of foreign currency exchange differences	(12,335)	(15,978)	(4,540)	(32,853)
Balance at December 31, 2020	$ 1,363,264	$ 2,082,271	$ 603,652	$ 4,049,187

The Group acquired Panasonic's semiconductor business in September 2020. Some fabs will be closed due to low capacity utilization, decommissioning costs and labor costs were accounted separately for decommissioning liabilities and employee benefits provision.

20. RETIREMENT BENEFIT PLANS

a. Defined contribution plan

The Company adopted a pension plan under the Labor Pension Act (LPA), which is a state-managed defined contribution plan. Under the LPA, the Company 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, Hong Kong, Israel, Japan, Korea, Singapore and China are members of a state-managed defined contribution plan implemented through the local government. The subsidiaries 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 plans

The defined benefit plan adopted by the Company 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. In 2020 and 2019, the Company 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 NTIL are calculated on the basis of the length of service and the last monthly salary under a defined benefit plan.

The amounts included in the consolidated balance sheets in respect of the Group’s defined benefit plans were as follows:

	December 31	
	2020	**2019**
Present value of defined benefit obligation	$ 2,968,227	$ 1,444,939
Fair value of plan assets	(1,188,219)	(1,157,374)
Net defined benefit liabilities, non-current	$ 1,780,008	$ 287,565

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	$ 1,282,657	$ (988,230)	$ 294,427
Service cost			
Current service cost	37,909	-	37,909
Net interest expense (income)	27,098	(15,581)	11,517
Recognized in profit or loss	65,007	(15,581)	49,426
Remeasurement			
Actuarial (gain) loss - the discount rate greater (less) than the realized rate of return	-	(19,854)	(19,854)
Actuarial (gain) loss - changes in demographic assumptions	398	-	398
Actuarial (gain) loss - changes in financial assumptions	102,769	(42,426)	60,343
Actuarial (gain) loss - experience adjustments	23,637	(8,194)	15,443
Recognized in other comprehensive income	126,804	(70,474)	56,330

(Continued)

	Present Value of the Defined Benefit Obligation	Fair Value of the Plan Assets	Net Defined Benefit Liabilities (Assets)
Contributions from the employer	$ -	$ (112,657)	$ (112,657)
Benefits paid	(51,951)	51,951	-
Effect of foreign currency exchange differences	22,422	(22,383)	39
Balance at December 31, 2019	1,444,939	(1,157,374)	287,565
Service cost			
Current service cost	37,017	-	37,017
Net interest expense (income)	19,566	(12,718)	6,848
Recognized in profit or loss	56,583	(12,718)	43,865
Remeasurement			
Actuarial (gain) loss - the discount rate greater (less) than the realized rate of return	-	(22,052)	(22,052)
Actuarial (gain) loss - changes in financial assumptions	25,236	(2,995)	22,241
Actuarial (gain) loss - experience adjustments	14,601	14,292	28,893
Recognized in other comprehensive income	39,837	(10,755)	29,082
Contributions from the employer	-	(41,461)	(41,461)
Benefits paid	(45,792)	45,792	-
Acquired through business combinations	1,473,458	-	1,473,458
Effect of foreign currency exchange differences	(798)	(11,703)	(12,501)
Balance at December 31, 2020	$ 2,968,227	$ (1,188,219)	$ 1,780,008

(Concluded)

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

	For the Year Ended December 31	
	2020	2019
Analysis by function		
Operating cost	$ 5,113	$ 6,253
Selling expenses	98	103
General and administrative expenses	13,801	7,571
Research and development expenses	24,853	35,499
	$ 43,865	$ 49,426

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

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

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

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

	December 31	
	2020	**2019**
Discount rate(s)	0.30%-2.50%	0.75%-4.18%
Expected rate(s) of salary increase	1%-3.1%	1%-2.00%

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

	December 31	
	2020	**2019**
Discount rate(s)		
0.25% increase	$ (33,068)	$ (32,671)
0.25% decrease	$ 37,302	$ 37,019
Expected rate(s) of salary increase		
0.25% increase	$ 34,821	$ 33,724
0.25% decrease	$ (29,927)	$ (28,667)

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 changes in assumptions will occur in isolation of one another as some of the assumptions may be correlated.

	December 31	
	2020	**2019**
Expected contributions to the plans for the next year	$ 60,369	$ 51,326
The average duration of the defined benefit obligation	8.6-12.21 years	9-12.74 years

21. EQUITY

a. Share capital

Ordinary shares

	December 31	
	2020	**2019**
Shares authorized (in thousands of shares)	500,000	500,000
Shares authorized	$ 5,000,000	$ 5,000,000
Shares issued and fully paid (in thousands of shares)	375,962	287,554
Shares issued and fully paid	$ 3,759,616	$ 2,875,544
Par value (in New Taiwan dollars)	$ 10	$ 10

On August 21, 2020 and July 25, 2019, the Company's board of directors resolved to issue 80,000 thousand ordinary shares and 80,000 thousand ordinary shares with a par value of NT$10 to repay bank loans and enhance working capital, respectively. On September 25, 2020 and August 26, 2019, the resolution was approved by the FSC, respectively. The consideration of NT$38 and NT$45 per share was determined by the chairman which was authorized by the board of directors of the Company, the subscription base date is December 10, 2020 and October 23, 2019, respectively. The associated issuance cost of $8,832 thousand and $6,494 thousand was deducted from capital surplus - additional paid-in capital, respectively.

In 2020, the Company's issued 20,839 thousand ordinary shares due to the conversion of unsecured convertible bonds, the registration of the 12,432 thousand ordinary shares issuance has not been completed as of December 31, 2020.

On December 6, 2019, the extraordinary general shareholders' meeting of the Company 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. According to the laws, the actual offering price should not be lower than the closing share price of the Company, one of the simple arithmetic averages of the Company's 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 was authorized by the board of the Company to set the pricing date and subscription base date after the approval by the FSC. On July 14, 2020, the FSC approved the termination of the offering of the GDSs.

As of December 31, 2020 and 2019, the balance of the Company's capital account amounted to NT$3,759,616 thousand and NT$2,875,544 thousand, divided into 375,962 thousand ordinary shares and 287,554 thousand ordinary shares with a par value of NT$10.

b. Capital surplus

	December 31	
	2020	**2019**
May be used to offset a deficit, distributed as cash dividends, or transferred to share capital*		
Additional paid-in capital	$ 5,088,159	$ 2,856,991
Conversion of bonds	596,347	-
May only be used to offset a deficit		
Cash capital increase reserved for employee share options	112,160	49,920
Overdue dividends unclaimed	52	52
May not be used for any purpose		
Employee share options	13	13
	$ 5,796,731	$ 2,906,976

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

c. Retained earnings and dividends policy

The shareholders held their regular meeting on May 29, 2020 and resolved the amendments to the Company's dividend distribution policy in the Company's Articles of Incorporation (the "Articles"). Under the dividends policy as set forth in the amended Articles, where the Company made a profit in a fiscal year, the profit shall be first utilized for paying taxes, offsetting losses of previous years, setting aside as legal reserve 10% of the remaining profit, setting aside or reversing a special reserve in accordance with the laws and regulations, and then any remaining profit together with any undistributed retained earnings shall be used by the Company's board of directors as the basis for proposing a distribution plan, which should be resolved in the shareholders' meeting for the distribution of dividends and bonuses to shareholders. The board of directors shall be authorized to distribute the profit, the legal reserve, and the capital plus 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. In principle, not less than 10% of the total shareholders' bonus shall be distributed in the form of cash. For the policies on the distribution of employees' compensation and remuneration of directors, refer to employees' compensation and remuneration of directors in Note 24.

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.

The appropriations of earnings for 2019 and 2018 approved in the shareholders' meetings on May 29, 2020 and June 24, 2019, respectively, were as follows:

	Appropriation of Earnings		Dividends Per Share (NT$)	
	For Year 2019	For Year 2018	For Year 2019	For Year 2018
Legal reserve	$ 55,183	$ 71,063		
Cash dividends	345,065	518,886	$1.20	$2.50
	$ 400,248	$ 589,949		

As of the date of the Company's board meeting, February 18, 2021, the appropriation of earnings for 2020 are not subjected.

d. Other equity items

1) The exchange differences arising on translation of foreign operations' net assets from its functional currency to the Group's presentation currency (New Taiwan dollar) are recognized directly in other comprehensive income. For the years ended December 31, 2020 and 2019, other comprehensive loss was NT$109,368 thousand and NT$8,449 thousand, respectively.

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

	For the Year End December 31	
	2020	2019
Balance at January 1	$ 169,544	$ 179,854
Recognized for the period	181,920	39,393
Cumulative unrealized gains (losses) of equity instruments transferred to retained earnings due to disposal	(82,399)	(49,703)
Balance at December 31	$ 269,065	$ 169,544

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.

22. REVENUE

Refer to Note 35 for the Group's revenue.

23. INCOME TAXES RELATING TO CONTINUING OPERATIONS

a. Income tax recognized in profit or loss

Major components of income tax expense were as follows:

	For the Year Ended December 31	
	2020	2019
Current tax		
In respect of the current year	$ 250,386	$ 96,776
Adjustment for prior years' tax and effects of estimated difference	(9,778)	462
Deferred tax		
In respect of the current year	(29,968)	11,872
Income tax expense recognized in profit or loss	$ 210,640	$ 109,110

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

	For the Year Ended December 31	
	2020	2019
Income tax expense from continuing operations at the statutory rate	$ 221,449	$ 146,352
Tax effect of adjustment item		
Permanent differences	99,998	(12,813)
Tax-exempt income	(13,000)	-
Others	(30,029)	5,109
Current income tax	278,418	138,648
Unused investment credits	(58,000)	(30,000)
Adjustment for prior year's income tax	(9,778)	462
Income tax expense recognized in profit or loss	$ 210,640	$ 109,110

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.

As the shareholders have not yet resolved the appropriation of earnings for 2020, the potential income tax consequences of the 2020 unappropriated earnings are not reliably determinable.

c. Current tax assets and liabilities

	December 31	
	2020	2019
Tax refund receivables	$ 5,561	$ 2,253
Income tax payables	$ 279,913	$ 78,732

d. Deferred tax assets

	December 31	
	2020	2019
Deferred tax assets		
Allowance for inventory valuation and obsolescence loss and others	$ 188,397	$ 97,919

e. Deferred tax liabilities

	December 31	
	2020	2019
Deferred tax liabilities		
Unrealized valuation gains or losses	$ 52,132	$ -

f. Income tax assessments

The Company's tax returns through 2018 have been assessed by the tax authorities.

g. Information about investment credits

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

24. EMPLOYEE BENEFITS EXPENSE, DEPRECIATION AND AMORTIZATION

	For the Year Ended December 31							
	2020				2019			
	Classified as Operating Costs	Classified as Operating Expenses	Classified as Non-operating Income and Losses	Total	Classified as Operating Costs	Classified as Operating Expenses	Classified as Non-operating Income and Losses	Total
Employee benefits expense								
Short-term employment benefits	$ 874,299	$ 3,729,598	$ -	$ 4,603,897	$ 711,339	$ 1,985,903	$ -	$ 2,697,242
Post-employment benefits	34,221	181,238	-	215,459	30,792	151,878	-	182,670
Compensation cost of employee share options	16,945	45,295	-	62,240	16,667	33,253	-	49,920
Depreciation	287,171	256,566	59,248	602,985	123,215	162,457	4,605	290,277
Amortization	34,330	145,183	-	179,513	33,506	56,063	-	89,569

According to the Company's Articles, the Company accrued employees' compensation and remuneration of directors at rates of no less than 1% and no higher than 1%, respectively, of net profit before income tax, employees' compensation, and remuneration of director.

The employees' compensation and remuneration of directors for the years ended December 31, 2020 and 2019, which were approved by the Company's board of directors on February 18, 2021 and February 6, 2020, respectively, were as follows:

	For the Year Ended December 31			
	2020		2019	
	Amount	%	Amount	%
Employees' cash compensation	$ 42,422	6	$ 40,868	6
Remuneration of directors	7,070	1	6,811	1

If there is a change in the amounts after the annual consolidated financial statements were authorized for issue, the differences are recorded as a change in accounting estimate. There is no difference between the actual amounts of employees' compensation and remuneration to directors paid and the amounts recognized in the financial statements for the year ended December 31, 2019 and 2018.

Information on the employees' compensation and remuneration of directors resolved by the Company's board of directors in 2021 and 2020 is available at the Market Observation Post System website of the Taiwan Stock Exchange.

25. SHARE-BASED PAYMENT ARRANGEMENTS

The Company's board of directors resolved to reserve 10% of the shares from the issuance of both 80,000 thousand shares approved by the FSC on September 25, 2020 and August 26, 2019 to be subscribed for by its employees, respectively. The number of shares subscribed for by the employees was affirmed on October 21 2020 and September 3, 2019, respectively. The fair value of such share options subscribed for by the Company's employees on the grant date was measured using the Black-Scholes Option Pricing Model and amounted to NT$62,240 thousand and NT$49,920 thousand which was recorded as compensation costs with a corresponding increase in capital surplus, respectively.

a. As of December 31, 2020 and 2019, the Company's Share-based payments agreements were as follows:

<u>2020</u>

Agreement	Grant Date	Number of Shares Grant	Vesting Conditions
Cash capital increase reserved for employee share options	2020.10.21	8,000 thousand shares	Vested immediately

<u>2019</u>

Agreement	Grant Date	Number of Shares Grant	Vesting Conditions
Cash capital increase reserved for employee share options	2019.09.03	8,000 thousand shares	Vested immediately

b. The fair value of share options acquired by employees on grant day, October 21 2020 and September 3, 2019, respectively, were measured by using Black-Scholes Option Pricing Model. Relevant information were as follows:

2020

Share Price (NT$)	Exercise Price (NT$)	Expected Price Volatility	Expected Vesting Period	Expected Dividend Yield Rate	Risk-free Interest Rate	Fair Value Per Share (NT$)
$45.6	$38.0	34.80%	48 days	0.00%	0.18%	$7.78

2019

Share Price (NT$)	Exercise Price (NT$)	Expected Price Volatility	Expected Vesting Period	Expected Dividend Yield Rate	Risk-free Interest Rate	Fair Value Per Share (NT$)
$50.8	$45	32.61%	46 days	0.00%	0.43%	$6.24

26. EARNINGS PER SHARE

The numerators and denominators used in calculating basic and diluted earnings per share ("EPS") were as follows:

	For the Year Ended December 31					
	2020			2019		
	Amounts (Numerator) After Income Tax (Attributable to Owners of the Company)	Shares (Denominator) (In Thousands)	Earnings Per Share (NT$) After Income Tax (Attributable to Owners of the Company)	Amounts (Numerator) After Income Tax (Attributable to Owners of the Company)	Shares (Denominator) (In Thousands)	Earnings Per Share (NT$) After Income Tax (Attributable to Owners of the Company)
Basic earnings per share						
Net profit attributed to owners of the Company	$ 532,785	295,056	$ 1.81	$ 558,459	220,888	$ 2.53
Effect of potentially dilutive ordinary shares						
Employees' compensation	-	993		-	1,080	
Convertible bonds	10,966	19,344		-	-	
Diluted earnings per share						
Net profit attributed to owners of the Company	$ 543,751	315,393	$ 1.72	$ 558,459	221,968	$ 2.52

If the Company offered to settle the compensation or bonuses paid to employees in 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 EPS, as the effect is dilutive. The number of shares used in the computation of diluted EPS is estimated by the amount of compensation divided by the closing price of the potential common shares at the end of the reporting period. 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.

27. BUSINESS COMBINATIONS

a. Subsidiaries acquired

	Principal Activity	Date of Acquisition	Proportion of Voting Equity Interests Acquired (%)	Consideration Transferred
Panasonic semiconductor business	Semiconductor business	September 1, 2020	100	$ 7,936,496

The Group's acquired the semiconductor business of Panasonic Corporation on September 1, 2020, including the acquisition of 100% equity in NTHJ, NTCJ (formerly PSCS), AMTC (formerly PIDE) and METC (formerly PIDST), Panasonic Semiconductor (Suzhou) Co., Ltd. (referred to as PSCSZ) related semiconductor business equipment and inventory, and Panasonic Industrial Devices Semiconductor Asia (referred to as PIDSCA) assets and liabilities projects and contracts and other specific operating assets.

b. Consideration transferred

	Panasonic Semiconductor Business
Cash	$ 7,862,056
Contingent consideration arrangement*	74,440
	$ 7,936,496

* Under the contingent consideration arrangement, if the TPSCo. held by NTCJ Company (formerly PSCS) is a net profit after tax from the acquisition date to March 31, 2022, the net profit after tax must be returned to Panasonic based on the shareholding ratio (49%), and the estimated amount based on the price allocation report was JPY267,000 thousand (approximately NT$74,440 thousand). Therefore, the contingent price of the consideration transferred is $74,440 thousand.

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

	Panasonic Semiconductor Business
Current assets	
Cash and cash equivalents	$ 1,102,882
Accounts receivable and other receivables	4,469,464
Inventories	4,613,102
Prepayments	216,082
Non-current assets	
Financial asset at FVTOCI	960,800
Property, plant and equipment	5,803,534
Investment property	2,503,591
Right-of-use assets	997,787
Intangible assets	83,046

(Continued)

	Panasonic Semiconductor Business
Deferred tax assets	$ 103,259
Other assets	4,639
Total assets	$ 20,858,186
Current liabilities	
Accounts payable and other payables	$ 5,999,366
Current tax liabilities	86,320
Provisions - current	617,821
Lease liabilities - current	176,138
Other current liabilities	57,635
Non-current liabilities	
Provisions - non-current	2,539,589
Net defined benefit liabilities - non-current	1,473,458
Deferred tax liabilities	89,169
Products guarantee based on commitment	506,301
Lease liabilities - non-current	1,156,925
Total liabilities	$ 12,702,722
Net assets	$ 8,155,464

(Concluded)

d. Gain on the bargain purchase

	Panasonic Semiconductor Business
Fair value of identifiable net assets obtained	$ 8,155,464
Less: Consideration transferred	(7,936,496)
Gain on the bargain purchase	$ 218,968

e. Net cash outflow on the acquisition of subsidiaries

	Panasonic Semiconductor Business
Consideration paid in cash	$ 7,936,496
Less: Cash and cash equivalent balances acquired	(1,102,882)
	6,833,614
Acquisition price adjustment	
Investment receivable	277,930
Business tax refund receivable	133,101
Other payable for contract	(316,438)
	$ 6,928,207

f. Impact of acquisitions on the results of the Group

The financial results of the acquirees since the acquisition dates, which are included in the consolidated statements of comprehensive income, are as follows:

	Panasonic Semiconductor Business
Revenue	$ 8,993,175
Net loss	$ (460,607)

Because of the acquisition includes equipment and inventory related to semiconductor business of PSCSZ and assets and liabilities of PIDSCA, rather than a stand-alone entity, it is impractical to disclose the pro-forma revenue and the pro-forma profit.

28. 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 expenses, debt repayments and dividends payments.

29. FINANCIAL INSTRUMENT

a. Categories of financial instruments

	December 31			
	2020		2019	
	Carrying Amount	Fair Value	Carrying Amount	Fair Value
Financial assets				
Financial assets at amortized cost (Note 1)	$ 12,489,674	$ 12,489,674	$ 6,521,099	$ 6,521,099
Financial assets at FVTPL				
Derivative financial assets	13,223	13,223	6,037	6,037
Financial assets at FVTOCI				
Investment in equity instruments	1,806,580	1,806,580	1,117,410	1,117,410
Financial liabilities				
Financial liabilities at amortized cost (Note 2)	12,257,989	12,534,077	2,618,441	2,618,441
Financial liabilities at FVTPL				
Derivative financial liabilities	3,191	3,191	-	-

Note 1: Including cash and cash equivalents, notes and accounts receivable (including related parties), other receivables and refundable deposits.

Note 2: Including notes and accounts payable (including related parties), other payables, convertible bonds, short-term loans, long-term loans and guarantee deposits.

b. Fair value information

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

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

   b) 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

   c) 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).

2) Fair value measurements recognized in the consolidated balance sheets

   a) 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 listed shares and emerging shares).

   b) The fair value of the financial instruments at fair value through profit or loss is based on Level 2 inputs, either directly or indirectly. 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 are measured using individual maturity rate to calculate the fair value of each contract.

   c) Domestic unlisted equity instruments at FVTOCI were all measured based on Level 3 fair value. Fair values of such equity instruments were determined using discounted cash flow of income approach and comparable listed company approach, by referring to strike price of similar business in active market, implied value multiple of the price and relevant information. Significant unobservable inputs included P/E ratio, value multiple and market liquidity discount. As the discounted cash flow method was used, the discount rate used for the lack of marketability was 29%; which increase by 1% while all the other variables are held constant fair value of investments will decrease by $9,942 thousand and $9,122 thousand for the years ended December 31, 2020 and 2019, respectively.

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

   The Group recognized in the financial statements financial assets and financial liabilities that are not measured at fair value. Management believes the carrying amounts of such financial assets and liabilities approximate their fair values.

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

   Fair value hierarchy

	December 31, 2020			
	Level 1	**Level 2**	**Level 3**	**Total**
Financial assets at FVTPL				
Derivative financial assets	$ -	$ 13,223	$ -	$ 13,223

(Continued)

	December 31, 2020			
	Level 1	Level 2	Level 3	Total
Financial assets at FVTOCI				
Domestic and overseas listed shares and emerging market shares	$ 313,689	$ -	$ -	$ 313,689
Domestic and overseas unlisted shares	$ -	$ -	$ 1,492,891	$ 1,492,891
Financial liabilities at amortized cost				
Bonds payable (unsecured)	$ 1,483,908	$ -	$ -	$ 1,483,908
Financial liabilities at FVTPL				
Derivative financial liabilities	$ -	$ 3,191	$ -	$ 3,191

(Concluded)

	December 31, 2019			
	Level 1	Level 2	Level 3	Total
Financial assets at FVTPL				
Derivative financial assets	$ -	$ 6,037	$ -	$ 6,037
Financial assets at FVTOCI				
Domestic listed shares and emerging market shares	$ 61,205	$ -	$ -	$ 61,205
Domestic and overseas unlisted shares	$ -	$ -	$ 1,056,205	$ 1,056,205

5) Reconciliation of Level 3 fair value measurements of financial assets

The financial assets measured at Level 3 fair value were financial assets at FVTPL and equity investments classified as financial assets at FVTOCI. Reconciliations for the years ended December 31, 2020 and 2019 were as follows:

	For the Year Ended December 31	
	2020	2019
Balance at January 1	$ 1,056,205	$ 418,733
Additions	-	630,000
Acquired through business combinations	456,117	-
Proceeds from capital reduction of investments	(2,250)	(4,000)
Recognized in other comprehensive income	(17,181)	11,472
Balance at December 31	$ 1,492,891	$ 1,056,205

c. Financial risk management objectives and policies

The Group seeks to minimize the effects of financial risks by using derivative financial instruments to hedge risk exposures. The use of financial derivatives is governed by the Group's policies approved by the board of directors, which provide written principles on foreign currency risk, and the use of financial derivatives. Compliance with policies and exposure limits is reviewed by the internal auditors on a continuous basis.

1) Market risk

The Group's activities exposed it primarily to the financial risks of changes in foreign currency exchange rates and interest rates. The Group entered into foreign exchange forward contracts to hedge the foreign currency arising on the export business.

a) Foreign currency risk

The Group has foreign currency denominated transactions, which expose the Group to foreign currency risk. Exchange rate exposures are managed within approved policy parameters utilizing foreign exchange forward contracts.

The carrying amounts of the Group's foreign currency denominated monetary assets and monetary liabilities at the end of the year are set out in Note 34.

The sensitivity analysis included only outstanding foreign currency denominated monetary items at the end of the reporting period and assuming 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 the relevant currency, there would be impact on net income in the amounts of NT$3,140 thousand and NT$3,882 thousand decrease for the years ended December 31, 2020 and 2019, respectively. The amounts used in the 1% weakening of New Taiwan dollars against the relevant currency did not consider the impact of hedge contracts and hedged item.

b) Interest rate risk

Interest rate risk refers to the risk that the change in market value will influence the fair value of financial instruments. The Group's interest rate risk arises primarily from floating rate deposits and long-term loans.

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

	December 31	
	2020	**2019**
Cash flow interest rate risk		
Financial assets	$ 7,749	$ 284,413
Financial liabilities	3,321,210	500,000

The sensitivity analysis of cash flows based on the Group's exposure to interest rates for fair value of variable-rate non-derivative instruments at the end of the reporting period. If interest rates increased by 1%, the Group's cash outflows for the years ended December 31, 2020 and 2019 would have increased by NT$33,135 thousand and NT$2,156 thousand, respectively.

2) Credit risk

Credit risk refers to the risk that counterparty will default on its contractual obligations resulting in a 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 this regard, the management 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 are as follows:

	December 31, 2020			
	Within 1 Year	**1-2 Years**	**Over 2 Years**	**Total**
Non-derivative financial liabilities				
Non-interest bearing	$ 7,659,385	$ -	$ -	$ 7,659,385
Lease liabilities	308,294	264,121	1,231,072	1,803,487
Variable interest rate liabilities	1,821,210	-	1,500,000	3,321,210
Fixed interest rate liabilities	-	-	1,305,480	1,305,480
	$ 9,788,889	$ 264,121	$ 4,036,552	$ 14,089,562

Additional information about the maturity analysis of lease liabilities:

	Less than 2 Years	**2-5 Years**	**5-10 Years**	**10-15 Years**	**Total**
Non-derivative financial liabilities					
Lease liabilities	$ 572,415	$ 500,296	$ 726,481	$ 4,295	$ 1,803,487

	December 31, 2019			
	Within 1 Year	**1-2 Years**	**Over 2 Years**	**Total**
Non-derivative financial liabilities				
Non-interest bearing	$ 2,076,872	$ -	$ -	$ 2,076,872
Lease liabilities	126,438	115,424	360,654	602,516
Variable interest rate liabilities	-	-	500,000	500,000
	$ 2,203,310	$ 115,424	$ 860,654	$ 3,179,388

Additional information about the maturity analysis of lease liabilities:

	Less than 2 Years	2-5 Years	5-10 Years	10-15 Years	Total
Non-derivative financial liabilities					
Lease liabilities	$ 241,862	$ 237,395	$ 117,532	$ 5,727	$ 602,516

d. Transfers of financial assets

Factored accounts receivable that are not yet overdue at December 31, 2020 was as follows:

Counterparty	Receivables Factoring Proceeds	Advances Received - Unused	Advances Received -Used	Annual Interest Rates on Advances Received (Used) (%)
Sumitomo Mitsui Banking Corporation	$ 230,449	$ -	$ 230,449	0.9

Pursuant to the Group's factoring agreements, losses from commercial disputes (such as sales returns and discounts) are borne by the Group, while losses from credit risk are borne by the banks.

30. RELATED PARTY TRANSACTIONS

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

Related Party Name	Related Party Categories
Winbond Electronics Corporation ("WEC")	The Company's parent
Winbond Electronics (HK) Limited ("WEHK")	Associate
Winbond Electronics Corporation America ("WECA")	Associate
Winbond Electronics Corporation Japan ("WECJ")	Associate
Techdesign Corporation	Associate
Callisto Holding Limited	Associate
Glorystones Corporation	Associate
Tower Partners Semiconductor Co., Ltd. ("TPSCo.")	Related party in substance
Nyquest Technology Co., Ltd. ("Nyquest")	Related party in substance
Walton Advanced Engineering Inc.	Related party in substance
Chin Cherng Construction Co., Ltd.	Related party in substance
United Industrial Gases Co., Ltd.	Related party in substance

b. Operating activities

	For the Year Ended December 31	
	2020	2019
1) Operating revenue		
Related party in substance	$ 300,887	$ 246,391
Associate	88,422	90,302
	$ 389,309	$ 336,693

	For the Year Ended December 31	
	2020	2019
2) Purchases of goods		
Related party in substance		
TPSCo.	$ 2,101,947	$ -
Parent company	209,957	131,874
	$ 2,311,904	$ 131,874
3) Manufacturing expenses		
Related party in substance		
TPSCo.	$ 720,784	$ -
Others	833	-
Parent company	369	33
	$ 721,986	$ 33
4) Operating expenses		
Related party in substance	$ 200,794	$ 10,780
Parent company	21,037	8,118
Associate	8,108	7,944
	$ 229,939	$ 26,842
5) Dividend income		
Related party in substance		
United Industrial Gases Co., Ltd.	$ 64,394	$ 62,858
Nyquest Technology Co., Ltd.	3,300	7,636
	$ 67,694	$ 70,494
6) Other income		
Parent company	$ 2	$ -
Related party in substance	-	183
	$ 2	$ 183

	December 31	
	2020	2019
7) Accounts receivable from related parties		
Related party in substance	$ 77,760	$ 45,903
Associate	12,817	21,491
	$ 90,577	$ 67,394

	December 31	
	2020	2019
8) Other receivables		
Related party in substance		
TPSCo.	$ 278,957	$ -
Associate	214	94
	$ 279,171	$ 94

Other receivables - related parties were collection or payment on behalf of others.

	December 31	
	2020	2019
9) Refundable deposits		
Parent company	$ 1,780	$ 1,780
Related party in substance	1,722	1,722
	$ 3,502	$ 3,502
10) Accounts payable to related parties		
Related party in substance		
TPSCo.	$ 788,043	$ -
Parent company	39,500	24,535
	$ 827,543	$ 24,535
11) Other payables		
Related party in substance	$ 77,373	$ -
Parent company	9,738	2,740
	$ 87,111	$ 2,740
12) Guarantee deposits		
Parent company	$ 545	$ 545

The sales and purchase prices and collection and payment terms with related parties were not significantly different from those with third parties. For other related party transactions, price and terms were determined in accordance with mutual agreement.

c. Acquisition of property, plant and equipment

	Purchase Price	
	For the Year Ended December 31	
	2020	2019
Related party in substance	$ 8,352	$ -

d. Lease arrangements - Group is lessee

	December 31	
	2020	2019
1) Lease liabilities		
Parent company	$ 47,969	$ 59,750
Related party in substance	22,451	32,869
Associate	7,566	15,652
	$ 77,986	$ 108,271

	For the Year Ended December 31	
	2020	2019
2) Interest expense		
Parent company	$ 569	$ 53
Related party in substance	438	604
Associate	404	696
	$ 1,411	$ 1,353

e. Lease arrangements - Group is lessor/sublease arrangements

Sublease arrangements under operating leases

For the years ended December 31, 2020 and 2019 and from September 1, 2020 to December 31, 2020, the Group subleases its right-of-use assets to its associate companies WEC, WEHK and TPSCo. under operating leases with lease terms between 1 and 12 years, and the rental is based on similar asset's market rental rates and fixed lease payments are received monthly.

1) The balance of operating lease receivables were as follows:

	December 31	
Related Party Category	**2020**	**2019**
Parent company	$ -	$ 434
Associate	245	269
	$ 245	$ 703

2) Future lease payment receivables was as follows:

	December 31	
Related Party Category	**2020**	**2019**
Related party in substance	$ 1,635,005	$ -
Parent company	11,133	11,430
Associate	1,948	535
	$ 1,648,086	$ 11,965

3) Lease income were as follows:

Related Party Category	For the Year Ended December 31 2020	2019
Related party in substance	$ 85,353	$ -
Parent company	3,838	4,003
Associate	1,524	1,655
	$ 90,715	$ 5,658

f. Endorsements and guarantees

Endorsements and guarantees provided by the Group

The chairman of the Company is a joint guarantor of the land-leasing from Taiwan Sugar Corporation. Refer to Note 13.

Endorsements and guarantees given by related parties

Related Party Category	For the Year Ended December 31 2020	2019
Parent company		
Amount endorsed	$ 4,440,417	$ -
Amount utilized (reported as secured bank loans)	$ 276,300	$ -

According to the contract, the endorsements and guarantees given by the related party above mentioned shall maintain a specific financial ratio (current ratio, debt ratio) and net tangible value shall not be less than a specific amount during the every half year. The calculation of the foregoing financial standards is based on the consolidated financial report verified by public accountants.

g. Compensation of key management personnel

	For the Year Ended December 31 2020	2019
Short-term employee benefits	$ 102,977	$ 78,687
Post-employment benefits	2,976	3,066
Compensation costs of employee share options	2,956	2,072
	$ 108,909	$ 83,825

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

31. ASSETS PLEDGED AS COLLATERAL OR FOR SECURITY

Please refer to Note 6.

32. SIGNIFICANT CONTINGENT LIABILITIES AND UNRECOGNIZED COMMITMENTS

The Company and NTCA received a complaint served by the court on June 29, 2020. The plaintiff charged in the California High Court that the gasoline generator produced by HD POWER SYSTEMS INC. exploded during use and caused damage to it. At the same time, the Company, NTCA and other related companies shall bear the relevant compensation. The court stipulated that the defendant must submit a defense within 30 days. The Company continues to evaluate the possible impact on business operation and financial position, and will conduct related litigation matters in accordance with the procedures established by the court.

33. OTHER ITEMS

In the year 2020, the novel coronavirus (Covid-19) spreads all over the world, causing subsidiaries, customers and suppliers in some regions to implement quarantine and travel restrictions. The Group evaluated that there is no significant impact on the overall business operation and financial position of the Group. There are no doubts about the ability of the Group to going concern, assets impairment and financing risks.

34. SIGNIFICANT ASSETS AND LIABILITIES DENOMINATED IN FOREIGN CURRENCIES

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

	December 31					
	2020			2019		
	Foreign Currencies (Thousand)	Exchange Rate (Note)	New Taiwan Dollars (Thousand)	Foreign Currencies (Thousand)	Exchange Rate (Note)	New Taiwan Dollars (Thousand)
Financial assets						
Monetary items						
USD	$ 57,028	28.48	$ 1,624,156	$ 40,291	29.98	$ 1,207,919
ILS	20,800	8.8712	184,522	14,128	8.6652	122,421
RMB	8,724	4.377	38,186	952	4.305	4,101
JPY	48,824	0.276	13,490	15,093	0.276	4,166
Financial liabilities						
Monetary items						
USD	46,275	28.48	1,317,309	26,123	29.98	783,180
ILS	18,706	8.8712	165,943	17,812	8.6652	154,348
RMB	7,098	4.377	31,067	1,053	4.305	4,532
JPY	68,971	0.276	19,057	62,389	0.276	17,219

Note: The rate foreign currencies are exchanged to New Taiwan dollars and displayed as a rate.

For the years ended December 31, 2020 and 2019, realized and unrealized net foreign exchange losses were NT$6,417 thousand and NT$2,791 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 currency of the entities in the Group.

35. SEGMENT INFORMATION

a. Basic information about operating segment

1) Classification of operating segments

The Group's reportable segments under IFRS 8 "Operating Segments" were as follows:

a) General IC product segment

The general IC product segment engages mainly in research, design, manufacturing, sale and after-sales service.

b) Foundry service segment

The foundry service segment engages mainly in research, design, manufacturing and sale.

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. The Group does not provide information on assets regularly to the Group's chief operating decision maker; thus, the measure of assets is zero. 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 is 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	
	2020	2019	2020	2019
General IC products	$ 17,955,892	$ 8,426,460	$ 1,018,873	$ 933,470
Foundry service	2,047,394	1,924,876	696,660	565,576
Total of segment revenue	20,003,286	10,351,336	1,715,533	1,499,046
Other revenue	664,770	15,933	656,845	8,683
Operating revenue	$ 20,668,056	$ 10,367,269	2,372,378	1,507,729
Unallocated expenditure				
Administrative and supporting expense			(1,358,393)	(468,518)
Sales and other common expenses			(691,703)	(454,890)
Total operating profit			322,282	584,321
Interest expense			(70,228)	(14,279)
Interest income			22,330	17,777
Dividend income			67,746	70,529
Gain on the bargain purchase			218,968	-
Other gains and losses			114,345	12,203
Gains (losses) on disposal of property, plant and equipment			40,433	62
Foreign exchange gains (losses)			(6,417)	(2,791)
Gains (losses) on financial instruments at fair value through profit or loss			33,966	(253)
Profit before income tax			$ 743,425	$ 667,569

c. Geographical information

The Group operates in three principal geographical area - Asia, the United States and Europe.

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 and deferred income tax assets) by location are detailed below.

	Revenue from External Customers For the Year Ended December 31		Non-current Assets December 31	
	2020	2019	2020	2019
Asia	$ 20,259,853	$ 9,950,563	$ 11,255,049	$ 1,626,019
United States	199,776	267,851	60,632	40,645
Europe	203,569	146,703	-	-
Others	4,858	2,152	-	-
	$ 20,668,056	$ 10,367,269	$ 11,315,681	$ 1,666,664

d. Information about major customer

Single customers contributing 10% or more to the Group's operating revenue for the years ended December 31, 2020 and 2019 were as follows:

	For the Year Ended December 31			
	2020		2019	
	Amount	%	Amount	%
Customer S	$ 4,793,626	23	$ -	-
Customer V	3,853,466	19	2,942,505	28
Customer C	1,291,476	6	1,094,889	11
	$ 9,938,568	48	$ 4,037,394	39