Consolidated Financial Statements for the Years Ended December 31, 2016 and 2015 and Independent Auditors' Report REPRESENTATION LETTER

The entities that are required to be included in the combined financial statements of Taiwan Semiconductor

Manufacturing Company Limited as of and for the year ended December 31, 2016, under the Criteria Governing

the Preparation of Affiliation Reports, Consolidated Business Reports and Consolidated Financial Statements of

Affiliated Enterprises are the same as those included in the consolidated financial statements prepared in

conformity with the International Financial Reporting Standard 10, "Consolidated Financial Statements." In

addition, the information required to be disclosed in the combined financial statements is included in the

consolidated financial statements. Consequently, Taiwan Semiconductor Manufacturing Company Limited

and Subsidiaries do not prepare a separate set of combined financial statements.

Very truly yours,

TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY LIMITED

By

MORRIS CHANG Chairman

February 14, 2017

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# Deloitte.

## 勤業眾信

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#### INDEPENDENT AUDITORS' REPORT

The Board of Directors and Shareholders
Taiwan Semiconductor Manufacturing Company Limited

#### Opinion

We have audited the accompanying consolidated financial statements of Taiwan Semiconductor Manufacturing Company Limited and subsidiaries (the "Company"), which comprise the consolidated balance sheets as of December 31, 2016 and 2015, and the consolidated statements of comprehensive income, changes in equity and cash flows for the years then ended, and the notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Company as of December 31, 2016 and 2015, and its consolidated financial performance and its consolidated cash flows for the years then ended in accordance with the Regulations Governing the Preparation of Financial Reports by Securities Issuers and the International Financial Reporting Standards (IFRS), International Accounting Standards (IAS), IFRIC Interpretations (IFRIC), and SIC Interpretations (SIC) endorsed and issued into effect by the Financial Supervisory Commission of the Republic of China.

#### **Basis for Opinion**

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

#### **Key Audit Matters**

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements for the year ended December 31, 2016. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Key audit matters for the Company's consolidated financial statements for the year ended December 31, 2016 are stated as follows:

#### Provision of sales returns and allowances

In consideration of business volume and market conditions, the Company provides a variety of business incentives to specific customers or products. The provision of sales returns and allowance is based on historical experience and the varying contractual terms by management's judgment. Please refer to Notes 4, 5 and 19 to the consolidated financial statements for the details of the information about provision of sales returns and allowances. Since the provision of sales returns and allowances is subject to management's judgment,

which has significant uncertainty, and the result could also affect the net revenue in the consolidated financial statements, it has been identified as a key audit matter.

Our key audit procedures performed in respect of the above area included the following:

- 1. Understood and tested the design and operating effectiveness of the key controls over provision of sales returns and allowances;
- 2. Understood and assessed the reasonableness of management's assumptions made and methodology used in estimating provision of sales returns and allowances;
- 3. Sampled and inspected the Company's sales contracts of main products by agreeing the contractual terms and performed an analysis to challenge management's estimation on possibility that specific products could meet business incentives condition to verify the reasonableness of the accrual of the provision;
- 4. Performed a retrospective review to comparatively analyze the historical accuracy of judgments with reference to actual sales allowance paid.

#### Timing to commence depreciation of property, plant and equipment (PP&E)

The Company continues to invest in capital expenditures to develop and build capacity in leading-edge technologies to meet customers' demand. Please refer to Notes 4 and 15 to the consolidated financial statements for the details of the information and accounting policy about the depreciation of PP&E. According to IAS 16, depreciation of PP&E should commence when the assets are available for their intended use. Due to the significant capital expenditures incurred by the Company, the appropriateness of the timing to commerce depreciation of PP&E could have a material impact on its financial performance. Consequently, the validity of the timing to commence depreciation of PP&E is identified as a key audit matter.

Our key audit procedures performed in respect of the above area included the following:

- 1. Understood and tested the design and operating effectiveness of the key controls over the timing to commence depreciation of PP&E;
- Understood the criteria the assets are defined as available for use intended by management and the corresponding accounting treatments;
- 3. Sampled and reviewed the appropriateness of the timing for commencing depreciation after the assets met the criteria of available for use in current year;
- 4. Performed an observation on the physical count of equipment under installation and construction in progress; sampled and inspected the supporting documentation to verify that the status of equipment under installation and construction in progress are not available for use;
- Sampled equipment under installation and construction in progress which met the criteria of available for use and were transferred in the subsequent period to evaluate the reasonableness of the timing for commencing depreciation;
- 6. Sampled and reviewed the appropriateness of the equipment under installation and construction in progress which are not available for their intended use.

#### Other Matter

We have also audited the parent company only financial statements of Taiwan Semiconductor Manufacturing Company Limited as of and for the years ended December 31, 2016 and 2015 on which we have issued an unmodified opinion.

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

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

In preparing the consolidated financial statements, management is responsible for assessing the 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 members of the Audit Committee) are responsible for overseeing the Company's financial reporting process.

#### Auditors' Responsibilities for the Audit of the Consolidated Financial Statements

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

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

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due
  to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence
  that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material
  misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion,
  forgery, intentional omissions, misrepresentations, or the override of internal control.
- 2. Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the 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 auditors' report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our

conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the Company to cease to continue as a going concern.

- 5. Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- 6. Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Company to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

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

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

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements for the year ended December 31, 2016 and are therefore the key audit matters. We describe these matters in our auditors' report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

The engagement partners on the audit resulting in this independent auditors' report are Yih-Shin Kao and Yu Feng Huang.

Deloitte & Touche Taipei, Taiwan The Republic of China

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February 14, 2017

#### Notice to Readers

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

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

# CONSOLIDATED BALANCE SHEETS (In Thousands of New Taiwan Dollars)

	<b>December 31, 2016</b>		<b>December 31, 2015</b>	
ASSETS	Amount	%	Amount	%
CURRENT ASSETS				
Cash and cash equivalents (Note 6) Financial assets at fair value through profit or loss (Note 7)	\$ 541,253,833 6,451,112	29 -	\$ 562,688,930 6,026	34
Available-for-sale financial assets (Notes 8 and 14)	67,788,767	4	14,299,361	1
Held-to-maturity financial assets (Note 9) Hedging derivative financial assets (Note 10)	16,610,116 5,550	1	9,166,523 1,739	1
Notes and accounts receivable, net (Note 11)	128,335,271	7	85,059,675	5
Receivables from related parties (Note 37)	969,559	-	505,722	-
Other receivables from related parties (Note 37) Inventories (Notes 5, 12 and 41)	146,788 48,682,233	3	125,018 67,052,270	4
Other financial assets (Notes 38 and 41)	4,100,475	-	4,305,358	-
Other current assets (Note 17)	3,385,422		3,533,369	
Total current assets	817,729,126	44	746,743,991	<u>45</u>
NONCURRENT ASSETS	22 207 561		6.010.072	
Held-to-maturity financial assets (Note 9) Financial assets carried at cost (Note 13)	22,307,561 4,102,467	1 -	6,910,873 3,990,882	-
Investments accounted for using equity method (Notes 5 and 14)	19,743,888	1	24,091,828	2
Property, plant and equipment (Notes 5 and 15) Intangible assets (Notes 5, 16 and 33)	997,777,687 14,614,846	53 1	853,470,392 14,065,880	52 1
Deferred income tax assets (Notes 5 and 30)	8,271,421	1 -	6,384,974	1 -
Refundable deposits	407,874	-	430,802	-
Other noncurrent assets (Note 17)	1,500,432	<del>-</del>	1,428,676	
Total noncurrent assets	1,068,726,176	56	910,774,307	55
TOTAL	<u>\$ 1,886,455,302</u>	<u>100</u>	<u>\$ 1,657,518,298</u>	<u>100</u>
LIABILITIES AND EQUITY				
CURRENT LIABILITIES				
Short-term loans (Note 18) Financial liabilities at fair value through profit or loss (Note 7)	\$ 57,958,200 191,135	3 -	\$ 39,474,000 72,610	2
Accounts payable	26,062,351	2	18,575,286	1
Payables to related parties (Note 37)	1,262,174	-	1,149,988	-
Salary and bonus payable Accrued profit sharing bonus to employees and compensation to directors and supervisors (Notes 23 and 32)	13,681,817 22,894,006	1 1	11,702,042 20,958,893	1 1
Payables to contractors and equipment suppliers	63,154,514	3	26,012,192	2
Income tax payable (Notes 5 and 30) Provisions (Notes 5 and 19)	40,306,054 18,037,789	2 1	32,901,106 10,163,536	2
Long-term liabilities - current portion (Note 20)	38,109,680	2	23,517,612	1
Accrued expenses and other current liabilities (Note 22)	36,581,553	2	27,701,329	2
Total current liabilities	318,239,273	<u>17</u>	212,228,594	13
NONCURRENT LIABILITIES				
Bonds payable (Note 20)	153,093,557	8	191,965,082	12
Long-term bank loans Deferred income tax liabilities (Notes 5 and 30)	21,780 141,183	-	32,500 31,271	-
Net defined benefit liability (Notes 5 and 21)	8,551,408	-	7,448,026	-
Guarantee deposits (Note 22) Others (Note 19)	14,670,433 1,686,542	1	21,564,801 1,613,545	1
		<del></del>		<del></del>
Total noncurrent liabilities	<u>178,164,903</u>	9	222,655,225	13
Total liabilities	496,404,176	<u>26</u>	434,883,819	<u>26</u>
EQUITY ATTRIBUTABLE TO SHAREHOLDERS OF THE PARENT Capital stock (Note 23)	259,303,805	14	259,303,805	16
Capital surplus (Note 23)	56,272,304	3	56,300,215	<u>16</u> <u>3</u>
Retained earnings (Note 23)	200 207 045	1.1	177 (40 5 (1	1.1
Appropriated as legal capital reserve Unappropriated earnings	208,297,945 863,710,224	11 <u>46</u>	177,640,561 716,653,025	11 43
	1,072,008,169	57	894,293,586	<u>43</u> <u>54</u>
Others (Note 23)	1,663,983	<del>_</del>	11,774,113	1
Equity attributable to shareholders of the parent	1,389,248,261	74	1,221,671,719	74
NONCONTROLLING INTERESTS	802,865		962,760	
Total equity	1,390,051,126	<u>74</u>	1,222,634,479	<u>74</u>
TOTAL	<u>\$ 1,886,455,302</u>	<u>100</u>	<u>\$1,657,518,298</u>	<u>100</u>

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

#### CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

(In Thousands of New Taiwan Dollars, Except Earnings Per Share)

	2016		2015		
	Amount	%	Amount	%	
NET REVENUE (Notes 5, 25, 37 and 43)	\$ 947,938,344	100	\$ 843,497,368	100	
COST OF REVENUE (Notes 5, 12, 32, 37 and 41)	473,077,173	50	433,117,601	51	
GROSS PROFIT BEFORE REALIZED (UNREALIZED) GROSS PROFIT ON SALES TO ASSOCIATES	474,861,171	50	410,379,767	49	
REALIZED (UNREALIZED) GROSS PROFIT ON SALES TO ASSOCIATES	(29,073)		15,126	_=	
GROSS PROFIT	474,832,098	<u>50</u>	410,394,893	<u>49</u>	
OPERATING EXPENSES (Notes 5, 32 and 37) Research and development General and administrative Marketing  Total operating expenses  OTHER OPERATING INCOME AND EXPENSES, NET (Notes 15, 16, 26 and 32)  INCOME FROM OPERATIONS (Note 43)  NON-OPERATING INCOME AND EXPENSES	71,207,703 19,795,593 5,900,837 96,904,133 29,813 377,957,778	7 2 1 10 ————————————————————————————————	65,544,579 17,257,237 5,664,684 88,466,500 (1,880,618) 320,047,775	8 2 1 11  38	
Share of profits of associates and joint venture (Notes 14 and 43) Other income (Note 27) Foreign exchange gain, net (Note 42) Finance costs (Note 28) Other gains and losses (Note 29)  Total non-operating income and expenses	3,495,600 6,454,901 1,161,322 (3,306,153) 195,932	1 - - - 1	4,132,128 4,750,829 2,481,446 (3,190,331) 22,207,064 30,381,136	1 - - 3 4	
INCOME BEFORE INCOME TAX	385,959,380	41	350,428,911	42	
INCOME TAX EXPENSE (Notes 5, 30 and 43)	51,621,144	<u>6</u>	43,872,744	<u>6</u>	
NET INCOME	334,338,236	<u>35</u>	306,556,167	<u>36</u>	
OTHER COMPREHENSIVE INCOME (LOSS) (Notes 14, 21, 23 and 30) Items that will not be reclassified subsequently to profit or loss: Remeasurement of defined benefit obligation	(1,057,220)	_	(827,703)	_	
Share of other comprehensive loss of associates and	, , , , , ,	_		_	
joint venture Income tax benefit related to items that will not be reclassified subsequently	(19,961) 126,867	-	(2,546)	-	
	(950,314)	<u> </u>	(730,923)	ntinued)	

#### CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

(In Thousands of New Taiwan Dollars, Except Earnings Per Share)

	2016		2015	
	Amount	%	Amount	%
Items that may be reclassified subsequently to profit or loss:  Exchange differences arising on translation of foreign				
operations Changes in fair value of available-for-sale financial	\$ (9,379,477)	(1)	\$ 6,604,768	1
assets Share of other comprehensive income (loss) of	(692,523)	-	(20,489,015)	(2)
associates and joint venture  Income tax expense related to items that may be	16,301	-	(83,021)	-
reclassified subsequently	(61,176)		(15,991)	<del>_</del>
	(10,116,875)	(1)	(13,983,259)	(1)
Other comprehensive loss for the year, net of income tax	(11,067,189)	(1)	(14,714,182)	<u>(1</u> )
TOTAL COMPREHENSIVE INCOME FOR THE YEAR	<u>\$ 323,271,047</u>	34	\$ 291,841,985	<u>35</u>
NET INCOME (LOSS) ATTRIBUTABLE TO: Shareholders of the parent Noncontrolling interests	\$ 334,247,180 91,056	35	\$ 306,573,837 (17,670)	36
TOTAL COMPREHENSIVE INCOME (LOSS) ATTRIBUTABLE TO:	<u>\$ 334,338,236</u>	<u>35</u>	\$ 306,556,167	<u>36</u>
Shareholders of the parent Noncontrolling interests	\$ 323,186,736 84,311	34	\$ 291,867,757 (25,772)	35 
	\$ 323,271,047	<u>34</u>	<u>\$ 291,841,985</u>	<u>35</u>
	2016		2015	
	Income Attributa Shareholders the Parent		Income Attributa Shareholders the Parent	
EARNINGS PER SHARE (NT\$, Note 31) Basic earnings per share Diluted earnings per share	\$ 12.89 \$ 12.89	_	\$ 11.82 \$ 11.82	

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

(Concluded)

# CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY (In Thousands of New Taiwan Dollars, Except Dividends Per Share)

	Equity Attributable to Shareholders of the Parent												
					1 2				hers				
	Capital Stock -	· Common Stock			Retained Earnings		Foreign Currency	Unrealized Gain/Loss from Available-					
	Shares (In Thousands)	Amount	Capital Surplus	Legal Capital Reserve	Unappropriated Earnings	Total	Translation Reserve	for-sale Financial Assets	Cash Flow Hedges Reserve	Total	Total	Noncontrolling Interests	Total Equity
BALANCE, JANUARY 1, 2015	25,929,662	\$ 259,296,624	\$ 55,989,922	\$ 151,250,682	\$ 553,914,592	\$ 705,165,274	\$ 4,502,113	\$ 21,247,483	\$ (305)	\$ 25,749,291	\$ 1,046,201,111	\$ 127,221	\$ 1,046,328,332
Appropriations of prior year's earnings Legal capital reserve Cash dividends to shareholders - NT\$4.5 per share	-	- -	- -	26,389,879	(26,389,879) (116,683,481)	(116,683,481)	- -	-	- -	- -	(116,683,481)	<u>.</u>	(116,683,481)
Total				26,389,879	(143,073,360)	(116,683,481)					(116,683,481)		(116,683,481)
Net income (loss) in 2015	-	-	-	-	306,573,837	306,573,837	-	-	-	-	306,573,837	(17,670)	306,556,167
Other comprehensive income (loss) in 2015, net of income tax		<del>_</del>	<del>_</del>		(730,902)	(730,902)	6,537,836	(20,512,712)	(302)	(13,975,178)	(14,706,080)	(8,102)	(14,714,182)
Total comprehensive income (loss) in 2015	=				305,842,935	305,842,935	6,537,836	(20,512,712)	(302)	(13,975,178)	291,867,757	(25,772)	291,841,985
Issuance of stock from exercise of employee stock options	718	7,181	130,974	-	-	-	-	-	-	-	138,155	-	138,155
Disposal of investments accounted for using equity method	-	-	(47,850)	-	-	-	-	-	-	-	(47,850)	-	(47,850)
Adjustments to share of changes in equities of associates and joint venture	-	-	230,743	-	-	-	-	-	-	-	230,743	(4,230)	226,513
From differences between equity purchase price and carrying amount arising from actual acquisition or disposal of subsidiaries	-	-	-	-	(31,142)	(31,142)	-	-	-	-	(31,142)	31,142	-
From share of changes in equities of subsidiaries	-	-	(3,574)	-	-	-	-	-	-	-	(3,574)	3,574	-
Decrease in noncontrolling interests	-	-	-	-	-	-	-	-	-	-	-	(50,218)	(50,218)
Effect of acquisition of subsidiary	-	-	-	-	-	-	-	-	-	-	-	923,683	923,683
Effect of disposal of subsidiary		<del>_</del>	<del>_</del>			<del>-</del>	=	<del>_</del>		<del>_</del>		(42,640)	(42,640)
BALANCE, DECEMBER 31, 2015	25,930,380	259,303,805	56,300,215	177,640,561	716,653,025	894,293,586	11,039,949	734,771	(607)	11,774,113	1,221,671,719	962,760	1,222,634,479
Appropriations of prior year's earnings Legal capital reserve Cash dividends to shareholders - NT\$6.0 per share	-	- -	-	30,657,384	(30,657,384) (155,582,283)	(155,582,283)	-	-	-	-	(155,582,283)	<u>-</u> -	(155,582,283)
Total				30,657,384	(186,239,667)	(155,582,283)					(155,582,283)		(155,582,283)
Net income in 2016	-	-	-	-	334,247,180	334,247,180	-	-	-	-	334,247,180	91,056	334,338,236
Other comprehensive income (loss) in 2016, net of income tax			<del>_</del>		(950,314)	(950,314)	(9,378,712)	(732,130)	712	(10,110,130)	(11,060,444)	(6,745)	(11,067,189)
Total comprehensive income (loss) in 2016	=				333,296,866	333,296,866	(9,378,712)	(732,130)	712	(10,110,130)	323,186,736	84,311	323,271,047
Disposal of investments accounted for using equity method	-	-	(56,169)	-	-	-	-	-	-	-	(56,169)	-	(56,169)
Adjustments to share of changes in equities of associates and joint venture	-	-	21,221	-	-	-	-	-	-	-	21,221	9	21,230
From share of changes in equities of subsidiaries	-	-	7,037	-	-	-	-	-	-	-	7,037	(7,037)	-
Decrease in noncontrolling interests	-	-	-	-	-	-	-	-	-	-	-	(235,224)	(235,224)
Effect of disposal of subsidiary	<del>-</del>		<del>-</del>		<del></del>	<del>_</del>		<del>-</del>		<del>-</del>		(1,954)	(1,954)
BALANCE, DECEMBER 31, 2016	25,930,380	<u>\$ 259,303,805</u>	\$ 56,272,304	\$ 208,297,945	<u>\$ 863,710,224</u>	<u>\$1,072,008,169</u>	<u>\$ 1,661,237</u>	<u>\$ 2,641</u>	<u>\$ 105</u>	<u>\$ 1,663,983</u>	<u>\$1,389,248,261</u>	<u>\$ 802,865</u>	\$1,390,051,126

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

# **CONSOLIDATED STATEMENTS OF CASH FLOWS** (In Thousands of New Taiwan Dollars)

	2016	2015
CASH FLOWS FROM OPERATING ACTIVITIES		
Income before income tax	\$ 385,959,380	\$ 350,428,911
Adjustments for:	\$ 303,737,300	Ф 550,420,711
Depreciation expense	220,084,998	219,303,369
Amortization expense	3,743,406	3,202,200
Finance costs	3,306,153	3,190,331
Share of profits of associates and joint venture	(3,495,600)	(4,132,128)
Interest income	(6,317,500)	(4,129,316)
Gain on disposal of property, plant and equipment, net	(46,548)	(433,559)
Impairment loss on property, plant and equipment	· -	2,545,584
Impairment loss on intangible assets	-	58,514
Impairment loss on financial assets	122,240	154,721
Loss (gain) on disposal of available-for-sale financial assets, net	4,014	(22,070,736)
Gain on disposal of financial assets carried at cost, net	(37,241)	(87,193)
Loss (gain) on disposal of investments accounted for using equity		
method, net	259,960	(2,507,707)
Loss from liquidation of subsidiaries	36,105	138,243
Unrealized (realized) gross profit on sales to associates	29,073	(15,126)
Loss (gain) on foreign exchange, net	(2,656,406)	2,563,439
Dividend income	(137,401)	(621,513)
Loss (gain) from hedging instruments	(12,725)	134,112
Loss (gain) arising from changes in fair value of available-for-sale		
financial assets in hedge effective portion	(4,248)	305,619
Gain from lease agreement modification	-	(430,041)
Changes in operating assets and liabilities:	(6.226.761)	(222.762)
Financial instruments at fair value through profit or loss	(6,326,561)	(228,560)
Notes and accounts receivable, net	(49,342,698)	26,630,123
Receivables from related parties	(463,837)	(192,767)
Other receivables from related parties	(21,770)	53,607
Inventories	18,370,037	(655,249)
Other financial assets	(41,554)	720,301
Other current assets	94,512	263,384
Other noncurrent assets	(349,771) 7,295,491	(2,693,358)
Accounts payable Payables to related parties	139,818	(369,134)
Salary and bonus payable	1,979,775	945,030
Accrued profit sharing bonus to employees and compensation to	1,979,773	943,030
directors and supervisors	1,935,113	2,860,250
Accrued expenses and other current liabilities	3,693,638	(3,778,322)
Provisions	7,931,877	(382,774)
Net defined benefit liability	46,163	52,540
Cash generated from operations	585,777,893	570,822,795
Income taxes paid	(45,943,301)	(40,943,357)
meetic wites para	(10,210,001)	(10,710,001)
Net cash generated by operating activities	539,834,592	529,879,438
		(Continued)

# **CONSOLIDATED STATEMENTS OF CASH FLOWS** (In Thousands of New Taiwan Dollars)

	2016	2015
CACH ELOWIC FROM INVESTING A CTIVITIES		
CASH FLOWS FROM INVESTING ACTIVITIES		
Acquisitions of: Available-for-sale financial assets	\$ (83,275,573)	\$ (13,392,330)
Held-to-maturity financial assets	(33,625,353)	(28,181,915)
Financial assets carried at cost	(533,745)	(2,586,169)
Property, plant and equipment	(328,045,270)	(257,516,835)
Intangible assets	(4,243,087)	(4,283,870)
Land use right	(805,318)	(1,203,070)
Proceeds from disposal or redemption of:	(005,510)	
Available-for-sale financial assets	29,967,979	57,493,051
Held-to-maturity financial assets	10,550,000	16,800,000
Financial assets carried at cost	160,498	368,778
Investments accounted for using equity method	-	5,171,962
Property, plant and equipment	98,069	816,852
Proceeds from return of capital of financial assets carried at cost	65,087	-
Derecognition of hedging derivative financial instruments	8,868	2,659
Costs from entering into hedging transactions	´ -	(495,348)
Interest received	6,353,195	3,641,920
Proceeds from government grants - land use right and others	798,469	-
Proceeds from government grants - property, plant and equipment	738,643	-
Net cash outflow from acquisition of subsidiary (Note 33)	-	(51,601)
Net cash inflow from disposal of subsidiary (Note 34)	-	601,047
Other dividends received	137,420	616,675
Dividends received from investments accounted for using equity		
method	5,478,790	3,407,126
Refundable deposits paid	(144,982)	(404,458)
Refundable deposits refunded	169,912	348,434
Decrease in receivables for temporary payments	706,718	398,185
Net cash used in investing activities	(395,439,680)	(217,245,837)
CASH FLOWS FROM FINANCING ACTIVITIES		
Increase in short-term loans	18,968,936	3,138,680
Repayment of bonds	(23,471,600)	-
Repayment of long-term bank loans	(8,540)	-
Interest paid	(3,302,420)	(3,156,218)
Decrease in obligations under finance leases	-	(29,098)
Guarantee deposits received	6,354,677	754,873
Guarantee deposits refunded	(523,234)	(742,458)
Cash dividends	(155,582,283)	(116,683,481)
Proceeds from exercise of employee stock options	- (22.7.72)	33,891
Decrease in noncontrolling interests	(235,733)	(50,218)
Net cash used in financing activities	(157,800,197)	(116,734,029) (Continued)

### CONSOLIDATED STATEMENTS OF CASH FLOWS

(In Thousands of New Taiwan Dollars)

	2016	2015
EFFECT OF EXCHANGE RATE CHANGES ON CASH AND CASH EQUIVALENTS	\$ (8,029,812)	\$ 8,258,851
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	(21,435,097)	204,158,423
CASH AND CASH EQUIVALENTS INCLUDED IN NONCURRENT ASSETS HELD FOR SALE, BEGINNING OF YEAR	-	81,478
CASH AND CASH EQUIVALENT ON CONSOLIDATED BALANCE SHEET, BEGINNING OF YEAR	562,688,930	358,449,029
CASH AND CASH EQUIVALENTS, END OF YEAR	\$ 541,253,833	\$ 562,688,930
The accompanying notes are an integral part of the consolidated financial st	tatements.	(Concluded)

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEARS ENDED DECEMBER 31, 2016 AND 2015

(Amounts in Thousands of New Taiwan Dollars, Unless Specified Otherwise)

#### 1. GENERAL

Taiwan Semiconductor Manufacturing Company Limited (TSMC), a Republic of China (R.O.C.) corporation, was incorporated on February 21, 1987. TSMC is a dedicated foundry in the semiconductor industry which engages mainly in the manufacturing, selling, packaging, testing and computer-aided design of integrated circuits and other semiconductor devices and the manufacturing of masks.

On September 5, 1994, TSMC's shares were listed on the Taiwan Stock Exchange (TWSE). On October 8, 1997, TSMC listed some of its shares of stock on the New York Stock Exchange (NYSE) in the form of American Depositary Shares (ADSs).

The address of its registered office and principal place of business is No. 8, Li-Hsin Rd. 6, Hsinchu Science Park, Taiwan. The principal operating activities of TSMC's subsidiaries are described in Note 4.

#### 2. THE AUTHORIZATION OF FINANCIAL STATEMENTS

The accompanying consolidated financial statements were approved and authorized for issue by the Board of Directors on February 14, 2017.

# 3. APPLICATION OF NEW AND REVISED INTERNATIONAL FINANCIAL REPORTING STANDARDS

As of the date that the accompanying consolidated financial statements were authorized for issue, TSMC and its subsidiaries (collectively as the "Company") have not applied the following amendments to the Regulations Governing the Preparation of Financial Reports by Securities Issuers and International Financial Reporting Standards (IFRS), International Accounting Standards (IAS), IFRIC Interpretations (IFRIC), and SIC Interpretations (SIC) issued by the International Accounting Standards Board (IASB) (collectively, "IFRSs").

a. Amendments to the Regulations Governing the Preparation of Financial Reports by Securities Issuers

Rule No. 1050050021 issued by Financial Supervisory Commission (FSC) stipulated that starting January 1, 2017, the Company should apply the amendments to the Regulations Governing the Preparation of Financial Reports by Securities Issuers.

The amendments include additions of several accounting items and requirements for disclosures of impairment of non-financial assets as a consequence of the IFRSs endorsed by the FSC for application starting from 2017. In addition, as a result of the post implementation review of IFRSs in Taiwan, the amendments also include emphasis on certain recognition and measurement considerations and add requirements for disclosures of related party transactions and goodwill.

The amendments stipulate that other companies or institutions of which the chairman of the board of directors or president serves as the chairman of the board of directors or the president, or is the spouse or second immediate family of the chairman of the board of directors or president of the Company are deemed to have a substantive related party relationship, unless it can be demonstrated that no control, joint control, or significant influence exists. Furthermore, the amendments require the disclosure of the names of the related parties and the relationship with whom the Company has significant transaction.

If the transaction or balance with a specific related party is 10% or more of the Company's respective total transaction or balance, such transaction should be separately disclosed by the name of each related party.

The amendments also require additional disclosure if there is a significant difference between the actual operation after business combination and the expected benefits on acquisition date.

The disclosures of related party transactions and impairment of goodwill will be enhanced when the above amendments are retrospectively applied in 2017.

Except for the aforementioned impact, as of the date that the accompanying consolidated financial statements were authorized for issue, the Company continues in evaluating the impact on its financial position and financial performance as a result of amendments to the Regulations Governing the Preparation of Financial Reports by Securities Issuers. The related impact will be disclosed when the Company completes the evaluation.

b. The IFRSs in issue and endorsed by FSC with effective date starting 2017

According to Rule No. 1050026834 issued by the FSC, the following IFRSs issued by the IASB and endorsed by the FSC should be adopted by the Company starting 2017.

New, Revised or Amended Standards and Interpretations	Effective Date Issued by IASB (Note 1)
Annual Improvements to IFRSs 2010 - 2012 Cycle	July 1, 2014 or transactions on or after July 1, 2014
Annual Improvements to IFRSs 2011 - 2013 Cycle	July 1, 2014
Annual Improvements to IFRSs 2012 - 2014 Cycle	January 1, 2016 (Note 2)
Amendments to IFRS 10, IFRS 12 and IAS 28 "Investment Entities: Applying the Consolidation Exception"	January 1, 2016
Amendment to IFRS 11 "Accounting for Acquisitions of Interests in Joint Operations"	January 1, 2016
Amendment to IAS 1 "Disclosure Initiative"	January 1, 2016
Amendments to IAS 16 and IAS 38 "Clarification of Acceptable Methods of Depreciation and Amortization"	January 1, 2016
Amendment to IAS 19 "Defined Benefit Plans: Employee Contributions"	July 1, 2014
Amendment to IAS 27 "Equity Method in Separate Financial Statements"	January 1, 2016
Amendment to IAS 36 "Recoverable Amount Disclosures for Non-Financial Assets"	January 1, 2014
Amendment to IAS 39 "Novation of Derivatives and Continuation of Hedge Accounting"	January 1, 2014

- Note 1: The aforementioned new, revised or amended standards or interpretations are effective after fiscal year beginning on or after the effective dates, unless specified otherwise.
- Note 2: The amendment to IFRS 5 is applied prospectively to changes in a method of disposal that occur in annual periods beginning on or after January 1, 2016; the remaining amendments are effective for annual periods beginning on or after January 1, 2016.

Except for the following, the Company believes that the adoption of aforementioned IFRSs with effective date starting 2017 will not have a significant effect on the Company's accounting policies:

#### 1) Amendments to IAS 36, "Recoverable Amount Disclosures for Non-Financial Assets"

The amendments to IAS 36 clarify that the Company is required to disclose the recoverable amount of an asset or a cash-generating unit only when an impairment loss on the asset has been recognized or reversed during the period. Furthermore, if the recoverable amount for which impairment loss has been recognized or reversed is fair value less costs of disposal, the Company is required to disclose the fair value hierarchy. If the fair value measurements are categorized within Level 2 or Level 3, the valuation technique and key assumptions used to measure the fair value are disclosed. The discount rate used is disclosed if such fair value less costs of disposal is measured by using present value technique. The Company expects the aforementioned amendments will result in a broader disclosure of recoverable amount for non-financial assets.

Except for the aforementioned impact, as of the date that the accompanying consolidated financial statements were authorized for issue, the Company continues in evaluating the impact on its financial position and financial performance as a result of IFRSs with effective date starting 2017. The related impact will be disclosed when the Company completes the evaluation.

#### c. The IFRSs issued by IASB but not yet endorsed by FSC

The Company has not applied the following IFRSs issued by the IASB but not endorsed by the FSC. The FSC announced that the Company should apply IFRS 9 and IFRS 15 starting January 1, 2018. As of the date the consolidated financial statements were authorized for issue, the FSC has not announced the effective dates of other new IFRSs.

New, Revised or Amended Standards and Interpretations	Effective Date Issued by IASB (Note 3)
Annual Improvements to IFRSs 2014-2016 Cycle	Note 4
Amendment to IFRS 2 "Classification and Measurement of Share-based Payment Transactions"	January 1, 2018
IFRS 9 "Financial Instruments"	January 1, 2018
Amendments to IFRS 9 and IFRS 7 "Mandatory Effective Date of IFRS 9 and Transition Disclosure"	January 1, 2018
Amendments to IFRS 10 and IAS 28 "Sale or Contribution of Assets between an Investor and its Associate or Joint Venture"	To be determined by IASB
IFRS 15 "Revenue from Contracts with Customers"	January 1, 2018
Amendment to IFRS 15 "Clarifications to IFRS 15"	January 1, 2018
IFRS 16 "Leases"	January 1, 2019
Amendment to IAS 7 "Disclosure Initiative"	January 1, 2017
Amendment to IAS 12 "Recognition of Deferred Tax Assets for Unrealized Losses"	January 1, 2017
IFRIC 22 "Foreign Currency Transactions and Advance Consideration"	January 1, 2018

- Note 3: The aforementioned new, revised or amended standards or interpretations are effective after fiscal year beginning on or after the effective dates, unless specified otherwise.
- Note 4: The amendment to IFRS 12 is retrospectively applied for annual periods beginning on or after January 1, 2017; the amendment to IAS 28 is retrospectively applied for annual periods beginning on or after January 1, 2018.

Except for the following items, the Company believes that the adoption of aforementioned standards or interpretations will not have a significant effect on the Company's accounting policies.

#### 1) IFRS 9, "Financial Instruments"

All recognized financial assets currently in the scope of IAS 39, "Financial Instruments: Recognition and Measurement," will be subsequently measured at either the amortized cost or the fair value. The classification and measurement requirements in IFRS 9 are stated as follows:

For the debt instruments invested by the Company, if the contractual cash flows that are solely for payments of principal and interest on the principal amount outstanding, the classification and measurement requirements are stated as follows:

- a) If the objective of the Company's business model is to hold the financial asset to collect the contractual cash flows, such assets are measured at the amortized cost. Interest revenue should be recognized in profit or loss by using the effective interest method, continuously assessed for impairment and the impairment loss or reversal of impairment loss should be recognized in profit and loss.
- b) If the objective of the Company's business model is to hold the financial asset both to collect the contractual cash flows and to sell the financial assets, such assets are measured at fair value through other comprehensive income and are continuously assessed for impairment. Interest revenue should be recognized in profit or loss by using the effective interest method. A gain or loss on a financial asset measured at fair value through other comprehensive income should be recognized in other comprehensive income, except for impairment gains or losses and foreign exchange gains and losses. When such financial asset is derecognized or reclassified, the cumulative gain or loss previously recognized in other comprehensive income is reclassified from equity to profit or loss.

The other financial assets which do not meet the aforementioned criteria should be measured at the fair value through profit or loss. However, the Company may irrevocably designate an investment in equity instruments that is not held for trading as measured at fair value through other comprehensive income. All relevant gains and losses shall be recognized in other comprehensive income, except for dividends which are recognized in profit or loss. No subsequent impairment assessment is required, and the cumulative gain or loss previously recognized in other comprehensive income cannot be reclassified from equity to profit or loss.

IFRS 9 adds a new expected loss impairment model to measure the impairment of financial assets. A loss allowance for expected credit losses should be recognized on financial assets measured at amortized cost and financial assets mandatorily measured at fair value through other comprehensive income. If the credit risk on a financial instrument has not increased significantly since initial recognition, the Company should measure the loss allowance for that financial instrument at an amount equal to 12-month expected credit losses. If the credit risk on a financial instrument has increased significantly since initial recognition and is not deemed to be a low credit risk, the Company should measure the loss allowance for that financial instrument at an amount equal to the lifetime expected credit losses. The Company should always measure the loss allowance at an amount equal to lifetime expected credit losses for trade receivables.

The main changes in hedge accounting amended the application requirements for hedge accounting to better reflect the entity's risk management activities. Compared with IAS 39, the main changes include: (1) enhancing types of transactions eligible for hedge accounting, specifically broadening the risks eligible for hedge accounting of non-financial items; (2) changing the way hedging derivative instruments are accounted for to reduce profit or loss volatility; and (3) replacing retrospective effectiveness assessment with the principle of economic relationship between the hedging instrument and the hedged item.

#### 2) IFRS 15, "Revenue from Contracts with Customers" and related amendment

IFRS 15 establishes principles for recognizing revenue that apply to all contracts with customers, and will supersede IAS 18, "Revenue," IAS 11, "Construction Contracts," and a number of revenue-related interpretations.

When applying IFRS 15, the Company shall recognize revenue by applying the following steps:

- Identify the contract with the customer;
- Identify the performance obligations in the contract;
- Determine the transaction price;
- Allocate the transaction price to the performance obligations in the contracts; and
- Recognize revenue when the entity satisfies a performance obligation.

When IFRS 15 and related amendment are effective, the Company may elect to apply this Standard either retrospectively to each prior reporting period presented or retrospectively with the cumulative effect of initially applying this Standard recognized at the date of initial application.

#### 3) IFRS 16, "Leases"

IFRS 16 sets out the accounting standards for leases that will supersede IAS 17 and a number of related interpretations.

Under IFRS 16, if the Company is a lessee, it shall recognize right-of-use assets and lease liabilities for all leases on the consolidated balance sheets except for low-value and short-term leases. The Company may elect to apply the accounting method similar to the accounting for operating lease under IAS 17 to the low-value and short-term leases. On the consolidated statements of comprehensive income, the Company should present the depreciation expense charged on the right-of-use asset separately from interest expense accrued on the lease liability; interest is computed by using effective interest method. On the consolidated statements of cash flows, cash payments for both the principal and interest portion of the lease liability are classified within financing activities.

When IFRS 16 becomes effective, the Company may elect to apply this Standard either retrospectively to each prior reporting period presented or retrospectively with the cumulative effect of the initial application of this Standard recognized at the date of initial application.

Except for the aforementioned impact, as of the date that the accompanying consolidated financial statements were authorized for issue, the Company continues in evaluating the impact on its financial position and financial performance as a result of the initial adoption of the other standards or interpretations. The related impact will be disclosed when the Company completes the evaluation.

#### 4. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

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

#### **Statement of Compliance**

The accompanying consolidated financial statements have been prepared in conformity with the Regulations Governing the Preparation of Financial Reports by Securities Issuers and the IFRSs endorsed by the FSC with the effective dates (collectively, "Taiwan-IFRSs").

#### **Basis of Preparation**

The accompanying consolidated financial statements have been prepared on the historical cost basis except for financial instruments that are measured at fair values, as explained in the accounting policies below. Historical cost is generally based on the fair value of the consideration given in exchange for the assets.

#### **Basis of Consolidation**

#### The basis for the consolidated financial statements

The consolidated financial statements incorporate the financial statements of TSMC and entities controlled by TSMC (its subsidiaries).

Income and expenses of subsidiaries acquired or disposed of are included in the consolidated statement of comprehensive income from the effective date of acquisition and up to the effective date of disposal, as appropriate. Total comprehensive income of subsidiaries is attributed to the shareholders of the parent and to the noncontrolling interests even if this results in the noncontrolling interests having a deficit balance.

When necessary, adjustments are made to the financial statements of subsidiaries to bring their accounting policies into line with those used by the Company.

All intra-group transactions, balances, income and expenses are eliminated in full on consolidation.

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

When the Company loses control of a subsidiary, a gain or loss is recognized in profit or loss and is calculated as the difference between:

- a. the aggregate of the fair value of consideration received and the fair value of any retained interest at the date when control is lost; and
- b. the previous carrying amount of the assets (including goodwill), and liabilities of the subsidiary and any noncontrolling interest.

The Company shall account for all amounts recognized in other comprehensive income in relation to the subsidiary on the same basis as would be required if the Company had directly disposed of the related assets and liabilities.

The fair value of any investment retained in the former subsidiary at the date when control is lost is regarded as the cost on initial recognition of an investment in an associate.

#### The subsidiaries in the consolidated financial statements

The detail information of the subsidiaries at the end of reporting period was as follows:

			Establishment	Percentage of	of Ownership	
Name of Investor	Name of Investee	Main Businesses and Products	and Operating Location	December 31, 2016	December 31, 2015	Note
TSMC	TSMC North America	Selling and marketing of integrated circuits and semiconductor devices	San Jose, California, U.S.A.	100%	100%	-
	TSMC Japan Limited (TSMC Japan)	Marketing activities	Yokohama, Japan	100%	100%	a)
	TSMC Partners, Ltd. (TSMC Partners)	Investing in companies involved in the design, manufacture, and other related business in the semiconductor industry	Tortola, British Virgin Islands	100%	100%	a)
	TSMC Korea Limited (TSMC Korea)	Customer service and technical supporting activities	Seoul, Korea	100%	100%	a)
	TSMC Europe B.V. (TSMC Europe)	Marketing and engineering supporting activities	Amsterdam, the Netherlands	100%	100%	a)
	TSMC Global, Ltd. (TSMC Global)	Investment activities	Tortola, British Virgin Islands	100%	100%	-
	TSMC China Company Limited (TSMC China)	Manufacturing and selling of integrated circuits at the order of and pursuant to product design specifications provided by customers	Shanghai, China	100%	100%	-
	TSMC Nanjing Company Limited (TSMC Nanjing)	Manufacturing and selling of integrated circuits at the order of and pursuant to product design specifications provided by customers	Nanjing, China	100%	-	b)
	VentureTech Alliance Fund III, L.P. (VTAF III)	Investing in new start-up technology companies	Cayman Islands	98%	98%	a)
	VentureTech Alliance Fund II, L.P. (VTAF II)	Investing in new start-up technology companies	Cayman Islands	98%	98%	a)
	Emerging Alliance Fund, L.P. (Emerging Alliance)	Investing in new start-up technology companies	Cayman Islands	-	99.5%	a), c)
	TSMC Solar Europe GmbH	Selling of solar related products and providing customer service	Hamburg, Germany	100%	100%	a), d)
	Chi Cherng Investment Co., Ltd. (Chi Cherng)	Investment activities	Taipei, Taiwan	87%	100%	e), f)
	VisEra Technologies Company Ltd. (VisEra Tech)	Engaged in manufacturing electronic spare parts and in researching, developing, designing, manufacturing, selling, packaging and testing of color filter	Hsin-Chu, Taiwan	8770	-	e),g)
TSMC Partners	TSMC Design Technology Canada Inc. (TSMC Canada)	Engineering support activities	Ontario, Canada	100%	100%	a)
	TSMC Technology, Inc. (TSMC Technology)	Engineering support activities	Delaware, U.S.A.	100%	100%	a)
	TSMC Development, Inc. (TSMC Development)	Investment activities	Delaware, U.S.A.	100%	100%	-
	InveStar Semiconductor Development Fund, Inc. (ISDF)	Investing in new start-up technology companies	Cayman Islands	97%	97%	a), h)
	InveStar Semiconductor Development Fund, Inc. (II) LDC. (ISDF II)	Investing in new start-up technology companies	Cayman Islands	97%	97%	a), h)
	VisEra Holding Company (VisEra Holding)	Investing in companies involved in the design, manufacturing and other related businesses in the semiconductor industry	Cayman Islands	-	98%	a), e), g)
TSMC Development	WaferTech, LLC (WaferTech)	Manufacturing, selling, testing and computer-aided designing of integrated circuits and other semiconductor devices	Washington, U.S.A.	100%	100%	-
VTAF III	Mutual-Pak Technology Co., Ltd. (Mutual-Pak)	Manufacturing of electronic parts, wholesaling and retailing of electronic materials, and researching, developing and testing of RFID	New Taipei, Taiwan	58%	58%	a)
	Growth Fund Limited (Growth Fund)	Investing in new start-up technology companies	Cayman Islands	100%	100%	a)
VTAF III, VTAF II and Emerging Alliance	VentureTech Alliance Holdings, LLC (VTA Holdings)	Investing in new start-up technology companies	Delaware, U.S.A.	-	100%	a), c)
VTAF III, VTAF II and TSMC	VentureTech Alliance Holdings, LLC (VTA Holdings)	Investing in new start-up technology companies	Delaware, U.S.A.	100%	-	a), c)
VisEra Holding	VisEra Tech	Engaged in manufacturing electronic spare parts and in researching, developing, designing, manufacturing, selling, packaging and testing of color filter	Hsin-Chu, Taiwan	-	87%	e), g)

Note a: This is an immaterial subsidiary for which the consolidated financial statements are not audited by the Company's independent accountants.

Note b: Under the investment agreement entered into with the municipal government of Nanjing, China on March 28, 2016, the Company will make an investment in Nanjing in the amount of approximately US\$3 billion to establish a subsidiary managing a 300mm wafer fab with the capacity of 20,000 12-inch wafers per month, and a design service center. TSMC Nanjing was established in May 2016.

Note c: Due to the expiration of the investment agreement between Emerging Alliance and TSMC, Emerging Alliance completed the liquidation procedures in April 2016. Emerging Alliance's ownership in VTA Holdings is held directly by TSMC.

Note d: In August 2015, TSMC Solar Ltd. (TSMC Solar) ceased its manufacturing operations. TSMC Solar and TSMC Guang Neng Investment, Ltd. (TSMC GN) were incorporated into TSMC in December 2015. After the incorporation, TSMC Solar Europe GmbH, the subsidiary of TSMC Solar, is held directly by TSMC and TSMC Solar Europe GmbH has started the liquidation procedures. TSMC Solar North America, Inc. (TSMC Solar NA), the subsidiary of TSMC Solar, completed the liquidation procedures in December 2015.

Note e: The Company acquired OmniVision Technologies, Inc.'s (OVT's) 49.1% ownership in VisEra Holding and 100% ownership in Taiwan OmniVision Investment Holding Co. (OVT Taiwan) on November 20, 2015. As a result, the Company has obtained controls of VisEra Holding and OVT Taiwan; therefore the Company has consolidated VisEra Holding, OVT Taiwan and VisEra Tech, held directly by VisEra Holding, since November 20, 2015. Please refer to Note 33.

Note f: OVT Taiwan that originally acquired by the Company was renamed as Chi Cherng in December 2015. Chi Cherng was incorporated into TSMC in December 2016.

Note g: To simplify investment structure, VisEra Tech owned by VisEra Holding was transferred to TSMC in the third quarter of 2016. In October 2016, VisEra Holding was incorporated into TSMC Partners, the subsidiary of TSMC.

#### **Foreign Currencies**

The financial statements of each individual consolidated entity were expressed in the currency which reflected its primary economic environment (functional currency). The functional currency of TSMC and presentation currency of the consolidated financial statements are both New Taiwan Dollars (NT\$). In preparing the consolidated financial statements, the operating results and financial positions of each consolidated entity are translated into NT\$.

In preparing the financial statements of each individual consolidated entity, transactions in currencies other than the entity's functional currency (foreign currencies) are recognized at the rates of exchange prevailing at the dates of the transactions. At the end of each reporting period, monetary items denominated in foreign currencies are retranslated at the rates prevailing at that date. Such exchange differences are recognized in profit or loss in the year in which they arise. Non-monetary items measured at fair value that are denominated in foreign currencies are retranslated at the rates prevailing at the date when the fair value was determined. Exchange differences arising on the retranslation of non-monetary items are included in profit or loss for the year except for exchange differences arising on the retranslation of non-monetary items in respect of which gains and losses are recognized directly in other comprehensive income, in which case, the exchange differences are also recognized directly in other comprehensive income. Non-monetary items that are measured in terms of historical cost in foreign currencies are not retranslated.

For the purposes of presenting consolidated financial statements, the assets and liabilities of the Company's foreign operations are translated into NT\$ using exchange rates prevailing at the end of each reporting period. Income and expense items are translated at the average exchange rates for the period. Exchange differences arising, if any, are recognized in other comprehensive income and accumulated in equity (attributed to noncontrolling interests as appropriate).

#### **Classification of Current and Noncurrent Assets and Liabilities**

Current assets are assets held for trading purposes and assets expected to be converted to cash, sold or consumed within one year from the end of the reporting period. Current liabilities are obligations incurred for trading purposes and obligations expected to be settled within one year from the end of the reporting period. Assets and liabilities that are not classified as current are noncurrent assets and liabilities, respectively.

#### **Cash Equivalents**

Cash equivalents, for the purpose of meeting short-term cash commitments, consist of highly liquid time deposits and investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

#### **Financial Instruments**

Financial assets and liabilities shall be recognized when the Company becomes a party to the contractual provisions of the instruments.

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

#### **Financial Assets**

Financial assets are classified into the following specified categories: Financial assets "at fair value through profit or loss" (FVTPL), "held-to-maturity" financial assets, "available-for-sale" financial assets and "loans and receivables". The classification depends on the nature and purpose of the financial assets and is determined at the time of initial recognition. Regular way purchases or sales of financial assets are recognized and derecognized on a trade date or settlement date basis for which financial assets were classified in the same way, respectively. Regular way purchases or sales are purchases or sales of financial assets that require delivery of assets within the time frame established by regulation or convention in the marketplace.

#### Financial assets at fair value through profit or loss

Financial assets are classified as at fair value through profit or loss when the financial asset is either held for trading or it is designated as at fair value through profit or loss.

Financial assets at fair value through profit or loss are stated at fair value, with any gains or losses arising on remeasurement recognized in profit or loss.

#### Held-to-maturity financial assets

Held-to-maturity investments are non-derivative financial assets with fixed or determinable payments and fixed maturity dates that the Company has the positive intent and ability to hold to maturity. Subsequent to initial recognition, held-to-maturity financial assets are measured at amortized cost using the effective interest method less any impairment.

#### Available-for-sale financial assets

Available-for-sale financial assets are non-derivative financial assets that are either designated as available-for-sale or are not classified as (a) loans and receivables, (b) held-to-maturity financial assets or (c) financial assets at fair value through profit or loss.

Available-for-sale financial assets are measured at fair value. Interest income from available-for-sale monetary financial assets and dividends on available-for-sale equity investments are recognized in profit or loss. Other changes in the carrying amount of available-for-sale financial assets are recognized in other comprehensive income. When the investment is disposed of or is determined to be impaired, the cumulative gain or loss previously recognized in other comprehensive income is reclassified to profit or loss.

Dividends on available-for-sale equity instruments are recognized in profit or loss when the Company's right to receive the dividends is established.

Available-for-sale equity instruments that do not have a quoted market price in an active market and whose fair value cannot be reliably measured are measured at cost less any identified impairment losses at the end of each reporting period. Such equity instruments are subsequently remeasured at fair value when their fair value can be reliably measured, and the difference between the carrying amount and fair value is recognized in profit or loss or other comprehensive income.

#### Loans and receivables

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. Loans and receivables including cash and cash equivalents, notes and accounts receivable and other receivables are measured at amortized cost using the effective interest method, less any impairment, except for those loans and receivables with immaterial discounted effect.

#### Impairment of financial assets

Financial assets, other than those carried at FVTPL, are assessed for indicators of impairment at the end of each reporting period. Those financial assets are considered to be impaired when there is objective evidence that, as a result of one or more events that occurred after the initial recognition of the financial assets, their estimated future cash flows have been affected.

For financial assets carried at amortized cost, such as trade receivables, assets that are assessed not to be impaired individually are, in addition, assessed for impairment on a collective basis. The Company assesses the collectability of receivables by performing the account aging analysis and examining current trends in the credit quality of its customers.

For financial assets carried at amortized cost, the amount of the impairment loss is the difference between the asset's carrying amount and the present value of estimated future cash flows, discounted at the financial asset's original effective interest rate.

For financial assets measured at amortized cost, if, in a subsequent period, the amount of the impairment loss decreases and the decrease can be related objectively to an event occurring after the impairment loss was recognized, the previously recognized impairment loss is reversed through profit or loss to the extent that the carrying amount of the financial assets at the date the impairment loss is reversed does not exceed what the amortized cost would have been had the impairment loss not been recognized.

When an available-for-sale financial asset is considered to be impaired, cumulative gains or losses previously recognized in other comprehensive income are reclassified to profit or loss in the year.

In respect of available-for-sale equity instruments, impairment losses previously recognized in profit or loss are not reversed through profit or loss. Any increase in fair value subsequent to the recognition of an impairment loss is recognized in other comprehensive income and accumulated under the heading of unrealized gains or losses from available-for-sale financial assets.

For financial assets carried at cost, the amount of the impairment loss is measured as the difference between the asset's carrying amount and the present value of the estimated future cash flows discounted at the current market rate of return for a similar financial asset. Such impairment loss will not be reversed in subsequent periods.

The carrying amount of the financial asset is reduced by the impairment loss directly for all financial assets with the exception of trade receivables, where the carrying amount is reduced through the use of an allowance account. When a trade receivable is considered uncollectible, it is written off against the allowance account. Subsequent recoveries of amounts previously written off are credited against the allowance account.

#### Derecognition of financial assets

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

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

#### **Financial Liabilities and Equity Instruments**

#### Classification as debt or equity

Debt and equity instruments issued by the Company are classified as either financial liabilities or as equity in accordance with the substance of the contractual arrangements and the definitions of a financial liability and an equity instrument.

#### **Equity instruments**

An equity instrument is any contract that evidences a residual interest in the assets of an entity after deducting all of its liabilities. Equity instruments issued by the Company are recognized at the proceeds received, net of direct issue costs.

#### Financial liabilities

Financial liabilities are subsequently measured either at amortized cost using effective interest method or at FVTPL.

Financial liabilities are classified as at fair value through profit or loss when the financial liability is either held for trading or is designated as at fair value through profit or loss.

Financial liabilities at fair value through profit or loss are stated at fair value, with any gains or losses arising on remeasurement recognized in profit or loss.

Financial liabilities other than those held for trading purposes and designated as at FVTPL are subsequently measured at amortized cost at the end of each reporting period.

#### Derecognition of financial liabilities

The Company derecognizes financial liabilities when, and only when, the Company's obligations are discharged, cancelled or they expire. The difference between the carrying amount of the financial liability derecognized and the consideration paid and payable is recognized in profit or loss.

#### **Derivative Financial Instruments**

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

#### Financial Instruments Designated as at Fair Value through Profit or Loss

A financial instrument may be designated as at fair value through profit or loss (FVTPL) upon initial recognition. The financial instrument forms part of a group of financial assets or financial liabilities or both, which is managed and its performance is evaluated on a fair value basis, in accordance with the Company's documented risk management or investment strategy, and information about the grouping is provided internally on that basis.

#### **Hedge Accounting**

The Company designates certain hedging instruments, which include stock forward contracts and interest rate futures contracts in respect of foreign currency risk, as fair value hedge. Changes in the fair value of derivatives that are designated and qualify as fair value hedges are recognized in profit or loss immediately. Hedge accounting is discontinued prospectively when the Company revokes the designated hedging

relationship, or when the hedging instrument expires or is sold, terminated, or exercised, or when it no longer meets the criteria for hedge accounting.

The effective portion of changes in the fair value of derivative financial instruments that are designated and qualify as cash flow hedges is recognized in other comprehensive income and accumulated under the heading of cash flow hedges reserve. Amounts previously recognized in other comprehensive income and accumulated in equity are reclassified to profit or loss in the period when the hedged item is recognized in profit or loss.

#### **Inventories**

Inventories are stated at the lower of cost or net realizable value. Inventories are recorded at standard cost and adjusted to approximate weighted-average cost at the end of the reporting period. Net realizable value represents the estimated selling price of inventories less all estimated costs of completion and costs necessary to make the sale.

#### **Noncurrent Assets Held for Sale**

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

When the committed sale plan involves loss of control of a subsidiary, all of the assets and liabilities of that subsidiary are classified as held for sale, regardless of whether a noncontrolling interest in its former subsidiary is retained after the sale.

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

#### **Investments Accounted for Using Equity Method**

Investments accounted for using the equity method include investments in associates and interests in joint venture.

An associate is an entity over which the Company has significant influence and that is neither a subsidiary nor a joint venture. Significant influence is the power to participate in the financial and operating policy decisions of the investee but is not control or joint control over those policies.

A joint venture is a joint arrangement whereby the Company and other parties that have joint control of the arrangement have rights to the net assets of the joint arrangement. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require unanimous consent of the parties sharing control.

The operating results and assets and liabilities of associates and joint venture are incorporated in these consolidated financial statements using the equity method of accounting. Under the equity method, an investment in an associate or a joint venture is initially recognized in the consolidated statement of financial position at cost and adjusted thereafter to recognize the Company's share of profit or loss and other comprehensive income of the associate and joint venture as well as the distribution received. The Company also recognizes its share in the changes in the equities of associates and joint venture.

Any excess of the cost of acquisition over the Company's share of the net fair value of the identifiable assets, liabilities and contingent liabilities of an associate or a joint venture recognized at the date of acquisition is recognized as goodwill, which is included within the carrying amount of the investment. Any excess of the Company's share of the net fair value of the identifiable assets, liabilities and contingent liabilities over the cost of acquisition, after reassessment, is recognized immediately in profit or loss.

When necessary, the entire carrying amount of the investment (including goodwill) is tested for impairment as a single asset by comparing its recoverable amount (higher of value in use and fair value less costs to sell) with its carrying amount. Any impairment loss recognized forms part of the carrying amount of the investment. Any reversal of that impairment loss is recognized to the extent that the recoverable amount of the investment subsequently increases.

The Company discontinues the use of the equity method from the date when the Company ceases to have significant influence over an associate. When the Company retains an interest in the former associate, the Company measures the retained interest at fair value at that date. The difference between the carrying amount of the associate at the date the equity method was discontinued, and the fair value of any retained interest and any proceeds from disposing of a part interest in the associate is included in the determination of the gain or loss on disposal of the associate. In addition, the Company shall account for all amounts recognized in other comprehensive income in relation to that associate on the same basis as would be required if the associate had directly disposed of the related assets or liabilities. If the Company's ownership interest in an associate is reduced as a result of disposal, but the investment continues to be an associate, the Company should reclassify to profit or loss only a proportionate amount of the gain or loss previously recognized in other comprehensive income.

When the Company subscribes to additional shares in an associate or a joint venture at a percentage different from its existing ownership percentage, the resulting carrying amount of the investment differs from the amount of the Company's proportionate interest in the net assets of the associate or joint venture. The Company records such a difference as an adjustment to investments with the corresponding amount charged or credited to capital surplus. If the Company's ownership interest is reduced due to the additional subscription to the shares of associate or joint venture by other investors, the proportionate amount of the gains or losses previously recognized in other comprehensive income in relation to that associate or joint venture shall be reclassified to profit or loss on the same basis as would be required if the associate or joint venture had directly disposed of the related assets or liabilities.

When a consolidated entity transacts with an associate or a joint venture, profits and losses resulting from the transactions with the associate or joint venture are recognized in the Company's consolidated financial statements only to the extent of interests in the associate or joint venture that are not owned by the Company.

#### **Property, Plant and Equipment**

Property, plant and equipment are measured at cost less accumulated depreciation and accumulated impairment. Costs include any incremental costs that are directly attributable to the construction or acquisition of the item of property, plant and equipment.

Properties in the course of construction for production, supply or administrative purposes are carried at cost, less any recognized impairment loss. Such properties are classified to the appropriate categories of property, plant and equipment when completed and ready for intended use. Depreciation of these assets, on the same basis as other property assets, commences when the assets are ready for their intended use.

Depreciation is recognized so as to write off the cost of the assets less their residual values over their useful lives, and it is computed using the straight-line method over the following estimated useful lives: land improvements - 20 years; buildings - 5 to 20 years; machinery and equipment - 2 to 5 years; office equipment - 3 to 15 years; and leased assets - 20 years. The estimated useful lives, residual values and depreciation method are reviewed at the end of each reporting period, with the effect of any changes in estimates accounted for on a prospective basis. Land is not depreciated.

Assets held under finance leases are depreciated over their expected useful lives on the same basis as owned assets. However, when there is no reasonable certainty that ownership will be obtained by the end of the lease term, assets are depreciated over the shorter of the lease term and their useful lives.

An item of property, plant and equipment is derecognized upon disposal or when no future economic benefits are expected to arise from the continued use of the assets. Any gain or loss arising on the disposal or retirement of an item of property, plant and equipment is determined as the difference between the sales proceeds and the carrying amount of the asset and is recognized in profit or loss.

#### Leases

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

#### The Company as lessor

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

#### The Company as lessee

Assets held under finance lease are initially recognized as assets of the Company at the fair value at the inception of the lease or, if lower, at the present value of the minimum lease payments. The corresponding liability to the lessor is included in the consolidated balance sheet as an obligation under finance lease.

Lease payments are apportioned between finance expense and reduction of the lease obligation so as to achieve a constant rate of interest on the remaining balance of the liability.

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

#### **Intangible Assets**

#### Goodwill

Goodwill arising on an acquisition of a business is carried at cost as established at the date of acquisition of the business less accumulated impairment losses, if any.

#### Other intangible assets

Other separately acquired intangible assets with finite useful lives are carried at cost less accumulated amortization and accumulated impairment losses. Amortization is recognized using the straight-line method over the following estimated useful lives: Technology license fees - the estimated life of the technology or the term of the technology transfer contract; software and system design costs - 3 years or contract period; patent and others - the economic life or contract period. The estimated useful life and amortization method are reviewed at the end of each reporting period, with the effect of any changes in estimate being accounted for on a prospective basis.

#### Impairment of Tangible and Intangible Assets

#### Goodwill

Goodwill is not amortized and instead is tested for impairment annually, or more frequently when there is an indication that the cash generating unit may be impaired. For the purpose of impairment testing, goodwill is allocated to each of the Company's cash-generating units or groups of cash-generating units

that are expected to benefit from the synergies of the combination. If the recoverable amount of a cash-generating unit is less than its carrying amount, the difference is allocated first to reduce the carrying amount of any goodwill allocated to such cash generating unit and then to the other assets of the cash generating unit pro rata based on the carrying amount of each asset in the cash generating unit. Any impairment loss for goodwill is recognized directly in profit or loss. An impairment loss recognized for goodwill is not reversed in subsequent periods.

#### Other tangible and intangible assets

At the end of each reporting period, the Company reviews the carrying amounts of its tangible and intangible assets to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss. When it is not possible to estimate the recoverable amount of an individual asset, the Company estimates the recoverable amount of the cash-generating unit to which the asset belongs. When a reasonable and consistent basis of allocation can be identified, corporate assets are also allocated to individual cash-generating units, or otherwise they are allocated to the smallest group of cash-generating units for which a reasonable and consistent allocation basis can be identified.

Recoverable amount is the higher of fair value less costs to sell and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset for which the estimates of future cash flows have not been adjusted.

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

When an impairment loss subsequently reverses, the carrying amount of the asset or a cash-generating unit is increased to the revised estimate of its recoverable amount, but the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognized for the asset or cash-generating unit in prior years. A reversal of an impairment loss is recognized immediately in profit or loss.

#### **Provision**

Provisions are recognized when the Company has a present obligation (legal or constructive) as a result of a past event, it is probable that the Company will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation.

The amount recognized as a provision is the best estimate of the consideration required to settle the present obligation at the end of the reporting period, taking into account the risks and uncertainties surrounding the obligation. When a provision is measured using the cash flows estimated to settle the present obligation, its carrying amount is the present value of those cash flows.

#### **Guarantee Deposit**

Guarantee deposit mainly consists of cash received under deposit agreements with customers to ensure they have access to the Company's specified capacity; and as guarantee of accounts receivable to ensure payment from customers. Cash received from customers is recorded as guarantee deposit upon receipt. Guarantee deposits are refunded to customers when terms and conditions set forth in the deposit agreements have been satisfied.

#### **Revenue Recognition**

Revenue is measured at the fair value of the consideration received or receivable. Revenue is reduced for estimated customer returns, rebates and other similar allowances.

#### Sale of goods

Revenue from the sale of goods is recognized when the goods are delivered and titles have passed, at which time all the following conditions are satisfied:

- The Company has transferred to the buyer the significant risks and rewards of ownership of the goods;
- The Company retains neither continuing managerial involvement to the degree usually associated with ownership nor effective control over the goods sold;
- The amount of revenue can be measured reliably;
- It is probable that the economic benefits associated with the transaction will flow to the Company; and
- The costs incurred or to be incurred in respect of the transaction can be measured reliably.

In principle, payment term granted to customers is due 30 days from the invoice date or 30 days from the end of the month of when the invoice is issued. Due to the short term nature of the receivables from sale of goods with the immaterial discounted effect, the Company measures them at the original invoice amounts without discounting.

#### Royalties, dividend and interest income

Revenue from royalties is recognized on an accrual basis in accordance with the substance of the relevant agreement, provided that it is probable that the economic benefits will flow to the Company and the amount of revenue can be measured reliably.

Dividend income from investments is recognized when the shareholder's right to receive payment has been established, provided that it is probable that the economic benefits will flow to the Company and the amount of income can be measured reliably.

Interest income from a financial asset is recognized when it is probable that the economic benefits will flow to the Company and the amount of income can be measured reliably. Interest income is accrued on a time basis, by reference to the principal outstanding and at the effective interest rate applicable.

#### **Employee Benefits**

#### Short-term employee benefits

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

#### Retirement benefits

For defined contribution retirement benefit plans, payments to the benefit plan are recognized as an expense when the employees have rendered service entitling them to the contribution. For defined benefit retirement benefit plans, the cost of providing benefit is recognized based on actuarial calculations.

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

Net defined benefit liability represents the actual deficit in the Company's defined benefit plan.

#### **Share-based Payment Arrangements**

The Company elected to take the optional exemption under IFRS 1 for the share-based payment transactions granted and vested before January 1, 2012, the date of transition to Taiwan-IFRSs. There were no stock options granted prior to but unvested at the date of transition.

The compensation costs of employee stock options that were granted after January 1, 2012 are measured at the fair value of the stock options at the grant date. The fair value of the stock option granted determined at the grant date of the stock options is expensed on a straight-line basis over the vesting period, based on the Company's estimate of the number of stock options that will eventually vest, with a corresponding increase in capital surplus - employee stock option. The estimate is revised if subsequent information indicates that the number of stock options expected to vest differs from original estimates.

#### **Taxation**

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

#### Current tax

Income tax on unappropriated earnings (excluding earnings from foreign consolidated subsidiaries) at a rate of 10% is expensed in the year the shareholders approved the appropriation of earnings which is the year subsequent to the year the earnings are generated.

Adjustments of prior years' tax liabilities are added to or deducted from the current year's tax provision.

#### Deferred tax

Deferred tax is recognized on temporary differences between the carrying amounts of assets and liabilities in the consolidated financial statements and the corresponding tax bases used in the computation of taxable profit. Deferred tax liabilities are generally recognized for all taxable temporary differences. Deferred tax assets are generally recognized for all deductible temporary differences, net operating loss carryforwards and unused tax credits to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilized.

Deferred tax liabilities are recognized for taxable temporary differences associated with investments in subsidiaries and associates, and interests in joint venture, except where the Company is able to control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred tax assets arising from deductible temporary differences associated with such investments are only recognized to the extent that it is probable that there will be sufficient taxable profits against which to utilize the benefits of the temporary differences and they are expected to reverse in the foreseeable future.

The carrying amount of deferred tax assets is reviewed at the end of each reporting period and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the deferred tax asset to be recovered. The deferred tax assets which originally not recognized is also reviewed at the end of each reporting period and recognized to the extent that it is probable that sufficient taxable profits will be available to allow all or part of the deferred tax asset to be recovered.

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

#### Current and deferred tax for the year

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

#### **Business Combinations**

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

Goodwill is measured as the excess of the sum of the consideration transferred, the amount of any noncontrolling interests in the acquiree, and the fair value of the acquirer's previously held equity interest in the acquiree over the net of the acquisition-date amounts of the identifiable assets acquired and the liabilities assumed.

Noncontrolling interests are initially measured at the noncontrolling interests' proportionate share of the fair value of the acquiree's identifiable net assets.

When a business combination is achieved in stages, the Company's previously held equity interest in the acquiree is remeasured to fair value at the acquisition date, and the resulting gain or loss is recognized in profit or loss.

#### **Insurance Claim**

The Company recognizes insurance claim reimbursement for losses incurred related to disaster damages. Insurance claim reimbursements are recorded, net of any deductible amounts, at the time while there is evidence that the claim reimbursement is virtually certain to be received.

#### **Government Grants**

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

Government grants whose primary condition is that the Company should purchase, construct or otherwise acquire non-current assets (mainly including land use right and depreciable assets) are recognized as a deduction from the carrying amount of the related assets and recognized as a reduced depreciation or amortization charge in profit or loss over the contract period or useful lives of the related assets. Government grants that are receivables as compensation for expenses already incurred are deducted from incurred expenses in the period in which they become receivables.

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

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

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

The following are the critical judgments, apart from those involving estimations, that the directors have made in the process of applying the Company's accounting policies and that have the most significant effect on the amounts recognized in the consolidated financial statements.

#### **Revenue Recognition**

The Company recognizes revenue when the conditions described in Note 4 are satisfied. The Company also records a provision for estimated future returns and other allowances in the same period the related revenue is recorded. Provision for estimated sales returns and other allowances is generally made and adjusted based on historical experience and the consideration of varying contractual terms, and our management periodically reviews the adequacy of the estimation used.

#### Impairment of Tangible and Intangible Assets Other than Goodwill

In the process of evaluating the potential impairment of tangible and intangible assets other than goodwill, the Company is required to make subjective judgments in determining the independent cash flows, useful lives, expected future revenue and expenses related to the specific asset groups with the consideration of the nature of semiconductor industry. Any changes in these estimates based on changed economic conditions or business strategies could result in significant impairment charges or reversal in future years.

#### **Impairment of Goodwill**

The assessment of impairment of goodwill requires the Company to make subjective judgment to determine the identified cash-generating units, allocate the goodwill to relevant cash-generating units and estimate the recoverable amount of relevant cash-generating units.

#### **Impairment Assessment on Investment Using Equity Method**

The Company assesses the impairment of investments accounted for using the equity method whenever triggering events or changes in circumstances indicate that an investment may be impaired and carrying value may not be recoverable. The Company measures the impairment based on a projected future cash flow of the investees, including the underlying assumptions of sales growth rate and capacity utilization rate formulated by such investees' internal management team. The Company also takes into account market conditions and the relevant industry trends to ensure the reasonableness of such assumptions.

#### **Realization of Deferred Income Tax Assets**

Deferred tax assets are recognized to the extent that it is probable that future taxable profits will be available against which those deferred tax assets can be utilized. Assessment of the realization of the deferred tax assets requires the Company's subjective judgment and estimate, including the future revenue growth and profitability, tax holidays, the amount of tax credits can be utilized and feasible tax planning strategies. Any changes in the global economic environment, the industry trends and relevant laws and regulations could result in significant adjustments to the deferred tax assets.

#### Valuation of Inventory

Inventories are stated at the lower of cost or net realizable value, and the Company uses judgment and estimate to determine the net realizable value of inventory at the end of each reporting period.

Due to the rapid technological changes, the Company estimates the net realizable value of inventory for obsolescence and unmarketable items at the end of reporting period and then writes down the cost of inventories to net realizable value. The net realizable value of the inventory is mainly determined based on assumptions of future demand within a specific time horizon.

#### **Recognition and Measurement of Defined Benefit Plans**

Net defined benefit liability and the resulting defined benefit costs under defined benefit pension plans are calculated using the Projected Unit Credit Method. Actuarial assumptions comprise the discount rate, rate of employee turnover, and future salary increase rate. Changes in economic circumstances and market conditions will affect these assumptions and may have a material impact on the amount of the expense and the liability.

#### 6. CASH AND CASH EQUIVALENTS

	December 31, 2016	December 31, 2015
Cash and deposits in banks Repurchase agreements collateralized by corporate bonds Commercial paper Repurchase agreements collateralized by government bonds	\$ 536,895,344 2,361,250 1,997,239	\$ 557,270,910 5,132,778 - 285,242
Reputchase agreements conateranzed by government bonds	<u>\$ 541,253,833</u>	\$ 562,688,930

Deposits in banks consisted of highly liquid time deposits that were readily convertible to known amounts of cash and were subject to an insignificant risk of changes in value.

#### 7. FINANCIAL ASSETS AND LIABILITIES AT FAIR VALUE THROUGH PROFIT OR LOSS

	December 31, 2016	December 31, 2015
<u>Financial assets</u>		
Held for trading Forward exchange contracts Cross currency swap contracts	\$ 142,406	\$ 6,026
Designated as at FVTPL Time deposit Forward exchange contracts	6,297,708 22 6,297,730 \$ 6,451,112	\$ 6,026
Financial liabilities	<u>\$\psi_0,\psi_1,112</u>	<del>ψ 0,020</del>
Held for trading Forward exchange contracts Designated as at FVTPL Forward exchange contracts	\$ 91,585 <u>99,550</u>	\$ 72,610 
	<u>\$ 191,135</u>	\$ 72,610

The Company entered into derivative contracts to manage exposures due to fluctuations of foreign exchange rates. The derivative contracts entered into by the Company did not meet the criteria for hedge accounting. Therefore, the Company did not apply hedge accounting treatment for derivative contracts.

Outstanding forward exchange contracts consisted of the following:

	Maturity Date	Contract Amount (In Thousands)
<u>December 31, 2016</u>		
Sell NT\$/Buy EUR Sell NT\$/Buy JPY Sell US\$/Buy EUR Sell US\$/Buy JPY Sell US\$/Buy NT\$ Sell US\$/Buy RMB	January 2017 January 2017 January 2017 January 2017 January 2017 January 2017 to February 2017 January 2017 to June 2017	NT\$5,393,329/EUR159,400 NT\$7,314,841/JPY26,501,800 US\$4,180/EUR4,000 US\$428/JPY50,000 US\$439,000/NT\$14,138,202 US\$421,750/RMB2,908,380
December 31, 2015  Sell US\$/Buy JPY Sell US\$/Buy RMB Sell US\$/Buy NT\$	January 2016 January 2016 January 2016 to February 2016	US\$128,418/JPY15,449,355 US\$226,000/RMB1,464,472 US\$440,000/NT\$14,434,179

Outstanding cross currency swap contracts consisted of the following:

Maturity Date	Contract Amount (In Thousands)	Range of Interest Rates Paid	Range of Interest Rates Received
<u>December 31, 2016</u>			
January 2017	US\$170,000/NT\$5,487,600	3.98%	-

#### 8. AVAILABLE-FOR-SALE FINANCIAL ASSETS

	December 31, 2016	December 31, 2015
Corporate bonds	\$ 29,999,508	\$ 6,267,768
Agency bonds	14,880,482	2,627,367
Corporate issued asset-backed securities	11,254,757	3,154,366
Government bonds	8,457,362	878,377
Publicly traded stocks	3,196,658	1,371,483
	<u>\$ 67,788,767</u>	<u>\$ 14,299,361</u>

#### 9. HELD-TO-MATURITY FINANCIAL ASSETS

	December 31, 2016	December 31, 2015
Corporate bonds/Bank debentures Commercial paper Negotiable certificate of deposit Structured product	\$ 23,849,701 8,628,176 4,829,850 1,609,950	\$ 8,143,146 4,934,250 3,000,000
	<u>\$ 38,917,677</u>	<u>\$ 16,077,396</u>
Current portion Noncurrent portion	\$ 16,610,116	\$ 9,166,523 6,910,873
	<u>\$ 38,917,677</u>	<u>\$ 16,077,396</u>

#### 10. HEDGING DERIVATIVE FINANCIAL INSTRUMENTS

	December 31, 2016	December 31, 2015
Financial assets- current		
Fair value hedges Interest rate futures contracts	<u>\$ 5,550</u>	<u>\$ 1,739</u>

The Company entered into interest rate futures contracts, which are used to hedge against price risk caused by changes in interest rates in the Company's investments in fixed income securities.

The outstanding interest rate futures contracts consisted of the following:

Maturity Period	Contract Amount (US\$ in Thousands)
<u>December 31, 2016</u>	
March 2017	US\$ 53,600
<u>December 31, 2015</u>	
March 2016	US\$ 13,800

#### 11. NOTES AND ACCOUNTS RECEIVABLE, NET

	December 31, 2016	December 31, 2015
Notes and accounts receivable Allowance for doubtful receivables	\$ 128,815,389 (480,118)	\$ 85,547,926 (488,251)
Notes and accounts receivable, net	<u>\$ 128,335,271</u>	\$ 85,059,675

In principle, the payment term granted to customers is due 30 days from the invoice date or 30 days from the end of the month of when the invoice is issued. The allowance for doubtful receivables is assessed by reference to the collectability of receivables by performing the account aging analysis, historical experience and current financial condition of customers.

Except for those impaired, for the rest of the notes and accounts receivable, the account aging analysis at the end of the reporting period is summarized in the following table. Notes and accounts receivable include amounts that are past due but for which the Company has not recognized a specific allowance for doubtful receivables after the assessment since there has not been a significant change in the credit quality of its customers and the amounts are still considered recoverable. In addition, the Company has obtained guarantee to certain receivables.

#### Aging analysis of notes and accounts receivable, net

		December 31, 2016	December 31, 2015
Neither past due nor impaired		\$ 108,411,408	\$ 71,482,666
Past due but not impaired Past due within 30 days Past due 31-60 days Past due 61-120 days		15,017,824 1,844,726 3,061,313	13,577,009
		<u>\$ 128,335,271</u>	\$ 85,059,675
Movements of the allowance for doubtful receivable	les		
	Individually Assessed for Impairment	Collectively Assessed for Impairment	Total
Balance at January 1, 2016 Provision Reversal/Write-off Effect of exchange rate changes	\$ 10,241 (8,393)	\$ 478,010 321 - (61)	\$ 488,251 321 (8,393) (61)
Balance at December 31, 2016	<u>\$ 1,848</u>	<u>\$ 478,270</u>	<u>\$ 480,118</u>
Balance at January 1, 2015 Provision Reversal/Write-off Effect of acquisition of subsidiary Effect of exchange rate changes	\$ 8,093 28,593 (29,065) 1,847 773	\$ 478,637 4,814 (4,737) - (704)	\$ 486,730 33,407 (33,802) 1,847 <u>69</u>
Balance at December 31, 2015	<u>\$ 10,241</u>	<u>\$ 478,010</u>	<u>\$ 488,251</u>
Aging analysis of accounts receivable that is individually determined as impaired			
		December 31, 2016	December 31, 2015

	December 31, 2016	December 31, 2015
Past due over 121 days	<u>\$ 1,848</u>	<u>\$ 10,241</u>

### 12. INVENTORIES

	December 31, 2016	December 31, 2015
Finished goods Work in process Raw materials Supplies and spare parts	\$ 8,521,873 33,330,870 4,012,190 	\$ 7,974,902 53,632,056 3,038,756 2,406,556
	<u>\$ 48,682,233</u>	<u>\$ 67,052,270</u>

Write-down of inventories to net realizable value (excluding earthquake losses) in the amount of NT\$1,542,779 thousand and NT\$464,361 thousand, respectively, were included in the cost of revenue for the years ended December 31, 2016 and 2015. Please refer to related earthquake losses in Note 41.

# 13. FINANCIAL ASSETS CARRIED AT COST

	December 31, 2016	December 31, 2015
Non-publicly traded stocks Mutual funds	\$ 2,944,859 	\$ 3,268,100 <u>722,782</u>
	<u>\$ 4,102,467</u>	\$ 3,990,882

Since there is a wide range of estimated fair values of the Company's investments in non-publicly traded stocks, the Company concludes that the fair value cannot be reliably measured and therefore should be measured at the cost less any impairment.

The stocks of Impinj, Inc. and Richwave Technology Corp. were listed in July 2016 and November 2015, respectively. Accordingly, the Company reclassified the aforementioned investments from financial assets carried at cost to available-for-sale financial assets.

### 14. INVESTMENTS ACCOUNTED FOR USING EQUITY METHOD

### a. Investments in associates

Associates consisted of the following:

		Place of		Carrying	Amo	ount	% of Ownersl Rights Held by	nip and Voting of the Company
Name of Associate	Principal Activities	Incorporation and Operation	De	cember 31, 2016	De	cember 31, 2015	December 31, 2016	December 31, 2015
Vanguard International Semiconductor Corporation (VIS)	Research, design, development, manufacture, packaging, testing and sale of memory integrated circuits, LSI, VLSI and related parts	Hsinchu, Taiwan	\$	8,806,384	\$	8,446,054	28%	28%
Systems on Silicon Manufacturing Company Pte Ltd. (SSMC)	Fabrication and supply of integrated circuits	Singapore		7,163,516		9,511,515	39%	39%
Xintec Inc. (Xintec)	Wafer level chip size packaging service	Taoyuan, Taiwan		2,599,807		2,928,362	41%	41%
								(Continued)

		Place of		Carrying	Amo	ount		ship and Voting by the Company
Name of Associate	<b>Principal Activities</b>	Incorporation and Operation	De	cember 31, 2016	De	cember 31, 2015	December 31, 2016	December 31, 2015
Global Unichip Corporation (GUC)	Researching, developing, manufacturing, testing and marketing of integrated circuits	Hsinchu, Taiwan	\$	1,174,181	\$	1,152,335	35%	35%
Motech Industries, Inc. (Motech)	Manufacturing and sales of solar cells, crystalline silicon solar cell, and test and measurement instruments and design and construction of solar power systems	New Taipei, Taiwan	_	-	_	2,053,562	-	12%
			\$	19,743,888	\$	24,091,828		(Concluded)

Starting June 2016, the Company has no longer served as Motech's board of director. As a result, the Company exercises no significant influence over Motech. Therefore, Motech is no longer accounted for using the equity method. Further, such investment was reclassified to available-for-sale financial assets and the Company recognized a disposal loss of NT\$259,960 thousand.

In June 2015, Motech merged with Topcell Solar International Co., Ltd with exchange of shares. As a result, the Company's percentage of ownership over Motech decreased to 18.0%. In the fourth quarter of 2015, the Company sold 29,160 thousand common shares of Motech and recognized a disposal gain of NT\$202,384 thousand. After the sale, the Company's percentage of ownership over Motech decreased to 12.0%. Motech continued to be accounted for using equity method as the Company still retained significant influence over Motech.

The Company acquired OVT's 49.1% ownership in VisEra Holding on November 20, 2015. As a result, the Company has obtained control of VisEra Holding and consolidated VisEra Holding since November 20, 2015. The Company included the Xintec shares held by VisEra Holding and total percentage of ownership over Xintec increased to 41.4%. To simplify investment structure, Xintec owned by VisEra Holding was transferred to TSMC in the third quarter of 2016.

In March 2015, Xintec listed its shares on the R.O.C. Over-the-Counter (Taipei Exchange). Consequently, the Company's percentage of ownership over Xintec was diluted to approximately 35.4%. In April 2015, the Company sold 2,172 thousand common shares of Xintec and recognized a disposal gain of NT\$43,017 thousand.

In the second quarter of 2015, the Company sold 82,000 thousand common shares of VIS and recognized a disposal gain of NT\$2,263,539 thousand. After the sale, the Company owned approximately 28.3 % of the equity interest in VIS.

The summarized financial information in respect of each of the Company's material associates is set out below. The summarized financial information below represents amounts shown in the associate's financial statements prepared in accordance with Taiwan-IFRSs adjusted by the Company using the equity method of accounting.

### 1) VIS

	December 31, 2016	December 31, 2015
Current assets	\$ 25,662,921	\$ 24,800,749
Noncurrent assets	\$ 9,501,442	\$ 7,785,093
Current liabilities	\$ 5,476,672	\$ 4,262,001
Noncurrent liabilities	<u>\$ 804,107</u>	<u>\$ 712,611</u>

	Years Ended December 31			
	2016	2015		
Net revenue	\$ 25,828,634	\$ 23,319,721		
Income from operations	<u>\$ 6,083,625</u>	<u>\$ 4,593,430</u>		
Net income	<u>\$ 5,520,645</u>	<u>\$ 4,139,031</u>		
Other comprehensive income (loss)	<u>\$ 5,592</u>	<u>\$ (61,886)</u>		
Total comprehensive income	<u>\$ 5,526,237</u>	<u>\$ 4,077,145</u>		
Cash dividends received	<u>\$ 1,206,981</u>	<u>\$ 1,206,414</u>		

Reconciliation of the above summarized financial information to the carrying amount of the interest in the associate recognized in the consolidated balance sheets was as follows:

		December 31, 2016	December 31, 2015
	Net assets Percentage of ownership The Company's share of net assets of the associate Goodwill	\$ 28,883,584	\$ 27,611,230
	Carrying amount of the investment	\$ 8,806,384	<u>\$ 8,446,054</u>
2)	SSMC		
		December 31, 2016	December 31, 2015
	Current assets Noncurrent assets Current liabilities Noncurrent liabilities	\$ 14,585,150 \$ 5,360,076 \$ 1,746,602 \$ 286,340	\$ 20,078,179 \$ 6,144,263 \$ 1,954,057 \$ 303,217
		Years Ended	
		2016	2015
	Net revenue Income from operations Net income Total comprehensive income Cash dividends received	\$ 14,045,927 \$ 4,921,735 \$ 4,918,140 \$ 4,918,140 \$ 4,076,170	\$ 15,026,016 \$ 5,802,261 \$ 5,904,586 \$ 5,904,586 \$ 1,556,592

Reconciliation of the above summarized financial information to the carrying amount of the interest in the associate recognized in the consolidated balance sheets was as follows:

	December 31, 2016	December 31, 2015
Net assets	\$ 17,912,284	\$ 23,965,168
Percentage of ownership	<u>39%</u>	39%
The Company's share of net assets of the associate	6,948,175	9,296,089
Goodwill	213,984	213,984
Other adjustments	1,357	1,442
Carrying amount of the investment	<u>\$ 7,163,516</u>	<u>\$ 9,511,515</u>

Aggregate information of associates that are not individually material was summarized as follows:

	Years Ended December 31			
	2016	2015		
The Company's share of profits (losses) of associates	<u>\$ 23,140</u>	<u>\$ (171,358)</u>		
The Company's share of other comprehensive income (loss) of associates	\$ (5,244)	\$ 7,880		
The Company's share of total comprehensive income (loss)		÷ (1.52.170)		
of associates	<u>\$ 17,896</u>	<u>\$ (163,478</u> )		

The market prices of the investments accounted for using the equity method in publicly traded stocks calculated by the closing price at the end of the reporting period are summarized as follows. The closing price represents the quoted price in active markets, the level 1 fair value measurement.

Name of Associate	December 31, 2016	December 31, 2015
VIS	<u>\$ 26,089,360</u>	<u>\$ 19,868,766</u>
GUC	<u>\$ 3,664,997</u>	\$ 3,081,399
Xintec	<u>\$ 3,622,227</u>	\$ 3,605,534
Motech		<u>\$ 2,636,054</u>

# b. Investments in joint venture

The Company and OVT entered into a joint agreement to invest in VisEra Holding. The Company acquired OVT's 49.1% ownership in VisEra Holding on November 20, 2015. As a result, the Company has obtained control of VisEra Holding and consolidated VisEra Holding since November 20, 2015. Please refer to Note 33 for related disclosures.

# 15. PROPERTY, PLANT AND EQUIPMENT

	Land and Land Improvements	Buildings	Machinery and Equipment	Office Equipment	Assets under Finance Leases	Equipment under Installation and Construction in Progress	Total
Cost							
Balance at January 1, 2016 Additions Disposals or retirements Reclassification Effect of exchange rate changes	\$ 4,067,391 - - (18,099)	\$ 296,801,864 9,113,314 (13,372) (1,497,332)	\$ 1,893,489,604 156,874,203 (3,094,143) - (4,401,920)	\$ 30,700,049 4,584,087 (469,235) 7,113 (92,374)	\$ 7,113 - (7,113)	\$ 192,111,548 195,255,966 - - (167,839)	\$ 2,417,177,569 365,827,570 (3,576,750) 
Balance at December 31, 2016	\$ 4,049,292	\$ 304,404,474	\$ 2,042,867,744	\$ 34,729,640	<u>s -</u>	\$ 387,199,675	\$ 2,773,250,825
Accumulated depreciation							
Balance at January 1, 2016 Additions Disposals or retirements Reclassification Effect of exchange rate changes	\$ 506,185 29,440 - (10,780)	\$ 157,910,155 17,540,470 (7,326) - (1,094,222)	\$ 1,385,857,655 198,189,423 (3,049,502) 	\$ 19,426,069 4,325,665 (468,401) 7,113 (68,739)	\$ 7,113 - - (7,113)	S	\$ 1,563,707,177 220,084,998 (3,525,229) 
Balance at December 31, 2016	<u>\$ 524,845</u>	\$ 174,349,077	<u>\$ 1,577,377,509</u>	\$ 23,221,707	<u>s -</u>	<u>s -</u>	<u>\$ 1,775,473,138</u>
Carrying amounts at December 31, 2016	\$ 3,524,447	\$ 130,055,397	\$ 465,490,235	<u>\$ 11,507,933</u>	<u>s -</u>	\$ 387,199,675	\$ 997,777,687
Cost							
Balance at January 1, 2015 Additions Disposals or retirements Lease agreement modification Effect of acquisition of subsidiary Effect of exchange rate changes	\$ 4,036,785	\$ 269,163,850 26,960,460 (74,941) - 624,731 127,764	\$ 1,754,170,227 142,090,400 (5,923,022) - 1,402,023 1,749,976	\$ 27,960,835 3,428,660 (1,170,037) - - - - - - - - - - - - - - - - - - -	\$ 841,154 - (824,129) - (9,912)	\$ 109,334,736 82,595,294 - - 176,549 4,969	\$ 2,165,507,587 255,074,814 (7,168,000) (824,129) 2,651,209 1,936,088
Balance at December 31, 2015	\$ 4,067,391	\$ 296,801,864	\$_1,893,489,604	\$ 30,700,049	<u>\$ 7,113</u>	<u>\$ 192,111,548</u>	<u>\$.2,417,177,569</u>
Accumulated depreciation and impairment							
Balance at January 1, 2015 Additions Disposals or retirements Lease agreement modification Impairment Effect of exchange rate changes	\$ 459,140 28,935 - - - 18,110	\$ 141,245,913 16,312,589 (74,075) - 278,057 147,671	\$ 1,188,388,402 199,184,992 (5,585,441) - 2,256,785 1,612,917	\$ 16,767,934 3,751,643 (1,125,191) - 10,742 20,941	\$ 447,397 25,210 - (460,380) - (5,114)	S	\$ 1,347,308,786 219,303,369 (6,784,707) (460,380) 2,545,584 1,794,525
Balance at December 31, 2015	<u>\$ 506,185</u>	<u>\$ 157,910,155</u>	<u>\$ 1,385,857,655</u>	<u>\$ 19,426,069</u>	<u>\$ 7,113</u>	<u>\$</u>	<u>\$ 1,563,707,177</u>
Carrying amounts at December 31, 2015	\$ 3,561,206	\$ 138,891,709	\$ 507,631,949	\$ 11,273,980	<u>s -</u>	<u>\$ 192,111,548</u>	<u>\$ 853,470,392</u>

The significant part of the Company's buildings includes main plants, mechanical and electrical power equipment and clean rooms, and the related depreciation is calculated using the estimated useful lives of 20 years, 10 years and 10 years, respectively.

For the year ended December 31, 2015, the Company recognized an impairment loss of NT\$259,568 thousand under foundry segment since the carrying amount of some of property, plant and equipment was expected to be unrecoverable. Such impairment loss was included in other operating income and expenses.

In August 2015, TSMC Solar ceased its manufacturing operations. In the third quarter of 2015, the Company recognized an impairment loss of NT\$2,286,016 thousand since the carrying amounts of certain machinery and equipment, office equipment and mechanical and electrical power equipment were not expected to be recoverable. Such impairment loss was included in other operating income and expenses.

The Company had a building lease agreement with leasing terms from December 2003 to November 2018 and such lease was accounted for as a finance lease. In August 2015, the lease was determined to be an operating lease due to a modification on lease conditions; as such, the Company recognized a gain of NT\$430,041 thousand from the modification. Such gain was included in other operating income and expenses.

### 16. INTANGIBLE ASSETS

	Goodwill	Technology License Fees	Software and System Design Costs	Patent and Others	Total
Cost					
Balance at January 1, 2016 Additions Retirements Effect of exchange rate changes	\$ 6,104,784 - - (96,809)	\$ 8,454,304 1,091,261 - 442	\$ 19,474,428 2,788,512 (5,273) (14,072)	\$ 4,879,026 519,289 - (11,880)	\$ 38,912,542 4,399,062 (5,273) (122,319)
			,		
Balance at December 31, 2016	<u>\$ 6,007,975</u>	\$ 9,546,007	<u>\$ 22,243,595</u>	<u>\$ 5,386,435</u>	<u>\$ 43,184,012</u>
Accumulated amortization					
Balance at January 1, 2016 Additions Retirements Effect of exchange rate changes	\$ - - -	\$ 4,779,388 1,367,370 - 442	\$ 16,431,666 1,730,834 (5,273) (12,799)	\$ 3,635,608 645,202 	\$ 24,846,662 3,743,406 (5,273) (15,629)
Balance at December 31, 2016	<u>\$</u>	<u>\$ 6,147,200</u>	<u>\$ 18,144,428</u>	<u>\$ 4,277,538</u>	\$ 28,569,166
Carrying amounts at December 31, 2016	<u>\$ 6,007,975</u>	<u>\$ 3,398,807</u>	\$ 4,099,167	<u>\$ 1,108,897</u>	<u>\$ 14,614,846</u>
Cost					
Balance at January 1, 2015 Additions Retirements Effect of acquisition of subsidiary Effect of exchange rate changes	\$ 5,888,813 - - 52,669 - - - - - - - - - - - - - - - - - -	\$ 6,350,253 2,112,572 - - - (8,521)	\$ 18,697,098 867,774 (101,377) 12,111 (1,178)	\$ 4,292,555 587,754 - (1,283)	\$ 35,228,719 3,568,100 (101,377) 64,780 152,320
Balance at December 31, 2015	\$ 6,104,784	<u>\$ 8,454,304</u>	<u>\$ 19,474,428</u>	<u>\$ 4,879,026</u>	\$ 38,912,542
Accumulated amortization and impairment					
Balance at January 1, 2015 Additions Retirements Impairment Effect of exchange rate changes	\$ - - - -	\$ 3,778,912 950,867 - 58,130 (8,521)	\$ 14,861,146 1,672,627 (101,377) 384 (1,114)	\$ 3,057,151 578,706 - - - 	\$ 21,697,209 3,202,200 (101,377) 58,514 (9,884)
Balance at December 31, 2015	<u>\$</u>	<u>\$ 4,779,388</u>	<u>\$ 16,431,666</u>	\$ 3,635,608	\$ 24,846,662
Carrying amounts at December 31, 2015	\$ 6,104,784	<u>\$ 3,674,916</u>	\$ 3,042,762	<u>\$ 1,243,418</u>	\$ 14,065,880

The Company's goodwill has been tested for impairment at the end of the annual reporting period and the recoverable amount is determined based on the value in use. The value in use was calculated based on the cash flow forecast from the financial budgets covering the future five-year period, and the Company used annual discount rate of 8.40% in its test of impairment for both December 31, 2016 and 2015 to reflect the relevant specific risk in the cash-generating unit.

For the years ended December 31, 2016 and 2015, the Company did not recognize any impairment loss on goodwill.

In August 2015, TSMC Solar ceased its manufacturing operation and the Company recognized an impairment loss of NT\$58,514 thousand in the third quarter of 2015 since the carrying amounts of technology license fees, software and system design costs were expected to be unrecoverable. Such impairment loss was included in other operating income and expenses.

#### 17. OTHER ASSETS

	December 31, 2016	December 31, 2015
Tax receivable Prepaid expenses Net Input VAT Long-term receivable Others	\$ 2,325,825 1,007,026 333,140 - 1,219,863	\$ 2,026,509 1,457,044 - 360,000 1,118,492
Current portion Noncurrent portion	\$ 4,885,854 \$ 3,385,422 	\$ 4,962,045 \$ 3,533,369 1,428,676
	<u>\$ 4,885,854</u>	<u>\$ 4,962,045</u>

### 18. SHORT-TERM LOANS

	December 31, 2016	December 31, 2015
Unsecured loans		
Amount	<u>\$ 57,958,200</u>	\$ 39,474,000
Original loan content		
US\$ (in thousands)	\$ 1,800,000	\$ 1,200,000
Annual interest rate	0.87%-1.07%	0.50%-0.77%
Maturity date	Due by January	Due by February
	2017	2016

### 19. PROVISIONS

		December 31, 2016	December 31, 2015
Sales returns and allowances Warranties		\$ 18,037,789 <u>28,187</u>	\$ 10,163,536 46,304
		<u>\$ 18,065,976</u>	\$ 10,209,840
Current portion Noncurrent portion (classified under other noncur	rrent liabilities)	\$ 18,037,789 <u>28,187</u>	\$ 10,163,536 46,304
		<u>\$ 18,065,976</u>	\$ 10,209,840
	Sales Returns and Allowances	Warranties	Total
Year ended December 31, 2016			
Balance, beginning of year Provision (Reversal) Payment Effect of exchange rate changes	\$ 10,163,536 36,519,312 (28,569,318) (75,741)	\$ 46,304 (13,629) (4,488)	\$ 10,209,840 36,505,683 (28,573,806) (75,741)
Balance, end of year	\$ 18,037,789	\$ 28,187	\$ 18,065,976
Year ended December 31, 2015			
Balance, beginning of year Provision Payment Effect of acquisition of subsidiary Effect of exchange rate changes	\$ 10,445,452 17,723,154 (18,133,061) 126,049 1,942	\$ 19,828 41,831 (14,698) - (657)	\$ 10,465,280 17,764,985 (18,147,759) 126,049 1,285
Balance, end of year	<u>\$ 10,163,536</u>	<u>\$ 46,304</u>	<u>\$ 10,209,840</u>

Provisions for sales returns and allowances are estimated based on historical experience, management judgment, and any known factors that would significantly affect the returns and allowances, and are recognized as a reduction of revenue in the same year of the related product sales.

The provision for warranties represents the present value of the Company's best estimate of the future outflow of the economic benefits that will be required under the Company's obligations for warranties. The best estimate has been made on the basis of historical warranty trends of business.

# 20. BONDS PAYABLE

	December 31, 2016	December 31, 2015
Domestic unsecured bonds	\$ 154,200,000	\$ 166,200,000
Overseas unsecured bonds	37,028,850	49,342,500
	191,228,850	215,542,500
Less: Discounts on bonds payable	(35,293)	(67,306)
Less: Current portion	(38,100,000)	(23,510,112)
	<u>\$ 153,093,557</u>	<u>\$ 191,965,082</u>

The major terms of domestic unsecured bonds are as follows:

Issuance	Tranche	Issuance Period	Total Amount	Coupon Rate	Repayment and Interest Payment
100-1	A	September 2011 to September 2016	\$ 10,500,000	1.40%	Bullet repayment; interest payable annually
	В	September 2011 to September 2018	7,500,000	1.63%	The same as above
100-2	A	January 2012 to January 2017	10,000,000	1.29%	The same as above
	В	January 2012 to January 2019	7,000,000	1.46%	The same as above
101-1	A	August 2012 to August 2017	9,900,000	1.28%	The same as above
	В	August 2012 to August 2019	9,000,000	1.40%	The same as above
101-2	A	September 2012 to September 2017	12,700,000	1.28%	The same as above
	В	September 2012 to September 2019	9,000,000	1.39%	The same as above
101-3	-	October 2012 to October 2022	4,400,000	1.53%	The same as above
101-4	Α	January 2013 to January 2018	10,600,000	1.23%	The same as above
	В	January 2013 to January 2020	10,000,000	1.35%	The same as above
	C	January 2013 to January 2023	3,000,000	1.49%	The same as above
102-1	Α	February 2013 to February 2018	6,200,000	1.23%	The same as above
	В	February 2013 to February 2020	11,600,000	1.38%	The same as above
	C	February 2013 to February 2023	3,600,000	1.50%	The same as above
102-2	A	July 2013 to July 2020	10,200,000	1.50%	The same as above
102 2	В	July 2013 to July 2023	3,500,000	1.70%	The same as above
102-3	A	August 2013 to August 2017	4,000,000	1.34%	The same as above
	В	August 2013 to August 2019	8,500,000	1.52%	The same as above
102-4	A	September 2013 to September 2016	1,500,000	1.35%	The same as above
	В	September 2013 to September 2017	1,500,000	1.45%	The same as above
		September 2017			(Continued)

Issuance	Tranche	Issuance Period	Total Amount	Coupon Rate	Repayment and Interest Payment
102-4	C	September 2013 to March 2019	\$ 1,400,000	1.60%	Bullet repayment; interest payable annually (interest for the six months prior to maturity will accrue on the basis of actual days and be repayable at maturity)
	D	September 2013 to March 2021	2,600,000	1.85%	The same as above
	Е	September 2013 to March 2023	5,400,000	2.05%	The same as above
	F	September 2013 to September 2023	2,600,000	2.10%	Bullet repayment; interest payable annually (Concluded)

The major terms of overseas unsecured bonds are as follows:

Issuance Period	Total Amount (US\$ in Thousands)	Coupon Rate	Repayment and Interest Payment
April 2013 to April 2016	\$ 350,000	0.95%	Bullet repayment; interest payable semi-annually
April 2013 to April 2018	1,150,000	1.625%	The same as above

### 21. RETIREMENT BENEFIT PLANS

### a. Defined contribution plans

The plan under the R.O.C. Labor Pension Act (the "Act") is deemed a defined contribution plan. Pursuant to the Act, TSMC, Mutual-Pak, TSMC Solar and VisEra Tech have made monthly contributions equal to 6% of each employee's monthly salary to employees' pension accounts. Furthermore, TSMC North America, TSMC China, TSMC Nanjing, TSMC Europe, TSMC Canada, TSMC Technology, TSMC Solar NA and TSMC Solar Europe GmbH also make monthly contributions at certain percentages of the basic salary of their employees. Accordingly, the Company recognized expenses of NT\$2,164,900 thousand and NT\$2,003,534 thousand in the consolidated statements of comprehensive income for the years ended December 31, 2016 and 2015, respectively.

### b. Defined benefit plans

TSMC and TSMC Solar have defined benefit plans under the R.O.C. Labor Standards Law that provide benefits based on an employee's length of service and average monthly salary for the six-month period prior to retirement. The aforementioned companies contribute an amount equal to 2% of salaries paid each month to their respective pension funds (the Funds), which are administered by the Labor Pension Fund Supervisory Committee (the Committee) and deposited in the Committee's name in the Bank of Taiwan. Before the end of each year, the Company assesses the balance in the Funds. If the amount of the balance in the Funds is inadequate to pay retirement benefits for employees who conform to retirement requirements in the next year, the Company is required to fund the difference in one

appropriation that should be made before the end of March of the next year. The Funds are operated and managed by the government's designated authorities; as such, the Company does not have any right to intervene in the investments of the Funds.

Amounts recognized in the consolidated statements of comprehensive income in respect of these defined benefit plans were as follows:

	Years Ended December 31	
	2016	2015
Current service cost	\$ 132,786	\$ 134,541
Net interest expense	139,355	144,389
Components of defined benefit costs recognized in profit or loss	272,141	278,930
Remeasurement on the net defined benefit liability:		
Return on plan assets (excluding amounts included in net		
interest expense)	45,721	(13,707)
Actuarial loss arising from experience adjustments	38,195	297,077
Actuarial loss arising from changes in financial assumptions	694,632	544,333
Actuarial loss arising from changes in demographic		•
assumptions	278,672	-
Components of defined benefit costs recognized in other		
comprehensive income	1,057,220	827,703
Total	<u>\$ 1,329,361</u>	<u>\$ 1,106,633</u>

The pension costs of the aforementioned defined benefit plans were recognized in profit or loss by the following categories:

	Years Ended December 31		
	2016	2015	
Cost of revenue	\$ 176,977	\$ 189,523	
Research and development expenses	73,395	81,333	
General and administrative expenses	17,367	3,102	
Marketing expenses	4,402	4,972	
	<u>\$ 272,141</u>	\$ 278,930	

The amounts arising from the defined benefit obligation of the Company in the consolidated balance sheets were as follows:

	December 31, 2016	December 31, 2015
Present value of defined benefit obligation Fair value of plan assets	\$ 12,480,480 (3,929,072)	\$ 11,318,174 (3,870,148)
Net defined benefit liability	<u>\$ 8,551,408</u>	<u>\$ 7,448,026</u>

Movements in the present value of the defined benefit obligation were as follows:

	Years Ended December 31		
	2016	2015	
Balance, beginning of year	\$ 11,318,174	\$ 10,265,284	
Current service cost	132,786	134,541	
Interest expense	212,909	228,444	
Remeasurement losses:			
Actuarial loss arising from experience adjustments	38,195	297,077	
Actuarial loss arising from changes in financial assumptions	694,632	544,333	
Actuarial loss arising from changes in demographic			
assumptions	278,672	-	
Benefits paid from plan assets	(194,888)	(146, 136)	
Benefits paid directly by the Company		(5,369)	
Balance, end of year	<u>\$ 12,480,480</u>	<u>\$ 11,318,174</u>	

Movements in the fair value of the plan assets were as follows:

	<b>Years Ended December 31</b>		
	2016	2015	
Balance, beginning of year	\$ 3,870,148	\$ 3,697,502	
Interest income	73,554	84,055	
Remeasurement gains (losses):			
Return on plan assets (excluding amounts included in net			
interest expense)	(45,721)	13,707	
Contributions from employer	225,979	221,020	
Benefits paid from plan assets	(194,888)	(146,136)	
Balance, end of year	\$ 3,929,072	<u>\$ 3,870,148</u>	

The fair value of the plan assets by major categories at the end of reporting period was as follows:

	December 31, 2016	December 31, 2015
Cash Equity instruments Debt instruments	\$ 818,426 1,852,950 	\$ 690,821 2,070,142 1,109,185
	<u>\$ 3,929,072</u>	\$ 3,870,148

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

	<b>Measurement Date</b>		
	December 31, 2016	December 31, 2015	
Discount rate	1.50%	1.90%	
Future salary increase rate	3.00%	3.00%	

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

- 1) Investment risk: The pension funds are invested in equity and debt securities, bank deposits, etc. The investment is conducted at the discretion of the government's designated authorities or under the mandated management. However, under the R.O.C. Labor Standards Law, the rate of return on assets shall not be less than the average interest rate on a two-year time deposit published by the local banks and the government is responsible for any shortfall in the event that the rate of return is less than the required rate of return.
- 2) Interest risk: A decrease in the government bond interest rate will increase the present value of the defined benefit obligation; however, this will be partially offset by an increase in the return on the debt investments of the plan assets.
  - Assuming a hypothetical decrease in interest rate at the end of the reporting period contributed to a decrease of 0.5% in the discount rate and all other assumptions were held constant, the present value of the defined benefit obligation would increase by NT\$970,282 thousand and NT\$844,058 thousand as of December 31, 2016 and 2015, respectively.
- 3) Salary risk: The present value of the defined benefit obligation is calculated by reference to the future salaries of plan participants. As such, an increase in the salary of the plan participants will increase the present value of the defined benefit obligation.

Assuming the expected salary rate increases by 0.5% at the end of the reporting period and all other assumptions were held constant, the present value of the defined benefit obligation would increase by NT\$951,424 thousand and NT\$830,699 thousand as of December 31, 2016 and 2015, respectively.

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

Furthermore, in presenting the above sensitivity analysis, the present value of the defined benefit obligation has been calculated using the projected unit credit method at the end of the reporting period, which is the same as that applied in calculating the defined benefit obligation liability recognized in the consolidated balance sheets.

The Company expects to make contributions of NT\$232,759 thousand to the defined benefit plans in the next year starting from December 31, 2016. The weighted average duration of the defined benefit obligation is 14 years.

### 22. GUARANTEE DEPOSITS

	December 31, 2016	December 31, 2015
Capacity guarantee Receivables guarantee Others	\$ 20,929,350 5,559,960 181,312	\$ 27,549,563 - 183,051
	<u>\$ 26,670,622</u>	\$ 27,732,614 (Continued)

	December 31, 2016	December 31, 2015
Current portion (classified under accrued expenses and other current liabilities) Noncurrent portion	\$ 12,000,189 14,670,433	\$ 6,167,813 21,564,801
	\$ 26,670,622	\$ 27,732,614 (Concluded)

Some of guarantee deposits were refunded to customers by offsetting related accounts receivable.

### 23. EQUITY

## a. Capital stock

	December 31, 2016	December 31, 2015
Authorized shares (in thousands)	28,050,000	28,050,000
Authorized capital	<u>\$ 280,500,000</u>	\$ 280,500,000
Issued and paid shares (in thousands)	25,930,380	25,930,380
Issued capital	<u>\$ 259,303,805</u>	<u>\$ 259,303,805</u>

A holder of issued common shares with par value of NT\$10 per share is entitled to vote and to receive dividends.

The authorized shares include 500,000 thousand shares allocated for the exercise of employee stock options.

As of December 31, 2016, 1,072,194 thousand ADSs of TSMC were traded on the NYSE. The number of common shares represented by the ADSs was 5,360,968 thousand shares (one ADS represents five common shares).

### b. Capital surplus

	December 31, 2016	December 31, 2015
Additional paid-in capital	\$ 24,184,939	\$ 24,184,939
From merger	22,804,510	22,804,510
From convertible bonds	8,892,847	8,892,847
From share of changes in equities of subsidiaries	107,798	100,761
From share of changes in equities of associates and joint venture	282,155	317,103
Donations	55	55
	\$ 56,272,304	\$ 56,300,215

Under the relevant laws, the capital surplus generated from donations and the excess of the issuance price over the par value of capital stock (including the stock issued for new capital, mergers and convertible bonds) may be used to offset a deficit; in addition, when the Company has no deficit, such capital surplus may be distributed as cash dividends or stock dividends up to a certain percentage of TSMC's paid-in capital. The capital surplus from share of changes in equities of subsidiaries, associates and joint venture may be used to offset a deficit.

### c. Retained earnings and dividend policy

In accordance with the amendments to the R.O.C. Company Act in May 2015, the recipients of dividends and bonuses are limited to shareholders and do not include employees. The amendments to TSMC's Articles of Incorporation on profits distribution policy had been approved by TSMC's shareholders in its meeting held on June 7, 2016. For policy about the profit sharing bonus to employees, please refer to Note 32.

TSMC's amended Articles of Incorporation provide that, when allocating the net profits for each fiscal year, TSMC shall first offset its losses in previous years and then set aside the following items accordingly:

- 1) Legal capital reserve at 10% of the profits left over, until the accumulated legal capital reserve equals TSMC's paid-in capital;
- 2) Special capital reserve in accordance with relevant laws or regulations or as requested by the authorities in charge;
- 3) Any balance left over shall be allocated according to the resolution of the shareholders' meeting.

TSMC's Articles of Incorporation also provide that profits of TSMC may be distributed by way of cash dividend and/or stock dividend. However, distribution of profits shall be made preferably by way of cash dividend. Distribution of profits may also be made by way of stock dividend; provided that the ratio for stock dividend shall not exceed 50% of the total distribution.

Any appropriations of the profits are subject to shareholders' approval in the following year.

The appropriation for legal capital reserve shall be made until the reserve equals the Company's paid-in capital. The reserve may be used to offset a deficit, or be distributed as dividends in cash or stocks for the portion in excess of 25% of the paid-in capital if the Company incurs no loss.

Pursuant to existing regulations, the Company is required to set aside additional special capital reserve equivalent to the net debit balance of the other components of stockholders' equity, such as the accumulated balance of foreign currency translation reserve, unrealized valuation gain/loss from available-for-sale financial assets, gain/loss from changes in fair value of hedging instruments in cash flow hedges, etc. For the subsequent decrease in the deduction amount to stockholders' equity, any special reserve appropriated may be reversed to the extent that the net debit balance reverses.

The appropriations of 2015 and 2014 earnings have been approved by TSMC's shareholders in its meetings held on June 7, 2016 and on June 9, 2015, respectively. The appropriations and dividends per share were as follows:

	Appropriatio	n of Earnings		Per Share T\$)
	For Fiscal Year 2015	For Fiscal Year 2014	For Fiscal Year 2015	For Fiscal Year 2014
Legal capital reserve Cash dividends to shareholders	\$ 30,657,384 <u>155,582,283</u>	\$ 26,389,879 	\$6.0	\$4.5
	<u>\$186,239,667</u>	<u>\$143,073,360</u>		

TSMC's appropriations of earnings for 2016 had been approved in the meeting of the Board of Directors held on February 14, 2017. The appropriations and dividends per share were as follows:

	Appropriation of Earnings For Fiscal Year 2016	Dividends Per Share (NT\$) For Fiscal Yea 2016	
Legal capital reserve Cash dividends to shareholders	\$ 33,424,718 <u>181,512,663</u> \$ 214,937,381	\$ 7.0	

The appropriations of earnings for 2016 are to be presented for approval in the TSMC's shareholders' meeting to be held on June 8, 2017 (expected).

Under the Integrated Income Tax System that became effective on January 1, 1998, the R.O.C. resident shareholders are allowed a tax credit for their proportionate share of the income tax paid by TSMC on earnings generated since January 1, 1998.

### d. Others

Changes in others were as follows:

	Year Ended December 31, 2016				
	Foreign Currency Translation Reserve	Unrealized Gain/Loss from Available-for- sale Financial Assets	Cash Flow Hedges Reserve	Total	
Balance, beginning of year	\$ 11,039,949	\$ 734,771	\$ (607)	\$ 11,774,113	
Exchange differences arising on translation of foreign operations Other comprehensive income	(9,409,190)	-	-	(9,409,190)	
reclassified to profit or loss upon liquidation of subsidiaries Changes in fair value of	36,105	-	-	36,105	
available-for-sale financial assets Cumulative (gain)/loss reclassified to profit or loss upon disposal of	-	(696,240)	-	(696,240)	
available-for-sale financial assets	-	4,071	-	4,071	
Share of other comprehensive income (loss) of associates and joint venture	(915)	24,684	712	24,481	
Other comprehensive loss reclassified to profit or loss					
upon disposal of associates Income tax effect	(4,712) 	(3,469) (61,176)	<u> </u>	(8,181) (61,176)	
Balance, end of year	\$ 1,661,237	<u>\$ 2,641</u>	<u>\$ 105</u>	\$ 1,663,983	

	Year Ended December 31, 2015				
	Foreign Currency Translation Reserve	Unrealized Gain/Loss from Available-for- sale Financial Assets		ı Flow Reserve	Total
Balance, beginning of year Exchange differences arising on	\$ 4,502,113	\$ 21,247,483	\$	(305)	\$ 25,749,291
translation of foreign operations Other comprehensive income/losses reclassified to	8,061,882	-		-	8,061,882
profit or loss upon liquidation of subsidiaries Changes in fair value of	138,087	-		-	138,087
available-for-sale financial assets Cumulative (gain)/loss reclassified to profit or loss upon disposal of	-	(5,543)		-	(5,543)
available-for-sale financial assets Share of other comprehensive	(1,595,413)	(20,475,233)		-	(22,070,646)
income of associates and joint venture  The proportionate share of other comprehensive income/losses reclassified to profit or loss	(60,642)	(17,996)		(313)	(78,951)
upon partial disposal of associates Income tax effect	(6,078)	2,051 (15,991)		11 	(4,016) (15,991)
Balance, end of year	<u>\$ 11,039,949</u>	<u>\$ 734,771</u>	\$	(607)	\$ 11,774,113

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

Unrealized gain/loss on available-for-sale financial assets represents the cumulative gains or losses arising from the fair value measurement on available-for-sale financial assets that are recognized in other comprehensive income, excluding the amounts recognized in profit or loss for the effective portion from changes in fair value of the hedging instruments. When those available-for-sale financial assets have been disposed of or are determined to be impaired subsequently, the related cumulative gains or losses in other comprehensive income are reclassified to profit or loss.

The cash flow hedges reserve represents the cumulative effective portion of gains or losses arising on changes in fair value of the hedging instruments entered into as cash flow hedges. The cumulative gains or losses arising on changes in fair value of the hedging instruments that are recognized and accumulated in cash flow hedges reserve will be reclassified to profit or loss only when the hedge transaction affects profit or loss.

# 24. SHARE-BASED PAYMENT

TSMC's Employee Stock Option Plans, consisting of the TSMC 2004 Plan, TSMC 2003 Plan and TSMC 2002 Plan, were approved by the Securities and Futures Bureau on January 6, 2005, October 29, 2003 and June 25, 2002, respectively. The maximum number of stock options authorized to be granted under the TSMC 2004 Plan, TSMC 2003 Plan and TSMC 2002 Plan was 11,000 thousand, 120,000 thousand and 100,000 thousand, respectively, with each stock option eligible to subscribe for one common share of TSMC when exercised. The stock options may be granted to qualified employees of TSMC or any of its domestic or foreign subsidiaries, in which TSMC's shareholding with voting rights, directly or indirectly, is more than fifty percent (50%). The stock options of all the plans are valid for ten years and exercisable at certain percentages subsequent to the second anniversary of the grant date. Under the terms of the plans, the stock options are granted at an exercise price equal to the closing price of TSMC's common shares quoted on the TWSE on the grant date.

The Company did not issue employee stock option plans for years ended December 31, 2016 and 2015. Information about the TSMC's outstanding employee stock options is described as follows:

	Number of Stock Options (In Thousands)	Weighted- average Exercise Price (NT\$)
Year ended December 31, 2015		
Balance, beginning of year Options exercised	718 (718)	\$47.2 47.2
Balance, end of year Balance exercisable, end of year	<del>-</del>	- -

The numbers of outstanding stock options and exercise prices have been adjusted to reflect the distribution of earnings by TSMC in accordance with the plans.

The employee stock options have been fully exercised in the second quarter of 2015.

### 25. NET REVENUE

	Years Ended December 31		
	2016	2015	
Net revenue from sale of goods Net revenue from royalties	\$ 947,415,900 522,444	\$ 842,997,542 499,826	
	<u>\$ 947,938,344</u>	<u>\$ 843,497,368</u>	

### 26. OTHER OPERATING INCOME AND EXPENSES, NET

	Years Ended December 31				
		2016	2015		
Gain on disposal of property, plant and equipment Impairment loss on property, plant and equipment Gain from lease agreement modification Others	\$	46,548	\$ 433,559 (2,545,584) 430,041 (198,634)		
	<u>\$</u>	29,813	<u>\$ (1,880,618</u> )		

# 27. OTHER INCOME

	Years Ended December 31				
	2016	2015			
Interest income					
Bank deposits	\$ 4,892,652	\$ 3,928,030			
Available-for-sale financial assets	816,185	35,811			
Held-to-maturity financial assets	383,261	76,818			
Structured product	225,402	88,657			
	6,317,500	4,129,316			
Dividend income	<u>137,401</u>	621,513			
	<u>\$ 6,454,901</u>	<u>\$ 4,750,829</u>			

# 28. FINANCE COSTS

	<b>Years Ended December 31</b>		
	2016	2015	
Interest expense			
Corporate bonds	\$ 3,014,753	\$ 3,103,702	
Bank loans	291,178	74,664	
Finance leases		11,666	
Others	222	299	
	<u>\$ 3,306,153</u>	\$ 3,190,331	

# 29. OTHER GAINS AND LOSSES

	Years Ended December 31		
		2016	2015
Gain (loss) on disposal of financial assets, net			
Available-for-sale financial assets	\$	(4,014)	\$ 22,070,736
Financial assets carried at cost		37,241	87,193
Gain (loss) on disposal of investments accounted for using equity			
method, net		(259,960)	2,507,707
Other gains		176,734	189,330
Net gain (loss) on financial instruments at FVTPL			
Held for trading		467,051	(1,769,253)
Designated as at FVTPL		(37,369)	<del>-</del>
Fair value hedges			
Gain (loss) from hedging instruments		12,725	(134,112)
Gain (loss) arising from changes in fair value of available-for-sale			
financial assets in hedge effective portion		4,248	(305,619)
Impairment loss of financial assets			
Financial assets carried at cost		(122,240)	(154,721)
Loss from liquidation of subsidiaries		(36,105)	(138,243)
Other losses		(42,379)	(145,954)
	\$	195,932	\$ 22,207,064
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# **30. INCOME TAX**

a. Income tax expense recognized in profit or loss

Income tax expense consisted of the following:

	Years Ended December 31				
	2016	2015			
Current income tax expense					
Current tax expense recognized in the current year	\$ 54,315,433	\$ 45,857,504			
Income tax adjustments on prior years	(1,041,762)	(992,995)			
Other income tax adjustments	122,461	247,835			
·	53,396,132	45,112,344			
Deferred income tax expense (benefit)					
The origination and reversal of temporary differences	(1,775,023)	(1,542,786)			
Investment tax credits and operating loss carryforward	35	303,186			
	(1,774,988)	(1,239,600)			
Income tax expense recognized in profit or loss	\$ 51,621,144	\$ 43,872,744			

A reconciliation of income before income tax and income tax expense recognized in profit or loss was as follows:

	<b>Years Ended December 31</b>			
	2016	2015		
Income before tax	<u>\$ 385,959,380</u>	\$ 350,428,911		
Income tax expense at the statutory rate	\$ 66,945,088	\$ 60,666,157		
Tax effect of adjusting items:				
Deductible items in determining taxable income	(51,324)	(6,332,097)		
Tax-exempt income	(19,594,962)	(22,144,303)		
Additional income tax under the Alternative Minimum Tax Act	<del>-</del>	6,041,603		
Additional income tax on unappropriated earnings	11,957,213	12,103,356		
The origination and reversal of temporary differences	(1,775,023)	(1,542,786)		
Income tax credits	(4,940,147)	(4,243,661)		
Remeasurement of operating loss carryforward	(400)	69,635		
	52,540,445	44,617,904		
Income tax adjustments on prior years	(1,041,762)	(992,995)		
Other income tax adjustments	122,461	247,835		
Income tax expense recognized in profit or loss	\$ 51,621,144	<u>\$ 43,872,744</u>		

For the years ended December 31, 2016 and 2015, the Company applied a tax rate of 17% for entities subject to the R.O.C. Income Tax Law; for other jurisdictions, the Company measures taxes by using the applicable tax rate for each individual jurisdiction.

# b. Income tax expense recognized in other comprehensive income

	Years Ended December 31			
	2016	2015		
Deferred income tax benefit (expense)				
Related to remeasurement of defined benefit obligation	\$ 126,867	\$ 99,326		
Related to unrealized gain/loss on available-for-sale	(61 176)	(15 001)		
financial assets	<u>(61,176</u> )	(15,991)		
	<u>\$ 65,691</u>	<u>\$ 83,335</u>		

# c. Deferred income tax balance

The analysis of deferred income tax assets and liabilities in the consolidated balance sheets was as follows:

	December 31, 2016	December 31, 2015
Deferred income tax assets		
Temporary differences Depreciation Provision for sales returns and allowance Net defined benefit liability Unrealized loss on inventories Deferred compensation cost Goodwill from business combination Others Operating loss carryforward	\$ 4,244,214 1,512,061 939,543 737,247 378,740 	
Deferred income tax liabilities		
Temporary differences Available-for-sale financial assets Unrealized exchange gains	\$ (92,447) (48,736) \$ (141,183)	\$ (31,271) <u> </u>

	Year Ended December 31, 2016									
				Recogn	ized in					
		Balance, nning of Year	Pro	ofit or Loss		Other nprehensive Income		of Exchange te Changes	Bal	ance, End of Year
Deferred income tax assets										
Temporary differences										
Depreciation	\$	2,852,961	\$	1,437,648	\$	-	\$	(46,395)	\$	4,244,214
Provision for sales returns and allowance		1,141,511		371,410		-		(860)		1,512,061
Net defined benefit liability		895,486		(82,810)		126,867		-		939,543
Unrealized loss on inventories		622,741		115,490		-		(984)		737,247
Deferred compensation cost		316,283		69,311		-		(6,854)		378,740
Goodwill from business combination		10,025		(9,836)		-		(189)		-
Others		531,449		(77,454)		-		(8,862)		445,133
Operating loss carryforward	_	14,518		(35)		<u> </u>		<del>-</del>		14,483
	<u>\$</u>	6,384,974	<u>\$</u>	1,823,724	<u>\$</u>	126,867	\$	(64,144)	<u>\$</u> (C	<u>8,271,421</u> ontinued)

	Year Ended December 31, 2016									
		Recognized in								
		Balance, ning of Year	Pro	fit or Loss	Com	Other prehensive ncome		Exchange Thanges	Bala	nce, End of Year
Deferred income tax liabilities										
Temporary differences Available-for-sale financial assets Unrealized exchange gains	\$	(31,271)	\$	- (48,736)	\$	(61,176) <u>-</u>	\$	- -	\$	(92,447) (48,736)
	<u>\$</u>	(31,271)	<u>\$</u>	<u>(48,736</u> )	<u>\$</u>	(61,176)	\$	<del>_</del>	<u>\$</u> (Co	(141,183) oncluded)

	Year Ended December 31, 2015						
		Recog	nized in				
	Balance, Beginning of Year	Profit or Loss	Other Comprehensive Income	Effect of Acquisition of Subsidiary	Effect of Exchange Rate Changes	Balance, End of Year	
Deferred income tax assets							
Temporary differences							
Depreciation	\$ 1,011,065	\$ 1,808,736	\$ -	\$ 11,899	\$ 21,261	\$ 2,852,961	
Provision for sales returns and				•			
allowance	1,230,752	(104,428)	-	13,815	1,372	1,141,511	
Net defined benefit liability	787,391	8,769	99,326	-	-	895,486	
Unrealized loss on inventories	591,871	25,088	-	4,081	1,701	622,741	
Deferred compensation cost	255,621	49,348	-	-	11,314	316,283	
Goodwill from business							
combination	195,453	(185,799)	-	-	371	10,025	
Others	749,678	(243,398)	-	148	25,021	531,449	
Operating loss carryforward	316,951	(303,186)			753	14,518	
	<u>\$ 5,138,782</u>	<u>\$ 1,055,130</u>	\$ 99,326	\$ 29,943	<u>\$ 61,793</u>	\$ 6,384,974	
Deferred income tax liabilities							
Temporary differences							
Available-for-sale financial	\$ (15.280)		e (15.001)	6	¢.	\$ (31.271)	
assets	4 (,)		\$ (15,991)	\$ -	\$ -	\$ (31,271)	
Unrealized exchange gains	(184,470)	184,470	<del>_</del>				
	<u>\$ (199,750)</u>	<u>\$ 184,470</u>	<u>\$ (15,991)</u>	<u>s -</u>	<u>\$</u>	<u>\$ (31,271)</u>	

d. The investment operating loss carryforward and deductible temporary differences for which no deferred income tax assets have been recognized in the consolidated financial statements

The information of the operating loss carryforward for which no deferred tax assets have been recognized was as follows:

	December 31, 2016	December 31, 2015
Expiry period 1 - 4 years 5 - 10 years	\$ 136,703 41,389	\$ 85,402 97,831
	<u>\$ 178,092</u>	<u>\$ 183,233</u>

As of December 31, 2016 and 2015, the aggregate deductible temporary differences for which no deferred income tax assets have been recognized amounted to NT\$1,919,784 thousand and NT\$1,972,286 thousand, respectively.

## e. Unused operating loss carryforward and tax-exemption information

As of December 31, 2016, operating loss carryforward of Mutual-Pak consisted of the following:

### **Remaining Creditable Amount**

Expiry period	
1 - 4 years	\$ 136,703
5 - 10 years	126,585
	\$ 263,288

As of December 31, 2016, the profits generated from the following projects of TSMC are exempt from income tax for a five-year period:

### **Tax-exemption Period**

Construction and expansion of 2007 by TSMC	2014 to 2018
Construction and expansion of 2008 by TSMC	2015 to 2019
Construction and expansion of 2009 by TSMC	2018 to 2022

### f. The information of unrecognized deferred income tax liabilities associated with investments

As of December 31, 2016 and 2015, the aggregate taxable temporary differences associated with investments in subsidiaries not recognized as deferred income tax liabilities amounted to NT\$83,181,401 thousand and NT\$80,919,309 thousand, respectively.

### g. Integrated income tax information

	December 31, 2016	December 31, 2015
Balance of the Imputation Credit Account - TSMC	<u>\$ 82,072,562</u>	\$ 59,973,516

The estimated and actual creditable ratio for distribution of TSMC's earnings of 2016 and 2015 were 13.94% and 12.57%, respectively; however, effective from January 1, 2015, the creditable ratio for individual shareholders residing in the R.O.C. will be half of the original creditable ratio according to the revised Article 66 - 6 of the R.O.C. Income Tax Law.

The imputation credit allocated to shareholders is based on its balance as of the date of the dividend distribution. The estimated creditable ratio may change when the actual distribution of the imputation credit is made.

All of TSMC's earnings generated prior to December 31, 1997 have been appropriated.

#### h. Income tax examination

The tax authorities have examined income tax returns of TSMC through 2013. All investment tax credit adjustments assessed by the tax authorities have been recognized accordingly.

# 31. EARNINGS PER SHARE

		Years Ended December 31	
		2016	2015
Basic EPS Diluted EPS		\$12.89 \$12.89	\$11.82 \$11.82
EPS is computed as follows:			
	Amounts (Numerator)	Number of Shares (Denominator) (In Thousands)	EPS (NT\$)
Year ended December 31, 2016			
Basic/Diluted EPS  Net income available to common shareholders  of the parent	<u>\$ 334,247,180</u>	25,930,380	<u>\$12.89</u>
Year ended December 31, 2015			
Basic EPS  Net income available to common shareholders of the parent Effect of dilutive potential common shares	\$ 306,573,837	25,930,288 92	<u>\$11.82</u>
Diluted EPS  Net income available to common shareholders of the parent (including effect of dilutive potential common shares)	\$ 306,573,837	25,930,380	<u>\$11.82</u>
32. ADDITIONAL INFORMATION OF EXPENSE	S BY NATURE		
		Years Ended 2016	December 31 2015
a. Depreciation of property, plant and equipment			
Recognized in cost of revenue Recognized in operating expenses Recognized in other operating income and expe	enses	\$ 203,476,848 16,583,067 25,083 \$ 220,084,998	\$ 204,126,243 15,152,174 24,952 \$ 219,303,369
b. Amortization of intangible assets			
Recognized in cost of revenue Recognized in operating expenses		\$ 2,028,492 1,714,914	\$ 1,642,051 1,560,149
		\$ 3,743,406	\$ 3,202,200
c. Research and development costs expensed as in	ocurred	<u>\$ 71,207,703</u>	\$ 65,544,579

	Years Ended	<b>Years Ended December 31</b>		
	2016	2015		
d. Employee benefits expenses				
Post-employment benefits				
Defined contribution plans	\$ 2,164,900	\$ 2,003,534		
Defined benefit plans	272,141	278,930		
•	2,437,041	2,282,464		
Other employee benefits	97,248,082	89,322,946		
	\$ 99,685,123	<u>\$ 91,605,410</u>		
Employee benefits expense summarized by function				
Recognized in cost of revenue	\$ 58,493,500	\$ 52,983,173		
Recognized in operating expenses	41,191,623	38,622,237		
	<u>\$ 99,685,123</u>	\$ 91,605,410		

In accordance with the amendments to the R.O.C. Company Act in May 2015 and the amended TSMC's Articles of Incorporation approved by TSMC's shareholders in its meeting held on June 7, 2016, TSMC shall allocate compensation to directors and profit sharing bonus to employees of TSMC not more than 0.3% and not less than 1% of annual profits during the period, respectively. Prior to the amendments, TSMC's Articles of Incorporation provided that, when allocating the net profits for each fiscal year, TSMC shall first set aside legal capital reserve and special capital reserve, then set aside not more than 0.3% of the balance as compensation to directors and not less than 1% as profit sharing bonus to employees, respectively.

TSMC accrued profit sharing bonus to employees based on a percentage of net income before income tax, profit sharing bonus to employees and compensation to directors during the period, which amounted to NT\$22,418,339 thousand and NT\$20,556,888 thousand for the years ended December 31, 2016 and 2015, respectively; Compensation to directors was expensed based on estimated amount payable. If there is a change in the proposed amounts after the annual consolidated financial statements are authorized for issue, the differences are recorded as a change in accounting estimate.

The Board of Directors of TSMC held on February 14, 2017 approved the profit sharing bonus to employees and compensation to directors in the amounts of NT\$22,418,339 thousand and NT\$376,432 thousand in cash for 2016, respectively. There is no significant difference between the aforementioned approved amounts and the amounts charged against earnings of 2016.

TSMC's profit sharing bonus to employees and compensation to directors in the amounts of NT\$20,556,888 thousand and NT\$356,186 thousand in cash for 2015, respectively, had been approved by the Board of Directors on February 2, 2016. The profit sharing bonus to employees and compensation to directors in cash for 2015 had been reported to TSMC's shareholders in its meeting held on June 7, 2016, after the amended TSMC's Articles of Incorporation had been approved. The aforementioned approved amount has no difference with the one recognized in the consolidated financial statements for the year ended December 31, 2015.

TSMC's profit sharing bonus to employees and compensation to directors in the amounts of NT\$17,645,966 thousand and NT\$406,854 thousand in cash for 2014, respectively, had been approved by the shareholders in its meetings held on June 9, 2015. The aforementioned approved amount has no difference with the one recognized in the consolidated financial statements for the year ended December 31, 2014.

The information about the appropriations of TSMC's profit sharing bonus to employees and compensation to directors is available at the Market Observation Post System website.

# 33. CONSOLIDATION OF SUBSIDIARY

Due to a Chinese consortium's acquisition of OVT, major shareholders of VisEra Holding and OVT Taiwan, the Company acquired OVT's 49.1% ownership in VisEra Holding and 100% ownership in OVT Taiwan on November 20, 2015. The related information is as follows:

# a. Subsidiaries acquired

		Principal Activity	Date of Acquisition	Proportion of Voting Equity Interests Acquired (%)	Consideration Transferred
	VisEra Holding	Investing in companies involved in the design, manufacturing and other related businesses in the semiconductor industry	November 20, 2015	49.1	<u>\$ 3,536,119</u>
	OVT Taiwan	Investment activities	November 20, 2015	100	<u>\$ 394,674</u>
b.	Considerations tra	nsferred			
				VisEra Holding	OVT Taiwan
	Cash			\$ 3,536,119	<u>\$ 394,674</u>
c.	Assets acquired ar	nd liabilities assumed at	the date of acquisition		
				VisEra Holding	<b>OVT Taiwan</b>
	Current assets				
	Cash and cash e			\$ 3,858,482	\$ 20,710
	Accounts receiv Inventories	/able		511,999 59,050	-
	Other financial	assets		706,500	373,813
	Other current as			26,441	155
	Noncurrent assets				
		counted for using equity	method	721,641	-
	Property, plant	* *		2,651,209	-
	Intangible asset Deferred incom			12,111	-
	Refundable dep			29,943 15,611	- -
	retundable dep	03113		8,592,987	394,678
	Current liabilities				<del></del>
		ties at fair value through	n profit or loss	975	-
	Accounts payab			87,480	-
	Salary and bonu	is payable		183,090	(Continued)
					(Continuca)

	VisE	cra Holding	OV	T Taiwan
Accrued profit sharing bonus to employees and compensation to directors and supervisors Payables to contractors and equipment suppliers Income tax payable Provisions Accrued expenses and other current liabilities	\$	45,819 132,305 47,860 126,049 102,851	\$	4 - - -
Noncurrent liabilities Guarantee deposits		1,279 727,708		
Net assets	<u>\$</u>	7,865,279	<u>\$</u>	394,674 (Concluded)

## d. Goodwill arising on acquisition

	VisEra Holding
Consideration transferred	\$ 3,536,119
Fair value of investments previously owned	3,458,146
Less: Fair value of identifiable net assets acquired	(7,865,279)
Noncontrolling interests	923,683
Goodwill arising on acquisition	<u>\$ 52,669</u>

### e. Net cash outflow on acquisition of subsidiaries

	VisEra Holding	OVT Taiwan
Consideration paid in cash Less: Cash and cash equivalent balances acquired	\$ 3,536,119 (3,858,482)	\$ 394,674 (20,710)
	<u>\$ (322,363)</u>	\$ 373,964

### f. Impact of acquisitions on the results of the Company

The results of VisEra Holding since the acquisition date included in the consolidated statements of comprehensive income for the year ended December 31, 2015 were as follows:

	VisEra Holding
Net revenue	\$ 254,319
Net income	\$ 16,264

Had the business combination of VisEra Holding been in effect on January 1, 2015, the Company's net revenue and net income for the year ended December 31, 2015 would have been NT\$846,401,819 thousand and NT\$306,687,674 thousand, respectively. This pro-forma information is for illustrative purposes only and is not necessarily an indication of revenue and results of operations of the Company that actually would have been achieved had the acquisition been completed on January 1, 2015, nor is it intended to be a projection of future results. The aforementioned pro-forma net revenue and net income were calculated based on the fair value of assets acquired and liabilities assumed at the date of acquisition.

# 34. DISPOSAL OF SUBSIDIARY

In January 2015, the Board of Directors of TSMC approved a sale of TSMC SSL common shares of 565,480 thousand held by TSMC and TSMC GN to Epistar Corporation. The transaction was completed in February 2015.

# a. Consideration received from the disposal

	Total consideration received Expenditure associated with consideration received	\$ 825,000 (142,475)
	Net consideration received	<u>\$ 682,525</u>
b.	Analysis of assets and liabilities over which the control was lost	
	Assets Cash and cash equivalents Inventories Other current assets Property, plant and equipment Intangible assets Others	\$ 81,478 28,519 91,331 643,699 47,373 51,808 944,208
	Liabilities Salary and bonus payable Accrued expenses and other current liabilities Net defined benefit liability Others	38,151 68,132 35,845 76,915 219,043
	Net assets disposed of	<u>\$ 725,165</u>
c.	Gain/loss on disposal of subsidiary	
	Net consideration received Net assets disposed of Noncontrolling interests  Gain/loss on disposal of subsidiary	\$ 682,525 (725,165) 42,640 \$ -
	Gam/loss on disposar of subsidiary	<u>5 -</u>
d.	Net cash inflow arising from disposal of subsidiary	
	Net consideration received Less: Balance of cash and cash equivalents disposed of	\$ 682,525 81,478
		\$ 601,047

### 35. CAPITAL MANAGEMENT

The Company requires significant amounts of capital to build and expand its production facilities and acquire additional equipment. In consideration of the industry dynamics, the Company manages its capital in a manner to ensure that it has sufficient and necessary financial resources to fund its working capital needs, capital asset purchases, research and development activities, dividend payments, debt service requirements and other business requirements associated with its existing operations over the next 12 months.

### **36. FINANCIAL INSTRUMENTS**

# a. Categories of financial instruments

	December 31, 2016	December 31, 2015
Financial assets		
FVTPL		
Held for trading	\$ 153,382	\$ 6,026
Designated as at FVTPL	6,297,730	-
Available-for-sale financial assets (Note)	71,891,234	18,290,243
Held-to-maturity financial assets	38,917,677	16,077,396
Derivative financial instruments in designated hedge		
accounting relationships	5,550	1,739
Loans and receivables	541 252 022	562 600 020
Cash and cash equivalents	541,253,833	562,688,930
Notes and accounts receivable (including related parties)	129,304,830	85,565,397
Other receivables	2,626,401 407,874	4,790,376 430,802
Refundable deposits	407,874	430,802
	<u>\$ 790,858,511</u>	\$ 687,850,909
Financial liabilities		
FVTPL		
Held for trading	\$ 91,585	\$ 72,610
Designated as at FVTPL	99,550	-
Amortized cost		
Short-term loans	57,958,200	39,474,000
Accounts payable (including related parties)	27,324,525	19,725,274
Payables to contractors and equipment suppliers	63,154,514	26,012,192
Accrued expenses and other current liabilities	20,713,259	18,900,123
Bonds payable (including long-term liabilities-current portion)	191,193,557	215,475,194
Long-term bank loans (including long-term	21 460	40,000
liabilities-current portion)	31,460	40,000
Other long-term payables (classified under accrued expenses and other current liabilities)	-	18,000
Guarantee deposits (including those classified under accrued expenses and other current liabilities)	26,670,622	27,732,614
	\$ 387,237,272	\$ 347,450,007

Note: Including financial assets carried at cost.

### b. Financial risk management objectives

The Company seeks to ensure sufficient cost-efficient funding readily available when needed. The Company manages its exposure to foreign currency risk, interest rate risk, equity price risk, credit risk and liquidity risk with the objective to reduce the potentially adverse effects the market uncertainties may have on its financial performance.

The plans for material treasury activities are reviewed by Audit Committees and/or Board of Directors in accordance with procedures required by relevant regulations or internal controls. During the implementation of such plans, Corporate Treasury function must comply with certain treasury procedures that provide guiding principles for overall financial risk management and segregation of duties.

#### c. Market risk

The Company is exposed to the market risks arising from changes in foreign exchange rates, interest rates and the prices in equity investments, and utilizes some derivative financial instruments to reduce the related risks.

### Foreign currency risk

Most of the Company's operating activities are denominated in foreign currencies. Consequently, the Company is exposed to foreign currency risk. To protect against reductions in value and the volatility of future cash flows caused by changes in foreign exchange rates, the Company utilizes derivative financial instruments, including currency forward contracts and cross currency swaps, to hedge its currency exposure. These instruments help to reduce, but do not eliminate, the impact of foreign currency exchange rate movements.

The Company also holds short-term borrowings in foreign currencies in proportion to its expected future cash flows. This allows foreign-currency-denominated borrowings to be serviced with expected future cash flows and provides a partial hedge against transaction translation exposure.

The Company's sensitivity analysis to foreign currency risk mainly focuses on the foreign currency monetary items at the end of the reporting period. Assuming an unfavorable 10% movement in the levels of foreign exchanges against the New Taiwan dollar, the net income for the years ended December 31, 2016 and 2015 would have decreased by NT\$111,347 thousand and NT\$902,083 thousand, respectively, after taking into consideration of the hedging contracts and the hedged items.

#### Interest rate risk

The Company is exposed to interest rate risk arising from borrowing at both fixed and floating interest rates and from fixed income securities. All of the Company's long-term bonds have fixed interest rates and are measured at amortized cost. As such, changes in interest rates would not affect the future cash flows. On the other hand, because interest rates of the Company's long-term bank loans are floating, changes in interest rates would affect the future cash flows but not the fair value.

Assuming the amount of floating interest rate bank loans at the end of the reporting period had been outstanding for the entire period and all other variables were held constant, a hypothetical increase in interest rates of 100 basis point (1%) would have resulted in an increase in the interest expense, net of tax, by approximately NT\$261 thousand and NT\$332 thousand for the years ended December 31, 2016 and 2015, respectively.

The Company classified fixed income securities as held-to-maturity and available-for-sale financial assets. Because held-to-maturity fixed income securities are measured at amortized cost, changes in interest rates would not affect the fair value. On the other hand, available-for-sale fixed income securities are exposed to fair value fluctuations caused by changes in interest rates. To manage its exposure to the fair value fluctuations, the Company enters into interest rate futures contract to hedge against price risk caused by changes in risk-free interest rates in the Company's investments in available-for-sale fixed income securities.

Assuming a hypothetical increase of 100 basis point (1%) in interest rates of available-for-sale fixed income securities at the end of the reporting period, the net income for the years ended December 31, 2016 and 2015 would have been unaffected as they were classified as available-for-sale; however, the other comprehensive income for the years ended December 31, 2016 and 2015 would have decreased by NT\$1,600,929 thousand and NT\$271,547 thousand, respectively.

### Other price risk

The Company is exposed to equity price risk arising from available-for-sale equity investments.

Assuming a hypothetical decrease of 5% in equity prices of the equity investments at the end of the reporting period, the net income for the years ended December 31, 2016 and 2015 would have been unaffected as they were classified as available-for-sale; however, the other comprehensive income for the years ended December 31, 2016 and 2015 would have decreased by NT\$342,565 thousand and NT\$259,996 thousand, respectively.

### d. Credit risk management

Credit risk refers to the risk that a counterparty will default on its contractual obligations resulting in financial loss to the Company. The Company is exposed to credit risk from operating activities, primarily trade receivables, and from investing activities, primarily deposits, fixed-income investments and other financial instruments with banks. Credit risk is managed separately for business related and financial related exposures. As of the end of the reporting period, the Company's maximum credit risk exposure is mainly from the carrying amount of financial assets recognized in the consolidated balance sheet.

### Business related credit risk

The Company has considerable trade receivables outstanding with its customers worldwide. A substantial majority of the Company's outstanding trade receivables are not covered by collateral or credit insurance. While the Company has procedures to monitor and limit exposure to credit risk on trade receivables, there can be no assurance such procedures will effectively limit its credit risk and avoid losses. This risk is heightened during periods when economic conditions worsen.

As of December 31, 2016 and 2015, the Company's ten largest customers accounted for 74% and 68% of accounts receivable, respectively. The Company believes the concentration of credit risk is insignificant for the remaining accounts receivable.

### Financial credit risk

The Company regularly monitors and reviews the transaction limit applied to counterparties and adjusts the concentration limit according to market conditions and the credit standing of the counterparties. The Company mitigates its exposure by selecting counterparties with investment-grade credit ratings.

# e. Liquidity risk management

The objective of liquidity risk management is to ensure the Company has sufficient liquidity to fund its business requirements associated with existing operations over the next 12 months. The Company manages its liquidity risk by maintaining adequate cash.

The table below summarizes the maturity profile of the Company's financial liabilities based on contractual undiscounted payments, including principal and interest.

	Less Than 1 Year	2-3 Years	4-5 Years	5+ Years	Total
<u>December 31, 2016</u>					
Non-derivative financial liabilities					
Short-term loans	\$ 57,974,562	\$ -	\$ -	\$ -	\$ 57,974,562
Accounts payable (including related parties)	27,324,525	-	-	-	27,324,525
Payables to contractors and equipment suppliers Accrued expenses and other current	63,154,514	-	-	-	63,154,514
liabilities	20,713,259	-	-	-	20,713,259
Bonds payable	40,669,468	99,161,486	35,340,742	22,979,426	198,151,122
Long-term bank loans Guarantee deposits (including those classified under accrued expenses	10,543	20,116	2,423	-	33,082
and other current liabilities)	12,000,189 221,847,060	13,060,483 112,242,085	1,609,950 36,953,115	22,979,426	26,670,622 394,021,686
Derivative financial instruments					
Forward exchange contracts					
Outflows	40,571,841 (40,586,344)	-	-	-	40,571,841
Inflows	(14,586,344)	<u>-</u> _	<del>_</del>	<del>_</del>	<u>(40,586,344)</u> (14,503)
Cross currency swap contracts	,				
Outflows Inflows	5,478,066 (5,487,600)	-	-	-	5,478,066 (5,487,600)
innows	(9,534)				(9,534)
	<u>\$ 221,823,023</u>	<u>\$ 112,242,085</u>	\$ 36,953,115	<u>\$ 22,979,426</u>	\$ 393,997,649
December 31, 2015					
Non-derivative financial liabilities					
Short-term loans Accounts payable (including related	\$ 39,488,957	\$ -	\$ -	\$ -	\$ 39,488,957
parties)	19,725,274	-	-	-	19,725,274
Payables to contractors and equipment suppliers	26,012,192	_	-	_	26,012,192
Accrued expenses and other current					
liabilities Bonds payable	18,900,123 26,494,990	104,462,371	-	25,981,316	18,900,123 225,317,464
Long-term bank loans	8,800	21,540	68,378,787 12,741	23,981,310	43,081
Other long-term payables (classified	•	•	ŕ		ŕ
under accrued expenses and other current liabilities)	18,000	_	_	_	18,000
Guarantee deposits (including those	18,000	-	-	-	18,000
classified under accrued expenses	6.167.012	12.241.051	0.000.750		25 522 (14
and other current liabilities)	6,167,813 136,816,149	13,341,051 117,824,962	8,223,750 76,615,278	25,981,316	27,732,614 357,237,705
Derivative financial instruments					
Forward exchange contracts					
Outflows	23,192,477	-	-	-	23,192,477
Inflows	(23,135,579) 56,898				(23,135,579) 56,898
	\$ 136,873,047	\$ 117,824,962	\$ 76,615,278	\$ 25,981,316	\$ 357,294,603
	<del>* 100,010,011</del>	<u> </u>	<u>~ , 0,010,210</u>	<u>~ ~~,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>	<u> </u>

#### f. Fair value of financial instruments

1) Fair value measurements recognized in the consolidated balance sheets

Fair value measurements are grouped into Levels 1 to 3 based on the degree to which the fair value is observable:

- Level 1 fair value measurements are those derived from quoted prices (unadjusted) in active markets for identical assets or liabilities;
- Level 2 fair value measurements are those derived from inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices); and
- Level 3 fair value measurements are those derived from valuation techniques that include inputs for the asset or liability that are not based on observable market data (unobservable inputs).
- 2) Fair value of financial instruments that are measured at fair value on a recurring basis

## Fair value hierarchy

The following table presents the Company's financial assets and liabilities measured at fair value on a recurring basis:

	December 31, 2016			
	Level 1	Level 2	Level 3	Total
Financial assets at FVTPL				
Held for trading Forward exchange contracts Cross currency swap contracts Designated as at FVTPL Time deposit	\$	\$ 142,406 10,976	\$ - -	\$ 142,406 10,976
Forward exchange contracts	<u> </u>	6,297,708 22		6,297,708 22
	<u>\$</u>	<u>\$ 6,451,112</u>	<u>\$</u>	<u>\$ 6,451,112</u>
Available-for-sale financial assets				
Corporate bonds Agency bonds Corporate issued asset-backed	\$ 29,999,508 14,880,482	\$ -	\$ - -	\$ 29,999,508 14,880,482
securities	-	11,254,757	-	11,254,757
Government bonds Publicly traded stocks	8,457,362 3,196,658	- 	<u>-</u>	8,457,362 3,196,658
	\$ 56,534,010	<u>\$ 11,254,757</u>	<u>\$</u>	<u>\$ 67,788,767</u>
Hedging derivative financial assets				
Interest rate futures contracts	\$ 5,550	<u>\$</u>	<u>\$</u>	\$ 5,550
Financial liabilities at FVTPL				
Held for trading Forward exchange contracts Designated as at FVTPL	\$ -	\$ 91,585	\$ -	\$ 91,585
Forward exchange contracts	=	99,550	<del>_</del>	99,550
	<u>\$</u>	<u>\$ 191,135</u>	<u>\$</u>	<u>\$ 191,135</u>

	December 31, 2015			
	Level 1	Level 2	Level 3	Total
Financial assets at FVTPL				
Held for trading Forward exchange contracts	<u>\$ -</u>	\$ 6,026	<u>\$</u>	\$ 6,026
Available-for-sale financial assets				
Corporate bonds Corporate issued asset-backed	\$ 6,267,768	\$ -	\$ -	\$ 6,267,768
securities	-	3,154,366	-	3,154,366
Agency bonds	2,627,367	-	-	2,627,367
Publicly traded stocks	1,371,483	-	-	1,371,483
Government bonds	878,377	<del>-</del>	- <u>-</u>	878,377
	<u>\$ 11,144,995</u>	\$ 3,154,366	<u>\$</u>	<u>\$ 14,299,361</u>
Hedging derivative financial assets				
Interest rate futures contracts	<u>\$ 1,739</u>	<u>\$</u>	<u>\$</u>	<u>\$ 1,739</u>
Financial liabilities at FVTPL				
Held for trading Forward exchange contracts	<u>\$</u>	<u>\$ 72,610</u>	<u>s -</u>	<u>\$ 72,610</u>

There were no transfers between Level 1 and Level 2 for the years ended December 31, 2016 and 2015, respectively.

There were no purchases and disposals for assets on Level 3 for the years ended December 31, 2016 and 2015, respectively.

# Valuation techniques and assumptions used in fair value measurement

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

- The fair values of financial assets and financial liabilities with standard terms and conditions and traded on active liquid markets are determined with reference to quoted market prices (includes interest rate futures contracts, publicly traded stocks, money market funds, government bonds, agency bonds and corporate bonds).
- Forward exchange contracts and cross currency swap contracts are measured using quoted forward exchange rates and yield curves derived from quoted interest rates matching maturities of the contracts. For investments in corporate issued asset-backed securities and time deposit, the fair value are determined using quoted market prices or the present value of future cash flows based on the observable yield curves.

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

Except as detailed in the following table, the Company considers that the carrying amounts of financial instruments that are not measured at fair value recognized in the consolidated financial statements approximate their fair values.

	<b>December 31, 2016</b>		<b>December 31, 2015</b>	
	Carrying Amount	Fair Value	Carrying Amount	Fair Value
Financial assets				
Held-to-maturity financial assets Corporate bonds/Bank debentures Commercial paper Negotiable certificate of deposit Structured product	\$ 23,849,701 8,628,176 4,829,850 1,609,950	\$ 23,996,429 8,630,769 4,847,785 1,609,738	\$ 8,143,146 - 4,934,250 3,000,000	\$ 8,146,756 - 4,945,878 2,995,731
Financial liabilities	<b>y y</b>	<b>, ,</b>	- 9 9	<i>y y</i>
Measured at amortized cost Bonds payable	191,193,557	192,845,296	215,475,194	216,223,736

# Fair value hierarchy

The table below sets out the balances for the Company's assets and liabilities that are not measured at fair value but for which the fair value is disclosed:

		December	31, 2016	
·	Level 1	Level 2	Level 3	Total
Assets				
Held-to-maturity securities Corporate bonds/Bank debentures Commercial paper Negotiable certificate of deposit Structured product	\$ 23,996,429	\$ - 8,630,769 4,847,785 1,609,738	\$ - - - -	\$ 23,996,429 8,630,769 4,847,785 1,609,738
	<u>\$ 23,996,429</u>	<u>\$ 15,088,292</u>	<u>s -</u>	<u>\$ 39,084,721</u>
<u>Liabilities</u>				
Measured at amortized cost Bonds payable	<u>\$ 192,845,296</u>	<u>\$</u>	<u>s -</u>	<u>\$ 192,845,296</u>
		December	31, 2015	
<del>-</del>	Level 1	Level 2	Level 3	Total
<u>Assets</u>				
Held-to-maturity securities Corporate bonds/Bank debentures Negotiable certificate of deposit Structured product	\$ 8,146,756 	\$ - 4,945,878 2,995,731 \$ 7,941,609	\$ - - - \$ -	\$ 8,146,756 4,945,878 2,995,731 \$ 16,088,365
<u>Liabilities</u>				
Measured at amortized cost Bonds payable	\$ 216,223,736	<u>\$</u>	<u>\$</u>	<u>\$ 216,223,736</u>

### Fair value measurement

For investments in bonds, the fair value is determined using active market prices.

For investments in commercial paper, negotiable certificate of deposit and structured product, the fair value is determined using the present value of future cash flows based on the observable yield curves.

The fair value of the Company's bonds payable is determined using active market prices.

### 37. RELATED PARTY TRANSACTIONS

Intercompany balances and transactions between TSMC and its subsidiaries, which are related parties of TSMC, have been eliminated upon consolidation; therefore those items are not disclosed in this note. The following is a summary of significant transactions between the Company and other related parties:

### a. Net revenue

			Years Ended December 31	
			2016	2015
	<u>Item</u>	Related Party Categories		
	Net revenue from sale of goods	Associates Joint venture	\$ 5,929,141	\$ 4,253,961 1,206
			\$ 5,929,141	<u>\$ 4,255,167</u>
	Net revenue from royalties	Associates	<u>\$ 516,749</u>	<u>\$ 489,420</u>
b.	Purchases			
			Years Ended	December 31
			2016	2015
	Related Party Categories Associates		<u>\$ 10,108,210</u>	<u>\$ 11,126,415</u>
c.	Receivables from related parties			
			December 31, 2016	December 31, 2015
	<u>Item</u>	Related Party Categories		
	Receivables from related parties	Associates	\$ 969,559	\$ 505,722
	Other receivables from related parties	Associates	<u>\$ 146,788</u>	<u>\$ 125,018</u>

### d. Payables to related parties

		December 31, 2016	December 31, 2015
<u>Item</u>	Related Party Categories		
Payables to related parties	Associates	<u>\$ 1,262,174</u>	<u>\$ 1,149,988</u>

e. Acquisition of property, plant and equipment

	Acquisition Price	
	Years Ended 2016	2015
Related Party Categories		
Associates	<u>\$</u>	<u>\$ 26,207</u>

### f. Others

		Years Ended December 31	
		2016	2015
<u>Item</u>	Related Party Categories		
Manufacturing expenses	Associates Joint venture	\$ 1,389,164 	\$ 2,321,858 12,819
		\$ 1,389,164	<u>\$ 2,334,677</u>
Research and development expenses	Associates Joint venture	\$ 161,735 	\$ 142,833 1,398
		<u>\$ 161,735</u>	<u>\$ 144,231</u>

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

The Company leased machinery and equipment, factory and office from Xintec and VIS. The lease terms and prices were both determined in accordance with mutual agreements. The rental expenses were paid to Xintec and VIS quarterly or monthly; the related expenses were both classified under manufacturing expenses.

The Company deferred the disposal gain/loss derived from sales of property, plant and equipment to related parties (transactions with associates and joint venture), and then recognized such gain/loss over the depreciable lives of the disposed assets.

## g. Compensation of key management personnel

The compensation to directors and other key management personnel for the years ended December 31, 2016 and 2015 were as follows:

	Years Ended	December 31
	2016	2015
Short-term employee benefits Post-employment benefits	\$ 2,023,971 3,992	\$ 1,883,013 10,926
	<u>\$ 2,027,963</u>	\$ 1,893,939

The compensation to directors and other key management personnel were determined by the Compensation Committee of TSMC in accordance with the individual performance and the market trends.

### 38. PLEDGED ASSETS

The Company provided certificate of deposits recorded in other financial assets as collateral mainly for building lease agreements. As of December 31, 2016 and 2015, the aforementioned other financial assets amounted to NT\$185,698 thousand and NT\$177,229 thousand, respectively.

### 39. SIGNIFICANT OPERATING LEASE ARRANGEMENTS

The Company leases several parcels of land, office premises and certain office equipment. These operating leases expire between January 2017 and June 2066 and can be renewed upon expiration.

The Company expensed the lease payments as follows:

	Years Ended	December 31		
	2016	2015		
Minimum lease payments	<u>\$ 1,135,735</u>	\$ 995,983		

Future minimum lease payments under the above non-cancellable operating leases are as follows:

	December 31, 2016	December 31, 2015
Not later than 1 year Later than 1 year and not later than 5 years Later than 5 years	\$ 1,321,546 3,677,432 6,623,957	\$ 1,099,017 3,635,180 6,921,891
	<u>\$ 11,622,935</u>	<u>\$ 11,656,088</u>

### 40. SIGNIFICANT CONTINGENT LIABILITIES AND UNRECOGNIZED COMMITMENTS

Significant contingent liabilities and unrecognized commitments of the Company as of the end of the reporting period, excluding those disclosed in other notes, were as follows:

- a. Under a technical cooperation agreement with Industrial Technology Research Institute, the R.O.C. Government or its designee approved by TSMC can use up to 35% of TSMC's capacity provided TSMC's outstanding commitments to its customers are not prejudiced. The term of this agreement is for five years beginning from January 1, 1987 and is automatically renewed for successive periods of five years unless otherwise terminated by either party with one year prior notice. As of December 31, 2016, the R.O.C. Government did not invoke such right.
- b. Under a Shareholders Agreement entered into with Philips and EDB Investments Pte Ltd. on March 30, 1999, the parties formed a joint venture company, SSMC, which is an integrated circuit foundry in Singapore. TSMC's equity interest in SSMC was 32%. Nevertheless, in September 2006, Philips spun-off its semiconductor subsidiary which was renamed as NXP B.V. Further, TSMC and NXP B.V. purchased all the SSMC shares owned by EDB Investments Pte Ltd. pro rata according to the Shareholders Agreement on November 15, 2006. After the purchase, TSMC and NXP B.V. currently own approximately 39% and 61% of the SSMC shares, respectively. TSMC and NXP B.V. are required, in the aggregate, to purchase at least 70% of SSMC's capacity, but TSMC alone is not required to purchase more than 28% of the capacity. If any party defaults on the commitment and the capacity utilization of SSMC falls below a specific percentage of its capacity, the defaulting party is required to compensate SSMC for all related unavoidable costs. There was no default from the aforementioned commitment as of December 31, 2016.
- c. In June 2010, Keranos, LLC. filed a complaint in the U.S. District Court for the Eastern District of Texas alleging that TSMC, TSMC North America, and several other leading technology companies infringe three expired U.S. patents. In response, TSMC, TSMC North America, and several co-defendants in the Texas case filed a lawsuit against Keranos in the U.S. District Court for the Northern District of California in November 2010, seeking a judgment declaring that they did not infringe the asserted patents, and that those patents were invalid. These two litigations have been consolidated into a single lawsuit in the U.S. District Court for the Eastern District of Texas. In February 2014, the Court entered a final judgment in favor of TSMC and TSMC North America, dismissing all of Keranos's claims against TSMC and TSMC North America with prejudice. Keranos appealed the final judgment to the U.S. Court of Appeals for the Federal Circuit, and in August 2015, the Federal Circuit remanded the case back to the Texas court for further proceedings. In January 2017, the Texas court dismissed all of Keranos's claims against TSMC and TSMC North America with prejudice, and dismissed TSMC's and TSMC North America's counterclaims without prejudice. The case is over as to TSMC and TSMC North America.
- d. In December 2010, Ziptronix, Inc. filed a complaint in the U.S. District Court for the Northern District of California accusing TSMC, TSMC North America and one other company of infringing several U.S. patents. In September 2014, the Court granted summary judgment of noninfringement in favor of TSMC and TSMC North America. Ziptronix, Inc. can appeal the Court's order. In August 2015, Tessera Technologies, Inc. announced it had acquired Ziptronix. In February 2017, the Court dismissed all of Ziptronix's claims against TSMC and TSMC North America with prejudice.
- e. TSMC joined the Customer Co-Investment Program of ASML and entered into the investment agreement in August 2012. The agreement includes an investment of EUR837,816 thousand by TSMC Global to acquire 5% of ASML's equity with a lock-up period of 2.5 years. TSMC Global has acquired the aforementioned equity on October 31, 2012. The lock-up period expired on May 1, 2015 and as of October 8, 2015, all ASML shares had been disposed.

Both parties also signed the research and development funding agreement whereby TSMC shall provide EUR276,000 thousand to ASML's research and development programs from 2013 to 2017. As of

December 31, 2016, TSMC has paid EUR228,603 thousand to ASML under the research and development funding agreement.

- f. In March 2014, DSS Technology Management, Inc. (DSS) filed a complaint in the U.S. District Court for the Eastern District of Texas alleging that TSMC, TSMC North America, TSMC Development and several other companies infringe one U.S. patent. TSMC Development has subsequently been dismissed. In May 2015, the Court entered a final judgment of noninfringement in favor of TSMC and TSMC North America. DSS appealed the final judgment to the U.S. Court of Appeals for the Federal Circuit (Federal Circuit). In November 2015, the Patent Trial and Appeal Board (PTAB) determined after concluding an Inter Partes Review (IPR) that the patent claims asserted by DSS in the District Court litigation are unpatentable. DSS appealed the PTAB's decision to the Federal Circuit in January 2016. In March 2016, the District Court's judgment of noninfringement was affirmed by the Federal Circuit. In April 2016, the District Court litigation between the parties and the related Federal Circuit appeal were dismissed, and the appeal proceeding of the PTAB's decision is also over as to TSMC.
- g. Amounts available under unused letters of credit as of December 31, 2016 and 2015 were NT\$122,356 thousand and NT\$144,738 thousand, respectively.

### 41. SIGNIFICANT LOSS FROM DISASTER

On February 6, 2016, an earthquake struck Taiwan. The resulting damage was mostly to inventories and equipment. The Company recognized related earthquake losses of NT\$2,492,138 thousand, net of insurance claim, for the year ended December 31, 2016. Such losses were primarily included in cost of revenue.

# 42. EXCHANGE RATE INFORMATION OF FOREIGN-CURRENCY FINANCIAL ASSETS AND LIABILITIES

The following information was summarized according to the foreign currencies other than the functional currency of the Company. The exchange rates disclosed were used to translate the foreign currencies into the functional currency. The significant financial assets and liabilities denominated in foreign currencies were as follows:

	Foreign Currencies (In Thousands)	Exchange Rate (Note 1)	Carrying Amount (In Thousands)
<u>December 31, 2016</u>			
Financial assets			
Monetary items			
USD	\$ 5,042,715	32.199	\$ 162,370,381
EUR	19,556	34.30	670,767
JPY	37,024,347	0.2775	10,274,256
Non-monetary items	, ,		
HKD	257,056	4.15	1,066,780
Financial liabilities			
Monetary items			
USD	4,000,930	32.199	128,825,952
EUR	183,922	34.30	6,308,513
JPY	61,062,114	0.2775	16,944,737
	, ,		(Continued)

	Foreign Currencies (In Thousands)	Exchange Rate (Note 1)	Carrying Amount (In Thousands)
<u>December 31, 2015</u>			
Financial assets			
Monetary items			
USD	\$ 3,089,634	32.895	\$ 101,633,497
USD	251,824	6.494(Note 2)	8,283,759
EUR	43,933	36.00	1,581,571
JPY	9,717,089	0.2733	2,655,680
Non-monetary items			
HKD	166,727	4.24	706,924
Financial liabilities			
Monetary items			
USD	2,952,404	32.895	97,119,331
EUR	44,174	36.00	1,590,264
JPY	26,416,113	0.2733	7,219,524
			(Concluded)

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

Note 2: The exchange rate represents the number of RMB for which one USD dollars could be exchanged.

The realized and unrealized foreign exchange gain and loss were net gains of NT\$1,161,322 thousand and NT\$2,481,446 thousand for the years ended December 31, 2016 and 2015, respectively. Since there were varieties of foreign currency transactions and functional currencies within the subsidiaries of the Company, the Company was unable to disclose foreign exchange gain (loss) towards each foreign currency with significant impact.

### 43. OPERATING SEGMENTS INFORMATION

### a. Operating segments

The Company's only reportable segment is the foundry segment. The foundry segment engages mainly in the manufacturing, selling, packaging, testing and computer-aided design of integrated circuits and other semiconductor devices and the manufacturing of masks. The Company also had other operating segments that did not exceed the quantitative threshold for separate reporting. These segments mainly engaged in the researching, developing, designing, manufacturing and selling of renewable energy and efficiency related technologies and products.

The Company uses the income from operations as the measurement for segment profit and the basis of performance assessment. There was no material differences between the accounting policies of the operating segment and the accounting policies described in Note 4.

## b. Segment revenue and operating results

	Foundry		Others	Total		
Year ended December 31, 2016						
Net revenue from external customers Income from operations Share of profits of associates and joint venture Income tax expense	\$	947,938,344 377,957,778 3,495,600 51,621,144	\$ - - - -	\$	947,938,344 377,957,778 3,495,600 51,621,144	
Year ended December 31, 2015						
Net revenue from external customers Income (loss) from operations Share of profits (loss) of associates and joint		842,690,157 320,833,219	807,211 (785,444)		843,497,368 320,047,775	
venture Income tax expense (benefit)		4,517,699 43,874,515	(385,571) (1,771)		4,132,128 43,872,744	

## c. Geographic information

		Net Revenue Custo	_			Non-curr	ent A	Assets
		Years Ended	Dec	ember 31	Г	ecember 31,	D	ecember 31,
		2016		2015		2016		2015
Taiwan	\$	127,062,984	\$	90,169,543	\$	991,567,870	\$	844,173,826
United States		610,371,107		566,600,178		8,245,054		8,892,851
Asia		146,907,470		123,705,876		14,071,364		15,889,993
Europe, the Middle East and								
Africa		58,042,311		57,064,965		8,677		8,278
Others	_	5,554,472	_	5,956,806	_	<u> </u>	_	<u>-</u> _
	\$	947 938 344	\$	843 497 368	\$	1 013 892 965	\$	868 964 948

The Company categorized the net revenue mainly based on the country in which the customer is headquartered. Non-current assets include property, plant and equipment, intangible assets and other noncurrent assets.

### d. Production information

	Years Ended	December 31
Production	2016	2015
Wafer Others	\$ 909,179,151 <u>38,759,193</u>	\$ 802,937,969 40,559,399
	\$ 947,938,344	<u>\$ 843,497,368</u>

## e. Major customers representing at least 10% of net revenue

	Year	s Ended	December 31	
	2016		2015	
	Amount	%	Amount	%
Customer A	\$ 157,185,418	17	\$ 134,117,206	16
Customer B	107,463,238	11	134,158,421	16

### 44. ADDITIONAL DISCLOSURES

Following are the additional disclosures required by the Securities and Futures Bureau for TSMC:

- a. Financings provided: Please see Table 1 attached;
- b. Endorsement/guarantee provided: Please see Table 2 attached;
- c. Marketable securities held (excluding investments in subsidiaries, associates and joint venture): Please see Table 3 attached;
- d. Marketable securities acquired and disposed of at costs or prices of at least NT\$300 million or 20% of the paid-in capital: Please see Table 4 attached;
- e. Acquisition of individual real estate properties at costs of at least NT\$300 million or 20% of the paid-in capital: Please see Table 5 attached;
- f. Disposal of individual real estate properties at prices of at least NT\$300 million or 20% of the paid-in capital: None;
- g. Total purchases from or sales to related parties of at least NT\$100 million or 20% of the paid-in capital: Please see Table 6 attached;
- h. Receivables from related parties amounting to at least NT\$100 million or 20% of the paid-in capital: Please see Table 7 attached;
- i. Information about the derivative financial instruments transaction: Please see Notes 7 and 10;
- j. Others: The business relationship between the parent and the subsidiaries and significant transactions between them: Please see Table 8 attached;
- k. Names, locations, and related information of investees over which TSMC exercises significant influence (excluding information on investment in mainland China): Please see Table 9 attached;
- 1. Information on investment in mainland China
  - 1) The name of the investee in mainland China, the main businesses and products, its issued capital, method of investment, information on inflow or outflow of capital, percentage of ownership, income (losses) of the investee, share of profits/losses of investee, ending balance, amount received as dividends from the investee, and the limitation on investee: Please see Table 10 attached.
  - 2) Significant direct or indirect transactions with the investee, its prices and terms of payment, unrealized gain or loss, and other related information which is helpful to understand the impact of investment in mainland China on financial reports: Please see Table 8 attached.

FINANCINGS PROVIDED FOR THE YEAR ENDED DECEMBER 31, 2016 (Amounts in Thousands of New Taiwan Dollars, Unless Specified Otherwise)

N	lo.	Financing Company	Counter-party Financial Statement Account	Related Party	Maximum Balance for the Period (RMB in Thousands) (Note 2)		Amount Actually Drawn (RMB in Thousands)	Interest Rate	Nature for Financing	Transaction Amounts	Reason for Financing (Note 3)	Allowance for Bad Debt	Colla Item	nteral Value	Financing Limits for Each Borrowing Company	Financing Company's Total Financing Amount Limits
	1 Т	TSMC China	TSMC Nanjing Other receivables from related parties	Yes	\$ 21,313,180 (RMB4,600,000)	. , ,		0.35%-1.5%	The need for short-term/long-term financing (Note 3)	\$ -	Operating capital	\$ -	-	\$ -	\$ 42,850,549 (Note 1)	\$ 42,850,549 (Note 1)

Note 1: The total amount for lending to a company for funding for a short-term period shall not exceed ten percent (10%) of the net worth of TSMC China. In addition, the total amount lendable to any one borrower shall be no more than thirty percent (30%) of the borrower's net worth. The above restriction does not apply to the subsidiaries whose voting shares are 100% owned, directly or indirectly, by TSMC. However, the total amount lendable to 100% owned subsidiaries by TSMC shall not exceed forty percent (40%) of the net worth of TSMC China. When there is a lending for funding needs by TSMC China to TSMC, or to the subsidiaries, which are not located in Taiwan, directly or indirectly wholly owned by TSMC, the lending will not be subject to the restriction set forth in the above paragraph of this Article. Notwithstanding the foregoing, the aggregate amount available for lending and the total amount lending limit for such borrower still shall not exceed the net worth of TSMC China.

Note 2: The maximum balance for the period and ending balance represent the amounts approved by the Board of Directors.

Note 3: The restriction of the term of each loan for funding not exceeding one year shall not apply to inter-company loans for funding between offshore subsidiaries in which the Company holds, directly or indirectly, 100% of the voting shares.

# ENDORSEMENTS/GUARANTEES PROVIDED FOR THE YEAR ENDED DECEMBER 31, 2016

(Amounts in Thousands of New Taiwan Dollars, Unless Specified Otherwise)

			Guarant	eed Party	Limits on					Ratio of				
No		Endorsement/ arantee Provider	Name	Nature of Relationship	Endorsement/ Guarantee Amount Provided to Each Guaranteed Party (Notes 1 and 2)	Maximum Balance for the Period (US\$ in Thousands) (Note 3)	Ending Balance (US\$ in Thousands) (Note 3)	Amount Actually Drawn (US\$ in Thousands)	Endorsement/	Accumulated Endorsement/ Guarantee to Net	Maximum Endorsement/ Guarantee Amount Allowable (Note 2)	Guarantee Provided by Parent Company	Guarantee Provided by A Subsidiary	Guarantee Provided to Subsidiaries in Mainland China
0	TSM			Subsidiary Subsidiary	\$ 347,312,065 347,312,065	\$ 48,298,500 (US\$ 1,500,000) 2,679,385 (US\$ 83,213)	\$ 37,028,850 (US\$ 1,150,000) 2,679,385 (US\$ 83,213)	2,679,385	-	2.67% 0.19%	\$ 347,312,065 347,312,065	Yes Yes	No No	No No

Note 1: The total amount of the guarantee provided by TSMC to any individual entity shall not exceed ten percent (10%) of TSMC's net worth, or the net worth of such entity. However, subsidiaries whose voting shares are 100% owned, directly or indirectly, by TSMC are not subject to the above restrictions after the approval of the Board of Directors.

Note 2: The total amount of guarantee shall not exceed twenty-five percent (25%) of TSMC's net worth.

Note 3: The maximum balance for the period and ending balance represent the amounts approved by the Board of Directors.

MARKETABLE SECURITIES HELD
DECEMBER 31, 2016
(Amounts in Thousands of New Taiwan Dollars, Unless Specified Otherwise)

				December 31, 2016					
Held Company Name	Marketable Securities Type and Name	Relationship with the Company	Financial Statement Account	Shares/Units (In Thousands)	Carrying Value (Foreign Currencies in Thousands)	Percentage of Ownership (%)	Fair Value (Foreign Currencies in Thousands)	Note	
TCMC	Comparate hand								
TSMC	Corporate bond CPC Corporation, Taiwan		Held-to-maturity financial assets	_	\$ 1,967,303	N/A	\$ 1,969,240		
	Hon Hai Precision Ind. Co., Ltd.		"		400,250	N/A	400,389		
	Taiwan Power Company		"	_	200,848	N/A	200,865		
	Nan Ya Plastics Corporation		"		150,742	N/A	150,763		
	Formosa Petrochemical Corporation	-	"	-	100,219	N/A	100,403		
	Commercial paper								
	Taiwan Power Company	-	Held-to-maturity financial assets	865	8,628,176	N/A	8,630,769		
	Stock Motech		Available for cale for a significant	59 220	1 (50 450	12	1 (50 450		
	Semiconductor Manufacturing International Corporation	-	Available-for-sale financial assets	58,320 21,105	1,650,450 1,066,780	12	1,650,450 1,066,780		
	RichWave Technology Corp.	-	"	21,105 2,208	1,066,780	4	1,066,780		
	United Industrial Gases Co., Ltd.	-	Financial assets carried at cost	21,230	193,584	10	193,584		
	Shin-Etsu Handotai Taiwan Co., Ltd.		rmanetal assets carried at cost	10,500	195,384	7	195,384		
	Global Investment Holding Inc.	-	"	11,124	99,041	6	99,041		
	W.K. Technology Fund IV	-	n	2,560	18,121	2	18,121		
	Fund								
	Horizon Ventures Fund	_	Financial assets carried at cost	_	11,259	12	11,259		
	Crimson Asia Capital	-	"	-	8,263	1	8,263		
TSMC Partners	Common stock								
	Tela Innovations	_	Financial assets carried at cost	10,440	US\$ 65,000	25	US\$ 65,000		
	Mcube Inc.	-	"	6,333	-	13	-		
	<u>Fund</u>								
1	China Walden Venture Investments II, L.P.	-	Financial assets carried at cost	-	US\$ 7,291	9	US\$ 7,291		
	Shanghai Walden Venture Capital Enterprise	-	"	-	US\$ 4,270	6	US\$ 4,270		
TSMC Global	Corporate bond				11G# 20.006	27/4	11G# 20.00¢		
	Bank of America Corp.	-	Available-for-sale financial assets	-	US\$ 29,886	N/A	US\$ 29,886		
	JPMorgan Chase & Co.	-	<u>"</u>	-	US\$ 26,231	N/A	US\$ 26,231		
	Morgan Stanley	-		-	US\$ 25,451	N/A	US\$ 25,451		
	Goldman Sachs Group Inc. Verizon Communications	-	"	-	US\$ 18,769 US\$ 17,059	N/A N/A	US\$ 18,769		
		-	"	-			US\$ 17,059 US\$ 16,819		
	Citigroup Inc. Abbvie Inc.	-	"	-	US\$ 16,819 US\$ 13,850	N/A N/A	US\$ 16,819 US\$ 13,850		
	AT&T Inc.		"	-	US\$ 13,332	N/A N/A	US\$ 13,830 US\$ 13,332		
	Gilead Sciences Inc.	1	"	-	US\$ 13,332 US\$ 11,850	N/A N/A	US\$ 13,332 US\$ 11,850		
	Aetna Inc.		"	_	US\$ 11,618	N/A	US\$ 11,618		
	PNC Bank NA		"		US\$ 11,518	N/A	US\$ 11,598		
	Capital One NA	_	"	_	US\$ 10,533	N/A	US\$ 10,533		
	Oracle Corp.	_	"	_	US\$ 10,405	N/A	US\$ 10,405		
l	· r					<del>-</del>			

					December	31, 2016		
Held Company Name	Marketable Securities Type and Name	Relationship with the Company	Financial Statement Account	Shares/Units (In Thousands)	Carrying Value (Foreign Currencies in Thousands)	Percentage of Ownership (%)	Fair Value (Foreign Currencies in Thousands)	Not
MC Global	Svenska Handelsbanken AB		Available-for-sale financial assets		US\$ 9,837	N/A	US\$ 9,837	
MC Global		-	Available-101-sale Illialicial assets	-				
	CVS Health Corp.	-		-	US\$ 9,736	N/A	US\$ 9,736	
	Westpac Banking Corp.	-	<u>"</u>	-	US\$ 8,905	N/A	US\$ 8,905	
	Anheuser Busch InBev Fin.	-	"	-	US\$ 8,737	N/A	US\$ 8,737	
	Ford Motor Credit Co LLC	-	"	-	US\$ 8,681	N/A	US\$ 8,681	
	Analog Devices, Inc.	-	"	-	US\$ 8,619	N/A	US\$ 8,619	
	Teva Pharmaceuticals Netherlands	-	"	-	US\$ 8,467	N/A	US\$ 8,467	
	American Intl. Group	-	"	-	US\$ 7,944	N/A	US\$ 7,944	
	Credit Suisse New York	-	"	-	US\$ 7,267	N/A	US\$ 7,267	
	BB&T Corporation	-	"	_	US\$ 7,189	N/A	US\$ 7,189	
	BMW US Capital LLC	-	"	_	US\$ 7,180	N/A	US\$ 7,180	
	Pricoa Global Funding I	_	n n	_	US\$ 7,140	N/A	US\$ 7,140	
	Daimler Finance NA LLC.	_	"	_	US\$ 7,101	N/A	US\$ 7,101	
	Bank of Ny Mellon Corp.	_	"	_	US\$ 7,006	N/A	US\$ 7,006	
	BP Capital Markets PLC	_	"	_	US\$ 6,658	N/A	US\$ 6,658	
	ERAC USA Finance LLC		· ·	_	US\$ 6,623	N/A	US\$ 6,623	
	Duke Energy Corp.	_	n n		US\$ 6,535	N/A	US\$ 6,535	
	Southern Co.	-	,,	-	US\$ 6,510	N/A N/A		
		-	,,	-				
	Ventas Realty LP/Cap Crp.	-	<u>"</u>	-	US\$ 6,429	N/A	US\$ 6,429	
	Citizens Bank NA/RI	-		-	US\$ 6,331	N/A	US\$ 6,331	
	Suntrust Banks Inc.	-	"	-	US\$ 6,203	N/A	US\$ 6,203	
	Welltower Inc.	-	"	-	US\$ 6,145	N/A	US\$ 6,145	
	Wells Fargo & Company	-	"	-	US\$ 6,127	N/A	US\$ 6,127	
	American Express Credit	-	"	-	US\$ 6,045	N/A	US\$ 6,045	
	Berkshire Hathaway Fin.	-	"	-	US\$ 6,017	N/A	US\$ 6,017	
	Skandinaviska Enskilda Banken AB	-	"	-	US\$ 6,001	N/A	US\$ 6,001	
	Sysco Corporation	_	"	_	US\$ 5,978	N/A	US\$ 5,978	
	Express Scripts Holding	_	"	_	US\$ 5,899	N/A	US\$ 5,899	
	Toronto Dominion Bank	_	"	_	US\$ 5,806	N/A	US\$ 5,806	
	Groupe Danone S.A.	_	"	_	US\$ 5,763	N/A	US\$ 5,763	
	Shell International Fin.	_	"	_	US\$ 5,713	N/A	US\$ 5,713	
	Toyota Motor Credit Corp.	_	"	_	US\$ 5,633	N/A	US\$ 5,633	
	TIAA Asset Management Finance LLC		n n		US\$ 5,617	N/A	US\$ 5,617	
	ABN AMRO Bank N.V.	-	n n		US\$ 5,572	N/A	US\$ 5,572	
	Protective Life Global Funding	-	,,	_	US\$ 5,552	N/A	US\$ 5,552	
		-	,,	-				
	Key Bank N.A.	-		-	US\$ 5,532	N/A	US\$ 5,532	
	Mitsubishi UFJ Fin Grp.	-	, " 	-	US\$ 5,524	N/A	US\$ 5,524	
	Cisco Systems Inc.	-	"	-	US\$ 5,511	N/A	US\$ 5,511	
	Hyundai Capital America	-	"	-	US\$ 5,471	N/A	US\$ 5,471	
	New York Life Global FDG	-	"	-	US\$ 5,445	N/A	US\$ 5,445	
	Siemens Financieringsmat	-	"	-	US\$ 5,357	N/A	US\$ 5,357	
	Fifth Third Bank	-	"	-	US\$ 5,341	N/A	US\$ 5,341	
	Aviation Capital Group	-	"	-	US\$ 5,144	N/A	US\$ 5,144	
	Sempra Energy	-	"	-	US\$ 5,144	N/A	US\$ 5,144	
	Intl. Bank Recon. & Development	-	"	-	US\$ 5,137	N/A	US\$ 5,137	
	HSBC Holdings PLC	-	"	-	US\$ 5,124	N/A	US\$ 5,124	
	UBS AG Stamford CT	_	"	_	US\$ 5,017	N/A	US\$ 5,017	
	Sumitomo Mitsui Trust Bank, Limited	_	"	_	US\$ 5,008	N/A	US\$ 5,008	
	Macquarie Group Ltd.	_	n .	_	US\$ 4,984	N/A	US\$ 4,984	
	Reliance Stand Life II	_	"		US\$ 4,925	N/A	US\$ 4,984 US\$ 4,925	
	INCHAIRCE STAIRLE LIE II	-		-	US\$ 4,923	1 <b>N</b> / <b>A</b>	US\$ 4,923	

					Decembe	r 31, 2016		
Hold Company Name	Markatable Securities Type and Name	Polationship with the Company	Financial Statement Account	Shares/Units	Carrying Value	Dougontogo of	Fair Value	Note
Held Company Name	Marketable Securities Type and Name	Relationship with the Company	Financial Statement Account	(In Thousands)	(Foreign Currencies	Percentage of	(Foreign Currencies	Note
				(III I nousanus)	in Thousands)	Ownership (%)	in Thousands)	
TO 10 01 1 1	D D				1100 4007	27/4	1100 1007	
TSMC Global	Dominion Resources Inc.	-	Available-for-sale financial assets	-	US\$ 4,907	N/A	US\$ 4,907	
	Walgreens Boots Alliance	-	"	-	US\$ 4,905	N/A	US\$ 4,905	
	Swedbank AB	-	"	-	US\$ 4,839	N/A	US\$ 4,839	
	Air Liquide Finance	-	"	-	US\$ 4,696	N/A	US\$ 4,696	
	ING Bank N.V.	-	"	-	US\$ 4,692	N/A	US\$ 4,692	
	Jackson Natl Life Global	-	"	-	US\$ 4,570	N/A	US\$ 4,570	
	Mondelez International	-	"	-	US\$ 4,527	N/A	US\$ 4,527	
	Mizuho Financial Group	-	"	-	US\$ 4,436	N/A	US\$ 4,436	
	Enel Finance Intl N.V.	-	"	-	US\$ 4,402	N/A	US\$ 4,402	
	CA, Inc.	-	"	_	US\$ 4,353	N/A	US\$ 4,353	
	Deutsche Telekom International Fin.	-	n .	_	US\$ 4,340	N/A	US\$ 4,340	
	Oaktree Capital Management, L.P.	_	"	_	US\$ 4,316	N/A	US\$ 4,316	
	Twenty-First Century Fox Inc.	_	"	_	US\$ 4,271	N/A	US\$ 4,271	
	Lloyds Bank PLC	_	"	_	US\$ 4,220	N/A	US\$ 4,220	
	Schlumberger Hldgs Corp.	_	"		US\$ 4,150	N/A	US\$ 4,150	
	Nextera Energy Capital		"		US\$ 4,067	N/A N/A	US\$ 4,067	
	Keycorp Pty Ltd.	_	"		US\$ 4,043	N/A N/A	US\$ 4,043	
		-	,,	-				
	Ameren Corp.	-	,,	-	US\$ 4,017	N/A		
	Pepsico Inc.	-	<u>"</u>	-	US\$ 4,004	N/A	US\$ 4,004	
	State Street Corp.	-	"	-	US\$ 3,995	N/A	US\$ 3,995	
	United Technologies Corporation	-	"	-	US\$ 3,968	N/A	US\$ 3,968	
	Fortive Corporation	-	"	-	US\$ 3,941	N/A	US\$ 3,941	
	Wells Fargo Bank NA	-	"	-	US\$ 3,880	N/A	US\$ 3,880	
	Autozone Inc.	-	"	-	US\$ 3,803	N/A	US\$ 3,803	
	Husky Energy Inc.	-	"	-	US\$ 3,775	N/A	US\$ 3,775	
	Sumitomo Mitsui Financial Group	-	"	-	US\$ 3,772	N/A	US\$ 3,772	
	Fifth Third Bancorp	-	"	-	US\$ 3,771	N/A	US\$ 3,771	
	Ryder System Inc.	-	"	_	US\$ 3,730	N/A	US\$ 3,730	
	Anheuser Busch InBev Worldwide Inc.	-	"	_	US\$ 3,659	N/A	US\$ 3,659	
	US Bank NA Cincinnati	-	n n	_	US\$ 3,568	N/A	US\$ 3,568	
	UBS Group Funding	-	"	_	US\$ 3,547	N/A	US\$ 3,547	
	BAT Intl Finance PLC	_	"	_	US\$ 3,497	N/A	US\$ 3,497	
	Credit Agricole London	_	"	_	US\$ 3,331	N/A	US\$ 3,331	
	Lam Research Corp.	_	"	_	US\$ 3,218	N/A	US\$ 3,218	
	Time Warner Inc.	_	"		US\$ 3,022	N/A	US\$ 3,022	
	Canadian Imperial Bank		"		US\$ 3,022 US\$ 3,002	N/A	US\$ 3,002	
	BNP Paribas New York Branch		"	_	US\$ 3,000	N/A N/A	US\$ 3,002	
		_	"	_	US\$ 2,983	N/A N/A	US\$ 2,983	
	Suncorp Metway Ltd. Corpoerative Centrale	_	"	-	US\$ 2,983 US\$ 2,974	N/A N/A	US\$ 2,983 US\$ 2,974	
	Microsoft Corp.	_	,,	-	US\$ 2,974 US\$ 2,905			
		-	"	-		N/A	US\$ 2,905	
	HSBC USA Inc.	-		-	US\$ 2,869	N/A	US\$ 2,869	
	Rabobank Nederland NY	-		-	US\$ 2,855	N/A	US\$ 2,855	
	Principal Life Global Funding II	-		-	US\$ 2,782	N/A	US\$ 2,782	
	KfW	-		-	US\$ 2,748	N/A	US\$ 2,748	
	PartnerRe Finance B LLC	-		-	US\$ 2,709	N/A	US\$ 2,709	
	Sprint Spectrum L.P.	-	"	-	US\$ 2,705	N/A	US\$ 2,705	
	Apple Inc.	-	"	-	US\$ 2,607	N/A	US\$ 2,607	
	Exelon Generation Co. LLC	-	"	-	US\$ 2,584	N/A	US\$ 2,584	
	MetLife Global Funding I	-	"	-	US\$ 2,524	N/A	US\$ 2,524	
	Unitedhealth Group Inc.	-	"	-	US\$ 2,500	N/A	US\$ 2,500	
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					December	31, 2016		
Held Company Name	Marketable Securities Type and Name	Relationship with the Company	Financial Statement Account	Shares/Units (In Thousands)	Carrying Value (Foreign Currencies in Thousands)	Percentage of Ownership (%)	Fair Value (Foreign Currencies in Thousands)	Not
SMC Global	Toronto Domin Holding	_	Available-for-sale financial assets	_	US\$ 2,478	N/A	US\$ 2,478	
Wie Globai	Nordea Bank AB		Available-101-sale lilialicial assets		US\$ 2,478	N/A	US\$ 2,457	
	Commonwealth Bank Australia NY	-	"	-	US\$ 2,404	N/A	US\$ 2,404	
	Marriott International, Inc.	-	"	-	US\$ 2,399	N/A	US\$ 2,399	
	Dow Chemical Co/The	-	,,	-		N/A N/A		
		-	,,	-		N/A N/A	US\$ 2,357 US\$ 2,253	
	Mckesson Corp.	-	,,	-	US\$ 2,253			
	Public Service Colorado	-	,,	-	US\$ 2,166	N/A	US\$ 2,166	
	Allied World Assurance	-	"	-	US\$ 2,155	N/A	US\$ 2,155	
	Celgene Corp.	-		-	US\$ 2,115	N/A	US\$ 2,115	
	Stancorp Financial Group	-	"	-	US\$ 2,097	N/A	US\$ 2,097	
	Johnson Controls International PLC	-	"	-	US\$ 2,052	N/A	US\$ 2,052	
	The Bear Stearns Companies LLC.	-	"	-	US\$ 2,011	N/A	US\$ 2,011	
	British Telecommunications PLC	-	"	-	US\$ 2,011	N/A	US\$ 2,011	
	Erste Bank der oesterreichischen Sparkassen AG	-	"	-	US\$ 2,000	N/A	US\$ 2,000	
	Norinchukin Bank	-	"	-	US\$ 2,000	N/A	US\$ 2,000	
	Nordic Investment Bank	-	"	-	US\$ 1,996	N/A	US\$ 1,996	
	FMS Wertmanagement	-	"	-	US\$ 1,995	N/A	US\$ 1,995	
	Asian Development Bank	-	"	-	US\$ 1,994	N/A	US\$ 1,994	
	Kells Funding LLC	-	"	-	US\$ 1,993	N/A	US\$ 1,993	
	Magellan Midstream Partners LP	-	"	-	US\$ 1,971	N/A	US\$ 1,971	
	Stryker Corp.	-	"	-	US\$ 1,951	N/A	US\$ 1,951	
	National Australia Bank/NY	-	"	-	US\$ 1,944	N/A	US\$ 1,944	
	Huntington National Bank	-	"	-	US\$ 1,911	N/A	US\$ 1,911	
	BPCE SA	-	n .	-	US\$ 1,910	N/A	US\$ 1,910	
	Sumitomo Mitsui Banking	_	"	_	US\$ 1,898	N/A	US\$ 1,898	
	Royal Bank of Canada	-	"	_	US\$ 1,893	N/A	US\$ 1,893	
	Oncor Electric Delivery	_	"	_	US\$ 1,853	N/A	US\$ 1,853	
	WestRock RKT Company	_	"	_	US\$ 1,843	N/A	US\$ 1,843	
	Orange S.A.	_	"	_	US\$ 1,824	N/A	US\$ 1,824	
	Regency Centers, L.P.	_	"	_	US\$ 1,817	N/A	US\$ 1,817	
	LyondellBasell Industries N.V.		"	_	US\$ 1,796	N/A	US\$ 1,796	
	Aust. & NZ Banking Grp. NY	-	"		US\$ 1,794	N/A	US\$ 1,794	
	Southern Power Company	-	"	-	US\$ 1,785	N/A	US\$ 1,785	
	Dominion Gas Holdings, LLC	-	,,	-				
	Cardinal Health Inc.	-	"	-	US\$ 1,764	N/A	US\$ 1,764	
		-	"	-	US\$ 1,754	N/A	US\$ 1,754	
	Kimco Realty Corp.	-	"	-	US\$ 1,739	N/A	US\$ 1,739	
	Amgen Inc.	-		-	US\$ 1,706	N/A	US\$ 1,706	
	Tyson Foods, Inc.	-	"	-	US\$ 1,704	N/A	US\$ 1,704	
	Enterprise Products Operating, LLC	-	"	-	US\$ 1,697	N/A	US\$ 1,697	
	Deutsche Bank AG, London	-	"	-	US\$ 1,644	N/A	US\$ 1,644	
	Pacific Gas & Electric	-	"	-	US\$ 1,633	N/A	US\$ 1,633	
	Trans Canada Pipelines	-	"	-	US\$ 1,566	N/A	US\$ 1,566	
	African Development Bank	-	"	-	US\$ 1,562	N/A	US\$ 1,562	
	Capital One Bank (USA), NA	-	"	-	US\$ 1,553	N/A	US\$ 1,553	
	Branch Banking & Trust	-	"	-	US\$ 1,532	N/A	US\$ 1,532	
	Simon Property Group LP	-	"	-	US\$ 1,507	N/A	US\$ 1,507	
	Halliburton Co.	-	"	-	US\$ 1,505	N/A	US\$ 1,505	
	Pfizer Inc.	-	"	-	US\$ 1,491	N/A	US\$ 1,491	
	Standard Chartered PLC	-	"	-	US\$ 1,487	N/A	US\$ 1,487	
	Suncor Energy, Inc.	<u>-</u>	"	_	US\$ 1,482	N/A	US\$ 1,482	
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					December	31, 2016		
Held Company Name	Marketable Securities Type and Name	Relationship with the Company	Financial Statement Account	Shares/Units (In Thousands)	Carrying Value (Foreign Currencies in Thousands)	Percentage of Ownership (%)	Fair Value (Foreign Currencies in Thousands)	Not
SMC Global	Westpac Banking Corp.		Available-for-sale financial assets	_	US\$ 1,481	N/A	US\$ 1,481	
Sivie Global	Procter & Gamble Co/The	_	"		US\$ 1,472	N/A	US\$ 1,472	
	HSBC Bank PLC	-	"	-	US\$ 1,472 US\$ 1,468	N/A N/A	US\$ 1,472 US\$ 1,468	
		-	,,	-				
	Guardian Life Global Funding	-		-	US\$ 1,461	N/A	US\$ 1,461	
	General Electric Co.	-		-	US\$ 1,417	N/A	US\$ 1,417	
	Eastman Chemical Company	-	"	-	US\$ 1,407	N/A	US\$ 1,407	
	ConocoPhillips	-	"	-	US\$ 1,396	N/A	US\$ 1,396	
	Walt Disney Company/The	-	"	-	US\$ 1,396	N/A	US\$ 1,396	
	PacifiCorp	-	"	-	US\$ 1,387	N/A	US\$ 1,387	
	Deutsche Bank AG	-	"	_	US\$ 1,351	N/A	US\$ 1,351	
	Biogen Inc.	-	"	_	US\$ 1,343	N/A	US\$ 1,343	
	IBM Corp.	_	"	_	US\$ 1,308	N/A	US\$ 1,308	
	Eaton Corp.	_	"	_	US\$ 1,307	N/A	US\$ 1,307	
	Santander UK PLC	_	II .	_	US\$ 1,289	N/A	US\$ 1,289	
	Philip Morris Intl Inc.	_	"		US\$ 1,287	N/A	US\$ 1,287	
	Equifax Inc.		"	-	US\$ 1,287 US\$ 1,282	N/A N/A	US\$ 1,282	
		-		-				
	American Airlines 2013-2	-		-	US\$ 1,278	N/A	US\$ 1,278	
	Visa Inc.	-	"	-	US\$ 1,277	N/A	US\$ 1,277	
	Nissan Motor Acceptance	-	"	-	US\$ 1,256	N/A	US\$ 1,256	
	Kroger Co.	-	"	-	US\$ 1,254	N/A	US\$ 1,254	
	CSX Corp.	-	"	_	US\$ 1,248	N/A	US\$ 1,248	
	Banque Fed Cred Mutuel	<u>-</u>	"	_	US\$ 1,178	N/A	US\$ 1,178	
	ONEOK Partners LP	_	"	_	US\$ 1,160	N/A	US\$ 1,160	
	Corning Inc.	_	"	_	US\$ 1,142	N/A	US\$ 1,142	
	Public Service Enterprise Group Inc.		"	_	US\$ 1,138	N/A	US\$ 1,138	
	ERP Operating LP	-	,,		US\$ 1,123	N/A	US\$ 1,123	
		-	,,	-				
	Berkshire Hathaway Inc.	-		-	US\$ 1,119	N/A	US\$ 1,119	
	Chevron Corp.	-		-	US\$ 1,103	N/A	US\$ 1,103	
	Medtronic Inc.	-	"	-	US\$ 1,098	N/A	US\$ 1,098	
	Wesfarmers Ltd.	-	"	-	US\$ 1,094	N/A	US\$ 1,094	
	Marsh & Mclennan Cos Inc.	-	"	-	US\$ 1,088	N/A	US\$ 1,088	
	International Paper Company	-	"	-	US\$ 1,080	N/A	US\$ 1,080	
	BNP Paribas	-	"	-	US\$ 1,071	N/A	US\$ 1,071	
	Cigna Corporation	-	"	-	US\$ 1,069	N/A	US\$ 1,069	
	Comcast Corp.	_	"	_	US\$ 1,056	N/A	US\$ 1,056	
	Merck & Co Inc.	_	"	_	US\$ 1,055	N/A	US\$ 1,055	
	EOG Resources, Inc.	_	n n	_	US\$ 1,053	N/A	US\$ 1,053	
			"	_				
	Berkshire Hathaway Energy Co.	-	"	-	US\$ 1,051	N/A	US\$ 1,051	
	Lincoln National Corp.	-		-	US\$ 1,048	N/A	US\$ 1,048	
	Macy's Retail Holdings Inc.	-	"	-	US\$ 1,027	N/A	US\$ 1,027	
	Statoil ASA	-	"	-	US\$ 1,020	N/A	US\$ 1,020	
	Amazon.com Inc.	-	"	-	US\$ 1,019	N/A	US\$ 1,019	
	Altera Corp.	-	"	-	US\$ 1,017	N/A	US\$ 1,017	
	HP Enterprise Co.	-	"	-	US\$ 1,010	N/A	US\$ 1,010	
	Home Depot Inc.	_	"	_	US\$ 1,009	N/A	US\$ 1,009	
	Realty Income Corp.	_	"	_	US\$ 1,008	N/A	US\$ 1,008	
	Manuf & Traders Trust Co.		"		US\$ 1,007	N/A	US\$ 1,008 US\$ 1,007	
	Carnival Corp.	_	"	-	US\$ 1,007 US\$ 1,004	N/A N/A		
		-	,,	-				
	John Deere Capital Corp.	-		-	US\$ 1,004	N/A	US\$ 1,004	
	Macquarie Bank Ltd.	-	"	_	US\$ 1,003	N/A	US\$ 1,003	

					December	31, 2016		
Held Company Name	Marketable Securities Type and Name	Relationship with the Company	Financial Statement Account	Shares/Units (In Thousands)	Carrying Value (Foreign Currencies in Thousands)	Percentage of Ownership (%)	Fair Value (Foreign Currencies in Thousands)	Not
MC Global	Caterpillar Financial Services Corp.		Available-for-sale financial assets		US\$ 1,000	N/A	US\$ 1,000	
IVIC Global	Nisource Finance Corp.	-	Available-101-sale illialicial assets	-	US\$ 1,000 US\$ 996	N/A	US\$ 1,000 US\$ 996	
		-	,,	-	US\$ 988	N/A N/A	US\$ 988	
	Georgia-Pacific LLC	-	"	-				
	Duke Realty LP	-	" "	-	US\$ 972	N/A	US\$ 972	
	Texas Eastern Transmission, LP	-	".	-	US\$ 972	N/A	US\$ 972	
	Duke Energy Progress Inc.	-	"	-	US\$ 962	N/A	US\$ 962	
	Glaxosmithkline Cap. Inc.	-	"	-	US\$ 950	N/A	US\$ 950	
	Southern Electric Generating Company	-	"	-	US\$ 909	N/A	US\$ 909	
	Lockheed Martin Corp.	-	"	-	US\$ 904	N/A	US\$ 904	
	Svenska Handelsbanken AB (publ)	-	"	-	US\$ 891	N/A	US\$ 891	
	AXA Financial, Inc.	-	"	-	US\$ 886	N/A	US\$ 886	
	Federal Realty Invs Trust	-	"	-	US\$ 883	N/A	US\$ 883	
	Mastercard Inc.	-	"	-	US\$ 855	N/A	US\$ 855	
	Nucor Corporation	-	"	-	US\$ 843	N/A	US\$ 843	
	AXIS Specialty Finance PLC	-	"	-	US\$ 821	N/A	US\$ 821	
	Pacific LifeCorp	-	"	-	US\$ 816	N/A	US\$ 816	
	Bank Of Montreal	-	"	_	US\$ 812	N/A	US\$ 812	
	Societe Generale Group	-	"	-	US\$ 810	N/A	US\$ 810	
	Xylem Inc.	<u>-</u>	"	_	US\$ 809	N/A	US\$ 809	
	Manulife Financial Corporation	_	"	_	US\$ 804	N/A	US\$ 804	
	Cox Communications, Inc.	_	"	_	US\$ 791	N/A	US\$ 791	
	Koninklijke Philips N.V.	_	"	_	US\$ 786	N/A	US\$ 786	
	CMS Energy Corp.	_	"	_	US\$ 772	N/A	US\$ 772	
	Crown Castle Towers LLC	-	"		US\$ 758	N/A N/A	US\$ 758	
	HCP Inc.	-	"	-	US\$ 751	N/A N/A	US\$ 751	
	Southern Railway Co.	-	"	-	US\$ 741	N/A N/A	US\$ 741	
		-	,,	-				
	DTE Electric Company	-		-	US\$ 718	N/A	US\$ 718	
	Baker Hughes Incorporated	-		-	US\$ 714	N/A	US\$ 714	
	Regions Financial Corporation	-	"	-	US\$ 710	N/A	US\$ 710	
	Total Capital International S.A.	-	".	-	US\$ 703	N/A	US\$ 703	
	Continental Airlines Inc.	-	"	-	US\$ 700	N/A	US\$ 700	
	TTX Co.	-	"	-	US\$ 700	N/A	US\$ 700	
	Scentre Group	-	"	-	US\$ 699	N/A	US\$ 699	
	Air Lease Corporation	-	"	-	US\$ 696	N/A	US\$ 696	
	Cargill, Incorporated	-	"	-	US\$ 693	N/A	US\$ 693	
	Danske Bank A/S	-	"	-	US\$ 689	N/A	US\$ 689	
	Entergy Louisiana, LLC	-	"	-	US\$ 676	N/A	US\$ 676	
	Ohio Power Company	-	"	-	US\$ 669	N/A	US\$ 669	
	National Retail Properties, Inc.	-	"	-	US\$ 663	N/A	US\$ 663	
	Capital One Financial Co.	-	"	-	US\$ 661	N/A	US\$ 661	
	Liberty Property LP	-	"	-	US\$ 638	N/A	US\$ 638	
	Grupo Bimbo, S.A.B. de C.V.	-	"	-	US\$ 637	N/A	US\$ 637	
	Potash Corp Saskatchewan Inc.	_	"	_	US\$ 637	N/A	US\$ 637	
	ABC Inc.	_	"	_	US\$ 621	N/A	US\$ 621	
	Life Technologies Corp.	_	"	_	US\$ 620	N/A	US\$ 620	
	Dr Pepper Snapple Group, Inc.	_	"	_	US\$ 614	N/A	US\$ 614	
	Kimberly Clark Corp.		"		US\$ 604	N/A N/A	US\$ 604	
	Bayer US Finance LLC	-	"		US\$ 599	N/A N/A	US\$ 599	
		-	,,	-			US\$ 599	
	CenterPoint Energy Resources	-	"	-		N/A		
	Host Hotels & Resorts, Inc.	-	"	-	US\$ 590	N/A	US\$ 590	1

					December	31, 2016		
Held Company Name	Marketable Securities Type and Name	Relationship with the Company	Financial Statement Account	Shares/Units	Carrying Value	Percentage of	Fair Value	Note
Tield Company Ivame	Marketable Securities Type and Name	Relationship with the Company	Financial Statement Account	(In Thousands)	(Foreign Currencies	Ownership (%)	(Foreign Currencies	Note
				(III I II ousunus)	in Thousands)		in Thousands)	
TSMC Global	MUFG Union Bank, N.A.		Available-for-sale financial assets		US\$ 586	N/A	US\$ 586	
1 SIVIC Global	AvalonBay Communities Inc.	-	Available-101-sale illiancial assets	-	US\$ 581	N/A N/A	US\$ 581	
	Bunge Limited Finance Corp.	-	,,	-	US\$ 573	N/A N/A	US\$ 573	
	Boston Properties LP	-	,,	-	US\$ 562	N/A N/A	US\$ 562	
	Nordstrom Inc.	-	,,	-				
		-	"	-	US\$ 553 US\$ 549	N/A N/A	US\$ 553 US\$ 549	
	Caisse Centrale Desjardins	-	"	-		N/A N/A		
	Digital Realty Trust, L.P. Mcdonald's Corp.	-	"	-	US\$ 544 US\$ 543	N/A N/A	US\$ 544 US\$ 543	
		-	,,	-	US\$ 543	N/A N/A	US\$ 543	
	Southwestern Electric Power Company Prudential Financial Inc.	-	"	-			US\$ 540	
		-	"	-		N/A		
	O'Reilly Automotive Inc.	-	"	-	US\$ 537	N/A		
	TD Ameritade Holding Corp.	-	"	-	US\$ 535	N/A	US\$ 535	
	American Express Co.	-	"	-	US\$ 531	N/A	US\$ 531	
	Burlington Northern Santa Fe Corp.	-	"	-	US\$ 526	N/A	US\$ 526	
	Inter-American Development Bank PSEG Power LLC	-	"	-	US\$ 507	N/A	US\$ 507	
		-	"	-	US\$ 504	N/A	US\$ 504	
	CBS Corp.	-	"	-	US\$ 503	N/A	US\$ 503	
	Comerica Inc.	-		-	US\$ 474	N/A	US\$ 474	
	Honeywell International Inc.	-	"	-	US\$ 464	N/A	US\$ 464	
	Nationwide Building Society	-	" "	-	US\$ 445	N/A	US\$ 445	
	Valero Energy Corp.	-	" "	-	US\$ 441	N/A	US\$ 441	
	Blackstone Holdings Finance Co., LLC	-	" "	-	US\$ 429	N/A	US\$ 429	
	Exxon Mobil Corporation	-	" "	-	US\$ 400	N/A	US\$ 400	
	Conocophillips Company	-	"	-	US\$ 399	N/A	US\$ 399	
	Volkswagen Group of America, Inc.	-	" "	-	US\$ 398	N/A	US\$ 398	
	First Niagara Financial Group, Inc.	-	"	-	US\$ 394	N/A	US\$ 394	
	Aon Corp.	-	"	-	US\$ 394	N/A	US\$ 394	
	Nationwide Financial Service, Inc.	-		-	US\$ 382	N/A	US\$ 382	
	American Honda Finance	-		-	US\$ 368	N/A	US\$ 368	
	Wm. Wrigley Jr. Co.	-		-	US\$ 353	N/A	US\$ 353	
	Metlife Inc.	-		-	US\$ 329	N/A	US\$ 329	
	Pearson Dol Fin Two PLC	-	"	-	US\$ 315	N/A	US\$ 315	
	Barclays Bank PLC	-	"	-	US\$ 292	N/A	US\$ 292	
	BAE Systems Holdings, Inc.	-	"	-	US\$ 292	N/A	US\$ 292	
	EMD Finance LLC	-		-	US\$ 278	N/A	US\$ 278	
	Mattel Inc.	-	"	-	US\$ 268	N/A	US\$ 268	
	U.S. Bancorp	-	"	-	US\$ 262	N/A	US\$ 262	
	Nomura Holdings Inc.	-	"	-	US\$ 252	N/A	US\$ 252	
	Kansas City Power & Light Company	-	"	-	US\$ 247	N/A	US\$ 247	
	Bank of Nova Scotia	-	"	-	US\$ 246	N/A	US\$ 246	
	Aon PLC	-	"	-	US\$ 245	N/A	US\$ 245	
	Protective Life Corporation	-	"	-	US\$ 238	N/A	US\$ 238	
	WestRock MWV, LLC	-	"	-	US\$ 235	N/A	US\$ 235	
	Rolls Royce PLC	-	"	-	US\$ 223	N/A	US\$ 223	
	Assurant, Inc.	-	"	-	US\$ 212	N/A	US\$ 212	
	Woolworths Limited	-	"	-	US\$ 196	N/A	US\$ 196	
	JPMorgan Chase & Co.	-	Held-to-maturity financial assets	-	US\$ 153,147	N/A	US\$ 154,710	
	Wells Fargo & Company	-	"	-	US\$ 150,007	N/A	US\$ 150,321	
	Goldman Sachs Group, Inc.	-	"	-	US\$ 100,000	N/A	US\$ 100,959	
	Westpac Banking Corp.	-	"	-	US\$ 100,000	N/A	US\$ 100,743	
					1			

					December	31, 2016		
Held Company Name	Marketable Securities Type and Name	Relationship with the Company	Financial Statement Account	Shares/Units (In Thousands)	Carrying Value (Foreign Currencies in Thousands)	Percentage of Ownership (%)	Fair Value (Foreign Currencies in Thousands)	Note
SMC Global	Commonwealth Bank of Australia	_	Held-to-maturity financial assets	_	US\$ 50,000	N/A	US\$ 50,419	
	National Australia Bank	_	"	_	US\$ 50,000	N/A	US\$ 50,313	
	Bank of Nova Scotia	-	"	-	US\$ 49,982	N/A	US\$ 50,158	
	Government bond							
	US Treasury N/B	-	Available-for-sale financial assets	-	US\$ 259,231	N/A	US\$ 259,231	
	Abu Dhabi Government International Bond	-	"	-	US\$ 3,428	N/A	US\$ 3,428	
	Agency bond				11C# 271 225	27/4	110Ф 271 225	
	Federal National Mortgage Association	-	Available-for-sale financial assets	-	US\$ 271,325	N/A	US\$ 271,325	
	Federal Home Loan Mortgage Corporation	-		-	US\$ 154,300	N/A	US\$ 154,300	
	Government National Mortgage Association	-	"	-	US\$ 18,007	N/A	US\$ 18,007	
	Federal Home Loan Bank	-	"	-	US\$ 9,663	N/A	US\$ 9,663	
	Export Import Bank Korea	-	"	-	US\$ 3,008	N/A	US\$ 3,008	
	Export Developmnt Canada	-	"	-	US\$ 2,648	N/A	US\$ 2,648	
	Government National Mortgage Association	-	"	-	US\$ 1,937	N/A	US\$ 1,937	
	Federal Farm Credit Bank Fhlmc Multifamily Structured PTC	-	"	-	US\$ 898 US\$ 356	N/A N/A	US\$ 898 US\$ 356	
	Negotiable certificate of deposit							
	China Construction Bank	_	Held-to-maturity financial assets	_	US\$ 50,000	N/A	US\$ 50,245	
	China Development Bank	_	"		US\$ 50,000	N/A	US\$ 50,179	
	Bank of China	-	"	-	US\$ 50,000	N/A	US\$ 50,134	
	Corporate issued asset-backed securities							
	Capital One Multi Asset Execution Trust	-	Available-for-sale financial assets	-	US\$ 39,626	N/A	US\$ 39,626	
	Chase Issuance Trust	-	"	-	US\$ 31,276	N/A	US\$ 31,276	
	American Express Credit Account Master Trust	-	"	-	US\$ 23,114	N/A	US\$ 23,114	
	Discover Card Execution Note Trust	-	"	-	US\$ 23,076	N/A	US\$ 23,076	
	Citibank Credit Card Issuance Trust	-	"	-	US\$ 22,585	N/A	US\$ 22,585	
	Bank of America Credit Card Trust	-	"	-	US\$ 19,464	N/A	US\$ 19,464	
	Nissan Auto Lease Trust	-	"	-	US\$ 13,780	N/A	US\$ 13,780	
	GS Mortgage Securities Trust	-	"	-	US\$ 12,386	N/A	US\$ 12,386	
	Ford Credit Floorplan Master Owner Trust	-	"	-	US\$ 11,944	N/A	US\$ 11,944	
	Ford Credit Auto Owner Trust	-	"	-	US\$ 10,910	N/A	US\$ 10,910	
	UBS-Barclays Commercial Mortgage Trust	-	"	-	US\$ 10,161	N/A	US\$ 10,161	
	Nissan Auto Receivables Owner Trust	-	"	-	US\$ 10,067	N/A	US\$ 10,067	
	Mercedes Benz Master Owner Trust	-	"	-	US\$ 10,012	N/A	US\$ 10,012	
	GM Financial Automobile Leasing Trust	-	"	-	US\$ 9,557	N/A	US\$ 9,557	
	Honda Auto Receivables Owner Trust	-	"	-	US\$ 7,632	N/A	US\$ 7,632	
	J.P. Morgan Chase Commercial Mortgage Securities Trust	-	"	-	US\$ 7,510	N/A	US\$ 7,510	
	Hyundai Auto Receivables Trust	-	"	-	US\$ 7,315	N/A	US\$ 7,315	
	Toyota Auto Receivables Owner Trust	-	"	-	US\$ 7,134	N/A	US\$ 7,134	
	Hyundai Auto Lease Securitization Trust	_	"	-	US\$ 6,371	N/A	US\$ 6,371	
	BMW Vehicle Lease Trust	-	"	-	US\$ 5,936	N/A	US\$ 5,936	
	Morgan Stanley Bank of America Merrill Lynch Trust	-	"	-	US\$ 5,790	N/A	US\$ 5,790	
	Chesapeake Funding II LLC	_	"	-	US\$ 5,746	N/A	US\$ 5,746	
	Ford Credit Auto Owner Trust	_	"	-	US\$ 5,651	N/A	US\$ 5,651	
	JPMBB Commercial Mortgage Securities Trust	_	"	_	US\$ 5,472	N/A	US\$ 5,472	
	COMM Mortgage Trust		"	1	US\$ 5,208	N/A	US\$ 5,208	
	ICADVIVI VIOLEAGE TIUSI	<u>-</u>		_		IN/ /*	(100) 1/300	

Held Company Name								
Heid Company Name	Marketable Securities Type and Name	Relationship with the Company	Financial Statement Account	Shares/Units (In Thousands)	Carrying Value (Foreign Currencies in Thousands)	Percentage of Ownership (%)	Fair Value (Foreign Currencies in Thousands)	Note
SMC Global	Citigroup Commercial Mortgage Trust	-	Available-for-sale financial assets	_	US\$ 4,207	N/A	US\$ 4,207	
	Morgan Stanley Capital I Trust	-	"	-	US\$ 4,114	N/A	US\$ 4,114	
	Mercedes Benz Auto Receivables Trust	-	"	-	US\$ 3,699	N/A	US\$ 3,699	
	BMW Floorplan Master Owner Trust	-	"	-	US\$ 2,437	N/A	US\$ 2,437	
	Ford Credit Auto Lease Trust	-	" "	-	US\$ 2,174	N/A	US\$ 2,174	
	Nissan Master Owner Trust Receivables Trust	-	"	-	US\$ 2,003	N/A	US\$ 2,003	
	Carmax Auto Owner Trust	-	",	-	US\$ 2,000	N/A	US\$ 2,000	
	Golden Credit Card Trust	-	"	-	US\$ 1,801	N/A	US\$ 1,801	
	Wheels SPV LLC	-	,,	-	US\$ 1,690 US\$ 1,295	N/A N/A	US\$ 1,690 US\$ 1,295	
	Wells Fargo Commercial Mortgage Trust CFCRE Commercial Mortgage Trust	-	"	-	US\$ 1,083	N/A N/A	US\$ 1,295 US\$ 1,083	
	Enterprise Fleet Financing LLC	-	n	-	US\$ 798	N/A N/A	US\$ 798	
	Structure product Bank of Tokyo-Mitsubishi UFJ	-	Held-to-maturity financial assets	-	US\$ 50,000	N/A	US\$ 49,993	
	Fund							
	Primavera Capital Fund II L.P.	-	Financial assets carried at cost	-	US\$ 23,784	4	US\$ 23,784	
TAF III	Common stock LiquidLeds Lighting Corp.		Financial assets carried at cost	1,600	US\$ 800	11	US\$ 800	
	Xenio Corporation	-	rinanciai assets carried at cost	435	US\$ 453	11	US\$ 453	
	Accton Wireless Broadband Corp.	-	n	2,249	US\$ 315	6	US\$ 315	
	Preferred stock							
	GTBF, Inc.	-	Financial assets carried at cost	1,154	US\$ 1,500	-	US\$ 1,500	
	Neoconix, Inc.	-	n	4,147	US\$ 170	-	US\$ 170	
TAF II	Common stock							
	RichWave Technology Corp.	-	Available-for-sale financial assets	1,334	US\$ 2,378	2	US\$ 2,378	
	Impinj, Inc.	-		62	US\$ 2,189	-	US\$ 2,189	
	Sentelic	-	Financial assets carried at cost	1,806	US\$ 2,607	8	US\$ 2,607	
	5V Technologies, Inc.	-	"	963	US\$ 2,168	2	US\$ 2,168	
	Aether Systems, Inc.	-	"	3,100	US\$ 339	30	US\$ 339	
	Preferred stock Aquantia	-	Financial assets carried at cost	4,643	US\$ 4,441	2	US\$ 4,441	
DF	Preferred stock							
D1	Sonics, Inc.	-	Financial assets carried at cost	230	-	3	-	
DF II	Common stock							
	Alchip Technologies Limited	-	Available-for-sale financial assets	6,581	US\$ 6,387	11	US\$ 6,387	
	Sonics, Inc.	-	Financial assets carried at cost	278	-	4	-	
	Preferred stock							
	Sonics, Inc.	-	Financial assets carried at cost	264	-	4	-	
rowth Fund	Common stock							
	Innovium, Inc.	-	Financial assets carried at cost	221	US\$ 370	-	US\$ 370	
	Preferred stock							
	Innovium, Inc.	-	Financial assets carried at cost	230	US\$ 384	-	US\$ 384	

(Concluded)

# MARKETABLE SECURITIES ACQUIRED AND DISPOSED OF AT COSTS OR PRICES OF AT LEAST NT\$300 MILLION OR 20% OF THE PAID-IN CAPITAL FOR THE YEAR ENDED DECEMBER 31, 2016

(Amounts in Thousands of New Taiwan Dollars, Unless Specified Otherwise)

	Marketable Securities	Financial Statement		Nature of	Beginning	g Balance	Acqu	isition		Disp	osal		Ending Bala	ance (Note 1)
Company Name	Type and Name	Account	Counter-party	Relationship	Shares/Units (In Thousands)	Amount	Shares/Units (In Thousands)	Amount	Shares/Units (In Thousands)	Amount	Carrying Value	Gain/Loss on Disposal	Shares/Units (In Thousands)	Amount
TSMC	Bank debentures HSBC Bank (Taiwan) Limited	Held-to-maturity financial assets	-	-	-	\$ 3,305,475	-	\$ -	-	\$ 3,300,000	\$ 3,300,000	\$ -	-	\$ -
	Corporate bond CPC Corporation, Taiwan	Held-to-maturity financial assets	-	-	-	1,543,723	-	1,513,743	-	1,075,000	1,075,000	-	-	1,967,303
	Hon Hai Precision Ind. Co., Ltd.	"	-	-	-	1,003,858	-	-	-	600,000	600,000	-	-	400,250
	Taiwan Power Company	"	-	-	-	1,207,601	-	-	-	1,000,000	1,000,000	-	-	200,848
	Nan Ya Plastics Corporation	"	-	-	-	-	-	302,139	-	150,000	150,000	-	-	150,742
	Structure product Hua Nan Commercial Bank	Held-to-maturity financial	_	_	_	2,000,000	_	_	_	2,000,000	2,000,000	_	_	_
		assets				_,,				_,,	_,,,,,,,			
	Cathay United Bank	"	-	-	-	1,000,000	-	-	-	1,000,000	1,000,000	-	-	-
	Commercial paper Taiwan Power Company	Held-to-maturity financial assets	-	-	-	-	945	9,426,884	80	800,000	800,000	-	865	8,628,176
	Stock TSMC Global	Investments accounted for using equity method	-	Subsidiary	5	203,425,723	2	64,451,983	-	-	-	-	7	265,634,729
	TSMC Nanjing VisEra Tech	"	- VisEra Holding	Subsidiary Subsidiary	-	-	253,120	6,435,200 5,005,171 Note 2		-	-	- -	253,120	6,331,094 5,234,883
	Xintec	"	VisEra Holding	Associate	92,778	2,209,785	18,504	678,348 Note 2	-	-	-	-	111,282	2,599,807
TSMC Global	Corporate bond Bank of America Corp.	Available-for-sale financial assets	-	-	-	US\$ 6,993	-	US\$ 25,862	-	US\$ 4,624	US\$ 4,532	US\$ 92	-	US\$ 27,973
	JPMorgan Chase & Co.	"	-	-	_	US\$ 4,971	_	US\$ 28,534	-	US\$ 11,121	US\$ 10,999	US\$ 122	-	US\$ 22,330
	Verizon Communications	"	-	-	-	US\$ 4,994	_	US\$ 12,385	-	-	-	-	-	US\$ 17,059
	Citigroup Inc.	"	-	-	-	US\$ 2,986	-	US\$ 13,979	-	-	-	-	-	US\$ 16,819
	Abbvie Inc.	"	-	-	-	-	-	US\$ 14,338	-	US\$ 251	US\$ 251	-	-	US\$ 13,850
	AT&T Inc.	"	-	-	-	US\$ 3,882	-	US\$ 10,044	-	US\$ 384	US\$ 390	US\$ (6)	-	US\$ 13,332
	Gilead Sciences Inc.	"	-	-	-	US\$ 1,000	-	US\$ 11,222	-	-	-	-	-	US\$ 11,850
	Aetna Inc.	"	-	-	-	-	-	US\$ 11,687	-	-	-	-	-	US\$ 11,618
	Morgan Stanley	"	-	-	-	US\$ 1,005	-	US\$ 10,359	-	-	-	-	-	US\$ 11,237
	Oracle Corp.	"	-	-	-	US\$ 2,428	-	US\$ 9,572	-	US\$ 1,447	US\$ 1,426	US\$ 21	-	US\$ 10,405
	Svenska Handelsbanken AB Teva Pharmaceuticals Netherlands	"	-	-	-	-	-	US\$ 9,922 US\$ 14,629		US\$ 5,856	US\$ 5,987	US\$ (131)	-	US\$ 9,837 US\$ 8,467

	Marketable Securities	Financial Statement		Nature of	Beginning	g Balan	ce		isition				Dis	posal				Ending Bal	ance (N	ote 1)
Company Name	Type and Name	Account	Counter-party	Relationship	Shares/Units (In Thousands)	An	nount	Shares/Units (In Thousands)	A	mount	Shares/Units (In Thousands)	Aı	nount	Carryi	ing Value		Loss on posal	Shares/Units (In Thousands)	A	mount
CSMC Clobal	BMW US Capital LLC	Available-for-sale financial				1100			TICO	11 211		1100	3,990	US\$	3,990	US\$			TICO	7 100
SMC Global	BMW OS Capital LLC	assets	-	-	-	US\$	-	-	0.22	11,211	-	US\$	3,990	0.53	3,990	022	-	-	US\$	7,180
	Wells Fargo & Company	"	-	-	-	US\$	2,475	-	US\$		-	US\$	6,008	US\$	5,967	US\$	41	-	US\$	
	Sysco Corporation	"	-	-	-		-	-	US\$	13,622	-	US\$	7,605	US\$	7,496	US\$	109	-	US\$	5,978
	Shell International Fin.	"	-	-	-	US\$	1,243	-	US\$	9,752	-	US\$	5,212	US\$	5,234	US\$	(22)	-	US\$	5,713
	Cisco Systems Inc.	"	-	-	-		-	-	US\$		-	US\$	8,079	US\$	8,007	US\$	72	-	US\$	
	US Bank NA Cincinnati	"	_	_	_		_	_	US\$		_	US\$	9,018	US\$	8,985	US\$	33	_	US\$	
	JPMorgan Chase & Co.	Held-to-maturity financial	_	_	_	US\$	10,798	_		143,533	_	СБФ	,,010	ОБФ	- 0,705	Ουψ	_	_		153,147
	of worgan chase & co.	assets				СБФ	10,770		СБФ	1 15,555									CDU	155,117
	Walls Forge & Company	assets "							TICC	150,008									TICC	150,007
	Wells Fargo & Company		-	-	-		-	-			-		-		-		-	-		
	Westpac Banking Corp.		-	-	-		-	-		100,000	-		-		-		-	-		100,000
	Goldman Sachs Group, Inc.	"	-	-	-		-	-		100,000	-		-		-		-	-		100,000
	Commonwealth Bank of Australia	"	-	-	-		-	-	US\$		-		-		-		-	-	US\$	
	National Australia Bank	"	-	-	-		-	-	US\$	50,000	-		-		-		-	-	US\$	50,000
	Bank of Nova Scotia	"	-	-	-		-	-	US\$	49,978	-		-		-		-	-	US\$	49,982
										•										Í
	Government bond US Treasury N/B	Available-for-sale financial	_	_	_	US\$	26,702	_	US\$	285,949	_	US\$	110,552	US\$	111,205	US\$	(653)	_	US\$	195,285
		assets					- ,			,-					,		()			,
	US Treasury Floating Rate Note	"	_	_	_		_	_	2211	104,729	_	2211	74,021	2211	73,990	US\$	31	_	US\$	30,756
	Treasury Inflation-Indexed N/B	"		_	_			_	US\$		_	СБФ	7 1,021	ОБФ	-	Ουψ	-	_	US\$	
	US Treasury N/B	,,	_	-	_		_				_	US\$	12,938	US\$	12.062	US\$	(25)	_	US\$	
			-	-	-		-	-	US\$		-				12,963		(23)	-	033	13,842
	WI Treasury Securities		-	-	-		-	-	US\$		-	US\$	14,699	US\$	14,698	US\$	1	-		-
	Treasury Bill	"	-	-	-		-	-	US\$	10,486	-	US\$	10,494	US\$	10,486	US\$	8	-		-
	Agency bond																			
	Fed Hm Ln Pc Pool G60594	Available-for-sale financial	-	-	-		-	-	US\$	16,185	-	US\$	609	US\$	698	US\$	(89)	-	US\$	15,322
		assets																		
	Fnma Pool AL9128	"	-	-	-		-	-	US\$	23,724	-	US\$	9,288	US\$	9,351	US\$	(63)	-	US\$	14,067
	Fnma Pool AL7191	"	-	-	-	US\$	5,864	-	US\$	9,855	-	US\$	2,925	US\$	3,333	US\$	(408)	_	US\$	12,533
	Fnma Pool AL8430	"	_	_	_		_	_	US\$		_	US\$	516	US\$	584	US\$	(68)	_	US\$	
	Fnma Pool 888577	"	_	_	_		_	_	US\$		_	US\$	2,292	US\$	2,619	US\$	(327)	_	US\$	
	Fed Hm Ln Pc Pool G18605	"		_	_			_	US\$		_	US\$	425	US\$	447	US\$	(22)	_	US\$	
	Fed Hm Ln Pc Pool G60081	,,	_	-	_		_	_	US\$		_	US\$	439	US\$	478	US\$	(39)	_	US\$	
			-	-	-		-	-			-						. ,	-		
	Fnma Pool AV5062		-	-	-		-	-	US\$		-	US\$	1,309	US\$	1,366	US\$	(57)	-	US\$	8,457
	Fed Hm Ln Pc Pool G60344	"	-	-	-		-	-	US\$		-	US\$	9,351	US\$	9,385	US\$	(34)	-		-
	Fnma Pool AS8074	"	-	-	-		-	-	US\$		-	US\$	20,007	US\$	19,967	US\$	40	-		-
	Fed Home Ln Discount Nt.	"	-	-	-		-	-	US\$	12,496	-	US\$	12,504	US\$	12,496	US\$	8	-		-
	Fnma Tba 15 Yr 2.5	"	-	-	-	US\$	3,964	-	US\$	11,998	-	US\$	16,006	US\$	15,978	US\$	28	-		-
	Corporate issued asset-backed																			
	securities								1											
	Capital One Multi Asset	Available-for-sale financial	_	_	_	US\$	8,961	_	2211	32,785	_	US\$	1,999	US\$	1,996	US\$	3	_	2211	39,626
	Execution Trust	assets				ОБФ	0,701		CDD	32,763		ОБФ	1,,,,,	ОБФ	1,770	ОБФ	3		CDD	37,020
		assets "				TICO	15 507		TICO	21.462		TICO	E 711	TICO	5 752	TICC	(0)		TICC	21.27/
	Chase Issuance Trust	.,	-	-	-		15,507	-		21,462	-	US\$	5,744	US\$	5,753	US\$	(9)	-		31,276
	Discover Card Execution Note	"	-	-	-	08\$	12,126	-	08\$	17,060	-	US\$	6,104	US\$	6,152	US\$	(48)	-	08\$	23,076
	Trust																			
	Citibank Credit Card Issuance	"	-	-	-	US\$	9,756	-	US\$	19,801	-	US\$	6,850	US\$	6,843	US\$	7	-	US\$	22,585
	Trust Bank of America Credit Card	"				US\$	4,433		TICO	13,019									TICO	17,465
	Trust		-	-	_	033	4,433	-	033	13,019	-		-		-		-	_	033	1 /,403
		,,				TIOO	5.000		TIOO	0.465		TIOO	2.450	TIOO	2.460	TIOO	/15		TIOO	11.044
	Ford Credit Floorplan Master		-	-	-	US\$	5,922	-	US\$	9,465	-	US\$	3,459	US\$	3,460	US\$	(1)	-	US\$	11,944
	Owner Trust	ì	i l	i	i .				1		1			1		1		i .	1	

	Marketable Securities	Financial Statement		Noture of	Beginning	Balance	e	Acqui	isition			Dis	osal		Ending Bala	nce (Note 1)
Company Name	Type and Name	Account	Counter-party		Shares/Units (In Thousands)	Amo	unt	Shares/Units (In Thousands)	Am	ount	Shares/Units (In Thousands)	Amount	Carrying Value	Gain/Loss on Disposal	Shares/Units (In Thousands)	Amount
	Structure product Bank of Tokyo-Mitsubishi UFJ	Held-to-maturity financial assets	-	-	-	US\$	-	-	US\$	50,000	-	US\$ -	US\$ -	US\$ -	-	US\$ 50,000
	Fund Primavera Capital Fund II L.P.	Financial assets carried at cost	-	-	-	US\$	12,017	-	US\$	11,767	-	-	-	-	-	US\$ 23,784
	Money market fund Goldman Sachs US\$ Liquid Reserves Fund	Available-for-sale financial assets	-	-	-		-	199,144	US\$	199,144	199,144	US\$ 199,144	US\$ 199,144	-	-	-

Note 1: The ending balance includes the amortization of premium/discount on bonds investments, share of profits/losses of investees and other related adjustment.

(Concluded)

Note 2: The Company restructured the organizational structure to simplify investment structure. Therefore, the acquisition amount was the carrying value of VisEra Holding's investment in VisEra Tech and Xintec, respectively.

# ACQUISITION OF INDIVIDUAL REAL ESTATE PROPERTIES AT COSTS OF AT LEAST NT\$300 MILLION OR 20% OF THE PAID-IN CAPITAL FOR THE YEAR ENDED DECEMBER 31, 2016

(Amounts in Thousands of New Taiwan Dollars, Unless Specified Otherwise)

			Transaction				Pri	or Transaction of l	Related Counter-pa	arty			
Company Name	Types of Property	Transaction Date	Amount (Foreign Currencies in Thousands)	Payment Term	Counter-party	Nature of Relationships	Owner	Relationships	Transfer Date	Amount	Price Reference	Purpose of Acquisition	Other Terms
TSMC	Fab	April 15, 2015 to February 17, 2016	\$ 362,111	Monthly settlement by the construction progress and acceptance	Environetics Design Group Co., Ltd.	-	N/A	N/A	N/A	N/A	Bidding, price comparison and price negotiation	Manufacturing purpose	None
	Fab	September 17, 2015 to January 25, 2016	3,201,800	Monthly settlement by the construction progress and acceptance	DA CIN Construction Co., Ltd.	-	N/A	N/A	N/A	N/A	Bidding, price comparison and price negotiation	Manufacturing purpose	None
	Fab	November 20, 2015 to October 26, 2016	329,010	Monthly settlement by the construction progress and acceptance	TASA Construction Corporation	-	N/A	N/A	N/A	N/A	Bidding, price comparison and price negotiation	Manufacturing purpose	None
	Fab	December 10, 2015 to April 11, 2016	3,167,768	Monthly settlement by the construction progress and acceptance	Fu Tsu Construction Co., Ltd.	-	N/A	N/A	N/A	N/A	Bidding, price comparison and price negotiation	Manufacturing purpose	None
	Fab	December 31, 2015 to January 04, 2016	1,250,000	Monthly settlement by the construction progress and acceptance	China Steel Structure Co., Ltd.	-	N/A	N/A	N/A	N/A	Bidding, price comparison and price negotiation	Manufacturing purpose	None
	Fab	January 22, 2016 to January 25, 2016	750,000	Monthly settlement by the construction progress and acceptance	KEDGE Construction Co., Ltd.	-	N/A	N/A	N/A	N/A	Bidding, price comparison and price negotiation	Manufacturing purpose	None
TSMC Nanjing	Land use right	June 16, 2016	RMB 160,521	100% payment	Nanjing Municipal Bureau of Land and Resources	-	N/A	N/A	N/A	N/A	Bidding	Manufacturing purpose	None
	Fab	June 30, 2016	RMB 899,997	Monthly settlement by the construction progress and acceptance		-	N/A	N/A	N/A	N/A	Bidding, price comparison and price negotiation	Manufacturing purpose	None
	Fab	October 17, 2016	RMB 408,980	Monthly settlement by the construction progress and acceptance	Shanghai Baoye Group Co., Ltd.	-	N/A	N/A	N/A	N/A	Bidding, price comparison and price negotiation	Manufacturing purpose	None

# TOTAL PURCHASES FROM OR SALES TO RELATED PARTIES OF AT LEAST NT\$100 MILLION OR 20% OF THE PAID-IN CAPITAL FOR THE YEAR ENDED DECEMBER 31, 2016

(Amounts in Thousands of New Taiwan Dollars, Unless Specified Otherwise)

				Trans	action D	etails	Abnorm	al Transaction	Notes/Accounts Pay Receivable	able or	
Company Name	Related Party	Nature of Relationships	Purchases/ Sales	Amount (Foreign Currencies in Thousands)	% to Total	Payment Terms	Unit Price Payment Terms		Ending Balance (Foreign Currencies in Thousands)	% to Total	Note
TSMC	TSMC North America	Subsidiary	Sales	\$ 633,917,888	65	Net 30 days from invoice date (Note)	-	Note	\$ 85,874,678	67	
	GUC	Associate	Sales	5,008,684	1	Net 30 days from the end of the month of when invoice is issued	-	-	931,787	1	
	TSMC China	Subsidiary	Purchases	19,256,773	27	Net 30 days from the end of the month of when invoice is issued	-	-	(1,775,774)	6	
	WaferTech	Indirect subsidiary	Purchases	8,531,562	12	Net 30 days from the end of the month of when invoice is issued	-	-	(1,303,795)	4	
	VIS	Associate	Purchases	6,732,298	10	Net 30 days from the end of the month of when invoice is issued	-	-	(587,407)	2	
	SSMC	Associate	Purchases	3,375,422	5	Net 30 days from the end of the month of when invoice is issued	-	-	(505,655)	2	
TSMC North America	GUC	Associate of TSMC	Sales	842,301 (US\$ 26,098)	-	Net 30 days from invoice date	-	-	37,349 (US\$ 1,160)	-	

Note: The tenor is 30 days from TSMC's invoice date or determined by the payment terms granted to its clients by TSMC North America.

# RECEIVABLES FROM RELATED PARTIES AMOUNTING TO AT LEAST NT\$100 MILLION OR 20% OF THE PAID-IN CAPITAL DECEMBER 31, 2016

(Amounts in Thousands of New Taiwan Dollars, Unless Specified Otherwise)

					Overdue			
Company Name	Related Party	Nature of Relationships	Ending Balance (Foreign Currencies in Thousands)	Turnover Days (Note 1)	Amount	Action Taken	Amounts Received in Subsequent Period	Allowance for Bad Debts
TSMC	TSMC North America GUC	Subsidiary Associate	\$ 86,675,335 931,787	41 52	\$ 5,767,087 593,265	-	\$ 14,527,760 593,265	\$ -
TSMC North America	TSMC	Parent company	(US\$ 200,701 6,233)	Note 2	-	-	-	-
TSMC China	TSMC	Parent company	1,775,774 (RMB 383,265)	31	-	-	-	-
	TSMC Nanjing	The same parent company	4,190,708 (RMB 904,476)	Note 2	-	-	-	-
TSMC Technology	TSMC	Parent company	(US\$ 209,112 (6,494)	Note 2	-	-	-	-
WaferTech	TSMC	The ultimate parent of the Company	1,303,795 (US\$ 40,492)	42	-	-	-	-
	TSMC Development	Parent company	(US\$ 40,492) 172,015 (US\$ 5,342)	Note 2	-	-	-	-

Note 1: The calculation of turnover days excludes other receivables from related parties.

Note 2: The ending balance is primarily consisted of other receivables, which is not applicable for the calculation of turnover days.

# INTERCOMPANY RELATIONSHIPS AND SIGNIFICANT INTERCOMPANY TRANSACTIONS FOR THE YEAR ENDED DECEMBER 31, 2016

(Amounts in Thousands of New Taiwan Dollars)

			N C	Intercompany Transactions								
No.	Company Name Counter Party		Nature of Relationship (Note 1)	Financial Statements Item	Amount	Terms (Note 2)	Percentage of Consolidated Net Revenue or Total Assets					
0 TSM	<b>I</b> C	TSMC North America	1	Net revenue from sale of goods	\$ 633,917,888	-	67%					
				Receivables from related parties	85,874,678	-	5%					
				Other receivables from related parties	800,657	-	-					
				Payables to related parties	200,701	-	-					
		TSMC Japan	1	Marketing expenses - commission	262,274	-	-					
		TSMC Europe	1	Marketing expenses - commission	451,801	=	-					
		TSMC China	1	Purchases	19,256,773	=	2%					
				Marketing expenses - commission	133,704	-	-					
				Payables to related parties	1,775,774	=	-					
		TSMC Canada	1	Research and development expenses	241,163	-	-					
		TSMC Technology	1	Research and development expenses	1,870,324	-	-					
				Payables to related parties	209,112	=	-					
		WaferTech	1	Purchases	8,531,562	-	1%					
				Payables to related parties	1,303,795	-	-					
1 TSM	IC China	TSMC Nanjing	3	Other receivables from related parties	4,190,708	-	-					
2 TSM	IC Development	WaferTech	3	Other payables from related parties	172,015	-	-					

Note 1: No. 1 represents the transactions from parent company to subsidiary.

No. 3 represents the transactions between subsidiaries.

Note 2: The sales prices and payment terms of intercompany sales are not significantly different from those to third parties. For other intercompany transactions, prices and terms are determined in accordance with mutual agreements.

# NAMES, LOCATIONS, AND RELATED INFORMATION OF INVESTEES OVER WHICH THE COMPANY EXERCISES SIGNIFICANT INFLUENCE (EXCLUDING INFORMATION ON INVESTMENT IN MAINLAND CHINA) FOR THE YEAR ENDED DECEMBER 31, 2016

(Amounts in Thousands of New Taiwan Dollars, Unless Specified Otherwise)

			Original Investment Amount		Balance as of December 31, 2016			Net Income	Share of		
Investor Company	Investee Company	Investee Company Location Main Businesses and Products		December 31, 2016 (Foreign Currencies in Thousands)	2015 (Foreign	Shares (In Thousands)	Percentage of Ownership	Carrying Value (Foreign Currencies in Thousands)	(Losses) of the Investee (Foreign	Profits/Losses of Investee (Note 1) (Foreign Currencies in Thousands)	Note
TSMC	TSMC Global	Tortola, British Virgin Islands	Investment activities	\$ 232,207,219	\$167,755,236	7	100	\$ 265,634,729	\$ 2,818,659	\$ 2,818,659	Subsidiary
	TSMC Partners	Tortola, British Virgin Islands	Investing in companies involved in the design, manufacture, and other related business in the semiconductor industry	31,456,130	31,456,130	988,268	100	51,749,910	2,145,629		Subsidiary
	VIS	Hsin-Chu, Taiwan	Research, design, development, manufacture, packaging, testing and sale of memory integrated circuits, LSI, VLSI and related parts	10,180,677	10,180,677	464,223	28	8,806,384	5,537,925	1,563,446	Associate
	SSMC VisEra Tech	Singapore Hsin-Chu, Taiwan	Fabrication and supply of integrated circuits Engaged in manufacturing electronic spare parts and in researching, developing, designing, manufacturing, selling, packaging and testing of color filter	5,120,028 5,005,171	5,120,028	314 253,120	39 87	7,163,516 5,234,883	4,921,406 661,562		Associate Subsidiary
	TSMC North America	San Jose, California, U.S.A	Selling and marketing of integrated circuits and semiconductor devices	333,718	333,718	11,000	100	4,340,303	195,672	195,672	Subsidiary
	Xintec GUC	Taoyuan, Taiwan Hsin-Chu, Taiwan	Wafer level chip size packaging service Researching, developing, manufacturing, testing and marketing of integrated circuits	1,988,317 386,568	1,309,969 386,568	111,282 46,688	41 35	2,599,807 1,174,181	(636,819) 551,082		Associate Associate
	VTAF II TSMC Europe VTAF III TSMC Japan TSMC Korea	Cayman Islands Amsterdam, the Netherlands Cayman Islands Yokohama, Japan Seoul, Korea	Investing in new start-up technology companies Marketing and engineering supporting activities Investing in new start-up technology companies Marketing activities Customer service and technical supporting	608,562 15,749 1,355,417 83,760 13,656	608,562 15,749 1,499,452 83,760 13,656	- - 6 80	98 100 98 100 100	467,171 353,695 219,350 132,999 35,706	(87,451) 40,471 (13,072) 3,861 2,074	40,471 (12,810) 3,861	Subsidiary Subsidiary Subsidiary Subsidiary Subsidiary
	TSMC Solar Europe GmbH	Hamburg, Germany	activities Selling of solar related products and providing customer service	25,266	25,266	1	100	(6,328)	(7,810)	(7,810)	Subsidiary
	VTA Holdings Emerging Alliance Chi Cherng Motech	Delaware, U.S.A Cayman Islands Taipei, Taiwan New Taipei, Taiwan	Investing in new start-up technology companies Investing in new start-up technology companies Investment activities Manufacturing and sales of solar cells, crystalline silicon solar cell, and test and measurement instruments and design and construction of solar power systems	Note 4 Note 3	844,775 394,674 5,221,931	Note 4 Note 3	7 - Note 4 Note 3	Note 4 Note 3	(313) 1,612 Note 3	(311) 1,612	Subsidiary Subsidiary Note 4 Note 3
TSMC Partners	TSMC Development	Delaware, U.S.A	Investment activities	18,898,843 (US\$ 586,939)	18,898,843 (US\$ 586,939)	-	100	27,109,843 (US\$ 841.947)	1,606,936 (US\$ 49,790)	Note 2	Subsidiary
	TSMC Technology	Delaware, U.S.A	Engineering support activities	459,867 (US\$ 14,282)	459,867	-	100	543,177 (US\$ 16,869)	9,719	Note 2	Subsidiary
	ISDF II	Cayman Islands	Investing in new start-up technology companies	167,236 (US\$ 5,194)			97	195,721 (US\$ 6,078)	(US\$ 2,925 (1)	Note 2	Subsidiary
	TSMC Canada	Ontario, Canada	Engineering support activities		74,058 (US\$ 2,300)		100	168,346 (US\$ 5,228)		Note 2	Subsidiary
	ISDF	Cayman Islands	Investing in new start-up technology companies	(US\$ 15,301 (US\$ 475)	(US\$ 18,772 583)	583	97	(US\$ 489	(US\$ (69) (US\$ (2))	Note 2	Subsidiary

				Original Investment Amount		Balance	as of December	31, 2016	Net Income	Share of	
Investor Company	Investee Company	Location	Main Businesses and Products	December 31, 2016 (Foreign Currencies in Thousands)	December 31, 2015 (Foreign Currencies in Thousands)	Shares (In Thousands)	Percentage of Ownership	Carrying Value (Foreign Currencies in Thousands)	(Losses) of the Investee (Foreign Currencies in Thousands)	Profits/Losses of Investee (Note 1) (Foreign Currencies in Thousands)	Note
TSMC Partners	VisEra Holding	Cayman Islands	Investing in companies involved in the design, manufacturing, and other related businesses in the semiconductor industry	Note 5	\$ 4,868,630 (US\$ 151,204)	Note 5	Note 5	Note 5	\$ 351,135 (US\$ 10,880)	Note 2	Note 5
VTAF III	Growth Fund	Cayman Islands	Investing in new start-up technology companies	\$ 47,067 (US\$ 1,462)	47,067 (US\$ 1,462)	-	100	\$ 29,486 (US\$ 916)	3,901 (US\$ 121)	Note 2	Subsidiary
	Mutual-Pak	New Taipei, Taiwan	Manufacturing of electronic parts, wholesaling and retailing of electronic materials, and researching, developing and testing of RFID	167,843 (US\$ 5,213)	167,843	15,643	58	21,725	2,526 (US\$ 78)	Note 2	Subsidiary
	VTA Holdings	Delaware, U.S.A	Investing in new start-up technology companies	-	-	-	62	-	-	Note 2	Subsidiary
VTAF II	VTA Holdings	Delaware, U.S.A	Investing in new start-up technology companies	-	-	-	31	-	-	Note 2	Subsidiary
TSMC Development	WaferTech	Washington, U.S.A	Manufacturing, selling, testing and computer-aided designing of integrated circuits and other semiconductor devices	-	-	293,637	100	5,785,335 (US\$ 179,674)	1,483,317 (US\$ 45,960)	Note 2	Subsidiary
VisEra Holding	VisEra Tech	Hsin-Chu, Taiwan	Engaged in manufacturing electronic spare parts and in researching, developing, designing, manufacturing, selling, packaging and testing of color filter	Note 5	3,028,916 (US\$ 94,069)	Note 5	Note 5	Note 5	661,562 (US\$ 20,498)	Note 2	Note 5
	Xintec	Taoyuan, Taiwan	Wafer level chip size packaging service	Note 5	(US\$ 195,864 (US\$ 6,083)	Note 5	Note 5	Note 5	( 636,819) (US\$ (19,732))	Note 2	Note 5

Note 1: The share of profits/losses of investee includes the effect of unrealized gross profit on intercompany transactions.

Note 2: The share of profits/losses of the investee company is not reflected herein as such amount is already included in the share of profits/losses of the investor company.

Note 3: The Company has no longer served as Motech's board of director starting June 2016. As a result, the Company exercises no significant influence over Motech. Therefore, Motech is no longer accounted for using the equity method. Further, such investment was reclassified to available-for-sale financial assets.

Note 4: Chi Cherng was incorporated into TSMC in December 2016.

Note 5: In October 2016, VisEra Holding was incorporated into TSMC Partners, the subsidiary of TSMC.

(Concluded)

# INFORMATION ON INVESTMENT IN MAINLAND CHINA FOR TWELVE MONTHS ENDED DECEMBER 31, 2016

(Amounts in Thousands of New Taiwan Dollars, Unless Specified Otherwise)

				Accumulated Outflow of	Investmen	t Flows	Accumulated Outflow of				Comming	Accumulated
Investee Company	Main Businesses and Products	Total Amount of Paid-in Capital (RMB in Thousands)	Method of Investment	Investment from Taiwan as of January 1, 2016 (US\$ in Thousands)	Outflow (US\$ in Thousands)	Inflow	Investment from Taiwan as of December 31, 2016 (US\$ in Thousands)	Net Income (Losses) of the Investee Company	Percentage of Ownership	Share of Profits/Losses	Carrying Amount as of December 31, 2016	Inward Remittance of Earnings as of December 31, 2016
TSMC China	Manufacturing and selling of integrated circuits at the order of and pursuant to product design specifications provided by customers	\$ 18,939,667 (RMB 4,502,080)	Note 1	\$ 18,939,667 (US\$ 596,000)	\$ -	\$ -	\$ 18,939,667 (US\$ 596,000)	\$ 6,181,335	100%	\$ 6,094,460 (Note 2)	\$ 42,618,308	\$ -
TSMC Nanjing	Manufacturing and selling of integrated circuits at the order of and pursuant to product design specifications provided by customers	6,435,200 (RMB 1,366,240)	Note 1	-	6,435,200 (US\$ 200,000)	-	6,435,200 (US\$ 200,000)	939	100%	939 (Note 2)	6,331,094	-

Accumulated Investment in Mainland China as of December 31, 2016 (US\$ in Thousands)	Investment Amounts Authorized by Investment Commission, MOEA (US\$ in Thousands)	Upper Limit on Investment
\$ 25,374,867 (US\$ 796,000)	\$ 119,412,667 (US\$3,596,000)	Note 3

Note 1: TSMC directly invested US\$596,000 thousand in TSMC China and US\$200,000 thousands in TSMC Nanjing.

Note 2: Amount was recognized based on the audited financial statements.

Note 3: As the Company has obtained the certificate of being qualified for operating headquarters issued by Industrial Development Bureau, MOEA on August 2016, the upper limit on investment in mainland China pursuant to "Principle of Investment or Technical Cooperation in Mainland China" is not applicable.