REALTEK SEMICONDUCTOR CORPORATION

PARENT COMPANY ONLY FINANCIAL STATEMENTS AND REPORT OF INDEPENDENT ACCOUNTANTS

DECEMBER 31, 2019 AND 2018

(Stock code:2379)

For the convenience of readers and for information purpose only, the auditors' report and the accompanying financial statements have been translated into English from the original Chinese version prepared and used in the Republic of China. In the event of any discrepancy between the English version and the original Chinese version or any differences in the interpretation of the two versions, the Chinese-language auditors' report and financial statements shall prevail.

REPORT OF INDEPENDENT ACCOUNTANTS TRANSLATED FROM CHINESE

PWCR19000226

To the Board of Directors and Shareholders of Realtek Semiconductor Corporation

Opinion

We have audited the accompanying parent company only balance sheets of Realtek Semiconductor Corporation (the "Company") as at December 31, 2019 and 2018, and the related parent company only statements of comprehensive income, of changes in equity and of cash flows for the years then ended, and notes to the parent company only financial statements, including a summary of significant accounting policies.

In our opinion, based on our audits and the reports of other independent accountants (please refer to the *Other matter* section of our report), the accompanying parent company only financial statements present fairly, in all material respects, the financial position of the Company as at December 31, 2019 and 2018, and its financial performance and its cash flows for the years then ended in accordance with the "Regulations Governing the Preparation of Financial Reports by Securities Issuers".

Basis for opinion

We conducted our audits in accordance with the "Regulations Governing Auditing and Attestation of Financial Statements by Certified Public Accountants" and generally accepted auditing standards in the Republic of China ("ROC GAAS"). Our responsibilities under those standards are further described in the Independent Accountant's Responsibilities for the Audit of the Parent Company Only Financial Statements section of our report. We are independent of the Company in accordance with the Code of Professional Ethics for Certified Public Accountants in the Republic of China (the "Code"), and we have fulfilled our other ethical responsibilities in accordance with the Code. Based on our audits and the reports of the other independent accountants, 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 judgement, were of most significance in our audit of the parent company only financial statements of the current period. These matters were addressed in the context of our audit of the parent company only financial statements as a whole and, in forming our opinion thereon, we do not provide a separate opinion on these matters.

Key audit matters for the Company's parent company only financial statements of the current period are stated as follows:

Valuation of inventories

Description

Refer to Note 4(13) of the parent company only financial statements for inventory valuation policies, Note 5(2) for uncertainty of accounting estimates and assumptions of inventory valuation and Note 6(3) for the details of inventories.

The Company is primarily engaged in researching, developing, manufacturing, selling of various integrated circuits and related application software. Inventories are stated at the lower of cost and net realizable value. Due to the balances of inventories are significant to the financial statements and the rapid technological changes in the industry, there is a higher risk of decline in market value and obsolescence of inventories. Thus, we considered the valuation of inventories as one of the key audit matters.

How our audit addressed the matter

We performed the following audit procedures in respect of the above key audit matter:

1. Obtained an understanding of accounting policies on the provision for inventory valuation losses and assessed the reasonableness.
2. Validated the accuracy of inventory aging report, as well as sampled and confirmed the consistency of quantities and amounts with detailed inventory listing, verified dates of movements with supporting documents and ensured the proper categorization of inventory aging report.
3. Evaluated and confirmed the reasonableness of net realizable value for inventories through validating respective supporting documents.

Other matter – Reference to audits of other independent accountants

We did not audit the financial statements of certain investments accounted for under equity method. Those financial statements were audited by other independent accountants whose reports thereon have been furnished to us, and our opinion expressed herein is based solely on the audit reports of the other independent accountants. Investments accounted for under equity method amounted to NT$6,938,839 thousand and NT$6,900,458 thousand, constituting 10.29% and 12.78% of total assets as of December 31, 2019 and 2018, respectively. Comprehensive income amounted to NT$151,087 thousand and NT$108,408 thousand, constituting 2.46% and 2.14% of total comprehensive income for the years ended December 31, 2019 and 2018, respectively.

Responsibilities of management and those charged with governance for the parent company only financial statements

Management is responsible for the preparation and fair presentation of the parent company only financial statements in accordance with the "Regulations Governing the Preparation of Financial Reports by Securities Issuers", and for such internal control as management determines is necessary to enable the preparation of parent company only financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the parent company only financial statements, management is responsible for assessing the Company'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 Company or to cease operations, or has no realistic alternative but to do so.

Those charged with governance, including the Audit Committee, are responsible for overseeing the Company's financial reporting process.

Independent accountant's responsibilities for the audit of the parent company only financial statements

Our objectives are to obtain reasonable assurance about whether the parent company only financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue a 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 ROC GAAS 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 parent company only financial statements.

As part of an audit in accordance with ROC GAAS, we exercise professional judgement and maintain professional skepticism throughout the audit. We also:

1. Identify and assess the risks of material misstatement of the parent company only 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 Company’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 Company’s ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our report to the related disclosures in the parent company only 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 report. However, future events or conditions may cause the Company to cease to continue as a going concern.
5. Evaluate the overall presentation, structure and content of the parent company only financial statements, including the disclosures, and whether the parent company only financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

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

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

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

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the parent company only financial statements of the current period and are therefore the key audit matters. We describe these matters in our 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.

Lin, Yu-Kuan   Tsang, Kwoh-Wah

For and on behalf of PricewaterhouseCoopers, Taiwan

March 20, 2020

The accompanying parent company only financial statements are not intended to present the financial position and results of operations and cash flows in accordance with accounting principles generally accepted in countries and jurisdictions other than the Republic of China. The standards, procedures and practices in the Republic of China governing the audit of such financial statements may differ from those generally accepted in countries and jurisdictions other than the Republic of China. Accordingly, the accompanying parent company only financial statements and report of independent accountants are not intended for use by those who are not informed about the accounting principles or auditing standards generally accepted in the Republic of China, and their applications in practice.
As the financial statements are the responsibility of the management, PricewaterhouseCoopers cannot accept any liability for the use of, or reliance on, the English translation or for any errors or misunderstandings that may derive from the translation.

REALTEK SEMICONDUCTOR CORPORATION
PARENT COMPANY ONLY BALANCE SHEETS
DECEMBER 31, 2019 AND 2018
(Expressed in thousands of New Taiwan dollars)

	Assets	Notes	December 31, 2019 AMOUNT	%	December 31, 2018 AMOUNT	%
	Current assets					
1100	Cash and cash equivalents	6(1)	$ 3,333,828	5	$ 1,553,365	3
1110	Financial assets at fair value through profit or loss - current		28,736	-	29,061	-
1136	Financial assets at amortised cost - current	8	-	-	61,401	-
1170	Accounts receivable, net	6(2)	6,588,225	10	4,307,547	8
1180	Accounts receivable, net - related parties	6(2) and 7	1,227,255	2	1,033,782	2
1200	Other receivables		20,417	-	42,641	-
1210	Other receivables - related parties	7	5,729,653	8	2,688,329	5
130X	Inventories, net	6(3)	5,820,326	9	4,096,647	8
1410	Prepayments		205,329	-	149,935	-
11XX	**Total current assets**		22,953,769	34	13,962,708	26
	Non-current assets					
1517	Financial assets at fair value through other comprehensive income - non-current		-	-	936	-
1535	Financial assets at amortised cost - non-current	8	64,885	-	-	-
1550	Investments accounted for under equity method	6(4)	38,503,441	57	35,911,991	67
1600	Property, plant and equipment	6(5)	3,019,258	5	2,863,756	5
1755	Right-of-use assets	6(6)	1,091,607	2	-	-
1780	Intangible assets	6(7)	1,652,722	2	1,160,549	2
1840	Deferred income tax assets	6(21)	114,163	-	78,472	-
1900	Other non-current assets		46,151	-	14,444	-
15XX	**Total non-current assets**		44,492,227	66	40,030,148	74
1XXX	**Total assets**		$ 67,445,996	100	$ 53,992,856	100

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REALTEK SEMICONDUCTOR CORPORATION
PARENT COMPANY ONLY BALANCE SHEETS
DECEMBER 31, 2019 AND 2018
(Expressed in thousands of New Taiwan dollars)

	Liabilities and Equity	Notes	December 31, 2019 AMOUNT	%	December 31, 2018 AMOUNT	%
	Current liabilities					
2100	Short-term borrowings	6(8)	$ 18,604,770	28	$ 14,526,311	27
2130	Contract liabilities - current	6(15)	67,853	-	110,764	-
2150	Notes payable		3,276	-	8,657	-
2170	Accounts payable		5,659,518	8	3,793,276	7
2180	Accounts payable - related parties	7	313,185	-	228,279	-
2200	Other payables	6(9)	9,929,669	15	6,867,842	13
2220	Other payables - related parties	7	55,690	-	38,283	-
2230	Current income tax liabilities		820,495	1	578,088	1
2280	Lease liabilities - current		30,417	-	-	-
2300	Other current liabilities	6(15)	3,831,860	6	2,581,910	5
21XX	**Total current liabilities**		39,316,733	58	28,733,410	53
	Non-current liabilities					
2550	Provisions - non-current		-	-	519,016	1
2570	Deferred income tax liabilities	6(21)	51,723	-	22,310	-
2580	Lease liabilities - non-current		781,678	2	-	-
2600	Other non-current liabilities	6(10)	76,877	-	80,828	-
25XX	**Total non-current liabilities**		910,278	2	622,154	1
2XXX	**Total liabilities**		40,227,011	60	29,355,564	54
	Equity					
	Share capital	6(11)				
3110	Common shares		5,080,955	7	5,080,955	10
	Capital surplus	6(12)				
3200	Capital surplus		2,736,854	4	3,236,659	6
	Retained earnings	6(13)				
3310	Legal reserve		4,902,176	7	4,467,099	8
3320	Special reserve		-	-	600,443	1
3350	Undistributed earnings		14,716,036	22	10,850,172	20
	Other equity	6(14)				
3400	Other equity interest		(217,036)	-	401,964	1
3XXX	**Total equity**		27,218,985	40	24,637,292	46
	Significant contingent liabilities and unrecognized contract commitments	9				
3X2X	**Total liabilities and equity**		$ 67,445,996	100	$ 53,992,856	100

The accompanying notes are an integral part of these parent company only financial statements.

REALTEK SEMICONDUCTOR CORPORATION
PARENT COMPANY ONLY STATEMENTS OF COMPREHENSIVE INCOME
FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018
(Expressed in thousands of New Taiwan dollars, except earings per share amounts)

	Items	Notes	2019 AMOUNT	2019 %	2018 AMOUNT	2018 %
4000	**Operating revenue**	6(15) and 7	$ 40,845,708	100	$ 32,194,291	100
5000	**Operating costs**	6(3) and 7	(24,643,053)	(60)	(18,906,196)	(59)
5900	**Gross profit**		16,202,655	40	13,288,095	41
	Operating expenses	6(20)(21) and 7				
6100	Selling expenses		(1,887,715)	(5)	(1,646,985)	(5)
6200	General and administrative expenses		(760,391)	(2)	(991,577)	(3)
6300	Research and development expenses		(12,212,926)	(30)	(9,955,350)	(31)
6450	Expected credit gains (losses)	12(2)	(25,618)	-	5,803	-
6000	**Total operating expenses**		(14,886,650)	(37)	(12,588,109)	(39)
6900	**Operating income**		1,316,005	3	699,986	2
	Non-operating income and expenses					
7010	Other income	6(16) and 7	194,391	-	112,353	1
7020	Other gains and losses	6(17)	(191,745)	-	(1,992)	-
7050	Finance costs	6(18)	(144,100)	-	(140,170)	-
7070	Share of profit of associates and joint ventures accounted for under equity method	6(4)	6,053,732	15	3,968,591	12
7000	**Total non-operating income and expenses**		5,912,278	15	3,938,782	13
7900	**Profit before income tax, net**		7,228,283	18	4,638,768	15
7950	Income tax expense	6(21)	(438,000)	(1)	(288,000)	(1)
8200	**Net income for the year**		$ 6,790,283	17	$ 4,350,768	14
	Other comprehensive income, net	6(14)				
	Components of other comprehensive income (loss) that will not be reclassified to profit or loss					
8311	Losses on remeasurements of defined benefit plans		$ -	-	($ 75,809)	-
8316	Unrealised losses from investments in equity instruments measured at fair value through other comprehensive income		-	-	(138)	-
8330	Share of other comprehensive income (loss) of associates and joint ventures accounted for under equity method		231,742	-	(163,544)	(1)
8310	**Total other comprehensive income (loss) that will not be reclassified to profit or loss**		231,742	-	(239,491)	(1)
	Components of other comprehensive income (loss) that will be reclassified to profit or loss					
8380	Share of other comprehensive (loss) income of associates and joint ventures accounted for under equity method		(891,954)	(2)	942,974	3
8360	**Total other comprehensive (loss) income that will be reclassified to profit or loss**		(891,954)	(2)	942,974	3
8300	**Other comprehensive (loss) income for the year**		($ 660,212)	(2)	$ 703,483	2
8500	**Total comprehensive income for the year**		$ 6,130,071	15	$ 5,054,251	16
	Earnings Per Share (in dollars)					
9750	**Basic earnings per share**	6(22)	$	13.36	$	8.57
9850	**Diluted earnings per share**	6(22)	$	13.13	$	8.40

The accompanying notes are an integral part of these parent company only financial statements.

REALTEK SEMICONDUCTOR CORPORATION
PARENT COMPANY ONLY STATEMENTS OF CHANGES IN EQUITY
FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018
(Expressed in thousands of New Taiwan dollars)

				Retained earnings			Other equity interest			
	Notes	Common shares	Capital surplus	Legal reserve	Special reserve	Undistributed earnings	Financial statements translation differences of foreign operations	Unrealised gains (losses) from financial assets measured at fair value through other comprehensive income	Unrealised gain or loss on available-for-sale financial assets	Total equity
2018										
Balance at January 1, 2018		$ 5,065,062	$ 3,558,856	$ 4,127,884	$ -	$ 9,698,159	($ 813,163)	$ -	$ 212,720	$ 21,849,518
Modified retrospective approach adjustment	6(14)	-	-	-	-	103,142	-	435,835	(212,720)	326,257
Balance at January 1 after adjustments		5,065,062	3,558,856	4,127,884	-	9,801,301	(813,163)	435,835	-	22,175,775
Net income for the year		-	-	-	-	4,350,768	-	-	-	4,350,768
Other comprehensive income (loss)	6(14)	-	-	-	-	(75,809)	942,974	(163,682)	-	703,483
Total comprehensive income (loss)		-	-	-	-	4,274,959	942,974	(163,682)	-	5,054,251
Distribution of 2017 earnings	6(13)									
Legal reserve		-	-	339,215	-	(339,215)	-	-	-	-
Special reserve		-	-	-	600,443	(600,443)	-	-	-	-
Cash dividends		-	-	-	-	(2,286,430)	-	-	-	(2,286,430)
Employees' compensation transferred to common stock	6(12)	15,893	163,692	-	-	-	-	-	-	179,585
Cash dividends from capital surplus	6(12)	-	(508,095)	-	-	-	-	-	-	(508,095)
Changes in equity of associates accounted for under equity method	6(12)	-	22,005	-	-	-	-	-	-	22,005
Cash dividends returned	6(12)	-	201	-	-	-	-	-	-	201
Balance at December 31, 2018		$ 5,080,955	$ 3,236,659	$ 4,467,099	$ 600,443	$ 10,850,172	$ 129,811	$ 272,153	$ -	$ 24,637,292
2019										
Balance at January 1, 2019		$ 5,080,955	$ 3,236,659	$ 4,467,099	$ 600,443	$ 10,850,172	$ 129,811	$ 272,153	$ -	$ 24,637,292
Net income for the year		-	-	-	-	6,790,283	-	-	-	6,790,283
Other comprehensive income (loss)	6(14)	-	-	-	-	-	(891,954)	231,742	-	(660,212)
Total comprehensive income (loss)		-	-	-	-	6,790,283	(891,954)	231,742	-	6,130,071
Distribution of 2018 earnings	6(13)									
Legal reserve		-	-	435,077	-	(435,077)	-	-	-	-
Special reserve		-	-	-	(600,443)	600,443	-	-	-	-
Cash dividends		-	-	-	-	(3,048,573)	-	-	-	(3,048,573)
Cash dividend from capital surplus	6(12)	-	(508,095)	-	-	-	-	-	-	(508,095)
Changes in equity of associates accounted for under equity method	6(12)	-	8,064	-	-	-	-	-	-	8,064
Disposal of investments in equity instruments measured at fair value through other comprehensive income	6(14)	-	-	-	-	(41,212)	-	41,212	-	-
Cash dividends returned	6(12)	-	226	-	-	-	-	-	-	226
Balance at December 31, 2019		$ 5,080,955	$ 2,736,854	$ 4,902,176	$ -	$ 14,716,036	($ 762,143)	$ 545,107	$ -	$ 27,218,985

The accompanying notes are an integral part of these parent company only financial statements.

REALTEK SEMICONDUCTOR CORPORATION
PARENT COMPANY ONLY STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018
(Expressed in thousands of New Taiwan dollars)

	Notes	2019	2018
CASH FLOWS FROM OPERATING ACTIVITIES			
Profit before tax		$ 7,228,283	$ 4,638,768
Adjustments			
Adjustments to reconcile profit (loss)			
Depreciation	6(19)	562,805	470,049
Amortization	6(19)	948,008	943,734
Expected credit losses (gains)	12(2)	25,618	(5,803)
Impairment loss	6(17)	41,397	-
Interest expense	6(18)	144,100	140,170
Interest income	6(16)	(118,442)	(66,668)
Dividend income	6(16)	(406)	(812)
Loss on financial assets at fair value through profit or loss	6(17)	325	11,283
Share of gain of associates and joint ventures accounted for under equity method	6(4)	(6,053,732)	(3,968,591)
Gain on disposal of property, plant and equipment	6(17)	(92)	-
Other intangible assets transferred to expenses	6(17)	526	7,698
Changes in operating assets and liabilities			
Changes in operating assets			
Accounts receivable, net		(2,304,342)	527,028
Accounts receivable, net - related parties		(195,427)	53,312
Other receivables		27,106	(23,639)
Other receivables, net - related parties		(2,420)	(67,713)
Inventories		(1,723,679)	227,773
Prepayments		(55,394)	97,207
Changes in operating liabilities			
Contract liabilities - current		(42,911)	21,541
Notes payable		(5,381)	26
Accounts payable		1,866,242	10,137
Accounts payable - related parties		84,906	(54,388)
Other payables		3,019,851	1,310,009
Other payables - related parties		17,407	6,126
Provisions - non-current		(519,016)	84,591
Other current liabilities		1,249,950	397,579
Accrued pension obligations		(2,470)	(2,507)

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REALTEK SEMICONDUCTOR CORPORATION
PARENT COMPANY ONLY STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018
(Expressed in thousands of New Taiwan dollars)

	Notes	2019	2018
Cash inflow generated from operations		$ 4,192,812	$ 4,756,910
Receipt of interest		113,560	66,401
Receipt of dividends		406	812
Interest paid		(146,526)	(138,304)
Income taxes paid		(201,871)	(48,920)
Net cash flows from operating activities		3,958,381	4,636,899
CASH FLOWS FROM INVESTING ACTIVITIES			
Acquisition of financial assets at amortised cost		(64,885)	-
Proceeds from disposal of financial assets at amortised cost		61,401	30,254
Proceeds from disposal of financial assets at fair value through other comprehensive income		939	-
Proceeds from capital reduction of investee accounted for under equity method	6(4)	17,908	-
Acquisition of cash dividends from investments accounted for under equity method		2,750,826	5,436,741
Acquisition of property, plant and equipment	6(23)	(682,325)	(578,076)
Proceeds from disposal of property, plant and equipment		92	-
Acquisition of intangible assets	6(23)	(1,399,800)	(581,659)
Acquisition of right-of-use assets		(286,276)	-
Increase in other receivables, net - related parties		(3,038,904)	(1,797,119)
Increase in refundable deposits		(1,722)	(7,988)
Increase in other non-current assets		(29,985)	-
Net cash flows (used in) from investing activities		(2,672,731)	2,502,153
CASH FLOWS FROM FINANCING ACTIVITIES			
Increase in short-term borrowings		147,831,650	146,563,258
Decrease in short-term borrowings		(143,753,191)	(150,089,571)
Repayment of principal portion of lease liabilities	6(24)	(25,723)	-
Guarantee deposits returned	6(24)	(1,481)	(304)
Cash dividends paid	6(13)	(3,556,668)	(2,794,525)
Cash dividends returned		226	201
Net cash flows from (used in) financing activities		494,813	(6,320,941)
Net increase in cash and cash equivalents		1,780,463	818,111
Cash and cash equivalents at beginning of year		1,553,365	735,254
Cash and cash equivalents at end of year		$ 3,333,828	$ 1,553,365

The accompanying notes are an integral part of these parent company only financial statements.

(Expressed in thousands of New Taiwan dollars, except as otherwise indicated)

1. HISTORY AND ORGANISATION

Realtek Semiconductor Corporation (the "Company") was incorporated as a company limited by shares on October 21, 1987 and commenced commercial operations in March 1988. The Company was based in Hsinchu Science-Based Industrial Park since October 28, 1989. The Company is engaged in the research, development, design, testing, and sales of ICs and application softwares for these products.

2. THE DATE OF AUTHORISATION FOR ISSUANCE OF THE PARENT COMPANY ONLY FINANCIAL STATEMENTS AND PROCEDURES FOR AUTHORISATION

These parent company only financial statements were authorised for issuance by the Board of Directors on March 20, 2020.

3. APPLICATION OF NEW STANDARDS, AMENDMENTS AND INTERPRETATIONS

(1) Effect of the adoption of new issuances of or amendments to International Financial Reporting Standards ("IFRSs") as endorsed by the Financial Supervisory Commission ("FSC")

New standards, interpretations and amendments endorsed by the FSC effective from 2019 are as follows:

New Standards, Interpretations and Amendments	Effective date by International Accounting Standards Board
Amendments to IFRS 9, 'Prepayment features with negative compensation'	January 1, 2019
IFRS 16, 'Leases'	January 1, 2019
Amendments to IAS 19, 'Plan amendment, curtailment or settlement'	January 1, 2019
Amendments to IAS 28, 'Long-term interests in associates and joint ventures'	January 1, 2019
IFRIC 23, 'Uncertainty over income tax treatments'	January 1, 2019
Annual improvements to IFRSs 2015-2017 cycle	January 1, 2019

Except for the following, the above standards and interpretations have no significant impact to the Company's financial condition and financial performance based on the Company's assessment.

IFRS 16, 'Leases'

A. IFRS 16, 'Leases', replaces IAS 17, 'Leases' and related interpretations and SICs. The standard requires lessees to recognize a 'right-of-use asset' and a lease liability (except for those leases with terms of 12 months or less and leases of low-value assets). The accounting stays the same for lessors, which is to classify their leases as either finance leases or operating leases and account for those two types of leases differently. IFRS 16 only requires enhanced disclosures to be provided by lessors.

B. The Company has elected to apply IFRS 16 by not restating the comparative information (referred herein as the 'modified retrospective approach') when applying "IFRSs" effective in 2019 as endorsed by the FSC. Accordingly, the Company increased 'right-of-use asset' by $732,121, increased 'lease liability' by $732,121 with respect to the lease contracts of lessees on January 1, 2019.

C. The Company has used the following practical expedients permitted by the standard at the date of initial application of IFRS 16:

(a) The use of a single discount rate to a portfolio of leases with reasonably similar characteristics.

(b) The exclusion of initial direct costs for the measurement of 'right-of-use asset'.

D. The Company calculated the present value of lease liabilities by using the incremental borrowing interest rate ranging from 0.97% to 1.71%.

E. The Company recognized lease liabilities which had previously been classified as 'operating leases' under the principles of IAS 17, 'Leases'. The reconciliation between operating lease commitments under IAS 17 measured at the present value of the remaining lease payments, discounted using the lessee's incremental borrowing rate and lease liabilities recognized as of January 1, 2019 is as follows:

Operating lease commitments disclosed by applying IAS 17 as at December 31, 2018	$	148,933
Add: Adjustments as a result of a different treatment of extension and termination options		834,929
Total lease contracts amount recognised as lease liabilities by applying IFRS 16 on January 1, 2019		983,862
Incremental borrowing interest rate at the date of initial application		0.97%~1.71%
Lease liabilities recognised as at January 1, 2019 by applying IFRS 16	$	732,121

(2) Effect of new issuances of or amendments to IFRSs as endorsed by the FSC but not yet adopted by the Company

New standards, interpretations and amendments endorsed by the FSC effective from 2020 are as follows:

New Standards, Interpretations and Amendments	Effective date by International Accounting Standards Board
Amendments to IAS 1 and IAS 8, 'Disclosure Initiative-Definition of Material'	January 1, 2020
Amendments to IFRS 3, 'Definition of a business'	January 1, 2020
Amendments to IFRS 9, IAS 39 and IFRS7 ,'Interest rate benchmark reform'	January 1, 2020

The above standards and interpretations have no significant impact to the Company's financial condition and financial performance based on the Company's assessment.

(3) IFRSs issued by IASB but not yet endorsed by the FSC

New standards, interpretations and amendments issued by IASB but not yet included in the IFRSs as endorsed by the FSC are as follows:

New Standards, Interpretations and Amendments	Effective date by International Accounting Standards Board
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 International Accounting Standards Board
IFRS 17, 'Insurance contracts'	January 1, 2021
Amendments to IAS 1, 'Classification of liabilities as current or non-	January 1, 2022

The above standards and interpretations have no significant impact to the Company's financial condition and financial performance based on the Company's assessment.

4. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The principal accounting policies applied in the preparation of these parent company only financial statements are set out below. These policies have been consistently applied to all the periods presented, unless otherwise stated.

(1) Compliance statement

The parent company only financial statements of the Company have been prepared in accordance with the "Regulations Governing the Preparation of Financial Reports by Securities Issuers".

(2) Basis of preparation

A. Except for the following items, the parent company only financial statements have been prepared under the historical cost convention:

(a) Financial assets (including derivative instruments) at fair value through profit or loss.

(b) Financial assets at fair value through other comprehensive income.

(c) Defined benefit liabilities recognized based on the net amount of pension fund assets less present value of defined benefit obligation.

B. The preparation of financial statements in conformity with International Financial Reporting Standards, International Accounting Standards, IFRIC Interpretations, and SIC Interpretations as endorsed by the FSC (collectively referred herein as the "IFRSs") requires the use of certain critical accounting estimates. It also requires management to exercise its judgement in the process of applying the Company's accounting policies. The areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates are significant to the parent company only financial statements are disclosed in Note 5.

(3) Foreign currency translation

Items included in the financial statements of each of the Company's entities are measured using the currency of the primary economic environment in which the entity operates (the "functional currency"). The parent company only financial statements are presented in New Taiwan dollars, which is the Company's functional and presentation currency.

A. Foreign currency transactions and balances

(a) Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions or valuation where items are remeasured. Foreign exchange gains and losses resulting from the settlement of such transactions are recognized in profit or loss in the period in which they arise.

(b) Monetary assets and liabilities denominated in foreign currencies at the period end are re-translated at the exchange rates prevailing at the balance sheet date. Exchange differences arising upon re-translation at the balance sheet date are recognized in profit or loss.

(c) Non-monetary assets and liabilities denominated in foreign currencies held at fair value through profit or loss are re-translated at the exchange rates prevailing at the balance sheet date; their translation differences are recognized in profit or loss. Non-monetary assets and liabilities denominated in foreign currencies held at fair value through other comprehensive income are re-translated at the exchange rates prevailing at the balance sheet date; their translation differences are recognized in other comprehensive income. However, non-monetary assets and liabilities denominated in foreign currencies that are not measured at fair value are translated using the historical exchange rates at the dates of the initial transactions.

(d) All other foreign exchange gains and losses based on the nature of those transactions are presented in the statement of comprehensive income within 'other gains and losses'.

B. Translation of foreign operations

(a) The operating results and financial position of all the Company entities, associates and joint arrangements that have a functional currency different from the presentation currency are translated into the presentation currency as follows:

i. Assets and liabilities for each balance sheet presented are translated at the closing exchange rate at the date of that balance sheet;

ii. Income and expenses for each statement of comprehensive income are translated at average exchange rates of that period; and

iii. All resulting exchange differences are recognized in other comprehensive income.

(b) When the foreign operation partially disposed of or sold is an associate, exchange differences that were recorded in other comprehensive income are proportionately reclassified to profit or loss as part of the gain or loss on sale. In addition, even when the Company retains partial interest in the former foreign associate after losing significant influence over the former foreign associate, such transactions should be accounted for as disposal of all interest in these foreign operations.

(c) Goodwill and fair value adjustments arising on the acquisition of a foreign entity are treated as assets and liabilities of the foreign entity and translated at the closing exchange rates at the balance sheet date.

(4) Classification of current and non-current items

A. Assets that meet one of the following criteria are classified as current assets; otherwise they are classified as non-current assets:

(a) Assets arising from operating activities that are expected to be realised, or are intended to be sold or consumed within the normal operating cycle;

(b) Assets held mainly for trading purposes;

(c) Assets that are expected to be realised within twelve months from the balance sheet date;

(d) Cash and cash equivalents, excluding restricted cash and cash equivalents and those that are to be exchanged or used to settle liabilities more than twelve months after the balance sheet date.

Otherwise the Company classified as non-current assets.

B. Liabilities that meet one of the following criteria are classified as current liabilities; otherwise they are classified as non-current liabilities:

(a) Liabilities that are expected to be settled within the normal operating cycle;

(b) Liabilities arising mainly from trading activities;

(c) Liabilities that are to be settled within twelve months from the balance sheet date;

(d) Liabilities for which the repayment date cannot be extended unconditionally to more than twelve months after the balance sheet date. 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.

Otherwise the Company classified as non-current liabilities.

(5) Cash equivalents

Cash equivalents refer to short-term, highly liquid investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value. Time deposits that meet the definition above and are held for the purpose of meeting short-term cash commitments in operations are classified as cash equivalents.

(6) Financial assets at fair value through profit or loss

A. Financial assets at fair value through profit or loss are financial assets that are not measured at amortised cost or fair value through other comprehensive income. Financial assets at amortised cost or fair value through other comprehensive income are designated as at fair value through profit or loss at initial recognition when they eliminate or significantly reduce a measurement or recognition inconsistency.

B. On a regular way purchase or sale basis, financial assets at fair value through profit or loss are recognized and derecognized using trade date accounting.

C. At initial recognition, the Company measures the financial assets at fair value and recognizes the transaction costs in profit or loss. The Company subsequently measures the financial assets at fair value, and recognizes the gain or loss in profit or loss.

D. The Company recognizes the dividend income when the right to receive payment is established, future economic benefits associated with the dividend will flow to the Company and the amount of the dividend can be measured reliably.

(7) Financial assets at fair value through other comprehensive income

A. Financial assets at fair value through other comprehensive income comprise equity securities which are not held for trading, and for which the Company has made an irrevocable election at initial recognition to recognize changes in fair value in other comprehensive income.

B. On a regular way purchase or sale basis, financial assets at fair value through other comprehensive income are recognized and derecognized using trade date accounting.

C. At initial recognition, the Company measures the financial assets at fair value plus transaction costs. The Company subsequently measures the financial assets at fair value:

The changes in fair value of equity investments that were recognized in other comprehensive income are reclassified to retained earnings and are not reclassified to profit or loss following the derecognition of the investment. Dividends are recognized as revenue when the right to receive payment is established, future economic benefits associated with the dividend will flow to the Company and the amount of the dividend can be measured reliably.

(8) Financial assets at amortised cost

The Company's time deposits which do not fall under cash equivalents are those with a short maturity period and are measured at initial investment amount as the effect of discounting is immaterial.

(9) Accounts receivable

A. Accounts receivable entitle the Company a legal right to receive consideration in exchange for transferred goods or rendered services.

B. The short-term accounts and notes receivable without bearing interest are subsequently measured at initial invoice amount as the effect of discounting is immaterial.

(10) Impairment of financial assets

For financial assets at amortised cost, at each reporting date, the Company recognizes the impairment provision for 12 months expected credit losses if there has not been a significant increase in credit risk since initial recognition or recognizes the impairment provision for the lifetime expected credit losses (ECLs) if such credit risk has increased since initial recognition after taking into consideration all reasonable and verifiable information that includes forecasts. On the other hand, for accounts receivable that do not contain a significant financing component, the Company recognizes the impairment provision for lifetime ECLs.

(11) Derecognition of financial assets

The Company derecognizes a financial asset when the contractual rights to receive the cash flows from the financial asset expire.

(12) Operating leases (lessor)

Lease income from an operating lease (net of any incentives given to the lessee) is recognized in profit or loss on a straight-line basis over the lease term.

(13) Inventories

Inventories are stated at the lower of cost and net realisable value. Cost is determined using the weighted-average method. The cost of finished goods and work in progress comprises raw materials, direct labour, other direct costs and related production overheads (allocated based on normal operating capacity). It excludes borrowing costs. The item by item approach is used in applying the lower of cost and net realisable value. Net realisable value is the estimated selling price in the ordinary course of business, less the estimated cost of completion and applicable variable selling expenses.

(14) Investments accounted for under equity method / associates

A. Subsidiaries are all entities controlled by the Company. The Company controls an entity when the Company is exposed, or has rights, to variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity.

B. Unrealised profit (loss) occurred from the transactions between the Company and subsidiaries have been offset. The accounting policies of the subsidiaries have been adjusted where necessary to ensure consistency with the policies adopted by the Company.

C. The Company's share of its subsidiaries' post-acquisition profits or losses is recognized in profit or loss, and its share of post-acquisition movements in other comprehensive income is recognized in other comprehensive income. When the Company's share of losses in a subsidiary equals or exceeds its interest in the subsidiary, the Company continues to recognize losses proportionate to its ownership.

D. Associates are all entities over which the Company has significant influence but not control. In general, it is presumed that the investor has significant influence, if an investor holds, directly or indirectly 20 percent or more of the voting power of the investee. Investments in associates are accounted for under equity method and are initially recognized at cost.

E. The Company's share of its associates' post-acquisition profits or losses is recognized in profit or loss, and its share of post-acquisition movements in other comprehensive income is recognized in other comprehensive income. When the Company's share of losses in an associate equals or exceeds its interest in the associate (including any other unsecured receivables), the Company does not recognize further losses, unless it has incurred statutory/constructive obligations or made payments on behalf of the associate.

F. When changes in an associate's equity do not arise from profit or loss or other comprehensive income of the associate and such changes do not affect the Company's ownership percentage of the associate, the Company recognizes the Company's share of change in equity of the associate in 'capital surplus' in proportion to its ownership.

G. Unrealised gains on transactions between the Company and its associates are eliminated to the extent of the Company's interest in the associates. Unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred. Accounting policies of associates have been adjusted where necessary to ensure consistency with the policies adopted by the Company.

H. In the case that an associate issues new shares and the Company does not subscribe or acquire new shares proportionately, which results in a change in the Company's ownership percentage of the associate but maintains significant influence on the associate, then 'capital surplus' and 'investments accounted for under equity method' shall be adjusted for the increase or decrease of its share of equity interest. If the above condition causes a decrease in the Company's ownership percentage of the associate, in addition to the above adjustment, the amounts previously recognized in other comprehensive income in relation to the associate are reclassified to profit or loss proportionately on the same basis as would be required if the relevant assets or liabilities were disposed of.

I. Upon loss of significant influence over an associate, the Company remeasures any investment retained in the former associate at its fair value. Any difference between fair value and carrying amount is recognized in profit or loss.

J. When the Company disposes its investment in an associate and loses significant influence over this associate, the amounts previously recognized in other comprehensive income in relation to the associate, are reclassified to profit or loss, on the same basis as would be required if the relevant assets or liabilities were disposed of. If it retains significant influence over this associate, the amounts previously recognized in other comprehensive income in relation to the associate are reclassified to profit or loss proportionately in accordance with the aforementioned approach.

K. Pursuant to the "Regulations Governing the Preparation of Financial Reports by Securities Issuers," profit (loss) of the current period and other comprehensive income in the parent company only financial statements shall equal to the amount attributable to owners of the parent in the parent company only financial statements. Owners' equity in the parent company only financial statements shall equal to equity attributable to owners of the parent in the parent company only financial statements.

(15) Property, plant and equipment

A. Property, plant and equipment are initially recorded at cost. Borrowing costs incurred during the construction period are capitalised.

B. Subsequent costs are included in the asset's carrying amount or recognized as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Company and the cost of the item can be measured reliably. The carrying amount of the replaced part is derecognized. All other repairs and maintenance are charged to profit or loss during the financial period in which they are incurred.

C. Other property, plant and equipment apply cost model and are depreciated using the straight-line method to allocate their cost over their estimated useful lives. Each part of an item of property, plant and equipment with a cost that is significant in relation to the total cost of the item must be depreciated separately.

D. The assets' residual values, useful lives and depreciation methods are reviewed, and adjusted if appropriate, at each financial year-end. If expectations for the assets' residual values and useful lives differ from previous estimates or the patterns of consumption of the assets' future economic benefits embodied in the assets have changed significantly, any change is accounted for as a change in estimate under IAS 8, 'Accounting Policies, Changes in Accounting Estimates and Errors', from the date of the change. The estimated useful lives of the fixed assets are as follows: buildings - 10~55 years and other fixed assets - 3~5 years.

(16) Leasing arrangements (lessee)－right-of-use assets/lease liabilities

Effective 2019

A. Leases are recognized as a right-of-use asset and a corresponding lease liability at the date at which the leased asset is available for use by the Company.

B. Lease liabilities include the net present value of the remaining lease payments at the commencement date, discounted using the incremental borrowing interest rate. Fixed payments, less any lease incentives receivable.

The Company subsequently measures the lease liability at amortised cost using the interest method and recognizes interest expense over the lease term. The lease liability is remeasured and the amount of remeasurement is recognized as an adjustment to the right-of-use asset when there are changes in the lease term or lease payments do not arise from contract modifications.

C. At the commencement date, the right-of-use asset is stated at cost comprising the following:

(a) The amount of the initial measurement of lease liability; and

(b) Any lease payments made at or before the commencement date.

The right-of-use asset is measured subsequently using the cost model and is depreciated from the commencement date to the earlier of the end of the asset's useful life or the end of the lease term. When the lease liability is remeasured, the amount of remeasurement is recognized as an adjustment to the right-of-use asset.

(17) Operating leases (lessee)

Applicable for 2018

Payments made under an operating lease (net of any incentives received from the lessor) are recognized in profit or loss on a straight-line basis over the lease term.

(18) Intangible assets

A. Computer software

Computer software is stated at cost and amortised on a straight-line basis over its estimated useful life of 1 to 5 years.

B. Other intangible assets

Separately acquired intangible assets with a finite useful life are stated at cost, net of accumulated amortisation and accumulated impairment. Intangible assets acquired in a business combination are recognized at fair value at acquisition date. The amortisation amounts of separately and parent company only acquired intangible assets were amortised on a straight-line basis over their estimated useful lives of 2-5 years.

(19) Impairment of non-financial assets

The Company assesses at each balance sheet date the recoverable amounts of those assets where there is an indication that they are impaired. An impairment loss is recognized for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell or value in use. When the circumstances or reasons for recognising impairment loss for an asset in prior years no longer exist or diminish, the impairment loss is reversed. The increased carrying amount due to reversal should not be more than what the depreciated or amortised historical cost would have been if the impairment had not been recognized.

(20) Borrowings

Borrowings comprise short-term bank borrowings. Borrowings are recognized initially at fair value, net of transaction costs incurred.

(21) Notes and accounts payable

A. Accounts payable are liabilities for purchases of raw materials, goods or services and notes payable are those resulting from operating and non-operating activities.

B. The short-term notes and accounts payable without bearing interest are subsequently measured at initial invoice amount as the effect of discounting is immaterial.

(22) Derecognition of financial liabilities

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

(23) Provisions

Provisions are recognized when the Company has a present legal or constructive obligation as a result of past events, and it is probable that an outflow of economic resources will be required to settle the obligation and the amount of the obligation can be reliably estimated. Provisions are measured at the present value of the expenditures expected to be required to settle the obligation on the balance sheet date.

(24) Employee benefits

A. Short-term employee benefits

Short-term employee benefits are measured at the undiscounted amount of the benefits expected to be paid in respect of service rendered by employees in a period and should be recognized as expense in that period when the employees render service.

B. Pension

(a) Defined contribution plan

For defined contribution plan, the contributions are recognized as pension expense when they are due on an accrual basis. Prepaid contributions are recognized as an asset to the extent of a cash refund or a reduction in the future payments.

(b) Defined benefit plan

i. Net obligation under a defined benefit plan is defined as the present value of an amount of pension benefits that employees will receive on retirement for their services with the Company in current period or prior periods. The liability recognized in the balance sheet in respect of defined benefit pension plans is the present value of the defined benefit obligation at the balance sheet date less the fair value of plan assets. The net defined benefit obligation is calculated annually by independent actuaries using the projected unit credit method. The rate used to discount is determined by using interest rates of high-quality corporate bonds that are denominated in the currency in which the benefits will be paid, and that have terms to maturity approximating to the terms of the related pension liability; when there is no deep market in high-quality corporate bonds, the Company uses interest rates of government bonds (at the balance sheet date) instead.

ii. Remeasurements arising on defined benefit plan are recognized in other comprehensive income in the period in which they arise and are recorded as retained earnings.

C. Employees' compensation and directors' remuneration

Employees' compensation and directors' remuneration are recognized as expense and liability, provided that such recognition is required under legal or constructive obligation and those amounts can be reliably estimated. Any difference between the resolved amounts and the subsequently actual distributed amounts is accounted for as changes in estimates. If employee compensation is distributed by shares, the Company calculates the number of shares based on the closing price at the previous day of the Board meeting resolution.

(25) Income tax

A. The tax expense for the period comprises current and deferred tax. Tax is recognized in profit or loss, except to the extent that it relates to items recognized in other comprehensive income or items recognized directly in equity, in which cases the tax is recognized in other comprehensive income or equity.

B. The current income tax expense is calculated on the basis of the tax laws enacted or substantively enacted at the balance sheet date in the countries where the Company and its subsidiaries operate and generate taxable income. Management periodically evaluates positions taken in tax returns with respect to situations in accordance with applicable tax regulations. It establishes provisions where appropriate based on the amounts expected to be paid to the tax authorities. An additional tax is levied on the unappropriated retained earnings and is recorded as income tax expense in the year the stockholders resolve to retain the earnings.

C. Deferred tax is recognized, using the balance sheet liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the parent company only balance sheet. However, the deferred tax is not accounted for if it arises from initial recognition of goodwill or of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profit nor loss. Deferred tax is provided on temporary differences arising on investments in subsidiaries and associates, except where the timing of the reversal of the temporary difference is controlled by the Company and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred tax is determined using tax rates (and laws) that have been enacted or substantially enacted by the balance sheet date and are expected to apply when the related deferred tax asset is realised or the deferred tax liability is settled.

D. Deferred tax assets are recognized only to the extent that it is probable that future taxable profit will be available against which the temporary differences can be utilised. At each balance sheet date, unrecognized and recognized deferred tax assets are reassessed.

E. A deferred tax asset shall be recognized for the carryforward of unused tax credits resulting from research and development expenditures to the extent that it is possible that future taxable profit will be available against which the unused tax credits can be utilised.

(26) Share capital

Ordinary shares are classified as equity. Incremental costs directly attributable to the issue of new shares are shown in equity as a deduction, net of tax, from the proceeds.

(27) Dividends

Dividends are recorded in the Company's financial statements in the period in which they are resolved by the Company's shareholders. Cash dividends are recorded as liabilities; stock dividends are recorded as stock dividends to be distributed and are reclassified to ordinary shares on the effective date of new shares issuance.

(28) Revenue recognition

A. Sales of goods

(a) The Company manufactures and sells various integrated circuit related products. Sales are recognized when control of the products has transferred, being when the products are delivered to the customers, and there is no unfulfilled obligation that could affect the customer's acceptance of the products. Delivery occurs when the products have been shipped to the specific location, the risks of obsolescence and loss have been transferred to the wholesaler, and either the wholesaler has accepted the products in accordance with the sales contract, or the Company has objective evidence that all criteria for acceptance have been satisfied.

(b) Revenue from these sales is recognized based on the price specified in the contract. A refund liability is recognized for expected sales discounts and allowances payable to customers in relation to sales made until the end of the reporting period. As the time interval between the transfer of committed goods or service and the payment of customer does not exceed one year, the Company does not adjust the transaction price to reflect the time value of money.

(c) A receivable is recognized when the goods are delivered as this is the point in time that the consideration is unconditional because only the passage of time is required before the payment is due.

B. Services revenue

Revenue from design, royalty and technical services is recognized after completing the services in which the services are rendered.

5. CRITICAL ACCOUNTING JUDGEMENTS, ESTIMATES AND KEY SOURCES OF ASSUMPTION UNCERTAINTY

The preparation of these parent company only financial statements requires management to make critical judgements in applying the Company’s accounting policies and make critical assumptions and estimates concerning future events. Assumptions and estimates may differ from the actual results and are continually evaluated and adjusted based on historical experience and other factors. Such assumptions and estimates have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year; and the related information is addressed below:

(1) Critical judgements in applying the Company’s accounting policies

None.

(2) Critical accounting estimates and assumptions

Evaluation of inventories

As inventories are stated at the lower of cost and net realisable value, the Company must determine the net realisable value of inventories on balance sheet date using judgements and estimates. Due to the rapid technology innovation, the Company evaluates the amounts of normal inventory consumption, obsolete inventories or inventories without market selling value on balance sheet date, and writes down the cost of inventories to the net realisable value. Such an evaluation of inventories is principally based on the demand for the products within the specified period in the future. Therefore, there might be material changes to the evaluation.

As of December 31, 2019, the carrying amount of inventories was $5,820,326.

6. DETAILS OF SIGNIFICANT ACCOUNTS

(1) Cash and cash equivalents

	December 31, 2019	December 31, 2018
Cash on hand and revolving funds	$ 654	$ 1,554
Checking accounts and demand deposits	1,827,874	1,551,811
Time deposits	1,505,300	-
	$ 3,333,828	$ 1,553,365

The Company transacts with a variety of financial institutions all with high credit quality to disperse credit risk, so it expects that the probability of counterparty default is remote.

(2) Accounts receivable

	December 31, 2019	December 31, 2018
Accounts receivable	$ 6,655,435	$ 4,351,094
Accounts receivable – related parties	1,239,652	1,044,224
Less: Allowance for bad debts	(79,607)	(53,989)
	$ 7,815,480	$ 5,341,329

A. The aging analysis of accounts receivable is as follows:

	December 31, 2019	December 31, 2018
Not past due	$ 7,518,066	$ 5,386,539
Up to 30 days	376,364	8,743
31 to 90 days	1	-
Over 90 days	656	36
	$ 7,895,087	$ 5,395,318

The above aging analysis is based on past due date.

B. As of December 31, 2019 and 2018, accounts receivable arose from contracts with customers. As of January 1, 2018, the balance of receivables from contracts with customers amounted to $5,915,866.

C. The Company has no accounts receivable pledged to others.

D. Information relating to credit risk of accounts receivable is provided in Note 12(2).

(3) Inventories

	December 31, 2019		
	Cost	Allowance for obsolescence and market value decline	Book value
Raw materials	$ 825,412	($ 26,448)	$ 798,964
Work in process	3,731,699	(312,273)	3,419,426
Finished goods	1,986,572	(384,636)	1,601,936
Total	$ 6,543,683	($ 723,357)	$ 5,820,326

	December 31, 2018					
	Cost		Allowance for obsolescence and market value decline		Book value	
Raw materials	$	224,177	($	23,147)	$	201,030
Work in process		2,814,518	(	218,774)		2,595,744
Finished goods		1,640,931	(	341,058)		1,299,873
Total	$	4,679,626	($	582,979)	$	4,096,647

Operating costs incurred on inventories for the years ended December 31, 2019 and 2018 were as follows:

	Years ended December 31,			
	2019		2018	
Cost of inventories sold and others	$	24,356,841	$	18,601,009
Loss on market value decline and obsolete and slow-moving inventories		140,378		102,326
Loss on scrap inventory		145,834		202,861
	$	24,643,053	$	18,906,196

(4) Investments accounted for under equity method

	December 31, 2019		December 31, 2018	
Subsidiaries:				
Leading Enterprises Limited	$	11,151,040	$	10,903,503
Amber Universal Inc.		3,312,175		3,195,092
Realtek Singapore Private Limited		10,370,572		7,750,098
Realtek Investment Singapore Private Limited		6,494,453		6,427,012
Talent Eagle Enterprise Inc.		2,585,499		2,916,363
Bluocean Inc.		3,479,391		3,440,632
Realsun Investments Co., Ltd.		354,481		437,910
Hung-wei Venture Capital Co., Ltd.		418,438		374,178
Realking Investments Limited		286,939		348,721
Realsun Technology Corporatioin		5,107		5,563
Bobitag Inc.		19,398		19,214
Associates:				
Technology Partner V Venture Capital Corporation		22,247		36,917
5V Technologies, Taiwan Ltd.		-		16,106
Estinet Technologies Incorporation		3,701		40,682
	$	38,503,441	$	35,911,991

A. Subsidiaries

Details of the Company's subsidiaries are provided in Note 4(3) in the Company's 2019 consolidated financial statements.

B. The gain on Investments accounted for under equity method amounted to $6,053,732 and $3,968,591 for the years ended December 31, 2019 and 2018, respectively.

C. The Company's held stocks in Technology Partner V Venture Capital Corporation decreased due to the return of capital in August 2019 and the proceeds from capital returned was $17,908.

D. Certain investments mentioned above have been impaired, and the Company recognized impairment loss amounting to $41,397 for the year ended December 31, 2019.

(5) Property, plant and equipment

	Buildings	Machinery	Test equipment	Office equipment	Others	Total
At January 1, 2019						
Cost	$ 2,574,744	$ 3,694,106	$ 1,899,377	$ 188,464	$ 696,142	$ 9,052,833
Accumulated depreciation and impairment	(878,259)	(3,435,978)	(1,250,013)	(116,837)	(507,990)	(6,189,077)
	$ 1,696,485	$ 258,128	$ 649,364	$ 71,627	$ 188,152	$ 2,863,756
2019						
Opening net book amount	$ 1,696,485	$ 258,128	$ 649,364	$ 71,627	$ 188,152	$ 2,863,756
Additions	-	145,879	391,153	45,469	102,773	685,274
Reclassifications	-	27,167	-	-	(27,167)	-
Depreciation	(92,881)	(73,035)	(286,431)	(23,226)	(54,199)	(529,772)
Closing net book amount	$ 1,603,604	$ 358,139	$ 754,086	$ 93,870	$ 209,559	$ 3,019,258
At December 31, 2019						
Cost	$ 2,574,744	$ 3,863,302	$ 2,281,360	$ 233,933	$ 772,540	$ 9,725,879
Accumulated depreciation and impairment	(971,140)	(3,505,163)	(1,527,274)	(140,063)	(562,981)	(6,706,621)
	$ 1,603,604	$ 358,139	$ 754,086	$ 93,870	$ 209,559	$ 3,019,258

	Buildings	Machinery	Test equipment	Office equipment	Others	Total
At January 1, 2018						
Cost	$ 2,518,099	$ 3,576,741	$ 1,487,712	$ 155,991	$ 663,079	$ 8,401,622
Accumulated depreciation and impairment	(776,967)	(3,351,878)	(1,032,998)	(98,600)	(461,724)	(5,722,167)
	$ 1,741,132	$ 224,863	$ 454,714	$ 57,391	$ 201,355	$ 2,679,455
2018						
Opening net book amount	$ 1,741,132	$ 224,863	$ 454,714	$ 57,391	$ 201,355	$ 2,679,455
Additions	6,238	117,365	414,633	33,630	83,470	655,336
Reclassifications	50,407	-	-	(986)	(50,407)	(986)
Depreciation	(101,292)	(84,100)	(219,983)	(18,408)	(46,266)	(470,049)
Closing net book amount	$ 1,696,485	$ 258,128	$ 649,364	$ 71,627	$ 188,152	$ 2,863,756
At December 31, 2018						
Cost	$ 2,574,744	$ 3,694,106	$ 1,899,377	$ 188,464	$ 696,142	$ 9,052,833
Accumulated depreciation and impairment	(878,259)	(3,435,978)	(1,250,013)	(116,837)	(507,990)	(6,189,077)
	$ 1,696,485	$ 258,128	$ 649,364	$ 71,627	$ 188,152	$ 2,863,756

A. Amount of borrowing costs capitalised as part of property, plant and equipment: None.

B. The Company has no property, plant and equipment pledged to others.

(6) Leasing arrangements－lessee

Effective 2019

A. The Company leases various assets including land and buildings. Lease terms are negotiated on an individual basis and contain a wide range of different terms and conditions. The lease agreements do not impose covenants, but leased assets may not be used as security for borrowing purposes.

B. The carrying amount of right-of-use assets and the depreciation charge are as follows:

		Year ended
	December 31, 2019	December 31, 2019
	Carrying amount	Depreciation charge
Land	$ 1,062,048	$ 20,502
Buildings	29,559	12,531
	$ 1,091,607	$ 33,033

C. For the year ended December 31, 2019, the additions to right-of-use assets was $392,519.

D. The information on profit and loss accounts relating to lease contracts is as follows:

		Year ended December 31, 2019
Items affecting profit or loss		
Interest expense on lease liabilities	$	12,651

E. For the year ended December 31, 2019, the Company's total cash outflow for leases was $38,374.

(7) Intangible assets

	Computer software		Intellectual property		Others		Total	
At January 1, 2019								
Cost	$	3,220,861	$	3,713,979	$	3,548	$	6,938,388
Accumulated amortisation and impairment	(	2,725,336)	(	3,052,503)		-	(	5,777,839)
	$	495,525	$	661,476	$	3,548	$	1,160,549
2019								
Opening net book amount	$	495,525	$	661,476	$	3,548	$	1,160,549
Additions		844,689		596,018		-		1,440,707
Transfers		1,800		-	(	2,326)	(	526)
Amortisation	(	568,635)	(	379,373)		-	(	948,008)
Closing net book amount	$	773,379	$	878,121	$	1,222	$	1,652,722
At December 31, 2019								
Cost	$	4,067,350	$	4,309,997	$	1,222	$	8,378,569
Accumulated amortisation and impairment	(	3,293,971)	(	3,431,876)		-	(	6,725,847)
	$	773,379	$	878,121	$	1,222	$	1,652,722

	Computer software		Intellectual property		Others		Total	
At January 1, 2018								
Cost	$	2,759,363	$	3,558,380	$	11,909	$	6,329,652
Accumulated amortisation and impairment	(	2,229,775)	(	2,604,330)		-	(	4,834,105)
	$	529,588	$	954,050	$	11,909	$	1,495,547
2018								
Opening net book amount	$	529,588	$	954,050	$	11,909	$	1,495,547
Additions		460,145		153,503		1,800		615,448
Transfers		1,353		2,096	(	10,161)	(	6,712)
Amortisation	(	495,561)	(	448,173)		-	(	943,734)
Closing net book amount	$	495,525	$	661,476	$	3,548	$	1,160,549
At December 31, 2018								
Cost	$	3,220,861	$	3,713,979	$	3,548	$	6,938,388
Accumulated amortisation and impairment	(	2,725,336)	(	3,052,503)		-	(	5,777,839)
	$	495,525	$	661,476	$	3,548	$	1,160,549

Details of amortisation on intangible assets are as follows:

	Years ended December 31, 2019	Years ended December 31, 2018
Operating costs	$ 4,107	$ 3,907
Operating expenses	943,901	939,827
	$ 948,008	$ 943,734

(8) Short-term borrowings

Type of borrowings	December 31, 2019	Interest rate range	Collateral
Bank borrowings			
Unsecured borrowings	$ 18,604,770	0.71%~1.91%	None

Type of borrowings	December 31, 2018	Interest rate range	Collateral
Bank borrowings			
Unsecured borrowings	$ 14,526,311	0.67%~4.16%	None

Interest expense recognized in profit or loss amounted to $131,449 and $140,170 for the years ended December 31, 2019 and 2018, respectively.

(9) Other payables

	December 31, 2019	December 31, 2018
Accrued salaries	$ 3,574,723	$ 3,043,992
Payable for employees' compensation	3,978,614	1,881,190
Other accrued expenses	1,374,970	965,327
Payables on equipment	113,350	110,401
Payables on software and intellectual property	725,345	684,438
Others	162,667	182,494
	$ 9,929,669	$ 6,867,842

(10) Pension

A. (a) The Company has a defined benefit pension plan in accordance with the Labor Standards Law, covering all regular employees’ service years prior to the enforcement of the Labor Pension Act on July 1, 2005 and service years thereafter of employees who chose to continue to be subject to the pension mechanism under the Law. Under the defined benefit pension plan, two units are accrued for each year of service for the first 15 years and one unit for each additional year thereafter, subject to a maximum of 45 units. Pension benefits are based on the number of units accrued and the average monthly salaries and wages of the last 6 months prior to retirement. The Company contributes monthly an amount equal to 2% of the employees’ monthly salaries and wages to the retirement fund deposited with Bank of Taiwan, the trustee, under the name of the independent retirement fund committee. Also, the Company would assess the balance in the aforementioned labor pension reserve account by December 31, every year. If the account balance is insufficient to pay the pension calculated by the aforementioned method to the employees expected to qualify for retirement in the following year, the Company will make contributions for the deficit by next March.

(b) The amounts recognized in the balance sheet are determined as follows:

	December 31, 2019	December 31, 2018
Present value of defined benefit obligations	($ 595,932)	($ 568,382)
Fair value of plan assets	522,312	495,415
Net liability in the balance sheet	($ 73,620)	($ 72,967)

(c) Movement in net defined benefit liabilities are as follows:

	Present value of defined benefit obligations	Fair value of plan assets	Net defined benefit liability
Year ended December 31, 2019			
At January 1	($ 568,382)	$ 495,415	($ 72,967)
Current service cost	(2,709)	-	(2,709)
Interest (expense) income	(6,366)	5,544	(822)
	(577,457)	500,959	(76,498)
Remeasurements:			
Return on plan assets (excluding amounts included in interest income or expense)	-	24,973	24,973
Change in demographic assumptions	(1,283)	-	(1,283)
Change in financial assumptions	(6,415)	-	(6,415)
Experience adjustments	(20,397)	-	(20,397)
	(28,095)	24,973	(3,122)
Pension fund contribution	-	6,000	6,000
Paid pension	9,620	(9,620)	-
At December 31	($ 595,932)	$ 522,312	($ 73,620)

	Present value of defined benefit obligations	Fair value of plan assets	Net defined benefit liability
Year ended December 31, 2018			
At January 1	($ 536,470)	$ 473,679	($ 62,791)
Current service cost	(2,745)	-	(2,745)
Interest (expense) income	(6,675)	5,927	(748)
	(545,890)	479,606	(66,284)
Remeasurements:			
Return on plan assets (excluding amounts included in interest income or expense)	-	13,319	13,319
Change in demographic assumptions	(1,639)	-	(1,639)
Change in financial assumptions	(8,197)	-	(8,197)
Experience adjustments	(16,166)	-	(16,166)
	(26,002)	13,319	(12,683)
Pension fund contribution	-	6,000	6,000
Paid pension	3,510	(3,510)	-
At December 31	($ 568,382)	$ 495,415	($ 72,967)

(d) The Bank of Taiwan was commissioned to manage the Fund of the Company's defined benefit pension plan in accordance with the Fund's annual investment and utilisation plan and the "Regulations for Revenues, Expenditures, Safeguard and Utilisation of the Labor Retirement Fund" (Article 6: The scope of utilisation for the Fund includes deposit in domestic or foreign financial institutions, investment in domestic or foreign listed, over-the-counter, or private placement equity securities, investment in domestic or foreign real estate securitization products, etc.). With regard to the utilisation of the Fund, its minimum earnings in the annual distributions on the final financial statements shall be no less than the earnings attainable from the amounts accrued from two-year time deposits with the interest rates offered by local banks.

(e) The principal actuarial assumptions used were as follows:

	Years ended December 31,	
	2019	2018
Discount rate	0.8%	1.125%
Future salary increases	5%	5.25%

Future mortality rate was estimated based on the 5th Taiwan Standard Ordinary Experience Mortality Table for the years ended December 31, 2019 and 2018.

Because the main actuarial assumption changed, the present value of defined benefit obligation is affected. The analysis was as follows:

	Discount rate		Future salary increases	
	Increase by 0.25%	Decrease by 0.25%	Increase by 0.25%	Decrease by 0.25%
December 31, 2019				
Effect on present value of defined benefit obligation	$ 16,562	($ 17,221)	($ 16,154)	$ 15,635

	Discount rate		Future salary increases	
	Increase by 0.25%	Decrease by 0.25%	Increase by 0.25%	Decrease by 0.25%
December 31, 2018				
Effect on present value of defined benefit obligation	$ 16,573	($ 17,256)	($ 16,206)	$ 15,665

The sensitivity analysis above is based on one assumption which changed while the other conditions remain unchanged. In practice, more than one assumption may change all at once. The method of analysing sensitivity and the method of calculating net pension liability in the balance sheet are the same.

(f) Expected contributions to the defined benefit pension plans of the Company for the year ending December 31, 2020 amount to $6,000.

(g) As of December 31, 2019, the weighted average duration of the retirement plan is 13 years. The analysis of timing of the future pension payment was as follows:

Within 1 year	$	281,271
2~5 years		112,554
5~10 years		197,517
Over 10 years		36,248
	$	627,590

B. (a) Effective July 1, 2005, the Company has established a defined contribution pension plan (the "New Plan") under the Labor Pension Act (the "Act"), covering all regular employees with R.O.C. nationality. Under the New Plan, the Company contributes monthly an amount based on 6% of the employees' monthly salaries and wages to the employees' individual pension accounts at the Bureau of Labor Insurance. The benefits accrued are paid monthly or in lump sum upon termination of employment.

(b) The pension costs under the defined contribution pension plans of the Company for the years ended December 31, 2019 and 2018 were $244,680 and $223,627, respectively.

(11) Share capital

A. As of December 31, 2019, the Company's authorised capital was $8,900,000, consisting of 890 million shares of ordinary stock (including 80 million shares reserved for employee stock options), and the paid-in capital was $5,080,955 with a par value of $10 (in dollars) per share. All proceeds from shares issued have been collected. The beginning balance and closing balance of the number of the Company's ordinary shares outstanding of the period remain the same as in previous two periods.

Unit : Thousands of shares

	2019	2018
At January 1	508,095	506,506
Employees' compensation transferred to common stock	-	1,589
At December 31	508,095	508,095

B. On January 24, 2002, the Company increased its new common stock and sold its old common stock by issuing 13,924 thousand units of GDRs for cash. Each GDR unit represents 4 common stocks, so the total common stocks issued were 55,694 thousand shares. The Company's GDRs are traded in Luxembourg stock exchange. As of December 31, 2019, the outstanding GDRs were 312 thousand units, or 1,249 thousand shares of common stock, representing 0.25% of the Company's total common stocks.

(12) Capital surplus

Pursuant to the R.O.C. Company Act, capital surplus arising from paid-in capital in excess of par value on issuance of common stocks and donations can be used to cover accumulated deficit or to issue new stocks or cash to shareholders in proportion to their share ownership, provided that the Company has no accumulated deficit. Further, the R.O.C. Securities and Exchange Act requires that the amount of capital surplus to be capitalised mentioned above should not exceed 10% of the paid-in capital each year. Capital surplus should not be used to cover accumulated deficit unless the legal reserve is insufficient.

	2019			
	Share premium	Change in associates accounted for under equity method	Others	Total
At January 1	$ 3,196,250	$ 40,208	$ 201	$ 3,236,659
Change in associates accounted for under equity method	-	8,064	-	8,064
Cash dividends distribution from capital surplus	(508,095)	-	-	(508,095)
Cash dividends returned	-	-	226	226
At December 31	$ 2,688,155	$ 48,272	$ 427	$ 2,736,854

	2018			
	Share premium	Change in associates accounted for under equity method	Others	Total
At January 1	$ 3,540,653	$ 18,203	$ -	$ 3,558,856
Change in associates accounted for under equity method	-	22,005	-	22,005
Cash dividends distribution from capital surplus	(508,095)	-	-	(508,095)
Employees' compensation tranferred to common stock	163,692	-	-	163,692
Cash dividends returned	-	-	201	201
At December 31	$ 3,196,250	$ 40,208	$ 201	$ 3,236,659

(13) Retained earnings

A. Under the Company's Articles of Incorporation, the current year's earnings, if any, shall first be used to pay all taxes and offset prior years' operating losses and then 10% of the remaining amount shall be set aside as legal reserve, if legal reserve has accumulated to an amount equal to the paid-in capital, then legal reserve is not required to be set aside any more. After that, special reserve shall be set aside or reversed in accordance with related laws or the regulations made by the Competent Authority. The remainder, if any, along with prior year's accumulated undistributed earnings shall be proposed by the Board of Directors. However, the appropriations of earnings shall be resolved by shareholders if earnings are distributed by issuing new shares, or the appropriations of earnings shall be resolved by the Board of Directors, if earnings are distributed in the form of cash. The Company should consider factors of finance, business and operations to appropriate distributable earnings for the period, and appropriate all or partial reserve in accordance with regulations and the Company's future expansion plans and future cash flows. In accordance with the Company's dividend policy, cash dividends shall account for at least 10% of the total dividends distributed.

In accordance with Company Act Article 240, Items 5 and Article 241, Item 2, the resolution, for all or partial of distributed dividends, legal reserve and capital surplus are distributed in the form of cash, will be adopted by a majority vote at a meeting of the Board of Directors attended by two-thirds of the total number of directors, and will be reported to the shareholders.

B. Except for covering accumulated deficit or issuing new stocks or cash to shareholders in proportion to their share ownership, the legal reserve shall not be used for any other purpose. The use of legal reserve for the issuance of stocks or cash to shareholders in proportion to their share ownership is permitted, provided that the distribution of the reserve is limited to the portion in excess of 25% of the Company's paid-in capital.

C. In accordance with the regulations, the Company shall set aside special reserve from the debit balance on other equity items at the balance sheet date before distributing earnings. When debit balance on other equity items is reversed subsequently, the reversed amount could be included in the distributable earnings.

D. The appropriations of 2018 and 2017 earnings had been resolved at the stockholders' meeting on June 12, 2019 and June 5, 2018, respectively. Details are summarised below:

	2018		2017	
	Amount	Dividends per share (in dollars)	Amount	Dividends per share (in dollars)
Legal reserve	$ 435,077	$ -	$ 339,215	$ -
(Reversal of) Special reserve	(600,443)	-	600,443	-
Cash dividends	3,048,573	6.00	2,286,430	4.50
	$ 2,883,207	$ 6.00	$ 3,226,088	$ 4.50

E. On June 12, 2019 and June 5, 2018, the stockholders resolved during their meeting to distribute $508,095 by cash ($1 per share) and $508,095 by cash ($1 per share) from additional paid-in capital in excess of par, ordinary share, respectively.

F. For the information relating to employees' compensation and directors' remuneration, please refer to Note 6(20).

(14) Other equity items

	2019		
	Unrealised gains (losses) on valuation	Currency translation difference	Total
At January 1	$ 272,153	$ 129,811	$ 401,964
Revaluation			
–Group	227,352	-	227,352
–Associates	4,390	-	4,390
–Reclassified to reatained earnings	41,212	-	41,212
Currency translation differences:			
–Group	-	(891,954)	(891,954)
At December 31	$ 545,107	($ 762,143)	($ 217,036)

	2018			
	Unrealised gains (losses) on valuation	Available-for-sale investment	Currency translation difference	Total
At January 1	$ -	$ 212,720	($ 813,163)	($ 600,443)
Modified retrospective approach adjustment:				
Revaluation	538,977	(212,720)	-	326,257
Revaluation transferred to retained earnings	(103,142)	-	-	(103,142)
Revaluation				
–Group	(165,659)	-	-	(165,659)
–Associates	1,977	-	-	1,977
Currency translation differences:				
–Group	-	-	942,974	942,974
At December 31	$ 272,153	$ -	$ 129,811	$ 401,964

(15) Operating revenue

	Years ended December 31,	
	2019	2018
Revenue from contracts with customers	$ 40,845,708	$ 32,194,291

A. Disaggregation of revenue from contracts with customers

The Company derives revenue from the transfer of goods and services at a point in time in the following major product lines:

Year ended December 31, 2019	Integrated circuit products	Others	Total
Revenue from external customer contracts	$ 40,729,445	$ 116,263	$ 40,845,708
Timing of revenue recognition			
At a point in time	$ 40,729,445	$ 116,263	$ 40,845,708

Year ended December 31, 2018	Integrated circuit products	Others	Total
Revenue from external customer contracts	$ 32,125,500	$ 68,791	$ 32,194,291
Timing of revenue recognition			
At a point in time	$ 32,125,500	$ 68,791	$ 32,194,291

B. Contract liabilities

The Company has recognized the following revenue-related contract liabilities:

	December 31, 2019	December 31, 2018	January 1, 2018
Contract liabilities – advance sales receipts	$ 67,853	$ 110,764	$ 89,223

Revenue recognized that was included in the contract liability balance at the beginning of the period:

	Years ended December 31,	
	2019	2018
Contract liabilities – advance sales receipts	$ 100,804	$ 77,338

C. Refund liabilities (shown in other current liabilities)

The Company estimates the discounts based on accumulated experience. The estimation is subject to an assessment at each reporting date.

	December 31, 2019	December 31, 2018
Refund liabilities – current	$ 3,831,860	$ 2,581,910

(16) Other income

	Years ended December 31, 2019	Years ended December 31, 2018
Interest income:		
Interest income from bank deposits	$ 42,689	$ 22,694
Other interest income	75,753	43,974
Total interest income	118,442	66,668
Rent income	12,865	20,636
Dividend income	406	812
Grant income	44,434	14,814
Other income	18,244	9,423
	$ 194,391	$ 112,353

(17) Other gains and losses

	Years ended December 31, 2019	Years ended December 31, 2018
Gains on disposal of property, plant and equipment	$ 92	$ -
Net currency exchanges (losses) gains	(145,314)	14,331
Losses on financial assets at fair value through profit or loss	(325)	(11,283)
Impairment loss of investments accounted for under equity method	(41,397)	-
Other losses	(4,801)	(5,040)
	($ 191,745)	($ 1,992)

(18) Finance costs

	Years ended December 31, 2019	Years ended December 31, 2018
Interest expense		
Bank borrowings	$ 131,449	$ 140,170
Lease liabilities	12,651	-
	$ 144,100	$ 140,170

(19) Expenses by nature

	Years ended December 31, 2019	Years ended December 31, 2018
Employee benefit expenses	$ 11,303,979	$ 8,731,937
Depreciation	$ 562,805	$ 470,049
Amortisation	$ 948,008	$ 943,734

(20) Employee benefit expenses

	Years ended December 31,	
	2019	2018
Wages and salaries	$ 10,471,633	$ 7,985,523
Labor and health insurance fees	410,720	364,845
Pension costs	248,211	227,120
Other personnel expenses	173,415	154,449
	$ 11,303,979	$ 8,731,937

A. In accordance with the Company’s Articles of Incorporation, the Company shall appropriate no higher than 3% for directors’ remuneration and no less than 1% for employees’ compensation, if the Company generates profit. If the Company has accumulated deficit, earnings should be reserved to cover losses before the appropriation of directors’ remuneration and employees’ compensation. Aforementioned employees’ compensation could be distributed by cash or stocks. Specifics of the compensation are to determined by a majority vote at a meeting of the Board of Directors attended by two-thirds of the number of directors. The resolution should be reported to the shareholders during the shareholders’ meeting.

B. For the years ended December 31, 2019 and 2018, employees’ compensation was accrued at $2,097,424 and $1,151,674 , respectively; directors’ remuneration was accrued at $119,828 and $76,778 , respectively. If the estimated amounts differ from the actual distribution resolved by the Board of Directors and the shareholders’ meeting, the Company will recognize the change as an adjustment to income of next year.

   Employees' cash compensation was $1,151,674, and directors' remuneration was $76,778 for 2018. Employees' compensation and directors' remuneration for 2018 as resolved at the meeting of the Board of Directors were in agreement with those amounts recognized in the 2018 financial statements.

   Information about employees’ compensation and directors’ remuneration of the Company as resolved by the Board of Directors will be posted in the “Market Observation Post System” at the website of the Taiwan Stock Exchange.

(21) Income tax

A. Income tax expense

	Years ended December 31, 2019	Years ended December 31, 2018
Current income tax:		
Current income tax on profits for the year	$ 388,600	$ 445,349
Income tax on undistributed earnings	74,745	16,607
Prior year income tax over estimation	(19,067)	(35,671)
Total current income tax	444,278	426,285
Deferred income tax:		
Origination and reversal of temporary differences	(6,278)	(12,360)
Impact of change in tax rate	-	(125,925)
Total deferred income tax	(6,278)	(138,285)
Income tax expense	$ 438,000	$ 288,000

B. Reconciliation between income tax expense and accounting profit

	Years ended December 31, 2019	Years ended December 31, 2018
Income tax calculated based on income before tax and statutory tax rate	$ 1,445,657	$ 927,754
Expenses disallowed by tax regulation and effects from tax-exempt income	(1,063,335)	(494,765)
Impact of change in tax rate	-	(125,925)
Prior year income tax over estimation	(19,067)	(35,671)
Income tax on undistributed surplus earnings	74,745	16,607
Income tax expense	$ 438,000	$ 288,000

C. Amounts of deferred income tax assets or liabilities as a result of temporary differences are as follows:

	Year ended December 31, 2019		
	January 1	Recognised in profit or loss	December 31
Deferred income tax assets:			
-Temporary differences:			
Unrealised loss on market price decline and obsolete and slow-moving inventories and others	$ 78,472	$ 35,691	$ 114,163
Deferred income tax liabilities:			
-Temporary differences:			
Unrealised exchange gain	(22,310)	(29,413)	(51,723)
	$ 56,162	$ 6,278	$ 62,440

	Year ended December 31, 2018		
	January 1	Recognised in profit or loss	December 31
Deferred income tax assets:			
-Temporary differences:			
Unrealised loss on market price decline and obsolete and slow-moving inventories and others	$ 65,551	$ 12,921	$ 78,472
Deferred income tax liabilities:			
-Temporary differences:			
Unrealised exchange gain	(21,749)	(561)	(22,310)
	$ 43,802	$ 12,360	$ 56,162

D. The amounts of deductible temporary differences that were not recognized as deferred income tax assets are as follows:

	December 31, 2019	December 31, 2018
Deductible temporary differences	$ 1,108,747	$ 783,339

E. The Company's income tax returns through 2017 have been assessed and approved by the Tax Authority.

F. Under the amendments to the Income Tax Act which was promulgated by the President of the Republic of China on February 7, 2018, the Company's applicable income tax rate was raised from 17% to 20% effective from January 1, 2018. The Company has assessed the impact of the change in income tax rate.

(22) Earnings per share

Effective January 1, 2008, as employees' compensation could be distributed in the form of stock, the diluted EPS computation shall include those estimated shares that would be increased from employees' stock compensation issuance in the weighted-average number of common shares outstanding during the reporting year, which take into account the dilutive effects of stock bonus on potential common shares. Whereas, basic EPS shall be calculated based on the weighted-average number of common shares outstanding during the reporting year that include the shares of employees' stock compensation for the appropriation of prior year earnings, which have already been resolved at the stockholders' meeting held in the reporting year. Since capitalisation of employees' compensation no longer belongs to distribution of stock dividends, the calculation of basic EPS and diluted EPS for all periods presented shall not be adjusted retroactively.

	Year ended December 31, 2019		
	Amount after tax	Weighted average number of ordinary shares outstanding (shares in thousands)	Earnings per share (in dollars)
Basic earnings per share			
Profit attributable to ordinary shareholders	$ 6,790,283	508,095	$ 13.36
Diluted earnings per share			
Profit attributable to ordinary shareholders	$ 6,790,283	508,095	
Assumed conversion of all dilutive potential ordinary shares			
Employees' compensation	-	8,926	
Profit attributable to ordinary shareholders plus assumed conversion of all dilutive potential ordinary shares	$ 6,790,283	517,021	$ 13.13

	Year ended December 31, 2018		
	Amount after tax	Weighted average number of ordinary shares outstanding (shares in thousands)	Earnings per share (in dollars)
Basic earnings per share			
Profit attributable to ordinary shareholders	$ 4,350,768	507,712	$ 8.57
Diluted earnings per share			
Profit attributable to ordinary shareholders	$ 4,350,768	507,712	
Assumed conversion of all dilutive potential ordinary shares			
Employees' compensation	-	10,477	
Profit attributable to ordinary shareholders plus assumed conversion of all dilutive potential ordinary shares	$ 4,350,768	518,189	$ 8.40

(23) Supplemental cash flow information

Investing activities with partial cash payments

	Years ended December 31,	
	2019	2018
Purchase of property, plant and equipment	$ 685,274	$ 655,336
Add: Opening balance of payable on equipment	110,401	33,141
Less: Ending balance of payable on equipment	(113,350)	(110,401)
Cash paid during the year	$ 682,325	$ 578,076

	Years ended December 31,	
	2019	2018
Purchase of intangible assets	$ 1,440,707	$ 615,448
Add: Opening balance of payable on software and intellectual property	684,438	650,649
Less: Ending balance of payable on software and intellectual property	(725,345)	(684,438)
Cash paid during the year	$ 1,399,800	$ 581,659

(24) Changes in liabilities from financing activities

	Short-term borrowings	Refundable deposits received	Lease liabilities	Liabilities from financing activities-gross
At January 1, 2019	$ 14,526,311	$ 4,739	$ 732,121	$ 14,531,050
Changes in cash flow from financing activities	4,078,459	(1,481)	(25,723)	4,051,255
Interest paid	-	-	(12,651)	(12,651)
Interest on lease liabilities	-	-	12,651	12,651
Changes in other non-cash items	-	-	105,697	105,697
At December 31, 2019	$ 18,604,770	$ 3,258	$ 812,095	$ 19,420,123

	Short-term borrowings	deposits received	Liabilities from financing activities-gross
At January 1, 2018	$ 18,052,624	$ 5,043	$ 18,057,667
Changes in cash flow from financing activities	(3,526,313)	(304)	(3,526,617)
At December 31, 2018	$ 14,526,311	$ 4,739	$ 14,531,050

7. RELATED PARTY TRANSACTIONS

(1) Names of related parties and relationship

Names of related parties	Relationship with the Company
Leading Enterprises Limited	Subsidiary
Realtek Singapore Private Limited	Subsidiary
Bluocean Inc.	Subsidiary
Talent Eagle Enterprise Inc.	Subsidiary
Amber Universal Inc.	Subsidiary
Cortina Systems Taiwan Limited	Sub-subsidiary
RayMX Microelectronics Corp.	Sub-subsidiary
G.M.I Technology Inc.	Other related party
Actions Semiconductor Co., Ltd.	Other related party
C-Media Electronics Inc.	Other related party
Greatek Electronics Inc.	Other related party
EmBestor Technology Inc.	Other related party

(2) Significant related party transactions and balances

A. Operating revenue

	Years ended December 31,	
	2019	2018
Sales of goods:		
G.M.I Technology Inc.	$ 5,996,976	$ 4,888,451
Others	269,079	427,950
	$ 6,266,055	$ 5,316,401

Goods are sold based on the price lists in force and terms that would be available to third parties, and the general collection term was 30 ~ 60 days after monthly billings.

B. Processing cost

	Years ended December 31,	
	2019	2018
Greatek Electronics Inc.	$ 1,024,163	$ 887,456

Processing cost is paid to associates on normal commercial terms and conditions, and the general payment term was 69 days after monthly billings.

C. Receivables from related parties

	December 31, 2019	December 31, 2018
Accounts receivable:		
G.M.I Technology Inc.	$ 1,172,793	$ 980,790
Others	54,462	52,992
	$ 1,227,255	$ 1,033,782

Aforementioned receivables were 30 ~ 60 days after monthly billings. The receivables from related parties arise mainly from sale transactions. The receivables bear no interest.

D. Payables to related parties:

	December 31, 2019	December 31, 2018
Accounts payable:		
Greatek Electronics Inc.	$ 313,185	$ 228,279

The payment term above was 69 days after monthly billings. The payables to related parties arise mainly from processing cost. The payables are unsecured in nature and bear no interest.

E. Other transactions and other (receivables) payables:

	Years ended December 31,			
	2019		2018	
	Amount	Ending balance	Amount	Ending balance
Other related parties-				
Sales commissions	$ 227,843	$ 55,690	$ 206,978	$ 38,283
Technical royalty revenue	($ 4,430)	$ -	($ 7,799)	$ -
Cash dividend income	($ 406)	$ -	($ 812)	$ -
Subsidiaries and sub-subsidiaries-				
Interest income	($ 70,752)	($ 44,587)	($ 43,612)	($ 41,149)
Other income	$ -	($ 48,980)	($ 50,000)	($ 50,000)
Cash dividend income	($ 2,750,826)	$ -	($ 2,745,981)	$ -
Rent income	($ 1,922)	($ 243)	($ 1,883)	($ 241)

The payment term above was 49 days after monthly billings; collection term was 30 ~ 60 days after monthly billings.

F. Loans to related parties:

Loans to related parties:

(a) Outstanding balance:

	December 31, 2019	December 31, 2018
Subsidiaries		
Leading Enterprises Limited	$ 1,806,360	$ 365,921
Talent Eagle Enterprise Inc.	1,737,116	1,628,849
Bluocean Inc.	1,490,247	602,367
Amber Universal Inc.	602,120	-
	$ 5,635,843	$ 2,597,137

(b) Interest income

	Year ended December,	
	2019	2018
Subsidiaries	$ 70,752	$ 43,612

The loans to subsidiaries are repayable monthly over 1 year and carry interest at 1.8% and 3.3% for the years ended December 31, 2019 and 2018, respectively.

G. Endorsements and guarantees provided to related parties:

	December 31, 2019	December 31, 2018
Subsidiaries	$ 9,798,836	$ 10,106,104

(3) Key management compensation

	Years ended December 31,	
	2019	2018
Salaries and other short-term employee benefits	$ 120,242	$ 105,676
Post-employment benefits	2,697	2,557
Total	$ 122,939	$ 108,233

8. PLEDGED ASSETS

The Company's assets pledged as collateral are as follows:

	Book value		
Pledged asset	December 31, 2019	December 31, 2018	Purposes
Time deposits (shown in financial assets at amortised cost - current)	$ -	$ 30,270	Guarantee for customs duties for the importation of materials
"	-	31,131	Guarantee for leasing land and office in Science Park
Time deposits (shown in financial assets at amortised cost - non-current)	34,307	-	Guarantee for customs duties for the importation of materials
"	30,578	-	Guarantee for leasing land and office in Science Park
	$ 64,885	$ 61,401	

9. SIGNIFICANT CONTINGENT LIABILITIES AND UNRECOGNIZED CONTRACT COMMITMENTS

(1) Contingencies

None.

(2) Operating lease agreements

Applicable for 2018

The Company leases lands and office buildings for operational needs under non-cancellable operating lease agreements. The lease terms are between 2019 and 2027. Most of the lease agreements are renewable at the market price at the end of the lease period. The Company recognized rental expense of $28,434 for these leases in profit or loss for the year ended December 31, 2018.

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

		December 31, 2018
No later than one year	$	24,761
Later than one year but not later than five years		84,262
Later than five years		39,910
	$	148,933

10. SIGNIFICANT DISASTER LOSS

None.

11. SIGNIFICANT EVENTS AFTER THE BALANCE SHEET DATE

On February 21, 2020, the Board of Directors resolved at their meeting to enter into a property purchase contract, obtaining property in Zhongshan District, Taipei from Huaku Development Co., Ltd. with the transaction amount of 730 million NT dollars.

12. OTHERS

(1) Capital management

The Company's objectives when managing capital are to safeguard the Company's ability to continue as a going concern in order to provide returns for shareholders and to maintain an optimal capital structure to reduce the cost of capital. In order to maintain or adjust the capital structure, the Company may adjust the amount of dividends paid to shareholders, return capital to shareholders, issue new shares or sell assets to reduce debt.

Financial instruments

A. Financial instruments by category

		December 31, 2019		December 31, 2018
Financial assets				
Financial assets at fair value through profit or loss				
Financial assets mandatorily measured at fair value through profit or loss	$	28,736	$	29,061
Financial assets at fair value through other comprehensive income				
Designation of equity instrument	$	-	$	936
Financial assets at amortised cost/Receivables				
Cash and cash equivalents	$	3,333,828	$	1,553,365
Financial assets at amortised cost		64,885		61,401
Accounts receivable (including related parties)		7,815,480		5,341,329
Other receivables (including related parties)		5,750,070		2,730,970
Refundable deposits		16,166		14,444
	$	16,980,429	$	9,701,509

	December 31, 2019	December 31, 2018
Financial liabilities		
Financial liabilities at amortised cost		
Short-term borrowings	$ 18,604,770	$ 14,526,311
Notes payable	3,276	8,657
Accounts payable (including related parties)	5,972,703	4,021,555
Other accounts payable (including related parties)	9,985,359	6,906,125
Refundable deposits received	3,258	4,739
Other financial liability	3,831,860	2,581,910
	$ 38,401,226	$ 28,049,297
Lease liability	$ 812,095	$ -

B. Financial risk management policies

(a) The Company's activities expose it to a variety of financial risks: market risk (including foreign exchange risk, interest rate risk and price risk), credit risk and liquidity risk.

(b) Risk management is carried out by a finance division (Company finance) under policies approved by the Board of Directors. Company finance identifies, evaluates and hedges financial risks in close cooperation with the Company's operating units.

C. Significant financial risks and degrees of financial risks

(a) Market risk

Foreign exchange risk

i. The Company operates internationally and is exposed to foreign exchange risk arising from various currency exposures, primarily with respect to the USD. Foreign exchange risk arises from future commercial transactions, recognized assets and liabilities and net investments in foreign operations.

ii. Management has set up a policy to require the Company to manage its foreign exchange risk against its functional currency. The Company is required to hedge its entire foreign exchange risk exposure with the Company finance.

iii. The Company's businesses involve some functional currency operations (the Company's and certain subsidiaries' functional currency: NTD). The information on assets and liabilities denominated in foreign currencies whose values would be materially affected by the exchange rate fluctuations is as follows:

	December 31, 2019				
	Foreign currency amount (In thousands)		Exchange rate	Book value (NTD)	
(Foreign currency: functional currency)					
Financial assets					
Monetary items					
USD:NTD	$	549,291	30.106	$	16,536,969
Investments accounted for under equity method					
USD:NTD		1,285,500	30.106		38,701,252
Financial liabilities					
Monetary items					
USD:NTD		220,816	30.106		6,647,887

	December 31, 2018				
	Foreign currency amount (In thousands)		Exchange rate	Book value (NTD)	
(Foreign currency: functional currency)					
Financial assets					
Monetary items					
USD:NTD	$	234,227	30.733	$	7,198,500
Investments accounted for under equity method					
USD:NTD		1,159,786	30.733		35,643,714
Financial liabilities					
Monetary items					
USD:NTD		134,264	30.733		4,126,322

The total exchange (loss) gain, including realised and unrealised arising from significant foreign exchange variation on the monetary items held by the Company for the years ended December 31, 2019 and 2018, amounted to ($145,314) and $14,331, respectively.

Analysis of foreign currency market risk arising from significant foreign exchange variation:

	Year ended December 31, 2019		
	Sensitivity analysis		
	Degree of variation	Effect on profit or loss	Effect on other comprehensive income
(Foreign currency: functional currency)			
Financial assets			
Monetary items			
USD:NTD	1%	$ 165,370	$ -
Investments accounted for under equity method			
USD:NTD	1%	-	387,013
Financial liabilities			
Monetary items			
USD:NTD	1%	(66,479)	-

	Year ended December 31, 2018		
	Sensitivity analysis		
	Degree of variation	Effect on profit or loss	Effect on other comprehensive income
(Foreign currency: functional currency)			
Financial assets			
Monetary items			
USD:NTD	1%	$ 71,985	$ -
Investments accounted for under equity method			
USD:NTD	1%	-	356,437
Financial liabilities			
Monetary items			
USD:NTD	1%	(41,263)	-

Price risk

i. The Company’s equity securities, which are exposed to price risk, are the held financial assets at fair value through profit or loss and financial assets at fair value through other comprehensive income.

ii. The Company's investments in equity securities comprise domestic listed and unlisted stocks. The prices of equity securities would change due to the change of the future value of investee companies. If the prices of these equity securities had decreased/increased by 10% with all other variables held constant, post-tax profit for the years ended December 31, 2019 and 2018 would have decreased/increased by $2,874 and $2,906, respectively, as a result of gains/losses on equity securities classified as at fair value through profit or loss. Other components of equity would have decreased/increased by $0 and $94, respectively, as a result of gains/losses on equity securities classified as equity investment at fair value through other comprehensive income.

Cash flow and fair value interest rate risk

The Company has no material interest rate risk.

(b) Credit risk

i. Credit risk refers to the risk of financial loss to the Company arising from default by the clients or counterparties of financial instruments on the contract obligations. The main factor is that counterparties could not repay in full the accounts receivable based on the agreed terms, and the contract cash flows of financial assets at amortised cost, at fair value through profit or loss and at fair value through other comprehensive income.

ii. The Company manages their credit risk taking into consideration the entire Company's concern. According to the Company's credit policy, the Company is responsible for managing and analysing the credit risk for each of their new clients before standard payment and delivery terms and conditions are offered. Internal risk control assesses the credit quality of the customers, taking into account their financial position, past experience and other factors.

iii. The Company adopts the assumption under IFRS 9, that is, the default occurs when the contract payments are past due over 90 days.

iv. The Company adopts the following assumption under IFRS 9 to assess whether there has been a significant increase in credit risk on that instrument since initial recognition:

If the contract payments were past due over 30 days based on the terms, there has been a significant increase in credit risk on that instrument since initial recognition.

v. The following indicators are used to determine whether the credit impairment of debt instruments has occurred:

(i) It becomes probable that the issuer will enter bankruptcy or other financial reorganization due to their financial difficulties;

(ii) The disappearance of an active market for that financial asset because of financial difficulties;

(iii) Default or delinquency in interest or principal repayments;

(iv) Adverse changes in national or regional economic conditions that are expected to cause a default.

vi. The Company classifies customers' accounts receivable in accordance with customer types. The Company applies the modified approach using provision matrix to estimate expected credit loss under the provision matrix basis.

vii. The Company wrote-off the financial assets, which cannot be reasonably expected to be recovered, after initiating recourse procedures. However, the Company will continue executing the recourse procedures to secure their rights.

viii. The Company used the forecast ability of semiconductor industry research report to adjust historical and timely information to assess the default possibility of accounts receivable. On December 31, 2019 and 2018, the provision matrix is as follows:

	Not past due	1~90 days past due	90 days past due	Total
At December 31, 2019				
Expected loss rate	1%	1%	100%	
Total book value	$ 7,518,066	$ 376,365	$ 656	$ 7,895,087
Loss allowance	$ 75,187	$ 3,764	$ 656	$ 79,607

	Not past due	1~90 days past due	90 days past due	Total
At December 31, 2018				
Expected loss rate	1%	1%	100%	
Total book value	$ 5,386,539	$ 8,743	$ 36	$ 5,395,318
Loss allowance	$ 53,866	$ 87	$ 36	$ 53,989

ix. Movements in relation to the Company applying the modified approach to provide loss allowance for accounts receivable are as follows:

	2019
	Loss allowance for accounts receivable
At January 1	$ 53,989
Provision for impairment	25,618
At December 31	$ 79,607

	2018
	Loss allowance for accounts receivable
At January 1	$ 59,792
Reversal of impairment loss	(5,803)
At December 31	$ 53,989

x. For financial assets at amortised cost, the credit rating levels are presented below:

	December 31, 2019			
		Lifetime		
	12 months	Significant increase in credit risk	Impairment of credit	Total
Financial assets at amortised cost	$ 64,885	$ -	$ -	$ 64,885

	December 31, 2018			
		Lifetime		
	12 months	Significant increase in credit risk	Impairment of credit	Total
Financial assets at amortised cost	$ 61,401	$ -	$ -	$ 61,401

The financial assets at measured cost are bank time deposits with original maturity more than three months, and there is no major material in credit risk assessment.

(c) Liquidity risk

i. Cash flow forecasting is performed in the operating entities of the Company and aggregated by Company finance. Company finance monitors rolling forecasts of the Company's liquidity requirements to ensure it has sufficient cash to meet operational needs while maintaining sufficient headroom on its undrawn committed borrowing facilities.

ii. Company finance invests surplus cash in interest bearing current accounts, time deposits, money market deposits and marketable securities, choosing instruments with appropriate maturities or sufficient liquidity to provide sufficient head-room as determined by the above-mentioned forecasts.

iii. The table below analyses the Company's non-derivative financial liabilities into relevant maturity groupings based on the remaining period at the balance sheet date to the contractual maturity date for non-derivative financial liabilities. The amounts disclosed in the table are the contractual undiscounted cash flows.

Non-derivative financial liabilities:

December 31, 2019	Less than 1 year	Between 1 and 5 years	Over 5 years
Short-term borrowings	$ 18,604,770	$ -	$ -
Notes payable	3,276	-	-
Accounts payable (including related parties)	5,972,703	-	-
Other payables (including related parties)	9,985,359	-	-
Lease liability	40,860	125,645	934,269
Guarantee deposits received	-	-	3,258
Other financial liabilities	3,831,860	-	-

Non-derivative financial liabilities:

December 31, 2018	Less than 1 year	Between 1 and 5 years	Over 5 years
Short-term borrowings	$ 14,526,311	$ -	$ -
Notes payable	8,657	-	-
Accounts payable (including related parties)	4,021,555	-	-
Other payables (including related parties)	1,980,943	-	-
Guarantee deposits received	-	-	4,739
Other financial liabilities	2,581,910	-	-

iv. The Company does not expect the timing of occurrence of the cash flows estimated through the maturity date analysis will be significantly earlier, nor expect the actual cash flow amount will be significantly different.

(2) Fair value information

A. The different levels that the inputs to valuation techniques are used to measure fair value of financial and non-financial instruments have been defined as follows:

Level 1: Quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date. A market is regarded as active where a market in which transactions for the asset or liability take place with sufficient frequency and volume to provide pricing information on an ongoing basis. The fair value of the Company’s investment in listed stocks and beneficiary certificates is included in Level 1.

Level 2: Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly.

Level 3: Unobservable inputs for the asset or liability. The fair value of the Company's investment in equity investment without active market is included in Level 3.

B. The related information of financial and non-financial instruments measured at fair value by level on the basis of the nature, characteristics and risks of the assets and liabilities is as follows:

(a) The related information of nature of the assets is as follows:

December 31, 2019	Level 1	Level 2	Level 3	Total
Assets				
Recurring fair value measurement				
Financial assets at fair value through profit or loss				
Equity securities	$ 28,736	$ -	$ -	$ 28,736

December 31, 2018	Level 1	Level 2	Level 3	Total
Assets				
Recurring fair value measurement				
Financial assets at fair value through profit or loss				
Equity securities	$ 29,061	$ -	$ -	$ 29,061
Financial assets at fair value through other comprehensive income				
Equity securities	-	-	936	936
	$ 29,061	$ -	$ 936	$ 29,997

(b) The methods and assumptions the Company used to measure fair value are as follows:

i. The instruments the Company used market quoted prices as their fair values (that is, Level 1) are listed below by characteristics:

	Listed shares	Closed-end fund	Opened-end fund	Government bond	Corporate bond	Convertible (exchangeable) bond
Market quoted price	Closing price	Closing price	Net asset value	Translation price	Weighted average quoted price	Closing price

ii. Except for financial instruments with active markets, the fair value of other financial instruments is measured by using valuation techniques or by reference to counterparty quotes. The fair value of financial instruments measured by using valuation techniques can be referred to current fair value of instruments with similar terms and characteristics in substance, discounted cash flow method or other valuation methods, including calculated by applying model using market information available at the parent company only balance sheet date.

iii. The output of valuation model is an estimated value and the valuation technique may not be able to capture all relevant factors of the Company's financial and non-financial instruments. Therefore, the estimated value derived using valuation model is adjusted accordingly with additional inputs.

C. For the years ended December 31, 2019 and 2018, there was no transfer between Level 1 and Level 2.

D. The following chart is the movement of Level 3 for the years ended December 31, 2019 and 2018:

	2019	2018
	Non-derivative equity instrument	Non-derivative equity instrument
At January 1	$ 936	$ 6,575
Modified retrospective adjustment	-	(5,501)
Losses recognised in other comprehensive income	-	(138)
Current sale	(936)	-
At December 31	$ -	$ 936

E. For the years ended December 31, 2019 and 2018, there was no transfer into or out from Level 3.

F. The finance division is in charge of valuation procedures for fair value measurements being categorised within Level 3, which is to verify independent fair value of financial instruments. Such assessment is to ensure the valuation results are reasonable by applying independent information to make results close to current market conditions, confirming the resource of information is independent, reliable and in line with other resources and represented as the exercisable price, updating inputs used to the valuation model and making any other necessary adjustments to the fair value.

G. The following is the qualitative information of significant unobservable inputs and sensitivity analysis of changes in significant unobservable inputs to valuation model used in Level 3 fair value measurement:

	Fair value at December 31, 2018	Valuation technique	Significant unobservable input	Range (weighted average)	Relationship of inputs to fair value
Non-derivative equity instrument:					
Private equity fund investment	$ 936	Net asset value	Not applicable	-	Not applicable

13. SUPPLEMENTARY DISCLOSURES

(1) Significant transactions information

A. Loans to others: Please refer to table 1.

B. Provision of endorsements and guarantees to others: Please refer to table 2.

C. Holding of marketable securities at the end of the period (not including subsidiaries, associates and joint ventures): Please refer to table 3.

D. Acquisition or sale of the same security with the accumulated cost exceeding $300 million or 20% of the Company’s paid-in capital: Please refer to table 4.

E. Acquisition of real estate reaching $300 million or 20% of paid-in capital or more: None.

F. Disposal of real estate reaching $300 million or 20% of paid-in capital or more: None.

G. Purchases or sales of goods from or to related parties reaching $100 million or 20% of paid-in capital or more: Please refer to table 5.

H. Receivables from related parties reaching $100 million or 20% of paid-in capital or more: Please refer to table 6.

I. Trading in derivative instruments undertaken during the reporting periods: None.

J. Significant inter-company transactions during the reporting periods: Please refer to table 7.

(2) Information on investees

Names, locations and other information of investee companies (not including investees in Mainland China): Please refer to table 8.

(3) Information on investments in Mainland China

A. Basic information: Please refer to table 9.

B. Significant transactions, either directly or indirectly through a third area, with investee companies in the Mainland Area: Please refer to table 1, table 2 and table 7.

14. SEGMENT INFORMATION

None.

REALTEK SEMICONDUCTOR CORPORATION

Loans to others

Year ended December 31, 2019

Table 1

Expressed in thousands of NTD

(Except as otherwise indicated)

No (Note 1)	Creditor	Borrower	General ledger account	Is a related party	Maximum outstanding balance during the year ended December 31, 2019 (Note 3)	Balance at December 31, 2019	Actual amount drawn down (Note 4)	Interest rate	Nature of loan	Amount of transactions with the borrower	Reason for short-term financing	Allowance for doubtful accounts	Collateral		Limit on loans granted to a single party	Ceiling on total loans granted (Note 2)	Footnote
													Item	Value			
0	Realtek Semiconductor Corporation	Realtek Singapore Private Limited	Other receivables-related parties	Y	$ 903,180	$ 903,180	$ -	-	Short-term financing	$ -	Operations	$ -	None	$ -	$ 2,721,899	$ 10,887,594	None
0	Realtek Semiconductor Corporation	Amber Universal Inc.	Other receivables-related parties	Y	602,120	602,120	602,120	1.8	Short-term financing	-	Operations	-	None	-	2,721,899	10,887,594	None
0	Realtek Semiconductor Corporation	Bluocean Inc.	Other receivables-related parties	Y	1,806,360	1,806,360	1,490,247	1.8	Short-term financing	-	Operations	-	None	-	2,721,899	10,887,594	None
0	Realtek Semiconductor Corporation	Talent Eagle Enterprise Inc.	Other receivables-related parties	Y	1,806,360	1,806,360	1,737,116	1.8	Short-term financing	-	Operations	-	None	-	2,721,899	10,887,594	None
0	Realtek Semiconductor Corporation	Leading Enterprises Limited	Other receivables-related parties	Y	1,806,360	1,806,360	1,806,360	1.8	Short-term financing	-	Operations	-	None	-	2,721,899	10,887,594	None
1	Leading Enterprises Limited	Bluocean Inc.	Other receivables-related parties	Y	1,806,360	1,806,360	-	-	Short-term financing	-	Operations	-	None	-	10,887,594	10,887,594	None
1	Leading Enterprises Limited	Talent Eagle Enterprise Inc.	Other receivables-related parties	Y	6,021,200	6,021,200	5,127,161	1.8	Short-term financing	-	Operations	-	None	-	10,887,594	10,887,594	None
2	Amber Universal Inc.	Blueocean Inc.	Other receivables-related parties	Y	1,505,300	1,505,300	1,505,300	1.8	Short-term financing	-	Operations	-	None	-	10,887,594	10,887,594	None
3	Cortina Access, Inc.	Leading Enterprises Limited	Other receivables-related parties	Y	903,180	903,180	-	-	Short-term financing	-	Operations	-	None	-	10,887,594	10,887,594	None
4	Realtek Investment Singapore Private Limited	Realtek Singapore Private Limited	Other receivables-related parties	Y	3,010,600	3,010,600	1,255,420	1.8	Short-term financing	-	Operations	-	None	-	10,887,594	10,887,594	None
5	Realtek Singapore Private Limited	Realsil Microelectronics Corp.	Other receivables-related parties	Y	903,180	903,180	-	-	Short-term financing	-	Operations	-	None	-	10,887,594	10,887,594	None

REALTEK SEMICONDUCTOR CORPORATION

Loans to others

Year ended December 31, 2019

Table 1

Expressed in thousands of NTD

(Except as otherwise indicated)

No (Note 1)	Creditor	Borrower	General ledger account	Is a related party	Maximum outstanding balance during the year ended December 31, 2019 (Note 3)	Balance at December 31, 2019	Actual amount drawn down (Note 4)	Interest rate	Nature of loan	Amount of transactions with the borrower	Reason for short-term financing	Allowance for doubtful accounts	Collateral		Limit on loans granted to a single party	Ceiling on total loans granted (Note 2)	Footnote
													Item	Value			
6	Realsil Microelectronics Corp.	RayMX Microelectronics Corp.	Other receivables-related parties	Y	$ 345,736	$ 345,736	$ -	-	Short-term financing	$ -	Operations	-	None	-	$ 10,887,594	$ 10,887,594	None
6	Realsil Microelectronics Corp.	Suzhou Hongwei Microelectronic Corp.	Other receivables-related parties	Y	345,736	345,736	-	-	Short-term financing	-	Operations	-	None	-	10,887,594	10,887,594	None
7	Cortina Network Systems Shanghai Co., Ltd.	Realsil Microelectronics Corp.	Other receivables-related parties	Y	129,651	129,651	43,217	4.35	Short-term financing	-	Operations	-	None	-	10,887,594	10,887,594	None

Note 1: The numbers filled in for the loans provided by the Company or subsidiaries are as follows:

(1) The Company is '0'.

(2) The subsidiaries are numbered in order starting from '1'.

Note 2: The Company's "Procedures for Provision of Loans" are as follows:

(1) Ceiling on total loans granted by the Company to all parties is 40% of the Company's net assets value as per its most recent financial statements.

(2) Limit on loans to a single party with business transactions is the business transactions occurred between the creditor and borrower in the current year. The business transaction amount is the higher of purchasing and selling during current year on the year of financing.

(3) For companies needing for short-term financing, the cumulative lending amount may not exceed 40% of the borrowing company's net assets based on its latest financial statements audited or reviewed by independent accountants.

The amount the Company or its subsidiaries lend to an individual entity may not exceed 10% of the Company's or subsidiary's net assets based on its latest financial statements audited or reviewed by independent accountants.

For the foreign companies which the Company holds 100% of the voting rights directly or indirectly, limit on loans is not restricted as stipulated in the above item (3). However, the ceiling on total loans and limit on loans to a single partymay not exceed 40% of the Company's net assets based on its latest financial statements audited or reviewed by independent accountants.

Note 3: Acccumulated maximum outstandings balance of loans to others as of the reporting month of the current period.

Note 4: Fillin the actual amount of loans to others used by the borrowing company.

REALTEK SEMICONDUCTOR CORPORATION

Provision of endorsements and guarantees to others

Year ended December 31, 2019

Table 2

Expressed in thousands of NTD

(Except as otherwise indicated)

Number (Note 1)	Endorser/ guarantor	Party being endorsed/guaranteed: Company name	Party being endorsed/guaranteed: Relationship with the endorser/ guarantor (Note 2)	Limited on endorsements/ guarantees provided for a single party (Note 3)	Maximum outstanding endorsement/ amount as of December 31, 2019 (Note 4)	Outstanding endorsement/ guarantee amount at December 31, 2019 (Note 5)	Actual amont drawn down (Note 6)	Amount of endorsements/gurantees secured with collateral	Ratio of accumulated endorsement/ guarantee amount to net asset value of the endorser/ guarantor company	Ceiling on total amount of endorsements/ guarantees provided (Note 3)	Provision of endorsements/ guarantees by parent company to subsidiary (Note 7)	Provision of endorsements/ guarantees by subsidiary to parent company (Note 7)	Provision of endorsements/ guarantees to the party in Mainland China (Note 7)	Footnote
0	Realtek Semiconductor Corporation	Realtek Singapore Private Limited	2	$ 13,609,493	$ 2,721,899	$ 2,721,899	$ -	$ -	10%	$ 13,609,493	Y	N	N	
0	Realtek Semiconductor Corporation	Leading Enterprises Limited	2	13,609,493	5,443,797	5,443,797	316,272	-	20%	1,369,493	Y	N	N	
0	Realtek Semiconductor Corporation	Realsil Microelectronics Corp.	2	13,609,493	816,570	816,570	-	-	3%	1,369,493	Y	N	Y	
0	Realtek Semiconductor Corporation	RayMX Microelectronics Corp.	2	13,609,493	816,570	816,570	7,092	-	3%	1,369,493	Y	N	Y	
1	Leading Enterprises Limited	Realsil Microelectronics Corp.	2	13,609,493	602,120	602,120	-	-	2%	1,369,493	N	N	Y	
2	Realsil Microelectronics Corp.	RayMX Microelectronics Corp.	2	13,609,493	602,120	602,120	-	-	2%	1,369,493	N	N	Y	

Note 1: The numbers filled in for the endorsements/guarantees provided by the Company or subsidiaries are as follows:

(1)The Company is '0'.

(2)The subsidiaries are numbered in order starting from '1'.

Note 2: Relationship between the endorser/guarantor and the party being endorsed/guaranteed is classified into the following six categories:

(1) Having business relationship.

(2) The endorser/guarantor parent company owns directly and indirectly more than 50% voting shares of the endorsed/guaranteed subsidiary.

(3) The endorser/guarantor company owns directly and indirectly more than 50% voting shares of the endorser/guarantor parent company.

(4) The endorser/guarantor parent company owns directly or indirectly owns more than 50% voting shares of the endorsed/guaranteed subsidiary.

(5) Mutual guarantee of the trade as required by the construction contract.

(6) Due to joint venture, each shareholder provides endorsements/guarantees to the endorsed/guaranteed company in proportion to its ownership.

(7) Joint guarantee of the performance guarantee for pre-sold home sales contract as required under the Consumer Protection Act.

Note 3: Ceiling on total endorsements/guarantees granted by the Company and subsidiaries is 50% of the Company's net asset based on the latest financial statements audited or reviewed by independent accountants, and limit on endorsements/guarantees to a single party is 50% of the Company's net asset based on the latest financial statements audited or reviewed by independent accountants.

Note 4: Fill in the year-to-date maximum outstanding balance of endorsements/guarantees provided as of the reporting period.

Note 5: Fill in the amount approved by the Board of Directors or the chairman has been authorised by the Board of Directors based on subparagraph 8, Article 12 of the Regulations Gorverning Loaning of Funds and Making of Endorsements/Guarantees by Public Companies.

Note 6: Fill in the actual amount of endorsements/guarantees used by the endorsed/guaranteed company.

Note 7: Fill in 'Y' for those cases of provision of endorsements/guarantees by listed parent company to subsidiary and provision by subsidiary to listed parent company, and provision to the party in Mainland China.

REALTEK SEMICONDUCTOR CORPORATION

Holding of marketable securities at the end of the period (not including subsidiaries, associates and joint ventures)

December 31, 2019

Table 3

Expressed in thousands of NTD

(Except as otherwise indicated)

Securities held by	Marketable securities (Note 1)	Relationship with the securities issuer(Note 2)	General ledger account	As of December 31, 2019				Footnote (Note 4)
				Number of shares	Book value (Note 3)	Ownership (%)	Fair value	
Realtek Semiconductor Corporation	C-media Electronics Inc. - Common stock	Other related parties	Financial assets at fair value through profit or loss	1, 623, 501	$ 28, 736	2. 05%	$ 28, 736	
Realking Investment Limited	Compal broadband networks Inc. - Common stock	None	Financial assets at fair value through other comprehensive income	3, 575, 000	104, 033	5. 34%	104, 033	
Realsun Investment Co., Ltd.	Shieh-Yong Investment Co., Ltd. - Common stock	None	Financial assets at fair value through other comprehensive income	23, 124, 000	216, 401	3. 03%	216, 401	
Realsun Investment Co., Ltd.	Compal broadband networks Inc. - Common stock	None	Financial assets at fair value through other comprehensive income	3, 575, 000	104, 033	5. 34%	104, 033	
Leading Enterprises Limited	Fortemedia Inc. - Common stock	None	Financial assets at fair value through other comprehensive income	8, 623, 301	97, 516	6. 89%	97, 516	
Leading Enterprises Limited	Starix Technology, Inc.-Preferred stock	None	Financial assets at fair value through other comprehensive income	5, 000, 000	18, 064	-	18, 064	
Leading Enterprises Limited	Octtasia Investment Holding Inc. - Common stock	None	Financial assets at fair value through other comprehensive income	9, 000, 000	657, 021	12. 49%	657, 021	
Amber Universal Inc.	Octtasia Investment Holding Inc. - Common stock	None	Financial assets at fair value through other comprehensive income	4, 726, 836	345, 070	6. 56%	345, 070	
Hung-wei Venture Capital Co., Ltd.	United Microelectronics Corporation - Common stock	None	Financial assets at fair value through other comprehensive income	336, 346	5, 533	-	5, 533	
Hung-wei Venture Capital Co., Ltd.	C-media Electronics Inc.- Common stock	Other related parties	Financial assets at fair value through profit or loss	2, 274, 875	40, 265	2. 88%	40, 265	
Hung-wei Venture Capital Co., Ltd.	Greatek Electroninc Inc. - Common stock	Other related parties	Financial assets at fair value through other comprehensive income	5, 823, 602	278, 659	1. 05%	278, 659	
Hung-wei Venture Capital Co., Ltd.	Subtron technology Co., Ltd - Common stock	None	Financial assets at fair value through other comprehensive income	1, 093, 968	13, 357	0. 33%	13, 357	
Hung-wei Venture Capital Co., Ltd.	Embestor Technology Inc. - Common stock	Other related parties	Financial assets at fair value through other comprehensive income	2, 800, 000	19, 791	12. 17%	19, 791	
Cortina Network Systems Shanghai Co. Ltd.	Tian Tianjin Aggressive Fund	None	Financial assets at fair value through profit or loss	934, 291	5, 007	-	5, 007	
Bluocean Inc.	CyWeeMotion Group Limited	None	Financial assets at fair value through other comprehensive income	4, 800, 000	-	6. 59%	-	
RayMx Microelectronics Corp.	Tian Li Bao Money Fund	None	Financial assets at fair value through profit or loss	712	4	-	4	

Note 1: Marketable securities in the table refer to stocks, bonds, beneficiary certificates and other related derivative securities within the scope of IFRS 9 'Financial instrument'.

Note 2: Leave the column blank if the issuer of marketable securities is non-related party.

Note 3: Fill in the amount after adjusted at fair value and deducted by accumulated impairment for the marketable securities measured at fair value; fill in the acquisition cost or amortised cost deducted by accumulated impairment for the marketable securities not measured at fair value.

Note 4: The number of shares of securities and their amounts pledged as security or pledged for loans and their restrictions on use under some agreements should be stated in the footnote if the securities presented herein have such conditions.

REALTEK SEMICONDUCTOR CORPORATION

Acquisition or sale of the same security with the accumulated cost exceeding $300 million or 20% of the Company's paid-in capital

Year ended December 31, 2019

Table 4

Expressed in thousands of NTD

(Except as otherwise indicated)

Investor	Marketable securities	General ledger account	Counterparty	Relationship with the investor	Balance as at January 1, 2019		Additions		Disposals				Balance as at December 31, 2019	
					Number of shares	Amount	Number of shares	Amount	Number of shares	Selling price	Book value	Gain (loss) on disposal	Number of shares	Amount
Talent Eagle Enterprise Inc.	Ubilinx Technology Inc.	Equity investments under equity method	Ubilinx Technology Inc.	Investee company accounted for under equity method	26,000,000	$ 799,058	14,000,000	$ 405,182	-	$ -	$ -	$ -	40,000,000	$ 1,204,240

REALTEK SEMICONDUCTOR CORPORATION

Purchases or sales of goods from or to related parties reaching NT$100 million or 20% of paid-in capital or more

Year ended December 31, 2019

Table 5

Expressed in thousands of NTD

(Except as otherwise indicated)

			Transaction				Differences in transaction terms compared to third party transactions		Notes/accounts receivable(payable)		
Purchase/seller	Counterparty	Relationship with the counterparty	Purchase (sales)	Amount	Percentage of total purchase (sales)	Credit term	Unit price	Credit term	Balance	Percentage of total notes/accounts receivable (payable)	Footnote
Realtek Semiconductor Corporation	G.M.I Technology Inc.	Other related parties	(Sales)	($ 5,996,976)	(10%)	Approximately the same with third party transactions	Approximately the same with third party transactions	Approximately the same with third party transactions	$ 1,172,793	11%	
Realtek Singapore Private Limited	G.M.I Technology Inc.	Other related parties	(Sales)	(5,226,298)	(9%)	Approximately the same with third party transactions	Approximately the same with third party transactions	Approximately the same with third party transactions	929,236	9%	
RayMX Microelectronics Corp.	G.M.I Technology Inc.	Other related parties	(Sales)	(169,283)	0%	Approximately the same with third party transactions	Approximately the same with third party transactions	Approximately the same with third party transactions	40,227	0%	
Realtek Semiconductor Corporation	Greatek Electronics Inc.	Other related parties	Purchase	1,024,163	3%	Approximately the same with third party transactions	Approximately the same with third party transactions	Approximately the same with third party transactions	(313,185)	(4%)	
Realtek Singapore Private Limited	Greatek Electronics Inc.	Other related parties	Purchase	298,240	1%	Approximately the same with third party transactions	Approximately the same with third party transactions	Approximately the same with third party transactions	(16,329)	(0%)	

REALTEK SEMICONDUCTOR CORPORATION

Receivables from related parties reaching NT$100 million 0r 20% of paid-in capital or more

December 31, 2019

Table 6

Expressed in thousands of NTD

(Except as otherwise indicated)

Creditor	Counterparty	Relationship with the counterparty	Balance as at December 31, 2019	Turnover rate	Overdue receivables: Amount	Overdue receivables: Action taken	Amount collected subsequent to the balance sheet date	Allowance for doubtful accounts
Realtek Semiconductor Corporation	G.M.I Technology Inc.	Other related parties	$ 1,172,793	5.57	$ -	-	$ 569,399	$ 11,847
Realtek Singapore Private Limited	G.M.I Technology Inc.	Other related parties	929,236	6.27	-	-	368,596	-

REALTEK SEMICONDUCTOR CORPORATION

Significant inter-company transactions during the reporting period

Year ended December 31, 2019

Table 7

Expressed in thousands of NTD

(Except as otherwise indicated)

Number (Note 1)	Company name	Counterparty	Relationship (Note 2)	Transaction: General ledger account	Transaction: Amount	Transaction: Transaction terms	Transaction: Percentage of consolidated total operating revenues or total assets (Note 3)
0	Realtek Semiconductor Corporation	RayMX Microelectronics Corp.	1	Other receivables	$ 48,980	No similar transaction can be compared with. Transaction prices and terms are determined in accordance with mutual agreement.	0.07%
0	Realtek Semiconductor Corporation	RayMX Microelectronics Corp.	1	Sales revenue	65,119	No similar transaction can be compared with. Transaction prices and terms are determined in accordance with mutual agreement.	0.11%
1	Leading Enterprises Limited	Realtek Semiconductor (Japan) Corp.	3	Technical service fees	34,049	No similar transaction can be compared with. Transaction prices and terms are determined in accordance with mutual agreement.	0.06%
2	Realtek Singapore Private Limited	Realsil Microelectronics Corp.	3	Technical service fees	1,639,884	No similar transaction can be compared with. Transaction prices and terms are determined in accordance with mutual agreement.	2.70%
2	Realtek Singapore Private Limited	Realsil Microelectronics Corp.	3	Other payables	552,750	No similar transaction can be compared with. Transaction prices and terms are determined in accordance with mutual agreement.	0.75%
2	Realtek Singapore Private Limited	Realtek Semiconductor (Shen Zhen) Corp.	3	Technical service fees	347,426	No similar transaction can be compared with. Transaction prices and terms are determined in accordance with mutual agreement.	0.57%

REALTEK SEMICONDUCTOR CORPORATION

Significant inter-company transactions during the reporting period

Year ended December 31, 2019

Table 7

Expressed in thousands of NTD

(Except as otherwise indicated)

Number (Note 1)	Company name	Counterparty	Relationship (Note 2)	Transaction: General ledger account	Transaction: Amount	Transaction: Transaction terms	Transaction: Percentage of consolidated total operating revenues or total assets (Note 3)
2	Realtek Singapore Private Limited	Realtek Semiconductor (Shen Zhen) Corp.	3	Other payables	$ 116,209	No similar transaction can be compared with. Transaction prices and terms are determined in accordance with mutual agreement.	0.16%
2	Realtek Singapore Private Limited	Cortina Access, Inc.	3	Technical service fees	214,462	No similar transaction can be compared with. Transaction prices and terms are determined in accordance with mutual agreement.	0.35%
2	Realtek Singapore Private Limited	Cortina Access, Inc.	3	Other payables	20,143	No similar transaction can be compared with. Transaction prices and terms are determined in accordance with mutual agreement.	0.03%
2	Realtek Singapore Private Limited	Cortina Network Systems Shanghai Co. Ltd.	3	Technical service fees	106,735	No similar transaction can be compared with. Transaction prices and terms are determined in accordance with mutual agreement.	0.18%
2	Realtek Singapore Private Limited	Cortina Network Systems Shanghai Co. Ltd.	3	Other payables	27,690	No similar transaction can be compared with. Transaction prices and terms are determined in accordance with mutual agreement.	0.04%
4	Realtek Singapore Private Limited	Cortina Systems Taiwan Limited	3	Technical service fees	96,982	No similar transaction can be compared with. Transaction prices and terms are determined in accordance with mutual agreement.	0.16%
2	Realtek Singapore Private Limited	Realtek Semiconductor (Japan) Corp.	3	Technical service fees	35,055	No similar transaction can be compared with. Transaction prices and terms are determined in accordance with mutual agreement.	0.06%

REALTEK SEMICONDUCTOR CORPORATION

Significant inter-company transactions during the reporting period

Year ended December 31, 2019

Table 7

Expressed in thousands of NTD

(Except as otherwise indicated)

				Transaction			
Number (Note 1)	Company name	Counterparty	Relationship (Note 2)	General ledger account	Amount	Transaction terms	Percentage of consolidated total operating revenues or total assets (Note 3)
2	Realtek Singapore Private Limited	RayMX Microelectronics Corp.	3	Other receivables	$ 48,980	No similar transaction can be compared with. Transaction prices and terms are determined in accordance with mutual agreement.	0.07%

Note 1: The numbers filled in for the transaction company in respect of inter-company transactions are as follows:

(1) Parent company is '0'.

(2) The subsidiaries are numbered in order starting from '1'.

Note 2: Relationship between transaction company and counterparty is classified into the following three categories; fill in the number of category each case belongs to (If transactions between parent company and subsidiaries or between subsidiaries refer to same transaction, it is not required to disclose twice. For example, if the parent company has already disclosed its transaction with a subsidiary, then the subsidiary is not required to disclose the transaction; for transactions between two subsidiaries, if one of the subsidiaries has disclosed the transaction, then the other is not required to disclose the transaction.):

(1) Parent company to subsidiary.

(2) Subsidiary to parent company.

(3) Subsidiary to subsidiary

Note 3: Regarding percentage of transaction amount to consolidated total operating revenues or total assets, it is computed based on period-end balance of transaction to consolidated total assets for balance sheet accounts and based on accumulated transaction amount for the period to consolidated total operating revenues for income statement accounts.

Note 4: Only transactions above NT$10 million are disclosed. Transactions of related parties are not further disclosed here.

REALTEK SEMICONDUCTOR CORPORATION

Information on investees

Year ended December 31, 2019

Table 8

Expressed in thousands of NTD

(Except as otherwise indicated)

				Initial investment amount		Shares held as at December 31, 2019					
Investor	Investee	Location	Main business activities	Balance as at December 31, 2019	Balance as at December 31, 2018	Number of shares	Ownership (%)	Book value	Net profit (loss) of the investee for the year ended December 31, 2019	Investment income (loss) recognised by the Company for the year ended December 31, 2019	Footnote
Realtek Semiconductor Corporation	Leading Enterprises Limited	British Virgin Islands	Investment holdings	$ 15,005,734	$ 15,318,249	39,130	100%	$ 11,151,040	$ 282,019	$ 282,019	Subsidiary
Realtek Semiconductor Corporation	Amber Universal Inc.	British Virgin Islands	Investment holdings	4,739,146	4,837,812	41,432	100%	3,312,175	87,008	87,008	Subsidiary
Realtek Semiconductor Corporation	Realtek Singapore Private Limited	Singapore	ICs manufacturing, design, research, development, sales, and marketing	2,408,480	2,458,640	80,000,000	89.03%	10,370,572	6,306,957	5,638,064	Subsidiary
Realtek Semiconductor Corporation	Bluocean Inc.	Cayman Islands	Investment holdings	3,313,165	3,382,167	110,050,000	100%	3,479,391	111,913	111,913	Subsidiary
Realtek Semiconductor Corporation	Talent Eagle Enterprise Inc.	Cayman Islands	Investment holdings	3,435,095	3,506,635	114,100,000	100%	2,585,499	(278,776)	(278,776)	Subsidiary
Realtek Semiconductor Corporation	Realtek Investment Singapore Private Limited	Singapore	Investment holdings	6,021,200	6,146,600	200,000,000	100%	6,494,453	203,956	203,956	Subsidiary
Realtek Semiconductor Corporation	Realsun Investments Co., Ltd.	Taiwan	Investment holdings	280,000	280,000	28,000,000	100%	354,481	6,966	6,966	Subsidiary
Realtek Semiconductor Corporation	Hung-wei Venture Capital Co., Ltd.	Taiwan	Investment holdings	250,000	250,000	25,000,000	100%	418,438	19,668	19,668	Subsidiary
Realtek Semiconductor Corporation	Realking Investments Limited	Taiwan	Investment holdings	293,930	293,930	29,392,985	100%	286,939	(1,384)	(1,384)	Subsidiary
Realtek Semiconductor Corporation	Realsun Technology Corporatioin	Taiwan	ICs manufacturing, design, research, development, sales, and marketing	5,000	5,000	500,000	100%	5,107	47	47	Subsidiary
Realtek Semiconductor Corporation	Bobitag Inc.	Taiwan	Manufacturing and installation of computer equipment and wholesasle, retail and related services of electronic materials and information/software	19,189	20,000	1,918,910	66.67%	19,398	277	184	Subsidiary
Realtek Semiconductor Corporation	Technology Partner V Venture Capital Corporation	Taiwan	Investment holdings	66,657	84,565	4,178,509	32.43%	22,247	(21,594)	(1,151)	Investments accounted for under equity method
Realtek Semiconductor Corporation	Estinet Technologies Incorporation	Taiwan	Research and development, design, manufacturing, sales and other services of electronic components, information/Software and integrated circuits.	110,000	110,000	4,000,000	16.10%	3,701	(57,015)	(5,384)	Investments accounted for under equity method
Realtek Semiconductor Corporation	5VTechnologies, Taiwan Ltd.	Taiwan	Research and development, design, manufacturing, sales and other services of electronic components, information/Software and integrated circuits.	46,699	46,699	46,699	24.42%	-	(39,968)	(9,398)	Investments accounted for under equity method
Realking Investments Limited	Innorich Venture Capital Corp.	Taiwan	Venture capital activities	200,000	200,000	20,000,000	37.38%	160,023	(21,228)	(7,900)	Investments accounted for under equity method

REALTEK SEMICONDUCTOR CORPORATION

Information on investees

Year ended December 31, 2019

Table 8

Expressed in thousands of NTD

(Except as otherwise indicated)

Investor	Investee	Location	Main business activities	Initial investment amount: Balance as at December 31, 2019	Initial investment amount: Balance as at December 31, 2018	Shares held as at December 31, 2019: Number of shares	Shares held as at December 31, 2019: Ownership (%)	Shares held as at December 31, 2019: Book value	Net profit (loss) of the investee for the year ended December 31, 2019	Investment income (loss) recognised by the Company for the year ended December 31, 2019	Footnote
Leading Enterprises Limited	Realtek Semiconductor (Japan) Corp.	Japan	ICs deign,sales, and consultancy	$ 5,542	$ 5,568	400	100%	$ 2,483	$ 255	255	Sub-Subsidiary
Leading Enterprises Limited	Circon Universal Inc.	Mauritius	Investment holdings	1,950,869	1,991,498	64,800,000	100%	8,151	6	6	Sub-Subsidiary
Leading Enterprises Limited	Realtek Singapore Private Limited	Singapore	ICs manufacturing, design, research, development, sales, and marketing	1,257,578	1,283,769	9,856,425	10.97%	1,281,046	6,306,957	$ 691,815	Sub-Subsidiary
Amber Universal Inc.	Realtek Semiconductor (HK) Limited	Hong Kong	Information services and technical support	5,799	5,886	-	100%	1,159	(25)	(25)	Sub-Subsidiary
Realtek Singapore Private Limited	Empsonic Enterprises Inc.	Mauritius	Investment holdings	850,495	868,207	2,825,000	100%	1,455,628	98,711	98,711	Sub-Subsidiary
Realtek Singapore Private Limited	Cortina Access Inc.	U.S.A	R&D and information services	1,229,710	1,255,320	16,892	100%	1,025,799	30,063	30,063	Sub-Subsidiary
Realtek Singapore Private Limited	Cortina Systems Taiwan Limited	Taiwan	R&D and technical support	60,212	61,466	21,130,000	100%	61,592	5,371	5,371	Sub-Subsidiary
Realtek Singapore Private Limited	Realtek Viet Nam Co., Ltd.	Vietnam	R&D and technical support	30,106	30,733	1,000,000	100%	19,772	(9,032)	(9,032)	Sub-Subsidiary
Talent Eagle Enterprise Inc.	Ubilinx Technology Inc.	U.S.A	R&D and information services	1,204,240	799,058	40,000,000	100%	41,892	(413,581)	(413,581)	Sub-Subsidiary

Note：The amount of foreign currencies denominated in New Taiwan dollars in this table, which related to income and expenses were re-translated at the average exchange rate from January 1, 2019 to December 31, 2019, others were re-translated at the exchange rate prevailing at the end of the financial reporting period.

REALTEK SEMICONDUCTOR CORPORATION

Information on investments in Mainland China

Year ended December 31, 2019

Table 9

Expressed in thousands of NTD

(Except as otherwise indicated)

Investee in Mainland China	Main business activities	Paid-in Capital	Investment method (Note1)	Accumulated amount of remittance from Taiwan to Mainland China as of January 1, 2019	Amount remitted from Taiwan to Mainland China/Amount remitted back to Taiwan for the year ended December 31, 2019		Accumulated amount of remittance from Taiwan to Mainland China as of December 31, 2019	Net income of investee for the year ended December 31, 2019	Ownership held by the Company (direct or indirect)	Investment income (loss) recognised by the Company for the year ended December 31, 2019 (Note2(2)C)	Book value of investment in Mainland China as of December 31, 2019	Accumulated amount of investment income remitted back to Taiwan as of December 31, 2019	Footnote
					Remitted to Mainland China	Remitted back to Taiwan							
Cortina Network Systems Shanghai Co., Ltd.	R&D and technical support	$ 108,382	(2)	$ 108,382	$ -	$ -	$ 108,382	$ 7,476	100%	$ 7,476	$ 96,784	$ -	
Realsil Microelectronics Corp.	R&D and technical support	842,968	(2)	842,968	-	-	842,968	99,574	100%	99,574	1,450,798	-	
Realtek Semiconductor (Shen Zhen) Corp.	R&D and technical support	150,530	(2)	150,530	-	-	150,530	22,194	100%	22,194	253,983	-	
RayMX Microelectronics Corp.	ICs manufacturing, design, research, development, sales, and marketing	113,445	(2)	113,445	-	-	113,445	(28,097)	100%	(28,097)	85,230	-	

Company name	Accumulated amount of remittance from Taiwan to Mainland China as of December 31, 2019	Investment amount approved by the Investment Commission of the Ministry of Economic Affairs (MOEA)	Ceiling on investments in Mainland China imposed by the Investment Commission of MOEA
Cortina Network Systems Shanghai Co., Ltd.	$ 108,382	$ 108,382	$ 16,331,391
Realsil Microelectronics Corp.	842,968	842,968	
Realtek Semiconductor (Shan Zhen) Corp.	150,530	150,530	
RayMX Microelectronics Corp.	113,445	113,445	

Note 1: Investment methods are classified into the following three categories; fill in the number of category each case belongs to:

(1) Directly invest in a company in Mainland China.

(2) Through investing in an existing company in the third area, which then invested in the investee in Mainland China.

(3) Others.

Note 2: In the Investment income (loss) recognised by the Company for the year ended December 31, 2019 column, except for the financial statements of Cortina Network Systems Shanghai Co. Ltd. were audited by other independent accountants, the remaining financial statements were audited by the independent accountants of parent company in Taiwan.

Note 3: The amount of foreign currencies denominated in New Taiwan dollars in this table, which related to income and expenses were re-translated at the average exchange rate from January 1, 2019 to December 31, 2019, others were re-translated at the exchange rate prevailing at the end of the financial reporting period.