

ADVANCED SEMICONDUCTOR ENGINEERING INC  
Form 20-F  
March 18, 2015

---

---

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

FORM 20-F

REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR 12(g) OF THE SECURITIES  
EXCHANGE ACT OF 1934

OR

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934  
For the fiscal year ended December 31, 2014

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF  
1934

OR

SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE  
ACT OF 1934

Commission file number: 001-16125

(Exact name of Registrant as specified in its charter)

Advanced Semiconductor Engineering, Inc.  
(Translation of Registrant's Name into English)

REPUBLIC OF CHINA  
(Jurisdiction of Incorporation or Organization)

26 Chin Third Road  
Nantze Export Processing Zone  
Nantze, Kaohsiung, Taiwan  
Republic of China  
(Address of Principal Executive Offices)

Joseph Tung  
Room 1901, No. 333, Section 1 Keelung Rd.  
Taipei, Taiwan, 110

Republic of China  
Tel: 886-2-8780-5489  
Fax: 882-2-2757-6121  
Email: ir@aseglobal.com

(Name, Telephone, Email and/or Facsimile number and Address of Company Contact Person)

Securities registered or to be registered pursuant to Section 12(b) of the Act:

Title of Each Class	Name of Each Exchange on which Registered
Common Shares, par value NT\$10.00 each	The New York Stock Exchange*

\*Traded in the form of American Depositary Receipts evidencing American Depositary Shares, each representing five Common Shares

Securities registered or to be registered pursuant to Section 12(g) of the Act:

None

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act:

None

---

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report:

7,860,491,546 Common Shares, par value NT\$10 each\*\*

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Yes  No

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934.

Yes  No

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports) and (2) has been subject to such filing requirements for the past 90 days.

Yes  No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

Yes  No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of "accelerated filer and large accelerated filer" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer  Accelerated filer  Non-accelerated filer

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

U.S. GAAP  International Financial Reporting Standards as issued by the International Accounting Standards Board  Other

If "Other" has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow:

Item 17  Item 18

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes  No

\*\* As a result of the exercise of employee stock options subsequent to December 31, 2014, as of January 31, 2015, we had 7,866,207,746 shares outstanding.

---

---

## TABLE OF CONTENTS

	Page
<u>USE OF CERTAIN TERMS</u>	<u>1</u>
<u>SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS</u>	<u>3</u>
<u>PART I</u>	<u>5</u>
<u>Item 1. Identity of Directors, Senior Management and Advisers</u>	<u>5</u>
<u>Item 2. Offer Statistics and Expected Timetable</u>	<u>5</u>
<u>Item 3. Key Information</u>	<u>5</u>
<u>SELECTED FINANCIAL DATA</u>	<u>5</u>
<u>CAPITALIZATION AND INDEBTEDNESS</u>	<u>7</u>
<u>REASON FOR THE OFFER AND USE OF PROCEEDS</u>	<u>7</u>
<u>RISK FACTORS</u>	<u>8</u>
<u>Item 4. Information on the Company</u>	<u>26</u>
<u>HISTORY AND DEVELOPMENT OF THE COMPANY</u>	<u>26</u>
<u>BUSINESS OVERVIEW</u>	<u>27</u>
<u>ORGANIZATIONAL STRUCTURE</u>	<u>49</u>
<u>PROPERTY, PLANTS AND EQUIPMENT</u>	<u>51</u>
<u>Item 4A. Unresolved Staff Comments</u>	<u>55</u>
<u>Item 5. Operating and Financial Review and Prospects</u>	<u>55</u>
<u>OPERATING RESULTS AND TREND INFORMATION</u>	<u>55</u>
<u>LIQUIDITY AND CAPITAL RESOURCES</u>	<u>65</u>
<u>RESEARCH AND DEVELOPMENT</u>	<u>68</u>
<u>OFF-BALANCE SHEET ARRANGEMENTS</u>	<u>69</u>
<u>TABULAR DISCLOSURE OF CONTRACTUAL OBLIGATIONS</u>	<u>69</u>
<u>Item 6. Directors, Senior Management and Employees</u>	<u>70</u>
<u>DIRECTORS AND SENIOR MANAGEMENT</u>	<u>70</u>
<u>COMPENSATION</u>	<u>75</u>
<u>BOARD PRACTICES</u>	<u>77</u>
<u>EMPLOYEES</u>	<u>77</u>
<u>SHARE OWNERSHIP</u>	<u>78</u>
<u>Item 7. Major Shareholders and Related Party Transactions</u>	<u>78</u>
<u>MAJOR SHAREHOLDERS</u>	<u>78</u>
<u>RELATED PARTY TRANSACTIONS</u>	<u>80</u>
<u>INTERESTS OF EXPERTS AND COUNSEL</u>	<u>81</u>
<u>Item 8. Financial Information</u>	<u>81</u>
<u>CONSOLIDATED STATEMENTS AND OTHER FINANCIAL INFORMATION</u>	<u>81</u>
<u>SIGNIFICANT CHANGES</u>	<u>84</u>
<u>Item 9. The Offer and Listing</u>	<u>84</u>
<u>OFFER AND LISTING DETAILS</u>	<u>84</u>
<u>PLAN OF DISTRIBUTION</u>	<u>85</u>
<u>MARKETS</u>	<u>85</u>
<u>SELLING SHAREHOLDERS</u>	<u>85</u>
<u>DILUTION</u>	<u>85</u>
<u>EXPENSES OF THE ISSUE</u>	<u>85</u>
<u>Item 10. Additional Information</u>	<u>86</u>
<u>SHARE CAPITAL</u>	<u>86</u>
<u>ARTICLES OF INCORPORATION</u>	<u>86</u>
<u>MATERIAL CONTRACTS</u>	<u>92</u>

<u>FOREIGN INVESTMENT IN THE ROC</u>	<u>92</u>
<u>EXCHANGE CONTROLS</u>	<u>93</u>
<u>TAXATION</u>	<u>94</u>
<u>DIVIDENDS AND PAYING AGENTS</u>	<u>98</u>
<u>STATEMENT BY EXPERTS</u>	<u>98</u>
<u>DOCUMENTS ON DISPLAY</u>	<u>98</u>
<u>SUBSIDIARY INFORMATION</u>	<u>98</u>
<u>Item 11. Quantitative and Qualitative Disclosures about Market Risk</u>	<u>98</u>
<u>Item 12. Description of Securities Other Than Equity Securities</u>	<u>100</u>

<u>DEBT SECURITIES</u>	<u>100</u>
<u>WARRANTS AND RIGHTS</u>	<u>101</u>
<u>OTHER SECURITIES</u>	<u>101</u>
<u>AMERICAN DEPOSITARY SHARES</u>	<u>101</u>
<u>PART II</u>	<u>102</u>
<u>Item 13. Defaults, Dividend Arrearages and Delinquencies</u>	<u>102</u>
<u>Item 14. Material Modifications to the Rights of Security Holders and Use of Proceeds</u>	<u>102</u>
<u>Item 15. Controls and Procedures</u>	<u>102</u>
<u>Item 16. [Reserved]</u>	<u>104</u>
<u>Item 16A. Audit Committee Financial Expert</u>	<u>104</u>
<u>Item 16B. Code of Ethics</u>	<u>104</u>
<u>Item 16C. Principal Accountant Fees and Services</u>	<u>104</u>
<u>Item 16D. Exemptions from the Listing Standards for Audit Committees</u>	<u>105</u>
<u>Item 16E. Purchases of Equity Securities by the Issuer and Affiliated Purchasers</u>	<u>105</u>
<u>Item 16F. Change In Registrant’s Certifying Accountant</u>	<u>106</u>
<u>Item 16G. Corporate Governance</u>	<u>106</u>
<u>Item 16H. Mine Safety Disclosure</u>	<u>110</u>
<u>PART III</u>	<u>111</u>
<u>Item 17. Financial Statements</u>	<u>111</u>
<u>Item 18. Financial Statements</u>	<u>111</u>
<u>Item 19. Exhibits</u>	<u>111</u>

Table of Contents

USE OF CERTAIN TERMS

Unless the context otherwise requires, references in this annual report to:

- “2014 Bonds” are to RMB150.0 million 3.125% Guaranteed Bonds due September 22, 2014, issued by Anstock Limited, our wholly owned subsidiary incorporated in the Cayman Islands;
- “2016 Bonds” are to RMB500.0 million 4.250% Guaranteed Bonds due September 20, 2016, issued by Antock Limited;
- “ASE,” the “Company,” “ASE Group,” “ASE Inc.,” “we,” “us,” or “our” are to Advanced Semiconductor Engineering, Inc. unless the context requires otherwise, its subsidiaries;
- “ASE Chung Li” are to ASE (Chung Li) Inc., a company previously incorporated under the laws of the ROC that merged into ASE Inc. on August 1, 2004;
  - “ASE Electronics” are to ASE Electronics Inc., a company incorporated under the laws of the ROC;
  - “ASE Japan” are to ASE Japan Co. Ltd., a company incorporated under the laws of Japan;
  - “ASE Korea” are to ASE (Korea) Inc., a company incorporated under the laws of the Republic of Korea;
- “ASE Material” are to ASE Material Inc., a company previously incorporated under the laws of the ROC that merged into ASE Inc. on August 1, 2004;
  - “ASE Shanghai” are to ASE (Shanghai) Inc., a company incorporated under the laws of the PRC;
  - “ASE Test” are to ASE Test Limited, a company incorporated under the laws of Singapore;
- “ASE Test Malaysia” are to ASE Electronics (M) Sdn. Bhd., a company incorporated under the laws of Malaysia;
  - “ASE Test Taiwan” are to ASE Test, Inc., a company incorporated under the laws of the ROC;
  - “ASEKS” are to ASE (KunShan) Inc., a company incorporated under the laws of the PRC;
- “ASEN” are to Suzhou ASEN Semiconductors Co., Ltd., a company incorporated under the laws of the PRC;
- “ASESH AT” are to ASE Assembly & Test (Shanghai) Limited, formerly known as Global Advanced Packaging Technology Limited, or GAPTECH, a company incorporated under the laws of the PRC;
- “ASEWH” are to ASE (Weihai), Inc., a company incorporated under the laws of the PRC;
  - “Bonds” are to the 2014 Bonds and 2016 Bonds;
- “California case” are to the complaint Tessera filed against the Company and its U.S. Subsidiary, ASE (U.S) Inc. in 2006, but was later dismissed in October 2014;
-



“Capital Increase” are to issuance of 130,000,000 common shares for public subscription which was effected by way of an increase in the authorized share capital in the amount of NT\$1,300.0 million of the Company in September 2013;

- “Corporate Bonds” are to NT\$8.0 billion 1.450% secured corporate bonds with five year term issued in August 2011 by the Company;
- “Deposit Agreement” are to deposit agreement dated September 29, 2000 among Citibank, N.A., as depositary, holders and beneficial owners of ADSs and us, which was filed as an exhibit to our registration statement on post-effective amendment No. 2 to Form F-6 on September 16, 2003, and its two amendments, which were filed as an exhibit to our registration statement on post-effective amendment No. 1 to Form F-6 on April 3, 2006 and our registration statement on post-effective amendment No. 2 to Form F-6 on October 25, 2006;

Table of Contents

- “EEMS Test Singapore” are to EEMS Test Singapore Pte. Ltd., a company incorporated under the laws of Singapore, which changed its name to ASE Singapore II Pte. Ltd. and was subsequently merged into ASE Singapore Pte. Ltd. on January 1, 2011;
  - the “Exchange Act” are to the U.S. Securities Exchange Act of 1934, as amended;
  - “FSC” are to the Financial Supervisory Commission of the Republic of China.
- “Green Bonds” are to US\$300.0 million 2.125% Guaranteed Bonds due July 24, 2017, offered by Anstock II Limited, our wholly owned subsidiary incorporated in the Cayman Islands;
- “Hung Ching” are to Hung Ching Development & Construction Co. Ltd., a company incorporated under the laws of the ROC;
- “IFRS” are to International Financial Reporting Standards, International Accounting Standards and Interpretations as issued by the International Accounting Standards Board;
  - “ISE Labs” are to ISE Labs, Inc., a corporation incorporated under the laws of the State of California;
    - “ITC” are to the United States International Trade Commission;
    - “Korea” or “South Korea” are to the Republic of Korea;
- “Mainland Investors Regulations” are to the Regulations Governing Securities Investment and Futures Trading in Taiwan by Mainland Area Investors;
  - “MOEAIC” are to Investment Commission of the ROC Ministry of Economic Affairs;
- “PowerASE” are to PowerASE Technology, Inc., a company incorporated under the laws of the ROC which was merged into ASE Inc. in May 2012;
  - “PRC” are to the People’s Republic of China and excludes Taiwan, Macau and Hong Kong;
- “PRC Regulations” are to the Regulations Governing Mainland China Investors’ Securities Investments and Futures Trading in Taiwan;
  - “QDII” are to qualified domestic institutional investors;
- “Republic of China,” the “ROC” and “Taiwan” are to the Republic of China, including Taiwan and certain other possessions;
  - “ROC GAAP” are to generally accepted accounting principles in the ROC;
  - the “SEC” are to the Securities and Exchange Commission of the U.S.;
  - the “Securities Act” are to the U.S. Securities Act of 1933, as amended;

- “SiP” are to system-in-package;
- “Taiwan-IFRS” are to the Regulations Governing the Preparation of Financial Reports by Securities Issuers, the IFRS as well as related guidance translated by Accounting Research and Development Foundation and endorsed by the FSC.
- “Tessera” are to Tessera, Inc., a company which filed a suit against the Company and its U.S. subsidiary, ASE (U.S.) Inc.;

Table of Contents

- “UGJQ” are to Universal Global Technology (Shanghai) Co., Ltd., a company incorporated under the laws of the PRC;
- “UGKS” are to Universal Global Technology (Kunshan) Co. Ltd., a company incorporated under the laws of the PRC;
- “UGTW” are to Universal Global Scientific Industrial Co. Ltd., a company incorporated under the laws of the ROC;
- “Universal Scientific” or “USI” are to Universal Scientific Industrial Co., Ltd., a company incorporated under the laws of the ROC, and, unless the context requires otherwise, “Universal Scientific Group” are to Universal Scientific, and its directly and indirectly held subsidiaries;
- “Universal Scientific Shanghai” are to Universal Scientific Industrial (Shanghai) Co., Ltd., a company incorporated under the laws of the PRC;
  - “U.S.” refers to United States of America;
  - “US GAAP” are to accounting principles generally accepted in the U.S.;
- “USI, Inc.” are to a new corporation, which is expected to be incorporated under ROC law on a spin-off record date once the proposed USI Spin-Off transaction is approved by the MOEAIC;
- “USI Spin-Off transaction” are to the proposed spin-off transaction whereby Universal Scientific proposes to spin-off and assign its investment businesses to a new entity, and the proposed transaction is currently being reviewed by the MOEAIC;
- “USI Mexico” are to Universal Scientific Industrial De Mexico S.A. DE C.V., a company incorporated under the laws of Mexico;
  - “USISZ” are to Universal Electronics (Shenzhen) Co. Ltd., a company incorporated under the laws of the PRC;
- “Wuxi Tongzhi” are to Wuxi Tongzhi Microelectronics Co., Ltd., a company incorporated under the laws of the PRC; and
- “Yang Ting” are to Yang Ting Tech Co., Ltd., a company incorporated under the laws of the ROC which was merged into ASE Inc. in August 2013.

We publish our financial statements in New Taiwan dollars, the lawful currency of the ROC. In this annual report, references to “United States dollars,” “U.S. dollars” and “US\$” are to the currency of the United States; references to “New Taiwan dollars,” “NT dollars” and “NT\$” are to the currency of the ROC; references to “RMB” are to the currency of the PRC; references to “JP¥” are to the currency of Japan; references to “MYR” are to the currency of Malaysia; references to “SGD” are to the currency of Republic of Singapore; references to “KRW” are to the currency of Republic of Korea; and references to “EUR” are to the currency of the European Union. Unless otherwise noted, all translations from NT dollars to U.S. dollars were made at the exchange rate as set forth in the H.10 weekly statistical release of the Federal Reserve System of the United States (the “Federal Reserve Board”) as of December 31, 2014, which was NT\$31.60 = US\$1.00, and all translations from RMB to U.S. dollars were made at the exchange rate as set forth in the H.10 weekly statistical release of the Federal Reserve Board as of December 31, 2014, which was RMB6.2046 = US\$1.00. All amounts translated into U.S. dollars in this annual report are provided solely for your convenience and no representation is made that the NT dollar/RMB or U.S. dollar amounts referred to herein could have been or could be

converted into U.S. dollars or NT dollars/RMB, as the case may be, at any particular rate or at all. On March 13, 2015, the exchange rate between NT dollars and U.S. dollars as set forth in the H.10 weekly statistical release by the Federal Reserve Board was NT\$31.71 = US\$1.00. On March 13, 2015, the exchange rate between RMB and U.S. dollars as set forth in the H.10 weekly statistical release by the Federal Reserve Board was RMB6.2585 = US\$1.00.

Table of Contents

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This annual report on Form 20-F contains “forward-looking statements” within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act. Although these forward-looking statements, which may include statements regarding our future results of operations, financial condition or business prospects, are based on our own information and information from other sources we believe to be reliable, you should not place undue reliance on these forward-looking statements, which apply only as of the date of this annual report. The words “anticipate,” “believe,” “estimate,” “expect,” “intend,” “plan” and similar expressions, as they relate to us, are intended to identify these forward-looking statements in this annual report. Our actual results of operations, financial condition or business prospects may differ materially from those expressed or implied in these forward-looking statements for a variety of reasons, including risks associated with cyclical and market conditions in the semiconductor or electronics industry; changes in our regulatory environment, including our ability to comply with new or stricter environmental regulations and to resolve environmental liabilities; demand for the outsourced semiconductor packaging, testing and electronic manufacturing services we offer and for such outsourced services generally; the highly competitive semiconductor or manufacturing industry we are involved in; our ability to introduce new technologies in order to remain competitive; international business activities; our business strategy; our future expansion plans and capital expenditures; the strained relationship between the ROC and the PRC; general economic and political conditions; the recent global economic crisis; possible disruptions in commercial activities caused by natural or human-induced disasters; fluctuations in foreign currency exchange rates; and other factors. For a discussion of these risks and other factors, see “Item 3. Key Information—Risk Factors.”

Table of Contents

## PART I

## Item 1. Identity of Directors, Senior Management and Advisers

Not applicable.

## Item 2. Offer Statistics and Expected Timetable

Not applicable.

## Item 3. Key Information

## SELECTED FINANCIAL DATA

The selected consolidated statements of comprehensive income data and cash flow data for the years ended December 31, 2012, 2013 and 2014, and the selected consolidated balance sheet data as of December 31, 2013 and 2014, set forth below are derived from our audited consolidated financial statements included in this annual report and should be read in conjunction with, and are qualified in their entirety by reference to, these consolidated financial statements, including the notes thereto. Our consolidated financial statements as of and for the years ended December 31, 2012, 2013 and 2014 have been prepared and presented in accordance with IFRS. The selected consolidated balance sheet data as of December 31, 2012, set forth below, is derived from our audited consolidated financial statements not included herein.

We have adopted IFRS for certain filings with the SEC, starting from the filing of our annual report on Form 20-F for the year ended December 31, 2013. Historical financial results as of and for the year ended December 31, 2012 included herein have been adjusted and presented in accordance with IFRS, which differs from the results included in our annual report on Form 20-F for the year ended December 31, 2012. Meanwhile, as required by the FSC, we adopted Taiwan-IFRS for reporting of our annual and interim consolidated financial statements in the ROC beginning on January 1, 2013. Taiwan-IFRS differs from IFRS in certain respects, including, but not limited to the extent that any new or amended standards or interpretations applicable under IFRS may not be timely endorsed by the FSC. See “Item 3. Key Information—Risk Factors—Risks Relating to Our Business—Our adoption of new financial reporting standards, effective January 1, 2013, may have material impact on our financial statements thereafter” for more information.

Following our adoption of IFRS for SEC filing purposes, pursuant to the rule amendments adopted by the SEC which became effective on March 4, 2008, we were no longer be required to reconcile our consolidated financial statements with U.S. GAAP.

	As of and for the Year Ended December 31,			
	2012	2013	2014	
	NT\$	NT\$	NT\$	US\$
	(in millions, except earnings per share and per ADS data)			
Statement of Comprehensive Income Data:				
Operating revenues	193,972.4	219,862.4	256,591.4	8,120.0
Operating costs	(157,342.7)	(177,040.4)	(203,002.9)	(6,424.1)
Gross profit	36,629.7	42,822.0	53,588.5	1,695.9
Operating expenses	(18,922.6)	(20,760.4)	(23,942.7)	(757.7)

Edgar Filing: ADVANCED SEMICONDUCTOR ENGINEERING INC - Form 20-F

Other income and expenses, net	83.2	(1,348.2 )	228.7	7.2
Profit from operations	17,790.3	20,713.4	29,874.5	945.4
Non-operating expense, net	(1,181.6 )	(1,343.6 )	(1,339.4 )	(42.4 )
Profit before income tax	16,608.7	19,369.8	28,535.1	903.0
Income tax expense	(2,960.4 )	(3,499.6 )	(5,666.0 )	(179.3 )
Profit for the year	13,648.3	15,870.2	22,869.1	723.7
Attributable to				
Owners of the Company	13,191.6	15,404.5	22,228.6	703.4
Non-controlling interests	456.7	465.7	640.5	20.3
	13,648.3	15,870.2	22,869.1	723.7
Other comprehensive income (loss), net of income tax	(3,830.7 )	3,233.3	5,504.4	174.2
Total comprehensive income for the year	9,817.6	19,103.5	28,373.5	897.9
Attributable to				
Owners of the Company	9,420.4	18,509.6	27,394.3	866.9



Table of Contents

As of and for the Year Ended December 31,  
2012            2013            2014  
NT\$            NT\$            NT\$            US\$  
(in millions, except earnings per share and per ADS  
data)

Non-controlling interests	397.2	593.9	979.2	31.0
	9,817.6	19,103.5	28,373.5	897.9
Earnings per common share(1):				
Basic	1.77	2.05	2.89	0.09
Diluted	1.73	1.99	2.79	0.09
Dividends per common share(2)	2.05	1.05	1.29	0.04
Earnings per equivalent ADS(1):				
Basic	8.86	10.26	14.46	0.46
Diluted	8.65	9.96	13.93	0.44
Number of common shares(3):				
Basic	7,445.5	7,508.5	7,687.9	7,687.9
Diluted	7,568.2	7,747.6	8,220.7	8,220.7
Number of equivalent ADSs				
Basic	1,489.1	1,501.7	1,537.6	1,537.6
Diluted	1,513.6	1,549.5	1,644.1	1,644.1
Balance Sheet Data:				
Current assets	97,495.6	132,176.5	159,955.2	5,061.9
Investments- non-current(4)	2,267.8	2,345.5	2,409.3	76.2
Property, plant and equipment, net	127,197.8	131,497.3	151,587.1	4,797.1
Intangible assets	12,361.3	11,953.6	11,913.3	377.0
Long-term prepayment for lease	4,164.1	4,072.3	2,586.0	81.8
Others(5)	4,236.0	4,676.9	5,267.9	166.7
Total assets	247,722.6	286,722.1	333,718.8	10,560.7
Short-term borrowings	36,884.9	44,618.2	41,176.0	1,303.1
Current portion of long-term debts	3,213.8	6,016.5	2,835.5	89.7
Long-term debts(6)	44,591.7	50,166.5	55,375.8	1,752.4
Other liabilities(7)	53,211.8	60,176.9	78,640.1	2,488.6
Total liabilities	137,902.2	160,978.1	178,027.4	5,633.8
Share capital	76,047.7	78,180.3	78,715.2	2,491.0
Non-controlling interests	3,505.7	4,128.4	8,209.9	259.8
Equity attributable to owners of the Company	106,314.7	121,615.6	147,481.5	4,667.1
Cash Flow Data:				
Capital expenditures	(39,029.5 )	(29,142.7 )	(39,599.0 )	(1,253.1 )
Depreciation and amortization	23,435.9	25,470.9	26,350.8	833.9
Net cash inflow from operating activities	33,038.0	41,296.0	45,863.5	1,451.4
Net cash outflow from investing activities	(43,817.8 )	(29,925.8 )	(38,817.9 )	(1,228.4 )
Net cash inflow (outflow) from financing activities	8,455.8	12,794.9	(2,797.0 )	(88.5 )
Segment Data:				
Operating revenues:				
Packaging	104,298.3	112,603.9	121,336.5	3,839.8
Testing	22,657.0	24,732.2	25,874.7	818.8
Electronic manufacturing services	62,747.7	78,530.6	105,784.4	3,347.6
Others	4,269.4	3,995.7	3,595.8	113.8

## Gross profit:

Packaging	19,812.5	23,673.7	33,040.2	1,045.6
Testing	7,601.0	9,079.4	9,632.0	304.8
Electronic manufacturing services	7,241.3	8,054.3	9,118.9	288.6
Others	1,974.9	2,014.6	1,797.4	56.9

---

(1) The denominators for diluted earnings per common share and diluted earnings per equivalent ADS are calculated to account for the potential diluted factors, such as the exercise of options and conversion of our convertible bonds into our common shares.

(2) Dividends per common share issued as a cash dividend, a stock dividend and distribution from capital surplus.

(3) Represents the weighted average number of shares after retroactive adjustments to give effect to stock dividends. Common shares held by consolidated subsidiaries are classified as “treasury stock,” and are deducted from the number of common shares outstanding.

(4) Including available-for-sale financial assets — non-current and investments accounted for using the equity method.

(5) Including deferred tax assets, other financial assets — non-current and other non-current assets.

(6) Including bonds payable, long-term borrowings and capital lease obligations.

(7) Including (x) current liabilities other than short-term borrowings and current portion of long-term debts and (y) non-current liabilities other than long-term debts.

Table of Contents

## Exchange Rates

Fluctuations in the exchange rate between NT dollars and U.S. dollars will affect the U.S. dollar equivalent of the NT dollar price of our common shares on the Taiwan Stock Exchange and, as a result, will likely affect the market price of the ADSs. Fluctuations will also affect the U.S. dollar conversion by the depositary under our ADS deposit agreement referred to below of cash dividends paid in NT dollars on, and the NT dollar proceeds received by the depositary from any sale of, common shares represented by ADSs, in each case, according to the terms of the deposit agreement dated September 29, 2000 and as amended and supplemented from time to time among us, Citibank N.A., as depositary, and the holders and beneficial owners from time to time of the ADSs, which we refer to as the deposit agreement.

The following table sets forth, for the periods indicated, information concerning the number of NT dollars for which one U.S. dollar could be exchanged. The exchange rates reflect the exchange rates set forth in the H.10 statistical release of the Federal Reserve Board.

	Exchange Rate			Period End
	Average(1)	High	Low	
2010	31.40	32.43	29.14	29.14
2011	29.42	30.67	28.50	30.27
2012	29.47	30.28	28.96	29.05
2013	29.73	30.20	28.93	29.83
2014	30.38	31.80	29.85	31.60
September	30.13	30.47	29.89	30.44
October	30.40	30.49	30.31	30.45
November	30.73	30.99	30.48	30.99
December	31.35	31.80	31.03	31.60
2015				
January	31.64	32.00	31.06	31.75
February	31.55	31.76	31.31	31.44
March (through March 13, 2015)	31.54	31.71	31.35	31.71

(1) Annual averages were calculated by using the average of the exchange rates on the last day of each month during the relevant year. Monthly averages were calculated by using the average of the daily rates during the relevant month.

On March 13, 2015, the exchange rate as set forth in the H.10 weekly statistical release by the Federal Reserve Board was NT\$31.71 = US\$1.00.

## CAPITALIZATION AND INDEBTEDNESS

Not applicable.

## REASON FOR THE OFFER AND USE OF PROCEEDS

Not applicable.



Table of Contents

RISK FACTORS

Risks Relating to Our Business

Since we are dependent on the highly cyclical semiconductor and electronics industries and conditions in the markets for the end-use applications of our products, our revenues and net income may fluctuate significantly.

Our business is affected by market conditions in the highly cyclical semiconductor and electronics industries. Most of our customers operate in this industry, and variations in order levels from our customers and service fee rates may result in volatility in our revenues and net income. From time to time, the semiconductor and electronics industries have experienced significant, and sometimes prolonged, downturns. As our business is, and will continue to be, dependent on the requirements for independent packaging, testing and electronic manufacturing services, any future downturn in the industry would reduce demand for our services. For example, in the fourth quarter of 2008, the global economic crisis resulted in a significant deterioration in demand for our customers' products, which in turn affected demand for our services and adversely affected our operating results. Although demand has recovered, we expect there to be continued downward pressure on our average selling prices and continued volatility with respect to our sales volumes in the future. If we cannot reduce our costs or adjust our product mix to sufficiently offset any decline in sales volumes, our profitability will suffer, and we may incur losses.

Market conditions in the semiconductor and electronics industries depend to a large degree on conditions in the markets for the end-use applications of various products, such as communications, computing and consumer electronics products. Any deterioration of conditions in the markets for the end-use applications would reduce demand for our services, and would likely have a material adverse effect on our financial condition and results of operations. In 2014, approximately 53.3%, 11.6% and 34.7% of our operating revenues from packaging and testing were attributed to the packaging and testing of semiconductors used in communications, computing and consumer electronics/industrial/automotive applications, respectively. In the same year, approximately 55.6%, 18.0%, 8.9%, 10.3% and 6.3% of our operating revenues from electronic manufacturing services were attributed to the communications, computing, consumer electronics applications, industrial and automotive applications, respectively. Each of the markets for end-use applications is subject to intense competition and significant shifts in demand, which could put pricing pressure on our services and adversely affect our revenues and net income.

A reversal or slowdown in the outsourcing trend for semiconductor packaging and testing services and electronic manufacturing services could adversely affect our growth prospects and profitability.

Semiconductor manufacturers that have their own in-house packaging and testing capabilities, known as integrated device manufacturers and original equipment manufacturers, have increasingly outsourced stages of the production process, including packaging, testing, electronic manufacturing and assembly, to independent companies in order to reduce costs, eliminate product complexity and meet fast-to-market requirements. In addition, the availability of advanced independent semiconductor manufacturing services has also enabled the growth of so-called "fabless" semiconductor companies that focus exclusively on design and marketing and outsource their manufacturing, packaging and testing requirements to independent companies. We cannot assure you that these manufacturers and companies will continue to outsource their packaging, testing and manufacturing requirements to third parties like us. Furthermore, during an economic downturn, these integrated device manufacturers typically rely more on their own in-house packaging and testing capabilities, therefore decreasing their need to outsource. A reversal of, or a slowdown in, this outsourcing trend could result in reduced demand for our services and adversely affect our growth prospects and profitability.

Any global economic downturn could adversely affect the demand for our products and services, and a protracted global economic crisis would have a material adverse effect on us.

The global financial markets experienced significant disruptions in 2008 and the United States, Europe and other economies went into recession. The recovery from the lows of 2008 and 2009 was uneven and it is facing new challenges, including a European sovereign debt crisis that began in 2011 and continuing high unemployment rates in much of the world. It is unclear what the long-term impact of the European sovereign debt crisis will be and uncertainty remains over the long-term effects of the expansionary monetary and fiscal policies that have been adopted by the central banks and financial authorities of some of the world's leading economies. Any economic downturn or crisis may cause our customers to do the following:

Table of Contents

- cancel or reduce planned expenditures for our products and services;
- seek to lower their costs by renegotiating their contracts with us;
- consolidate the number of suppliers they use which may result in our loss of customers; and
- switch to lower-priced products or services provided by our competitors.

Any uncertainty or significant volatility in global economic conditions may also make it difficult for our customers to accurately forecast and plan future business activities and may have a material adverse effect on us.

If we are unable to compete favorably in the highly competitive markets of semiconductor packaging and testing and electronic manufacturing services, our revenues and net income may decrease.

The markets of semiconductor packaging and testing and electronic manufacturing services are very competitive. We face competition from a number of sources, including other independent semiconductor packaging and testing companies, especially those that offer turnkey packaging and testing services, and other electronic manufacturing services providers with large-scale manufacturing capabilities who can quickly react to market changes. We believe that the principal competitive factors in our industry are:

- technological expertise;
- price;
- the ability to provide total solutions to our customers, including integrated design, manufacturing, packaging and testing and electronic manufacturing services;
  - ability to offer interconnect technologies at an optimal scale for our businesses;
    - range of package types and testing platforms available;
  - the ability to work closely with our customers at the product development stage;
    - responsiveness and flexibility;
    - fast-to-market product development;
    - capacity;
    - diversity in facility locations; and
    - production yield.

We face increasing competition, as most of our customers obtain services from more than one source. Rapid technological advances and aggressive pricing strategies by our competitors may continue to increase competition. Our ability to compete depends on factors both within and outside of our control and may be constrained by the distinct characteristics and production requirements of individual products. We cannot assure you that we will be able to continue to improve production efficiency and maintain reasonable profit for all of our products.

In addition, some of our competitors may have superior financial, marketing, manufacturing, research and development and technological resources than we do. For example, the central government of the PRC as well as provincial and municipal governments have provided various incentives to domestic companies in the semiconductor industry. Increase in competition may lead to declines in product prices and profitability could have a material adverse effect on our business, financial condition, results of operations and future prospects.



Table of Contents

Our profitability depends on our ability to respond to rapid technological changes in the semiconductor industry.

The semiconductor industry is characterized by rapid increases in the diversity and complexity of semiconductors. As a result, we expect that we will need to constantly offer more sophisticated packaging and testing technologies and processes in order to respond to competitive industry conditions and customer requirements. We have successfully combined our packaging, testing and materials technologies with the expertise of Universal Scientific at the systems level to develop our SiP business. Success of a new product depends on a number of factors such as product acceptance by the market. New products are developed in anticipation of future demand. We cannot assure you that the launch of any new product will be successful, or that we will be able to produce sufficient quantities of these products to meet market demand. If we fail to develop, or obtain access to, advances in packaging or testing technologies or processes, we may become less competitive and less profitable. In addition, advances in technology typically lead to declining average selling prices for semiconductors packaged or tested with older technologies or processes. As a result, if we cannot reduce the costs associated with our services, the profitability of a given service and our overall profitability may decrease over time.

Our operating results are subject to significant fluctuations, which could adversely affect the market value of your investment.

Our operating results have varied significantly from period to period and may continue to vary in the future. Downward fluctuations in our operating results may result in decreases in the market price of our common shares and the ADSs. Among the more important factors affecting our quarterly and annual operating results are the following:

- changes in general economic and business conditions, particularly the cyclical nature of the semiconductor and electronics industries and the markets served by our customers;
  - our ability to quickly adjust to unanticipated declines or shortfalls in demand and market prices;
    - changes in prices for our products or services;
  - volume of orders relative to our packaging, testing and manufacturing capacity;
    - changes in costs and availability of raw materials, equipment and labor;
    - our ability to obtain or develop substitute raw materials with lower cost;
    - our ability to successfully develop or market new products or services;
- our ability to successfully manage product mix in response to changes in market demand and differences in margin associated with different products;
  - timing of capital expenditures in anticipation of future orders;
- our ability to acquire or design and produce advanced and cost-competitive interconnect materials, and provide integrated solutions for electronic manufacturing services;
- fluctuations in the exchange rate between the NT dollar and foreign currencies, especially the U.S. dollar; and
-

typhoons, earthquakes, drought, epidemics, tsunamis and other natural disasters, as well as industrial and other incidents such as fires and power outages.

Due to the factors listed above, our future operating results or growth rates may be below the expectations of research analysts and investors. If so, the market price of our common shares and the ADSs, and thus the market value of your investment, may fall.

## Table of Contents

If we are not successful in maintaining our in-house interconnect materials capabilities, our margins and profitability may be adversely affected.

We expect that we will need to maintain our interconnect materials designs and production processes in order to respond to competitive industry conditions and customer requirements. In particular, our competitive position will depend on our ability to design and produce interconnect materials that are comparable to or better than those produced by independent suppliers and others. Many of these independent suppliers have dedicated greater resources than we have for the research and development and design and production of interconnect materials. In addition, we may not be able to acquire the technology and personnel that would enable us to maintain our in-house expertise and our design and production capabilities. For more information on our interconnect materials operations, see “Item 4. Information on the Company—Business Overview—Principal Products and Services—Packaging Services—Interconnect Materials.” If we are unable to maintain our in-house interconnect materials expertise to offer interconnect materials that meet the requirements of our customers, we may become less competitive and our margins and profitability may suffer as a result.

Due to our high percentage of fixed costs, we may be unable to maintain our gross margin at past levels if we are unable to achieve relatively high capacity utilization rates.

Our operations, in particular our testing operations, are characterized by relatively high fixed costs. We expect to continue to incur substantial depreciation and other expenses in connection with our acquisitions of equipment and facilities. Our profitability depends not only on the pricing levels for our services or products, but also on utilization rates for our machinery and equipment, commonly referred to as “capacity utilization rates.” In particular, increases or decreases in our capacity utilization rates can significantly affect gross margins since the unit cost generally decreases as fixed costs are allocated over a larger number of units. In periods of low demand, we experience relatively low capacity utilization rates in our operations, which leads to reduced margins. For example, in the fourth quarter of 2008, we experienced lower than anticipated utilization rates in our operations due to a significant decline in worldwide demand for our packaging and testing services, which resulted in reduced margins during that period. Although capacity utilization rates have recovered since 2009, we cannot assure you that we will be able to maintain or surpass our past gross margin levels if we cannot consistently achieve or maintain relatively high capacity utilization rates.

If we are unable to manage our expansion or investments effectively, our growth prospects may be limited and our future profitability and core business operations may be adversely affected.

We have significantly expanded our operations through both organic growth and acquisitions in recent years. For example, we acquired the controlling interest of Universal Scientific through a tender offer in February 2010 and EEMS Test Singapore in August 2010 (EEMS Test Singapore was subsequently merged into ASE Singapore Pte. Ltd. on January 1, 2011). We also acquired Yang Ting in January 2012 and merged our subsidiary PowerASE into ASE Inc. in May 2012 (Yang Ting was subsequently merged into ASE Inc. in August 2013). In addition, we acquired Wuxi Tongzhi in May 2013 and Universal Scientific Group established UGJQ in September 2013. We expect that we will continue to expand our operations in the future. The purpose of our expansion is mainly to provide total solutions to existing customers or to attract new customers and broaden our product range for a variety of end-use applications. However, rapid expansion may place a strain on our managerial, technical, financial, operational and other resources. As a result of our expansion, we have implemented and will continue to implement additional operational and financial controls and hire and train additional personnel. Any failure to manage our growth effectively could lead to inefficiencies and redundancies and result in reduced growth prospects and profitability.

In addition, we have recently made investments in real estate development businesses mostly in China. The PRC property market is volatile and may experience undersupply or oversupply and property price fluctuations. The central and local governments frequently adjust monetary and other fiscal policies to prevent and curtail the overheating of the economy. Such policies may lead to changes in market conditions, including price instability and imbalance of supply and demand in respect of office, residential, retail, entertainment, cultural and intellectual properties. We may continue to make investments in this area in the future and our diversification in this industry may put pressure on our managerial, financial, operational and other resources. Our exposure to risks related to real estate development may also increase over time as a result of our expansion into such a business. There can be no assurance that our investments in such a business will yield the anticipated returns and that our expansion into such a business, including the resulting diversion of management's attention, will not adversely affect our core business operations.

## Table of Contents

The packaging and testing businesses are capital intensive. If we cannot obtain additional capital when we need it, our growth prospects and future profitability may be adversely affected.

The packaging and testing businesses are capital intensive. We will need capital to fund the expansion of our facilities as well as fund our research and development activities in order to remain competitive. We believe that our existing cash, marketable securities, expected cash flow from operations and existing credit lines under our loan facilities will be sufficient to meet our capital expenditures, working capital, cash obligations under our existing debt and lease arrangements, and other requirements for at least the next twelve months. However, future capacity expansions or market or other developments may cause us to require additional funds. Our ability to obtain external financing in the future is subject to a variety of uncertainties, including:

- our future financial condition, results of operations and cash flows;
- general market conditions for financing activities by semiconductor or electronics companies; and
- economic, political and other conditions in Taiwan and elsewhere.

If we are unable to obtain funding in a timely manner or on acceptable terms, our result of operations and financial conditions may be materially and adversely affected.

Restrictive covenants and broad default provisions in our existing debt agreements may materially restrict our operations as well as adversely affect our liquidity, financial condition and results of operations.

We are a party to numerous loans and other agreements relating to the incurrence of debt, many of which include restrictive covenants and broad default provisions. In general, covenants in the agreements governing our existing debt, and debt we may incur in the future, may materially restrict our operations, including our ability to incur debt, pay dividends, make certain investments and payments, other than in connection with restructurings of consolidated entities, and encumber or dispose of assets. In addition, any global economic deterioration or ineffective expansion may cause us to incur significant net losses or force us to assume considerable liabilities. We cannot assure you that we will be able to remain in compliance with our financial covenants which, as a result, may lead to a default. This may thereby restrict our ability to access unutilized credit facilities or the global capital markets to meet our liquidity needs. Furthermore, a default under one agreement by us or one of our subsidiaries may also trigger cross-defaults under our other agreements. In the event of default, we may not be able to cure the default or obtain a waiver on a timely basis. An event of default under any agreement timely governing our existing or future debt, if not cured or waived, could have a material adverse effect on our liquidity, financial condition and results of operations.

We have on occasion failed to comply with certain financial covenants in some of our loan agreements. Such non-compliance may also have, through broadly worded cross-default provisions, resulted in default under some of the agreements governing our other existing debt. For example, we failed to comply with certain financial covenants in some of our loan agreements as a result of our acquisition of the controlling interest of Universal Scientific in February 2010, for which we have timely obtained waivers from our counterparties. If we are unable to timely remedy any of our non-compliance under such loan agreements or obtain applicable waivers or amendments, we would breach our financial covenants and our financial condition would be adversely affected. As of December 31, 2014, we were not in breach of any of the financial covenants under our existing loan agreements, although we cannot provide any assurance that we will not breach any of such financial covenants in the future.

We depend on select personnel and could be affected by the loss of their services.

We depend on the continued service of our executive officers and skilled technical personnel. Our business could suffer if we lose the services of any of these personnel and cannot adequately replace them. Although some of these management personnel have entered into employment agreements with us, they may nevertheless leave before the expiration of these agreements. We are not insured against the loss of the services of any of our personnel. In addition, these proceedings may divert these and other employees' attention from our business operations.

## Table of Contents

In addition, we may be required to increase substantially the number of these employees in connection with our expansion plans, and there is intense competition for their services in this industry. We may not be able to either retain our present personnel or attract additional qualified personnel as and when needed. In addition, we may need to increase employee compensation levels in order to attract and retain our existing officers and employees and the additional personnel that we expect to require. Furthermore, a portion of the workforce at our facilities in Taiwan are foreign workers employed by us under work permits which are subject to government regulations on renewal and other terms. Consequently, our business could also suffer if the Taiwan regulations relating to the employment of foreign workers were to become significantly more restrictive or if we are otherwise unable to attract or retain these workers at a reasonable cost.

If we are unable to obtain additional packaging and testing equipment or facilities in a timely manner and at a reasonable cost, our competitiveness and future profitability may be adversely affected.

The semiconductor packaging and testing businesses are capital intensive and require significant investment in expensive equipment manufactured by a limited number of suppliers. The market for semiconductor packaging and testing equipment is characterized, from time to time, by intense demand, limited supply and long delivery cycles. Our operations and expansion plans depend on our ability to obtain a significant amount of such equipment from a limited number of suppliers. From time to time we have also leased certain equipment. We have no binding supply agreements with any of our suppliers and acquire our packaging and testing equipment on a purchase order basis, which exposes us to changing market conditions and other substantial risks. For example, shortages of capital equipment could result in an increase in the price of equipment and longer delivery times. Semiconductor packaging and testing also require us to operate sizeable facilities. If we are unable to obtain equipment or facilities in a timely manner, we may be unable to fulfill our customers' orders, which could adversely affect our growth prospects as well as financial condition and results of operations. See "Item 4. Information on the Company—Business Overview—Equipment."

Fluctuations in exchange rates could result in foreign exchange losses.

Currently, the majority of our revenues are denominated in U.S. dollars, with a portion denominated in NT dollars and Japanese yen. Our operating costs and operating expenses, on the other hand, are incurred in several currencies, primarily NT dollars, U.S. dollars, RMB, Japanese yen, Korean won, as well as, to a lesser extent, Singapore dollars and Malaysian ringgit. In addition, a substantial portion of our capital expenditures, primarily for the purchase of packaging and testing equipment, has been, and is expected to continue to be, denominated in U.S. dollars, with the remainder in Japanese yen. Fluctuations in exchange rates, primarily among the U.S. dollar against the NT dollar, the Japanese yen and RMB, will affect our costs and operating margins. In addition, these fluctuations could result in exchange losses and increased costs in NT dollar and other local currency terms. Despite hedging and mitigating techniques implemented by us, fluctuations in exchange rates have affected, and may continue to affect, our financial condition and results of operations. We recognized net foreign exchange gains of NT\$965.4 million, net foreign exchange losses of NT\$276.2 million and net foreign exchange losses of NT\$1,222.0 million (US\$38.7 million) in 2012, 2013 and 2014, respectively. We cannot assure you that we will achieve foreign exchange gains in the future. See "Item 11. Quantitative and Qualitative Disclosures about Market Risk—Market Risk—Foreign Currency Exchange Rate Risk."

The loss of a large customer or disruption of our strategic alliance or other commercial arrangements with semiconductor foundries and providers of other complementary semiconductor manufacturing services may result in a decline in our revenues and profitability.

Although we have a large customer base, we have derived and expect to continue to derive a large portion of our revenues from a small group of customers during any particular period due in part to the concentration of market share in the semiconductor and electronics industries. Our five largest customers together accounted for approximately 31.2%, 37.2% and 40.3% of our operating revenues in 2012, 2013 and 2014, respectively. Although no single customer accounted for more than 10.0% of our operating revenues in 2012, one customer did account for more than 10.0% of our operating revenues in 2013 and 2014. The demand for our services from a customer is directly dependent upon that customer's level of business activity, which could vary significantly from year to year. Our key customers typically operate in the cyclical semiconductor and electronic business and, in the past, have varied, and may vary in the future, order levels significantly from period to period. Some of these companies are relatively small, have limited operating histories and financial resources, and are highly exposed to the cyclical nature of the industry. We cannot assure you that these customers or any other customers will continue to place orders with us in the future at the same levels as in past periods. The loss of one or more of our significant customers, or reduced orders by any one of them, and our inability to replace these customers or make up for such orders could adversely affect our revenues and profitability. In addition, we have in the past reduced, and may in the future be requested to reduce, our prices to limit the level of order cancellations. Any price reduction would likely reduce our margins and profitability.



## Table of Contents

Since 1997, we have maintained a strategic alliance with Taiwan Semiconductor Manufacturing Company Limited, or TSMC, one of the world's largest dedicated semiconductor foundries. TSMC designates us as their non-exclusive preferred provider of packaging and testing services for semiconductors manufactured by TSMC. Any strategic alliances, as well as our other commercial arrangements with providers of other complementary semiconductor manufacturing services, enable us to offer total semiconductor manufacturing solutions to our customers. Any strategic alliances and our other commercial arrangements may be terminated at any time. Any such termination, and our failure to enter into substantially similar strategic alliances or commercial arrangements, may adversely affect our competitiveness and our revenues and profitability.

Our revenues and profitability may decline if we are unable to obtain adequate supplies of raw materials in a timely manner and at a reasonable price.

Our operations, such as packaging operations, substrate operations and electronic manufacturing services, require that we obtain adequate supplies of raw materials on a timely basis. Shortages in the supply of raw materials have in the past resulted in occasional price increases and delivery delays. In addition, the operations of some of our suppliers are vulnerable to natural disasters, such as earthquakes and typhoons, the occurrences of which may deteriorate and prolong the shortage or increase the uncertainty of the supply of raw materials. For example, on March 11, 2011, a major earthquake occurred off the coast of Japan resulting in a large tsunami and radiation leak at the Fukushima nuclear power plant. We experienced a disruption to the supply of raw materials from Japan for about three to four weeks due to the fear of radiation contamination and the reduction or postponement in production by some of our Japanese suppliers. Although the purchase of supplies from Japan has been restored to the previous level, we cannot assure you that we will not suffer long-term from the impact of the earthquake and the tsunami. In addition, further earthquakes, aftershocks thereof or other disasters in Japan or affecting any regions in which we operate may cause a decline in our sales. Any of the above events or developments may have a material adverse effect on our business, results of operations and financial condition.

Raw materials such as advanced substrates are prone to supply shortages since such materials are produced by a limited number of suppliers such as Nanya Printed Circuit Board Corporation, Kinsus Interconnect Technology Corporation, Samsung Electro-Mechanics Co., Ltd and Unimicron Technology Corp. Our operations conducted through our wholly-owned subsidiaries ASE Electronics and ASE Shanghai have improved our ability to obtain advanced substrates on a timely basis and at a reasonable cost. In 2014, our interconnect materials operations supplied approximately 31.7% of our consolidated substrate requirements by value. We do not expect that our internal interconnect materials operations will be able to meet all of our interconnect materials requirements. Consequently, we will remain dependent on market supply and demand for our raw materials. In addition, recent fluctuations in prices of precious metals, such as gold, have also affected the price at which we have been able to purchase the principal raw materials we use in our packaging processes. We cannot guarantee that we will not experience shortages in the near future or that we will be able to obtain adequate supplies of raw materials in a timely manner or at a reasonable price. Our revenues and net income could decline if we are unable to obtain adequate supplies of high quality raw materials in a timely manner or if there are significant increases in the costs of raw materials that we cannot pass on to our customers.

New regulations related to conflict minerals could adversely affect our business, financial condition and results of operations.

The Dodd-Frank Wall Street Reform and Consumer Protection Act contains provisions to improve transparency and accountability concerning the supply of certain minerals, known as conflict minerals, which are defined as cassiterite, columbite-tantalite, gold, wolframite or their derivatives and other minerals determined by the U.S. government to be

financing conflict in the Democratic Republic of Congo and adjoining countries. As a result, in August 2012 the SEC adopted annual disclosure and reporting requirements for those companies who use conflict minerals in their products. These rules require companies that manufacture or contract to manufacture products for which conflict minerals are necessary to the functionality or production to begin scrutinizing the origin of conflict minerals in their products starting from January 1, 2013, and file a new form, Form SD, containing the conflict

## Table of Contents

minerals disclosure by May 31 for the prior calendar year, beginning May 31, 2014. We filed a specialized disclosure report on Form SD for the year ended December 31, 2013 on May 30, 2014. Our specialized disclosure report on Form SD for the year ended December 31, 2013 disclosed that we were unable to determine the origin of the sources of gold, tantalum, tin and tungsten used in our products. Therefore, pursuant to the SEC rules governing conflict minerals disclosures, we have engaged an independent auditing firm to conduct audits on our due diligence framework to provide a private sector report for our specialized disclosure report on Form SD for the year ended December 31, 2014. As a result, there will be costs associated with complying with these disclosure requirements, including costs for diligence to determine the sources of conflict minerals used in our products and other potential changes to products, processes or sources of supply as a consequence of such verification activities. The implementation of these rules could adversely affect the sourcing, supply and pricing of materials used in our products. As there may be only a limited number of suppliers offering “conflict free” minerals, we cannot be sure that we will be able to obtain necessary “conflict free” minerals from such suppliers in sufficient quantities or at competitive prices. Also, we may face adverse effects to our reputation if we determine that certain of our products contain minerals not determined to be conflict free or if we are unable to sufficiently verify the origins for all conflict minerals used in our products through the procedures we may implement.

System security risks, data protection breaches or unexpected system outage or failures could harm our business, financial condition and results of operations.

We rely on the efficient and uninterrupted operation of complex information technology applications, systems and networks to operate our business. Our systems are vulnerable to damage or interruption from earthquakes, terrorist attacks, floods, fires, power loss, telecommunications failures, cyber-attacks, computer viruses, computer denial of service attacks or other attempts to harm our system, and similar events. In recent years, the risks that we face from cyber-attacks have increased significantly. Some of these attacks may originate from well-organized, highly skilled organizations. Although there have not been reported major cyber-attacks against our systems in the recent years, any such attack or system or network disruption could result in a loss of our intellectual property, the release of commercially sensitive information, customer or employee personal data. Failures to protect the privacy of customer and employee confidential data against breaches of network security could result in damage to our reputation.

Furthermore, some of our data centers are located in areas with a high risk of major earthquakes. Our data centers are also subject to break-ins, sabotage and intentional acts of vandalism, and to potential disruptions if the operators of these facilities have financial difficulties. Some of our systems are not fully redundant, and our disaster recovery planning cannot account for all eventualities. The occurrence of a natural disaster, a decision to close a facility we are using without adequate notice for financial reasons or other unanticipated problems at our data centers could result in loss of production capabilities and lengthy interruptions in our service. Any damage to or failure of our systems could result in interruptions in our service. Interruptions in our service could materially and adversely affect our business, financial condition and results of operations.

Any environmental claims or failure to comply with any present or future environmental regulations, as well as any fire or other industrial accident, may require us to spend additional funds and may materially and adversely affect our financial condition and results of operations.

We are subject to various laws and regulations relating to the use, storage, discharge and disposal of chemical by-products of, and water used in, our packaging and interconnect materials production processes, and the emission of volatile organic compounds and the discharge and disposal of solid industrial wastes from electronic manufacturing services operations. In the recent years, we have been subject to environmental administrative actions and judicial proceedings related to certain wastewater discharge incidents that occurred at our facilities. As a result of these proceedings, we have been subject to monetary fines as well as sanctions, including orders to suspend or limit our

operations and criminal charges against us.

In December 2013, the Kaohsiung City Environmental Protection Bureau ordered us to suspend the operations at our K7 Plant's wafer-level process where nickel is used for alleged wastewater discharge violations and fined us NT\$110.1 million for which we recognized as other income and expenses in December 2013 and paid in full in January 2014. In April 2014, the amount of the fine was reduced to NT\$109.4 million (US\$3.5 million) by the Kaohsiung City Environmental Protection Bureau. We received the refund of NT\$0.7 million (US\$0.02 million) and recorded the reversal of loss in September 2014. We have been actively working with the Kaohsiung City Environmental Protection Bureau and implemented improvement plans to enhance our wastewater discharge processes since this incident. Following a series of examinations, hearings and trial runs as ordered by the Kaohsiung City Environmental Protection Bureau during 2014, in December 2014, the Kaohsiung City Environmental Protection Bureau lifted the suspension order and approved the full resumption of operation of our K7 Plant. Although our K7 Plant has resumed full operation, we may be subject to other new environmental claims, charges or investigations on our K7 Plant or other facilities which may cause similar or more severe interruptions to our business and operations.

## Table of Contents

With respect to the NT\$109.4 million (US\$3.5 million) administrative penalty imposed on us by the Kaohsiung City Environmental Protection Bureau, we appealed the case to the Kaohsiung High Administrative Court in August 2014 to revoke the Kaohsiung City Government's decision and to lift the administrative penalty. In connection with the same alleged wastewater discharge violations at our K7 plant, the Kaohsiung District Court ruled against us and imposed on us a criminal penalty of NT\$3.0 million (US\$0.1 million) for which we recognized as other income and expenses in October 2014. We appealed the case to the Taiwan High Court Kaohsiung District Branch in November 2014. While we are defending these proceedings vigorously, the ultimate outcome of the matter is uncertain. For additional details of these administrative actions and judicial proceedings related to our K7 Plant see "Item 4. Information on the Company—Business Overview—Environmental Matters," "Item 4. Information on the Company—Property, Plants and Equipment" and "Item 8. Financial Information—Consolidated Statements and Other Financial Information—Legal Proceedings." Defending against any of these pending or future actions will likely be costly and time-consuming and could significantly divert management's efforts and resources. The ultimate outcome of these proceedings cannot be predicted with certainty. Any penalties, fines, damages or settlements made in connection with these criminal, civil, and/or administrative investigations and/or lawsuits may have a material adverse effect on our business, results of operations and future prospects.

We have made, and expect to continue to make, expenditures to maintain strict compliance with such environmental laws and regulations. For example, in order to demonstrate our commitment to environmental protection, in December 2013, our board of directors approved contributions to environmental protection efforts in Taiwan in a total amount of not less than NT\$3,000.0 million, to be made in the next 30 years. For the year ended December 31, 2014, we have made contributions in the amount of NT\$100.0 million (US\$3.2 million) through ASE Cultural and Educational Foundation to fund various environmental projects and our board of directors have resolved in a resolution in January 2015 to contribute NT\$100.0 million (US\$3.2 million) through ASE Cultural and Educational Foundation in environmental projects in 2015. The costs of current and future compliance with environmental laws and regulations could require us to acquire costly equipment or to incur other significant expenses that may have a material adverse effect on our financial condition and results of operations.

Negative publicity may adversely affect our brand and reputation, which may result in a material adverse impact on our business, results of operations and prospects and cause fluctuations in the price of our common shares and ADSs.

Any negative publicity may damage our brand and reputation, harm our ability to attract and retain customers and result in a material adverse impact on our results of operations and prospects as well as cause fluctuations in the trading price of our common shares and ADSs. In addition, any change in policy or directions in which we carry out our corporate social responsibility or corporate sustainability activities may also have an adverse effect on our reputation. Furthermore, in recent years, we have experienced and may continue to experience negative publicity in connection with administrative penalties and criminal charges related to alleged violations of environmental regulations and laws. For further details, see "—Any environmental claims or failure to comply with any present or future environmental regulations, as well as any fire or other industrial accident, may require us to spend additional funds and may materially and adversely affect our financial condition and results of operations," "Item 4. Information on the Company—Business Overview—Environmental Matters," "Item 4. Information on the Company—Property, Plants and Equipment" and "Item 8. Financial Information—Consolidated Statements and Other Financial Information—Legal Proceedings."

Climate change, other environmental concerns and green initiatives also presents other commercial challenges, economic risks and physical risks that could harm our results of operations or affect the manner in which we conduct our business.

Increasing climate change and environmental concerns could affect the results of our operations if any of our customers request that we exceed any standards set for environmentally compliant products and services, or if raw materials and/or products are required to meet strict inspection standards with respect to any radioactive contamination as a result of concerns arising from radiation leaking incidents, such as the radiation leak which occurred in March 2011 in Japan. If we are unable to offer such products or offer products that are compliant, but are not as reliable due to the lack of reasonably available alternative technologies, it may harm our results of operations.

## Table of Contents

Furthermore, energy costs in general could increase significantly due to climate change regulations. Therefore, our energy costs may increase substantially if utility or power companies pass on their costs, fully or partially, such as those associated with carbon taxes, emission cap and carbon credit trading programs.

We may be subject to intellectual property rights disputes, which could materially adversely affect our business.

Our ability to compete successfully and achieve future growth depends, in part, on our ability to develop and protect our proprietary technologies and to secure on commercially acceptable terms certain technologies that we do not own. We cannot assure you that we will be able to independently develop, obtain patents for, protect or secure from any third party, the technologies required.

Our ability to compete successfully also depends, in part, on our ability to operate without infringing the proprietary rights of others. In particular, the semiconductor and electronics industries are characterized by frequent litigation regarding patent and other intellectual property rights. In February 2006, Tessera filed a suit against us and others alleging patent infringement. In February 2014, ASE Inc. and our U.S. subsidiary, ASE (U.S.) Inc. reached a term sheet agreement with Tessera to fully resolve the remaining legal proceedings between each other, under which we would pay a total of US\$30.0 million to Tessera (which was fully recognized by us in the fourth quarter of 2013) and both Tessera and we would dismiss all pending claims against each other. The final settlement agreement was entered into among the parties in October 2014 and the final settlement amount was reduced to US\$27.0 million. In October 2014, the United States District Court for the Northern District of California dismissed all claims between Tessera and us. We have fully paid the settlement amount in January 2015 and reversed the settlement amount of US\$3.0 million in the fourth quarter of 2014. See “Item 8. Financial Information—Consolidated Statements and Other Financial Information—Legal Proceedings.”

Any litigation, whether as plaintiff or defendant and regardless of the outcome, is costly and diverts company resources. Any of the foregoing could harm our competitive position and render us unable to provide some of our services operations.

Our major shareholders may take actions that are not in, or may conflict with, our public shareholders’ best interest.

Members of the Chang family own, directly or indirectly, a significant interest in our outstanding common shares. See “Item 7. Major Shareholders and Related Party Transactions—Major Shareholders.” Accordingly, these shareholders will continue to have the ability to exercise a significant influence over our business, including matters relating to:

- our management and policies;
- the timing and distribution of dividends; and
- the election of our directors and supervisors.

Members of the Chang family may take actions that you may not agree with or that are not in our or our public shareholders’ best interests.

We are an ROC company and, because the rights of shareholders under ROC law differ from those under U.S. law and the laws of certain other countries, you may have difficulty protecting your shareholder rights.

Our corporate affairs are governed by our Articles of Incorporation and by the laws governing corporations incorporated in the ROC. The rights of shareholders and the responsibilities of management and the members of the board of directors under ROC law are different from those applicable to a corporation incorporated in the United States and certain other countries. As a result, public shareholders of ROC companies may have more difficulty in protecting their interests in connection with actions taken by management or members of the board of directors than they would as public shareholders of a corporation in the United States or certain other countries.



Table of Contents

We have made investments in, and are exploring the possibility of expanding our businesses and operations to, or making additional investments in, the PRC, which may expose us to additional political, regulatory, economic and foreign investment risks.

We operate packaging and testing facilities and electronic manufacturing services in the PRC primarily through our PRC subsidiaries such as ASESAT and Universal Scientific Shanghai, among others. We also made substantial investments in PRC real estate development through our subsidiaries in the PRC. Under PRC laws and regulations, foreign investment projects, such as our subsidiaries, must obtain certain approvals from the relevant governmental authorities in the provinces or special economic zones in which they are located and, in some circumstances, from the relevant authorities in the PRC's central government. Foreign investment projects must also comply with certain regulatory requirements. However, PRC laws and regulations are often subject to varying interpretations and means of enforcement, and additional approvals from the relevant governmental authorities may be required for the operations of our PRC subsidiaries. If required, we cannot assure you that we will be able to obtain these approvals in a timely manner, if at all. Because the PRC government holds significant discretion in determining matters relating to foreign investment, we cannot assure you that the relevant governmental authorities will not take action that is materially adverse to our PRC operations.

In addition, the PRC stock market is subject to extreme price and volume fluctuations. We are the controlling shareholder of Universal Scientific Shanghai, which is an entity currently listed on the Shanghai Stock Exchange. The PRC securities markets have recently experienced, and may experience in the future, significant price declines and volatility. Any volatility may have a significant effect on Universal Scientific Shanghai's share price and may indirectly affect the market price of our common shares and ADSs.

Our global manufacturing and sales activities subject us to risks associated with legal, political, economic or other conditions or developments in various jurisdictions, including in particular the ROC and the PRC, which could negatively affect our business and financial status and therefore the market value of your investment.

Our principal executive office and our principal production facilities are located in the ROC, and a substantial majority of our net revenues are derived from our operations in the ROC and the PRC. In addition, we have operations worldwide and a significant percentage of our revenue comes from sales to locations outside the ROC or the PRC. Operating in the ROC, PRC and other overseas locations exposes us to changes in policies and laws, as well as the general political and economic conditions, security risks, health conditions and possible disruptions in transportation networks, in the various countries in which we operate, which could result in an adverse effect on our business operations in such countries. If any of our global operations are affected by the legal, political, economic or other conditions in the jurisdiction we operate, our results of operations as well as market price and the liquidity of our ADSs and common shares may be materially and adversely affected.

## Table of Contents

Escalations in tensions with North Korea could have a material adverse effect on our business and results of operations.

Relations between Korea and North Korea have been tense throughout Korea's modern history. The level of tension between the two Koreas has fluctuated and may increase abruptly as a result of future events. In particular, there have been heightened security concerns in recent years stemming from North Korea's nuclear weapon and long-range missile programs as well as its hostile military actions against Korea. North Korea renounced its obligations under the Nuclear Non-Proliferation Treaty in January 2003 and conducted a nuclear test in October 2006, which increased tensions in the region and elicited strong objections worldwide. Despite condemnation from the United Nations and international community, North Korea has conducted the nuclear tests in the past and may conduct new forms of nuclear tests in the future.

Revenue from our subsidiary, ASE Korea, accounts for 9.2% of the revenue generated from our packaging and testing business in 2014. There can be no assurance that the level of tension on the Korean peninsula will not escalate in the future. Any further increase in tensions, which may occur, for example, if North Korea experiences a leadership crisis, high level contacts between Korea and North Korea break down or military hostilities occur, could have a material adverse effect on ASE Korea, which in turn, will have a material adverse effect on our packaging and testing business, and our results of operations.

Any impairment charges may have a material adverse effect on our net income.

Under IFRS, we are required to evaluate our assets, such as equipment, goodwill and investments, for possible impairment at least annually or whenever there is an indication of impairment. If certain criteria are met, we are required to record an impairment charge.

With respect to assets, we recognized impairment charges of NT\$97.2 million, NT\$691.9 million and NT\$308.1 million (US\$9.8 million) in 2012, 2013, 2014, respectively, primarily as a result of an impairment charge related to buildings and improvement, and impaired equipment and investment. See "Item 5. Operating and Financial Review and Prospects—Operating Results and Trend Information—Critical Accounting Policies and Estimates—Impairment of Tangible and Intangible Assets other than Goodwill," "Item 5. Operating and Financial Review and Prospects—Operating Results and Trends Information—Critical Accounting Policies and Estimates—Valuation of Investments" and "Item 5. Operating and Financial Review and Prospects—Operating Results and Trend Information—Goodwill."

We are unable to estimate the extent and timing of any impairment charges for future years and we cannot give any assurance that impairment charges will not be required in periods subsequent to December 31, 2014. Any impairment charge could have a material adverse effect on our net income. The determination of an impairment charge at any given time is based significantly on our expected results of operations over a number of years in the future. As a result, an impairment charge is more likely to occur during a period in which our operating results and outlook are otherwise already depressed.

Our adoption of new financial reporting standards, effective January 1, 2013, may have material impact on our financial statements thereafter.

We have historically presented our consolidated financial statements, including our consolidated financial statements for the year ended December 31, 2012, in accordance with ROC GAAP for purposes of our filings with the Taiwan Stock Exchange, with reconciliation to U.S. GAAP for certain filings with the SEC. According to the announcement of the FSC, on May 14, 2009, effective January 1, 2013, companies listed on the Taiwan Stock Exchange, including

us, must report their financial statements in accordance with the Taiwan-IFRS. Accordingly, we have adopted Taiwan-IFRS in the ROC for our interim quarterly earnings releases beginning in the first quarter of 2013 and our annual consolidated financial statements beginning in 2013. While we have adopted Taiwan-IFRS for ROC reporting purposes, we have also adopted and will continue to adopt IFRS, which differs from Taiwan-IFRS, for certain filings with the SEC, including this annual report and future reports on Form 20-F. Following our adoption of IFRS for SEC filing purposes, we will no longer be required to reconcile net income and balance sheet differences under our consolidated financial statements with U.S. GAAP.

Taiwan-IFRS differs from IFRS in certain respects, including, but not limited to the extent that any new or amended standards or interpretations applicable under IFRS may not be timely endorsed by the FSC. Because of the differences in accounting treatments, the adoption of Taiwan-IFRS and IFRS may have material impact on our results of operations and financial condition in our reported financial statements going forward. In addition, under the Taiwan-IFRS or IFRS, we are required to present the opening balance sheet on the transition date of January 1, 2012 with adjusted opening balances prepared under the Taiwan-IFRS or IFRS. Consequently, our consolidated financial statements as of and for the year ended December 31, 2012 included in this annual report may differ materially from those included in the annual report for the year ended December 31, 2012, even though they relate to the same fiscal year.

Table of Contents

Provisions of our outstanding convertible bonds could discourage an acquisition of us by a third party.

In September 2013, we completed an offering of US\$400.0 million in aggregate principal amount of convertible bonds due 2018 (“2018 Convertible Bonds”). Certain provisions of our convertible bonds could make it more difficult or more expensive for a third party to acquire us. In the event that (1) our common shares cease to be listed on the Taiwan Stock Exchange; (2) any person or persons acting together acquire control of us if such person or persons do not have, and would not be deemed to have, control of us as of August 29, 2013; (3) we consolidate with or merge into or sell or transfer all or substantially all of our assets to any other person, unless the consolidation, merger, sale or transfer will not result in the other person or persons acquiring control over us or the successor entity; or (4) one or more other persons acquire the legal or beneficial ownership of all or substantially all of our capital stock, holders of these bonds shall have the right to require us to repurchase all or any portion of the principal amount thereof (which is US\$200,000 or any integral multiples thereof) of such holder’s bonds. “Control” means the right to appoint and/or remove all or the majority of the members of our board of directors or other governing body, whether obtained directly or indirectly, and whether obtained by ownership of share capital, the possession of voting rights, contract or otherwise. However, a “change of control” will not be deemed to have occurred (i) solely as a result of the issuance or transfer, with the Company’s corporation, of any preferred shares in the Company’s capital or (ii) if the closing price per common share for any five trading days within the period of 10 consecutive trading days ending immediately after the later of the change of control or the public announcement of the change of control equals or exceeds 110% of the conversion price in effect on each of those five trading days.

The accounting treatment for our outstanding convertible bonds, including the treatment for conversion option, redemption option and put option embedded in our outstanding convertible bonds, could have a material effect on our reported financial results.

In September 2013, we completed the offering of the 2018 Convertible Bonds. Since the 2018 Convertible Bonds are denominated in U.S. dollars which is different from our functional currency, under IFRS, we separated the conversion option, redemption option and put option embedded in 2018 Convertible Bonds (collectively, the “Bond Options”) and recognized them as a freestanding derivative at fair value through profit or loss. To determine the fair value of the Bond Options of the 2018 Convertible Bonds, we are subject to a mark-to-market accounting on the Bond Options embedded in the 2018 Convertible Bonds. As a result, if the fair value of our common shares rises, mark-to-market of the Bond Options would lead to losses in our financial statements. For each reporting period over the term of the convertible bonds, a gain (or loss) will be reported in our consolidated statement of comprehensive income to the extent the fair value of the Bond Options changes from the previous period. Changes in fair value of the Bond Options generated a loss for NT\$75.0 million and NT\$777.6 million (US\$24.6 million) in 2013 and 2014, respectively. See note 19 to our audited consolidated financial statements included in this annual report.

Any failure to achieve and maintain effective internal controls could have a material adverse effect on our business and results of operations.

We are subject to reporting obligations under the U.S. securities laws. The SEC as required by Section 404 of the Sarbanes-Oxley Act of 2002 adopted rules requiring every public company to include a management report on the effectiveness of such company’s internal control over financial reporting in its annual report. In addition, an independent registered public accounting firm must report on such company’s internal control over financial reporting.

Our management concluded that our internal control over financial reporting was effective as of December 31, 2014 and our independent registered public accounting firm has issued an attestation report concluding that our internal control over financial reporting was effective in all material aspects. As effective internal control over financial

reporting is necessary for us to produce reliable financial reports and is important to help prevent fraud, any failure to maintain effective internal control over financial reporting could harm our business and result in a loss of investor confidence in the reliability of our financial statements, which in turn could negatively impact the trading price of our common shares and ADSs. Furthermore, we may need to incur additional costs and use additional management and other resources in an effort to comply with Section 404 of the Sarbanes-Oxley Act and other requirements going forward.

Table of Contents

Risks Relating to Taiwan, ROC

Strained relations between the ROC and the PRC and disruptions in Taiwan's political environment caused by domestic political events could negatively affect our business and the market value of your investment.

Our principal executive offices and our principal facilities are located in Taiwan and approximately 45.2%, 48.5% and 52.1% of our operating revenues in 2012, 2013 and 2014, respectively, were derived from our operations in Taiwan. Accordingly, our business and financial condition may be affected by changes in local governmental policies and political and social instability.

The ROC has a unique international political status. The government of the PRC asserts sovereignty over all of China, including Taiwan, and does not recognize the legitimacy of the ROC government. Although significant economic and cultural relations have been established in recent years between the ROC and the PRC, relations have often been strained. Any major change in the Taiwanese political environment, including the outcome of presidential or municipal elections, or potential shifts in government policy, may affect the direction of economic and political developments and negatively impact the economic and political environment in Taiwan. Past developments related to the interaction between the ROC and the PRC, domestic political events or election results have on occasion depressed the market prices of the securities of Taiwanese or Taiwan-related companies, including our own. Relations between the ROC and the PRC and other factors affecting the political or economic conditions in Taiwan could have a material adverse effect on our financial condition and results of operations, as well as the market price and the liquidity of our common shares and ADSs.

Currently, we manufacture interconnect materials in the PRC through our wholly-owned subsidiary, ASE Shanghai. We also provide packaging and testing services in the PRC through some of our subsidiaries. In addition, we engage in the PRC in real estate development and the manufacturing of computer peripherals and electronic components through our subsidiaries in the PRC. See "Item 4. Information on the Company—Organizational Structure—Our Consolidated Subsidiaries." In the past, ROC companies, including ourselves, were prohibited from investing in facilities for the packaging and testing of semiconductors in the PRC. Although the prohibitions have been relaxed since February 2010, the ROC government currently still restricts certain types of investments by ROC companies, including ourselves, in the PRC. We do not know when or if such laws and policies governing investment in the PRC will be amended, and we cannot assure you that such ROC investment laws and policies will permit us to make further investments of certain types in the PRC in the future that we consider beneficial to us. Our growth prospects and profitability may be adversely affected if we are restricted from making certain additional investments in the PRC and are not able to fully capitalize on the growth of the semiconductor industry in the PRC.

As a substantial portion of our business and operations is located in Taiwan, we are vulnerable to earthquakes, typhoons, drought and other natural disasters, as well as power outages and other industrial incidents, which could severely disrupt the normal operation of our business and adversely affect our results of operations.

Taiwan is susceptible to earthquakes and has experienced severe earthquakes which caused significant property damage and loss of life, particularly in the central and eastern parts of Taiwan. Earthquakes have damaged production facilities and adversely affected the operations of many companies involved in the semiconductor and other industries. For example, in June 2013, an earthquake measuring 6.5 on the Richter magnitude scale occurred in Nantou caused several death and property damages. However, the earthquake did not have a material impact on our operations. We have never experienced structural damage to our facilities or damage to our machinery and equipment as a result of these earthquakes. In the past, however, we have experienced interruptions to our production schedule primarily as a result of power outages caused by earthquakes.

Taiwan is also susceptible to typhoons, which may cause damage and business interruptions to companies with facilities located in Taiwan. For example, in 2012, Taiwan experienced severe damage from typhoons, including typhoon Saola on August 3, 2012 that caused several deaths, severe flooding and extensive property damage. Taiwan has experienced severe droughts in the past. Although we have not been directly affected by droughts, we are dependent upon water for our packaging and substrates operations and a drought could interrupt such operations. In addition, a drought could interrupt the manufacturing process of the foundries located in Taiwan, in turn disrupting some of our customers' production, which could result in a decline in the demand for our services. In addition, the supply of electrical power in Taiwan, which is primarily provided by Taiwan Power Company, the state-owned electric utility, is susceptible to disruption that could be prolonged and frequent, caused by overload as a result of high demand or other reasons.

## Table of Contents

Kaohsiung is one of the major industrial cities in Taiwan. Our testing and packaging businesses have been founded in Kaohsiung and currently our primary testing and packaging operations are located in Kaohsiung. In July 2014, following leaks from underground propene pipes, a series of propene pipeline explosions occurred in the Cian-Jhen and Ling-Ya districts of Kaohsiung. 32 people were killed and 321 others were injured from this incident. Although we have not been directly affected by the explosion, future industrial incidents could negatively affect our operation and result in interruption or delay of our operation or production capacity.

Our production facilities as well as many of our suppliers and customers and providers of complementary semiconductor manufacturing services, including foundries, are located in Taiwan. If our customers are affected by an earthquake, a typhoon, a drought or any other natural disasters, or power outage or other industrial incidents, it could result in a decline in the demand for our services. If our suppliers or providers of complementary semiconductor manufacturing services are affected, our production schedule could be interrupted or delayed. As a result, a major earthquake, typhoon, drought or other natural disaster in Taiwan, or a power outage or other industrial incident could severely disrupt the normal operation of our business and have a material adverse effect on our financial condition and results of operations.

We face risks related to health epidemics and outbreaks of contagious diseases, including H5N1 influenza, H7N9 influenza, H9N2 influenza, Severe Acute Respiratory Syndrome, or SARS, and Ebola virus.

There have been reports of outbreaks of a highly pathogenic influenza caused by the H5N1, H7N9 and H9N2 viruses, in certain regions of Asia and other parts of the world. In the recent years, Ebola virus disease broke out in West Africa, with a number of people having died of the disease in countries such as Guinea, Sierra Leone and Liberia. There are also cases of patients diagnosed with Ebola in the United States and Europe. An outbreak of such contagious diseases in the human population could result in a widespread health crisis that could adversely affect the economies and financial markets of many countries. Additionally, a recurrence of SARS, a highly contagious form of atypical pneumonia, similar to the occurrence in 2003 which affected the PRC, Hong Kong, Taiwan, Singapore, Vietnam and certain other countries, would also have similar adverse effects. Since most of our operations and customers and suppliers are based in Asia (mainly in Taiwan and the PRC), an outbreak of H5N1 influenza, H7N9 influenza, H9N2 influenza, SARS, Ebola or other contagious diseases in Asia or elsewhere, or the perception that such an outbreak could occur, and the measures taken by the governments of countries affected, including the ROC and the PRC, could adversely affect our business, financial condition or results of operations.

### Risks Relating to Ownership of Our Common Shares and the ADSs

The market for our common shares and the ADSs may not be liquid.

Active, liquid trading markets generally result in lower price volatility and more efficient execution of buy and sell orders for investors, compared to less active and less liquid markets. Liquidity of a securities market is often a function of the volume of the underlying shares that are publicly held by unrelated parties.

There has been no trading market outside the ROC for our common shares and the only trading market for our common shares is the Taiwan Stock Exchange. The outstanding ADSs are listed on the New York Stock Exchange. There is no assurance that the market for our common shares or the ADSs will be active or liquid.

Although ADS holders are entitled to withdraw our common shares underlying the ADSs from the depositary at any time, ROC law requires that our common shares be held in an account in the ROC or sold for the benefit of the holder on the Taiwan Stock Exchange. In connection with any withdrawal of common shares from our ADS facility, the



ADSs evidencing these common shares will be cancelled. Unless additional ADSs are issued, the effect of withdrawals will be to reduce the number of outstanding ADSs. If a significant number of withdrawals are effected, the liquidity of our ADSs will be substantially reduced. We cannot assure you that the ADS depository will be able to arrange for a sale of deposited shares in a timely manner or at a specified price, particularly during periods of illiquidity or volatility.

## Table of Contents

If a non-ROC holder of ADSs withdraws and holds common shares, such holder of ADSs will be required to appoint a tax guarantor, local agent and custodian in the ROC and register with the Taiwan Stock Exchange in order to buy and sell securities on the Taiwan Stock Exchange.

When a non-ROC holder of ADSs elects to withdraw and hold common shares represented by ADSs, such holder of the ADSs will be required to appoint an agent for filing tax returns and making tax payments in the ROC. Such agent will be required to meet the qualifications set by the ROC Ministry of Finance and, upon appointment, becomes the guarantor of the withdrawing holder's tax payment obligations. Evidence of the appointment of a tax guarantor, the approval of such appointment by the ROC tax authorities and tax clearance certificates or evidentiary documents issued by such tax guarantor may be required as conditions to such holder repatriating the profits derived from the sale of common shares. We cannot assure you that a withdrawing holder will be able to appoint, and obtain approval for, a tax guarantor in a timely manner.

In addition, under current ROC law, such withdrawing holder is required to register with the Taiwan Stock Exchange and appoint a local agent in the ROC to, among other things, open a bank account and open a securities trading account with a local securities brokerage firm, pay taxes, remit funds and exercise such holder's rights as a shareholder. Furthermore, such withdrawing holder must appoint a local bank or a local securities firm to act as custodian for confirmation and settlement of trades, safekeeping of securities and cash proceeds and reporting and declaration of information. Without satisfying these requirements, non-ROC withdrawing holders of ADSs would not be able to hold or otherwise subsequently sell our common shares on the Taiwan Stock Exchange or otherwise.

Pursuant to Mainland Investors Regulations, only QDIIs or persons that have otherwise obtained the approval from the MOEAIC and registered with the Taiwan Stock Exchange are permitted to withdraw and hold our shares from a depositary receipt facility. In order to hold our shares, such QDIIs are required to appoint an agent and custodian as required by the Mainland Investors Regulations. If the aggregate amount of our shares held by any QDII or shares received by any QDII upon a single withdrawal accounts for 10.0% of our total issued and outstanding shares, such QDII must obtain the prior approval from the MOEAIC. We cannot assure you that such approval would be granted.

The market value of your investment may fluctuate due to the volatility of the ROC securities market.

The trading price of our ADSs may be affected by the trading price of our common shares on the Taiwan Stock Exchange. The ROC securities market is smaller and more volatile than the securities markets in the United States and in many European countries. The Taiwan Stock Exchange has experienced substantial fluctuations in the prices and volumes of sales of listed securities and there are currently limits on the range of daily price movements on the Taiwan Stock Exchange. The Taiwan Stock Exchange Index peaked at 12,495.3 in February 1990, and subsequently fell to a low of 2,560.5 in October 1990. On March 13, 2000, the Taiwan Stock Exchange Index experienced a 617-point drop, which represented the single largest decrease in the Taiwan Stock Exchange Index in its history. During the period from January 1, 2014 to December 31, 2014, the Taiwan Stock Exchange Index peaked at 9,569.17 on July 15, 2014, and reached a low of 8,264.48 on February 5, 2014. Over the same period, the trading price of our common shares ranged from NT\$42.15 per share to NT\$26.60 per share. On March 17, 2015, the Taiwan Stock Exchange Index closed at 9,539.44 and the closing value of our common shares was NT\$44.05 per share.

The Taiwan Stock Exchange is particularly volatile during times of political instability, including when relations between Taiwan and the PRC are strained. Several investment funds affiliated with the ROC government have also from time to time purchased securities from the Taiwan Stock Exchange to support the trading level of the Taiwan Stock Exchange. Moreover, the Taiwan Stock Exchange has experienced problems such as market manipulation, insider trading and settlement defaults. The recurrence of these or similar problems could have an adverse effect on the market price and liquidity of the securities of ROC companies, including our common shares and ADSs, in both

the domestic and international markets.

Holders of common shares and ADSs may experience dilution if we issue stock bonuses and stock options to employees or sell additional equity or equity-linked securities.

Similar to other ROC technology companies, we issue bonuses from time to time in the form of common shares. Prior to 2009, bonuses issued in the form of our common shares were valued at par. Beginning in 2009, bonuses in the form of our common shares are valued at the closing price of our common shares on the day prior to our shareholders' meeting. In addition, under the ROC Company Law we may, upon approval from our board of directors and the ROC Securities and Futures Bureau of the FSC, establish employee stock option plans provided that shareholders' approval is required if the exercise price of an option would be less than the closing price of our common shares on the Taiwan Stock Exchange on the grant date of the option. ASE Inc. currently maintains three employee stock option plans pursuant to which our full-time employees, including our domestic and foreign subsidiaries, are eligible to receive stock option grants. As of December 31, 2014, 209,745,100 options granted by ASE Inc. were outstanding. In December 2014, the board of directors approved the 5th Employee Share Option plans under which 100,000,000 options will be granted. See "Item 6. Directors, Senior Management and Employees—Compensation—ASE Inc. Employee Bonus and Stock Option Plans." The issuance of our common shares pursuant to stock bonuses or stock options may have a dilutive effect on the holders of outstanding common shares and ADSs.

Table of Contents

In addition, the sale of additional equity or equity-linked securities may result in additional dilution to our shareholders. In September 2013, we issued US\$400.0 million unsecured zero coupon convertible bonds due 2018 to fund procurement of raw materials from overseas. The bonds are convertible by holders at any time on or after October 16, 2013 and up to (and including) August 26, 2018. As of December 31, 2014, none of the bonds has been converted into our common shares, and the balance of the outstanding bonds was US\$400.0 million. The conversion price was adjusted from NT\$33.085 per common share to NT\$33.05 per common share due to the Capital Increase in September 2013. In August 2014, as a result of our cash dividend distribution, the conversion price was further adjusted from NT\$33.05 to NT\$31.93 per common share. As of the date of this annual report, the conversion price is NT\$31.93 per common share. Upon full conversion, the outstanding bonds will be converted into 375,270,905 common shares if based on the current conversion price, representing 4.8% of our outstanding shares at the end of December 31, 2014. Any conversion of bonds, in full or in part, would dilute the ownership interest of our existing shareholders and our earnings per share and could adversely affect the market price of our ADSs. Moreover, in September 2013, we issued 130,000,000 common shares for public subscription which was effected by way of an increase in our authorized share capital in the amount of NT\$1,300.0 million. The issuance of the zero coupon convertible bonds due 2018 and the Capital Increase could cause dilution to our ADS holders.

Restrictions on the ability to deposit our common shares into our ADS facility may adversely affect the liquidity and price of our ADSs.

The ability to deposit common shares into our ADS facility is restricted by ROC law. A significant number of withdrawals of common shares underlying our ADSs would reduce the liquidity of the ADSs by reducing the number of ADSs outstanding. As a result, the prevailing market price of our ADSs may differ from the prevailing market price of our common shares on the Taiwan Stock Exchange. Under current ROC law, no person or entity, including you and us, may deposit our common shares in our ADS facility without specific approval of the FSC, unless:

- (1) we pay stock dividends on our common shares;
- (2) we make a free distribution of common shares;
- (3) holders of ADSs exercise preemptive rights in the event of capital increases; or

(4) to the extent permitted under the deposit agreement and the relevant custody agreement, investors purchase our common shares, directly or through the depository, on the Taiwan Stock Exchange, and deliver our common shares to the custodian for deposit into our ADS facility, or our existing shareholders deliver our common shares to the custodian for deposit into our ADS facility.

With respect to item (4) above, the depository may issue ADSs against the deposit of those common shares only if the total number of ADSs outstanding following the deposit will not exceed the number of ADSs previously approved by the FSC, plus any ADSs issued pursuant to the events described in items (1), (2) and (3) above.

In addition, in the case of a deposit of our common shares requested under item (4) above, the depository will refuse to accept deposit of our common shares if such deposit is not permitted under any legal, regulatory or other restrictions notified by us to the depository from time to time, which restrictions may include blackout periods during which deposits may not be made, minimum and maximum amounts and frequency of deposits.



## Table of Contents

The depositary will not offer holders of ADSs preemptive rights unless the distribution of both the rights and the underlying common shares to our ADS holders are either registered under the Securities Act or exempt from registration under the Securities Act.

Holders of ADSs will not have the same voting rights as our shareholders, which may affect the value of their ADSs.

The voting rights of a holder of ADSs as to our common shares represented by its ADSs are governed by the deposit agreement. Holders of ADSs will not be able to exercise voting rights on an individual basis. If holders representing at least 51% of the ADSs outstanding at the relevant record date instruct the depositary to vote in the same manner regarding a resolution, including the election of directors and supervisors, the depositary will cause all common shares represented by the ADSs to be voted in that manner. If the depositary does not receive timely instructions representing at least 51% of the ADSs outstanding at the relevant record date to vote in the same manner for any resolution, including the election of directors and supervisors, holders of ADSs will be deemed to have instructed the depositary or its nominee to authorize all our common shares represented by the ADSs to be voted at the discretion of our chairman or his designee, which may not be in the interest of holders of ADSs. Moreover, while shareholders who own 1% or more of our outstanding shares are entitled to submit one proposal to be considered at our annual general meetings of shareholders, only holders representing at least 51% of our ADSs outstanding at the relevant record date are entitled to submit one proposal to be considered at our annual general meetings of shareholders. Hence, only one proposal may be submitted on behalf of all ADS holders.

The right of holders of ADSs to participate in our rights offerings is limited, which could cause dilution to your holdings.

We may from time to time distribute rights to our shareholders, including rights to acquire our securities. Under the deposit agreement, the depositary will not offer holders of ADSs those rights unless both the distribution of the rights and the underlying securities to all our ADS holders are either registered under the Securities Act or exempt from registration under the Securities Act. Although we may be eligible to take advantage of certain exemptions under the Securities Act available to certain foreign issuers for rights offerings, we can give no assurances that we will be able to establish an exemption from registration under the Securities Act, and we are under no obligation to file a registration statement for any of these rights. Accordingly, holders of ADSs may be unable to participate in our rights offerings and may experience dilution of their holdings.

If the depositary is unable to sell rights that are not exercised or not distributed or if the sale is not lawful or reasonably practicable, it will allow the rights to lapse, in which case holders of ADSs will receive no value for these rights.

Changes in exchange controls which restrict your ability to convert proceeds received from your ownership of ADSs may have an adverse effect on the value of your investment.

Under current ROC law, the depositary, without obtaining approvals from the Central Bank of the Republic of China (Taiwan) or any other governmental authority or agency of the ROC, may convert NT dollars into other currencies, including U.S. dollars, for:

- the proceeds of the sale of common shares represented by ADSs or received as stock dividends from our common shares and deposited into the depositary receipt facility; and
- any cash dividends or distributions received from our common shares.

In addition, the depositary may also convert into NT dollars incoming payments for purchases of common shares for deposit in the ADS facility against the creation of additional ADSs. The depositary may be required to obtain foreign exchange approval from the Central Bank of the Republic of China (Taiwan) on a payment-by-payment basis for conversion from NT dollars into foreign currencies of the proceeds from the sale of subscription rights for new common shares. Although it is expected that the Central Bank of the Republic of China (Taiwan) will grant this approval as a routine matter, we cannot assure you that in the future any approval will be obtained in a timely manner, or at all.

## Table of Contents

Under the ROC Foreign Exchange Control Law, the Executive Yuan of the ROC government may, without prior notice but subject to subsequent legislative approval, impose foreign exchange controls in the event of, among other things, a material change in international economic conditions. We cannot assure you that foreign exchange controls or other restrictions will not be introduced in the future.

The value of your investment may be reduced by possible future sales of common shares or ADSs by us or our shareholders.

While we are not aware of any plans by any major shareholders to dispose of significant numbers of common shares, we cannot assure you that one or more existing shareholders or owners of securities convertible or exchangeable into or exercisable for our common shares or ADSs will not dispose of significant numbers of common shares or ADSs. In addition, several of our subsidiaries and affiliates hold common shares, depositary shares representing common shares and options to purchase common shares or ADSs. They may decide to sell those securities in the future. See “Item 7. Major Shareholders and Related Party Transactions—Major Shareholders” for a description of our significant shareholders and affiliates that hold our common shares.

We cannot predict the effect, if any, that future sales of common shares or ADSs, or the availability of common shares or ADSs for future sale, will have on the market price of our common shares or the ADSs prevailing from time to time. Sales of substantial numbers of common shares or ADSs in the public market, or the perception that such sales may occur, could depress the prevailing market prices of our common shares or the ADSs.

## Item 4. Information on the Company

### HISTORY AND DEVELOPMENT OF THE COMPANY

Advanced Semiconductor Engineering, Inc. was incorporated on March 23, 1984 as a company limited by shares under the ROC Company Law, with facilities in the Nantze Export Processing Zone located in Kaohsiung, Taiwan. Our principal executive offices are located at 26 Chin Third Road, Nantze Export Processing Zone, Nantze, Kaohsiung, Taiwan, ROC and our telephone number at the above address is (886) 7-361-7131. Our common shares have been listed on the Taiwan Stock Exchange under the symbol “2311” since July 1989, and ADSs representing our common shares have been listed on the New York Stock Exchange under the symbol “ASX” since September 2000.

### Domestic Private Placements of Universal Scientific Shanghai

In November 2014, Universal Scientific Shanghai, a subsidiary of Universal Scientific, completed its capital increase by way of domestic private placements through a bidding process, raising a total of RMB2,063.0 million (US\$332.0 million) prior to deducting underwriting discounts and commissions. The issue price per share was RMB27.06. As of January 31, 2015, we indirectly held 82.1% of the total outstanding shares of Universal Scientific Shanghai through our subsidiaries Universal Scientific and ASE Shanghai.

### Green Bond Offerings

In July 2014, Anstock II Limited completed an offering of US\$300.0 million in aggregate principal amount of guaranteed bonds due 2017. The bonds are unconditionally and irrevocably guaranteed by us. The net proceeds from the offering were used to fund projects that promote our transition to low-carbon and climate-resilient growth. As of December 31, 2014, approximately US\$249.7 million have been used in finance projects including green building construction, waste water treatment system improvement and energy efficiency enhancement initiatives, among other environmental projects.



For more information on our history and development including recent developments relating to the spin-off transaction proposed by the shareholders of Universal Scientific, see “—Organizational Structure.”

Our principal capital expenditures for the years ended December 31, 2012, 2013 and 2014 have been for machinery and equipment procurements and investments in buildings and improvement in connection with the expansion of our capacity expansion, for which we spent NT\$38,893.1 million, NT\$27,044.1 million and NT\$43,448.6 million (US\$1,375.0 million), respectively. We had commitments for capital expenditures of approximately US\$553 million, including expenditures on machinery and buildings, as of December 31, 2014, mainly in connection with the expansion of our packaging and electronic manufacturing services operations primarily in the ROC and the PRC.

## Table of Contents

Any future expansion of our operating activities could result in additional capital expenditures. We anticipate our capital expenditures in 2015 will be financed through our existing cash, marketable securities, expected cash flow from operations and existing credit lines under our loan facilities and will consist of, among other things, additional machinery and equipment procurements for our capacity expansions. There were no significant financial investments or divestitures in 2012, 2013 and 2014. See “Item 5. Operating and Financial Review and Prospects—Liquidity and Capital Resources” for more information.

There were no public takeover offers by third parties of our shares or made by us in respect of other companies’ shares which occurred in 2013 and 2014.

## BUSINESS OVERVIEW

ASE is the world’s largest independent provider of semiconductor packaging and testing services based on 2014 revenues. Our services include semiconductor packaging, production of interconnect materials, front-end engineering testing, wafer probing and final testing services, as well as integrated solutions for electronic manufacturing services in relation to computers, peripherals, communications, industrial, automotive, and storage and server applications. We believe that, as a result of the following strengths, we are better positioned than our competitors to meet customers’ requirements across a wide range of end-use applications:

- our ability to provide a broad range of cost-effective semiconductor packaging and testing services on a large-scale turnkey basis within key centers of semiconductor manufacturing;
- our expertise in developing and providing cost-effective packaging, interconnect materials and testing technologies and solutions;
- our ability to provide proactive original design manufacturing services using innovative solution-based designs;
- our scale of operations and financial position, which enable us to make significant investments in capacity expansion and research and development as well as to make selective acquisitions;
  - our geographic presence in key centers of outsourced semiconductor and electronics manufacturing; and
- our long-term relationships with providers of complementary semiconductor manufacturing services, including our strategic alliance with TSMC, one of the world’s largest dedicated semiconductor foundries.

We believe that it is still the trend for semiconductor companies to outsource their packaging, testing and manufacturing requirements as semiconductor companies rely on independent providers of foundry, advanced packaging, testing and electronic manufacturing services. In response to the increased pace of new product development and shortened product life and production cycles, semiconductor companies are increasingly seeking both independent packaging and testing companies that can provide turnkey services in order to reduce time-to-market and electronic manufacturing companies with proactive original design capabilities that can provide large-scale production. We believe that our expertise and scale in advanced technology and our ability to integrate our broad range of solutions into turnkey services and electronic manufacturing services allow us to benefit from the accelerated outsourcing trend and better serve our existing and potential customers.

We believe that we have benefited, and will continue to benefit, from our geographic location in Taiwan. Taiwan is currently the largest center for outsourced semiconductor manufacturing in the world and has a high concentration of electronic manufacturing service providers. Our close proximity to foundries and other providers of complementary

semiconductor manufacturing services is attractive to our customers who wish to take advantage of the efficiencies of a total semiconductor manufacturing solution by outsourcing several stages of their manufacturing requirements. We believe that, as a result, we are well positioned to meet the advanced semiconductor engineering and manufacturing requirements of our customers.

## Table of Contents

### Industry Background

#### General

Semiconductors are the basic building blocks used to create an increasing variety of electronic products and systems. Continuous improvements in semiconductor process and design technologies have led to smaller, more complex and more reliable semiconductors at a lower cost per function. These improvements have resulted in significant performance and price benefits to manufacturers of electronic products. As a result, semiconductor demand has grown substantially in our primary end-user markets for communications, computing and consumer electronics, and has experienced increased growth in other markets such as automotive products and industrial automation and control systems.

The semiconductor industry is characterized by strong long-term growth, with periodic and sometimes severe cyclical downturns. The Semiconductor Industry Association reported that worldwide sales of semiconductors increased from approximately US\$51.0 billion in 1990 to approximately US\$335.8 billion in 2014. We believe that overall growth and cyclical fluctuations will continue over the long-term in the semiconductor industry.

#### Electronic Manufacturing Services

Electronic manufacturing service providers typically achieve large economies of scale in manufacturing by pooling together product design techniques and also provide value-added services such as warranties and repairs. Companies who do not need to manufacture a constant supply of products have increasingly outsourced their manufacturing to these service providers so that they can respond quickly and efficiently to sudden spikes in demand without having to maintain large inventories of products.

Electronic manufacturing services are sought by companies in a wide range of industries including, among others, information, communications, consumer electronics, automotive electronics, medical treatment, industrial applications, aviation, navigation, national defense and transportation. Although affected by global economic fluctuations, we expect the electronic manufacturing services industry to continue to grow in the long-term, and we have enhanced our presence in the industry since 2010 through our acquisition of a controlling interest in Universal Scientific.

#### Outsourcing Trends in Semiconductor Manufacturing

Historically, semiconductor companies designed, manufactured, packaged and tested semiconductors primarily within their own facilities. However, there is a clear trend in the industry to outsource the manufacturing process. Virtually every significant stage of the manufacturing process can be outsourced. Wafer foundry services, semiconductor packaging and testing services, and electronic manufacturing services are currently the largest segments of the independent semiconductor manufacturing services market.

The availability of technologically advanced independent manufacturing services has also enabled the growth of “fabless” semiconductor companies that focus on semiconductor design and marketing, while outsourcing their wafer fabrication, packaging and testing requirements to independent companies. We believe that the growth in the number and scale of fabless semiconductor companies that rely solely on independent companies to meet their manufacturing requirements will continue to be a driver of growth in the market for independent foundry, packaging and testing services. Similarly, the availability of technologically advanced independent manufacturing services has encouraged integrated device manufacturers, which traditionally have relied on in-house semiconductor manufacturing capacity, to increasingly outsource their manufacturing requirements to independent semiconductor manufacturing companies.

We believe the outsourcing of semiconductor manufacturing services will increase in the future for many reasons, including the following:

- **Technological Expertise and Significant Capital Expenditure.** Semiconductor manufacturing processes have become highly complex, requiring substantial investment in specialized equipment and facilities and sophisticated engineering and manufacturing expertise. In addition, product life cycles have been shortening, magnifying the need to continuously upgrade or replace manufacturing equipment to accommodate new products. As a result, new investments in in-house facilities are becoming less desirable to integrated device manufacturers because of the high investment costs as well as the inability to achieve sufficient economies of scale and utilization rates necessary to be competitive with the independent service providers. Independent packaging, testing, foundry and electronic manufacturing services companies, on the other hand, are able to realize the benefits of specialization and achieve economies of scale by providing services to a large base of customers across a wide range of products. This enables them to reduce costs and shorten production cycles through high capacity utilization and process expertise. In the process, they are also able to focus on discrete stages of semiconductor manufacturing and deliver services of superior quality.

## Table of Contents

In recent years, semiconductor companies have significantly reduced their investment in in-house technology capacities. As a result, some semiconductor companies may have limited in-house expertise and capacity to accommodate large orders following a recovery in demand, particularly in the area of advanced technology. On the other hand, some semiconductor companies with in-house operations are under increasing pressure to rationalize these operations by relocating to locations with lower costs or better infrastructure, in order to lower manufacturing costs and shorten production cycle time. We expect semiconductor companies to increasingly outsource their requirements to take advantage of the advanced technology and scale of operations of independent packaging and testing companies and electronic manufacturing services providers.

- **Increased Adoption of Copper Wire Bonding.** With significant cost saving benefits over conventional gold wiring technology, semiconductor companies have been qualifying and converting volumes to copper wire based packages at a steady pace. Independent packaging companies have been more aggressive in building copper bonding capacity than integrated device manufacturers and have accumulated significantly more experience and acumen in the new technology. Due to the inherent cost savings and comparable yield of copper and the lack of in-house capacity and experience among integrated device manufacturers, we believe that they will continue to increase the outsourcing of their manufacturing services for copper wire packages to independent packaging and testing companies.
- **Focus on Core Competencies.** As the semiconductor industry becomes more competitive, semiconductor companies are expected to further outsource their semiconductor manufacturing requirements in order to focus their resources on core competencies, such as semiconductor design and marketing.
- **Time-to-Market Pressure.** The increasingly short product life cycle has accelerated time-to-market pressure for semiconductor companies, leading them to rely increasingly on outsourced suppliers as a key source for effective manufacturing solutions.
- **Capitalize on the High Growth Rates in Emerging Markets.** Emerging markets, and China in particular, have become both major manufacturing centers for the technology industry and growing markets for technology-based products. Thus, in order to gain direct access to the Chinese market, many semiconductor companies are seeking to establish manufacturing facilities in China by partnering with local subcontractors. As a result, certain stages of the semiconductor manufacturing process that were previously handled in-house will be increasingly outsourced in order to improve efficiency.

### The Semiconductor Industry in Taiwan

The semiconductor industry in Taiwan has been a leader in, and a major beneficiary of, the trend to outsource the manufacture of semiconductors. The growth of the semiconductor industry in Taiwan has been the result of several factors. First, semiconductor manufacturing companies in Taiwan typically focus on one or two stages of the semiconductor manufacturing process. As a result, these companies tend to be more efficient and are better able to achieve economies of scale and maintain higher capacity utilization rates. Second, semiconductor manufacturing companies in Taiwan that provide the major stages of the manufacturing process are located close to each other and typically enjoy close working relationships. This close network is attractive to customers who wish to outsource multiple stages of the semiconductor manufacturing process. For instance, a customer could reduce production cycle time and unit cost and streamline logistics by outsourcing its foundry, packaging, testing and drop shipment services to electronics manufacturing companies in Taiwan. Third, Taiwan has an educated labor pool and a large number of engineers suitable for sophisticated manufacturing industries such as semiconductors.



## Table of Contents

The semiconductor industry in Taiwan has over the past decade made significant capital expenditures to expand capacity and technological capabilities. The ROC government has also provided tax incentives and research and development support, both directly and indirectly such as through support of research institutes and universities. As a result of investments made in recent years, Taiwan has achieved substantial market share in the outsourced semiconductor manufacturing industry. Furthermore, the growth of Taiwan's electronics manufacturing industry, particularly in personal computer, mobile handset and digital camera design and manufacturing, has created substantial local demand for semiconductors.

### The Semiconductor Industry in Other Regions of Asia

Many of the factors that contributed to the growth of the semiconductor industry in Taiwan have also contributed to the recent development of the semiconductor industry in Southeast Asia. Access to expanding semiconductor foundry services in Singapore, convenient proximity to major downstream electronics manufacturing operations in Malaysia, Singapore and Thailand, government-sponsored infrastructure support, tax incentives and pools of skilled engineers and labor at relatively low cost have all encouraged the development of back-end semiconductor service operations in Southeast Asia. The downstream electronics manufacturers in Southeast Asia have typically focused on products used in the communications, industrial and consumer electronics and personal computer peripheral sectors. The proximity to both semiconductor foundries and end users has influenced local and international semiconductor companies increasingly to obtain packaging, testing and drop shipment services from companies in Southeast Asia.

In addition, the world's leading electronic manufacturing service providers, many of them from Taiwan, are increasingly establishing manufacturing facilities in the PRC and Vietnam in order to take advantage of lower labor costs, government incentives for investment and the potential size of the domestic market for end users of electronics products. Many of the factors that contributed to the growth of the semiconductor industry in Taiwan are beginning to emerge in the PRC and may play an increasingly important role in the growth of its semiconductor industry over the long term.

### Overview of Semiconductor Manufacturing Process

The manufacturing of semiconductors is a complex process that requires increasingly sophisticated engineering and manufacturing expertise. The manufacturing process may be divided into the following stages:

We are involved in all stages of the semiconductor manufacturing process except circuit design and wafer fabrication.



Table of Contents

Process	Description
1. Circuit Design	The design of a semiconductor is developed by laying out circuit components and interconnections.
2. Engineering Test	Throughout and following the design process, prototype semiconductors undergo engineering testing, which involves software development, electrical design validation and reliability and failure analysis.
3. Wafer Fabrication	Process begins with the generation of a photomask through the definition of the circuit design pattern on a photographic negative, known as a mask, by an electron beam or laser beam writer. These circuit patterns are transferred to the wafers using various advanced processes.
4. Wafer Probe	Each individual die is electrically tested, or probed, for defects. Dies that fail this test are marked to be discarded.
5. Packaging (or Assembly)	Packaging, also called assembly, is the processing of bare semiconductors into finished semiconductors and serves to protect the die and facilitate electrical connections and heat dissipation. The patterned silicon wafers received from our customers are diced by means of diamond saws into separate dies, also called chips. Basically each die is attached to a leadframe or a laminate (plastic or tape) substrate by epoxy resin. A leadframe is a miniature sheet of metal, generally made of copper and silver alloys, on which the pattern of input/output leads has been cut. On a laminate substrate, typically used in ball grid array, or BGA, packages, the leads take the shape of small bumps or balls. Leads on the leadframe or the substrate are connected by extremely fine gold or copper wires or bumps to the input/output terminals on the chips, through the use of automated machines known as “bonders.” Each chip is then encapsulated, generally in a plastic casing molded from a molding compound, with only the leads protruding from the finished casing, either from the edges of the package as in the case of the leadframe-based packages, or in the form of small bumps on a surface of the package as in the case of BGA or other substrate-based packages.
6. Final Test	Final testing is conducted to ensure that the packaged semiconductor meets performance specifications. Final testing involves using sophisticated testing equipment known as testers and customized software to electrically test a number of attributes of packaged semiconductors, including functionality, speed, predicted endurance and power consumption. The final testing of semiconductors is categorized by the functions of the semiconductors tested into logic/mixed-signal/RF/3D IC/discrete final testing and memory final testing. Memory final testing typically requires simpler test software but longer testing time per device tested.
7. Module, Board Assembly and Test	Module, board assembly and test refers to the combination of one or more packaged semiconductors with other components in an integrated module or board to enable increased functionality.

8. Material

Material refers to the interconnection of materials which connect the input/output on the semiconductor dies to the printed circuit board, such as substrate, leadframe and flip-chip.

31

---

## Table of Contents

### Strategy

Our objective is to provide integrated solutions which set industry standards, including packaging, testing services, interconnect materials design and production capabilities, and to lead and facilitate the industry trend towards outsourcing semiconductor manufacturing requirements. The principal elements of our strategy are to:

#### Grow Our Advanced Packaging Services and Expand into the Legacy Packaging Market

We believe that an important factor in our ability to attract leading semiconductor companies as our customers has been our ability to fulfill demand for a broad range of packaging solutions on a large scale. We intend to continue to develop process and product technologies to meet the requirements of clients using our advanced packaging services. Our expertise in packaging technology has enabled us to develop advanced solutions such as flip-chip packaging, bump chip carrier packaging, stacked die packaging and fine-pitch wire bonding. We are continuously investing in research and development in response to and in anticipation of migrations in technology and intend to continue to acquire access to new technologies through strategic alliances and licensing arrangements.

We also intend to expand our legacy leadframe-based packaging product offerings and services. We believe that our clients will continue to outsource their legacy packaging requirements. To capitalize on this trend, we plan to continuously grow our legacy packaging production and discrete packaging businesses.

The increasing miniaturization of semiconductors and the growing complexity of interconnect technology have also resulted in the blurring of the traditional distinctions among assembly at different levels of integration: chip, module, board and system. In response to this miniaturization and growing complexity, we have focused on providing module assembly services and, in addition, our subsidiary Universal Scientific has provided us with access to process and product technologies at the levels of module, board and system assembly and testing, which helps us to better anticipate industry trends and take advantage of potential growth opportunities. We expect to continue to combine our packaging, testing and materials technologies with the expertise of Universal Scientific at the systems level to develop our SiP business.

#### Strategically Expand and Streamline Production Capacity

To capitalize on the growing demand for advanced and legacy packaging and testing services, we intend to strategically expand our production capacity, both through internal growth and selective acquisitions and joint ventures, with a focus on providing cost competitive and innovative packaging and testing services.

For our advanced packaging and testing businesses, we intend to invest in trends that are essential to the development of the industry. We plan to expand our capacity with respect to, but not limited to, 12-inch wafer process, bumping, FC-CSP and SiP products to meet demand for smaller form factors, higher performance and higher packaging density.

In addition, we intend to promote our copper wire solutions to our customers in addition to gold wire. Gold wire is a significant raw material for us. Gold prices, however, are subject to intense fluctuations and have in the past impacted our profitability. We believe that replacing gold wire in some of our packages with copper wire technology will not only improve our profitability but will also enable us to provide more value to our customers by providing lower cost solutions, which could enhance our competitiveness and market share. We are currently the industry leader in terms of copper wire capacity. We thus plan to capitalize on the overall industry trend of copper conversion by maintaining our leadership and focusing on integrating copper wire into a wider range of traditional leadframe-based packages and higher end substrate-based packages.

We expect to focus our legacy packaging and testing on providing cost competitive services through better management of capacity utilization and efficiency improvements and offer our services on a large scale with the intention of driving more integrated device manufacturer outsourcing in the long-run.

## Table of Contents

We evaluate acquisition and joint venture opportunities on the basis of access to new markets and technology, the enhancement of our production capacity, economies of scale and management resources, and closer proximity to existing and potential customers. For example, we acquired controlling interests in Universal Scientific in 2010. Universal Scientific is an electronic manufacturing services company that provides integrated solutions for electronic manufacturing services in relation to computers, peripherals, communications, industrial, automotive, and storage and server applications. We intend to provide our customers with more value-added products through Universal Scientific. We also acquired Yang Ting in January 2012 and later merged Yang Ting into ASE Inc. in August 2013 to enhance our capacity to provide packaging and testing services on discrete products. In addition, we acquired Wuxi Tongzhi in May 2013 and Universal Scientific Group established UGJQ in September 2013.

### Continue to Leverage Our Presence in Key Centers of Semiconductor and Electronics Manufacturing

We intend to continue leveraging our presence in key centers of semiconductor and electronics manufacturing to further grow our business. We have significant packaging, testing and electronic manufacturing services operations in Taiwan, currently the largest center for outsourced semiconductor and electronics manufacturing in the world. This presence enables our engineers to work closely with our customers as well as foundries and other providers of complementary semiconductor and electronic manufacturing services early in the design process, enhances our responsiveness to the requirements of our customers and shortens production cycles. In addition, as a turnkey service provider, we are able to offer our products to our customers and complementary service providers within relatively close geographic proximity. Besides our current operations in Taiwan, we intend to expand our operations in our other subsidiaries.

We have primary operations in the following locations besides our locations in Taiwan:

- PRC — a fast-growing market for semiconductor and electronics manufacturing in the world;
- Korea — an important center for the manufacturing of memory and communications devices;
- Malaysia and Singapore — a center for outsourced semiconductor manufacturing in Southeast Asia;
- Silicon Valley in California — the preeminent center for semiconductor design, with a concentration of fabless customers; and
- Japan — an emerging market for packaging and testing outsourcing services as Japanese integrated device manufacturers increasingly outsource their semiconductor manufacturing requirements.

### Strengthen and Develop Strategic Relationships with Our Customers and Providers of Complementary Semiconductor Manufacturing Services

We intend to strengthen existing and develop new strategic relationships with our customers and providers of other complementary semiconductor manufacturing services, such as foundries, as well as equipment vendors, raw material suppliers and technology research institutes, in order to offer our customers total semiconductor manufacturing solutions covering all stages of the manufacturing of their products from design to shipment. In addition, we are working with our customers to co-develop new packaging technologies and designs.

Since 1997, we have maintained a strategic alliance with TSMC, currently one of the world's largest dedicated semiconductor foundries, which designates us as their non-exclusive preferred provider of packaging and testing services for semiconductors manufactured by TSMC. Through our strategic alliance with and close geographic

proximity to TSMC, we are able to offer our customers a total semiconductor manufacturing solution that includes access to foundry services in addition to our packaging, testing and direct shipment services.

#### Principal Products and Services

We offer a broad range of advanced and legacy semiconductor packaging and testing services. In addition, we have provided electronic manufacturing services since our acquisition of a controlling interest in Universal Scientific in February 2010. Our package types generally employ either leadframes or substrates as interconnect materials. The semiconductors we package are used in a wide range of end-use applications, including communications, computing, consumer electronics, industrial, automotive and other applications. Our testing services include front-end engineering testing, which is performed during and following the initial circuit design stage of the semiconductor manufacturing process, wafer probe, final testing and other related semiconductor testing services. We focus on packaging and testing semiconductors. We offer our customers turnkey services which consist of packaging, testing and direct shipment of semiconductors to end users designated by our customers. Our electronic manufacturing services are used in a wide range of end-use applications, including, but not limited to, computers, peripherals, communications, industrial applications, automotive electronics, and storage and server applications. In 2014, our revenues generated from packaging, testing and electronic manufacturing services accounted for 47.3%, 10.1% and 41.2% of our operating revenues, respectively.

Table of Contents

## Packaging Services

We offer a broad range of package types to meet the requirements of our customers, with a focus on advanced packaging solutions. These include advanced packages such as flip-chip BGA, flip-chip CSP, aCSP (advanced chip scale packages) and IC wirebonding packages, including leadframe-based package types such as quad flat packages (QFP), thin quad flat packages (TQFP), bump chip carrier (BCC) and quad flat no-lead (QFN) packages, aQFN (advanced QFN) and package types based on substrates, such as Plastic BGA. In addition, we provide 3D chip packages, such as MAP POP (package on package) and aMAP POP (advanced, laser ablation type), which enable our customers to mount packages more easily. We also offer other forms of stacked die solutions in different package types, e.g., stacked die QFN, hybrid BGAs containing stacked wire bond and fc die. We are also developing the cost-effective solutions to 3D packages, such 2.1D (substrate layer modification) and 2.5D (substrate interposer) to fulfill current low cost and high performance requirement in parallel with 3D packages with TSV (Through Silicon Via) technology. 2.1D and 2.5D are the low-tier package solutions for 3D packages and use substrate technology on top layer to connect to top package. 2.5D technology uses substrate interposer for finer pitch requirement on 3D packages for advanced wafer node in reducing the overall 3D package cost. Our first product has been a CMOS image sensor with TSV to minimize the form factor. In addition, to meet current trends towards low cost solutions, we provide copper wire bonding solutions which can be applied to current gold wire products. Furthermore, we also provide, with high volume manufacturing experience, silver wire bonding with current focus on FCCSP Hybrid packages. We believe we are among the leaders in such advanced packaging processes and technologies and are well positioned to lead the technology migration in the semiconductor packaging industry.

Advanced Packages. The semiconductor packaging industry has evolved to meet the requirements of high-performance electronics products. We believe that there will continue to be growing demand for packaging solutions with increased input/output density, smaller size and better heat dissipation characteristics.

We assemble SiP products, which involve the integration of more than one chip into the same package. As miniaturization requirements for electronic devices increase, smaller and lighter SiPs are garnering much attention within the industry. Wafer level integration-passive device technology has become increasingly important. Passive devices such as inductors, capacitors, resistors, filters and diplexers are those components occupying the largest area in printed circuit boards; therefore, miniaturization and integration is key to advanced SiPs. This can be achieved through integrating passive components on an individual substrate using a thin film process known as MCM-D or IPD (Integrated Passive Device). The IPD can then be used as a package substrate or interposer for SiP. This manufacturing method will enhance product performance and also reduce overall costs. The extension of our current RDL (Redistribution) process can be used to build high quality factor (Q) inductor and RF circuits on top of CMOS (Complementary Metal–Oxide–Semiconductor) wafers. IPD is an enabling technology for advanced SiP. It can be used in the following three approaches to enhance product performance: several solutions to replace discrete components such as Balun, Filter, etc. or to integrate certain passive components and act as interposer, or to replace PWB and act as a substrate of the module.

In addition, we have focused on developing our capabilities in some advanced packaging solutions, such as aCSP (Wafer level chip scale package), flip-chip BGA, Heat-Spreader FCBGA, flip-chip CSP, Hybrid FCCSP (Flip-Chip + W/B), Flip-Chip PiP (Package in Package), Flip-Chip PoP (Package on Package) and aS 3<sup>TM</sup> (Advanced Single Sided Substrate) . Flip-chip BGA technology replaces wire bonding with wafer bumping for interconnections within the package. Wafer bumping involves the placing of tiny solder balls, instead of wires, on top of dies for connection to substrates. As compared with more traditional packages, which allow input/output connection only on the boundaries of the dies, flip-chip packages significantly enhance the input/output flow by allowing input/output connection over the entire surface of the dies.

Chip scale packages typically have an area no greater than 1.2 times of the silicon die. For wafer level package, the electrical connections are plated or printed directly onto the wafer itself, resulting in a package very close to the size of the silicon die. Wafer-level packages do not include an interposer so they are unlike substrate-based packages, where the die is usually mounted on an interposer which contains electrical connections in the form of small bumps or balls.



Table of Contents

aEASI (Advance Embedded Assembly Substrate Integration) is a technology which allows the embedding thin chips into substrate build-up layers. aEASI can be used in various technologies tailored to clients' demand, such as package solution of miniaturization, and has also been proven to have better electrical/thermal performance. It also provides flexibility in design (such as for MicroSiP) and the electrical contacts to the chips are realized by laser-drilled and metallized micro-vias to replace traditional wire bonding process. aEASI are mainly used in power management applications.

WL MEMs (Wafer-Level MEMs) is advanced assembly for MEMs in wafer-level type instead of current LGA or leadframe types and to use TSV or chip to wafer technology. WL MEMs are mainly used in applications such as pressure, temperature, humidity and gyroscope sensors, among others.

HB POP (High-Bandwidth Package on Package) packages are new package structures which has the characteristics to extend higher top side ball/lead counts to gain better performance.

We provide numerous technologies to meet various customer demands. The following table sets forth our principal advanced packages.

Package Types	Number of Leads	Description	End-Use Applications
Wafer Level Chip Scale Package (aCSP)	6-120	A wafer level chip scale package that can be directly attached to the circuit board. Provides shortest electrical path from the die pad to the circuit board, thereby enhancing electrical performance.	Cellular phones, personal digital assistants, watches, MP3 players, digital cameras and camcorders.
Flip-Chip Chip Scale Package (FC-CSP, a-fcCSP)	16-560	A lightweight package with a small, thin profile that provides better protection for chips and better solder joint reliability than other comparable package types.	RFICs and memory ICs such as digital cameras, DVDs, devices that utilize WiMAX technology, cellular phones, GPS devices and personal computer peripherals.
Flip-Chip PiP (Package in Package) (FC-CSP PiP)	500-980	System In Package for Flip-Chip+Memory die inside with a better electrical performance package types.	Application processor for smartphone, data modern on portable devices.
Flip-Chip PoP (Package on Package) (FC-CSP PoP)	500-1100	SOC (System On Chip) die for Assembly to Bottom package and then applied for Memory die on top inside with a better electrical performance package types.	High-tier application processor for smartphone, data modern on portable devices.

Flip-Chip BGA/ HF FCBGA(High Performance / Heat Spreader / FCBGA)	16-2916	Using advanced interconnect technology, the flip-chip BGA packages allow higher density of input/output connection over the entire surface of the dies. HF FCBGA is designed for semiconductor high-performance requirement of high density of interconnects.	High-performance networking, graphics and server and data center processor applications.
---	---------	---	--

Table of Contents

Package Types	Number of Leads	Description	End-Use Applications
Hybrid (Flip-Chip and Wire Bonding)	49-608	A package technology which stacks a die on top of a probed good die to integrate ASIC and memory (flash, SRAM and DDR) into one package and interconnects them with wire bonding and molding. This technology suffers from known good die issues (i.e., one bad die will ruin the entire module). Rework is also not an option in hybrid packages.	Digital cameras, smartphones, bluetooth applications and personal digital assistants.
aS3	up to 300	Ultra-thin profile package which is excellent on middle pin count alternative solution; standard BT material and manufacturing equipment; and lower cost via on pad.	High I/O and short wire length package solution in high performance requirement.
Integrated Passive Device (IPD)	less than 20	IPD can provide high performance/high Q-factor inductor and single/double layers for lower cost and turnkey solutions and integrate passives into one IPD chip. IPD requires less involvement in the Surface Mount Technology ("SMT") process, and is considered to be more compatible with current assembly process and suitable for all package solutions.	Cellular phones, Wi-Fi module, TV, personal digital assistants

IC Wirebonding. We provide IC wirebonding, including leadframe-based packages and substrate-based packages. Leadframe-based packages are packaged by connecting the die, using wire bonders, to the leadframe with gold wire or copper wire. As packaging technology improves, the number of leads per package increases. In addition, improvements in leadframe-based packages have reduced the footprint of the package on the circuit board and improved the electrical performance of the package. To have higher interconnected density and better electrical performance, semiconductor packages have evolved from leadframe-based packages to substrate-based packages. The key differences of these package types are: the size of the package; the density of electrical connections the package can support; flexibility at lower costs; the thermal and electrical characteristics of the package; and environmentally conscious designs. Substrate-based packages generally employ the BGA design. Whereas traditional leadframe

technology places the electrical connection around the perimeter of the package, the BGA package type places the electrical connection at the bottom of the package surface in the form of small bumps or balls. These small bumps or balls are typically distributed evenly across the bottom surface of the package, allowing greater distance between individual leads and higher pin-counts. Our expertise in BGA packages also includes capabilities in stacked-die BGA, which assembles multiple dies into a single package.

3D packaging has recently received a lot of publicity because of the advent of TSV (Through Silicon Via) based chip stacking. Chip stacking has been implemented for many years, albeit without TSVs. Wire bond die is routinely stacked on leadframes as well as BGA substrates. A more recent implementation is the stacking of packages as package on package (PoP) and the more specialized package in package (PiP). ASE has advanced PoP by the invention of aMAPPoP which provides the package interconnects by exposing a molded in solder ball with a laser via. Aside from being cost effective due to block molding, this PoP also has much lower warpage, greatly improving the stacking yield.

Table of Contents

The following table sets forth our principal IC wirebonding packages.

Package Types	Number of Leads	Description	End-Use Applications
Advanced Quad Flat No-Lead Package (aQFN)	104-276	aQFN allows for leadless, multi-row and fine-pitch leadframe packaging and is characterized by enhanced thermal and electrical performance. aQFN is a cost-effective packaging solution due to its cost-effective materials and simpler packaging process.	Telecommunications products, wireless local access networks, personal digital assistants, digital cameras, low to medium lead count packaging information appliances.
Quad Flat Package (QFP)/Thin Quad Flat Package (TQFP)	44-256	Designed for advanced processors and controllers, application-specific integrated circuits and digital signal processors.	Multimedia applications, cellular phones, personal computers, automotive and industrial products, hard disk drives, communication boards such as ethernet, integrated services digital networks and notebook computers.
Quad Flat No-Lead Package (QFN)/Dual-Row QFN (DR-QFN)/Microchip Carrier (MCC)	12-160	QFN/DRQFN, also known as types of MCC, uses half-encapsulation technology to expose the rear side of the die pad and the tiny fingers, which are used to connect the chip and bonding wire with printed circuit boards. Dual-Row is to increase the lead counts for product requirement.	Cellular phones, wireless local access networks, personal digital assistant devices and digital cameras.
Bump Chip Carrier (BCC)	16-156	BCC packages use plating metal pads to connect with printed circuit boards, creating enhanced thermal and electrical performance.	Cellular phones, wireless local access networks, personal digital assistant devices and digital cameras.
Small Outline Plastic Package (SOP)/Thin Small Outline Plastic Package (TSOP)	8-56	Designed for memory devices including static random access memory, or SRAM, dynamic random access memory, or DRAM, fast static RAM, also	Consumer audio/video and entertainment products, cordless telephones, pagers, fax machines, printers, copiers, personal computer

		called FSRAM, and flash memory devices.	peripherals, automotive parts, telecommunications products, recordable optical disks and hard disk drives.
Small Outline Plastic J-Bend Package (SOJ)	20-44	Designed for memory and low pin-count applications.	DRAM memory devices, microcontrollers, digital analog conversions and audio/video applications.
Plastic Leaded Chip Carrier (PLCC)	28-84	Designed for applications that do not require low-profile packages with high density of interconnects.	Personal computers, scanners, electronic games and monitors.
Plastic Dual In-line Package (PDIP)	8-64	Designed for consumer electronic products.	Telephones, televisions, audio/video applications and computer peripherals.

Table of Contents

Package Types	Number of Leads	Description	End-Use Applications
Plastic BGA	119-1520	Designed for semiconductors which require the enhanced performance provided by plastic BGA, including personal computer chipsets, graphic controllers and microprocessors, application-specific integrated circuits, digital signal processors and memory devices.	Telecommunications products, global positioning systems, notebook computers, disk drives and video cameras.
Stacked-Die BGA	120-1520	Combination of multiple dies in a single package enables package to have multiple functions within a small surface area.	Telecommunications products, local area networks, graphics processor applications, digital cameras and pagers.
Package-on-Package (POP, aMAP POP)	136-904	This technology places one package on top of another to integrate different functionalities while maintaining a compact size. It offers procurement flexibility, low cost of ownership, better total system cost and faster time to market. Designers typically use the topmost package for memory applications and the bottommost package for ASICs. By using this technology, the memory known good die issue can be mitigated and the development cycle time and cost can be reduced.	Cellular phones, personal digital assistants and system boards.
Land Grid Array (LGA)	10-72	Leadless package which is essentially a BGA package without the solder balls. Based on laminate substrate, land grid array packages allow	High frequency integrated circuits such as wireless communications products, computers servers and personal computer peripherals.

flexible routing and are  
capable of multichip module  
functions.

Modules. We also offer module assembly services, which combine one or more packaged semiconductors with other components in an integrated module to enable increased functionality, typically using automated SMT machines and other machinery and equipment for system-level assembly. End-use applications for modules include cellular phones, PDAs, wireless LAN applications, Bluetooth applications, camera modules, automotive applications, toys, and networking storage power management.

Interconnect Materials. Interconnect materials connect the input/output on the semiconductor dies to the printed circuit board. Interconnect materials include substrate, which is a multi-layer miniature printed circuit board, and is an important element of the electrical characteristics and overall performance of semiconductors. We produce substrates for use in our packaging operations.

The demand for higher performance semiconductors in smaller packages will continue to spur the development of advanced substrates that can support the advancement in circuit design and fabrication. As a result, we believe that the market for substrates will grow and the cost of substrates as a percentage of the total packaging process will increase. In the past, substrates we designed for our customers were produced by independent substrate manufacturers. Since 1997, we have been designing and producing a portion of our interconnect materials in-house.



Table of Contents

In 2014, our interconnect materials operations supplied approximately 31.7% of our consolidated substrate requirements by value.

The following table sets forth, for the periods indicated, the percentage of our packaging revenues accounted for by each principal type of packaging products or services.

	Year Ended December 31,					
	2012		2013		2014	
	(percentage of packaging revenues)					
Advanced packaging(1)	23.6	%	26.7	%	25.0	%
IC Wirebonding(2)	65.9		62.5		64.4	
Discrete and other	10.5		10.8		10.6	
Total	100.0	%	100.0	%	100.0	%

(1) Includes bumping, flip chip, chip scale and SiP package.

(2) Includes leadframe-based packages such as QFP/TQFP, QFN/MCC and PLCC/PDIP and substrate-based packages, such as various BGA package types and LGA.

### Testing Services

We provide a complete range of semiconductor testing services, including front-end engineering testing, wafer probing, final testing of logic/mixed-signal/RF/(2.5D/3D) module SiP/ MEMS/Discrete and other test-related services.

The testing of semiconductors requires technical expertise and knowledge of the specific applications and functions of the semiconductors tested as well as the testing equipment utilized. We believe that our testing services employ technology and expertise which are among the most advanced in the semiconductor industry. In addition to maintaining different types of testing equipment, which enables us to test a variety of semiconductor functions, we work closely with our customers to design effective testing solutions on multiple equipment platforms for particular semiconductors.

In recent years, complex, high-performance logic/mixed-signal/RF/(2.5D/3D) module SiP/ MEMS semiconductors have accounted for an increasing portion of our testing revenues. As the testing of complex, high-performance semiconductors requires a large number of functions to be tested using more advanced testing equipment, these products generate higher revenues per unit of testing time, as measured in central processing unit seconds.

**Front-End Engineering Testing.** We provide front-end engineering testing services, including customized software development, electrical design validation, and reliability and failure analysis.

- **Customized Software Development.** Test engineers develop customized software to test the semiconductors using advanced testing equipment. Customized software, developed on specific test platforms, is required to test the conformity of each particular semiconductor type to its unique functionality and specification.
- **Electrical Design Validation.** A prototype of the designed semiconductor is subjected to electrical tests using advanced test equipment and customized software. These tests assess whether the prototype semiconductor complies with a variety of different operating specifications, including functionality, frequency, voltage, current, timing and temperature range.

- **Reliability Analysis.** Reliability analysis is designed to assess the long-term reliability of the semiconductor and its suitability of use for intended applications. Reliability testing can include “burn-in” services, which electrically stress a device, usually at high temperature and voltage, for a period of time long enough to cause the failure of marginal devices.
- **Failure Analysis.** In the event that the prototype semiconductor does not function to specifications during either the electrical design validation or reliability testing processes, it is typically subjected to failure analysis to determine the cause of the failure to perform as anticipated. As part of this analysis, the prototype semiconductor may be subjected to a variety of analyses, including electron beam probing and electrical testing.

## Table of Contents

Wafer Probing. Wafer probing is the step immediately before the packaging of semiconductors and involves visual inspection and electrical testing of the processed wafer for defects to ensure that it meets our customers' specifications. Wafer probing services require expertise and testing equipment similar to that used in final testing, and most of our testers can also be used for wafer probing.

Logic/Mixed-signal/RF/(2.5D/3D) module SiP/Discrete Final Testing. We conduct final tests of a wide variety of logic/mixed-signal/RF/(2.5D/3D) module SiP/ MEMS /discrete semiconductors, with the number of leads or bumps ranging from the single digits to over ten thousand and operating frequencies of over 20 Gbps for digital semiconductors and 6 GHz for radio frequency semiconductors, which are at the high end of the range for the industry. The products we test include semiconductors used for wired, wireless and mobile communications, home entertainment and personal computer applications, as well as a variety of consumer and application-specific integrated circuits for various specialized applications.

Other Test-Related Services. We provide a broad range of additional test-related services, such as:

- Electric Interface Board and Mechanical Test Tool Design. Process of designing individualized testing apparatuses such as test load boards, sockets, handler change kits, and probe cards for unique semiconductor devices and packages.
- Program Conversion. Process of converting a program from one test platform to different test platforms to reduce testing costs or optimize testing capacity.
- Program Efficiency Improvement. Process of optimizing the program code or increasing site count of parallel tests to improve testing throughout.
- Remote Program Debugging. Process of allowing the customer to debug their test program remotely through an internet connection.
- Burn-in Testing. Burn-in testing is the process of electrically stressing a device, usually at high temperature and voltage, for a period of time to simulate the continuous use of the device to determine whether this use would cause the failure of marginal devices.
- Module SiP Testing. We provide module SiP testing through integrated bench solution or automatic test equipment to our customers with a complete solution with respect to finger print sensor module, camera module, wireless connectivity devices, global positioning system devices, personal navigation devices and digital video broadcasting devices.
- Dry Pack. Process which involves heating semiconductors in order to remove moisture before vacuum sealing packaging and shipping to customers.
- Tape and Reel. Process which involves transferring semiconductors from a tray or tube into a tape-like carrier for shipment to customers.

Drop Shipment Services. We offer drop shipment services for shipment of semiconductors directly to end users designated by our customers. Drop shipment services are provided mostly in conjunction with logic/mixed-signal/RF/3D IC/discrete testing. We provide drop shipment services to a significant percentage of our testing customers. A substantial portion of our customers at each of our facilities have qualified these facilities for

drop shipment services. Since drop shipment eliminates the additional step of inspection by the customer before shipment to the end user, quality of service is a key consideration. We believe that our ability to successfully execute our full range of services, including drop shipment services, is an important factor in maintaining existing customers as well as attracting new customers.

The following table sets forth, for the periods indicated, the percentage of our testing revenues accounted for by each type of testing service.

Table of Contents

	Year Ended December 31,					
	2012		2013		2014	
	(percentage of testing revenues)					
Testing Services:						
Front-end engineering testing	2.3	%	2.5	%	2.9	%
Wafer probing	17.2		19.5		20.5	
Final testing	80.5		78.0		76.6	
Total	100.0	%	100.0	%	100.0	%

Electronic Manufacturing Services. Since our acquisition of a controlling interest in Universal Scientific in February 2010, we also provide integrated solutions for electronic manufacturing services in relation to computers, peripherals, communications, industrial, automotive, and storage and server applications. The key products and services we offer to our customers, for instance, include:

- Computers: motherboards for server & desktop PC; peripheral; port replicator; network attached storage; and technical services;
  - Communications: Wi-Fi; WiMAX; SiP and Hybrid SiP;
  - Consumer products: control boards for flat panel devices;
- Automotive electronics: automotive electronic manufacturing services; car LED lighting; regulator/rectifier; and
  - Industrial products: point-of-sale systems; smart handheld devices.

## Seasonality

See “Item 5. Operating and Financial Review and Prospects—Operating Results and Trend Information—Quarterly Operating Revenues, Gross Profit and Gross Margin.”

## Sales and Marketing

## Sales and Marketing Presence

We maintain sales and marketing offices in Taiwan, the United States, Belgium, France, Singapore, the PRC, Korea, Malaysia, Japan and a number of other countries. We also have sales representatives operating in certain other countries in which we do not have offices. Our sales and marketing offices in Taiwan are located in Hsinchu and Kaohsiung. We conduct marketing research through our customer service personnel and through our relationships with our customers and suppliers to keep abreast of market trends and developments. We also provide advice in the area of production process technology to our major customers planning the introduction of new products. In placing orders with us, our customers specify which of our facilities these orders will go to. Our customers conduct separate qualification and correlation processes for each of our facilities that they use. See “—Qualification and Correlation by Customers.”

## Customers

Our five largest customers together accounted for approximately 31.2%, 37.2% and 40.3% of our operating revenues in 2012, 2013 and 2014, respectively. Although no single customer accounted for more than 10.0% of our operating revenues in 2012, one customer did account for more than 10.0% of our operating revenues in 2013 and 2014.

We package and test for our customers a wide range of products with end-use applications in the communications, computing, and consumer electronics/industrial/automotive sectors. The following table sets forth a breakdown of the percentage of our operating revenues generated from our packaging and testing services, for the periods indicated, by the principal end-use applications of the products which we packaged and tested.

Table of Contents

	Year Ended December 31,					
	2012		2013		2014	
Communications	51.9	%	54.6	%	53.3	%
Computing	12.2		11.0		11.6	
Consumer electronics/industrial/automotive	35.5		34.0		34.7	
Other	0.4		0.4		0.4	
Total	100.0	%	100.0	%	100.0	%

In addition, we have provided electronic manufacturing services since our acquisition of the controlling interest of Universal Scientific in February 2010. Our electronic manufacturing services provide a wide range of products with end-use applications. The following table sets forth a breakdown of the percentage of our operating revenues generated from our electronic manufacturing services for the periods indicated by the principal end-use applications.

	Year Ended December 31,					
	2012		2013		2014	
Communications	36.8	%	45.4	%	55.6	%
Computing	24.3		21.7		18.0	
Consumer electronics	14.2		11.7		8.9	
Industrial	15.5		12.8		10.3	
Automotive	7.9		7.4		6.3	
Other	1.3		1.0		0.9	
Total	100.0	%	100.0	%	100.0	%

We categorize our operating revenues geographically based on the country in which the customer is headquartered. The following table sets forth, for the periods indicated, the percentage breakdown by geographic regions of our operating revenues.

	Year Ended December 31,					
	2012		2013		2014	
United States	61.3	%	65.4	%	67.8	%
Taiwan	17.3		14.2		14.3	
Asia	11.5		10.8		9.4	
Europe	9.8		9.3		8.1	
Other	0.1		0.3		0.4	
Total	100.0	%	100.0	%	100.0	%

## Qualification and Correlation by Customers

Customers generally require that our facilities undergo a stringent qualification process during which the customer evaluates our operations and production processes, including engineering, delivery control and testing capabilities. The qualification process typically takes up to several weeks, but can take longer depending on the requirements of the customer. In the case of our testing operations, after we have been qualified by a customer and before the customer delivers semiconductors to us for testing in volume, a process known as correlation is undertaken. During the correlation process, the customer provides us with sample semiconductors to be tested and either provides us with the test program or requests that we develop a conversion program. In some cases, the customer also provides us with a data log of results of any testing of the semiconductors which the customer may have conducted previously. The

correlation process typically takes up to two weeks, but can take longer depending on the requirements of the customer. We believe our ability to provide turnkey services reduces the amount of time spent by our customers in the qualification and correlation process. As a result, customers utilizing our turnkey services are able to achieve shorter production cycles.



## Table of Contents

### Pricing

We price our packaging services and electronic manufacturing services, taking into account the actual costs, with reference to prevailing market prices. We price our testing services primarily on the basis of the amount of time, measured in central processing unit seconds, taken by the automated testing equipment to execute the test programs specific to the products being tested, as well as the cost of the equipment, with reference to prevailing market prices. Prices for our packaging, testing and electronic manufacturing services are confirmed at the time orders are received from customers, which is typically several weeks before delivery.

### Raw Materials and Suppliers

#### Packaging

The principal raw materials used in our packaging processes are interconnect materials such as leadframes and substrates, gold wire and molding compound. The silicon die, which is the functional unit of the semiconductor to be packaged, is supplied in the form of silicon wafers. Each silicon wafer contains a number of identical dies. We receive the wafers from the customers or the foundries on a consignment basis. Consequently, we generally do not incur inventory costs relating to the silicon wafers used in our packaging process.

We do not maintain large inventories of leadframes, substrates, gold wire or molding compound, but generally maintain sufficient stock of each principal raw material based on blanket orders and rolling forecasts of near-term requirements received from customers. In addition, several of our principal suppliers dedicate portions of their inventories as reserves to meet our production requirements. However, shortages in the supply of materials experienced by the semiconductor industry have in the past resulted in occasional price adjustments and delivery delays. For example, in the first half of 2000, the industry experienced a shortage in the supply of advanced substrates used in BGA packages, which, at the time, were only available from a limited number of suppliers located primarily in Japan. In addition, recent fluctuations in gold prices have affected the price at which we have been able to purchase our principal raw materials. In order to reduce the adverse impact caused by the price fluctuations of raw materials, we have developed substitute raw materials, such as copper, the cost of which is much cheaper than that of gold. However, we cannot guarantee that we will not experience shortages or price increase in the near future or that we will be able to obtain adequate supplies of raw materials in a timely manner and at a reasonable price or to develop any substitute raw materials. In the event of a shortage and/or price increase, we generally inform our customers and work together to accommodate changes in delivery schedules and/or the price increase of raw materials.

We produce substrates for use in our packaging operations. In 2014, our interconnect materials operations supplied approximately 31.7% of our consolidated substrate requirements by value. See “—Principal Products and Services—Interconnect Materials.”

As a result of the “Directive 2002/95/EC on the restriction of the use of certain hazardous substances in electrical and electronic equipment,” or RoHS, which became effective on July 1, 2006, we have adjusted our purchases of raw materials and our production processes in order to use raw materials that comply with this legislation for part of our production. This legislation restricts the use in the European Union, or EU, of certain substances the EU deems harmful to consumers, which includes certain grades of molding compounds, solder and other raw materials that are used in our products. Manufacturers of electrical and electronic equipment must comply with this legislation in order to sell their products in an EU member state. Any failure by us to comply with regulatory environmental standards such as Directive 2002/95/EC may have a material adverse effect on our results of operations.

### Testing

For the functional and burn-in testing of semiconductors, no other raw materials are needed. However, we often design and outsource the manufacturing of test interface products such as load boards, probe cards and burn-in boards.

#### Electronic Manufacturing Services

Our manufacturing processes use many raw materials in our electronic manufacturing services. For 2014, raw materials costs accounted for 76.2% of our operating revenues from electronic manufacturing services. Our principal raw materials include, among others, printed circuit boards, integrated chips, ink, semiconductor devices, computer peripherals and related accessories and electronic components. Our principal raw materials varied in the past, depending on the end-use products we provided.

## Table of Contents

To ensure quality, on-time delivery and pricing competitiveness, we have established both a standardized supplier assessment system and an evaluation mechanism, continued to maintain close working relationships with our suppliers and jointly created a stable and sustainable supply chain. In addition, we adjusted the procurement strategy in line with industry trends as well as the nature of raw materials and decentralized the sources of raw materials to lower our supply concentration risk. However, we cannot assure you that we will not experience any shortages or price increases in the near future. See “Item 3. Key Information—Risk Factors—Risks Relating to Our Business—Our revenues and profitability may decline if we are unable to obtain adequate supplies of raw materials in a timely manner and at a reasonable price.”

### Equipment

#### Packaging

The most important equipment used in the semiconductor packaging process is the wire bonder. Wire bonders connect the input/output terminals on the silicon die using extremely fine gold wire to leads on leadframes or substrates. Typically, a wire bonder may be used, with minor modifications, for the packaging of different products. We purchase our wire bonders principally from Kulicke & Soffa Industries Inc. and ASM Assembly Automation Ltd.. As of January 31, 2015, we operated an aggregate of 15,773 wire bonders, of which 15,653 were fine-pitch wire bonders. As of the same date, 21 of the wire bonders operated by us were consigned by customers and none were leased under operating leases. For the packaging of certain types of substrate-based packages, die bonders are used in place of wire bonders. We purchase our die bonders principally from ASM Assembly Automation Ltd., Hitachi High Technologies Corporation and Esec AG. The number of bonders at a given facility is commonly used as a measure of the packaging capacity of the facility. In addition to bonders, we maintain a variety of other types of packaging equipment, such as wafer grind, wafer mount, wafer saw, automated molding machines, laser markers, solder plate, pad printers, dejunkers, trimmers, formers, substrate saws and scanners. We purchase our molding machines principally from ASM Assembly Automation Ltd., Towa Corporation and Fico B.V.

#### Testing

Testing equipment is the most capital intensive component of the testing process. We generally seek to purchase testers from different suppliers with similar functionality and the ability to test a variety of different semiconductors. We purchase testers from major international manufacturers, including Teradyne, Inc., Advantest Ltd., LTX-Credence Corporation, Seiko Epson and Tokyo Electron Limited. Upon acquisition of new testers, we install, configure, calibrate, perform burn-in diagnostic tests on and establish parameters for the testers based on the anticipated requirements of existing and potential customers and considerations relating to market trends. As of January 31, 2015, we operated an aggregate of 3,268 testers, of which 845 were consigned by customers and 89 were leased under operating leases. In addition to testers, we maintain a variety of other types of testing equipment, such as automated handlers and probers (special handlers for wafer probing), scanners, reformers and computer workstations for use in software development. Each tester may be attached to a handler or prober. Handlers attach to testers and transport individual packaged semiconductor to the tester interface. Probers similarly attach to the tester and align each individual die on a wafer with the interface to the tester.

For the majority of our testing equipment, we often base our purchases on prior discussions with our customers about their forecast requirements. The balance consists of testing equipment on consignment from customers and which are dedicated exclusively to the testing of these customers’ specific products.

Test programs, which consist of the software that drives the testing of specific semiconductors, are written for a specific testing platform. We sometimes perform test program conversions that enable us to test semiconductors on multiple test platforms. This portability between testers enables us to allocate semiconductors tested across our available test capabilities and thereby improve capacity utilization rates. In cases where a customer requires the testing of a semiconductor product that is not yet fully developed, the customer may provide computer workstations to us to test specific functions. In cases where a customer has specified testing equipment that was not widely applicable to other products which we test, we have required the customer to furnish the equipment on a consignment basis.

## Table of Contents

### Electronic Manufacturing Services

The SMT assembly line is the key facility of our electronic manufacturing operations, and generally includes a printer and one or two high-speed mounters and/or a multi-function mounter. The SMT assembly process primarily consists of the following three manufacturing steps: (i) solder paste stencil printing, (ii) component placement and (iii) solder reflow. High-speed SMT assembly systems offer both economical and technical advantages which may reduce both production cost and time while meeting quality requirements. Thus, SMT has become the most popular assembly method for sophisticated electronic devices. We had 125 SMT lines as of January 31, 2015.

### Intellectual Property

As of January 31, 2015, we held 1,923 Taiwan patents, 872 U.S. patents, 717 PRC patents and 18 patents in other countries related to various semiconductor packaging technologies and invention, utility and design on our electronic manufacturing services. In addition, we also filed several trademarks applications in Taiwan, the United States, China and European Union. For example, “ASE”, “aCSP”, “a-EASI”, “a-fcCSP”, “aQFN” “a-QFN”, “a-TiV”, “iSiP” and “iWLP” have been registered in Taiwan.

We have also entered into various non-exclusive technology license agreements with other companies involved in the semiconductor manufacturing process, including Fujitsu Limited, Flip Chip International, L.L.C., Mitsui High-Tec, Inc., Infineon Technologies AG, Siliconware Precision Industries Co., Ltd., and STATS Chippac Ltd. The technology we license from these companies includes solder bumping, redistribution, ultra CSP assembly, advanced QFN assembly, wafer level packaging and other technologies used in the production of package types, such as BCC, flip-chip BGA, film BGA, aQFN, Package-in-Package (PiP) and chip embedding. Our license agreements with Flip Chip International, L.L.C. and Siliconware Precision Industries Co., Ltd. will not expire until the expiration of the patents licensed by the agreement. Our one license agreement with Infineon Technologies AG will expire on November 5, 2017, and another license agreement with Infineon Technologies AG will remain effect until expiration of the Infineon’s patents licensed by the agreement. Our license agreement with Mitsui High-Tec, Inc. renews automatically each year, and our license agreement with Fujitsu Limited renews automatically each year unless the parties to the agreement agree otherwise. Our license agreement with STATS Chippac Ltd. will expire on December 31, 2016.

Our success depends in part on our ability to obtain, maintain and protect our patents, licenses and other intellectual property rights, including rights under our license agreements with third parties.

### Quality Control

We believe that our advanced process technology and reputation for high quality and reliable services have been important factors in attracting and retaining leading international semiconductor companies as customers for our services and/or products. We maintain a quality control staff at each of our facilities. Our quality control staff typically includes engineers, technicians and other employees who monitor the processes in order to ensure high quality. Our quality assurance systems impose strict process controls, statistical in-line monitors, supplier control, data review and management, quality controls and corrective action systems. Our quality control employees operate quality control stations along production lines, monitor clean room environments and follow up on quality through outgoing product inspection and interaction with customer service staff. We have established quality control systems which are designed to ensure high quality products/service to customers, high testing reliability and high production yields at our facilities. We also have established an environmental management system in order to ensure that we can comply with the environmental standards of our customers and the countries within which they operate. See “—Raw Materials and Suppliers—Packaging.” In addition, our facilities have been qualified by all of our major customers after satisfying

stringent quality standards prescribed by these customers.

Our packaging and testing operations are undertaken in clean rooms where air purity, temperature and humidity are controlled. To ensure stability and integrity of our operations, we maintain clean rooms at our facilities that meet U.S. Federal Standard 209E class 1,000, 10,000 and 100,000 standards.

ISE Labs' testing facilities in Fremont, California, are considered suitably equipped by the Defense Logistics Agency to perform the MIL-STD-883 tests on monolithic microcircuits in accordance with the requirements of military specification MIL-PRF-38535.

Table of Contents

We have also obtained many certifications on our packaging, testing and interconnect materials facilities. Some of these certifications are required by some semiconductor manufacturers as a threshold indicator of company's quality control standards or needed by many countries in connection with sales of industrial products. The table below sets forth the certifications we have for our packaging, testing and interconnect materials.

Location	ISO/TS 16949(1)	ISO 9001(2)	ISO 14001(3)	ISO 17025(4)	ISO 14064-1(5)	IECQ HSPM QC080000(6)	Sony Green(7)	OHSAS 18001(8)	TOSHMS and SA8000(9)	ISO 50001(10)
Taiwan	ü	ü	ü	ü	ü	ü	ü	ü	ü	ü
Shanghai, PRC	ü	ü	ü		ü	ü	ü	ü		
Suzhou/Kunshan/ Weihai/ Wuxi, PRC	ü	ü	ü		ü	ü	ü	ü		
Korea	ü	ü	ü			ü	ü	ü		
Japan	ü	ü	ü			ü	ü			
Malaysia	ü	ü	ü			ü	ü			
Singapore	ü	ü	ü					ü		
California		ü	ü	ü						

- 
- (1) ISO/TS16949 standards were originally created by the International Automotive Task Force in conjunction with the International Standards Organization, or ISO. These standards provide for continuous improvement with an emphasis on the prevention of defects and reduction of variation and waste in the supply chain.
  - (2) ISO 9001 quality standards, set by the ISO, are related to quality management systems and designed to help organizations ensure that they meet the needs of customers and other stakeholders while meeting statutory and regulatory requirements related to the product.
  - (3) ISO 14001 sets out the criteria for an environmental management system. It can be used by any organization that wants to improve resource efficiency, reduce waste and drive down costs.
  - (4) ISO 17025 is the main ISO standard used by testing and calibration laboratories.
  - (5) ISO 14064-1 standard is part of the ISO 14000 series of International Standards for environmental management. The ISO 14064 standard provides governments, businesses, regions and other organizations with a complementary set of tools for programs to quantify, monitor, report and verify greenhouse gas emissions.
  - (6) IECQ HSPM QC080000 is a certification designed to manage, reduce and eliminate hazardous substances.
  - (7) "Sony Green Partner" indicates our compliance with the "Sony Green Package" standard requirements.
  - (8) OHSAS 18001 is a set of standards designed upon collaboration with occupational health and safety experts and now offered by many certification organizations as an indication of compliance with certain standards for occupational health and safety.
  - (9) TOSHMS is the Taiwan Occupational and Health Management System. SA8000 is the most widely recognized global standard for managing human rights in the workspace.
  - (10) ISO50001 is a standard for an energy management system. It can be used by any organization that wants to reduce energy costs and use energy more efficiently.

Since our acquisition of a controlling interest in Universal Scientific in February 2010, we began providing electronic manufacturing services, for which we also have strict process controls. The table below sets forth the certifications we have obtained for our electronic manufacturing services facilities.

Location	ISO/TS 16949	ISO 9001	ISO 14001	ISO 14064-1	IECQ		TL 9000(1)	OHSAS 18001	ISO 50001	ISO 17025	ISO 13485(2)
					QC 080000						
Taiwan	ü	ü	ü	ü	ü			ü	ü		
Shenzhen, PRC		ü	ü	ü	ü		ü	ü	ü		
Shanghai, PRC	ü	ü	ü	ü	ü		ü	ü	ü	ü	
Kunshan, PRC	ü	ü	ü	ü	ü		ü	ü	ü		ü
Mexico	ü	ü	ü		ü			ü			

---

(1) TL 9000 quality management system sets forth the supply chain quality requirements of the global communications industry.

(2) ISO 13485 quality management system sets forth the quality requirements for organizations that are required to consistently meet customers' requirements and regulatory requirements in the medical devices and related services industry.



## Table of Contents

In addition, we have received various vendor awards from our customers for the quality of our products and services.

### Competition

We compete in the highly competitive independent semiconductor packaging and testing markets. We face competition from a number of sources, including other independent semiconductor packaging and testing companies. More importantly, we compete for the business of integrated device manufacturers with in-house packaging and testing capabilities and fabless semiconductor design companies with their own in-house testing capabilities. Some of these integrated device manufacturers have commenced, or may commence, in-house packaging and testing operations in Asia. Substantially all of the independent packaging and testing companies that compete with us have established operations in Taiwan.

Integrated device manufacturers that use our services continuously evaluate our performance against their own in-house packaging and testing capabilities. These integrated device manufacturers may have access to more advanced technologies and greater financial and other resources than we do. We believe, however, that we can offer greater efficiency at lower cost while maintaining equivalent or higher quality for several reasons. First, as we benefit from specialization and economies of scale by providing services to a large base of customers across a wide range of products, we are better able to reduce costs and shorten production cycles through high capacity utilization and process expertise. Second, as a result of our customer base and product offerings, our equipment generally has a longer useful life. Third, as a result of the continuing reduction of investments in in-house packaging and testing capacity and technology at integrated device manufacturers, we are better positioned to meet their advanced packaging and testing requirements on a large scale.

In addition, we have provided electronic manufacturing services since our acquisition of a controlling interest in Universal Scientific in February 2010. We face significant competition from other electronic manufacturing services providers, such as Hon Hai Precision Ind. Co., Ltd., with comprehensive integration, wide geographic coverage and large production capabilities that enable them to achieve economies of scale. We believe, however, that we can still achieve satisfactory performance in the market given that we have been able to provide products with high quality and we are capable of designing new products by cooperating with our customers.

### Environmental Matters

Our operations of packaging, interconnect materials and electronic manufacturing services generate environmental wastes, including gaseous chemical, liquid and solid industrial wastes. We have installed various types of anti-pollution equipment for the treatment of liquid and gaseous chemical waste generated at our facilities. We believe that we have adopted adequate anti-pollution measures for the effective maintenance of environmental protection standards that are consistent with industry practice in the countries in which our facilities are located. In addition, we believe we are in compliance in all material respects with present environmental laws and regulations applicable to our operations and facilities.

Furthermore, in order to demonstrate our commitment to environmental protection, in December 2013, our board of directors approved contributions to environmental protection efforts in Taiwan in a total amount of not less than NT\$3,000.0 million, to be made in the next 30 years. For the year ended December 31, 2014, we have made contributions in the amount of NT\$100.0 million (US\$3.2 million) through ASE Cultural and Educational Foundation to fund various environmental projects and our board of directors have resolved in a resolution in January 2015 to contribute NT\$100.0 million (US\$3.2 million) through ASE Cultural and Educational Foundation in environmental projects in 2015.

ASE Inc. Kaohsiung facility

Our operations involving wafer-level process where nickel is used and require wastewater treatment at our K7 Plant have been subject to scrutiny by the Kaohsiung City Environmental Protection Bureau and the Kaohsiung District Prosecutors office as a result of alleged wastewater disposal violations that occurred on October 1, 2013.

## Table of Contents

In December 2013, the Kaohsiung City Environmental Protection Bureau ordered us to suspend the operations at our K7 Plant's wafer-level process where nickel is used for alleged wastewater discharge violations and fined us NT\$110.1 million for which we recognized as other income and expenses in December 2013 and paid in full in January 2014. In April 2014, the amount of the fine was reduced NT\$109.4 million (US\$3.5 million) by the Kaohsiung City Environmental Protection Bureau. We received the refund of NT\$0.7 million (US\$0.02 million) and recorded the reversal of loss in September 2014. We have been actively working with the Kaohsiung City Environmental Protection Bureau and implemented improvement plans to enhance our wastewater discharge processes since this incident. Following a series of examinations, hearings and trial runs as ordered by the Kaohsiung City Environmental Protection Bureau during 2014, in December 2014, the Kaohsiung City Environmental Protection Bureau lifted the suspension order and approved the full resumption of operation of our K7 Plant.

With respect to the NT\$109.4 million (US\$3.5 million) administrative penalty imposed on us by the Kaohsiung City Environmental Protection Bureau, we appealed the case to the Kaohsiung High Administrative Court in August 2014 to revoke the Kaohsiung City Government's decision and to lift the administrative penalty. In connection with the same alleged wastewater discharge violations at our K7 plant, the Kaohsiung District Court ruled against us and imposed on us a criminal penalty of NT\$3.0 million (US\$0.1 million) for which we recognized as other income and expenses in October 2014. We appealed the case to the Taiwan High Court Kaohsiung District Branch in November 2014. The ultimate outcome of these proceedings cannot be predicted with certainty.

Any future suspension of operations at K7 Plant or our other facilities may adversely affect our business, financial condition, results of operations and cash flows. See "Item 3. Key Information—Risk Factors—Risks Relating to Our Business—Any environmental claims or failure to comply with any present or future environmental regulations, as well as any fire or other industrial accident, may require us to spend additional funds and may materially and adversely affect our financial condition and results of operations," "Item 4. Information on the Company—Property, Plants and Equipment" and "Item 8. Financial Information—Consolidated Statements and Other Financial Information—Legal Proceedings."

### ASE Inc. Chung Li facility

On December 14, 2013, inspectors from the Taoyuan County Environmental Protection Bureau determined that wastewater from three wafer saw machines at Chung Li No.1 Testing Site could potentially be directly discharged into a sedimentation tank without permitted proper treatments which is in violation of the ROC Water Pollution Control Act. The Taoyuan County Environmental Protection Bureau ordered the shutdown of the three wafer saw machines. This incident did not have a material impact on our operations at our Chung Li facility.

### Insurance

We have insurance policies covering property damage and damage to our production facilities, buildings and machinery. In addition, we have insurance policies covering our public and product liabilities. Significant damage to any of our production facilities would have a material adverse effect on our results of operations.

We are not insured against the loss of key personnel.

## Table of Contents

### ORGANIZATIONAL STRUCTURE

The following chart illustrates our corporate structure including our principal manufacturing subsidiaries as of January 31, 2015. The following chart does not include wholly-owned intermediate holding companies, internal trading companies and those companies without active operations. In addition, as a result of Universal Scientific's proposed spin-off transaction to spin-off and assign its investment businesses to a newly incorporated entity, certain of our subsidiaries, including the selected operating subsidiaries listed in the organization chart below, namely Universal Scientific Shanghai, UGTW, USISZ, UGKS, USI Mexico and UGJQ, among others, are expected to be indirectly held by a new corporation, USI, Inc., which is expected to be incorporated under ROC law on a spin-off record date once the spin-off transaction is approved by the MOEAIC. See “—Our Consolidated Subsidiaries—Universal Scientific Group.”

#### Our Consolidated Subsidiaries

##### ASE Test Taiwan

ASE Test Taiwan, which was acquired in 1990, is our wholly-owned subsidiary. It is incorporated in Taiwan and is engaged in the testing of integrated circuits.

##### ASE Test Malaysia

ASE Test Malaysia, which was established in 1991, is our wholly-owned subsidiary. It is incorporated in Malaysia and is engaged in the packaging and testing of integrated circuits.

##### ISE Labs

ISE Labs is our wholly-owned subsidiary. It is a semiconductor company specializing in front-end engineering testing that is incorporated in the United States and has its principal facilities located in Fremont, California. We acquired 70.0% of the outstanding shares of ISE Labs in 1999 through ASE Test, and increased our holding to 100.0% through purchases made in 2000 and 2002.

##### ASE Singapore Pte. Ltd.

ASE Singapore Pte. Ltd., our wholly-owned subsidiary, is incorporated in Singapore and provides packaging and testing services. We acquired ASE Singapore Pte. Ltd., which was wholly-owned by ISE Lab, through our acquisition of ISE Lab in 1999. In January 2011, ASE Singapore II Pte. Ltd. (formerly, EEMS Test Singapore) merged into ASE Singapore Pte. Ltd. after we acquired ASE Singapore II Pte. Ltd. in August 2010.

##### ASE Electronics

ASE Material was established in 1997 as an ROC company for the production of interconnect materials, such as substrates, used in the packaging of semiconductors. We initially held a majority stake in ASE Material, but acquired the remaining equity by means of a merger of ASE Material with and into us in August 2004. In August 2006, we spun off the operations originally conducted through ASE Material into our wholly-owned subsidiary ASE Electronics. ASE Electronics currently supplies our packaging operations with a substantial portion of our substrate requirements. The facilities of ASE Electronics are primarily located in the Nantze Export Processing Zone near our packaging and testing facilities in Kaohsiung, Taiwan.



Table of Contents

ASE Chung Li and ASE Korea

In July 1999, we purchased Motorola's Semiconductor Products Sector operations in Chung Li, Taiwan and Paju, South Korea for the packaging and testing of semiconductors, thereby forming ASE Chung Li and ASE Korea. In August 2004, we acquired the remaining outstanding shares of ASE Chung Li that we did not already own and merged ASE Chung Li into us.

ASE Japan

ASE Japan, which we acquired from NEC Electronics Corporation in May 2004, is our wholly-owned subsidiary. It is incorporated in Japan and is engaged in the packaging and testing of semiconductors.

ASE Shanghai

ASE Shanghai was established in 2001 as a wholly-owned subsidiary of ASE Inc. and began operations in June 2004. ASE Shanghai primarily manufactures and supplies interconnect materials for our packaging operations.

ASESH AT

We acquired 100% of GAPTECH, now known as ASESH AT, in January 2007 for a purchase price of US\$60.0 million. ASESH AT is a PRC company based in Shanghai, China that provides packaging and testing services for a wide range of semiconductors.

ASEN

In September 2007, we acquired 60.0% of ASEN, formerly known as NXP Semiconductors Suzhou Ltd., from NXP Semiconductors for a purchase price of US\$21.6 million. NXP Semiconductors holds the remaining 40.0% of ASEN. ASEN is based in Suzhou, China and is engaged in semiconductor packaging and testing.

ASEWH

In May 2008, we acquired 100.0% of the shares of ASEWH from Aimhigh Global Corp. and TCC Steel. ASEWH is based in Weihai, Shandong, China and is engaged in semiconductor packaging and testing.

ASEKS

ASEKS was set up in 2004 and began operating in 2010. ASEKS is based in Kunshan, China and is engaged in semiconductor packaging and testing.

Wuxi Tongzhi

In May 2013, we, through our subsidiary ASESH AT, acquired 100.0% of the shares of Wuxi Tongzhi from Toshiba Semiconductor (Wuxi) Co, Ltd. Wuxi Tongzhi is based in Wuxi, China and is engaged in semiconductor packaging and testing.

Universal Scientific Group

Universal Scientific Group engages primarily in electronic manufacturing services in relation to computers, consumer electronics, communications, industrial and automotive, among other services and businesses. We purchased 22.6% of the outstanding shares of Universal Scientific in 1999. In February 2010, we, along with our two subsidiaries, J&R Holding Limited and ASE Test, through a cash and stock tender offer, acquired 641,669,316 common shares of Universal Scientific at NT\$21 per share, amounting to NT\$13,475.1 million in total, resulting in our controlling ownership over Universal Scientific. As a result, Universal Scientific became our subsidiary. The shares of Universal Scientific were delisted from the Taiwan Stock Exchange on June 17, 2010, which were previously listed under the symbol "2350." In September 2012, as part of our internal business restructuring, our subsidiaries, transferred their shareholdings in Universal Scientific to ASE Inc. As of January 31, 2015, ASE Inc. directly holds 99.2% of Universal Scientific.

Table of Contents

In February 2012, Universal Scientific's subsidiary, Universal Scientific Shanghai, completed its IPO on the Shanghai Stock Exchange. The total proceeds from the IPO was approximately RMB811.7 million prior to deducting underwriting discounts and commissions. In November 2014, Universal Scientific Shanghai completed its capital increase by way of domestic private placements through a bidding process, raising a total of RMB2,063.0 million (US\$332.0 million) prior to deducting underwriting discounts and commissions. The issue price per share was RMB27.06.

On February 2, 2015, Universal Scientific's shareholders passed a resolution at the shareholders' meeting to spin-off and assign Universal Scientific's investment businesses with a then-estimated value of NT\$35,537.8 million (US\$1,124.6 million) to USI, Inc. The USI Spin-Off transaction is currently being reviewed by the MOEAIC and will be effective upon the approval by the MOEAIC. Following the MOEAIC's approval, on the spin-off record date, subsidiaries originally indirectly held by Universal Scientific, including, among others, Universal Scientific Shanghai, UGTW, USISZ, UGKS, USI Mexico and UGJQ, will be indirectly held by USI, Inc.

In addition, following Universal Scientific's tentative spin-off of its investment businesses to USI, Inc., Universal Scientific expects to carry out a capital reduction plan reducing its capital from NT\$16,413.0 million (US\$519.4 million) to NT\$400.0 million (US\$12.7 million). After the MOEAIC's approval, on the spin-off record date, we expect to own 99.2% of the outstanding common shares of Universal Scientific and 82.1% of the total outstanding shares of Universal Scientific Shanghai indirectly through our subsidiaries USI, Inc. and ASE Shanghai. As part of our business realignment effort, we expect to acquire 990.1 million shares in USI, Inc. on the spin-off record date, which is expected to result in us holding 99.2% of the total then outstanding shares of USI, Inc.

## PROPERTY, PLANTS AND EQUIPMENT

We operate a number of packaging, testing and electronic manufacturing facilities in Asia and the United States. Our facilities provide varying types or levels of services with respect to different end-product focus, customers, technologies and geographic locations. With our diverse facilities we are able to tailor our packaging, testing and electronic manufacturing solutions closely to our customers' needs. The following table sets forth the location, commencement of operation, primary use, approximate floor space and ownership of our principal facilities as of January 31, 2015.

Facility	Location	Commencement of Operation	Primary Use	Approximate Floor Space (in sq. ft.)	Owned or Leased
ASE Inc.	Kaohsiung, ROC	March 1984	Our primary packaging facility, which offers complete semiconductor manufacturing solutions in conjunction with ASE Test Taiwan and foundries located in Taiwan. Focuses primarily on advanced	4,961,000	Land: leased Buildings: owned and leased



packaging services,  
including flip-chip,  
wafer bumping and  
fine-pitch wire  
bonding.

Chung Li, ROC	Acquired in July 1999	An integrated packaging and testing facility that specializes in semiconductors for communications and consumer applications.	3,991,000	Land and buildings: owned
Nantou, ROC	April 2011	Our facility that provides packaging services.	80,000	Land and buildings:

Table of Contents

Facility	Location	Commencement of Operation	Primary Use	Approximate Floor Space (in sq. ft.)	Owned or Leased
ASE Test Taiwan	Kaohsiung, ROC	Acquired in April 1990	Our primary testing facilities, which offer complete semiconductor manufacturing solutions in conjunction with ASE Inc.'s facility in Kaohsiung and foundries located in Taiwan. Focuses primarily on advanced logic/mixed-signal/RF/3D IC testing for integrated device manufacturers, fabless design companies and system companies.	939,000	Leased Land: leased Buildings: owned and leased
	Chung Li, ROC	October 2001	Our primary wafer probing testing facilities.	116,000	Land and building: leased
ASE Test Malaysia	Penang, Malaysia	February 1991	An integrated packaging and testing facility that focuses primarily on the requirements of integrated device manufacturers.	828,000	Land: leased Buildings: owned
ASE Korea	Paju, Korea	Acquired in July 1999	An integrated packaging and testing facility that specializes in semiconductors for radio frequency, sensor and automotive applications.	1,079,000	Land and buildings: owned
ISE Labs	California, USA Texas, USA	Acquired in May 1999	Front-end engineering and final testing facilities located in northern California in close proximity to some of the world's largest fabless design companies. Testing facilities located in close proximity to integrated device manufacturers and fabless companies in	96,000	Land and buildings: owned and leased

Texas.

ASE Singapore Singapore	Acquired in May 1999	An integrated packaging and testing facility that specializes in semiconductors for communication, computers and consumer applications.	282,000	Land: leased Buildings: owned and leased
ASE Shanghai Shanghai, China	June 2004	Design and production of semiconductor packaging materials.	1,431,000	Land: leased Buildings: owned

Table of Contents

Facility	Location	Commencement of Operation	Primary Use	Approximate Floor Space (in sq. ft.)	Owned or Leased
ASE Japan	Takahata, Japan	Acquired in May 2004	An integrated packaging and testing facility that specializes in semiconductors for cellular phone, household appliance and automotive applications.	298,000	Land and buildings: leased
ASE Electronics	Kaohsiung, ROC	August 2006	Facilities for the design and production of interconnect materials such as substrates used in the packaging of semiconductors.	552,000	Land: leased Buildings: owned and leased
ASESH AT	Shanghai, China	Acquired in January 2007	An integrated packaging and testing facility that specializes in semiconductors for communications and consumer applications.	909,000	Land: leased Buildings: owned
ASEN	Suzhou, China	Acquired in September 2007	An integrated packaging and testing facility that specializes in communication applications.	433,000	Land: leased Buildings: owned
ASEWH	Shandong, China	Acquired in May 2008	An integrated packaging and testing facility that specializes in semiconductors for communications, computing and consumer applications.	717,000	Land: leased Buildings: owned
ASEKS	Kunshan, China	July 2010	An integrated packaging and testing facility that specializes in semiconductors for communications and consumer applications.	1,489,000	Land: leased Buildings: owned
Wuxi Tongzhi	Wuxi, China	Acquired in May 2013	An integrated packaging and testing facility that specializes in semiconductors for MP3, Vehicle, household appliance and communications applications.	78,000	Land and buildings: leased

Universal Scientific	Nantou, ROC	Acquired in February 2010	The parent company of Universal Scientific Group, engages in research and development activities for various electronic products and components.	900,000	Land: owned Buildings: owned and leased
----------------------	-------------	---------------------------	--	---------	--

Table of Contents

Facility	Location	Commencement of Operation	Primary Use	Approximate Floor Space (in sq. ft.)	Owned or Leased
USI Mexico	Guadalajara, Mexico	Acquired in February 2010	Manufacturing site, which offer Motherboard manufacture and system assembly.	362,000	Land: owned Buildings: owned
USISZ	Shenzhen, China	Acquired in February 2010	Manufacturing site, design, manufacture and marketing of motherboards, electronic components, accessories and related products in China.	787,000	Land: leased Buildings: owned
Universal Scientific Shanghai	Shanghai, China	Acquired in February 2010	Manufacturing site, design, manufacture and marketing of motherboards, electronic components, accessories and related products in China.	714,000	Land: leased Buildings: owned and leased
UGKS	Kunshan, China	August 2011	Manufacturing site, design, manufacture and marketing of motherboards, electronic components, accessories and related products in China.	388,000	Land: leased Buildings: leased
UGTW	Nantou, ROC	February 2010	Design, manufacture and marketing of electronic components, accessories and related products.	400,000	Land: owned Buildings: owned and leased
UGJQ				364,000	Land: leased

Shanghai, China	Established in September 2013	Design, manufacture and marketing of motherboards, electronic components, accessories and related products in China.	Buildings: leased
--------------------	----------------------------------	--	-------------------

Our major leased property in Kaohsiung consists primarily of leases of land in the Kaohsiung Nantze Export Processing Zone between ASE Inc. and ASE Test Taiwan, as the lessees, and the Export Processing Zones Administration (the "EPZA"), under the Ministry of Economic Affairs. The leases have ten-year terms that will expire in January 2023. No sublease or lending of the land is allowed. The EPZA has the right to adjust the rental price in the event the government revalues the land. The leases are typically renewable with three-month notice prior to the termination date.

#### ASE Inc. Kaohsiung Facility

In December 2013, the Kaohsiung City Environmental Protection Bureau ordered us to suspend the operations at our K7 Plant's wafer-level process where nickel is used for alleged wastewater discharge violations and fined us NT\$110.1 million for which we recognized as other income and expenses in December 2013 and paid in full in January 2014. In April 2014, the amount of the fine was reduced NT\$109.4 million (US\$3.5 million) by the Kaohsiung City Environmental Protection Bureau. We received the refund of NT\$0.7 million (US\$0.02 million) and recorded the reversal of loss in September 2014. We have been actively working with the Kaohsiung City Environmental Protection Bureau and implemented improvement plans to enhance our wastewater discharge

## Table of Contents

processes since this incident. Following a series of examinations, hearings and trial runs as ordered by the Kaohsiung City Environmental Protection Bureau during 2014, in December 2014, the Kaohsiung City Environmental Protection Bureau lifted the suspension order and approved the full resumption of operation of our K7 Plant. Any future suspension of operations at K7 Plant or our other facilities may adversely affect our business, financial condition, results of operations and cash flows. See “Item 3. Key Information—Risk Factors—Risks Relating to Our Business—Any environmental claims or failure to comply with any present or future environmental regulations, as well as any fire or other industrial accident, may require us to spend additional funds and may materially and adversely affect our financial condition and results of operations,” “Item 4. Information on the Company—Business Overview—Environmental Matters,” and “Item 8. Financial Information—Consolidated Statements and Other Financial Information—Legal Proceedings.”

We currently do not have plans for significant expansion, but will re-evaluate our need for future expansion based on market condition and future demand requirements to meet our expected future growth. For information on the aggregate capacity of our facilities we operate, see “—Business Overview—Equipment.”

### Item 4A. Unresolved Staff Comments

None.

### Item 5. Operating and Financial Review and Prospects

## OPERATING RESULTS AND TREND INFORMATION

The following discussion of our business, financial condition and results of operations should be read in conjunction with our consolidated financial statements, which are included elsewhere in this annual report. This discussion contains forward-looking statements that reflect our current views with respect to future events and financial performance. Our actual results may differ materially from those anticipated in these forward-looking statements as a result of any number of factors, such as those set forth under “Item 3. Key Information—Risk Factors” and elsewhere in this annual report. See “Special Note Regarding Forward-Looking Statements.”

### Overview

We offer a broad range of semiconductor packaging, testing services and we also offer electronic manufacturing services since our acquisition of a controlling interest in Universal Scientific in February 2010. In addition to offering each service separately, we also offer turnkey services, which consist of the integrated packaging, testing and direct shipment of semiconductors to end users designated by our customers and solution-based proactive original design manufacturing, with our customers. In addition, we started generating revenues from our real estate business since 2010. Our operating revenues increased from NT\$193,972.4 million in 2012 to NT\$219,862.4 million in 2013 and NT\$256,591.4 million (US\$8,120.0 million) in 2014.

Discussed below are several factors that have had a significant influence on our financial results in recent years.

### Pricing and Revenue Mix

We price our services taking into account the actual costs involved in providing these services, with reference to prevailing market prices. The majority of our prices and revenues are denominated in U.S. dollars. Any significant fluctuation in exchange rates, especially between NT dollars and U.S. dollars, will affect our costs and, in turn, our revenues.



In the case of semiconductor packaging, the cost of the silicon die, typically the most costly component of the packaged semiconductor, is usually not reflected in our costs (or revenues) since it is generally supplied by our customers on a consignment basis.

The semiconductor industry is characterized by a general trend towards declining prices for products and services of a given technology over time. In addition, during periods of intense competition and adverse conditions in the semiconductor industry, the pace of this decline may be more rapid than in other years. The average selling prices of our packaging and testing services have experienced sharp declines during such periods as a result of intense price competition from other independent packaging and testing companies that attempt to maintain high capacity utilization levels in the face of reduced demand.

## Table of Contents

Declines in average selling prices have been partially offset historically by changes in our revenue mix, and typically the selling price is largely dependable on the complexity of the services. In particular, revenues derived from packaging more advanced package types, such as flip-chip BGA, higher density packages with finer lead-to-lead spacing, or pitch, and testing of more complex, high-performance semiconductors have increased as a percentage of total revenues. We intend to continue to focus on packaging more advanced package types, such as bumping, flip-chip BGA and SiP, developing and offering new technologies in packaging and testing services and expanding our capacity to achieve economies of scale, as well as improving production efficiencies for older technologies, in order to mitigate the effects of declining average selling prices on our profitability.

Our profitability for a specific package type does not depend linearly on its average selling price. Some of our more traditional package types, which typically have low average selling prices, may well command steadier and sometimes higher margins than more advanced package types with higher average selling prices.

### High Fixed Costs

Our operations, in particular our testing operations, are characterized by relatively high fixed costs. We expect to continue to incur substantial depreciation and other expenses especially from our acquisitions of packaging and testing equipment and facilities. Our profitability depends in part not only on absolute pricing levels for our products/services, but also on utilization rates on equipment, commonly referred to as “capacity utilization rates.” In particular, increases or decreases in our capacity utilization rates could have a significant effect on gross margins since the unit cost of our products and/or services generally decreases as fixed costs are allocated over a larger number of units. The capacity utilization rates of the machinery and equipment installed at our production facilities typically depend on factors such as the volume and variety of products, the efficiency of our operations in terms of the loading and adjustment of machinery and equipment for different products, the complexity of the different products to be packaged or tested, the amount of time set aside for the maintenance and repair of the machinery and equipment, and the experience and schedule of work shifts of operators.

In 2012, 2013 and 2014, our depreciation, amortization and rental expense included in operating costs as a percentage of operating revenues was 11.4%, 11.1% and 9.9%, respectively. The decrease in depreciation, amortization and rental expense as a percentage of operating revenues in 2014 compared to 2013 was primarily a result of an increase in our revenues. We begin depreciating our equipment when the machinery is placed into service. There may sometimes be a time lag between when our equipment is available for use and when it achieves high levels of utilization. In periods of depressed industry conditions, such as the fourth quarter of 2008, we experienced lower than expected demand from customers, resulting in an increase in depreciation relative to operating revenues. In particular, the capacity utilization rates for our testing equipment are more severely affected during an industry downturn as a result of a decrease in outsourcing demand from integrated device manufacturers, which typically maintain larger in-house testing capacity than in-house packaging capacity.

In addition to purchasing testers, we also lease a portion of our testers, which we believe allows us to better manage our capacity utilization rates and cash flow. Since leased testers can be replaced with more advanced testers upon the expiration of the lease, we believe that these operating leases have enabled us to improve our capacity utilization rates by allowing us to better align our capacity with changes in equipment technology and the needs of our customers. For more information about our testers, including the number of testers under lease, see “Item 4. Information on the Company—Business Overview—Equipment—Testing.”

### Raw Material Costs

Substantially all of our raw material costs are accounted for by packaging, the production of interconnect materials and electronic manufacturing services. In particular, our electronic manufacturing services acquired in 2010 require more significant quantities of raw materials than our packaging and production of interconnect materials. In 2012, 2013 and 2014, raw material cost as a percentage of our operating revenues was 45.3%, 45.6% and 45.6%, respectively.

We have developed copper wire to gradually replace gold wire in the packaging processes in order to benefit from the lower material cost of copper. However, gold wire is still one of the principal raw materials we use in our packaging processes, and the recent volatility in the price of gold has affected our operating costs. In 2014, the spot rate for gold fluctuated from approximately US\$1,142 per ounce to approximately US\$1,385 per ounce according to the statistics published by The London Bullion Market Association. It may be difficult for us to adjust our average selling prices to account for fluctuations in the price of gold. We expect that gold wire will continue to be an important raw material for us and we therefore expect to continue to be subject to significant fluctuations in the price of gold.

## Table of Contents

### Recent Accounting Pronouncements

Please refer to note 3 to our consolidated financial statements included in this annual report for more information.

### Critical Accounting Policies and Estimates

Preparation of our consolidated financial statements requires us to make estimates and judgments in applying our critical accounting policies which have a significant impact on the results we report in our consolidated financial statements. Our principal accounting policies and critical accounting judgments and key sources of estimation uncertainty are set forth in detail in note 4 and note 5, respectively, to our consolidated financial statements included in this annual report. We continually evaluate these estimates and assumptions. Actual results may differ from these estimates under different assumptions and conditions. Significant accounting policies are summarized as follows.

**Revenue Recognition.** Revenue is measured at the fair value of the consideration received or receivable take into account of estimated customer returns, rebates and other similar allowances. Revenue from the sale of goods and real estate properties is recognized when the goods and real estate properties are delivered and titles have passed, at the time all the following conditions are satisfied:

- we have transferred to the buyer the significant risks and rewards of ownership of the goods and real estate properties;
- we retain neither continuing managerial involvement to the degree usually associated with ownership nor effective control over the goods and real estate properties sold;
  - the amount of revenue can be reliably measured;
- it is probable that the economic benefits associated with the transaction will flow to us; and
  - the costs incurred or to be incurred in respect of the transaction can be reliably measured.

Service income is recognized when services are rendered.

Our customers bear the title and risk of loss for those bare semiconductor wafers that we receive and package into finished semiconductors and/or those packaged semiconductors that we receive and test for performance specifications. Accordingly, the cost of customer-supplied semiconductor materials is not included in our consolidated financial statements.

A sales discount and return allowance is recognized in the period during which the sale is recognized, and is estimated based on historical experience, the management's judgment and relevant factors.

**Impairment of Accounts Receivable.** We periodically record a provision for doubtful accounts based on our evaluation of the collectability of our accounts receivable. We first assess whether objective evidence of impairment exists individually in each customer for account receivable, then includes in a group basis with historical collective experience and similar credit risk characteristics and collectively assess them for impairment. As of December 31, 2012, 2013 and 2014, the allowance we set aside for doubtful accounts was NT\$80.1 million, NT\$68.1 million and NT\$84.1 million (US\$2.7 million), respectively. Additional allowances may be required in the future if the financial condition of our customers or general economic conditions further deteriorate, and this additional allowance would

reduce our net income.

Inventories. Inventories are recorded at cost when acquired and stated at the lower of cost or net realizable values. Inventories are written down to net realizable value item by item, except for those that may be appropriate to group items of similar or related inventories. Materials received from customers for processing, mainly of semiconductor wafers, are excluded from inventories, as title and risk of loss remains with the customers. Net realizable value is the estimated selling prices of inventories less all estimated costs of completion and estimated costs necessary to make the sale. An allowance for loss on decline in market value and obsolescence is provided based on the difference between the cost of inventory and the estimated market value based upon assumptions about future demand and market conditions. Due to rapid technology advancements, we estimate the net realizable value of inventory for obsolete and unmarketable items at balance sheet date and then write down the cost of inventories to net realizable value. There may be significant changes in the net realizable value of inventories due to assumptions of future demand within a specific time period.

## Table of Contents

**Realization of Deferred Tax Assets.** Tax benefits arising from deductible temporary differences, unused tax credits and unused loss carry-forwards are recognized as deferred tax assets to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilized. We have considered future taxable income and ongoing prudent and feasible tax planning strategies in assessing the deferred tax assets. The carrying amounts of deferred tax assets are reviewed at each balance sheet date and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of deferred tax assets to be utilized. A previously unrecognized deferred tax asset is also reviewed at each balance sheet date and recognized to the extent that it has become probable that future taxable profit will allow the deferred tax asset to be utilized. The realizability of deferred tax assets mainly depends on whether sufficient future profits or taxable temporary differences will be available. In cases where the actual future profits generated are less than expected, a material reversal of deferred tax assets may arise, which would be recognized in profit or loss for the period in which such a reversal takes place.

**Impairment of Tangible and Intangible Assets Other than Goodwill.** At each balance sheet date, we review the carrying amounts of the tangible and intangible assets, excluding goodwill, to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss. Recoverable amount is the higher of fair value less costs to sell and value in use. If the recoverable amount of an asset or cash-generating unit is estimated to be less than its carrying amount, the carrying amount of the asset or cash-generating unit is reduced to its recoverable amount. The process of evaluating the potential impairment of tangible and intangible assets other than goodwill requires significant judgment. We are 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 its usage patterns and the nature of the semiconductor industry. Any changes in these estimates based on changed economic conditions or business strategies could result in significant impairment charges in future periods.

In 2012, 2013 and 2014, we recognized impairment losses of NT\$73.5 million, NT\$495.5 million and NT\$297.8 million (US\$9.4 million), respectively, on property, plant and equipment. See notes 14 and 23 to our consolidated financial statements included in this annual report.

**Business Combinations.** When we acquire businesses, goodwill is measured as the excess of the sum of the consideration transferred, the amount of any non-controlling interests in the acquiree, and the fair value of the acquirer's previously held equity interest in the acquiree (if any) over the net of the acquisition-date amounts of the identifiable assets acquired and the liabilities assumed. The allocation of the purchase price requires management to make significant estimates in determining the fair values of assets acquired and liabilities assumed, especially with respect to intangible assets. These estimates are based on historical experience, information obtained from the management of the acquired companies and independent external service providers' reports. These estimates can include, but are not limited to, the cash flows that an asset is expected to generate in the future, the appropriate weighted-average cost of capital, and the synergistic benefits expected to be derived from the acquired business. These estimates are inherently uncertain and unpredictable. In addition, unanticipated events and circumstances may occur which may affect the accuracy or validity of such estimates.

For example, we acquired Universal Scientific through tender offers in February and August 2010 and EEMS Test Singapore in August 2010; acquired tangible assets and liabilities as well as identified intangible assets were valued at estimates of their current fair values. The valuation of acquired intangible assets was determined based on management's estimates. In addition, the amortization method of these intangible assets is based on the pattern in which the economic benefits are consumed. In addition, we also recognized goodwill which represents the excess of the purchase price over the estimated fair value of the net assets acquired. See our consolidated statements of cash

flow as well as notes 14 to 16 and 27 to our consolidated financial statements included in this annual report.

## Table of Contents

**Goodwill.** Goodwill is tested for impairment annually and we test for impairment more frequently if an event occurs or circumstances change that would indicate that the cash-generating unit may be impaired. Goodwill is tested for impairment by comparing the carrying amount of the cash-generating unit to which the goodwill has been allocated to its recoverable amount. Recoverable amount is defined as the higher of a cash-generating unit's fair value less costs to sell or its value in use, which is defined as the present value of the expected future cash flows generated by the cash-generating unit. In conducting the future cash flow valuation, we make assumptions about future operating cash flows, the discount rate used to determine present value of future cash flows, and capital expenditures. Future operating cash flows assumptions include sales growth assumptions, which are based on our historical trends and industry trends, and gross margin and operating expense growth assumptions, which are based on the historical relationship of those measures compared to sales and certain cost cutting initiatives. An impairment charge is incurred to the extent the carrying amount exceeds the recoverable amount. As of December 31, 2014, we had goodwill of NT\$10,445.4 million (US\$330.6 million). We did not recognize any impairment loss in 2014. Our conclusion could, however, change in the future if actual results differ from our estimates and judgments under different assumptions and conditions.

**Valuation of Investments.** We hold investments in the shareholdings of public and non-public entities. We evaluate these investments periodically for impairment based on market prices, if available, the financial condition of the investees and economic conditions in the industry. These assessments usually require a significant amount of judgment, as a significant decline in the market price may be a short-term drop and may not be the best indicator of impairment. Whenever triggering events or changes in circumstances indicate that an investment may be impaired and carrying amount may not be recoverable, we measure the impairment based on the market prices, if available, or using market approach based on the financial result of the investments. Several of the investments held by us are recognized as the equity method investments, debt investments with no active market or available-for-sale financial assets. Any significant decline in the estimated future cash flows of the investments or financial assets could affect the value of the investment and indicate that an impairment charge may occur. In 2012, 2013 and 2014, we recognized impairment losses of NT\$23.7 million, NT\$196.3 million and NT\$10.4 million (US\$0.3 million), respectively, on our investments. See notes 8 and 23 to our consolidated financial statements included in this annual report.

**Stock-based Compensation.** Equity-settled share-based payments to employees are measured at the fair value of the equity instruments at the grant date. The fair value determined at the grant date of the equity - settled share - based payments is expensed on a straight-line basis over the vesting period, based on our best estimate of equity instruments that will eventually vest, with a corresponding increase in capital surplus - employee share options.

**Defined Benefit Plans.** Accrued pension liabilities and the resulting pension expenses under defined benefit pension plans are calculated using the projected unit credit method. Actuarial assumptions comprise discount rates and expected rates of salary increase. Due to changing market and economic conditions, the underlying key assumptions may differ from actual developments and may lead to significant changes in our defined benefit plans. We immediately recognize all actuarial gains and losses arising from defined benefit plans in retained earnings.

**Fair value of Derivatives and Other Financial Instruments.** We use our judgments applying appropriate valuation techniques commonly applied by market practitioners. The assumptions applied are based on observable quoted market prices, foreign exchange rates and interest rates to the extent it is available. The fair value of unquoted equity instruments is estimated based on the assumptions supported by unobservable market prices and interest rates which are disclosed in note 32 to our consolidated financial statements included in this annual report. We believe that the valuation techniques and the assumptions applied are appropriate in determining the fair value of financial instruments.

## Results of Operations



The following table sets forth, for the periods indicated, financial data from our consolidated statements of comprehensive income, expressed as a percentage of operating revenues.

59

---

Table of Contents

	Year Ended December 31,					
	2012		2013		2014	
	(percentage of operating revenues)					
Operating revenues	100.0	%	100.0	%	100.0	%
Packaging	53.8		51.2		47.3	
Testing	11.7		11.3		10.1	
Electronic manufacturing services	32.3		35.7		41.2	
Others	2.2		1.8		1.4	
Operating costs	(81.1	)	(80.5	)	(79.1	)
Gross profit	18.9		19.5		20.9	
Operating expenses	(9.8	)	(9.5	)	(9.3	)
Other income and expenses	0.0		(0.6	)	0.0	
Profit from operations	9.1		9.4		11.6	
Non-operating expense, net	(0.6	)	(0.6	)	(0.5	)
Profit before income tax	8.5		8.8		11.1	
Income tax expense	(1.5	)	(1.6	)	(2.2	)
Profit for the year	7.0	%	7.2	%	8.9	%
Attributable to						
Owners of the Company	6.8	%	7.0	%	8.7	%
Non-controlling interests	0.2		0.2		0.2	
	7.0	%	7.2	%	8.9	%
Other comprehensive income (loss), net of income tax	(2.0	)	1.5		2.2	
Total comprehensive income for the year	5.0	%	8.7	%	11.1	%
Attributable to						
Owners of the Company	4.8	%	8.4	%	10.7	%
Non-controlling interests	0.2		0.3		0.4	
	5.0	%	8.7	%	11.1	%

The following table sets forth, for the periods indicated, the gross margins for our packaging, testing services and electronic manufacturing services and our total gross margin. Gross margin is calculated by dividing gross profits by operating revenues.

	Year Ended December 31,					
	2012		2013		2014	
	(percentage of operating revenues)					
Gross profit						
Packaging	19.0	%	21.0	%	27.2	%
Testing	33.5		36.7		37.2	
Electronic manufacturing services	11.5		10.3		8.6	
Overall	18.9	%	19.5	%	20.9	%

The following table sets forth, for the periods indicated, a breakdown of our total operating costs and operating expenses, expressed as a percentage of operating revenues.

Year Ended December 31,  
2012                      2013                      2014

	(percentage of operating revenues)					
Operating costs						
Raw materials	45.3	%	45.6	%	45.6	%
Labor	12.8		12.8		13.0	
Depreciation, amortization and rental expense	11.4		11.1		9.9	
Others	11.6		11.0		10.6	
Total operating costs	81.1	%	80.5	%	79.1	%
Operating expenses						
Selling	1.4	%	1.4	%	1.3	%
General and administrative	4.3		4.0		4.0	
Research and development	4.1		4.1		4.0	
Total operating expenses	9.8	%	9.5	%	9.3	%

Table of Contents

Year ended December 31, 2014 Compared to Year Ended December 31, 2013

**Operating Revenues.** Operating revenues increased 16.7% to NT\$256,591.4 million (US\$8,120.0 million) in 2014 from NT\$219,862.4 million in 2013, primarily due to an increase in revenues from our electronic manufacturing services business. Packaging revenues increased 7.8% to NT\$121,336.5 million (US\$3,839.8 million) in 2014 from NT\$112,603.9 million in 2013. Testing revenues increased 4.6% to NT\$25,874.7 million (US\$818.8 million) in 2014 from NT\$24,732.2 million in 2013. Revenues from our electronic manufacturing services business increased 34.7% to NT\$105,784.4 million (US\$3,347.6 million) in 2014 from NT\$78,530.6 million in 2013. The increase in packaging revenues was primarily due to an increase in the demand for our services and an increase in the revenues generated from our copper wire bonding solutions. The increase in testing revenues was primarily due to an increase in sales volume for our testing business. The increase in the revenues from our electronic manufacturing services business was primarily due to an increase in the outsourced orders for communications products.

**Gross Profit.** Gross profit increased 25.1% to NT\$53,588.5 million (US\$1,695.8 million) in 2014 from NT\$42,822.0 million in 2013. Our gross profit as a percentage of operating revenues, or gross margin, was 20.9% in 2014 compared to 19.5% in 2013. The increase was primarily due to a decrease in depreciation expenses as a percentage of our operating revenues. Raw material costs in 2014 were NT\$116,998.6 million (US\$3,702.5 million) compared to NT\$100,314.5 million in 2013 primarily due to an increase in revenue contribution by our electronic manufacturing services business with higher raw material costs, partially offset by a decrease in the price of gold. As a percentage of operating revenues, raw material costs was 45.6% in both 2014 and 2013. Depreciation, amortization and rental expenses were NT\$25,386.7 million (US\$803.4 million) in 2014 compared to NT\$24,447.0 million in 2013. As a percentage of operating revenues, depreciation, amortization and rental expenses decreased to 9.9% in 2014 from 11.1% in 2013 due to increase in revenue. Labor cost in 2014 was NT\$33,243.2 million (US\$1,052.0 million) compared to NT\$28,053.5 million in 2013. As a percentage of operating revenues, labor cost increased to 13.0% in 2014 from 12.8% in 2013 primarily due to an increase in salary and bonus payments as a result of increase in headcount. Our gross margin for our packaging business increased to 27.2% in 2014 from 21.0% in 2013 due to a decrease in raw material costs as a percentage of packaging revenues. Our gross margin for our testing business increased to 37.2% in 2014 from 36.7% in 2013 primarily due to a decrease in depreciation as a percentage of testing revenues but partially offset by an increase in labor costs as a percentage of testing revenues. Our gross margin for our electronic manufacturing services business decreased to 8.6% in 2014 from 10.3% in 2013 primarily due to a change in product mix.

**Profit from operations.** Profit from operations increased 44.2% to NT\$29,874.5 million (US\$945.4 million) in 2014 compared to NT\$20,713.4 million in 2013. Our profit from operations as a percentage of operating revenues, or operating margin, increased to 11.6% in 2014 from 9.4% in 2013 primarily due to an increase in gross margin. Operating expenses increased 15.3% to NT\$23,942.7 million (US\$757.7 million) in 2014 compared to NT\$20,760.4 million in 2013. The increase in operating expenses was primarily due to an increase in general and administrative expense, as well as research and development expense. General and administrative expense increased 17.2% to NT\$10,214.8 million (US\$323.3 million) in 2014 from NT\$8,712.9 million in 2013, primarily due to an increase in salary and bonus payments due to an increase in headcount. General and administrative expense as a percentage of our operating revenues was 4.0% in both 2014 and 2013. Research and development expense increased 13.5% to NT\$10,289.7 million (US\$325.6 million), accounting for 4.0% of operating revenues in 2014, compared to NT\$9,064.7 million, accounting for 4.1% of operating revenues in 2013. This increase in the research and development expense was primarily due to an increase in salary and bonus payments due to increase in headcount. Selling expense increased 15.3% to NT\$3,438.2 million (US\$108.8 million) in 2014 from NT\$2,982.8 million in 2013. This increase was primarily due to an increase in salary and bonus payments due to increase in headcount and an increase in sampling costs. Selling expense as a percentage of operating revenues was 1.3% in 2014, compared to 1.4% in 2013. We had a net other income of NT\$228.6 million (US\$7.2 million) in 2014 compared to a net other

expense of NT\$1,348.2 million in 2013. The increase in net other income was primarily due to the settlement with Tessera in relation to patent infringement claims in 2013. We recognized the settlement in the amount of US\$30.0 million in the fourth quarter of 2013, and reversed US\$3.0 million in the fourth quarter of 2014 due to the reduction of the final settlement amount from US\$30.0 million to US\$27.0 million.

**Non-Operating Expense, Net.** We had a net non-operating expense of NT\$1,339.4 million (US\$42.4 million) in 2014 compared to a net non-operating expense of NT\$1,343.6 million in 2013. This decrease was primarily due to (i) a decrease in non-operating expenses as a result of decrease in impairment loss on financial assets from NT\$196.3 million in 2013 to NT\$10.4 million (US\$0.3 million) in 2014 and (ii) an increase in non-operating income due to the change in the net gain/loss on valuation of financial assets and liabilities and net foreign exchange gain/loss which resulted in an increase in net gain from NT\$519.2 million in 2013 to NT\$616.9 million (US\$19.5 million) in 2014, but partially offset by (i) an increase in non-operating expenses due to an increase in finance costs (consisting mainly of interest expenses) from NT\$2,307.5 million in 2013 to NT\$2,354.1 million (US\$74.5 million) in 2014, (ii) a decrease in non-operating income due to the decrease in the income earned from equity investments from the profit of NT\$22.0 million in 2013 compared to the loss of NT\$121.9 million (US\$3.9 million) in 2014, and (iii) a decrease in non-operating income due to the decrease in the net gain on disposal of financial assets from NT\$96.2 million in 2013 to NT\$0.8 million (US\$0.03 million) in 2014.

Table of Contents

Net Profit. Net profit, excluding non-controlling interests, increased 44.3% to NT\$22,228.6 million (US\$703.4 million) in 2014 compared to NT\$15,404.5 million in 2013. Our diluted earnings per ADS increased to NT\$13.93 (US\$0.44) in 2014 compared to diluted earnings per ADS of NT\$9.96 in 2013. Our income tax expense increased 61.9% to NT\$5,666.0 million (US\$179.3 million) in 2014 compared to NT\$3,499.6 million in 2013, primarily due to an increase in the profit before income tax and income tax on undistributed earnings, partially offset by an increase in the tax credit.

## Year Ended December 31, 2013 Compared to Year Ended December 31, 2012

Operating Revenues. Operating revenues increased 13.3% to NT\$219,862.4 million in 2013 from NT\$193,972.4 million in 2012, primarily due to an increase in revenues from our EMS businesses. Packaging revenues increased 8.0% to NT\$112,603.9 million in 2013 from NT\$104,298.3 million in 2012. Testing revenues increased 9.2% to NT\$24,732.2 million in 2013 from NT\$22,657.0 million in 2012. Revenues from our electronic manufacturing services business increased 25.2% to NT\$78,530.6 million in 2013 from NT\$62,747.7 million in 2012. The increase in packaging revenues was primarily due to an increase in the sale of advanced packaging products with higher selling prices. The increase in testing revenues was primarily due to an increase in the sale of advanced testing services with higher selling prices. The increase in the revenues from our electronic manufacturing services business was primarily due to an increase in the outsourced orders of communications products from original design manufacturers.

Gross Profit. Gross profit increased 16.9% to NT\$42,822.0 million in 2013 from NT\$36,629.7 million in 2012. Our gross profit as a percentage of operating revenues, or gross margin, was 19.5% in 2013 compared to 18.9% in 2012. The increase was primarily due to stronger growth in our higher margin packaging and testing business coupled with more disciplined cost control measures employed in 2013. Raw material costs in 2013 were NT\$100,314.5 million compared to NT\$87,830.5 million in 2012. As a percentage of operating revenues, raw material costs increased to 45.6% in 2013 from 45.3% in 2012 primarily due to a shift in our EMS product mix to products with higher raw material costs, partially offset by an increase in revenue from packaging services with lower raw material cost and a decrease in the price of gold. Depreciation, amortization and rental expenses were NT\$24,447.0 million in 2013 compared to NT\$22,129.7 million in 2012. As a percentage of operating revenues, depreciation, amortization and rental expenses decreased to 11.1% in 2013 from 11.4% in 2012 due to increase in revenue. Labor cost in 2013 was NT\$28,053.5 million compared to NT\$24,802.6 million in 2012 primarily due to an increase in salary and bonus payments as a result of increase in headcount. As a percentage of operating revenues, labor cost was 12.8% in both 2013 and 2012. Our gross margin for packaging increased to 21.0% in 2013 from 19.0% in 2012 due to a decrease in raw material costs as a percentage of packaging revenues. Our gross margin for testing increased to 36.7% in 2013 from 33.5% in 2012 primarily due to increased sale of advanced testing services with a higher gross margin. Our gross margin for electronic manufacturing services decreased to 10.3% in 2013 from 11.5% in 2012 primarily due to a change in product mix.

Profit from operations. Profit from operations increased 16.4% to NT\$20,713.4 million in 2013 compared to NT\$17,790.3 million in 2012. Our profit from operations as a percentage of operating revenues, or operating margin, increased to 9.4% in 2013 from 9.1% in 2012. Operating expenses increased 9.7% to NT\$20,760.4 million in 2013 compared to NT\$18,922.6 million in 2012. The increase in operating expenses was primarily due to an increase in research and development expense. General and administrative expense increased 5.2% to NT\$8,712.9 million in 2013 from NT\$8,283.3 million in 2012, primarily due to an increase in salary and bonus payments due to an increase in headcount and an increase in professional fees, partially offset by a decrease in depreciation and amortization. General and administrative expense as a percentage of our operating revenues was 4.0% in 2013 compared to 4.3% in 2012. Research and development expense increased 15.1% to NT\$9,064.7 million, accounting for 4.1% of operating revenues in 2013, compared to NT\$7,872.4 million, accounting for 4.1% of operating revenues in 2012. This increase

in the research and development expense was primarily due to an increase in salary and bonus payments due to increase in headcount. Selling expense increased 7.8% to NT\$2,982.8 million in 2013 from NT\$2,766.9 million in 2012. This increase was primarily due to an increase in salary and bonus payments due to increase in headcount. Selling expense as a percentage of operating revenues was 1.4% in 2013, which was the same as 2012. We had a net other expense of NT\$1,348.2 million in 2013 compared to a net other income of NT\$83.2 million in 2012, which increase was primarily due to a settlement in the amount of US\$30.0 million to Tessera in relation to patent infringement claims.

Table of Contents

**Non-Operating Expense, net.** We had a net non-operating expense of NT\$1,343.6 million in 2013 compared to a net non-operating expense of NT\$1,181.6 million in 2012. This increase was primarily due to (i) an increase in non-operating expenses due to an increase in finance costs (consisting mainly of interest expenses) from NT\$2,042.5 million in 2012 to NT\$2,307.5 million in 2013 and (ii) an increase in non-operating expenses due to an increase in impairment loss on financial assets from NT\$23.7 million in 2012 to NT\$196.3 million in 2013, partially offset by an increase in non-operating income due to the change in the net gain/loss on valuation of financial assets and liabilities and net foreign exchange gain/loss which resulted in an increase in net gain from NT\$247.7 million in 2012 to NT\$519.2 million in 2013.

**Net Profit.** Net profit, excluding non-controlling interests, increased 16.8% to NT\$15,404.5 million in 2013 compared to NT\$13,191.6 million in 2012. Our diluted earnings per ADS increase to NT\$9.96 in 2013 compared to diluted earnings per ADS of NT\$8.65 in 2012. Our income tax expense increased 18.2% to NT\$3,499.6 million in 2013 compared to NT\$2,960.4 million in 2012, primarily due to a decrease in the tax credit and an increase in income tax on undistributed earnings.

**Quarterly Operating Revenues, Gross Profit and Gross Margin**

The following table sets forth our unaudited consolidated operating revenues, gross profit and gross margin for the quarterly periods indicated. The unaudited quarterly results reflect all adjustments, consisting of normal recurring adjustments, that, in the opinion of management, are necessary for a fair presentation of the amounts, on a basis consistent with the audited consolidated financial statements included elsewhere in this annual report. You should read the following table in conjunction with the audited consolidated financial statements and related notes included elsewhere in this annual report. Our operating revenues, gross profit and gross margin for any quarter are not necessarily indicative of the results for any future period. Our quarterly operating revenues, gross profit and gross margin may fluctuate significantly.

	Quarter Ended							
	Mar. 31, 2013 NT\$	Jun. 30, 2013 NT\$	Sept. 30, 2013 NT\$	Dec. 31, 2013 NT\$	Mar. 31, 2014 NT\$	Jun. 30, 2014 NT\$	Sept. 30, 2014 NT\$	Dec. 31, 2014 NT\$
	(in millions)							
<b>Consolidated Operating Revenues</b>								
Packaging	24,903.3	29,020.7	29,976.8	28,703.1	26,721.8	30,641.2	32,031.1	31,942.4
Testing	5,723.0	6,505.4	6,279.3	6,224.5	5,784.6	6,599.8	6,827.5	6,662.8
<b>Electronic manufacturing services</b>								
Others	1,383.2	14,185.3	19,550.1	28,412.0	21,365.4	20,500.6	26,740.5	37,177.9
<b>Total</b>	<b>48,189.9</b>	<b>50,759.7</b>	<b>56,748.4</b>	<b>64,164.4</b>	<b>54,699.6</b>	<b>58,615.2</b>	<b>66,631.9</b>	<b>76,644.7</b>
<b>Consolidated Gross Profit</b>								
Packaging	4,016.9	5,899.5	6,094.4	7,662.9	6,101.4	7,694.3	8,728.9	10,515.6
Testing	1,961.6	2,513.8	2,330.3	2,273.7	1,867.3	2,458.2	2,716.8	2,589.7
<b>Electronic manufacturing</b>								
Others	1,784.5	1,532.4	2,602.2	2,135.2	2,006.6	2,007.1	2,239.4	2,865.8



Edgar Filing: ADVANCED SEMICONDUCTOR ENGINEERING INC - Form 20-F

services														
Others	519.6		492.1		562.4		440.5		383.9		450.8		522.9	439.8
Total	8,282.6		10,437.8		11,589.3		12,512.3		10,359.2		12,610.4		14,208.0	16,410.9
Consolidated														
Gross Profit														
(%)														
Packaging	16.1	%	20.3	%	20.3	%	26.7	%	22.8	%	25.1	%	27.3	% 32.9
Testing	34.3		38.6		37.1		36.5		32.3		37.2		39.8	38.9
Electronic														
manufacturing														
services	10.9		10.8		13.3		7.5		9.4		9.8		8.4	7.7
Overall	17.2	%	20.6	%	20.4	%	19.5	%	18.9	%	21.5	%	21.3	% 21.4

## Table of Contents

Our results of operations are affected by seasonality. In general, our first quarter operating revenues have historically decreased over the preceding fourth quarter, primarily due to the combined effects of holidays in the United States, Taiwan and elsewhere in Asia. Moreover, the increase or decrease in operating revenues of a particular quarter as compared with the immediately preceding quarter varies significantly. See “Item 3. Key Information—Risk Factors—Risks Relating to Our Business—Our operating results are subject to significant fluctuations, which could adversely affect the market value of your investment.”

### Exchange Rate Fluctuations

For quantitative and qualitative disclosure of our exposure to foreign currency exchange rate risk, see “Item 11. Quantitative and Qualitative Disclosures about Market Risk—Market Risk—Foreign Currency Exchange Rate Risk.”

### Taxation

The corporate income tax rate in the ROC decreased from 25% to 17%, effective since January 1, 2010. The ROC Statute for Upgrading Industries, which provided various tax incentives including investment tax credits, tax exemptions and tax holidays for companies, expired on December 31, 2009. Under this statute, we had been granted tax holidays covering the portion of our income attributable to eligible machinery and equipment that were procured with cash infusions from our shareholders or after the capitalization of retained earnings through the issuance of stock dividends, and tax credits of 7% for the purchase of qualifying manufacturing equipment. We can continue to enjoy the tax holidays that have been granted to us by the ROC tax authority. On April 16, 2010, the Legislative Yuan of ROC passed the Industrial Innovation Act, effective from January 1, 2010 to December 31, 2019. Under the Industrial Innovation Act, a profit-seeking enterprise may deduct up to 15% of its research and development expenditures from its income tax payable for the fiscal year in which these expenditures are incurred. However, the deduction may not exceed 30% of the income tax payable for that fiscal year. Under the Alternative Minimum Tax Act (the “AMT Act”) which took effect on January 2006 and was amended in August 2012, when a taxpayer’s regular income tax payable calculated, pursuant to the AMT Act is below the alternative minimum tax, or the AMT, a taxpayer is required to pay the difference between the AMT and the said regular income tax payable. Taxable income for calculating the AMT includes most sources of income that are exempted from income tax under various legislations such as tax holidays. However, there are grandfathered treatments for the tax holidays approved by the tax authority before the AMT Act took effect. Under the amended AMT Act, the standard deduction for taxable income decreased from NT\$2.0 million to NT\$0.5 million and the tax rate increased from 10% to 12%. The amendment to the AMT Act became effective on January 1, 2013.

As of January 31, 2015, we had several five-year tax holidays on income derived from a portion of our operations in Kaohsiung, Taiwan, which will expire through December 31, 2015 to December 31, 2018. Moreover, we are in the process of applying for the use of another tax exemption in connection with our operations in Kaohsiung, Taiwan, following application on the tax exemption period. We also have several unused five-year tax holidays of which the tax exemption period has not yet started. In addition, some of our subsidiaries, such as ASE Test Taiwan and ASE Electronics, are entitled to certain tax exemptions on income derived from a portion of their respective operations. The aggregate tax benefits of such exemptions for the years ended December 31, 2012, 2013 and 2014 were NT\$312.6 million, NT\$373.1 million and NT\$623.7 million (US\$19.7 million), respectively.

In addition, since we have facilities located in special export zones such as the Nantze Export Processing Zone in Taiwan, we enjoy exemptions from various import duties, commodity taxes and business taxes on imported machinery, equipment, raw materials and components which are directly used for manufacturing finished goods. We also enjoy exemptions from commodity and business taxes on finished goods exported or sold to others within the zones.



## Table of Contents

Under the ROC Income Tax Act, all earnings generated in a year which are not distributed to shareholders as dividends in the following year will be assessed a 10% undistributed earnings tax. As a result, if we do not distribute all of our annual earnings as either cash or stock dividends in the following year, these undistributed earnings will be subject to the 10% undistributed earnings tax.

In 2012 and 2013, our effective income tax rate (including the corporate income tax rate and the 10% undistributed earnings tax) remained at 18%. In 2014, our effective income tax rate increased to 20% primarily due to an increase in undistributed earnings tax. We believe that our future estimated taxable income will be sufficient to utilize our deferred tax assets recorded as of December 31, 2014.

### Inflation

We do not believe that inflation in Taiwan or elsewhere has had a material impact on our results of operations.

## LIQUIDITY AND CAPITAL RESOURCES

We have historically been able to satisfy our working capital needs from our cash flow from operations. We have historically funded our capacity expansion from internally generated cash and, to the extent necessary, the issuance of equity securities and borrowings. If adequate funds are not available on satisfactory terms, we may be forced to curtail our expansion plans. Moreover, our ability to meet our working capital needs from cash flow from operations will be affected by the demand for our packaging, testing services and electronic manufacturing services, which in turn may be affected by several factors. Many of these factors are outside of our control, such as economic downturns and declines in the prices of our services or products caused by a downturn in the industry. See “Item 3. Key Information—Risk Factors—Risks Relating to Our Business—Our operating results are subject to significant fluctuations, which could adversely affect the market value of your investment.” To the extent we do not generate sufficient cash flow from our operations to meet our cash requirements, we will have to rely on external financing.

Net cash provided by operating activities amounted to NT\$45,863.5 million (US\$1,451.4 million) in 2014, primarily as a result of (i) our operation performance with profit before income tax of NT\$28,535.1 million (US\$903.0 million) and (ii) our non-cash depreciation and amortization in the amount of NT\$26,350.8 million (US\$833.9 million). Net cash provided by operating activities amounted to NT\$41,296.0 million in 2013, primarily as a result of (i) our operation performance with profit before income tax of NT\$19,369.8 million and (ii) our non-cash depreciation and amortization in the amount of NT\$25,470.9 million. Net cash provided by operating activities amounted to NT\$33,038.0 million in 2012, primarily as a result of (i) our operation performance with profit before income tax of NT\$16,608.7 million and (ii) our non-cash depreciation and amortization in the amount of NT\$23,435.9 million. The increase in net cash provided by operating activities in 2014 compared to 2013 was primarily due to an increase in profit before income tax and cash inflows from an increase in trade payables and other payables, partially offset by cash outflows from an increase in trade receivables and inventories. The increase in net cash provided by operating activities in 2013 compared to 2012 was primarily due to an increase in profit before income tax, an increase in non-cash depreciation and amortization and cash inflows from an increase in trade payables and other payables, partially offset by an increase in non-cash net gains on fair value change of financial assets and liabilities at fair value through profit or loss.

Net cash used in investing activities amounted to NT\$38,817.9 million (US\$1,228.4 million) in 2014, primarily due to our acquisition of property, plant and equipment of NT\$39,599.0 million (US\$1,253.1 million). Net cash used in investing activities amounted to NT\$29,925.8 million in 2013, primarily due to our acquisition of property, plant and equipment of NT\$29,142.7 million. Net cash used in investing activities amounted to NT\$43,817.8 million in 2012,

primarily due to our acquisition of property, plant and equipment of NT\$39,029.5 million.

Net cash used in financing activities amounted to NT\$2,797.0 million (US\$88.5 million) in 2014. This amount reflected primarily (i) our net repayment of short-term borrowings and long-term bank loans in the amount of NT\$12,389.7 million (US\$392.1 million); and (ii) our distributed cash dividends to owners of the Company in the amount of NT\$9,967.2 million (US\$315.4 million), partially offset by (i) our net proceeds from issue of bonds of NT\$8,158.8 million (US\$258.2 million); and (ii) change in non-controlling interests of NT\$9,905.7 million (US\$313.5 million) due to Universal Scientific Shanghai's capital increase. Net cash provided by financing activities amounted to NT\$12,794.9 million in 2013. This amount reflected primarily (i) our net proceeds from short-term borrowings and long-term bank loans in the amount of NT\$4,385.2 million; (ii) net proceeds from issue of convertible bonds in the amount of NT\$11,900.1 million; and (iii) proceeds from Capital Increase in the amount of NT\$3,393.0 million, partially offset by our distributed cash dividends to owners of the Company in the amount of NT\$7,834.9 million. Net cash provided by financing activities in 2012 amounted to NT\$8,455.8 million in 2012. This amount reflected primarily our net proceeds from short-term borrowings and long-term bank loans of NT\$8,791.1 million and change in non-controlling interests of NT\$3,602.4 million due to Universal Scientific Shanghai's IPO, partially offset by our cash dividends distributed to owners of the Company in the amount of NT\$4,242.2 million.

Table of Contents

As of December 31, 2014, our primary source of liquidity was NT\$51,694.4 million (US\$1,635.9 million) of cash and NT\$6,522.1 million (US\$206.4 million) of financial assets—current. Our financial assets—current primarily consisted of structured time deposits, mutual funds and swap contracts. As of December 31, 2014, we had total unused credit lines of NT\$141,399.9 million (US\$4,474.7 million). As of December 31, 2014, we had working capital of NT\$46,275.1 million (US\$1,464.4 million).

As of December 31, 2014, we had total borrowings of NT\$99,387.3 million (US\$3,145.2 million), of which NT\$41,176.0 million (US\$1,303.1 million) were short-term borrowings and of which NT\$58,211.3 million (US\$1,842.1 million) were long-term borrowings. In 2014, the maximum amount of our short-term borrowings was NT\$47,533.0 million (US\$1,504.2 million) and the average amount of our short-term borrowings was NT\$38,868.9 million (US\$1,230.0 million). The fluctuation was primarily because our working capital balance fluctuated during 2014 from time to time. The annual interest rate for borrowings under our short-term bank loans ranged from 0.81% to 6.00% as of December 31, 2014. Our short-term loans are primarily revolving facilities with a term of one year, each of which may be extended on an annual basis with lender consent. Our long-term borrowings consist of bank loans, bonds payable and capital lease obligations. As of December 31, 2014, we had outstanding long-term borrowings, less current portion, of NT\$55,375.8 million (US\$1,752.4 million). As of December 31, 2014, the current portion of our long-term borrowings was NT\$2,835.4 million (US\$89.7 million). Our long-term borrowings typically carried variable annual interest rates which ranged between 0.90% to 6.77% as of December 31, 2014. For the maturity information and interest rates by currencies, see “Item 11—Quantitative and Qualitative Disclosures about Market Risk—Market Risk—Interest Rate Risk.”

We have pledged a portion of our assets, with a carrying value of NT\$15,433.4 million (US\$488.4 million) as of December 31, 2014, to secure our obligations under our short-term and long-term facilities.

In September 2011, Anstock Limited, our wholly owned subsidiary incorporated in the Cayman Islands with limited liability, issued RMB150.0 million 3.125% Guaranteed Bonds due September 22, 2014 and RMB500.0 million 4.250% Guaranteed Bonds due September 20, 2016. The Bonds were offered to certain non-U.S. persons in compliance with Regulation S under the Securities Act. The Bonds are irrevocably and unconditionally guaranteed on an unsecured and unsubordinated basis by us. The 2014 Bonds matured and was repaid on September 22, 2014. The 2016 Bonds bear interest from and including September 20, 2011 at the rate of 4.250% per annum. Interest on the 2016 Bonds is payable semi-annually in arrear on September 20 and March 20 of each year beginning on March 20, 2012. The 2016 Bonds will mature on September 20, 2016 unless previously redeemed or repurchased and cancelled. The net proceeds from the Bonds were advanced by Anstock Limited to ASESH AT in the form of an intercompany RMB loan for working capital and capital expenditure with maturity in September 2016.

In July 2014, Anstock II Limited offered US\$300.0 million aggregate principal amount of guaranteed bonds due 2017. The Green Bonds are unconditionally and irrevocably guaranteed by us. The Green Bonds were offered to persons outside of the United States in compliance with Regulation S under the Securities Act. The Green Bonds bear interest from and including July 24, 2014 at the rate of 2.125% per annum. Interest on the Green Bonds is payable semi-annually in arrear on January 24 and July 24 of each year beginning on January 24, 2015. The Green Bonds will mature on July 24, 2017 unless previously redeemed or repurchased and cancelled. The net proceeds from the Green Bonds offering were used to fund projects that promote our transition to low-carbon and climate-resilient growth.

In August 2011, we issued NT\$8.0 billion 1.45% secured corporate bonds with five year term, guaranteed by the Bank of Taiwan, Mega International Commercial Bank, Taiwan Cooperative Bank, First Bank and Hua Nan Bank. The Corporate Bonds bear an annual simple interest and payment by coupon rate from the issue date. The net proceeds from the Corporate Bonds were used to repay our previous debts.



Table of Contents

We currently have two syndicated loan agreements outstanding. In June 2010, we entered into a NT\$7,200.0 million and US\$240.0 million five-year syndicated credit facility, for which Citibank Taiwan Limited acted as the agent bank, for the purpose of repaying certain bank loans, funding general operations and capital expenditure of the Company. The agreement for this facility contains covenants that require us to maintain certain financial ratios. As of December 31, 2014, NT\$1,085.1 million (US\$34.3 million) was outstanding under this credit facility. This syndicated loan agreement contains undertakings and restrictive covenants relating to the maintenance of certain financial ratios including: (i) current ratio (current assets to current liabilities) of not less than 100.0%; (ii) leverage ratio (total liabilities to tangible net worth) of not higher than 180.0% as at June 30, 2010 and of not higher than 160.0% since the end of 2010; (iii) interest coverage ratio (EBITDA to interest expense) of not less than 280.0%; and (v) tangible net worth not less than NT\$55,000.0 million. In July 2013, we entered into a US\$400.0 million five-year syndicated credit facility, for which the Bank of Taiwan acted as the agent bank, for the purpose of funding the purchase of machinery and equipment at our facility and funding general operations. The agreement for this facility contains covenants that require us to maintain certain financial ratios. As of December 31, 2014, NT\$8,070.8 million (US\$255.4 million) was outstanding under this credit facility. This syndicated loan agreement contains undertakings and restrictive covenants relating to the maintenance of certain financial ratios including: (i) current ratio (current assets to current liabilities) of not less than 100.0%; (ii) leverage ratio (total liabilities to tangible net worth) of not higher than 160.0%; (iii) interest coverage ratio (EBITDA to interest expense) of not less than 280.0%; and (iv) tangible net worth not less than NT\$75,000.0 million.

In September 2013, we issued US\$400.0 million aggregate principal amount of zero coupon convertible bonds due 2018. The 2018 Convertible Bonds were offered to persons outside of the United States in compliance with Regulation S under the Securities Act. The initial conversion price was NT\$33.085 per common share, subject to certain adjustments, determined on the basis of a fixed exchange rate of NT\$29.956 = US\$1.00 (which represents an approximately 31.3% conversion premium over the closing trading price of our common shares on August 28, 2013 of NT\$25.20 per common share). The conversion price is subject to adjustment upon the occurrence of certain events. The conversion price was adjusted from NT\$33.085 per common share to NT\$33.05 per common share due to the Capital Increase in September 2013. In August 2014, as a result of our cash dividend distribution, the conversion price was further adjusted from NT\$33.05 to NT\$31.93 per common share. As of the date of this annual report, the conversion price is NT\$31.93 per common share. The bonds will mature on September 5, 2018, unless previously repurchased or converted in accordance with their terms prior to such date. We used the net proceeds to fund procurement of raw materials from overseas. Please refer to note 19 of our consolidated financial statements included in this annual report for more information. As of December 31, 2014, the balance of the outstanding convertible bonds was US\$400.0 million.

We have in the past failed to comply with certain financial covenants in some of our loan agreements. Such non-compliance may also have, through broadly worded cross-default provisions, resulted in default under some of the agreements governing our other existing debt. In February 2010, we failed to comply with certain financial covenants in some of our loan agreements as a result of our acquisition of Universal Scientific in February 2010. As of December 31, 2014, we were not in breach of any of the financial covenants under our existing loan agreements. If we are unable to timely remedy any of our non-compliance under such loan agreements or obtain applicable waivers or amendments, we would breach our financial covenants and our financial condition would be adversely affected. See “Item 3. Key Information—Risk Factors—Risks Relating to Our Business—Restrictive covenants and broad default provisions in our existing debt agreements may materially restrict our operations as well as adversely affect our liquidity, financial condition and results of operations.”

Our contingent obligations consist of guarantees provided by us to our subsidiaries. As of December 31, 2014, we endorsed and guaranteed the bonds issued by our subsidiaries, Anstock Limited, in the amount of RMB542.3 million (US\$87.4 million) and Anstock II Limited, in the amount of US\$319.1 million, respectively. Other than such



guarantees, we have no other contingent obligations.

We have made, and expect to continue to make, substantial capital expenditures in connection with the expansion of our production capacity. The table below sets forth our principal capital expenditures incurred for the periods indicated.

	Year Ended December 31,			US\$
	2012 NT\$	2013 NT\$	2014 NT\$	
	(in millions)			
Machinery and equipment	31,790.5	19,851.7	31,735.5	1,004.3
Building and improvements	7,102.6	7,192.4	11,713.1	370.7
Total	38,893.1	27,044.1	43,448.6	1,375.0

## Table of Contents

We had commitments for capital expenditures of approximately US\$553.0 million, including expenditures on machinery and buildings, as of December 31, 2014, primarily in connection with the expansion of our packaging and electronic manufacturing services operations. We estimate that our environmental capital expenditures for 2015 will be approximately US\$30.1 million. We may adjust our capital expenditures based on market conditions, the progress of our expansion plans and cash flow from operations. In addition, due to the rapid changes in technology in the semiconductor industry, we frequently need to invest in new machinery and equipment, which may require us to raise additional capital. We cannot assure you that we will be able to raise additional capital should it become necessary on terms acceptable to us or at all. See “Item 3. Key Information—Risk Factors—Risks Relating to Our Business—The packaging and testing businesses are capital intensive. If we cannot obtain additional capital when we need it, our growth prospects and future profitability may be adversely affected.”

We believe that our existing cash, marketable securities, expected cash flow from operations and existing credit lines under our loan facilities will be sufficient to meet our capital expenditures, working capital, cash obligations under our existing debt and lease arrangements, and other requirements for at least the next 12 months. We currently hold cash primarily in U.S. dollars, New Taiwan dollars, RMB, Japanese yen and Korean won. As of December 31, 2014, we had contractual obligations of NT\$46,341.2 million (US\$1,466.5 million) due in the next three years. We currently expect to meet our payment obligations through the expected cash flow from operations, long-term borrowings and the issuance of additional equity or equity-linked securities. We will continue to evaluate our capital structure and may decide from time to time to increase or decrease our financial leverage through equity offerings or borrowings. The issuance of additional equity or equity-linked securities may result in additional dilution to our shareholders.

From time to time, we evaluate possible investments, acquisitions or divestments and may, if a suitable opportunity arises, make an investment, acquisition or divestment.

Our treasury team, under the supervision of our chief financial officer, is responsible for setting our funding and treasury policies and objectives. Our exposure to financial market risks relates primarily to changes in interest rates and foreign currency exchange rates. To mitigate these risks, we utilize derivative financial instruments, the application of which is primarily to manage these exposures, and not for speculative purposes.

We have, from time to time, entered into interest rate swap transactions to hedge our interest rate exposure. In addition, we have, from time to time, entered into forward exchange contracts, swap contracts, cross currency swap contracts and European foreign currency options contracts to hedge our existing assets and liabilities denominated in foreign currencies. See “Item 11. Quantitative and Qualitative Disclosures about Market Risk” and notes 7, 9 and 32 to our consolidated financial statements included in this annual report.

## RESEARCH AND DEVELOPMENT

For 2012, 2013 and 2014, our research and development expenditures totaled approximately NT\$7,872.4 million, NT\$9,064.7 million and NT\$10,289.7 million (US\$325.6 million), respectively. These expenditures represented approximately 4.1% of operating revenues in 2012 and 2013, and 4.0% of operating revenues in 2014, respectively. We have historically expensed all research and development costs as incurred and none is currently capitalized. As of January 31, 2015, we employed 7,073 employees in research and development.

### Packaging

We centralize our research and development efforts in packaging technology in our Kaohsiung, Taiwan facilities. After initial phases of development, we conduct pilot runs in one of our facilities before new technologies or processes

are implemented commercially at other sites. Facilities with special product expertise, such as ASE Korea, also conduct research and development of these specialized products and technologies at their sites. One of the areas of emphasis for our research and development efforts is improving the efficiency and technology of our packaging processes and these efforts are expected to continue. We are also putting significant research and development efforts into the development and adoption of innovative technology. We work closely with manufacturers of our packaging equipment and materials in designing and developing the equipment and materials used in our production process. We also collaborate with our significant customers to co-develop new product and process technologies.

## Table of Contents

In addition to investing in the development of advanced package assembly technology and improving production efficiency, a significant portion of our research and development efforts is focused on the development of advanced substrate production technology for BGA packaging. Substrate is the principal raw material for BGA packages. Development and production of advanced substrates involve complex technology. We are currently working closely with certain first-tier substrate suppliers in Asia, primarily including those located in Japan, Taiwan and Korea. We believe that our successful cooperation with substrate suppliers to enhance the overall substrate production capability and to meet future advanced package requirement has enabled us to capture an increasingly important value-added component of the packaging process, helped ensure a stable and cost-effective supply of substrates for our BGA packaging operations and shortened time to market.

### Testing

Our research and development efforts in the area of testing have focused primarily on developing advanced test solutions for customer requirement. These efforts include developing test software of logic/mixed-signal/RF/(2.5D/3D) module SiP /discrete semiconductors, characterization of semiconductors, layout design, electrical simulation for high frequency test board and developing software of parametric test data analysis. We work closely with our customers on the leading edge test technologies, such as 3D IC test and advanced probe test technology such as very fine pitch probe card. Our research and development operations also include an equipment development group, which currently designs testing hardware and software for specific semiconductors to offer our customers cost effective test solutions.

### Electronic manufacturing services

To further enhance the quality of our services and products, we focus on developing diversified and innovative products to improve our competitiveness. By leveraging our proprietary research and development expertise, we are able to provide our customers with high performance and cost-effective products and services by optimizing our product design, engineering and manufacturing capabilities. During the process of designing, as well as developing the technology for, our software and hardware, our research and development team also dedicates itself to discovering new know-how, and then applying such know-how to create new, advanced and improved products, processes, methodology and services. We are currently investing in the development of products used in electronic manufacturing services in relation to computers and peripherals, communications, industrial, automotive, and storage and server applications.

### TREND INFORMATION

Other than as disclosed elsewhere in this annual report, we are not aware of any trends, uncertainties, demands, commitments or events for the period from January 1, 2014 to December 31, 2014 that are reasonably likely to have a material effect on our net revenues, income, profitability, liquidity or capital resources, or that caused the disclosed financial information to be not necessarily indicative of future operating results or financial conditions.

### OFF-BALANCE SHEET ARRANGEMENTS

There are no off-balance sheet arrangements that have or are reasonably likely to have a current or future effect on our financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources that are material to investors.



Table of Contents

## TABULAR DISCLOSURE OF CONTRACTUAL OBLIGATIONS

The following table sets forth the maturity of our contractual obligations as of December 31, 2014.

	Total NT\$	Payments Due by Period			
		Under 1 Year NT\$	1 to 3 Years NT\$	3 to 5 Years NT\$	After 5 Years NT\$
(in millions)					
Contractual Obligations:					
Long-term debt(1)	62,273.3	3,769.8	38,369.2	19,959.0	175.3
Capital lease obligations(2)	5.9	4.6	1.3	–	–
Operating leases(3)	922.0	224.6	181.0	94.5	421.9
Purchase obligations(4)	3,790.7	3,790.7	–	–	–
Total(5)(6)(7)(8)	66,991.9	7,789.7	38,551.5	20,053.5	597.2

- (1) Includes long-term borrowings and bonds payable (before the deduction of unamortized arrangement fees, unamortized issuance cost and discounts on bonds payable) and interest payments.
- (2) Represents our commitments under property leases and imputed interest. These obligations are recorded on our consolidated balance sheets.
- (3) Represents our commitments under leases for land, machinery and equipment such as testers, and office buildings and equipment. See note 35 to our consolidated financial statements included in this annual report.
- (4) Represents unpaid commitments for construction. These commitments were not recorded on our consolidated balance sheets as of December 31, 2014. See note 35 to our consolidated financial statements included in this annual report. Total commitments for construction of buildings were approximately NT\$4,864.0 million (US\$153.9 million), of which NT\$1,073.3 million (US\$34.0 million) had been paid as of December 31, 2014.
- (5) Excludes non-binding commitments to purchase machinery and equipment of approximately NT\$12,634.0 million (US\$399.8 million), of which NT\$443.1 million (US\$14.0 million) had been paid as of December 31, 2014. See note 35 to our consolidated financial statements included in this annual report.
- (6) Excludes our unfunded defined benefit obligation since the schedule of payments is difficult to determine. Under defined benefit pension plans, we made pension contributions of approximately NT\$556.6 million (US\$17.6 million) in 2014, and we estimate that we will contribute approximately NT\$510.4 million (US\$16.2 million) in 2015. See note 21 to our consolidated financial statements included in this annual report.
- (7) Excludes uncertain tax liabilities. We recognized additional taxes payable of NT\$151.2 million (US\$4.8 million) and accrued interest and penalties of NT\$14.1 million (US\$0.4 million) related to uncertain tax positions as of or for the year ended December 31, 2014. Because we were unable to make a reasonable estimate of the timing of the tax audits, such balances were not included in the table.
- (8) Excludes contributions to environmental protection efforts in Taiwan in a total amount of not less than NT\$3,000.0 million to be made in the next 30 years starting January 1, 2014, as approved by our board of directors in December 2013. The contributions are our voluntary commitment to promote environmental protection in Taiwan and not contractual obligations. See “Item 4. Information on the Company—Business Overview—Environmental Matters.”

## Item 6. Directors, Senior Management and Employees

## DIRECTORS AND SENIOR MANAGEMENT

## Directors

Our board of directors is elected by our shareholders in a general meeting at which a quorum, consisting of a majority of all issued and outstanding common shares, is present. The chairman is elected by the board from among the directors. Our nine-member board of directors, including two independent directors, is responsible for the management of our business.

We currently have nine directors, serving a three-year term. The current board of directors began serving on June 22, 2012. The terms of the current directors will expire on June 21, 2015. Directors may serve any number of consecutive terms and may be removed from office at any time by a resolution adopted at a meeting of shareholders. Normally, all board members are elected at the same meeting of shareholders, except where the posts of one-third or more of the directors are vacant, at which time a special meeting of shareholders shall be convened to elect directors to fill the vacancies. We and our subsidiaries do not have service contracts with our directors that provide for benefits upon termination of employment.

Table of Contents

Our board of directors established an audit committee on July 22, 2005 to satisfy the requirements of Rule 10A-3 under the Exchange Act. The audit committee is appointed by the board of directors and currently consists of our independent directors, Shen-Fu Yu and Ta-Lin Hsu, who are independent under Rule 10A-3 and financially literate with accounting or related financial management expertise. The audit committee has responsibility for, among other things, overseeing the qualifications, independence and performance of our independent auditors and the integrity of our financial statements.

Our board of directors established a compensation committee on September 29, 2011 pursuant to the ROC Securities Exchange Act. Under ROC securities regulations, a compensation committee should have at least one independent director who is considered independent under ROC securities regulations. We do not assess the independence of our compensation committee member under the independence requirements of the NYSE listing standards but adopt the independence standard as promulgated under ROC Securities and Exchange Act. See “Item 16G. Corporation Governance” for more information. Our compensation committee currently consists of Shen-Fu Yu, our independent director, Ta-Lin Hsu, our independent director, and Hsiao-Ying Ku. Our compensation committee meets at least twice a year. Our board of directors has adopted an compensation committee charter for our compensation committee. The compensation committee has responsibility for, among other things, setting forth and reviewing policies, systems, standards and structures regarding performance evaluation and compensation of the directors, supervisors and managerial personnel, and evaluating compensation of the directors, supervisors and managerial personnel.

The following table sets forth information regarding all of our directors as of January 31, 2015.

Name	Position	Director Since	Age	Other Significant Positions Held Outside of the ASE Group
Jason C.S. Chang(1)(2)	Director, Chairman and Chief Executive Officer	1984	70	None
Richard H.P. Chang(1)	Director, Vice Chairman and President	1984	68	Chairman, Sino Horizon Holdings Ltd.
Tien Wu(2)	Director and Chief Operating Officer	2003	57	None
Joseph Tung(2)	Director and Chief Financial Officer	1997	56	Independent director, Ta Chong Bank Ltd.
Raymond Lo(3)	Director and General Manager, Kaohsiung packaging facility	2006	60	None
Jeffrey Chen(3)	Director and General Manager of Corporate Affairs and Strategy of China Region	2003	50	None
Rutherford Chang(4)	Director and General Manager of China Region	2009	35	None
Shen-Fu Yu	Independent Director	2009	70	Supervisor, Dynapack International Technology Corporation and independent director, Yulon Motor Co., Ltd.
Ta-Lin Hsu	Independent Director	2009	71	



Chairman and founder,  
H&Q Asia Pacific

- 
- (1) Jason C.S. Chang and Richard H.P. Chang are brothers.
  - (2) Representative of ASE Enterprises Limited, a company organized under the laws of Hong Kong, which held 16.87% of our total outstanding shares as of January 31, 2015. All of the outstanding shares of ASE Enterprises Limited are held by a company organized under the laws of the British Virgin Islands in trust for the benefit of the family of our Chairman and Chief Executive Officer, Jason C.S. Chang, who is the sole shareholder and director of that company.
  - (3) Representatives of J&R Holding Limited, a company organized under the laws of Bermuda, which held 0.59% of our total outstanding shares as of January 31, 2015.
  - (4) Rutherford Chang is the son of Jason C.S. Chang.

Table of Contents

## Supervisors

We currently have five supervisors, each serving a three-year term. The current supervisors began serving on June 22, 2012, and their terms will expire on June 21, 2015. The supervisors' duties and powers include investigation of our business condition, inspection of our corporate records, verification and review of financial statements to be presented by our board of directors at shareholders' meetings, convening of shareholders' meetings under certain circumstances, representing us in negotiations with our directors and notification, when appropriate, to the board of directors to cease acting in contravention of any applicable law or regulation, our Articles of Incorporation or the resolutions of our shareholders' meeting. Each supervisor is elected by our shareholders and cannot concurrently serve as a director, managerial officer or other staff member of ASE Inc. In response to the requirement for a compulsory audit committee announced by the Financial Supervisory Commission, the Company will conduct a reelection of directors at the annual shareholder's meeting in June 2015 and establish an audit committee to replace our current supervisors. According to ROC law, our audit committee will be required to be composed solely of independent directors who are considered independent under the ROC securities regulations. The number of such committee members shall not be less than three.

The following table sets forth information regarding all of our supervisors as of January 31, 2015.

Name	Position	Supervisor Since	Age	Other Significant Positions Held Outside of the ASE Group
David Pan(1)	Supervisor	2012	69	None
Chun-Che Lee (1)	Supervisor	2012	55	None
Tien-Szu Chen(1)	Supervisor	2006	53	None
Yen-Yi Tseng(1)	Supervisor	2000	73	Chairman, ASE Cultural and Educational Foundation
Jerry Chang(2)	Supervisor	2009	37	None

(1) Representative of Hung Ching.

(2) Jerry Chang is the son of Richard H.P. Chang.

In accordance with ROC law, each of our directors and supervisors is elected either in his or her capacity as an individual or as an individual representative of a corporation or government. Persons designated to represent corporate or government shareholders as directors are typically nominated by such shareholders at the annual general meeting and may be replaced as representatives by such shareholders at will. Of the current directors and supervisors, three represent ASE Enterprises Limited, two represent J&R Holding Limited and four represents Hung Ching. The remaining directors and supervisors serve in their capacity as individuals.

## Audit Committee

For a discussion of our audit committee, see “—Directors and Senior Management—Directors.”

## Executive Officers

The following table sets forth information regarding all of our executive officers as of January 31, 2015.

Name	Position	Years with the Company	Age
Jason C.S. Chang	Chairman and Chief Executive Officer	30	70
Richard H.P. Chang	Vice Chairman and President; Chairman, Universal Scientific Shanghai	30	68
Tien Wu	Chief Operating Officer	14	57
Joseph Tung	Chief Financial Officer	20	56
Raymond Lo	General Manager, ASE Test Taiwan; General Manager, Kaohsiung packaging facility	28	60
Rutherford Chang	General Manger, China Region	9	35
Chun-Che Lee	General Manager, ASE Electronics	30	55
Ung Bae	General Manager, ASE Korea	15	58
Chih-Hsiao Chung	General Manager, ASE Japan and Wuxi Tongzhi	15	50
Chiu-Ming Cheng	General Manager, ASES AT	24	54
Chih-An Hsu	General Manager, ASEKS	17	51
Yen-Chieh Tsao	General Manager, ASEWH	3	57
Shih-Kang Hsu	Chief Executive Officer, ASEN	14	49
Kwai Mun Lee	President, ASE South-East Asia operations	16	52
Lid Jian Chiou	General Manager, ASE Singapore Pte. Ltd.	11	58
Kenneth Hsiang	General Manger, ISE Labs	15	44
Chen-Yen Wei	Chairman, Universal Scientific; President, Universal Scientific Shanghai	35	60
Jack Hou	General Manager, UGTW.	20	58
Ta-I Lin	General Manager, UGKS	27	51
Yueh-Ming Lin	General Manager, USISZ	19	49
Hector Escobedo	General Manager, USI Mexico	14	64

Table of Contents

Biographies of Directors, Supervisors and Executive Officers

Jason C.S. Chang has served as Chairman of ASE Inc. since its founding in March 1984 and as its Chief Executive Officer since May 2003. He holds a bachelor's degree in electrical engineering from National Taiwan University and a master's degree from the Illinois Institute of Technology. He is the brother of Richard H.P. Chang, our Vice Chairman and President.

Richard H.P. Chang has served as Vice Chairman of ASE Inc. since November 1999 after having served as President of ASE Inc. since its founding in March 1984, and served as Chief Executive Officer of ASE Inc. from July 2000 to April 2003. In February 2003, he was again appointed President of ASE Inc. upon the retirement of Mr. Leonard Y. Liu. Mr. Chang has also served as the Chairman of Universal Scientific Shanghai since June 2008. He holds a bachelor's degree in industrial engineering from Chung Yuan Christian University of Taiwan. He is the brother of Jason C.S. Chang, our Chairman and Chief Executive Officer.

Tien Wu has served as a director of ASE Inc. since June 2003 and Chief Operating Officer since April 2006, prior to which he served as the President of Worldwide Marketing and Strategy of the ASE Group. Prior to joining ASE Inc. in March 2000, Mr. Wu held various managerial positions with IBM. He holds a bachelor's degree in computer engineering from National Taiwan University, a master's degree in mechanical engineering and a doctorate degree in applied mechanics from the University of Pennsylvania.

Joseph Tung has served as a director of ASE Inc. since April 1997 and Chief Financial Officer since December 1994. He is also an independent director of Ta Chong Bank Ltd. since October 2007. Before joining ASE Inc., Mr. Tung was a Vice President at Citibank, N.A. He received a bachelor's degree in economics from the National ChengChi University of Taiwan and a master's degree in business administration from the University of Southern California.

Raymond Lo has served as a director of ASE Inc. and General Manager of our packaging facility in Kaohsiung, Taiwan since April 2006. Mr. Lo also served as a supervisor of ASE Inc. between July 2000 and April 2006. Before joining ASE Group, Mr. Lo was the Director of Quality Assurance at Zeny Electronics Co. He holds a bachelor's degree in electronic physics from the National Chiao-Tung University of Taiwan.

Jeffrey Chen has served as a director of ASE Inc. since June 2003 and General Manager of Corporate Affairs and Strategy of China Region. Prior to joining ASE Inc., he worked in the corporate banking department of Citibank, N.A. in Taipei and as a Vice President of corporate finance at Bankers Trust in Taipei. He holds a bachelor's degree in finance and economics from Simon Fraser University in Canada and a master's degree in business administration from the University of British Columbia in Canada.

Rutherford Chang has served as a director of ASE Inc. since June 2009 and General Manager of China Region of ASE Group since June 2010. He joined ASE Group in March 2005. Mr. Chang received a bachelor's degree in psychology from Wesleyan University in Connecticut. He is the son of Jason C.S. Chang, our Chairman and Chief Executive Officer.

Table of Contents

Shen-Fu Yu has served as an independent director of ASE Inc. since June 2009. He is also a supervisor of Dynapack International Technology Corporation and an independent director of Yulon Motor Co., Ltd. He worked in Deloitte & Touche Accounting Firm as a consultant from June 2003 to November 2006. He received a bachelor's degree in Accounting in National Taiwan University and a master's degree in Accounting from National ChengChi University.

Ta-Lin Hsu has served as an independent director of ASE Inc. since June 2009. He is currently the chairman and founder of H&Q Asia Pacific. He received a bachelor's degree in physics from National Taiwan University, a master's degree in electrophysics from the Polytechnic Institute of Brooklyn and a doctorate degree in Electrical Engineering from the University of California at Berkeley.

David Pan has served as a supervisor of ASE Inc. since June 2012. Mr. Pan has served as the Chief of Staff and Chief Information Officer of ASE Group since 2007. He was the General Manager at ASE Malaysia in 1994 and President of ASE Test from 1995 to 2003. Prior to joining ASE Group, he was the Vice President of Operations and Engineering at Ultratech Stepper in Santa Clara, CA, U.S.A. Mr. Pan holds a MS degree in Engineering Physics from University of Illinois, Urbana, IL and a Ph.D. in Physics from University of California, Berkeley.

Chun-Che Lee has served as a supervisor of ASE Inc. since June 2012. He has also served as General Manager of ASE Electronics since August 2011, prior to which he was a vice president, director and manager of research and development at ASE Inc. since 1984. Mr. Lee holds a bachelor's degree in aeronautic from Tamkung University of Taiwan.

Tien-Szu Chen has served as a supervisor of ASE Inc. since June 2006. Prior to his current position, Mr. Chen held several key management positions during his career with ASE Group from June 1988 to June 2006, including President of Power ASE Technology Inc., President of ASE Inc. Chung-Li branch and Senior Vice President of ASE Inc. Prior to joining ASE Group in June 1988, Mr. Chen worked at TSMC and Philips Semiconductor Kaohsiung. Mr. Chen holds a bachelor's degree in industrial engineering from Chung Yuan Christian University in Taiwan.

Yen-Yi Tseng has served as a supervisor of ASE Inc. since July 2000. He has served as the Chairman of ASE Cultural & Educational Foundation since October 2014 and Chairman of Hung Ching from July 2002 to July 2014. Mr. Tseng served as President of Ret-Ser Engineering Agency from 1991 to 1998. He holds a bachelor's degree in civil engineering from National Taiwan University and a master's degree in system engineering from Asian Institute of Technology in Thailand. He was also a participant in the Program for Management Development at Harvard Business School.

Jerry Chang has served as a supervisor of ASE Inc. since June 2009. Prior to joining ASE Inc., he was an analyst at Morgan Stanley Asia. He received a bachelor's degree in political economy from Williams College in Massachusetts. He is the son of Richard H.P. Chang, our Vice Chairman and President.

Ung Bae has served as General Manager of ASE Korea since July 2008, after serving as Senior Vice President of ASE Korea since July 1999. Mr. Bae was Vice President of Motorola Korea, Limited before joining ASE Korea when we acquired Motorola Korea, Limited. He holds a degree in electronic engineering from the In-Ha university of Korea.

Chih-Hsiao Chung has served as General Manager of ASE Japan since March 2011 and General Manager of Wuxi Tongzhi since June 2013. Mr. Chung has also managed the sales and marketing of ASE Japan region since April 2007. Before joining ASE Group, Mr. Chung was the Senior Manager of Sale and Marketing at Kimberly Clark Co., Taiwan. He holds a master's degree in business administration from the University of Wisconsin-Madison.

Chiu-Ming Cheng has served as General Manager of ASES AT since September 2012, after serving as Vice President of ASE's Kaohsiung packaging facility since October 2004. He joined ASE Group in April, 1990. Mr. Cheng holds a master's degree in Public Policy from National Sun Yat-Sen University.

Chih-An Hsu has served as General Manager of ASEKS since July 2012, after serving as Vice President of ASE's Chung-Li since July 2006. He joined ASE Group in February 1997. Mr. Hsu holds a bachelor's degree in Industrial Engineering from National Tsing Hua University of Taiwan.

Table of Contents

Yen-Chieh Tsao has served as General Manager of ASEWH since October 2013 after serving as Vice President of ASE's Chung-Li since October 2011. Mr. Tsao was the Vice President of Motorola Electronics Taiwan Ltd. prior to joining ASE Group. He holds a bachelor's degree in Physics from the Chinese Culture University in Taiwan.

Shih-Kang Hsu has served as Chief Executive Officer of ASEN since August 2010, after serving as Senior Vice President of ASE (U.S.) Inc. since June 2006. He joined ASE Group in June 2000. Mr. Hsu holds a master's degree in Mechanical Engineering from Case Western Reserve University.

Kwai Mun Lee has served as President of our Southeast Asia operations, with responsibility for the operations of our Penang, Malaysia and Singapore manufacturing facilities, since March 2006. Before joining the ASE Group, Mr. Lee held senior management positions at Chartered Semiconductor and STATSChipPAC. He started his career as an engineer at Intel. He holds a degree in engineering from the Swinburne Institute of Technology in Australia.

Lid Jian Chiou has served as General Manager of ASE Singapore Pte. Ltd. since September 2010 after serving as Senior Director of Operations since November 2003. Prior to that, he worked several years with Texas Instruments and Chartered Semiconductor. Mr. Chiou holds a master's degree in business administration from State University of New York and a bachelor's degree in Engineering from University of Strathclyde (UK).

Kenneth Hsiang has served as General Manager of ISE Labs since June 2004. Prior to joining ASE Group in November 1999, Mr. Hsiang worked in management positions within finance and strategic analysis in the healthcare and biotech industries in the San Francisco Bay area in California. He also worked for Price Waterhouse LLP as a Certified Public Accountant. Mr. Hsiang received a bachelor's degrees in Economics & Rhetoric from the University of California at Berkeley.

Chen-Yen Wei has served as Chairman of Universal Scientific Industrial Co., Ltd. since July 2014 and President of Universal Scientific Shanghai since April 2008. He joined USI as an engineer in August 1979. He holds a bachelor's degree in Communication Engineering from National Chiao Tung University.

Jack Hou has served as General Manager of UGTW since January 2010 and Vice President of Automotive & Visual Product Devices Business Unit of Universal Scientific since April 2012. He joined USI as a section manager in February 1994. He holds a master's degree in Biomedical Engineering from Ohio State University.

Ta-I Lin has served as General Manager of UGKS since August 2011. He joined USI as an engineer in August 1987. He holds a bachelor's degree in Electrical Engineering from National Cheng Kung University and an Executive Master of Business Administration from Peking University.

Yueh-Ming Lin has served as General Manager of USISZ since January 2015 and Senior Director of Global Operation Management (Shenzhen) Division of USISZ since March 2014. He joined USI as a section manager in October 1995. He holds a bachelor's degree in Electrical Engineering from Feng Chia University.

Hector Escobedo has served as General Manager of USI Mexico since January 2002. Mr. Escobedo has worked in the electronics industry for over 43 years in various technical and manufacturing management roles. He holds a bachelor's degree in Electrical Engineering from the University of Texas at El Paso.

The business address of our directors, supervisors and executive officers is our registered office.

COMPENSATION

In 2014, we paid to our directors, supervisors and executive officers approximately NT\$1,044.1 million (US\$33.0 million) in cash remuneration. We did not pay any remuneration in kind to our directors, supervisors or executive officers in 2014. In 2014, we accrued pension costs of NT\$16.6 million (US\$0.5 million) for retirement benefits for our management. The remuneration of our independent directors is set at NT\$2.0 million per person per year. In addition, according to our Articles of Incorporation, not more than 1% of our annual net earnings (after recovering any losses incurred in prior years and deducting the legal reserve, special reserve provisions and other items as required under ROC law, if any) may be distributed as bonuses to our directors and supervisors. 7% to 11% of our annual net earnings (after recovering any losses incurred in prior years and deducting the legal reserve, special reserve provisions and other items as required under ROC law, if any) may be distributed as a bonus to employees, including executive officers.



## Table of Contents

We have not provided any loans to or guarantees for the benefit of any of our directors, supervisors or executive officers. For information regarding our pension and other retirement plans and those of our subsidiaries, see note 21 to our consolidated financial statements included in this annual report.

### ASE Inc. Employee Bonus and Stock Option Plans

We award bonuses to employees of ASE Inc. and its subsidiaries who are located in Taiwan based on overall income and individual performance targets. Prior to 2009, these employees were eligible to receive bonuses in the form of our common shares valued at par. Beginning in 2009, employees are eligible to receive bonuses in the form of our common shares valued at the closing price (after adjustment with consideration of the effects on the share price, if any, brought by cash and stock dividends resolved at shareholders' meetings) of our common shares on the day prior to our shareholders' meeting. Actual amounts of bonuses to individual employees are determined based upon the employee meeting specified individual performance objectives. We granted aggregate values of NT\$1,235.3 million, NT\$1,147.2 million and NT\$1,587.3 million (US\$50.2 million) as cash bonus to our employees in 2012, 2013 and 2014, respectively.

We currently maintain three option plans, adopted in 2004, 2007 and 2010. The option plan adopted in 2002 expired in August 2013. Pursuant to these plans, our full-time employees, including domestic and foreign subsidiaries, are eligible to receive stock option grants. Each option entitles the holder to purchase one ASE Inc. common share at a price equal to (for the 2004 and 2007 plans), or not less than (for the 2010 plan), the closing market price on the date of the option issuance, such exercise price being subject to retroactive adjustment in the event of certain capital transactions in subsequent periods. Each option is valid for ten years from the date of the grant. 40.0% of the options originally granted vest upon the second anniversary of the grant date, and an additional 10.0% of the options originally granted vest every six months thereafter. Each option expires at the end of the tenth year following its grant date. The options are generally not transferable. As of December 31, 2014, a total of 139,917,000 options had been granted under the 2004 plan, 124,917,000 of which had an original exercise price of NT\$26.60 per share (currently adjusted to NT\$13.5 per share) and 15,000,000 of which had an original exercise price of NT\$20.55 per share (currently adjusted to NT\$11.1 per share). As of December 31, 2014, a total of 185,806,000 options had been granted under the 2007 plan. The original exercise price under the 2007 plan was NT\$30.65 per share (currently adjusted to NT\$21.1 per share). As of December 31, 2014, a total of 199,999,500 options had been granted under the 2010 plan, 187,719,500 of which had an original exercise price of NT\$28.6 per share (currently adjusted to NT\$20.4 per share) and 12,280,000 of which had an original exercise price of NT\$28.75 per share (currently adjusted to NT\$22.6 per share). In December 2014, the board of directors approved the 5th employee share option plan under which 100,000,000 options will be granted.

### ASE Mauritius Inc. Share Option Plan

As of December 31, 2014, ASE Mauritius Inc. maintained one option plan adopted in 2007. Under this plan, certain employees of ASE Mauritius Inc. and the ASE Group are granted options to purchase ordinary shares of ASE Mauritius Inc. at an exercise price of US\$1.7, which exercise price was determined by taking into account a fairness opinion rendered by an independent appraiser and was reviewed by our accountants. Each option is valid for ten years from the date of the grant. As of December 31, 2014, a total of 30,000,000 options had been granted under this plan with an exercise price of US\$1.7.

### USI Enterprise Limited Share Option Plans

USI Enterprise Limited maintains three option plans adopted in 2007, 2010 and 2011, under which certain employees of Universal Scientific and our employees were granted options to purchase common shares of USI Enterprise

Limited. Each option under these three plans is valid for ten to twelve years from the date of the grant. As of December 31, 2014, we had 16,704,500 options outstanding with an exercise price of US\$1.53 per share, 8,761,000 options outstanding with an exercise price of US\$2.42 per share and 8,693,000 options outstanding with an exercise price of US\$2.94 per share under these three plans respectively.

Table of Contents

## BOARD PRACTICES

## General

For a discussion of the term of office of the board of directors, see “—Directors and Senior Management.” No benefits are payable to members of the board or the executive officers upon termination of their relationship with us.

## Supervisors

Pursuant to ROC Securities Exchange Act, public companies can elect to establish an audit committee or have supervisors to perform duties described below. We currently have five supervisors, each serving a three-year term. The current supervisors began serving on June 22, 2012, and their terms will expire on June 21, 2015. In order to comply with the ROC securities regulations, we will replace our supervisors by our audit committee after the election of new directors at our annual general shareholders’ meeting scheduled in June 2015. After we amend our Articles of Incorporation at our annual general shareholders’ meeting scheduled in June 2015, provisions regarding supervisors under our Articles of Incorporation will subsequently cease to apply. The supervisors’ duties and powers include investigation of our business condition, inspection of our corporate records, verification and review of financial statements to be presented by our board of directors at shareholders’ meetings, convening of shareholders’ meetings under certain circumstances, representing us in negotiations with our directors and notification, when appropriate, to the board of directors to cease acting in contravention of any applicable law or regulation, our Articles of Incorporation or the resolutions of our shareholders’ meeting. See “—Directors and Senior Management—Supervisors.”

## Compensation Committee

For a discussion of our compensation committee, see “—Directors and Senior Management—Directors.”

## EMPLOYEES

The following table sets forth certain information concerning our employees as of the dates indicated.

	As of December 31,		
	2012	2013	2014
Total	57,259	60,199	68,100
Function			
Direct labor	32,196	33,794	38,588
Indirect labor (manufacturing)	14,158	14,518	16,620
Indirect labor (administration)	4,760	5,580	5,941
Research and development	6,145	6,307	6,951
Location			
Taiwan	27,763	30,552	35,382
PRC	21,627	21,360	24,223
Korea	2,985	2,964	2,900
Malaysia	2,384	2,672	2,752
Japan	787	693	588
Singapore	1,023	1,068	1,059
United States	356	376	383
Others	334	514	813

The increase in our employee count in 2014 was primarily due to our business expansion.

Eligible employees may participate in our employee share bonus plan and stock option plans and our subsidiaries' share option plans, such as the option plans adopted by ASE Mauritius and USI Enterprise Limited. See “—Compensation.”

We have never experienced a work stoppage caused by our employees. We believe that our relationship with our employees is good.

Table of Contents

## SHARE OWNERSHIP

The following table sets forth certain information with respect to our common shares and options of ASE Inc. exercisable for our common shares held by our directors, supervisors and executive officers as of January 31, 2015. Percentage of beneficial ownership is based on 7,866,207,746 common shares outstanding as of January 31, 2015.

Director, Supervisor or Executive Officer	Number of ASE Inc. Common Shares Beneficially Held(1)	Percentage of ASE Inc. Total Common Shares Issued and Outstanding		Number of Options Exercisable(2)	Exercise Price of Options (NT\$)	Expiration Date of Options
Jason C.S. Chang	1,743,979,181 (3)	22.17	%	16,300,000	20.40-21.10	2017/12/19 – 2020/5/6
Richard H.P. Chang	226,144,287	2.87	%	9,050,000	20.40-21.10	2017/12/19 – 2020/5/6
Tien Wu	3,853,386	*		*	20.40-21.10	2017/12/19 – 2020/5/6
Joseph Tung	4,226,823	*		*	20.40-21.10	2017/12/19 – 2020/5/6
Raymond Lo	2,566,825	*		*	20.40-21.10	2017/12/19 – 2020/5/6
Jeffrey Chen	1,044,802	*		*	20.40-21.10	2017/12/19 – 2020/5/6
Rutherford Chang	1,779,708	*		*	20.40-21.10	2017/12/19 – 2020/5/6
Shen-Fu Yu	4,632	*		0	-	-
Ta-Lin Hsu	0	0	%	0	-	-
David Pan	1,018,229	*		*	20.40-21.10	2017/12/19 – 2020/5/6
Chun-Che Lee	2,944,502	*		*	20.40-21.10	2017/12/19 – 2020/5/6
Tien-Szu Chen	1,122,054	*		*	20.40-21.10	2017/12/19 – 2020/5/6
Yen-Yi Tseng	186,894	*		*	20.4	2020/5/6
Jerry Chang	217,860	*		*	20.40-21.10	2017/12/19 – 2020/5/6
Ung Bae	0	0	%	*	20.40-21.10	2017/12/19 – 2020/5/6
Chih-Hsiao Chung	62,230	*		*	20.40-21.10	2017/12/19 – 2020/5/6
Chiu-Ming Cheng	274,140	*		*	20.40-21.10	2017/12/19 – 2020/5/6
Chih-An Hsu	0	0	%	*	20.40-21.10	2017/12/19 – 2020/5/6
Yen-Chieh Tsao	0	0	%	0	-	-
Shih-Kang Hsu	464,688	*		*	20.4	2020/5/6

Kwai Mun Lee	0	0	%	*	20.40-21.10	2017/12/19 – 2020/5/6
Lid Jian Chiou	0	0	%	*	20.40-21.10	2017/12/19 – 2020/5/6
Kenneth Hsiang	155,000	*		*	20.40-21.10	2017/12/19 – 2020/5/6
Chen-Yen Wei	710,053	*		0	-	-
Jack Hou	107,558	*		0	-	-
Ta-I Lin	0	0	%	0	-	-
Yueh-Ming Lin	0	0	%	0	-	-
Hector Escobedo	0	0	%	0	-	-

- (1) Including shares directly held and shares beneficially owned through spouse and minor children.
- (2) Each option may be converted into one of our common shares. The figures referred herein include options convertible into our common shares scheduled to vest within 60 days as of the date hereof.
- (3) Including 1,327,202,773 common shares Jason C.S. Chang beneficially owned through ASE Enterprises Limited and 321,454,196 common shares beneficially owned through Value Tower Limited, respectively, and 95,322,212 common shares Jason C.S. Chang directly owned. See “Item 7. Major Shareholders and Related Party Transactions—Major Shareholders.”

\*The sum of the number of common shares held and the number of common shares issuable upon exercise of all options held is less than 1.0% of our total outstanding shares.

#### Item 7. Major Shareholders and Related Party Transactions

##### MAJOR SHAREHOLDERS

The following table sets forth information known to us with respect to the beneficial ownership of our common shares, as of January 31, 2015, by each shareholder known by us to beneficially own more than 5.0% of our total outstanding shares.

Table of Contents

Beneficial ownership is determined in accordance with the rules and regulations of the SEC. Percentage of beneficial ownership is based on 7,866,207,746 common shares outstanding as of January 31, 2015. In addition, in computing the number of shares beneficially owned by a person and the percentage ownership of that person, we have included shares that the person has the right to acquire within 60 days, including through the exercise of any option, warrant or other right or the conversion of any other security. These shares, however, are not included in the computation of the percentage ownership of any other person.

Name of Shareholder or Group	Common Shares Beneficially Owned	
	Number	Percentage
Jason C.S. Chang(1)	1,760,279,181	22.33 %
BlackRock, Inc.(2)	411,225,959	5.23 %

(1) Jason C.S. Chang is our Chairman and Chief Executive Officer. Jason C. S. Chang beneficially owned 1,327,202,773 common shares through ASE Enterprises Limited and 321,454,196 common shares through Value Tower Limited, respectively, and directly owned 95,322,212 common shares, vested options convertible into 15,540,000 common shares and options convertible into 760,000 common shares scheduled to vest on May 6, 2015, within 60 days as of the date hereof. As a result, Jason C.S. Chang beneficially owned 1,760,279,181 common shares, representing 22.33% of our total outstanding shares on an adjusted basis (based on 7,882,507,746 common shares which were adjusted to reflect 7,866,207,746 shares outstanding as of January 31, 2015, plus 16,300,000 common shares Jason C.S. Chang may receive upon exercise of options granted to him which are vested or vesting within 60 days of the date hereof). ASE Enterprises Limited is a company organized under the laws of Hong Kong. All of the outstanding shares of ASE Enterprises Limited are held by a company organized under the laws of the British Virgin Islands in trust for the benefit of the family of Jason C.S. Chang, who is the sole shareholder and director of that company. Value Tower Limited is a company organized under the laws of the British Virgin Islands. Jason C.S. Chang is the sole shareholder and director of Value Tower Limited. During the period from May 30, 2011 to May 23, 2012, Jason C.S. Chang acquired 1.04% of our then-outstanding total common shares. Other than the above, there were no significant changes in the percentage of ownership beneficially owned by Jason C.S. Chang in 2012, 2013 and 2014.

(2) BlackRock, Inc. is a corporation organized under the laws of the State of Delaware, United States. According to the Schedule 13G filed with the SEC on February 3, 2015, BlackRock, Inc. beneficially owns 411,225,959 as of December 31, 2014. We do not have further information on any changes in BlackRock, Inc.'s ownership of our shares subsequent to December 31, 2014.

The following table sets forth information relating to our common shares held directly by our consolidated subsidiaries and our equity method investee as of January 31, 2015.

Name of Shareholder	Common Shares Beneficially Owned	
	Number	Percentage
ASE Test(1)	88,200,472	1.12%
ASE Test Taiwan(2)	10,978,776	0.14%
J&R Holding Limited(3)	46,703,763	0.59%
Hung Ching(4)	85,588,293	1.09%

- (1) ASE Test is our wholly-owned subsidiary. ASE Test's ownership of our common shares is the result of the merger of ASE Chung Li with and into us in August 2004, and subsequent dividends upon shares received in connection with this merger. In order to comply with Singapore Companies Act, a trust was established to hold and dispose our common shares issued to ASE Test, a Singaporean Company, upon completion of the merger. The trustee appointed under such trust arrangement is currently our registered shareholder for our common shares issued to ASE Test. See "—Related Party Transactions."
- (2) ASE Test Taiwan is our wholly-owned subsidiary. ASE Test Taiwan's ownership of our common shares is mainly the result of the merger of ASE Material with and into us in August 2004, and subsequent dividends upon shares received in connection with this merger. In order to comply with Singapore Companies Act, a trust had been established to hold and dispose our common shares issued to ASE Test Taiwan, which had been a subsidiary of ASE Test, upon completion of the merger. In December 2014, the trust established to hold the common shares issued to ASE Test Taiwan had been terminated because ASE Test Taiwan was no longer a subsidiary owned by ASE Test and therefore no longer subject to Singapore Companies Act requirements. As a result, ASE Test Taiwan directly owned 10,978,776 of our common shares as of January 31, 2015. See "—Related Party Transactions."
- (3) J&R Holding Limited is our wholly-owned subsidiary. J&R Holding Limited's ownership of our common shares is the result of the merger of ASE Chung Li with and into us in August 2004, and subsequent dividends upon shares received in connection with this merger.
- (4) Hung Ching is our equity method investee. As of January 31, 2015, we held 26.22% of the outstanding shares of Hung Ching. Hung Ching acquired our common shares in open market transactions and subsequent dividends upon the acquired shares.

As of January 31, 2015, none of our major shareholders had voting rights different from those of our other shareholders. We are not aware of any arrangement that may at a subsequent date result in a change of control of us. Furthermore, other than disclosed above, we are not aware of any significant changes in the percentage of ownership held by our major shareholders in 2012, 2013 and 2014.



## Table of Contents

As of January 31, 2015, a total of 7,866,207,746 common shares were outstanding. With certain limited exceptions, holders of common shares that are not ROC persons are required to hold their common shares through a brokerage account in the ROC. As of January 31, 2015, 628,656,885 common shares were registered in the name of a nominee of Citibank, N.A., the depositary under our ADS deposit agreement. Citibank, N.A., has advised us that, as of January 31, 2015, 125,731,066 ADSs, representing 628,655,330 common shares, were held of record by Cede & Co., and 310 ADSs, representing 1,550 common shares, were held by 11 other U.S. persons. The remaining 5 common shares held by Citibank, N.A. for the Company are a result of fractional shares distributed during stock distributions on our common shares underlying the ADSs.

## RELATED PARTY TRANSACTIONS

In recent years, we have awarded cash bonuses to the employees of our subsidiaries as part of their compensation, based in part on our consolidated net income and the subsidiaries' contribution to our consolidated income. We expect to continue this practice in the future.

In order to comply with Singapore law and other applicable laws and regulations, trusts organized under ROC law were established to hold and dispose of our common shares issued to ASE Test and ASE Test Taiwan in connection with the merger of ASE Chung Li and ASE Material into our company in August 2004. Under Section 76(1)(b)(ii) of Singapore's Companies Act, Chapter 50, ASE Test, a Singapore company, may not purport to acquire, directly or indirectly, shares or units of shares in our company, ASE Test's parent company. Pursuant to the applicable trust agreements, the trustee under each trust is (1) the registered owner of our common shares, (2) authorized to exercise all of the rights as a shareholder of our common shares, (3) authorized to sell our common shares, subject to market conditions, when such common shares become available for resale under ROC law and in accordance with volume limitations under ROC law, at its sole discretion; provided such common shares are sold (i) in compliance with ROC laws and regulations, (ii) in an orderly manner in order to minimize the impact on the trading price of our common shares, and (iii) in a manner consistent with its fiduciary duties owed to ASE Test and (4) able to transfer and deliver to ASE Test or ASE Test Taiwan the proceeds from the sale of our common shares and any cash dividends distributed, as the case may be. In February 2010, to complete the tender offer to acquire Universal Scientific, ASE Test transferred 141,808,499 shares to the shareholders of Universal Scientific. Neither ASE Test nor ASE Test Taiwan have any rights with respect to our common shares held in trust pursuant to the applicable trust agreements other than the right to receive the proceeds from the sale of such common shares and cash dividends declared while the shares remain in trust. In December 2014, the trust established to hold the common shares issued to ASE Test Taiwan had been terminated because ASE Test Taiwan was no longer a subsidiary owned by ASE Test and therefore no longer subject to Singapore Companies Act requirements. As a result, ASE Test Taiwan directly owned 10,978,776 of our common shares as of January 31, 2015 and the trust established to hold the common shares issued to ASE Test held 88,200,472 of our common shares.

We have historically provided promissory notes as guarantees to some of our subsidiaries. As of December 31, 2014, we endorsed and guaranteed the bonds issued by our subsidiaries, Anstock Limited, in the amount of RMB542.3 million (US\$87.4 million) and Anstock II Limited, in the amount of US\$319.1 million, respectively. Other than such guarantee, we have no other contingent obligations.

In May 2012, we and ASE Test Taiwan acquired the K12 factory-administration building in Nantze Export Processing Zone, Taiwan, from Hung Ching for a consideration of NT\$1,429.7 million.

In December 2013, we acquired the K21 factory-administration building in Nantze Export Processing Zone, Taiwan, from Hung Ching for a consideration of NT\$1,473.9 million.

In July 2014, we acquired factory-administration building in Chung Li, Taiwan, from Hung Ching for a consideration of NT\$4,540.1 million (US\$143.7 million).

In 2014, a series of construction projects for which we contracted with Fu Hwa Construction Co., Ltd. for the construction of buildings with green design concept and other projects in Nantze Export Processing Zone, Taiwan, have been completed with a total consideration of NT\$350.0 million (US\$11.1 million).

## Table of Contents

In August 2014, we made the donation of NT\$15.0 million (US\$0.5 million) to Social Affairs Bureau of Kaohsiung City Government through ASE Cultural and Educational Foundation. In addition, in order to demonstrate our commitment to environmental protection, in December 2013, our board of directors approved contributions to environmental protection efforts in Taiwan in a total amount of not less than NT\$3,000.0 million, to be made in the next 30 years. For the year ended December 31, 2014, we have made contributions in the amount of NT\$100.0 million (US\$3.2 million) through ASE Cultural and Educational Foundation to fund various environmental projects and our board of directors have resolved in a resolution in January 2015 to contribute NT\$100.0 million (US\$3.2 million) through ASE Cultural and Educational Foundation in environmental projects in 2015.

## INTERESTS OF EXPERTS AND COUNSEL

Not applicable.

## Item 8. Financial Information

### CONSOLIDATED STATEMENTS AND OTHER FINANCIAL INFORMATION

Consolidated financial statements are set forth under “Item 18. Financial Statements.”

### Export Sales

We categorize our revenues geographically based on the country in which the customer is headquartered. Revenues from our export sales were NT\$160,529.3 million, NT\$188,585.3 million and NT\$219,843.7 million (US\$6,957.1 million) in 2012, 2013 and 2014, respectively, which contributed 82.7%, 85.8% and 85.7% of our total sales volume for those periods, respectively. See “Item 4—Information on the Company—Business Overview—Sales and Marketing” for information on our export sales.

### Legal Proceedings

#### Tessera Patents

On February 1, 2006, Tessera filed an amended complaint in the United States District Court for the Northern District of California adding Advanced Semiconductor Engineering, Inc. and ASE (U.S.) Inc., (collectively referred to as “ASE” for purposes of this paragraph) and other companies to a suit alleging that ASE’s and the 13 other defendants’ manufacturing, use, importation, offer for sale, and sale of various packaged semiconductor products infringed five patents owned by Tessera relating to certain types of semiconductor chip packaging, and/or breached technology license agreements regarding certain types of semiconductor chip packages between Tessera and certain defendants, including ASE. Tessera sought, among other things, monetary damages and injunctive relief in the lawsuit.

On May 15, 2007, at Tessera’s request, the ITC instituted an investigation, or ITC Investigation No. 605, of certain of ASE’s co-defendants and other companies, including certain of ASE’s customers, but not ASE and the other contract chip packagers that were included as defendants in the California case. On May 20, 2009, the ITC issued its final determination, finding infringement of both asserted patents by the accused semiconductor packages. The ITC’s determination was affirmed by the Court of Appeals for the Federal Circuit on December 21, 2010, and the United States Supreme Court denied a petition for writ of certiorari on November 28, 2011.

On April 21, 2008, Tessera filed an ITC complaint against ASE and the other contract chip packagers that were included as defendants in the California case, and on May 21, 2008, the ITC instituted a new investigation against

them, which involved three patents also asserted in the original California case, as well as one newly-asserted patent. On August 4, 2008, ASE, Inc., ASE (U.S.) Inc. and ASE Test filed an action in the United States District Court for the Northern District of California against Tessera seeking a declaratory judgment of non-infringement and invalidity of the patent newly asserted by Tessera in the ITC. On December 19, 2008, the court stayed the declaratory judgment action in response to a joint motion of the parties. On August 7, 2009, the ITC terminated the investigation in response to Tessera's motion to terminate, without the issuance of an exclusion order or any other remedy.

## Table of Contents

On January 4, 2012, the court held a case management conference where the stay was lifted in both California district court cases – the original 2006 case, and the 2008 declaratory judgment case. The 2008 declaratory judgment action was voluntarily dismissed shortly after the stay was lifted. After the stay was lifted in the original 2006 case, Tessera narrowed its infringement accusations by dropping three of the five originally-asserted patents. Moreover, ASE further narrowed the scope of the case by successfully moving for summary judgment against certain aspects of Tessera’s breach of license claim.

In February 2014, ASE reached a term sheet agreement with Tessera to fully resolve the remaining legal proceedings between each other, under which ASE would pay a total of US\$30.0 million to Tessera, which was fully recognized in the fourth quarter of 2013, and both Tessera and ASE would dismiss all pending claims against each other. The final settlement agreement was entered into among the parties in October 2014 and the final settlement amount was reduced to US\$27.0 million. In October 2014, the United States District Court for the Northern District of California dismissed all claims between Tessera and ASE. We have fully paid the settlement amount in January 2015 and reversed the settlement amount of US\$3.0 million in the fourth quarter of 2014.

### K7 Plant Wastewater Discharge

In December 2013, the Kaohsiung City Environmental Protection Bureau ordered us to suspend the operations at our K7 Plant’s wafer-level process where nickel is used for alleged wastewater discharge violations and fined us NT\$110.1 million for which we recognized as other income and expenses in December 2013 and paid in full in January 2014. In April 2014, the amount of the fine was reduced NT\$109.4 million (US\$3.5 million) by the Kaohsiung City Environmental Protection Bureau. We received the refund of NT\$0.7 million (US\$0.02 million) and recorded the reversal of loss in September 2014. We have been actively working with the Kaohsiung City Environmental Protection Bureau and implemented improvement plans to enhance our wastewater discharge processes since this incident. Following a series of examinations, hearings and trial runs as ordered by the Kaohsiung City Environmental Protection Bureau during 2014, in December 2014, the Kaohsiung City Environmental Protection Bureau lifted the suspension order and approved the full resumption of operation of our K7 Plant.

With respect to the NT\$109.4 million (US\$3.5 million) administrative penalty imposed on us by the Kaohsiung City Environmental Protection Bureau, we appealed the case to the Kaohsiung High Administrative Court in August 2014 to revoke the Kaohsiung City Government’s decision and to lift the administrative penalty. In connection with the same alleged wastewater discharge violations at our K7 plant, the Kaohsiung District Court ruled against us and imposed on us a criminal penalty of NT\$3.0 million (US\$0.1 million) for which we recognized as other income and expenses in October 2014. We appealed the case to the Taiwan High Court Kaohsiung District Branch in November 2014. While we are defending these proceedings vigorously, the ultimate outcome of these proceedings cannot be predicted with certainty. Any penalties, fines, damages or settlements made in connection with these criminal, civil, and/or administrative investigations and/or lawsuits may have a material adverse effect on our business, results of operations and future prospects. See “Item 3. Key Information—Risk Factors—Risks Relating to Our Business—Any environmental claims or failure to comply with any present or future environmental regulations, as well as any fire or other industrial accident, may require us to spend additional funds and may materially and adversely affect our financial condition and results of operations,” “Item 4. Information on the Company—Business Overview—Environmental Matters” and “Item 4. Information on the Company—Property, Plants and Equipment.”

### Dividends and Dividend Policy

We have historically paid dividends on our common shares with respect to the results of the preceding year following approval by our shareholders at the annual general meeting of shareholders. We have paid annual dividends on our common shares since 1989, except in 2002 and 2006 when we did not pay any dividend due to the losses we incurred

in the 2001 and 2005 fiscal years, respectively. Our board of directors has not yet approved the appropriation of 2014 earnings as of the date of this annual report.

Table of Contents

The following table sets forth the stock dividends paid during each of the years indicated and related information.

	Cash Dividends Per Common Share NT\$	Stock Dividends Per Common Share(1) NT\$	Total Common Shares Issued as Stock Dividends	Outstanding Common Shares on Record Date(2)	Percentage of Outstanding Common Shares Represented by Stock Dividends	
2007	1.48	1.48	694,101,071	4,645,295,431	14.9	%
2008	1.71	0.29	158,766,146	5,484,848,118	2.9	%
2009	0.50	–	–	5,474,320,814	–	
2010	0.36	1.00	549,497,078	5,500,216,994	10.0	%
2011	0.65	1.15	695,735,660	6,055,261,112	11.5	%
2012	0.65	1.40	931,599,554	6,659,893,672	14.0	%
2013	1.05	–	–	7,611,579,786	–	
2014	1.29	(3)	–	7,847,817,646	–	

(1) Stock dividends were paid out from retained earnings and capital surplus. Holders of common shares receive as a stock dividend the number of common shares equal to the NT dollar value per common share of the dividend declared multiplied by the number of common shares owned and divided by the par value of NT\$10 per share. Fractional shares are not issued but are paid in cash.

(2) Aggregate number of common shares outstanding on the record date applicable to the dividend payment. Includes common shares issued in the previous year under our employee bonus plan.

(3) On June 26, 2014, our shareholders approved a cash dividend of NT\$1.30 per share for 2013 earnings. On July 29, 2014, our board of directors resolved to adjust the cash dividend ratio to NT\$1.29411842 because the number of outstanding common shares had changed as a result of the exercise of share options.

In order to meet the needs of our present and future capital expenditures, we anticipate paying both stock and cash dividends in the future. The form, frequency and amount of future cash or stock dividends on our common shares will depend upon our net income, cash flow, financial condition, shareholders' requirement for cash inflow and other factors. According to our Articles of Incorporation, we have a general policy that cash dividend distribution should not be lower than 30% of the total dividend amount and the remainder be distributed as stock dividends. See "Item 10. Additional information—Articles of Incorporation—Dividends and Distributions."

In general, we are not permitted to distribute dividends or make other distributions to shareholders for any year where we did not record net income or retained earnings (excluding reserves). The ROC Company Law also requires that 10% of annual net income (less outstanding taxes and prior years' losses, if any) be set aside as a legal reserve until the accumulated legal reserve equals our paid-in capital. In addition, our Articles of Incorporation require that before a dividend is paid pro rata out of our annual net income:

- up to 1% of our annual net income (less prior years' losses and legal and special reserves and the additions or deductions of the portion of retained earnings that belong to equity investment gains or losses that have been realized through other comprehensive income or losses measured at fair value, if any) should be paid to our directors and supervisors as compensation; and

-

between 7% and 11% of the annual net income (less prior years' losses and legal and special reserves and the additions or deductions of the portion of retained earnings that belong to equity investment gains or losses that have been realized through other comprehensive income or losses measured at fair value, if any) should be paid to our employees as bonuses; the 7% portion is to be distributed to all employees in accordance with our employee bonus distribution rules, while any portion exceeding 7% is to be distributed in accordance with rules established by our board of directors to individual employees who have been recognized as having made special contributions to our company. Such employees include those of our subsidiaries.

Holders of ADSs will be entitled to receive dividends, subject to the terms of the deposit agreement, to the same extent as the holders of our common shares. Cash dividends will be paid to the depositary in NT dollars and, except as otherwise provided in the deposit agreement, will be converted by the depositary into U.S. dollars and paid to holders of ADSs according to the terms of the deposit agreement. Stock dividends will be distributed to the depositary and, except as otherwise provided in the deposit agreement, will be distributed by the depositary, in the form of additional ADSs, to holders of ADSs according to the terms of the deposit agreement.



Table of Contents

Holders of outstanding common shares on a dividend record date will be entitled to the full dividend declared without regard to any prior or subsequent transfer of common shares. Holders of outstanding ADSs are entitled to receive dividends, subject to the terms of the deposit agreement, to the same extent as the holders of outstanding common shares.

For information relating to ROC withholding taxes payable on dividends, see “Item 10. Additional Information—Taxation—ROC Taxation—Dividends.”

## SIGNIFICANT CHANGES

Other than as disclosed elsewhere in this annual report, we have not experienced any significant changes since the date of the annual financial statements.

## Item 9. The Offer and Listing

## OFFER AND LISTING DETAILS

Our common shares were first issued in March 1984 and have been listed on the Taiwan Stock Exchange since July 1989. The Taiwan Stock Exchange is an auction market where the securities traded are priced according to supply and demand through announced bid and ask prices. As of January 31, 2015, there were an aggregate of 7,866,207,746 of our common shares outstanding. The following table sets forth, for the periods indicated, the high and low closing prices and the average daily volume of trading activity on the Taiwan Stock Exchange for our common shares and the high and low of the daily closing values of the Taiwan Stock Exchange Index. The closing price for our common shares on the Taiwan Stock Exchange on March 17, 2015 was NT\$44.05 per share.

	Closing Price per Share		Adjusted Closing Price per Share(1)		Average Daily Trading Volume (in thousands of shares)	Taiwan Stock Exchange Index	
	High NT\$	Low NT\$	High NT\$	Low NT\$		High	Low
2010	35.50	21.95	24.51	13.85	32,137	8,972.5	7,071.7
2011	37.60	24.00	26.16	18.14	32,247	9,145.4	6,633.3
2012	31.10	20.15	24.37	16.39	24,667	8,144.0	6,894.7
2013	30.65	23.60	29.36	21.26	24,598	8,623.4	7,616.6
First Quarter	26.80	23.60	24.46	21.26	21,873	8,038.7	7,616.6
Second Quarter	26.15	24.05	23.81	21.71	18,406	8,398.8	7,663.2
Third Quarter	28.50	24.25	27.21	22.16	22,200	8,299.1	7,814.4
Fourth Quarter	30.65	25.75	29.36	24.46	35,118	8,623.4	8,099.5
2014	41.00	26.80	39.10	25.51	25,609	9,569.2	8,264.5
First Quarter	33.80	26.80	32.51	25.51	28,492	8,849.3	8,264.5
Second Quarter	39.00	32.90	37.71	31.61	22,238	9,393.1	8,774.1
Third Quarter	41.00	35.40	39.71	34.16	25,959	9,569.2	8,960.8
Fourth Quarter	39.10	34.40	39.10	34.40	25,991	9,307.3	8,512.9
September	38.00	35.40	38.00	35.40	18,382	9,513.1	8,960.8
October	38.60	34.40	38.60	34.40	28,494	9,106.3	8,512.9

Edgar Filing: ADVANCED SEMICONDUCTOR ENGINEERING INC - Form 20-F

November	37.80	35.25	37.80	35.25	27,651	9,187.2	8,859.1
December	39.10	36.30	39.10	36.30	22,313	9,307.3	8,828.4
2015							
January	39.90	36.65	39.90	36.65	21,860	9,521.6	9,048.3
February	43.50	39.80	43.50	39.80	30,472	9,699.5	9,387.0
March (through March 17, 2015)	47.75	43.70	47.75	43.70	44,826	9,645.8	9,512.9

---

(1) As adjusted retroactively by the Taiwan Stock Exchange to give effect to stock dividends and cash dividends paid in the periods indicated. See “Item 8. Financial Information—Consolidated Statements and Other Financial Information—Dividends and Dividend Policy.”

The performance of the Taiwan Stock Exchange has in recent years been characterized by extreme price volatility. There are currently limits on the range of daily price movements on the Taiwan Stock Exchange. In the case of equity securities traded on the Taiwan Stock Exchange, such as our common shares, fluctuations in the price of a particular security may not exceed a 7.0% change either above or below the previous day’s closing price of such security.

Table of Contents

Our ADSs have been listed on the New York Stock Exchange under the symbol “ASX” since September 26, 2000. The outstanding ADSs are identified by the CUSIP number 00756M404. As of January 31, 2015, a total of 125,731,376 ADSs were outstanding. The following table sets forth, for the periods indicated, the high and low closing prices and the average daily volume of trading activity on the New York Stock Exchange for our ADSs and the highest and lowest of the daily closing values of the New York Stock Exchange Index. The closing price for our ADSs on the New York Stock Exchange on March 17, 2015 was US\$7.37 per ADS.

	Closing Price per ADS		Adjusted Closing Price per ADS(1)		Average Daily Trading Volume (in thousands of ADSs)	New York Stock Exchange Index	
	High US\$	Low US\$	High US\$	Low US\$		High	Low
2010	5.82	3.39	4.93	2.87	867	7,964.0	6,434.8
2011	6.55	4.04	5.55	3.49	1,346	8,671.4	6,571.5
2012	5.27	3.54	4.55	3.13	1,065	8,516.4	7,285.5
2013	5.35	3.91	5.16	3.45	746	10,400.3	8,604.4
First Quarter	4.63	3.92	4.09	3.46	766	9,128.0	8,604.4
Second Quarter	4.48	3.91	3.96	3.45	650	9,598.3	8,892.0
Third Quarter	4.78	3.99	4.61	3.53	677	9,887.9	9,135.1
Fourth Quarter	5.35	4.58	5.16	4.42	891	10,400.3	9,483.2
2014	6.87	4.45	6.63	4.29	752	11,104.7	9,741.6
First Quarter	5.55	4.45	5.35	4.29	731	10,527.8	9,741.6
Second Quarter	6.65	5.43	6.41	5.24	709	11,018.1	10,280.9
Third Quarter	6.87	5.87	6.63	5.78	728	11,104.7	10,583.8
Fourth Quarter	6.39	5.80	6.39	5.80	839	11,047.9	10,109.7
September	6.46	5.87	6.46	5.87	611	11,073.4	10,702.9
October	6.33	5.80	6.33	5.80	744	10,845.0	10,109.7
November	6.34	5.87	6.34	5.87	1,036	11,047.9	10,758.1
December	6.39	5.99	6.39	5.99	766	10,988.0	10,390.0
2015							
January	6.84	5.96	6.84	5.96	1,382	10,859.4	10,514.6
February	7.42	6.58	7.42	6.58	1,341	11,122.1	10,669.0
March (through March 17, 2015)	7.89	7.29	7.89	7.29	1,671	11,102.8	10,678.4

(1) As adjusted retroactively to give effect to stock dividends paid in the periods indicated.

## PLAN OF DISTRIBUTION

Not applicable.

## MARKETS

The principal trading market for our common shares is the Taiwan Stock Exchange and the principal trading market for ADSs representing our common shares is the New York Stock Exchange.

SELLING SHAREHOLDERS

Not applicable.

DILUTION

Not applicable.

EXPENSES OF THE ISSUE

Not applicable.

Table of Contents

Item 10. Additional Information

SHARE CAPITAL

Not applicable.

ARTICLES OF INCORPORATION

General

We are a company limited by shares organized under the laws of the ROC. Our organizational document is our Articles of Incorporation. We have no by-laws.

Our Articles of Incorporation provide, in Article 2, that we may engage in the following types of business:

- the manufacture, assembly, processing, testing and export of various types of integrated circuitry;
- the research, development, design and manufacture, assembly, processing, testing and export of various computers, electronics, communications, information products and their peripheral products;
  - general import and export trading (excluding businesses that require trading permits);
    - the manufacture of electronic parts and components;
- the manufacture of mechanical and electronic devices and materials (including integrated circuit leadframes, BGA substrates and flip-chip substrates);
  - wholesale and retail sales of electronic materials;
- technical support and consulting service for integrated circuit leadframes, BGA substrates and flip-chip substrates;
  - leasing; and
- except any business requiring a special permit, any business not prohibited or restricted by law or regulation.

We were incorporated on March 23, 1984 as a company limited by shares under the ROC Company Law. Our authorized share capital registered with the Kaohsiung Export Processing Zones Administration was NT\$95 billion, divided into 9,500 million common shares, 7,866,207,746 of which were outstanding as of January 31, 2015. Our authorized share capital under our Articles of Incorporation is NT\$100 billion, divided into 10 billion common shares. We do not have any equity in the form of preference shares or otherwise outstanding as of the date of this annual report.

Subject to limited exceptions, with the approval of our board of directors and the FSC, we may grant stock options to our employees, provided that NT\$8,000 million of our authorized capital (800 million common shares) is reserved for employee stock options and that the shares to be issued under any option plan shall not exceed 10% of our outstanding common shares. The total number of shares to be issued under all option plans, together with all restricted shares issued to employees, shall not exceed 15% of our outstanding common shares. Unless otherwise approved by the shareholders' meeting, the exercise price of an option shall not be less than the closing price of our common shares on

the Taiwan Stock Exchange on the grant date of the option. As of January 31, 2015, we had granted 525,722,500 options pursuant to employee stock option plans established on May 27, 2004, November 22, 2007 and April 20, 2010 to our full-time employees, including our domestic and foreign subsidiaries. See “Item 6. Directors, Senior Management and Employees—Compensation—ASE Inc. Employee Bonus and Stock Option Plans.”

## Table of Contents

### Directors and Supervisors

Upon the expiry of the terms of office of our current supervisors, which will be in June 2015, the provisions regarding supervisors under our Articles of Incorporation subsequently cease to apply. We shall then establish an audit committee in lieu of supervisors in accordance with the ROC Securities and Exchange Law to exercise the powers and duties of supervisors. Our Articles of Incorporation provide that, before we elect new directors in 2015, we are to have seven to nine directors with tenures of three years who are elected at a shareholders' meeting. In addition, two of our directors will be required to be independent directors. Following the election of our new directors at our annual shareholders' meeting scheduled in June 2015, we will have a board composing of 11 to 15 directors, and three of which will be independent directors.

There is no minimum amount of shares necessary to stand for election to a directorship. Many of our directors are representatives appointed by corporate shareholders which appoint individual representatives. Re-elections are allowed. The board of directors has certain powers and duties, including devising operations strategy, proposing to distribute dividends or make up losses, proposing to increase or decrease capital, reviewing material internal rules and contracts, hiring and discharging the general manager, establishing and dissolving branch offices, reviewing budgets and financial statements and other duties and powers granted by or in accordance with the ROC Company Law, our Articles of Incorporation or shareholders resolutions.

The board of directors is constituted by the directors, who elect a chairman from among the directors to preside over the meeting of the board. Meetings of the board may be held in the ROC or by videoconference. A director may appoint another director to attend a meeting and vote by proxy, but a director may accept only one proxy.

### Dividends and Distributions

In general, we are not permitted to distribute dividends or make other distributions to shareholders in any year in which we did not record net income or retained earnings (excluding reserves). The ROC Company Law also requires that 10% of annual net income (less prior years' losses, if any) be set aside as a legal reserve until the accumulated legal reserve equals our paid-in capital. In addition, our Articles of Incorporation require that before a dividend is paid out of our annual net income:

- up to 1% of our annual net income (less prior years' losses and legal and special reserves and the additions or deductions of the portion of retained earnings that belong to equity investment gains or losses that have been realized through other comprehensive income or losses measured at fair value, if any) should be paid to our directors and supervisors as compensation; and
- between 7% and 11% of the annual net income (less prior years' losses and legal and special reserves and the additions or deductions of the portion of retained earnings that belong to equity investment gains or losses that have been realized through other comprehensive income or losses measured at fair value, if any) should be paid to our employees as bonuses. The 7% portion is to be distributed to all employees in accordance with our employee bonus distribution rules, while any portion exceeding 7% is to be distributed in accordance with rules established by our board of directors to individual employees who have been recognized as having made special contributions to our company. Such employees include those of our subsidiaries.

At the annual general meeting of shareholders, our board of directors submits to the shareholders for their approval any proposal for the distribution of dividends or the making of any other distribution to shareholders from our net income for the preceding fiscal year. All common shares outstanding and fully paid as of the relevant record date are

entitled to share equally in any dividend or other distribution so approved. Dividends may be distributed in cash, in the form of common shares or a combination of the two, as determined by the shareholders at the meeting. According to our Articles of Incorporation, we have a general policy that cash dividend distribution should not be lower than 30% of the total dividend amount and the remainder be distributed as stock dividends. See “Item 8. Financial Information—Consolidated Statements and Other Financial Information—Dividends and Dividend Policy.”

We are also permitted to make distributions to our shareholders in cash or in the form of common shares from reserves if we have no accumulated loss. However, the distribution payable out of our legal reserve can only come from the amount exceeding 25% of the total paid-in capital.



## Table of Contents

For information on the dividends we paid in recent years, see “Item 8. Financial Information—Consolidated Statements and Other Financial Information—Dividends and Dividend Policy.” For information as to ROC taxes on dividends and distributions, see “—Taxation—ROC Taxation—Dividends.”

### Changes in Share Capital

Under ROC Company Law, any change in the authorized share capital of a company limited by shares requires an amendment to its Articles of Incorporation, which in turn requires approval at the shareholders’ meeting. In the case of a public company such as ourselves, we must also obtain the approval of, or submit a report to, the FSC and the Kaohsiung Export Processing Zone Administration. Authorized but unissued common shares may be issued, subject to applicable ROC law, upon terms as our board of directors may determine. Our authorized share capital registered with the Kaohsiung Export Processing Zones Administration was NT\$95 billion, divided into 9,500 million common shares with a face value of NT\$10 per share as of January 31, 2015. Our authorized share capital under our Articles of Incorporation is NT\$100 billion, divided into 10 billion common shares. There were 500 million common shares included in our authorized shares that are currently not registered with the Kaohsiung Export Processing Zones Administration. We will complete the registration with the Kaohsiung Export Processing Zones Administration if and when our total issued share capital equals or exceeds NT\$95 billion.

### Preemptive Rights

Under the ROC Company Law, when an ROC company issues new shares for cash, existing shareholders who are listed on the shareholders’ register as of the record date have preemptive rights to subscribe for the new issue in proportion to their existing shareholdings, while a company’s employees, whether or not they are shareholders of the company, have rights to subscribe for 10% to 15% of the new issue. Any new shares that remain unsubscribed at the expiration of the subscription period may be freely offered, subject to compliance with applicable ROC law.

In addition, in accordance with the ROC Securities and Exchange Law, a public company that intends to offer new shares for cash must offer to the public at least 10% of the shares to be sold, except under certain circumstances or when exempted by the FSC. This percentage can be increased by a resolution passed at a shareholders’ meeting, which would diminish the number of new shares subject to the preemptive rights of existing shareholders.

These preemptive rights provisions do not apply to offerings of new shares through a private placement approved at a shareholders’ meeting.

### Meetings of Shareholders

We are required to hold an annual general meeting of our shareholders within six months following the end of each fiscal year. These meetings are generally held in Kaohsiung, Taiwan. Any shareholder who holds 1% or more of our issued and outstanding shares may submit one written proposal for discussion at our annual general meeting. Extraordinary shareholders’ meetings may be convened by resolution of the board of directors or by the board of directors upon the written request of any shareholder or shareholders who have held 3% or more of the outstanding common shares for a period of one year or longer. Shareholders’ meetings may also be convened by a supervisor. Notice in writing of meetings of shareholders, stating the place, time and purpose, must be dispatched to each shareholder at least 30 days, in the case of annual general meetings, and 15 days, in the case of extraordinary meetings, before the date set for each meeting. A majority of the holders of all issued and outstanding common shares present at a shareholders’ meeting constitutes a quorum for meetings of shareholders.

### Voting Rights

Under the ROC Company Law, except under limited circumstances, shareholders have one vote for each common share held. Under the ROC Company Law, our directors and supervisors are elected at a shareholders' meeting through cumulative voting.

In general, a resolution can be adopted by the holders of at least a majority of our common shares represented at a shareholders' meeting at which the holders of a majority of all issued and outstanding common shares are present. Under ROC Company Law, the approval by at least a majority of our common shares represented at a shareholders' meeting in which a quorum of at least two-thirds of all issued and outstanding common shares are represented is required for major corporate actions, including:

## Table of Contents

- amendment to the Articles of Incorporation, including increase of authorized share capital and any changes of the rights of different classes of shares;
- execution, amendment or termination of any contract through which the company leases its entire business to others, or the company appoints others to operate its business or the company operates its business with others on a continuous basis;
  - transfer of entire business or assets or a substantial part of its business or assets;
- acquisition of the entire business or assets of any other company, which would have a significant impact on the company's operations;
  - distribution of any stock dividend;
  - dissolution, merger or spin-off of the company;
  - issuance of restricted shares to employees; and
  - removal of the directors or supervisors.

A shareholder may be represented at an annual general or extraordinary meeting by proxy if a valid proxy form is delivered to us five days before the commencement of the annual general or extraordinary shareholders' meeting. Shareholders may exercise their voting rights by way of a written ballot or by way of electronic transmission if the voting decision is delivered to us two days before the commencement of the annual general or extraordinary shareholders' meeting.

Holders of ADSs do not have the right to exercise voting rights with respect to the underlying common shares, except as described in the deposit agreement.

### Other Rights of Shareholders

Under the ROC Company Law, dissenting shareholders are entitled to appraisal rights in certain major corporate actions such as a proposed amalgamation by the company. If agreement with the company cannot be reached, dissenting shareholders may seek a court order for the company to redeem all of their shares. Shareholders may exercise their appraisal rights by serving written notice on the company prior to or at the related shareholders' meeting and/or by raising and registering an objection at the shareholders' meeting. In addition to appraisal rights, shareholders have the right to sue for the annulment of any resolution adopted at a shareholders' meeting where the procedures were legally defective within 30 days after the date of the shareholders' meeting. One or more shareholders who have held 3% or more of the issued and outstanding shares of a company for a period of one year or longer may require a supervisor to bring a derivative action on behalf of the company against a director as a result of the director's unlawful actions or failure to act.

### Rights of Holders of Deposited Securities

Except as described below, holders of ADSs generally have no right under the deposit agreement to instruct the depositary to exercise the voting rights for our common shares represented by the ADSs. Instead, by accepting ADSs or any beneficial interest in ADSs, holders of ADSs are deemed to have authorized and directed the depositary to appoint our chairman or his designee to represent them at our shareholders' meetings and to vote our common shares

deposited with the custodian according to the terms of the deposit agreement.

The depositary will mail to holders of ADSs any notice of shareholders' meeting received from us together with information explaining how to instruct the depositary to exercise the voting rights of the securities represented by ADSs.

If we fail to timely provide the depositary with an English language translation of our notice of meeting or other materials related to any meeting of owners of common shares, the depositary will endeavor to cause all the deposited securities represented by ADSs to be present at the applicable meeting, insofar as practicable and permitted under applicable law, but will not cause those securities to be voted.

## Table of Contents

If the depositary timely receives voting instructions from owners of at least 51.0% of the outstanding ADSs to vote in the same direction regarding one or more resolutions to be proposed at the meeting, including election of directors and supervisors, the depositary will notify our chairman or his designee to attend the meeting and vote all the securities represented by the holders' ADSs in accordance with the direction received from owners of at least 51.0% of the outstanding ADSs.

If we have timely provided the depositary with the materials described in the deposit agreement and the depositary has not timely received instructions from holders of at least 51.0% of the outstanding ADSs to vote in the same direction regarding any resolution to be considered at the meeting, then, holders of ADSs will be deemed to have authorized and directed the depositary bank to give a discretionary proxy to our chairman or his designee to attend and vote at the meeting our common shares represented by the ADSs in any manner, our chairman or his designee may wish, which may not be in the interests of holders.

The ability of the depositary to carry out voting instructions may be limited by practical and legal limitations and the terms of the securities on deposit. We cannot assure ADS holders that they will receive voting materials in time to enable them to return voting instructions to the depositary in a timely manner.

While shareholders who own 1% or more of our outstanding shares are entitled to submit one proposal to be considered at our annual general meetings, only holders representing at least 51% of our ADSs outstanding at the relevant record date are entitled to submit one proposal to be considered at our annual general meetings. Hence, only one proposal may be submitted on behalf of all ADS holders.

## Register of Shareholders and Record Dates

Our share registrar, President Securities Corp., maintains our register of shareholders at its offices in Taipei, Taiwan. Under the ROC Company Law and our Articles of Incorporation, we may, by giving advance public notice, set a record date and close the register of shareholders for a specified period in order for us to determine the shareholders or pledgees that are entitled to rights pertaining to our common share. The specified period required is as follows:

- annual general meeting—60 days;
- extraordinary shareholders' meeting—30 days; and
- relevant record date—5 days.

## Annual Financial Statements

At least ten days before the annual general meeting, our annual financial statements, which are prepared in conformity with Taiwan IFRS, must be available at our principal executive office in Kaohsiung, Taiwan for inspection by the shareholders.

## Transfer of Common Shares

The transfer of common shares in registered form is effected by endorsement and delivery of the related share certificates but, in order to assert shareholders' rights against us, the transferee must have his name and address registered on our register of shareholders. Shareholders are required to file their respective specimen seals, also known as chops, with us. Chops are official stamps widely used in Taiwan by individuals and other entities to authenticate the execution of official and commercial documents. The settlement of trading in our common shares is normally carried

out on the book-entry system maintained by the Taiwan Depository & Clearing Corporation.

Acquisition of Common Shares by ASE Inc.

Under the ROC Securities and Exchange Law, we may purchase our own common shares for treasury stock in limited circumstances, including:

- to transfer shares to our employees;

## Table of Contents

- to deliver shares upon the conversion or exercise of bonds with warrants, preferred shares with warrants, convertible bonds, convertible preferred shares or warrants issued by us; and
- to maintain our credit and our shareholders' equity, provided that the shares so purchased shall be canceled.

We may purchase our common shares on the Taiwan Stock Exchange or by means of a public tender offer. These transactions require the approval of a majority of our board of directors at a meeting in which at least two-thirds of the directors are in attendance. The total amount of common shares purchased for treasury stock may not exceed 10.0% of the total issued shares. In addition, the total cost of the purchased shares shall not exceed the aggregate amount of our retained earnings, any premium from share issuances and the realized portion of our capital reserve.

We may not pledge or hypothecate any of our shares purchased by us. In addition, we may not exercise any shareholders' right attaching to such shares. In the event that we purchase our shares on the Taiwan Stock Exchange, our affiliates, directors, supervisors, managers, and their respective spouses and minor children and/or nominees are prohibited from selling any of our shares during the period in which we are purchasing our shares.

Pursuant to the ROC Company Law, an entity in which our company directly or indirectly owns more than 50.0% of the voting shares or paid-in capital, which is referred to as a controlled entity, may not purchase our shares. Also, if our company and a controlled entity jointly own, directly or indirectly, more than 50.0% of the voting shares or paid-in capital of another entity, which is referred to as a third entity, the third entity may not purchase shares in either our company or a controlled entity.

## Liquidation Rights

In the event of our liquidation, the assets remaining after payment of all debts, liquidation expenses and taxes will be distributed pro rata to the shareholders in accordance with the relevant provisions of the ROC Company Law and our Articles of Incorporation.

## Transfer Restrictions

### Substantial Shareholders

The ROC Securities and Exchange Law currently requires:

- each director, supervisor, manager, or substantial shareholder (that is, a shareholder who holds more than 10.0% shares of a company), and their respective spouses, minor children or nominees, to report any change in that person's shareholding to the issuer of the shares and the FSC; and
- each director, supervisor, manager, or substantial shareholder, and their respective spouses, minor children or nominees, after acquiring the status of director, supervisor, manager, or substantial shareholder for a period of six months, to report his or her intent to transfer any shares on the Taiwan Stock Exchange to the FSC at least three days before the intended transfer, unless the number of shares to be transferred does not exceed 10,000 shares.

In addition, the number of shares that can be sold or transferred on the Taiwan Stock Exchange by any person subject to the restrictions described above on any given day may not exceed:

- 0.2% of the outstanding shares of the company in the case of a company with no more than 30 million outstanding shares; or

- 0.2% of 30 million shares plus 0.1% of the outstanding shares exceeding 30 million shares in the case of a company with more than 30 million outstanding shares; or
- in any case, 5.0% of the average trading volume (number of shares) on the Taiwan Stock Exchange for the ten consecutive trading days preceding the reporting day on which the director, supervisor, manager or substantial shareholder reports the intended share transfer to the FSC.

These restrictions do not apply to sales or transfers of our ADSs.



## Table of Contents

### MATERIAL CONTRACTS

#### Equity Purchase Agreement between Us and Shareholders of Yang Ting

On January 13, 2012, we entered into share purchase agreements with shareholders of Yang Ting in connection with the acquisition of 100.0% of Yang Ting, for a purchase price of NT\$300.0 million. See “Item 4. Information on the Company—History and Development of the Company—Acquisition and Merger of Yang Ting” for more information.

#### Equity Purchase Agreement between ASESH AT and Shareholders of Wuxi Tongzhi

On May 27, 2013, we, through our subsidiary ASESH AT, entered into a share purchase agreement with the shareholder of Wuxi Tongzhi in connection with the acquisition of 100.0% of Wuxi Tongzhi, for a purchase price of NT\$338.0 million. See “Item 4. Information on the Company—History and Development of the Company—Acquisition of Wuxi Tongzhi” for more information.

### FOREIGN INVESTMENT IN THE ROC

Historically, foreign investment in the ROC securities market has been restricted. Since 1983, the ROC government has from time to time enacted legislation and adopted regulations to permit foreign investment in the ROC securities market.

On September 30, 2003, the Executive Yuan approved an amendment to the Regulations Governing Investment in Securities by Overseas Chinese and Foreign National, or the Regulations, which took effect on October 2, 2003. Pursuant to the Regulations, the FSC abolished the mechanism of the “qualified foreign institutional investors” and “general foreign investors” as stipulated in the Regulations before the amendment.

Under the Regulations, foreign investors (other than PRC persons) are classified as either “onshore foreign investors” or “offshore foreign investors” according to their respective geographical location. Both onshore and offshore foreign investors are allowed to invest in ROC securities after they register with the Taiwan Stock Exchange or the Taiwan Futures Exchange. The Regulations further classify foreign investors into foreign institutional investors and foreign individual investors. “Foreign institutional investors” refer to those investors incorporated and registered in accordance with foreign laws outside of the ROC (i.e., offshore foreign institutional investors) or their branches set up and recognized within the ROC (i.e., onshore foreign institutional investors). Offshore overseas Chinese and foreign individual investors may be subject to a maximum investment ceiling that will be separately determined by the FSC, after consultation with the Central Bank of the Republic of China (Taiwan). Currently, there is no maximum investment ceiling for offshore overseas Chinese and foreign individual investors. On the other hand, foreign institutional investors are not subject to any ceiling for investment in the ROC securities market.

Except for certain specified industries, such as telecommunications, investments in ROC-listed companies by foreign investors are not subject to individual or aggregate foreign ownership limits. Custodians for foreign investors are required to submit to the Central Bank of the Republic of China (Taiwan) and the Taiwan Stock Exchange a monthly report of trading activities and status of assets under custody and other matters. Capital remitted to the ROC under these guidelines may be remitted out of the ROC at any time after the date the capital is remitted to the ROC. Capital gains and income on investments may be remitted out of the ROC at any time.

Foreign investors (other than PRC persons) who wish to make (i) direct investments in the shares of ROC private companies or (ii) investment in 10.0% or more of the equity interest of a ROC company listed on the Taiwan Stock Exchange or the Taipei Exchange in any single transaction, are required to submit a foreign investment approval

application to the MOEAIC or other applicable government authority. The MOEAIC or such other government authority reviews each foreign investment approval application and approves or disapproves each application after consultation with other governmental agencies (such as the Central Bank of the Republic of China (Taiwan) and the FSC).

Under current ROC law, any non-ROC person possessing a foreign investment approval may remit capital for the approved investment and is entitled to repatriate annual net profits, interest and cash dividends attributable to the approved investment. Dividends attributable to such investment may be repatriated upon submitting certain required documents to the remitting bank, and investment capital and capital gains attributable to such investment may be repatriated after approvals of the MOEAIC or other government authorities have been obtained.

## Table of Contents

In addition to the general restriction against direct investment by foreign investors in securities of ROC companies, foreign investors (except in certain limited cases) are currently prohibited from investing in certain industries in the ROC pursuant to a “negative list,” as amended by the Executive Yuan. The prohibition on foreign investment in the prohibited industries specified in the negative list is absolute in the absence of a specific exemption from the application of the negative list. Pursuant to the negative list, certain other industries are restricted so that foreign investors (except in limited cases) may invest in these industries only up to a specified level and with the special approval of the relevant competent authority that is responsible for enforcing the relevant legislation that the negative list is intended to implement.

The FSC announced the PRC Regulations on April 30, 2009. According to the PRC Regulations, a PRC QDII is allowed to invest in ROC securities (including less than 10.0% shareholding of a ROC company listed on the Taiwan Stock Exchange or the Taipei Exchange) provided that the total investment amount of any QDII does not exceed US\$500 million. The custodians of QDIIs must apply with the Taiwan Stock Exchange for the remittance amount for each QDII, which cannot exceed US\$100 million, and QDII can only invest in ROC securities at an amount approved by the Taiwan Stock Exchange. In addition, QDIIs are currently prohibited from investing in certain industries, and their investment in any company of certain other industries is restricted to a certain percentage pursuant to a list promulgated by the FSC and amended from time to time. PRC investors other than QDII are prohibited from making investments in a ROC company listed on the Taiwan Stock Exchange or the Taipei Exchange if the investment is less than 10.0% of the equity interest of such ROC company.

In addition to investments permitted under the PRC Regulations, PRC investors who wish to make (i) direct investment in the shares of ROC private companies or (ii) investments, individually or in the aggregate, in 10.0% or more of the equity interest of a ROC company listed on the Taiwan Stock Exchange or the Taipei Exchange, are required to submit an investment approval application to the MOEAIC or other government authority. The MOEAIC or such other government authority reviews each investment approval application and approves or disapproves each application after consultation with other governmental agencies.

In addition to the general restriction against direct investment by PRC investors in securities of ROC companies, PRC investors may only invest in certain industries on the “positive list” promulgated by the Executive Yuan. Furthermore, a PRC investor who wishes to be elected as a ROC company’s director or supervisor shall submit an investment approval application to the MOEAIC or other government authority for approval.

## EXCHANGE CONTROLS

### ROC Exchange Controls

The ROC Foreign Exchange Control Law and regulations provide that all foreign exchange transactions must be executed by banks designated by the FSC and by the Central Bank of the Republic of China (Taiwan) to engage in such transactions. Current regulations favor trade-related or service-related foreign exchange transactions. Consequently, foreign currency earned from exports of merchandise and services may now be retained and used freely by exporters, and all foreign currency needed for the importation of merchandise and services may be purchased freely from the designated foreign exchange banks.

Apart from trade-related or service-related foreign exchange transactions, ROC companies and individual residents of the ROC reaching the age of 20 years old may, without foreign exchange approval, remit foreign currency of up to US\$50 million (or its equivalent) and US\$5 million (or its equivalent) to and from the ROC, respectively, in each calendar year. The above limits apply to remittances involving either a conversion of NT dollars into a foreign

currency or a conversion of foreign currency into NT dollars. In addition, a requirement is also imposed on all enterprises to register medium- and long-term foreign debt with the Central Bank of the Republic of China (Taiwan).

In addition, foreign persons may, subject to specified requirements but without foreign exchange approval of the Central Bank of the Republic of China (Taiwan), remit to and from the ROC foreign currencies of up to US\$100,000 (or its equivalent) per remittance if the required documentation is provided to the ROC authorities. The above limit applies to remittances involving either a conversion of NT dollars into a foreign currency or a conversion of foreign currency into NT dollars. The above limit does not, however, apply to the conversion of NT dollars into other currencies, including U.S. dollars, from the proceeds of a sale of any underlying shares withdrawn from a depository receipt facility.

## Table of Contents

### TAXATION

#### ROC Taxation

The following discussion describes the material ROC tax consequences of the ownership and disposition of our common shares or ADSs to a non-resident individual or non-resident entity that owns our common shares or ADSs (referred to here as a “non-ROC holder”). As used in the preceding sentence, a “non-resident individual” is a non-ROC national who owns our common shares or ADSs and is not physically present in the ROC for 183 days or more during any calendar year, and a “non-resident entity” is a corporation or a non-corporate body that owns our common shares or ADSs, is organized under the laws of a jurisdiction other than the ROC and has no fixed place of business or business agent in the ROC.

#### Dividends

Dividends (whether in cash or common shares) declared by us out of retained earnings and distributed to a non-ROC holder are subject to ROC withholding tax, currently at the rate of 20% (unless a preferable tax rate is provided under a tax treaty between the ROC and the jurisdiction where the non-ROC holder is a resident) on the amount of the distribution (in the case of cash dividends) or on the par value of the distributed common shares (in the case of stock dividends). A 10% undistributed earnings tax is imposed on a ROC company for its after-tax earnings generated after January 1, 1998 which are not distributed in the following year. The undistributed earnings tax so paid will further reduce the retained earnings available for future distribution. When we declare a dividend out of those retained earnings, an amount in respect of the undistributed earnings tax, up to a maximum amount of 5% of the dividend to be distributed, will be credited against the withholding tax imposed on the non-ROC holders.

Distributions of stock dividends out of capital reserves will not be subject to withholding tax, except under limited circumstances.

#### Capital Gains

Under ROC law, capital gain realized upon the sale or other disposition of shares prior to January 1, 2013 is exempt from ROC income tax. Starting from January 1, 2013, non-resident entities remain exempt from income tax on capital gain realized upon the sale or other disposition of shares; however, non-resident individuals are subject to 15% income tax. The amount of capital gain is calculated by deducting cost and necessary expenses in respect of the shares transaction from revenues. Capital loss incurred from the sale or disposition of shares can be deducted from capital gains in the same calendar year when calculating the net capital gains and income tax liability, but cannot be carried forward to subsequent years. In addition, only 50% of the net capital gains will be subject to ROC income tax if the non-resident individual has directly held the underlying shares for one year or longer. As a result, the tax agent of each non-resident individual should pay the income tax payable, if any, and file an income tax return in May each year for the capital gains the non-resident individual generates in the prior year.

Sales of ADSs are not regarded as sales of ROC securities and thus any gains derived from transfers of ADSs by non-ROC holders are not currently subject to ROC income tax.

#### Securities Transaction Tax

Securities transaction tax will be imposed on the seller at the rate of 0.3% of the transaction price upon a sale of common shares. Transfers of ADSs are not subject to ROC securities transaction tax.

## Subscription Rights

Distributions of statutory subscription rights for our common shares in compliance with the ROC Company Act are currently not subject to ROC tax. Sales of statutory subscription rights evidenced by securities are subject to securities transaction tax, currently at the rate of 0.3% of the gross amount received. Moreover, as advised under “Capital Gains” above, while non-resident entities are exempt from ROC income tax on capital gains from such sales, non-resident individuals are subject to ROC income tax at a flat rate of 15% on said capital gains. Proceeds derived from sales of statutory subscription rights which are not evidenced by securities are not subject to securities transaction tax but are subject to income tax at a fixed rate of 20% of the income if the seller is a non-ROC holder regardless of whether the non-ROC holder is an individual or entity. Subject to compliance with ROC law, we, in our sole discretion, may determine whether statutory subscription rights are evidenced by securities.

## Table of Contents

### Estate and Gift Tax

ROC estate tax is payable on any property within the ROC left by a deceased non-resident individual, and ROC gift tax is payable on any property within the ROC donated by a non-resident individual. Estate tax and gift tax are currently imposed at the rate of 10%. Under the ROC Estate and Gift Act, common shares issued by ROC companies are deemed located in the ROC without regard to the location of the owner. It is unclear whether a holder of ADSs will be considered to own common shares for this purpose.

### Tax Treaty

At present, the ROC has income tax treaties with Indonesia, Singapore, New Zealand, Australia, the United Kingdom, South Africa, Gambia, Swaziland, Malaysia, Macedonia, the Netherlands, Senegal, Sweden, Belgium, Denmark, Israel, Vietnam, Paraguay, Hungary, France, India, Slovakia, Switzerland, Germany, Thailand Kiribati, Luxembourg and Austria. These tax treaties may limit the rate of ROC withholding tax on dividends paid with respect to common shares issued by ROC companies. A non-ROC holder of ADSs will be considered as the beneficial owner of common shares for the purposes of such treaties. Accordingly, holders of ADSs who wish to apply a reduced withholding tax rate that is provided under a tax treaty should consult their own tax advisers concerning such application. The United States does not have an income tax treaty with the ROC.

### United States Federal Income Taxation

The following discussion describes the material U.S. federal income tax consequences of the ownership and disposition of our common shares or ADSs to those U.S. Holders described below who hold such common shares or ADSs as capital assets for U.S. federal income tax purposes. As used herein, a “U.S. Holder” is a beneficial owner of our common shares or ADSs that is for U.S. federal income tax purposes:

- a citizen or individual resident of the United States;
- a corporation, or other entity taxable as a corporation, created or organized under the laws of the United States or of any political subdivision of the United States; or
- an estate or trust the income of which is subject to U.S. federal income taxation regardless of its source.

This discussion assumes that we are not a passive foreign investment company, as discussed below.

This discussion does not address all of the tax consequences that may be relevant in light of a U.S. Holder’s particular circumstances. In particular, it does not address all of the tax consequences that may be relevant to holders subject to special rules, including:

- persons subject to the alternative minimum tax;
- persons subject to taxation under the provisions of the Internal Revenue Code of 1986, as amended (the “Code”), known as the Medicare contribution tax;
- insurance companies;
- tax-exempt entities, including “individual retirement accounts” or “Roth IRAs”;

- dealers or traders in securities who use a mark-to-market method of accounting for U.S. federal income tax purposes;
- certain financial institutions;
- partnerships or other entities classified as partnerships for U.S. federal income tax purposes;



## Table of Contents

- persons holding common shares or ADSs in connection with a trade or business conducted outside of the U.S.;
- persons who hold or will hold common shares or ADSs as part of a straddle, hedge, conversion transaction, integrated transaction or similar transaction;
  - persons whose functional currency for U.S. federal income tax purposes is not the U.S. dollar;
  - persons who own or are deemed to own 10% or more of our voting stock; or
- persons who acquired our common shares or ADSs pursuant to the exercise of any employee stock option or otherwise as compensation.

If an entity that is classified as a partnership for U.S. federal income tax purposes holds our common shares or ADSs, the U.S. federal income tax treatment of a partner will generally depend on the status of the partner and the activities of the partnership. Partnerships holding our common shares or ADSs and partners in such partnerships should consult their tax advisers as to the particular U.S. federal income tax consequences of holding and disposing of our common shares or ADSs.

This discussion is based on the Code, final, temporary and proposed Treasury regulations, administrative pronouncements and judicial decisions, all as of the date hereof. These laws and regulations are subject to change, possibly with retroactive effect. This discussion is also based in part on representations by the depositary and assumes that each obligation under the deposit agreement and any related agreement will be performed in accordance with its terms.

In general, for U.S. federal income tax purposes, a U.S. Holder who owns ADSs should be treated as the owner of the common shares represented by the ADSs. Accordingly, no gain or loss should be recognized if a U.S. holder exchanges ADSs for the common shares represented by those ADSs.

The U.S. Treasury has expressed concerns that parties to whom American depositary shares are released before delivery of shares to the depositary (“pre-release”), or intermediaries in the chain of ownership between holders and the issuer of the security underlying the American depositary shares, may be taking actions that are inconsistent with the claiming of foreign tax credits by the holders of American depositary shares. Such actions would also be inconsistent with the claiming of the preferential rates of tax applicable to dividends received by certain non-corporate U.S. holders. Accordingly, the creditability of ROC taxes and the availability of the preferential tax rates for dividends received by certain non-corporate U.S. Holders, both described below, could be affected by actions that may be taken by such parties or intermediaries.

U.S. Holders should consult their tax advisers with regard to the application of the U.S. federal income tax laws to their common shares or ADSs as well as any tax consequences arising under the laws of any state, local or non-U.S. taxing jurisdiction.

## Dividends

Distributions paid on our common shares or ADSs (other than certain pro rata distributions of our common shares to all shareholders, including holders of ADSs), including the amount of any ROC taxes withheld thereon, reduced by any credit against the withholding tax on account of the 10% retained earnings tax imposed on us, generally will constitute foreign-source dividend income to the extent paid out of our current or accumulated earnings and profits as determined in accordance with U.S. federal income tax principles. Because we do not maintain calculations of our

earnings and profits under U.S. federal income tax principles, we expect that distributions generally will be reported to U.S. Holders as dividends. The amount a U.S. Holder will be required to include in income for any dividend paid in NT dollars will be equal to the U.S. dollar value of the NT dollars paid, calculated by reference to the exchange rate in effect on the date the payment is received by the depository (in the case of ADSs) or by a U.S. Holder (in the case of common shares), regardless of whether the payment is in fact converted into U.S. dollars on the date of receipt. If a U.S. Holder does not convert the NT dollars so received into U.S. dollars on the date of receipt, any gain or loss recognized on a subsequent sale or other disposition of the NT dollars generally will be U.S.-source ordinary income or loss. The amount of any taxable distribution of property other than cash will be the fair market value of such property on the date of distribution. Dividends will not be eligible for the dividends-received deduction generally available to U.S. corporations under the Code.

## Table of Contents

Subject to applicable limitations and the discussion above regarding concerns expressed by the U.S. Treasury, under current law, certain dividends paid by qualified foreign corporations to certain non-corporate U.S. Holders are taxable at the preferential rates applicable to long-term capital gain. A foreign corporation is treated as a qualified foreign corporation with respect to dividends paid by that corporation on shares (or ADSs representing such shares) that are readily tradable on a securities market in the United States, such as the New York Stock Exchange, where our ADSs are traded. U.S. Holders should consult their tax advisers to determine whether these preferential rates may apply to dividends they receive and whether they are subject to any special rules that limit their ability to be taxed at these preferential rates.

Subject to applicable limitations and restrictions, some of which vary depending upon the U.S. Holder's circumstances, and the discussion above regarding concerns expressed by the U.S. Treasury, the ROC taxes withheld from dividend distributions, reduced by any credit against the withholding tax which is paid by us on account of the 10% retained earnings tax, will be eligible for credit against the U.S. Holder's U.S. federal income tax liability. The limitation on foreign taxes eligible for credit is calculated separately with respect to specific classes of income. The rules governing foreign tax credits are complex and, therefore, U.S. Holders should consult their tax advisers regarding the availability of foreign tax credits in their particular circumstances. Instead of claiming a credit, U.S. Holders may, at their election, deduct otherwise creditable ROC taxes in computing their taxable income, subject to generally applicable limitations under U.S. law. An election to deduct foreign taxes instead of claiming foreign tax credits applies to all taxes paid or accrued in the taxable year to foreign countries and possessions of the United States.

Certain pro rata distributions of common shares by a company to its shareholders, including holders of ADSs, will not be subject to U.S. federal income tax. Accordingly, these distributions will not give rise to U.S. federal income against which the ROC tax imposed on these distributions may be credited. U.S. Holders should consult their tax advisers as to whether any ROC tax imposed on such distributions may be creditable against their U.S. federal income tax on foreign-source income from other sources.

## Capital Gains

A U.S. Holder generally will recognize U.S.-source capital gain or loss for U.S. federal income tax purposes on the sale or exchange of our common shares or ADSs, which will be long-term capital gain or loss if our common shares or ADSs were held by the U.S. Holder for more than one year. The amount of gain or loss will be equal to the difference between the U.S. Holder's tax basis in our common shares or ADSs disposed of and the amount realized on disposition, in each case as determined in U.S. dollars. A U.S. Holder's basis in our common shares or ADSs will generally equal the U.S. Holder's cost of such common shares or ADSs. If a U.S. Holder receives our common shares or ADSs in a non-taxable pro rata distribution with respect to its ADSs or common shares (the "new securities"), the basis of such new securities must be determined by allocating the basis of the common shares or ADSs with respect to which the new securities were issued (the "old securities") between the old securities and new securities in proportion to their fair market values on the date of distribution. U.S. Holders should consult their tax advisers about the treatment of capital gains, which may be taxed at lower rates than ordinary income for non-corporate taxpayers, and capital losses, the deductibility of which may be limited.

## Passive Foreign Investment Company Rules

We believe that we were not a passive foreign investment company, or PFIC, for U.S. federal income tax purposes for our 2014 taxable year. However, since PFIC status depends upon the composition of a company's income and assets and the market value of its assets (including, among others, less than 25 percent owned equity investments) from time to time, there can be no assurance that we will not be considered a PFIC for any taxable year.

If we were treated as a PFIC for any taxable year during which a U.S. Holder held a common share or an ADS, certain adverse consequences could apply to that U.S. Holder. If we are a PFIC for any taxable year during which a U.S. Holder owned a common share or an ADS, such U.S. Holder will generally be required to file Internal Revenue Service Form 8621 with their annual U.S. federal income tax returns, subject to certain exceptions.

## Table of Contents

### Information Reporting and Backup Withholding

Payments of dividends and sales proceeds that are made within the United States or through certain U.S.-related financial intermediaries generally are subject to information reporting, and may be subject to backup withholding, unless (i) the U.S. Holder is an exempt recipient or (ii) in the case of backup withholding, the U.S. Holder provides a correct taxpayer identification number and certifies that it is not subject to backup withholding.

The amount of any backup withholding from a payment to a U.S. Holder will be allowed as a credit against the U.S. Holder's U.S. federal income tax liability and may entitle it to a refund, provided that the required information is timely furnished to the Internal Revenue Service.

### DIVIDENDS AND PAYING AGENTS

Not applicable.

### STATEMENT BY EXPERTS

Not applicable.

### DOCUMENTS ON DISPLAY

We file annual reports on Form 20-F and periodic reports on Form 6-K with the SEC. You can read and copy these reports and other information at the SEC's Public Reference Room at 450 Fifth Street, N.W., Washington, D.C. 20549. You can also request copies of the documents, upon payment of a duplicating fee, by writing to the Public Reference Section of the SEC. Please call the SEC at 1-800-SEC-0330 for further information on the operation of the Public Reference Room. The reports and other information we file electronically with the SEC are also available to the public from the SEC's website at <http://www.sec.gov>.

### SUBSIDIARY INFORMATION

Not applicable.

### Item 11. Quantitative and Qualitative Disclosures about Market Risk

#### Market Risk

Our exposure to financial market risks relates primarily to changes in interest rates and foreign currency exchange rates.

**Interest Rate Risk.** Our exposure to interest rate risks relates primarily to our long-term floating rate loans, which is normally incurred to support our corporate activities and capital expenditures. See note 32 to our consolidated financial statements included in this annual report for details on interest rate sensitivity analysis.

We entered into several interest rate swap contracts to mitigate the interest rate risk on our long-term loans. In April 2013, J&R Holding Limited entered into an interest rate swap contract in the amount of RMB240.0 million, which matured in April 2014, with interest receipt based on a floating rate of 1.05% to 2.80% and payment based on a fixed rate of 2.0%. In February 2014, J&R Holding Limited entered into another interest rate swap contract in the amount of RMB240.0 million, which had the maturity schedule in February 2015 but was early settled in May 2014, with interest

receipt based on a floating rate of 1.20% to 1.40% and payment based on a fixed rate of 1.35%. We recognized these contracts as hedging derivative liabilities-current with an adjustment to shareholders' equity. See note 9 to our consolidated financial statements included in this annual report for details of these contracts.

The tables below set forth information relating to our significant obligations, including short-term borrowings and long-term borrowings, including bank loans, capital lease obligations and bonds payable, that are sensitive to interest rate fluctuations as of December 31, 2014.

Table of Contents

	Expected Maturity Date							Total	Fair Value
	2015	2016	2017	2018	2019	Thereafter	(in millions, except percentages)		
Short-term borrowings:									
Variable rate (NT\$)	4,113.0	—	—	—	—	—	—	4,113.0	4,113.0
Average interest rate	1.15 %	—	—	—	—	—	—	1.15 %	
Fixed rate (NT\$)	880.0	—	—	—	—	—	—	880.0	880.0
Average interest rate	1.02 %	—	—	—	—	—	—	1.02 %	
Variable rate (US\$)	510.9	—	—	—	—	—	—	510.9	510.9
Average interest rate	2.15 %	—	—	—	—	—	—	2.15 %	
Fixed rate (US\$)	29.1	—	—	—	—	—	—	29.1	29.1
Average interest rate	0.83 %	—	—	—	—	—	—	0.83 %	
Variable rate (RMB)	3,577.0	—	—	—	—	—	—	3,577.0	3,577.0
Average interest rate	4.69 %	—	—	—	—	—	—	4.69 %	
Variable rate (EUR)	15.3	—	—	—	—	—	—	15.3	15.3
Average interest rate	1.09 %	—	—	—	—	—	—	1.09 %	
Long-term borrowings:									
Variable rate (NT\$)	—	4,983.4	1,222.2	1,611.1	833.3	—	—	8,650.0	8,650.0
Average interest rate	—	1.56 %	1.87 %	2.10 %	2.17 %	—	—	1.76 %	
Fixed rate (NT\$)	0.1	8,000.0	—	—	—	—	—	8,000.1	8,000.1
Average interest rate	10.59 %	1.45 %	—	—	—	—	—	1.45 %	
Variable rate (US\$)	85.0	117.0	157.0	102.0	—	—	—	461.0	461.0
Average interest rate	2.16 %	3.04 %	3.97 %	3.57 %	—	—	—	3.31 %	
Fixed rate (US\$)	0.1	34.0	300.0	—	—	—	—	334.1	334.1
Average interest rate	6.18 %	1.10 %	2.13 %	—	—	—	—	2.02 %	
Variable rate (RMB)	5.0	70.3	116.7	125.0	150.0	23.0	—	490.0	490.0
Average interest rate	5.95 %	6.15 %	6.28 %	6.49 %	6.41 %	6.41 %	6.41 %	6.36 %	
Fixed rate (RMB)	22.8	500.2	0.0	—	—	—	—	523.0	523.0
Average interest rate	6.12 %	4.25 %	2.29 %	—	—	—	—	4.33 %	

Foreign Currency Exchange Rate Risk. Our foreign currency exposure gives rise to market risk associated with exchange rate movements against the NT dollar, our functional currency. Currently, the majority of our revenues are denominated in U.S. dollars, with a portion denominated in NT dollars and Japanese yen. Our costs of revenues and operating expenses are incurred in several currencies, primarily in NT dollars, U.S. dollars, RMB, Japanese yen, Korean won, as well as, to a lesser extent, Singapore dollars and Malaysian ringgit. In addition, a substantial portion of our capital expenditures, primarily for the purchase of packaging and testing equipment, has been, and is expected to continue to be, denominated primarily in U.S. dollars with the remainder in Japanese yen. The majority of our borrowings are denominated in NT dollars, U.S. dollars and RMB. Fluctuations in exchange rates, primarily among the U.S. dollar against the NT dollar, RMB and the Japanese yen, will affect our costs and operating margins and could result in exchange losses and increased costs in NT dollar and other local currency terms. See note 32 to our consolidated financial statements included in this annual report for details on foreign currency exchange rate sensitivity analysis.

Despite hedging and mitigating techniques implemented by us, fluctuations in exchange rates have affected, and may continue to affect, our financial condition and results of operations. We recorded net foreign exchange gains of NT\$965.4 million, net foreign exchange losses of NT\$276.2 million and NT\$1,222.0 (US\$38.7 million) in 2012, 2013

and 2014, respectively. In 2012, 2013 and 2014, the average exchange rate of the NT dollar to the U.S. dollar was 29.47, 29.73 and 30.38, respectively, calculated based on the statistical release by the Federal Reserve Board. To protect against reductions in value and the volatility of future cash flows caused by changes in foreign currency exchange rates, we utilize currency forward contracts and swap contracts from time to time to reduce the impact of foreign currency fluctuations on our results of operations. Our policy is to account for these contracts on a mark-to-market rate basis.

The table below sets forth our outstanding forward exchange contracts and swap contracts, for which the expected maturity dates are in 2015, in aggregate terms by type of contract as of December 31, 2014.

#### Forward Exchange Contracts and Swap Contracts



Table of Contents

	Forward Exchange Contracts	Swap Contracts
<b>Buy US\$ against NT\$</b>		
Notional Amount	–	US\$1,209.0 million
Weighted Average Strike Price	–	US\$/NT\$ 29.942
Fair Value	–	US\$59.667 million
<b>Sell US\$ against NT\$</b>		
Notional Amount	US\$14.0 million	US\$132.1 million
Weighted Average Strike Price	US\$/NT\$ 31.317	US\$/NT\$ 31.415
Fair Value	Negative US\$0.148 million	Negative US\$0.979 million
<b>Sell US\$ against RMB</b>		
Notional Amount	US\$127.0 million	US\$80.0 million
Weighted Average Strike Price	US\$/RMB 6.186	US\$/RMB 6.293
Fair Value	US\$0.442 million	US\$0.257 million
<b>Sell US\$ against JPY</b>		
Notional Amount	US\$18.4 million	US\$72.2 million
Weighted Average Strike Price	US\$/JP¥ 118.452	US\$/JP¥ 116.958
Fair Value	Negative US\$0.177 million	Negative US\$1.512 million
<b>Sell US\$ against MYR</b>		
Notional Amount	US\$6.0 million	–
Weighted Average Strike Price	US\$/MYR 3.477	–
Fair Value	Negative US\$0.043 million	–
<b>Sell US\$ against SGD</b>		
Notional Amount	US\$11.7 million	–
Weighted Average Strike Price	US\$/SGD 1.300	–
Fair Value	Negative US\$0.193 million	–
<b>Buy US\$ against RMB</b>		
Notional Amount	–	US\$35.0 million
Weighted Average Strike Price	–	US\$/RMB 6.208
Fair Value	–	Negative US\$0.140 million

**Other Market Risk.** Our exposure to other market risk relates primarily to our investments in publicly-traded stock, private-placement shares and bonds, open-end mutual funds and limited partnership interests. The value of these investments may fluctuate based on various factors including prevailing market conditions. Moreover, the fair value of investments in unlisted securities may be significantly different from their carrying value. As of December 31, 2014, our investments in publicly-traded stock, open-end mutual funds and private-placement bonds classified as financial assets at fair value through profit or loss were NT\$677.3 million (US\$21.4 million). As of December 31, 2014, our investments classified as available-for-sale financial assets were NT\$2,474.4 million (US\$78.3 million), primarily consisting of publicly-traded stock, open-end mutual funds and limited partnership interests. If the fair values of these investments fluctuate by 1.0%, our profit before income tax will increase or decrease by approximately NT\$6.8

million (US\$0.2 million) for the same period, and our other comprehensive before income tax will increase or decrease by approximately NT\$25.0 million (US\$0.8 million) for the same period. In addition, we are also exposed to our share price risk through conversion option, redemption option and put option of convertible bonds recognized as financial liabilities held for trading. If our share price increases or decreases by 7.0%, our profit before income tax for the year ended December 31 2014 will decrease by NT\$651.0 million (US\$20.6 million) or increase by NT\$608.0 million (US\$19.2 million), respectively. Furthermore, fluctuations in gold prices may also affect the price at which we have been able to purchase gold wire. How this will impact the results of our operations depends on whether such costs can be transferred onto our customers.

Item 12. Description of Securities Other Than Equity Securities

DEBT SECURITIES

Not applicable.

Table of Contents

## WARRANTS AND RIGHTS

Not applicable.

## OTHER SECURITIES

Not applicable.

## AMERICAN DEPOSITARY SHARES

## Depositary Fees and Charges

Under the terms of the amended and restated deposit agreement dated September 29, 2000 among Citibank, N.A., as depositary, holders and beneficial owners of ADSs and us, which was filed as an exhibit to our registration statement on Form F-6 on September 16, 2003, and its two amendments, which were filed as an exhibit to our registration statement on post-effective amendment No. 1 to Form F-6 on April 3, 2006 and our registration statement on post-effective amendment No. 2 to Form F-6 on October 25, 2006, respectively, for our ADSs, an ADS holder may have to pay the following service fees to the depositary bank:

Service	Fees
Issuance of ADSs	Up to US\$5.00 per 100 ADSs (or fraction thereof) issued
Delivery of deposited securities against surrender of ADSs	Up to US\$5.00 per 100 ADSs (or fraction thereof) surrendered
Distribution of cash dividends or other cash distributions	Up to US\$5.00 per 100 ADSs (or fraction thereof) held, unless prohibited by the exchange upon which the ADSs are listed
Distribution of ADSs pursuant to (i) stock dividends or other free stock distributions, or (ii) exercises of rights to purchase additional ADSs	Up to US\$5.00 per 100 ADSs (or fraction thereof) held, unless prohibited by the exchange upon which the ADSs are listed
Distribution of securities other than ADSs or rights to purchase additional ADSs	Up to US\$5.00 per 100 ADSs (or fraction thereof) held
Depositary Services	Up to US\$5.00 per 100 ADSs (or fraction thereof) held, unless prohibited by the exchange upon which the ADSs are listed
Transfer of ADRs	US\$1.50 per certificate presented for transfer

An ADS holder will also be responsible to pay certain fees and expenses incurred by the depositary bank and certain taxes and governmental charges such as:

- taxes (including applicable interest and penalties) and other governmental charges;
- such registration fees as may from time to time be in effect for the registration of shares or other deposited securities on the share register and applicable to transfers of shares or other deposited securities to or from the name of the custodian, the depositary or any nominees upon the making of deposits and withdrawals, respectively;

- such cable, telex and facsimile transmission and delivery expenses as are expressly provided in the Deposit Agreement to be at the expense of the person depositing or withdrawing shares or holders and beneficial owners of ADSs;
  - the expenses and charges incurred by the depositary in the conversion of foreign currency;
- such fees and expenses as are incurred by the depositary in connection with compliance with exchange control regulations and other regulatory requirements applicable to shares, deposited securities, ADSs and ADRs; and
  - the fees and expenses incurred by the depositary, the custodian or any nominee in connection with the servicing or delivery of deposited securities.

Table of Contents

Depository fees payable upon the issuance and cancellation of ADSs are typically paid to the depository bank by the brokers (on behalf of their clients) receiving the newly-issued ADSs from the depository bank and by the brokers (on behalf of their clients) delivering the ADSs to the depository bank for cancellation. The brokers in turn charge these transaction fees to their clients.

Depository fees payable in connection with distributions of cash or securities to ADS holders and the depository services fee are charged by the depository bank to the holders of record of ADSs as of the applicable ADS record date. Depository fees payable for cash distributions are generally deducted from the cash being distributed. In case of distributions other than cash (i.e., stock dividends, rights offerings), the depository bank charges the applicable fee to the ADS record date holders concurrent with the distribution. In the case of ADSs registered in the name of the investor (whether certificated or un-certificated in direct registration), the depository bank sends invoices to the applicable record date ADS holders. In case of ADSs held in brokerage and custodian accounts via the central clearing and settlement system, The Depository Trust Company (DTC), the depository bank generally collects its fees through the systems provided by DTC (whose nominee is the registered holder of the ADSs held in DTC) from the brokers and custodians holding ADSs in their DTC accounts. The brokers and custodians who hold their clients' ADSs in DTC accounts in turn charge their clients' accounts the amount of the fees paid to the depository banks.

In the event of refusal to pay depository fees, the depository bank may, under the terms of the Deposit Agreement, refuse the requested service until payment is received or may set-off the amount of the depository fees from any distribution to be made to the ADS holder. Note that the fees and charges you may be required to pay may vary over time and may be changed by us and by the depository bank. You will receive prior notice of such changes.

## Depository Payments

In 2014, we received US\$4,150,394.6 from Citibank, N.A., the depository bank for our ADR programs. The table below sets forth details of the amount we received from Citibank, N.A.

## Depository Payments

Reimbursement of proxy process expenses	\$	US 9,732.0
Reimbursement of ADR holders identification expenses	\$	US 21,435.0
Direct reimbursement	\$	US 4,119,227.6
Net payment received by us(1)	\$	US 4,150,394.6

(1) net of U.S. withholding tax.

## PART II

## Item 13. Defaults, Dividend Arrearages and Delinquencies

Not applicable.

## Item 14. Material Modifications to the Rights of Security Holders and Use of Proceeds

Not applicable.

## Item 15. Controls and Procedures

## Disclosure Controls and Procedures

As of December 31, 2014, we, under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, performed an evaluation of the effectiveness of our disclosure controls and procedures as defined in Rules 13a-15(e) and 15(d)-15(e) under the Exchange Act. Our management necessarily applied its judgment in assessing the costs and benefits of such controls and procedures, which by their nature can provide only reasonable assurance regarding management's control objectives. Based on this evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures are effective for recording, processing, summarizing and reporting, within the time periods specified in the SEC's rules and forms, information required to be disclosed in the reports we file or submit under the Exchange Act, and for accumulating and communicating such information to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

Table of Contents

Management's Annual Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as defined in Rule 13a-15(f) and 15d-15(f) promulgated under the Securities Exchange Act of 1934.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Our management assessed the effectiveness of our internal control over financial reporting as of December 31, 2014. In making this assessment, our management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in Internal Control-Integrated Framework (2013).

Based on this assessment, management concluded that, as of December 31, 2014, our internal control over financial reporting is effective based on those criteria.

Our independent registered public accounting firm, Deloitte & Touche, independently assessed the effectiveness of our internal control over financial reporting. Deloitte & Touche has issued an attestation report, which is included below.

Report of the Independent Registered Public Accounting Firm

To: the Board of Directors and Shareholders of Advanced Semiconductor Engineering, Inc.

We have audited the internal control over financial reporting of Advanced Semiconductor Engineering, Inc. and its subsidiaries (the "Group") as of December 31, 2014, based on the criteria established in Internal Control-Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. The Group's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Annual Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Group's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed by, or under the supervision of, the company's principal executive and principal financial officers, or persons performing similar functions, and effected by the company's board of directors, management, and other personnel to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of

records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.



## Table of Contents

Because of the inherent limitations of internal control over financial reporting, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may not be prevented or detected on a timely basis. Also, projections of any evaluation of the effectiveness of the internal control over financial reporting to future periods are subject to the risk that the controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, the Group maintained, in all material respects, effective internal control over financial reporting as of December 31, 2014, based on the criteria established in Internal Control-Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated financial statements of the Group as of and for the year ended December 31, 2014 and our report dated March 11, 2015 expressed an unqualified opinion on those financial statements and included an explanatory paragraph regarding the convenience translation of New Taiwan dollar amounts into U.S. dollar amounts.

/s/ Deloitte & Touche

Taipei, Taiwan  
The Republic of China  
March 11, 2015

## Changes in Internal Control Over Financial Reporting

There has been no change in our internal control over financial reporting that occurred during the period covered by this annual report that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Item 16. [Reserved]

Item 16A. Audit Committee Financial Expert

Our board of directors determined that Shen-Fu Yu and Ta-Lin Hsu are audit committee financial experts as defined under the applicable rules of the SEC issued pursuant to Section 407 of the Sarbanes-Oxley Act of 2002 and are independent for the purposes of Rule 10A-3 of the Exchange Act.

Item 16B. Code of Ethics

We have adopted a code of ethics that satisfies the requirements of Item 16B of Form 20-F and applies to all employees, officers, supervisors and directors of our company and our subsidiaries, including our Chief Executive Officer and Chief Financial Officer. We have posted our code of ethics on our website at <http://www.aseglobal.com>.

Item 16C. Principal Accountant Fees and Services

Policy on Pre-Approval of Audit and Non-Audit Services of Independent Registered Public Accounting Firm

Our audit committee, which was established on July 22, 2005, pre-approves all audit and non-audit services provided by our independent registered public accounting firm, including audit services, audit-related services, tax services and other services, on a case-by-case basis.

Table of Contents

## Independent Registered Public Accounting Firm's Fees

The following table sets forth the aggregate fees by categories specified below in connection with certain professional services rendered by Deloitte & Touche. We did not pay any other fees to our independent registered public accounting firm during the periods indicated below.

	For the Year Ended December 31,			
	2012	2013	2014	US\$
	NT\$	NT\$	NT\$	
	(in thousands)			
Audit fees(1)	151,981.7	140,876.7	158,962.4	5,030.4
Audit-related fees(2)	–	8,049.4	5,000.0	158.2
Tax fees(3)	12,044.0	13,409.8	20,160.6	638.0
All other fees(4)	583.5	5,077.0	5,592.2	177.0
Total	164,609.2	167,412.9	189,715.2	6,003.6

- (1) Audit fees are defined as the standard audit and review work that needs to be performed each year in order to issue an opinion on our consolidated financial statements and to issue reports on the local statutory financial statements. It also includes services that can only be provided by our auditor such as statutory audits required by the Tax Bureau of the ROC and the Customs Bureau of the ROC, consents and comfort letters and any other audit services required for SEC or other regulatory filings.
- (2) Audit-related fees consist of assurance and related services by Deloitte & Touche that are reasonably related to the performance of the audit or review of our financial statements and are not reported above under Audit Fees. The service for the fees disclosed under this category relate to cash capital increase and bonds offering.
- (3) Tax fees consist of professional services rendered by Deloitte & Touche for tax compliance and tax advice. The services for the fees disclosed under this category include tax return preparation and technical tax advice.
- (4) Other fees primarily consist of risk management advisory fee and agreed-upon procedures as required by the ROC government for capital investments in the PRC.

## Item 16D. Exemptions from the Listing Standards for Audit Committees

Not applicable.

## Item 16E. Purchases of Equity Securities by the Issuer and Affiliated Purchasers

On November 29, 2010, we announced a share repurchase program, or Third Share Repurchase, to repurchase up to 37.0 million of our common shares at prices between NT\$25.0 to NT\$41.0 per share during the period from November 30, 2010 to January 28, 2011. This share repurchase program concluded on December 6, 2010, when a total of 37.0 million of our common shares had been repurchased pursuant to this program. As of January 19, 2011, all of these common shares we repurchased had been cancelled. On August 15, 2011, we announced a share repurchase program, or Fourth Share Repurchase, to repurchase up to 34.0 million of our common shares at prices between NT\$20.0 to NT\$45.0 per share during the period from August 16, 2011 to October 15, 2011. This share repurchase program concluded on August 29, 2011, when a total of 34.0 million of our common shares had been repurchased pursuant to this program. On September 1, 2011, we announced a share repurchase program, or Fifth Share Repurchase, to repurchase up to 50.0 million of our common shares at prices between NT\$20.0 to NT\$42.0 per share during the period from September 2, 2011 to November 1, 2011. This share repurchase program concluded on

September 16, 2011, when a total of 50.0 million of our common shares had been repurchased pursuant to this program. On September 20, 2011, we announced a share repurchase program, or Sixth Share Repurchase, to repurchase up to 30.0 million of our common shares at prices between NT\$22.0 to NT\$40.0 per share during the period from September 21, 2011 to November 20, 2011. This share repurchase program concluded on November 20, 2011, when a total of 21.475 million of our common shares had been repurchased pursuant to this program. As of January 19, 2012, all of these common shares we repurchased had been cancelled. On February 26, 2015, we announced a share repurchase program, or Seventh Share Repurchase, approved by our board of directors, to repurchase up to 120.0 million of our common shares, which accounts for 1.53% of our total issued shares, at prices between NT\$32.0 to NT\$55.0 per share during the period from March 2, 2015 to April 30, 2015. The program authorized us to repurchase up to NT\$6,600 million worth of our issued common shares in open market transactions.

Table of Contents

The table below sets forth certain information about the repurchase of our common shares under these share repurchase programs.

Period	Total Number of Common Shares Purchased	Average Price Paid Per Common Share	Total Number of Common Shares Purchased as Part of Publicly Announced Programs	Maximum Number (or Approximate Dollar Value) of Common Shares that May Yet Be Purchased Under the Programs
<b>Third Share Repurchase</b>				
November 2010 (November 30, 2010)	7,300,000	31.48	7,300,000	29,700,000
December 2010 (December 1, 2010 – December 6, 2010)	29,700,000	32.17	29,700,000	–
Total	37,000,000	32.03	37,000,000	–
<b>Fourth Share Repurchase</b>				
August 2011 (August 16, 2011 – August 29, 2011)	34,000,000	25.72	34,000,000	–
<b>Fifth Share Repurchase</b>				
September 2011 (September 2, 2011 – September 16, 2011)	50,000,000	26.68	50,000,000	–
<b>Sixth Share Repurchase</b>				
September 2011 (September 21, 2011 – September 30, 2011)	6,488,000	27.15	6,488,000	23,512,000
October 2011 (October 1, 2011 – October 31, 2011)	14,316,000	25.85	20,804,000	9,196,000
November 2011 (November 1, 2011 – November 20, 2011)	671,000	26.72	21,475,000	8,525,000
Total	21,475,000	26.27	21,475,000	8,525,000
<b>Seventh Share Repurchase</b>				
March 2015 (March 2, 2015 – March 17, 2015)	82,169,000	44.89	82,169,000	37,831,000

## Item 16F. Change In Registrant's Certifying Accountant

Not applicable.

## Item 16G. Corporate Governance

As a company listed on the New York Stock Exchange, or the NYSE, we are subject to certain corporate governance rules of the NYSE. The application of the NYSE's corporate governance rules is limited for foreign private issuers, recognizing that they have to comply with domestic requirements. As a foreign private issuer, we must comply with the following NYSE corporate governance rules: 1) satisfy the audit committee requirements of the SEC; 2) chief executive officer must promptly notify the NYSE in writing upon becoming aware of any material non-compliance with applicable NYSE corporate governance rules; 3) submit annual and interim affirmations to the NYSE regarding compliance with applicable NYSE corporate governance requirements; and 4) provide a brief description of any significant differences between our corporate governance practices and those required of U.S. companies under the

NYSE listing standards. The table below sets forth the significant differences between our corporate governance practices and those required of U.S. companies under the NYSE listing standards.

New York Stock Exchange Corporate Governance Rules Applicable to U.S. Companies	Description of Significant Differences between Our Governance Practices and the NYSE Corporate Governance Rules Applicable to U.S. Companies
Director independence	
Listed companies must have a majority of independent directors, as defined under the NYSE listing standards.	Two members of our board of directors are independent as defined in Rule 10A-3 under the Exchange Act. We do not assess the independence of our directors under the independence requirements of the NYSE listing standards.

Table of Contents

New York Stock Exchange Corporate  
Governance  
Rules Applicable to U.S. Companies

Description of Significant Differences  
between Our Governance Practices and the  
NYSE Corporate Governance Rules  
Applicable to U.S. Companies

To empower non-management directors to  
serve as a more effective check on  
management, the non-management directors  
of each company must meet at regularly  
scheduled executive sessions without  
management.

Pursuant to relevant laws and regulations of  
the ROC, we have two independent  
directors on our board of directors that were  
elected through the candidate nomination  
system at our annual general meeting on  
June 21, 2012.

All of our directors attend the meetings of  
the board of directors. Our non-management  
directors do not meet at regularly scheduled  
executive sessions without management.  
The ROC Company Law does not require  
companies incorporated in the ROC to have  
their non-management directors meet at  
regularly scheduled executive sessions  
without management.

Nominating/Corporate governance committee

Listed companies must have a  
nominating/corporate governance  
committee composed entirely of  
independent directors and governed by a  
written charter that provides for certain  
responsibilities of the committee set out in  
the NYSE listing standards.

We do not have a nominating/corporate  
governance committee. The ROC Company  
Law does not require companies  
incorporated in the ROC to have a  
nominating/corporate governance  
committee.

Currently, our board of directors performs  
the duties of a corporate governance  
committee and regularly reviews our  
corporate governance principles and  
practices.

The ROC Company Law requires that  
directors be elected by shareholders. Under  
ROC law and regulations, companies that  
have independent directors are required to  
adopt a candidate nomination system for the  
election of independent directors. Our two  
independent directors were elected through  
the candidate nomination system provided  
in our articles of incorporation. All of our  
non-independent directors were elected  
directly by our shareholders at our  
shareholders meetings without a nomination

process.

#### Compensation committee

Listed companies must have a compensation committee composed entirely of independent directors and governed by a written charter that provides for certain responsibilities of the committee set out in the NYSE listing standards.

In addition to any requirement of Rule 10A-3(b)(1), all compensation committee members must satisfy the independence requirements for independent directors set out in the NYSE listing standards.

We have established a compensation committee on September 29, 2011 which was required by the regulations promulgated by the FSC in March 2011. The charter of such committee contains similar responsibilities as those provided under NYSE listing standards.

Our compensation committee members satisfy the independence requirements of Rule 10A-3 under the Exchange Act. We do not assess the independence of our compensation committee member under the independence requirements of the NYSE listing standards but adopt the independence standard as promulgated under ROC Securities and Exchange Act.



Table of Contents

New York Stock Exchange Corporate  
Governance  
Rules Applicable to U.S. Companies

Description of Significant Differences  
between Our Governance Practices and the  
NYSE Corporate Governance Rules  
Applicable to U.S. Companies

Audit committee

Listed companies must have an audit  
committee that satisfies the requirements of  
Rule 10A-3 under the Exchange Act.

We have an audit committee that satisfies the requirements of Rule 10A-3 under the Exchange Act. Pursuant to the ROC Securities and Exchange Act, public companies shall either establish an audit committee or install supervisors provided that the FSC may, after considering the scale, business nature of a public company and other essential conditions, require the company to establish an audit committee in place of its supervisor. According the ruling issued by the FSC on February 20, 2013 (the "FSC Ruling"), we are required to retain an audit committee no later than the expiration of the term of the current directors and supervisors. We currently have supervisors and shall replace our supervisors by establishing an audit committee no later than the expiration of the term of our current directors and supervisors in accordance with the FSC Ruling.

The audit committee must have a minimum of three members. In addition to any requirement of Rule 10A-3(b)(1), all audit committee members must satisfy the independence requirements for independent directors set out in the NYSE listing standards.

We currently have two members on our audit committee. Our audit committee members satisfy the independence requirements of Rule 10A-3 under the Exchange Act. We do not assess the independence of our audit committee member under the independence requirements of the NYSE listing standards.

The audit committee must have a written charter that provides for the duties and responsibilities set out in Rule 10A-3 and addresses certain other matters required by the NYSE listing standards.

Our audit committee charter provides for the audit committee to assist our board of directors in its oversight of (i) the integrity of our financial statements, (ii) the qualifications, independence and performance of our independent auditor and (iii) our compliance with legal and regulatory requirements and provides for the duties and responsibilities set out in

Rule 10A-3. Our audit committee charter does not address all the matters required by the NYSE listing standards beyond the requirements of Rule 10A-3.

Because the appointment and retention of our independent auditor are the responsibility of our entire board of directors under ROC law and regulations, our audit committee charter provides that the audit committee shall make recommendations to the board of directors with respect to these matters.

Each listed company must have an internal audit function.

We have an internal audit function. Under the ROC Regulations for the Establishment of Internal Control Systems by Public Companies, a public company is required to set out its internal control systems in writing, including internal audit implementation rules, which must be approved by the board of directors.

Our entire board of directors and the Chief Executive Officer are responsible for the establishment of the internal audit functions, compliance with the internal audit implementation rules and oversight of our internal control systems, including the appointment and retention of our independent auditor.

Table of Contents

New York Stock Exchange Corporate  
Governance  
Rules Applicable to U.S. Companies

Description of Significant Differences  
between Our Governance Practices and the  
NYSE Corporate Governance Rules  
Applicable to U.S. Companies

Equity compensation plans

Shareholders must be given the opportunity to vote on all equity compensation plans and material revisions thereto, except for employment inducement awards, certain grants, plans and amendments in the context of mergers and acquisitions, and certain specific types of plans.

We comply with the corresponding requirements of the ROC Company Law, the ROC Securities and Exchange Law, and the ROC Criteria Governing the Offering and Issuance of Securities by Securities Issuers, which require shareholders' approval for the distribution of employee bonuses, while the board of directors has authority to approve employee stock option plans by a majority vote of the board of directors at a meeting where at least two-thirds of all directors are present and to grant options to employees pursuant to such plans provided that shareholders' approval is required if the exercise price of an option would be less than the closing price of the common shares on the Taiwan Stock Exchange on the grant date of the option, subject to the approval of the Securities and Futures Bureau of the FSC, and to approve treasury stock programs and the transfer of shares to employees under such programs by a majority vote of the board of directors in a meeting where at least two-thirds of all directors are present.

Corporate governance guidelines

Listed companies must adopt and disclose corporate governance guidelines.

We currently comply with the domestic non-binding Corporate Governance Best-Practice Principles for Taiwan Stock Exchange and Taipei Exchange Listed Companies promulgated by the Taiwan Stock Exchange and the Taipei Exchange, and we provide an explanation of differences between our practice and the principles, if any, in our ROC annual report.

Code of ethics for directors, officers and employees

Listed companies must adopt and disclose a code of business conduct and ethics for directors, officers and employees, and promptly disclose any waivers of the code for directors or executive officers.

We have adopted a code of ethics that satisfies the requirements of Item 16B of Form 20-F and applies to all employees, officers, supervisors and directors of our company and our subsidiaries and will disclose any waivers of the code as required by Item 16B of Form 20-F. We have posted our code of ethics on our website.

#### Description of significant differences

Listed foreign private issuers must disclose any significant ways in which their corporate governance practices differ from those followed by domestic companies under NYSE listing standards.

This table contains the significant differences between our corporate governance practices and those required of U.S. companies under the NYSE listing standards.

Table of Contents

New York Stock Exchange Corporate Governance Rules Applicable to U.S. Companies

Description of Significant Differences between Our Governance Practices and the NYSE Corporate Governance Rules Applicable to U.S. Companies

CEO certification

Each listed company CEO must certify to the NYSE each year that he or she is not aware of any violation by the company of NYSE corporate governance listing standards, qualifying the certification to the extent necessary.

As a foreign private issuer, we are not required to comply with this rule; however, our Chief Executive Officer provides certifications under Sections 302 and 906 of the Sarbanes-Oxley Act.

Each listed company CEO must promptly notify the NYSE in writing after any executive officer of the listed company becomes aware of any material non-compliance with any applicable provisions of Section 303A.

We intend to comply with this requirement.

Each listed company must submit an executed Written Affirmation annually to the NYSE. In addition, each listed company must submit an interim Written Affirmation each time a change occurs to the board or any of the committees subject to Section 303A. The annual and interim Written Affirmations must be in the form specified by the NYSE.

We have complied with this requirement to date and intend to continue to comply going forward.

Website

Listed companies must have and maintain a publicly accessible website

We have and maintain a publicly accessible website.

Item 16H. Mine Safety Disclosure

Not applicable.

Table of Contents

PART III

Item 17. Financial Statements

The Company has elected to provide financial statements for fiscal year 2014 and the related information pursuant to Item 18.

Item 18. Financial Statements

Reference is made to pages F-1 to F-90 of this annual report.

The consolidated financial statements of the Company and the report thereon by its independent registered public accounting firm listed below are attached hereto as follows:

- (a) Report of Independent Registered Public Accounting Firm of the Company dated March 11, 2015 (page F-1).
- (b) Consolidated Balance Sheets of the Company and subsidiaries as of December 31, 2013 and 2014 (page F-2 to F-4).
- (c) Consolidated Statements of Comprehensive Income of the Company and subsidiaries for the years ended December 31, 2012, 2013 and 2014 (page F-5 to F-6).
- (d) Consolidated Statements of Changes in Equity of the Company and subsidiaries for the years ended December 31, 2012, 2013 and 2014 (page F-7 to F-8).
- (e) Consolidated Statements of Cash Flows of the Company and subsidiaries for the years ended December 31, 2012, 2013 and 2014 (pages F-9 to F-11).
- (f) Notes to Consolidated Financial Statements of the Company and subsidiaries (pages F-12 to F-90).

Item 19. Exhibits

- 1. Articles of Incorporation of the Registrant (English translation of Chinese).
- 2. (a) Amended and Restated Deposit Agreement dated as of September 29, 2000 among ASE Inc., Citibank N.A., as depositary, and Holders and Beneficial Holders of American Depositary Shares evidenced by American Depositary Receipts issued thereunder, including the form of American Depositary Receipt (incorporated by reference to Exhibit (a) to our registration statement on Form F-6 (File No. 333-108834) filed on September 16, 2003).
- (b) Letter Agreement dated as of February 1, 2001 by and between ASE Inc. and Citibank N.A., as depositary for the sole purpose of accommodating the surrender of ASE Inc.'s Rule 144A Global Depositary Shares, the issuance of American Depositary Shares and the delivery of American Depositary Receipts in the context of the termination of ASE Inc.'s Rule 144A Depositary Receipts Facility (incorporated by reference to Exhibit (b)(i) to our registration statement on Post-Effective Amendment No. 1 to Form F-6 (File No. 333-108834) filed on April 3, 2006).
- (c)

Letter Agreement dated as of September 25, 2003 by and between ASE Inc. and Citibank N.A., as depositary for the sole purpose of accommodating the issuance of American Depositary Shares upon ASE Inc.'s deposit of its shares with the depositary following the conversion of certain bonds issued by ASE Inc. in accordance with, and subject to, the terms and conditions of the indenture governing such bonds (incorporated by reference to Exhibit (b)(ii) to our registration statement on Post-Effective Amendment No. 1 to Form F-6 (File No. 333-108834) filed on April 3, 2006).

- (d) Amendment No. 1 to Amended and Restated Deposit Agreement dated as of April 6, 2006 among ASE Inc., Citibank N.A., as depositary, and Holders and Beneficial Holders of American Depositary Shares evidenced by American Depositary Receipts issued thereunder, including the form of American Depositary Receipt (incorporated by reference to Exhibit (a)(ii) to our registration statement on Post-Effective Amendment No. 2 to Form F-6 (File No. 333-108834) filed on October 25, 2006).

Table of Contents

- (e) Form of Amendment No. 2 to Amended and Restated Deposit Agreement among ASE Inc., Citibank N.A., as depositary, and Holders and Beneficial Holders of American Depositary Shares evidenced by American Depositary Receipts issued thereunder, including the form of American Depositary Receipt (incorporated by reference to Exhibit (a)(iii) to our registration statement on Post-Effective Amendment No. 2 to Form F-6 (File No. 333-108834) filed on October 25, 2006).
4. (a) Asset Purchase Agreement dated as of July 3, 1999 among ASE (Chung Li) Inc., ASE Inc., Motorola Electronics Taiwan, Ltd. and Motorola, Inc. (incorporated by reference to Exhibit 10.2 to ASE Test's registration statement on Form F-3 (File No. 333-10892) filed on September 27, 1999 (the "ASE Test 1999 Form-3")).
- (b) Agreement dated as of June 5, 2002 among ASE (Chung Li) Inc., ASE Inc., Motorola Electronics Taiwan, Ltd. and Motorola, Inc. amending certain earn-out arrangements provided for in Section 2.09(b)(ii)(D) of the Asset Purchase Agreement dated as of July 3, 1999 among the same parties (incorporated by reference to Exhibit 4(b) to our annual report on Form 20-F (File No. 001-16125) for the year ended December 31, 2002 filed on June 30, 2003).
- (c) Stock Purchase Agreement dated as of July 3, 1999 among ASE Investment (Labuan) Inc., ASE Inc., Motorola Asia Ltd. and Motorola, Inc. relating to the purchase and sale of 100.0% of the common stock of Motorola Korea Ltd. (incorporated by reference to Exhibit 10.3 to the ASE Test 1999 Form F-3).
- (d) BGA Immunity Agreement dated as of January 25, 1994 between ASE Inc. and Motorola, Inc. (incorporated by reference to Exhibit 10.6 to the Form F-1).
- (e)† Amendment dated March 18, 2003 renewing the BGA Immunity Agreement dated as of January 25, 1994 between ASE Inc. and Motorola, Inc. (incorporated by reference to Exhibit 4(g) to our annual report on Form 20-F (File No. 001-16125) for the year ended December 31, 2003 filed on June 30, 2004).
- (f) Consent dated June 10, 2004 to the Assignment of the BGA Immunity Agreement between ASE Inc. and Motorola, Inc. dated January 25, 1994 (incorporated by reference to Exhibit 4(h) to our annual report on Form 20-F (File No. 001-16125) for the year ended December 31, 2003 filed on June 30, 2004).
- (g) Asset Purchase Agreement by and among Flextronics Manufacturing (M) Sdn Bhd, as Buyer, ASE Electronics (M) Sdn. Bhd. as Company, dated as of October 3, 2005 (incorporated by reference to Exhibit 4(g) to our annual report on Form 20-F (File No. 001-16125) for the year ended December 31, 2005 filed on June 19, 2006).
- (h) Joint Venture Agreement dated as of July 14, 2006 among Advanced Semiconductor Engineering, Inc. and Powerchip Semiconductor Corp. relating to the establishment of, and our investment of 60.0% in, PowerASE (incorporated by reference to Exhibit 4(r) to our annual report on Form 20-F (File No. 001-16125) for the year ended December 31, 2006 filed on June 25, 2007, as amended).
- (i) Sale and Purchase Agreement dated January 11, 2007 among J&R Holding Limited and Seacoast Profits Limited relating to our acquisition of 100% of GAPT (incorporated by reference to Exhibit 4(s) to our annual report on Form 20-F (File No. 001-16125) for the year ended December 31, 2006 filed on June 25, 2007, as amended).
- (j) Equity Interests Transfer Agreement dated August 6, 2007 by and among NXP B.V., NXP Semiconductors Suzhou Ltd. and J&R Holding Limited relating to our acquisition of 60% of ASEN, our joint venture with NXP



Semiconductors (incorporated by reference to Exhibit 4(j) to our annual report on Form 20-F (File No. 001-16125) for the year ended December 31, 2008 filed on June 24, 2009).

(k) Scheme Implementation Agreement dated September 4, 2007 between Advanced Semiconductor Engineering, Inc. and ASE Test Limited relating to our acquisition of all the outstanding ordinary shares of, and the privatization of, ASE Test (incorporated by reference to Appendix A to Exhibit (a)(1) to Schedule 13E-3 (File No. 005-55723) filed by ASE Test on January 4, 2008).

Table of Contents

- (l) Syndicated Loan Agreement in the amount of NT\$24,750 million dated March 3, 2008 among Advanced Semiconductor Engineering, Inc., Citibank, N.A., Taipei Branch and the banks and banking institutions listed on Schedule I thereto relating to our acquisition of all the outstanding ordinary shares of, and the privatization of, ASE Test (incorporated by reference to Exhibit 4(l) to our annual report on Form 20-F (File No. 001-16125) for the year ended December 31, 2008 filed on June 24, 2009).
- (m) Equity Purchase Agreement dated March 17, 2008 between Aimhigh Global Corp., TCC Steel and J&R Holding Limited in respect of Weihai Aimhigh Electronic Co. Ltd. relating to our acquisition of 100% of ASE (Weihai), Inc. (incorporated by reference to Exhibit 4(m) to our annual report on Form 20-F (File No. 001-16125) for the year ended December 31, 2008 filed on June 24, 2009).
- (n) Syndicated Loan Agreement in the amount of US\$200 million dated May 29, 2008 among Advanced Semiconductor Engineering, Inc., Citibank, N.A., Taipei Branch and the banks and banking institutions listed on Schedule I thereto relating to our acquisition of all the outstanding ordinary shares of, and the privatization of, ASE Test (incorporated by reference to Exhibit 4(n) to our annual report on Form 20-F (File No. 001-16125) for the year ended December 31, 2008 filed on June 24, 2009).
- (o) Equity Purchase Agreement dated October 25, 2011 between PowerASE Technology, Inc. and certain shareholders of Lu-Chu Development Corporation relating to our acquisition of 72.97% of all the outstanding ordinary shares of Lu-Chu Development Corporation (incorporated by reference to Exhibit 4(o) to our annual report on Form 20-F (File No. 001-16125) for the year ended December 31, 2011 filed on April 20, 2012).
- (p) Equity Purchase Agreement dated October 25, 2011 between PowerASE Technology, Inc. and shareholders of Lu-Chu Development Corporation listed on Schedule I thereto relating to our acquisition of 9.3% of all the outstanding ordinary shares of Lu-Chu Development Corporation (incorporated by reference to Exhibit 4(p) to our annual report on Form 20-F (File No. 001-16125) for the year ended December 31, 2011 filed on April 20, 2012).
- (q) Equity Purchase Agreement dated November 17, 2011 between ASE Assembly & Test (Shanghai) Limited and Kunshan Ding Yao Real Estate Development Co., Ltd. relating to our acquisition of 10% equity of Shanghai Ding Hui Real Estate Development Co., Ltd. (incorporated by reference to Exhibit 4(q) to our annual report on Form 20-F (File No. 001-16125) for the year ended December 31, 2011 filed on April 20, 2012).
- (r) Equity Purchase Agreement dated January 13, 2012 between Advanced Semiconductor Engineering, Inc. and shareholders of Yang Ting Tech Co., Ltd. listed on Schedule I thereto relating to our acquisition of 61.63% of all the outstanding ordinary shares of Yang Ting Tech Co., Ltd. (incorporated by reference to Exhibit 4(r) to our annual report on Form 20-F (File No. 001-16125) for the year ended December 31, 2011 filed on April 20, 2012).
- (s) Equity Purchase Agreement dated January 13, 2012 between Advanced Semiconductor Engineering, Inc. and shareholders of Yang Ting Tech Co., Ltd. listed on Schedule I thereto relating to our acquisition of 38.37% of all the outstanding ordinary shares of Yang Ting Tech Co., Ltd. (incorporated by reference to Exhibit 4(s) to our annual report on Form 20-F (File No. 001-16125) for the year ended December 31, 2011 filed on April 20, 2012).
8. List of Subsidiaries
12. (a) Certification of Jason C.S. Chang, required by Rule 13a-14(a) of the Exchange Act.
- (b) Certification of Joseph Tung, required by Rule 13a-14(a) of the Exchange Act.

13. Certification of the Chief Executive Officer and the Chief Financial Officer of Advanced Semiconductor Engineering, Inc. required by Rule 13a-14(b) of the Exchange Act and Section 1350 of Chapter 63 of Title 18 of the United States Code.

15. (a) Consent of Deloitte & Touche.

113

---

Table of Contents

---

† Does not contain portions for which confidential treatment has been granted.

The Company agrees to furnish to the SEC upon request a copy of any instrument which defines the rights of holders of long-term debt of the Company and its consolidated subsidiaries.

114

---

Table of Contents

SIGNATURES

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this annual report on its behalf.

ADVANCED SEMICONDUCTOR ENGINEERING, INC.

By: /s/ Joseph Tung  
Name: Joseph Tung  
Title: Chief Financial Officer

Date: March 18, 2015

Table of Contents

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

	Page
Consolidated Financial Statements of Advanced Semiconductor Engineering, Inc. and Subsidiaries	
<u>Independent Registered Public Accounting Firm's Report</u>	<u>F-1</u>
<u>Consolidated Balance Sheets</u>	<u>F-2</u>
<u>Consolidated Statements of Comprehensive Income</u>	<u>F-5</u>
<u>Consolidated Statements of Changes in Equity</u>	<u>F-7</u>
<u>Consolidated Statements of Cash Flows</u>	<u>F-9</u>
<u>Notes to Consolidated Financial Statements</u>	<u>F-12</u>

---

Table of Contents

Advanced Semiconductor Engineering,  
Inc. and Subsidiaries

Consolidated Financial Statements as of  
December 31, 2013 and 2014 and for the  
Years Ended December 31, 2012, 2013 and 2014 and  
Report of Independent Registered Public Accounting Firm

---

Table of Contents

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Shareholders of  
Advanced Semiconductor Engineering, Inc.

We have audited the accompanying consolidated balance sheets of Advanced Semiconductor Engineering, Inc. (a corporation incorporated under the laws of the Republic of China) and its subsidiaries (collectively, the “Group”) as of December 31, 2013 and 2014, and the related consolidated statements of comprehensive income, changes in equity and cash flows for each of the three years in the period ended December 31, 2014, all expressed in New Taiwan dollars. These consolidated financial statements are the responsibility of the Group’s management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the consolidated financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall consolidated financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Group as of December 31, 2013 and 2014, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2014, in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board.

Our audits also comprehended the translation of New Taiwan dollar amounts into U.S. dollar amounts and, in our opinion, such translation has been made in conformity with the basis stated in Note 4 to the consolidated financial statements. Such U.S. dollar amounts are presented solely for the convenience of the readers.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the Group’s internal control over financial reporting as of December 31, 2014, based on the criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated March 11, 2015 expressed an unqualified opinion on the Group’s internal control over financial reporting.

/s/ Deloitte & Touche  
Taipei, Taiwan  
Republic of China

March 11, 2015



Table of Contents

## ADVANCED SEMICONDUCTOR ENGINEERING, INC. AND SUBSIDIARIES

## CONSOLIDATED BALANCE SHEETS

(Amounts in Thousands)

	December 31, 2013	December 31, 2014	US\$ (Note 4)
ASSETS	NT\$	NT\$	
<b>CURRENT ASSETS</b>			
Cash and cash equivalents (Notes 4 and 6)	\$45,026,371	\$51,694,410	\$1,635,899
Financial assets at fair value through profit or loss - current (Notes 4, 5 and 7)	2,764,269	4,988,843	157,875
Available-for-sale financial assets - current (Notes 4 and 8)	2,376,970	1,533,265	48,521
Trade receivables, net (Notes 4 and 10)	43,235,573	52,920,810	1,674,709
Other receivables (Note 4)	422,345	537,122	16,997
Current tax assets (Notes 4 and 24)	150,596	65,312	2,067
Inventories (Notes 4, 5 and 11)	16,281,236	20,163,093	638,072
Inventories related to real estate business (Notes 4, 5, 12, 23 and 34)	18,589,255	23,986,478	759,066
Other financial assets - current (Notes 4 and 34)	278,375	638,592	20,209
Other current assets	3,051,492	3,427,265	108,458
<b>Total current assets</b>	<b>132,176,482</b>	<b>159,955,190</b>	<b>5,061,873</b>
<b>NON-CURRENT ASSETS</b>			
Available-for-sale financial assets - non-current (Notes 4 and 8)	1,140,329	941,105	29,782
Investments accounted for using the equity method (Notes 4 and 13)	1,205,158	1,468,242	46,463
Property, plant and equipment (Notes 4, 5, 14, 23, 34 and 35)	131,497,331	151,587,115	4,797,061
Goodwill (Notes 4, 5 and 15)	10,347,820	10,445,415	330,551
Other intangible assets (Notes 4, 5, 16 and 23)	1,605,824	1,467,871	46,452
Deferred tax assets (Notes 4, 5 and 24)	3,684,702	4,265,220	134,975
Other financial assets - non-current (Notes 4 and 34)	354,993	367,345	11,625
Long-term prepayments for lease (Note 17)	4,072,281	2,585,964	81,834
Other non-current assets	637,163	635,350	20,106
<b>Total non-current assets</b>	<b>154,545,601</b>	<b>173,763,627</b>	<b>5,498,849</b>
<b>TOTAL</b>	<b>\$286,722,083</b>	<b>\$333,718,817</b>	<b>\$10,560,722</b>

(Continued)

Table of Contents

## ADVANCED SEMICONDUCTOR ENGINEERING, INC. AND SUBSIDIARIES

## CONSOLIDATED BALANCE SHEETS

(Amounts in Thousands)

	December 31, 2013	December 31, 2014	US\$ (Note 4)
LIABILITIES AND EQUITY	NT\$	NT\$	
<b>CURRENT LIABILITIES</b>			
Short-term borrowings (Note 18)	\$44,618,195	\$41,176,033	\$1,303,039
Financial liabilities at fair value through profit or loss - current (Notes 4, 5 and 7)	1,853,304	2,651,352	83,903
Derivative financial liabilities for hedging - current (Notes 4, 5 and 9)	3,310	-	-
Trade payables	28,988,976	35,411,281	1,120,610
Other payables (Note 20)	14,758,553	22,364,516	707,738
Current tax liabilities (Notes 4 and 24)	4,225,390	6,630,696	209,832
Advance real estate receipts (Note 4)	19,248	480,325	15,200
Current portion of bonds payable (Notes 4 and 19)	731,438	-	-
Current portion of long-term borrowings (Notes 18 and 34)	5,276,206	2,831,007	89,589
Other current liabilities	1,585,177	2,134,917	67,561
<b>Total current liabilities</b>	<b>102,059,797</b>	<b>113,680,127</b>	<b>3,597,472</b>
<b>NON-CURRENT LIABILITIES</b>			
Bonds payable (Notes 4 and 19)	20,582,567	31,270,131	989,561
Long-term borrowings (Notes 18 and 34)	29,580,659	24,104,424	762,798
Deferred tax liabilities (Notes 4, 5 and 24)	2,663,767	3,932,819	124,456
Long-term payables (Note 20)	894,150	-	-
Accrued pension liabilities (Notes 4, 5 and 21)	4,545,960	4,382,530	138,688
Other non-current liabilities	651,171	657,392	20,804
<b>Total non-current liabilities</b>	<b>58,918,274</b>	<b>64,347,296</b>	<b>2,036,307</b>
<b>Total liabilities</b>	<b>160,978,071</b>	<b>178,027,423</b>	<b>5,633,779</b>
<b>EQUITY ATTRIBUTABLE TO OWNERS OF THE COMPANY</b> (Notes 4 and 22)			
Share capital	78,180,258	78,715,179	2,490,987
Capital surplus	7,921,375	16,013,980	506,772
Retained earnings			
Legal reserve	8,720,971	10,289,878	325,629
Special reserve	3,663,930	3,353,938	106,137
Unappropriated earnings	25,190,778	36,000,026	1,139,241
<b>Total retained earnings</b>	<b>37,575,679</b>	<b>49,643,842</b>	<b>1,571,007</b>
Other equity	(102,554 )	5,067,640	160,368

Treasury shares	(1,959,107 )	(1,959,107 )	(61,997 )
Equity attributable to owners of the Company	121,615,651	147,481,534	4,667,137

(Continued)

F-3

---

Table of Contents

## ADVANCED SEMICONDUCTOR ENGINEERING, INC. AND SUBSIDIARIES

## CONSOLIDATED BALANCE SHEETS

(Amounts in Thousands)

---

	December 31, 2013	December 31, 2014	US\$ (Note 4)
	NT\$	NT\$	
NON-CONTROLLING INTERESTS (Notes 4 and 22)	\$4,128,361	\$8,209,860	\$259,806
Total equity	125,744,012	155,691,394	4,926,943
<b>TOTAL</b>	<b>\$286,722,083</b>	<b>\$333,718,817</b>	<b>\$10,560,722</b>

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

(Concluded)

F-4

Table of Contents

## ADVANCED SEMICONDUCTOR ENGINEERING, INC. AND SUBSIDIARIES

## CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

(Amounts in Thousands Except Earnings Per Share)

	For the Years Ended December 31			
	2012	2013	2014	US\$ (Note 4)
	NT\$	NT\$	NT\$	
OPERATING REVENUES (Note 4)	\$ 193,972,392	\$ 219,862,446	\$ 256,591,447	\$ 8,119,983
OPERATING COSTS (Notes 11, 21 and 23)	157,342,744	177,040,435	203,002,918	6,424,143
GROSS PROFIT	36,629,648	42,822,011	53,588,529	1,695,840
OPERATING EXPENSES (Notes 21 and 23)				
Selling and marketing expenses	2,766,880	2,982,789	3,438,166	108,803
General and administrative expenses	8,283,264	8,712,862	10,214,810	323,254
Research and development expenses	7,872,422	9,064,712	10,289,684	325,623
Total operating expenses	18,922,566	20,760,363	23,942,660	757,680
Other income and expenses (Notes 20 and 23)	83,192	(1,348,246 )	228,615	7,235
PROFIT FROM OPERATIONS	17,790,274	20,713,402	29,874,484	945,395
NON-OPERATING INCOME AND EXPENSES				
Other income (Note 23)	553,088	493,884	529,251	16,749
Other gains and losses (Note 23)	244,830	447,886	607,299	19,218
Finance costs (Note 23)	(2,042,544 )	(2,307,455 )	(2,354,097 )	(74,497 )
Share of the profit or loss of associates (Note 4)	63,076	22,039	(121,882 )	(3,857 )
Total non-operating income and expenses	(1,181,550 )	(1,343,646 )	(1,339,429 )	(42,387 )
PROFIT BEFORE INCOME TAX	16,608,724	19,369,756	28,535,055	903,008
INCOME TAX EXPENSE (Notes 4, 5 and 24)	2,960,426	3,499,595	5,665,954	179,302
PROFIT FOR THE YEAR	13,648,298	15,870,161	22,869,101	723,706
OTHER COMPREHENSIVE INCOME (LOSS)				
Items that will not be reclassified subsequently to profit or loss:				
Remeasurement of defined benefit obligation	(818,546 )	412,225	(28,145 )	(891 )
Share of other comprehensive income of associates	-	-	(1,031 )	(32 )

F-5

---

Table of Contents

## ADVANCED SEMICONDUCTOR ENGINEERING, INC. AND SUBSIDIARIES

## CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

(Amounts in Thousands Except Earnings Per Share)

	For the Years Ended December 31			
	2012	2013	2014	US\$ (Note
	NT\$	NT\$	NT\$	4)
Income tax relating to items that will not be reclassified subsequently	\$ 140,880 (677,666 )	\$(66,706 ) 345,519	\$ 23,885 (5,291 )	\$ 756 (167 )
Items that may be reclassified subsequently to profit or loss:				
Exchange differences on translating foreign operations	(3,269,623 )	2,817,268	5,405,008	171,044
Unrealized gain (loss) on available-for-sale financial assets	16,539	14,839	(133,714 )	(4,232 )
Cash flow hedges	53,755	1,245	3,279	104
Share of other comprehensive income of associates	55,401	55,183	235,156	7,442
Income tax relating to items that may be reclassified subsequently	(9,138 ) (3,153,066 )	(769 ) 2,887,766	- 5,509,729	- 174,358
Other comprehensive income (loss) for the year, net of income tax	(3,830,732 )	3,233,285	5,504,438	174,191
<b>TOTAL COMPREHENSIVE INCOME FOR THE YEAR</b>	<b>\$ 9,817,566</b>	<b>\$ 19,103,446</b>	<b>\$ 28,373,539</b>	<b>\$ 897,897</b>
<b>PROFIT FOR THE YEAR ATTRIBUTABLE TO:</b>				
Owners of the Company	\$ 13,191,617	\$ 15,404,505	\$ 22,228,602	\$ 703,437
Non-controlling interests	456,681	465,656	640,499	20,269
	\$ 13,648,298	\$ 15,870,161	\$ 22,869,101	\$ 723,706
<b>TOTAL COMPREHENSIVE INCOME FOR THE YEAR ATTRIBUTABLE TO:</b>				
Owners of the Company	\$ 9,420,363	\$ 18,509,604	\$ 27,394,362	\$ 866,910
Non-controlling interests	397,203	593,842	979,177	30,987
	\$ 9,817,566	\$ 19,103,446	\$ 28,373,539	\$ 897,897
<b>EARNINGS PER SHARE (Note 25)</b>				
Basic	\$ 1.77	\$ 2.05	\$ 2.89	\$ 0.09
Diluted	\$ 1.73	\$ 1.99	\$ 2.79	\$ 0.09
<b>EARNINGS PER AMERICAN DEPOSIT SHARE ("ADS")</b>				

Basic	\$8.86	\$10.26	\$14.46	\$0.46
Diluted	\$8.65	\$9.96	\$13.93	\$0.44

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

F-6

---



Table of Contents

## ADVANCED SEMICONDUCTOR ENGINEERING, INC. AND SUBSIDIARIES

## CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

(Amounts in Thousands)

	Equity Attributable to Owners of the Company							
	Share Capital		Capital Surplus	Retained Earnings		Unappropriated Earnings	Total	Exchange Differences on Translation of Foreign Operations
	Shares (In Thousands)	Amounts		Legal Reserve	Special Reserve			
BALANCE AT JANUARY 1, 2012	6,755,707	\$67,571,325	\$3,976,014	\$6,039,239	\$1,272,417	\$23,915,690	\$31,227,346	\$-
Profit for the year ended December 31, 2012	-	-	-	-	-	13,191,617	13,191,617	-
Other comprehensive income (loss) for the year ended December 31, 2012, net of income tax	-	-	-	-	-	(677,417 )	(677,417 )	(3,210 )
Total comprehensive income (loss) for the year ended December 31, 2012	-	-	-	-	-	12,514,200	12,514,200	(3,210 )
Appropriation of 2011 earnings								
Legal reserve	-	-	-	1,372,596	-	(1,372,596 )	-	-
Special reserve	-	-	-	-	(1,272,417)	1,272,417	-	-
Cash dividends distributed by	-	-	-	-	-	(4,325,284 )	(4,325,284 )	-

Edgar Filing: ADVANCED SEMICONDUCTOR ENGINEERING INC - Form 20-F

the Company									
Share dividends distributed by the Company	931,600	9,315,995	-	-	-	(9,315,995 )	(9,315,995 )	-	
	931,600	9,315,995	-	1,372,596	(1,272,417)	(13,741,458)	(13,641,279)	-	
Cash dividends distributed by subsidiaries	-	-	-	-	-	-	-	-	
Cancel of treasury shares	(105,475 )	(1,054,750 )	(1,427,861 )	-	-	(290,023 )	(290,023 )	-	
Issue of dividends received by subsidiaries from the parent company	-	-	83,117	-	-	-	-	-	
Changes in capital surplus from investments in associates accounted for using the equity method	-	-	1,790	-	-	-	-	-	
Partial disposal of interests in subsidiaries and additional acquisition of partially-owned subsidiaries (Notes 22 and 28)	-	-	2,178,714	-	-	-	-	-	
Issue of ordinary shares under employee share options	20,460	215,097	462,860	-	-	-	-	-	
BALANCE AT DECEMBER 31, 2012	7,602,292	76,047,667	5,274,634	7,411,835	-	22,398,409	29,810,244	(3,210)	
Special reserve under Rule No.	-	-	-	-	3,353,938	(3,353,938 )	-	-	

1010012865  
issued by the  
Financial  
Supervisory  
Commission  
(Note 22)

Profit for the  
year ended  
December 31,  
2013

-	-	-	-	-	-	15,404,505	15,404,505	-
---	---	---	---	---	---	------------	------------	---

Other  
comprehensive  
income for the  
year ended  
December 31,  
2013, net of  
income tax

-	-	-	-	-	-	348,904	348,904	2,684,000
---	---	---	---	---	---	---------	---------	-----------

Total  
comprehensive  
income for the  
year ended  
December 31,  
2013

-	-	-	-	-	-	15,753,409	15,753,409	2,684,000
---	---	---	---	---	---	------------	------------	-----------

Issue of  
ordinary shares  
for cash (Note  
22)

130,000	1,300,000	2,093,000	-	-	-	-	-	-
---------	-----------	-----------	---	---	---	---	---	---

Appropriation  
of 2012  
earnings

Legal reserve

-	-	-	1,309,136	-	(1,309,136 )	-	-	-
---	---	---	-----------	---	--------------	---	---	---

Special reserve

-	-	-	-	309,992	(309,992 )	-	-	-
---	---	---	---	---------	------------	---	---	---

Cash dividends

distributed by

the Company

-	-	-	-	-	(7,987,974 )	(7,987,974 )	-	-
---	---	---	---	---	--------------	--------------	---	---

-	-	-	1,309,136	309,992	(9,607,102 )	(7,987,974 )	-	-
---	---	---	-----------	---------	--------------	--------------	---	---

Cash dividends

distributed by

subsidiaries

-	-	-	-	-	-	-	-	-
---	---	---	---	---	---	---	---	---

Issue of  
dividends  
received by  
subsidiaries

-	-	153,097	-	-	-	-	-	-
---	---	---------	---	---	---	---	---	---

from the parent  
company

Partial disposal  
of interests in  
subsidiaries and  
additional  
acquisition of  
partially-owned  
subsidiaries  
(Notes 22 and  
28)

- - (330 ) - - - - -

Changes in  
capital surplus  
from  
investments in  
associates  
accounted for  
using the equity  
method

- - 1,457 - - - - -

Issue of  
ordinary shares  
under employee  
share options

55,535 832,591 399,517 - - - - -

BALANCE AT  
DECEMBER

31, 2013 7,787,827 78,180,258 7,921,375 8,720,971 3,663,930 25,190,778 37,575,679 (525,5

Profit for the  
year ended  
December 31,  
2014

- - - - - 22,228,602 22,228,602 -

Other  
comprehensive  
income (loss)  
for the year  
ended  
December 31,  
2014, net of  
income tax

- - - - - (4,434 ) (4,434 ) 5,066,

(Continued)

F-7

Table of Contents

## ADVANCED SEMICONDUCTOR ENGINEERING, INC. AND SUBSIDIARIES

## CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

(Amounts in Thousands)

	Equity Attributable to Owners of the Co							Co
	Share Capital		Capital Surplus	Retained Earnings		Unappropriated Earnings	Total	
	Shares (In Thousands)	Amounts		Legal Reserve	Special Reserve			
Total comprehensive income for the year ended December 31, 2014	-	\$-	\$-	\$-	\$-	\$22,224,168	\$22,224,168	\$5
Appropriation of 2013 earnings								
Legal reserve	-	-	-	1,568,907	-	(1,568,907 )	-	-
Special reserve	-	-	-	-	(309,992 )	309,992	-	-
Cash dividends distributed by the Company	-	-	-	-	-	(10,156,005)	(10,156,005)	-
	-	-	-	1,568,907	(309,992 )	(11,414,920)	(10,156,005)	-
Issue of dividends received by subsidiaries from the parent company	-	-	188,790	-	-	-	-	-
Partial disposal of interests in subsidiaries and additional acquisition of partially-owned subsidiaries(Notes 22 and 28)	-	-	6,876,866	-	-	-	-	-
	-	-	26,884	-	-	-	-	-

Changes in capital  
surplus from  
investments in  
associates  
accounted for  
using the equity  
method

Issue of ordinary  
shares under  
employee share  
options

73,898	534,921	1,000,065	-	-	-	-	-	-
--------	---------	-----------	---	---	---	---	---	---

Cash dividends  
distributed by  
subsidiaries

-	-	-	-	-	-	-	-	-
---	---	---	---	---	---	---	---	---

BALANCE AT  
DECEMBER 31,  
2014

7,861,725	\$ 78,715,179	\$ 16,013,980	\$ 10,289,878	\$ 3,353,938	\$ 36,000,026	\$ 49,643,842	\$ 4	\$ 1
-----------	---------------	---------------	---------------	--------------	---------------	---------------	------	------

US. DOLLARS  
(Note 4)

BALANCE AT  
DECEMBER 31,  
2014

7,861,725	\$ 2,490,987	\$ 506,772	\$ 325,629	\$ 106,137	\$ 1,139,241	\$ 1,571,007	\$ 1	\$ 1
-----------	--------------	------------	------------	------------	--------------	--------------	------	------

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

F-8

---

Table of Contents

## ADVANCED SEMICONDUCTOR ENGINEERING, INC. AND SUBSIDIARIES

## CONSOLIDATED STATEMENTS OF CASH FLOWS

(Amounts in Thousands)

	For the Years Ended December 31			
	2012	2013	2014	
	NT\$	NT\$	NT\$	US\$ (Note 4)
<b>CASH FLOWS FROM OPERATING ACTIVITIES</b>				
Profit before income tax	\$ 16,608,724	\$ 19,369,756	\$ 28,535,055	\$ 903,008
Adjustments for:				
Depreciation expense	22,473,857	24,696,607	25,805,042	816,615
Amortization expense	962,022	774,304	545,734	17,270
Net (gains) losses on fair value change of financial assets and liabilities at fair value through profit or loss	717,664	(795,359 )	(1,838,840 )	(58,191 )
Interest expense	2,004,315	2,257,144	2,324,426	73,558
Interest income	(322,197 )	(212,801 )	(243,474 )	(7,705 )
Dividend income	(66,129 )	(131,449 )	(101,252 )	(3,204 )
Compensation cost of employee share options	537,461	260,801	110,157	3,486
Share of loss (profit) of associates	(63,076 )	(22,039 )	121,882	3,857
Impairment loss recognized on financial assets	23,693	196,325	28,421	899
Impairment loss recognized on non-financial assets	592,972	949,015	899,480	28,465
(Reversal of) compensation cost for the settlement of legal claims	-	894,150	(91,305 )	(2,889 )
Others	(263,456 )	451,240	1,808,677	57,236
Changes in operating assets and liabilities				
Financial assets held for trading	871,970	1,122,280	823,313	26,054
Trade receivables	(6,683,680 )	(5,767,254 )	(9,703,070 )	(307,059 )
Other receivables	252,044	(6,540 )	(8,625 )	(273 )
Inventories	(2,434,715 )	(3,241,115 )	(8,208,824 )	(259,773 )
Other current assets	(543,304 )	(108,425 )	102,353	3,239
Financial liabilities held for trading	(805,635 )	(1,011,975 )	(835,779 )	(26,449 )
Trade payables	2,992,599	4,722,462	6,422,305	203,238
Other payables	(96,222 )	1,068,223	3,045,452	96,375
Other current liabilities	738,146	2,796	703,764	22,271
Other operating activities items	(695,839 )	(191,631 )	(187,727 )	(5,941 )
	36,801,214	45,276,515	50,057,165	1,584,087
Interest received	337,819	182,164	233,457	7,388
Dividend received	121,033	176,058	101,252	3,204
Interest paid	(2,140,357 )	(2,200,143 )	(2,065,244 )	(65,356 )
Income tax paid	(2,081,690 )	(2,138,639 )	(2,463,153 )	(77,947 )
Net cash generated from operating activities	33,038,019	41,295,955	45,863,477	1,451,376

(Continued)

F-9

---



Table of Contents

## ADVANCED SEMICONDUCTOR ENGINEERING, INC. AND SUBSIDIARIES

## CONSOLIDATED STATEMENTS OF CASH FLOWS

(Amounts in Thousands)

	For the Years Ended December 31			
	2012	2013	2014	US\$ (Note 4)
	NT\$	NT\$	NT\$	
<b>CASH FLOWS FROM INVESTING ACTIVITIES</b>				
Purchase of financial assets designated as at fair value through profit or loss	\$(11,624,529)	\$(53,135,894)	\$(108,958,658)	\$(3,448,059)
Proceeds from disposal of financial assets designated as at fair value through profit or loss	7,788,016	55,032,536	109,825,159	3,475,480
Purchase of available-for-sale financial assets	(891,233 )	(3,474,152 )	(3,565,428 )	(112,830 )
Proceeds on sale of available-for-sale financial assets	824,343	1,093,408	4,388,130	138,865
Cash received from return of capital by available-for-sale financial assets	34,598	27,368	20,411	646
Purchase of held-to-maturity financial assets	-	(88,169 )	-	-
Proceeds on sale of held-to-maturity financial assets	-	73,716	-	-
Purchase of Investments accounted for using the equity method	-	-	(100,000 )	(3,165 )
Net cash outflow on acquisition of subsidiaries	(261,607 )	(250,387 )	-	-
Payments for property, plant and equipment	(39,029,496)	(29,142,719)	(39,598,964 )	(1,253,132)
Proceeds from disposal of property, plant and equipment	484,800	351,546	421,207	13,329
Payments for intangible assets	(445,951 )	(313,110 )	(396,466 )	(12,546 )
Proceeds from disposal of intangible assets	4,309	-	-	-
Decrease in other financial assets	217,468	4,513	(372,569 )	(11,790 )
Increase in other non-current assets	(918,566 )	(104,499 )	(480,711 )	(15,212 )
<b>Net cash used in investing activities</b>	<b>(43,817,848)</b>	<b>(29,925,843)</b>	<b>(38,817,889 )</b>	<b>(1,228,414)</b>
<b>CASH FLOWS FROM FINANCING ACTIVITIES</b>				
Net proceeds from (repayment of) short-term borrowings	13,919,793	7,051,874	(3,442,162 )	(108,929 )
Proceeds from issue of bonds	-	11,900,051	8,888,562	281,284
Repayment of bonds	-	-	(729,790 )	(23,095 )
Proceeds from long-term borrowings	13,840,778	28,715,694	32,030,868	1,013,635
Repayment of long-term borrowings	(18,969,491)	(31,382,333)	(40,978,403 )	(1,296,785)
Dividends paid	(4,242,167 )	(7,834,877 )	(9,967,215 )	(315,418 )
Proceeds from issue of ordinary shares	-	3,393,000	-	-
Proceeds from exercise of employee share options	315,690	1,071,854	1,498,343	47,416
Increase (decrease) in non-controlling interests	3,602,439	(72,101 )	9,905,673	313,470
Other financing activities items	(11,287 )	(48,291 )	(2,879 )	(91 )

(Continued)

F-10

---

Table of Contents

## ADVANCED SEMICONDUCTOR ENGINEERING, INC. AND SUBSIDIARIES

## CONSOLIDATED STATEMENTS OF CASH FLOWS

(Amounts in Thousands)

	For the Years Ended December 31			
	2012	2013	2014	US\$ (Note 4)
	NT\$	NT\$	NT\$	
Net cash generated from (used in) financing activities	\$8,455,755	\$12,794,871	\$(2,797,003)	\$(88,513)
EFFECTS OF EXCHANGE RATE CHANGES ON THE BALANCE OF CASH AND CASH EQUIVALENTS HELD IN FOREIGN CURRENCIES	(1,649,455)	867,872	2,419,454	76,565
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	(3,973,529)	25,032,855	6,668,039	211,014
CASH AND CASH EQUIVALENTS AT THE BEGINNING OF THE YEAR	23,967,045	19,993,516	45,026,371	1,424,885
CASH AND CASH EQUIVALENTS AT THE END OF THE YEAR	\$19,993,516	\$45,026,371	\$51,694,410	\$1,635,899

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

(Concluded)

F-11

Table of Contents

ADVANCED SEMICONDUCTOR ENGINEERING, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(Amounts in Thousands, Unless Stated Otherwise)

---

1. GENERAL INFORMATION

Advanced Semiconductor Engineering, Inc. (the “Company”), a corporation incorporated under the laws of Republic of China (the “ROC”), and its subsidiaries (collectively referred to as the “Group”) offer a comprehensive range of semiconductors packaging, testing, and electronic manufacturing services (“EMS”).

The Company’s ordinary shares have been listed on the Taiwan Stock Exchange (the “TSE”) under the symbol “2311”. Since September 2000, the ordinary shares of the Company have been traded on the New York Stock Exchange (the “NYSE”) under the symbol “ASX” in the form of American Depositary Shares (“ADS”). Its subsidiary, Universal Scientific Industrial (Shanghai) Co., Ltd (the “USISH”), has been listed on the Shanghai Stock Exchange (the “SSE”) under the symbol “601231”.

The functional currency of the Company and the reporting currency of the consolidated financial statements are both New Taiwan dollar (NT\$).

2. APPROVAL OF FINANCIAL STATEMENTS

The consolidated financial statements were authorized for issue by the management on March 11, 2015.

3. APPLICATION OF NEW AND REVISED INTERNATIONAL FINANCIAL REPORTING STANDARDS AS ISSUED BY THE INTERNATIONAL ACCOUNTING STANDARDS BOARD

Starting from 2013, the consolidated financial statements were prepared in accordance with International Financial Reporting Standards (IFRS), International Accounting Standards (IAS), Interpretations of IFRS (IFRIC), and Interpretations of IAS (SIC) issued by International Accounting Standards Board (“IASB”) (collectively referred to as the “IFRSs”). The date of transition to IFRSs is January 1, 2012.

a. Amendments to IFRSs and the new interpretation that are mandatorily effective for the current year

In the current year, the Group has applied a number of amendments to IFRSs and a new interpretation issued by IASB that are mandatorily effective for an accounting period that begins on or after January 1, 2014.

Amendments to IAS 36 “Recoverable Amount Disclosures for Non-Financial Assets”

The Group has applied the amendments to IAS 36 “Recoverable Amount Disclosures for Non-Financial Assets” for the first time in the current year. The amendments to IAS 36 remove the requirement to disclose the recoverable amount of a cash-generating unit (“CGU”) to which goodwill or other intangible assets with indefinite useful lives had been allocated when there has been no impairment or reversal of impairment of the related CGU. Furthermore, the amendments introduce additional disclosure requirements applicable to when the recoverable amount of an asset or a CGU is measured at fair value less costs of disposal. These new disclosures include the fair value hierarchy, key assumptions and valuation techniques used which are in line with the disclosure required by IFRS 13 “Fair Value Measurements”.

Refer to Note 14 for the disclosures in the Group's consolidated financial statements for the application of these amendments.

F-12

---

Table of Contents

b.New and revised or amended standards and interpretations in issue but not yet effective

The Group has not applied the following new and revised IFRSs that have been issued but are not yet effective:

New, Revised or Amended Standards and Interpretations	Effective Date Issued by IASB (Note)
IFRSs (Amendments)	Annual Improvements to IFRSs: 2010-2012 Cycle July 1, 2014
IFRSs (Amendments)	Annual Improvements to IFRSs: 2011-2013 Cycle July 1, 2014
IFRSs (Amendments)	Annual Improvements to IFRSs: 2012-2014 Cycle January 1, 2016
IFRS 9 Amendments to IFRS 9 and IFRS 7	Financial Instruments Mandatory Effective Date of IFRS 9 and Transition Disclosures January 1, 2018
Amendments to IFRS 10 and IAS 28	Sale or Contribution of Assets between an Investor and its Associate or Joint Venture January 1, 2016
Amendments to IFRS 10, IFRS 12 and IAS 28	Investment Entities: Applying the Consolidation Exception January 1, 2016
Amendments to IFRS 11	Accounting for Acquisitions of Interests in Joint Operations January 1, 2016
IFRS 14	Regulatory Deferral Accounts January 1, 2016
IFRS 15	Revenue from Contracts with Customers January 1, 2017
Amendment to IAS 1 Amendments to IAS 16 and IAS 38	Disclosure Initiative Clarification of Acceptable Methods of Depreciation and Amortization January 1, 2016
Amendments to IAS 16 and IAS 41	Agriculture: Bearer Plants 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

Note: The aforementioned new, revised or amended standards or interpretations are effective for annual period beginning on or after the effective dates, unless specified otherwise.

b. Significant changes in accounting policy resulted from new, revised and amended standards and interpretations in issue but not yet effective

Except for the following, the Group believes that the adoption of aforementioned new, revised and amended standards or interpretations will not have a material effect on the Group's accounting policies. As of the date that the accompanying consolidated financial statements were authorized for issue, the Group continues in evaluating the impact on its financial position and financial performance as a result of the initial adoption of the below standards or

interpretations. The related impact will be disclosed when the Group completes the evaluation.

#### IFRS 9 “Financial Instruments”

##### Recognition and measurement of financial assets

With regards to financial assets, all recognized financial assets that are within the scope of IAS 39 “Financial Instruments: Recognition and Measurement” are subsequently measured at amortized cost or fair value. Under IFRS 9, the requirement for the classification of financial assets is stated below.

F-13

---

## Table of Contents

For the Group's debt instruments that have contractual cash flows that are solely payments of principal and interest on the principal amount outstanding, their classification and measurement are as follows:

- 1) For debt instruments, if they are held within a business model whose objective is to collect the contractual cash flows, the financial assets are measured at amortized cost and are assessed for impairment continuously with impairment loss recognized in profit or loss, if any. Interest revenue is recognized in profit or loss by using the effective interest method;
- 2) For debt instruments, if they are held within a business model whose objective is achieved by both the collecting of contractual cash flows and the selling of financial assets, the financial assets are measured at fair value through other comprehensive income (FVTOCI) and are assessed for impairment. Interest revenue is recognized in profit or loss by using the effective interest method, and other gain or loss shall be recognized in other comprehensive income, except for impairment gains or losses and foreign exchange gains and losses. When the debt instruments are derecognized or reclassified, the cumulative gain or loss previously recognized in other comprehensive income is reclassified from equity to profit or loss.

Except for above, all other financial assets are measured at fair value through profit or loss. However, the Group may make an irrevocable election to present subsequent changes in the fair value of an equity investment (that is not held for trading) in other comprehensive income, with only dividend income generally recognized in profit or loss. No subsequent impairment assessment is required, and the cumulative gains or losses previously recognized in other comprehensive income cannot be reclassified from equity to profit or loss.

### The impairment of financial assets

IFRS 9 requires that impairment loss on financial assets is recognized by using the "Expected Credit Losses Model". The credit loss allowance is required for financial assets measured at amortized cost, financial assets mandatorily measured at FVTOCI, lease receivables, contract assets arising from IFRS 15 "Revenue from Contracts with Customers", certain written loan commitments and financial guarantee contracts. A loss allowance for the 12-month expected credit losses is required for a financial asset if its credit risk has not increased significantly since initial recognition. A loss allowance for full lifetime expected credit losses is required for a financial asset if its credit risk has increased significantly since initial recognition and is not low. However, a loss allowance for full lifetime expected credit losses is required for trade receivables that do not constitute a financing transaction.

For purchased or originated credit-impaired financial assets, the Group takes into account the expected credit losses on initial recognition in calculating the credit-adjusted effective interest rate. Subsequently, any changes in expected losses are recognized as a loss allowance with a corresponding gain or loss recognized in profit or loss.

### Hedge accounting

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 risk 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.

### IFRS 15 "Revenue from Contracts with Customers"



IFRS 15 establishes principles for recognizing revenue that apply to all contracts with customers, and

F-14

---

Table of Contents

will supersede IAS 18 “Revenue”, IAS 11 “Construction Contracts” and a number of revenue-related interpretations from January 1, 2017.

When applying IFRS 15, an entity 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 is effective, an entity 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.

Amendments to IFRS 10 and IAS 28 “Sale or Contribution of Assets between an Investor and its Associate or Joint Venture”

The amendments stipulated that, when an entity sells or contributes assets that constitute a business (as defined in IFRS 3) to an associate or joint venture, the gains or losses resulting from the transaction is recognized in full. Also, when an entity loses control over a subsidiary that contains a business but retains significant influence or joint control, the gains or losses resulting from the transaction is recognized in full.

Conversely, when an entity sells or contributes assets that do not constitute a business to an associate or joint venture, the gains or losses resulting from the transaction is recognized only to the extent of the unrelated investors’ interest in the associate or joint venture, i.e. the entity’s share of the gains or losses is eliminated. Also, when an entity loses control over a subsidiary that does not contain a business but retains significant influence or joint control in an associate or a joint venture, the gains or losses resulting from the transaction is recognized only to the extent of the unrelated investors’ interest in the associate or joint venture, i.e. the entity’s share of the gains or losses is eliminated.

Amendment to IAS 1 “Disclosure Initiative”

The amendment clarifies that the consolidated financial statements should be prepared for the purpose of disclosing material information. To improve the understandability of its consolidated financial statements, the Group should separately disclose material items into their different natures or functions, and disaggregate material information from immaterial information.

The amendment further clarifies that the Group should consider the understandability and comparability of its consolidated financial statements to determine a systematic order in presenting its footnotes.

4. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

a.Statement of Compliance

The consolidated financial statements have been prepared in accordance with IFRSs as issued by IASB.

b.Basis of Preparation

The consolidated financial statements have been prepared on the historical cost basis except for certain

F-15

---

Table of Contents

financial instruments that are measured at fair value. Historical cost is generally based on the fair value of the consideration given in exchange for goods and services.

c. Classification of Current and Non-current Assets and Liabilities

Current assets include cash and cash equivalents and those assets held primarily for trading purposes or to be realized within twelve months after the balance sheet date, unless the asset is to be used for an exchange or to settle a liability, or otherwise remains restricted, at more than twelve months after the balance sheet date. Property, plant and equipment, intangible assets, other than assets classified as current are classified as non-current. Current liabilities are obligations incurred for trading purposes or to be settled within twelve months after the balance sheet date and liabilities that do not have an unconditional right to defer settlement for at least twelve months after the balance sheet date. Liabilities that are not classified as current are classified as non-current.

For the Group's real estate business, whose operating cycle is longer than one year, the length of the operating cycle is the basis for classifying the Group's real estate related assets and liabilities as current or non-current.

d. Basis of Consolidation

1) Principles for preparing consolidated financial statements

The consolidated financial statements incorporate the financial statements of the Company and the entities controlled by the Company (i.e. its subsidiaries). Control is achieved when the Group:

- has power over the investee;
- is exposed, or has rights, to variable returns from its involvement with the investee; and
- has the ability to use its power to affect its returns.

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

When the Group has less than a majority of the voting rights of an investee, it has power over the investee when the voting rights are sufficient to give it the practical ability to direct the relevant activities of the investee unilaterally. The Group considers all relevant facts and circumstances in assessing whether or not the Group's voting rights in an investee are sufficient to give it power, including:

- the size of the Group's holding of voting rights relative to the size and dispersion of holdings of the other vote holders;
- potential voting rights held by the Group, other vote holders or other parties;
- rights arising from other contractual arrangements; and
- any additional facts and circumstances that indicate that the Group has, or does not have, the current ability to direct the relevant activities at the time that decisions need to be made, including voting patterns at previous shareholders' meetings.

Consolidation of a subsidiary begins when the Group obtains control over the subsidiary and ceases when the Group loses control over the subsidiary. Specifically, income and expenses of subsidiaries acquired or disposed of during the period are included in the consolidated statement of comprehensive income from the effective date of acquisition or up to the effective date of disposal, as appropriate.

F-16

---

Table of Contents

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

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

Attribution of total comprehensive income to non-controlling interests

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

Changes in the Group's ownership interests in existing subsidiaries

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

When the Group loses control over a subsidiary, a gain or loss is recognized in profit or loss and is calculated as the difference between (i) the aggregate of the fair value of the consideration received and any investment retained in the former subsidiary at its fair value at the date when control is lost and (ii) the assets (including any goodwill) and liabilities and any non-controlling interests of the former subsidiary at their carrying amounts at the date when control is lost. The Group accounts for all amounts recognized in other comprehensive income in relation to that subsidiary on the same basis as would be required if the Group had directly disposed of the related assets or liabilities.

2) Subsidiaries included in the consolidated financial statements

Name of Investee	Main Businesses	Establishment and Operating Location	Percentage of Ownership (%)	
			2013	December 31 2014
A.S.E. Holding Limited	Holding company	Bermuda	100.0	100.0
J & R Holding Limited (J&R Holding)	Holding company	Bermuda	100.0	100.0
Innosource Limited	Holding company	British Virgin Islands	100.0	100.0
Omniquest Industrial Limited	Holding company	British Virgin Islands	100.0	100.0
ASE Marketing & Service Japan Co., Ltd.	Engaged in marketing and sales services	Japan	100.0	100.0
ASE Test, Inc.	Engaged in the testing of semiconductors	Kaohsiung, ROC	100.0	100.0

Universal Scientific Industrial Co., Ltd. (USI)	Engaged in the manufacturing, processing and sale of computers, computer peripherals and related accessories.	Nantou, ROC	99.2	99.2
Luchu Development Corporation	Engaged in the development of real estate properties	Taipei, ROC	86.1	86.1
Alto Enterprises Limited (Continued)	Holding company	British Virgin Islands	100.0	100.0

F-17

Table of Contents

Name of Investee	Main Businesses	Establishment and Operating Location	Percentage of Ownership (%)	
			2013	December 31 2014
Super Zone Holdings Limited	Holding company	Hong Kong	100.0	100.0
ASE (Kun Shan) Inc.	Engaged in the packaging and testing of semiconductors	Kun Shan, China	100.0	100.0
ASE Investment (Kun Shan) Limited	Holding company	Kun Shan, China	100.0	100.0
Advanced Semiconductor Engineering (China) Ltd.	Will engage in the packaging and testing of semiconductors	Shanghai, China	100.0	100.0
ASE Investment (Labuan) Inc.	Holding company	Malaysia	100.0	100.0
ASE Test Limited (ASE Test)	Holding company	Singapore	100.0	100.0
ASE (Korea) Inc. (ASE Korea)	Engaged in the packaging and testing of semiconductors	Korea	100.0	100.0
J&R Industrial Inc.	Engaged in leasing equipment and investing activity	Kaohsiung, ROC	100.0	100.0
ASE Japan Co., Ltd. (ASE Japan)	Engaged in the packaging and testing of semiconductors	Japan	100.0	100.0
ASE (U.S.) Inc. (ASE US)	After-sales service and sales support	U.S.A.	100.0	100.0
Global Advanced Packaging Technology Limited, Cayman Islands	Holding company	British Cayman Islands	100.0	100.0
ASE WeiHai Inc.	Engaged in the packaging and testing of semiconductors	Shandong, China	100.0	100.0
Suzhou ASEN Semiconductors Co., Ltd.	Engaged in the packaging and testing of semiconductors	Suzhou, China	60.0	60.0



Edgar Filing: ADVANCED SEMICONDUCTOR ENGINEERING INC - Form 20-F

Anstock Limited	Engaged in financing activity	British Cayman Islands	100.0	100.0
Anstock II Limited	Engaged in financing activity and established in July 2014	British Cayman Islands	-	100.0
ASE Module (Shanghai) Inc.	Will engage in the production and sale of electronic components and printed circuit boards	Shanghai, China	100.0	100.0
ASE (Shanghai) Inc.	Engaged in the production of substrates	Shanghai, China	100.0	100.0
ASE Corporation	Holding company	British Cayman Islands	100.0	100.0
ASE Mauritius Inc.	Holding company	Mauritius	100.0	100.0
ASE Labuan Inc.	Holding company	Malaysia	100.0	100.0
ASE Module (Kunshan) Inc.	Merged into ASE (Kun Shan) Inc. in September 2014	Kun Shan, China	100.0	-

(Continued)

Table of Contents

Name of Investee	Main Businesses	Establishment and Operating Location	Percentage of Ownership (%)	
			2013	December 31 2014
Shanghai Ding Hui Real Estate Development Co., Ltd.	Engaged in the development, construction and sale of real estate properties	Shanghai, China	100.0	100.0
Advanced Semiconductor Engineering (HK) Limited	Engaged in the trading of substrates	Hong Kong	100.0	100.0
Shanghai Ding Wei Real Estate Development Co., Ltd.	Engaged in the development, construction and leasing of real estate properties	Shanghai, China	100.0	100.0
Shanghai Ding Yu Real Estate Development Co., Ltd.	Engaged in the development, construction and leasing of real estate properties	Shanghai, China	100.0	100.0
Kun Shan Ding Yue Real Estate Development Co., Ltd.	Engaged in the development, construction and leasing of real estate properties	Kun Shan, China	100.0	100.0
Kun Shan Ding Hong Real Estate Development Co., Ltd.	Engaged in the development, construction and leasing of real estate properties	Kun Shan, China	100.0	100.0
ASE Electronics Inc.	Engaged in the production of substrates	Kaohsiung, ROC	100.0	100.0
ASE Test Holdings, Ltd.	Holding company	British Cayman Islands	100.0	100.0
ASE Holdings (Singapore) Pte Ltd	Holding company	Singapore	100.0	100.0
ASE Test Finance Limited	Engaged in financing activity	Mauritius	100.0	100.0
ASE Singapore Pte. Ltd.	Engaged in the packaging and testing of semiconductors	Singapore	100.0	100.0

Edgar Filing: ADVANCED SEMICONDUCTOR ENGINEERING INC - Form 20-F

ISE Labs, Inc.	Engaged in the testing of semiconductors	U.S.A.	100.0	100.0
ASE Electronics (M) Sdn. Bhd.	Engaged in the packaging and testing of semiconductors	Malaysia	100.0	100.0
ASE Assembly & Test (Shanghai) Limited	Engaged in the packaging and testing of semiconductors	Shanghai, China	100.0	100.0
Wuxi Tongzhi Microelectronics Co., Ltd. (Wuxi Tongzhi)	Engaged in the packaging and testing of semiconductors	Wuxi, China	100.0	100.0
Huntington Holdings International Co., Ltd.	Holding company	British Virgin Islands	99.2	99.2
Senetex Investment Co., Ltd.	In the process of liquidation	Nantou, ROC	99.2	99.2
Unitech Holdings International Co., Ltd.	Holding company	British Virgin Islands	99.2	99.2
Real Tech Holdings Limited	Holding company	British Virgin Islands	99.2	99.2
Universal ABIT Holding Co., Ltd.	Holding company	British Cayman Islands	99.2	99.2
Rising Capital Investment Limited	Holding company	British Virgin Islands	99.2	99.2

(Continued)

Table of Contents

Name of Investee	Main Businesses	Establishment and Operating Location	Percentage of Ownership (%)	
			2013	December 31 2014
Rise Accord Limited	Holding company	British Virgin Islands	99.2	99.2
Cubuy Corporation	Engaged in the trading of computer systems	Shanghai, China	99.2	99.2
Universal Scientific Industrial (Kunshan) Co., Ltd.	Engaged in the manufacturing and sale of computer assistance system and related peripherals	Kun Shan, China	99.2	99.2
USI Enterprise Limited (“USIE”)	Engaged in the services of investment advisory and warehousing management	Hong Kong	99.1	98.7
Universal Scientific Industrial (Shanghai) Co., Ltd. (“USISH”)	Engaged in the designing, manufacturing and sale of electronic components	Shanghai, China	88.6	82.1
Universal Global Technology Co., Limited	Holding company	Hong Kong	88.6	82.1
Universal Global Technology (Kunshan) Co., Ltd.	Engaged in the designing and manufacturing of electronic components	Kun Shan, China	88.6	82.1
Universal Global Technology (Shanghai) Co., Ltd.	Engaged in the processing and sales of computer and communication peripherals as well as business in import and export of goods and technology	Shanghai, China	88.6	82.1
Universal Global Electronics (Shanghai) Co., Ltd.	Engaged in the sale of electronic components and telecommunications	Shanghai, China	-	82.1

	equipment and established in May 2014			
Universal Global Technology (Shenzhen) Co., Ltd.	Liquidated in March 2014	Shenzhen, China	88.6	-
Universal Global Industrial Co., Limited	Engaged in manufacturing, trading and investing activity	Hong Kong	88.6	82.1
Universal Global Scientific Industrial Co., Ltd.	Engaged in the manufacturing of components of telecomm and cars and provision of related R&D services	Nantou, ROC	88.6	82.1
USI Manufacturing Service, Inc.	Engaged in the manufacturing and processing of motherboards and wireless network communication and provision of related technical service	U.S.A.	88.6	82.1

(Continued)

Table of Contents

Name of Investee	Main Businesses	Establishment and Operating Location	Percentage of Ownership (%)	
			2013	2014
Universal Scientific Industrial De Mexico S.A. De C.V.	Engaged in the assembling of motherboards and computer components	Mexico	88.6	82.1
USI Japan Co., Ltd.	Engaged in the manufacturing and sale of computer peripherals, integrated chip and other related accessories	Japan	88.6	82.1
USI@Work, Inc.	After-sale service	U.S.A.	88.6	82.1
USI Electronics (Shenzhen) Co., Ltd.	Engaged in the design, manufacturing and sale of motherboards and computer peripherals	Shenzhen, China	88.6	82.1

## e.Business Combinations

Acquisitions of businesses are accounted for using the acquisition method. The consideration transferred in a business combination is measured at fair value, which is calculated as the sum of the acquisition-date fair values of the assets transferred by the Group, liabilities incurred by the Group to the former owners of the acquiree and the equity interests issued by the Group in exchange for control of the acquiree. Acquisition-related costs are recognized in profit or loss as incurred.

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

When a business combination is achieved in stages, the Group's previously held equity interest in the acquiree is remeasured to its acquisition-date fair value and the resulting gain or loss, if any, is recognized in profit or loss. Amounts arising from interests in the acquiree prior to the acquisition date that have previously been recognized in other comprehensive income are reclassified to profit or loss where such treatment would be appropriate if that interest were disposed of.

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

The Group does not apply the acquisition method to account for business combinations involving entities under common control.

f.Foreign Currencies

In preparing the financial statements of each individual group 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 each balance sheet date, monetary items denominated in

(Concluded)

## Table of Contents

foreign currencies are retranslated at the rates prevailing at that date. Non-monetary items carried at fair value that are denominated in foreign currencies are retranslated at the rates prevailing at the date when the fair value was determined. Non-monetary items that are measured in terms of historical cost in a foreign currency are not retranslated.

Exchange differences on monetary items arising from settlement or translation are recognized in profit or loss in the period in which they arise.

Exchange differences arising on the retranslation of non-monetary assets (such as equity instruments) or liabilities measured at fair value are included in profit or loss for the period at the rates prevailing at the balance sheet date 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.

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

In relation to a partial disposal of a subsidiary that includes a foreign operation does not result in the Group losing control over the subsidiary, the proportionate share of accumulated exchange differences are re-attributed to non-controlling interests of the subsidiary and are not recognized in profit or loss.

### g.Cash Equivalents

Cash equivalents are short-term, highly liquid investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of change in value.

### h.Inventories and Inventories Related to Real Estate Business

Inventories, including raw materials (materials received from customers for processing, mainly semiconductor wafers, are excluded from inventories as title and risk of loss remain with the customers), supplies, work in process, finished goods, and materials and supplies in transit are stated at the lower of cost or net realizable value. Inventory write-downs are made by item, except for those that may be appropriate to group items of similar or related inventories. Net realizable value is the estimated selling prices of inventories less all estimated costs of completion and estimated costs necessary to make the sale. Raw materials and supplies are recorded at moving average cost while work in process and finished goods are recorded at standard cost.

Inventories related to real estate business include land and buildings held for sale, land held for construction, construction in progress and prepayment for land use rights. Land held for development is recorded as land held for construction upon obtaining the title of ownership. The prepayment is recorded as prepayments for land use rights before obtaining the title of ownership. Prior to the completion, the borrowing costs directly attributable to construction in progress are capitalized as part of the cost of the asset. Construction in progress is transferred to land and buildings held for sale upon completion. Land and buildings held for sale, construction in progress and land held for construction are stated at the lower of cost or net realizable value and related write-downs are made by item. The amounts received in advance for real estate properties are first recorded as advance receipts and then recognized as revenue when the construction is completed and the title and significant risk of the real estate properties are



transferred to customers. Cost of sales of land and buildings held for sale are recognized based on the ratio of property sold to the total property developed.

i. Investments Accounted for Using the Equity Method

Investments accounted for using the equity method include investments in associates. An associate is

F-22

---

## Table of Contents

an entity over which the Group has significant influence and that is not a subsidiary. Significant influence is the power to participate in the financial and operating policy decisions of the investee without having control over those policies.

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

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

When a group entity transacts with its associate, unrealized profits and losses resulting from the transactions with the associate are eliminated.

### j. Property, Plant and Equipment

Except for land which is stated at cost, property, plant and equipment are stated at cost less accumulated depreciation and accumulated impairment.

Properties in the course of construction for production, supply or administrative purposes are carried at cost, less any recognized impairment loss. Cost includes professional fees and borrowing costs eligible for capitalization. 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 using the straight-line method. The estimated useful lives, residual values and depreciation methods are reviewed at each balance sheet date, with the effect of any changes in estimate accounted for on a prospective basis. Freehold land is not depreciated.

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 asset. Any gain or loss arising on the disposal or retirement of an item of property, plant and equipment is recognized in profit or loss.

### k. Goodwill

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

Goodwill is not amortized but 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 Group's cash-generating units or groups of cash-generating units that are expected to benefit from the synergies of business combinations.

If the recoverable amount of the cash-generating unit is less than its carrying amount, the impairment loss is allocated first to reduce the carrying amount of any goodwill allocated to the cash-generating unit and then to the other assets of the 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. A reversal of an impairment loss recognized for goodwill is prohibited in subsequent periods.

#### 1. Other Intangible Assets

Other intangible assets with finite useful lives acquired separately are initially measured at cost and subsequently measured at cost less accumulated amortization and accumulated impairment. Other

F-23

---

## Table of Contents

intangible assets are amortized based on the pattern in which the economic benefits are consumed or using the straight-line method over their estimated useful lives. The estimated useful lives, residual value and amortization methods are reviewed at each balance sheet date, with the effect of any changes in estimate being accounted for on a prospective basis.

Other intangible assets acquired in a business combination and recognized separately from goodwill are initially recognized at their fair value at the acquisition date. Subsequent to initial recognition, other intangible assets acquired in a business combination are reported at cost less accumulated amortization and accumulated impairment, on the same basis as intangible assets acquired separately.

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

At each balance sheet date, the Group reviews the carrying amounts of its tangible and intangible assets, excluding goodwill (see above), to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss. Recoverable amount is the higher of fair value less costs to sell and value in use. If the recoverable amount of an asset or cash-generating unit is estimated to be less than its carrying amount, the carrying amount of the asset or cash-generating unit is reduced to its recoverable amount.

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

### n.Financial Instruments

Financial assets and financial liabilities are recognized when a group entity becomes a party to the contractual provisions of the instruments. Financial assets and financial liabilities are initially measured at fair value. Transaction costs that are directly attributable to the acquisition or issue of financial assets and financial liabilities (other than financial assets and financial liabilities at 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.

#### 1)Financial assets

All regular way purchases or sales of financial assets are recognized or derecognized on a settlement date basis.

#### a) Measurement category

The classification of financial assets held by the Group depends on the nature and purpose of the financial assets and is determined at the time of initial recognition.

#### i.Financial assets at fair value through profit or loss (“FVTPL”)

Financial assets are classified as at FVTPL when the financial assets are either held for trading or they are designated as at FVTPL.

A financial asset other than a financial asset held for trading may be designated as at FVTPL upon initial recognition if:

F-24

---

Table of Contents

Such designation eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise; or

The financial asset 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 Group's documented risk management or investment strategy, and information about the grouping is provided internally on that basis; or

It forms part of a contract containing one or more embedded derivatives, and IAS 39 permits the entire combined contract to be designated as at FVTPL.

Financial assets at FVTPL are stated at fair value with any gains or losses arising on remeasurement recognized in profit or loss. The net gain or loss recognized in profit or loss incorporates any dividend or interest earned on the financial asset.

ii. Available-for-sale financial assets

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

Available-for-sale financial assets are stated at fair value at each balance sheet date. Changes in the carrying amount of available-for-sale monetary financial assets relating to changes in foreign currency rates, interest income calculated using the effective interest method 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 and accumulated under the heading of unrealized gain (loss) on available-for-sale financial assets. When the investment is disposed of or is determined to be impaired, the cumulative gain or loss previously accumulated in the unrealized gain (loss) on available-for-sale financial assets is reclassified to profit or loss.

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

iii. Held-to-maturity investments

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

iv. Loans and receivables

Loans and receivables including cash and cash equivalents, trade receivables, other receivables, other financial assets and debt investments with no active market are measured at amortized cost using the effective interest method, less any impairment. Interest income is recognized by applying the effective interest rate, except for short-term receivables when the effect of discounting is immaterial.

b) Impairment of financial assets

Financial assets, other than those at FVTPL, are assessed for indicators of impairment at each balance sheet date. 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, the estimated future cash flows of the investments have been affected.

F-25

---

Table of Contents

For financial assets carried at amortized cost, such as trade receivables and other receivables, assets that are assessed not to be impaired individually are, further, assessed for impairment on a collective basis. The Group assesses the collectability of receivables based on the Group's past experience of collecting payments and observable changes that correlate with default on receivables.

For financial assets carried at amortized cost, the amount of the impairment loss recognized is the difference between the assets' carrying amounts and the present value of estimated future cash flows, discounted at the financial assets' original effective interest rates. If, in a subsequent period, the amount of the impairment loss decreases and the decreases can be objectively related to an event occurring after the impairment loss recognized, the previously recognized impairment loss is reversed either directly or by adjusting an allowance account through profit or loss. The reversal shall not result in carrying amounts of financial assets that exceed what the amortized cost would have been at the date the impairment is reversed.

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 period. In respect of available-for-sale equity securities, impairment loss previously recognized in profit or loss are not reversed through profit or loss. Any increase in fair value subsequent to an impairment loss is recognized in other comprehensive income and accumulated under the heading of unrealized gain (loss) on available-for-sale financial assets.

c) Derecognition of financial assets

The Group derecognizes a financial asset only when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another entity. On derecognition of a financial asset in its entirety, the difference between the 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.

2) 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 a group entity are recognized at the proceeds received, net of direct issue costs.

Repurchase of the Company's own equity instruments is recognized and deducted directly in equity. No gain or loss is recognized in profit or loss on the purchase, sale, issue or cancellation of the Company's own equity instruments.

3) Financial liabilities

Financial liabilities are measured either at amortized cost using the effective interest method or at FVTPL. Financial liabilities measured at FVTPL are held for trading.

Financial liabilities at FVTPL are stated at fair value with any gains or losses, including dividends or interest paid, arising on remeasurement recognized in profit or loss.

The Group derecognizes financial liabilities when, and only when, the Group'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.





Table of Contents

4) Derivative Financial Instruments

Derivatives are initially recognized at fair value at the date the derivative contracts are entered into and are subsequently remeasured to their fair value at each balance sheet date. The resulting gain or loss is recognized in profit or loss immediately unless the derivative is designated and effective as a hedging instrument. When the fair value of derivative instruments is positive, they are recognized as financial assets; when the fair value of derivative instruments is negative, they are recognized as financial liabilities.

Derivatives embedded in non-derivative host contracts are treated as separate derivatives when they meet the definition of a derivative, their risks and characteristics are not closely related to those of the host contracts and the contracts are not measured at FVTPL.

5) Convertible Bonds

Convertible bonds issued by the Company that contain liability, conversion option, redemption option and put option (collectively the “Bonds Options”) components are classified separately into respective items on initial recognition. The conversion option that will be settled other than by the exchange of a fixed amount of cash or other financial asset for a fixed number of the Company’s own equity instruments is classified as a conversion option derivative. At the date of offering, both the liability and the Bonds Options components are recognized at fair value.

In subsequent periods, the liability component of the convertible bonds is measured at amortized cost using the effective interest method. The Bonds Options are measured at fair value and the changes in fair value are recognized in profit or loss.

Transaction costs that relate to the offering of the convertible bonds are allocated to the liability and the Bonds Options components in proportion to their relative fair values. Transaction costs relating to the Bonds Options are recognized immediately in profit or loss. Transaction costs relating to the liability component are included in the carrying amount of the liability component and amortized using the effective interest method.

o. Hedge Accounting

The Group designates certain hedging instruments as cash flow hedges. At the inception of the hedge relationship, the Group documents the relationship between the hedging instrument and the hedged item, along with its risk management objectives and its strategy for undertaking various hedge transactions. Furthermore, at the inception of the hedge and on an ongoing basis, the Group documents whether the hedging instrument is highly effective in offsetting changes in fair values or cash flows of the hedged item attributable to the hedged risk.

The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges is recognized in other comprehensive income and accumulated under the heading of cash flow hedges. The gain or loss relating to the ineffective portion is recognized immediately in profit or loss.

Amounts previously recognized in other comprehensive income and accumulated in equity are reclassified to profit or loss in the periods when the hedged item affects profit or loss, in the same line as the recognized hedged item.

Hedge accounting is discontinued prospectively when the Group revokes the designated hedging relationship, or when the hedging instrument expires or is sold, terminated, or exercised, or when it no longer qualifies for hedge accounting. The cumulative gains or losses on the hedging instruments that were previously recognized in other comprehensive income from the period when the hedge was effective remains separately in equity until the forecast

transaction occurs. When the forecast transaction is ultimately recognized in profit or loss, the associated gains or losses that were recognized

F-27

---

## Table of Contents

in other comprehensive income are reclassified from equity to profit or loss or are included in the initial cost as non-financial assets or non-financial liabilities. When a forecast transaction is no longer expected to occur, the gain or loss accumulated in equity is recognized immediately in profit or loss.

### p.Revenue Recognition

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

#### 1)Sale of goods and real estate properties

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

- The Group has transferred to the buyer the significant risks and rewards of ownership of the goods and real estate properties;
- The Group retains neither continuing managerial involvement to the degree usually associated with ownership nor effective control over the goods and real estate properties sold;

— The amount of revenue can be reliably measured;

— It is probable that the economic benefits associated with the transaction will flow to the Group; and

— The costs incurred or to be incurred in respect of the transaction can be reliably measured.

#### 2)Rendering of services

Service income is recognized when services are rendered.

#### 3)Dividend and interest income

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

### q.Leasing

The Group as lessor

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

The Group as lessee

Assets held under finance leases are initially recognized as assets of the Group at their 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 sheets as a finance lease obligation.

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

F-28

---

Table of Contents

r. Borrowing Costs

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, which are assets that necessarily take a substantial period of time to get ready for their intended use or sale, are added to the cost of those assets, until such time as the assets are substantially ready for their intended use or sale. All other borrowing costs are recognized in profit or loss in the period in which they are incurred.

s. Government grants

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

Government grants are recognized in profit or loss on a systematic basis over the periods in which the Group recognizes as expenses the related costs for which the grants are intended to compensate. Specifically, government grants whose primary condition is that the Group should purchase, construct or otherwise acquire non-current assets are recognized as deferred revenue in the consolidated financial statements and transferred to profit or loss on a systematic and rational basis over the useful lives of the related assets.

Government grants that are receivable as compensation for expenses or losses already incurred or for the purpose of giving immediate financial support to the Group with no future related costs are recognized in profit or loss in the period in which they become receivable.

t. Retirement Benefit Costs

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

For defined benefit retirement benefit plans, the cost of providing benefits is determined using the Projected Unit Credit Method, with actuarial valuations being carried out at the end of each annual reporting period. Remeasurement, comprising actuarial gains and losses, the effect of the changes to the asset ceiling (if applicable) and the return on plan assets (excluding interest), is reflected immediately 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. Past service cost is recognized in profit or loss in the period of a plan amendment. Net interest is calculated by applying the discount rate at the beginning of the period to the net defined benefit liability or asset. Defined benefit costs are categorized as follows:

—service cost (including current service cost, past service cost, as well as gains and losses on curtailments and settlements);

— net interest expense or income; and

— remeasurement.

The Group presents the first two components of defined benefit costs in profit or loss in the line items, employee benefit expense. Curtailment gains and losses are accounted for as past service costs.

The retirement benefit obligation recognized in the consolidated balance sheets represents the actual deficit or surplus in the Group's defined benefit plans. Any surplus resulting from this calculation is limited to the present value of any

economic benefits available in the form of refunds from the plans or reductions in future contributions to the plans.

F-29

---

Table of Contents

u.Share-based Payment Arrangements

Equity-settled share-based payments to employees are measured at the fair value of the equity instruments at the grant date. The fair value determined at the grant date of the equity-settled share-based payments is expensed on a straight-line basis over the vesting period, based on the Group's best estimate of equity instruments that will eventually vest, with a corresponding increase in capital surplus - employee share options.

At each balance sheet date, the Group reviews its estimate of the number of employee share options expected to vest. The impact of the revision of the original estimates is recognized in profit or loss such that the cumulative expense reflects the revised estimate, with a corresponding adjustment to the capital surplus - employee share options.

v.Taxation

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

1) Current tax

Income tax on unappropriated earnings (excluding earnings from foreign consolidated subsidiaries) at a rate of 10% is expensed in the year the earnings arise and adjusted to the extent that distributions are approved by the shareholders in the following year.

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

2) 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, unused loss carry-forward and unused tax credits for purchases of machinery, equipment and technology, research and development expenditures, and personnel training expenditures 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 except where the Group is able to control the reversal of the temporary differences and it is probable that the temporary differences will not reverse in the foreseeable future.

The carrying amounts of deferred tax assets is reviewed at each balance sheet date and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of deferred tax assets to be utilized. A previously unrecognized deferred tax asset is also reviewed at each balance sheet date and recognized to the extent that it has become probable that future taxable profit will allow the deferred tax asset to be recovered.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the period in which assets are realized or the liabilities are settled. The measurement of deferred tax assets and liabilities reflects the tax consequences that would follow from the manner in which the Group expects, at the balance sheet date, to recover or settle the carrying amounts of its assets and liabilities.

3) 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

F-30

---

## Table of Contents

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.

Where current tax or deferred tax arises from the initial accounting for a business combination, the tax effect is included in the accounting for the business combination.

w.

U.S. Dollar Amounts

A translation of the consolidated financial statements into U.S. dollars is included solely for the convenience of the readers, and has been translated from New Taiwan dollar (NT\$) at the exchange rate as set forth in the statistical release by the U.S. Federal Reserve Board of the United States, which was NT\$31.60 to US\$1.00 as of December 31, 2014. The translation should not be construed as a representation that the NT\$ amounts have been, could have been, or could in the future be, converted into U.S. dollars at this or any other rate of exchange.

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

In the application of the Group's accounting policies, which are described in Note 4, management is 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 underlying 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 period in which the estimate is revised if the revision affects only that period, or in the period of the revision and future periods if the revision affects both current and future periods.

### Impairment of Goodwill

Determining whether goodwill is impaired requires an estimation of the value in use of the cash-generating units to which goodwill has been allocated. The value in use calculation requires management to estimate the future cash flows expected to arise from cash-generating units and suitable discount rates in order to calculate its present value. When the actual future cash flows are less than expected, a material impairment loss may arise.

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

In evaluating the impairment of tangible and intangible assets other than goodwill, the Group 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 its usage patterns and the nature of semiconductor industry. Any changes in these estimates based on changed economic conditions or business strategies could result in significant impairment charges in future periods.

### Valuation of Inventory

Inventories are stated at the lower of cost or net realizable value and the net realizable value of inventory at balance sheet date is determined based on Group's judgments and estimates.

Due to the rapid technology changes, the Group estimates the net realizable value of inventory for obsolescent and unmarketable items at balance sheet date and then writes down the cost of inventories to net realizable value. There may be significant changes in the net realizable value of inventories due to assumptions of future demand within a

specific time period.

F-31

---

Table of Contents

## Income Taxes

The realizability of deferred tax assets mainly depends on whether sufficient future profits or taxable temporary differences will be available. In cases where the actual future profits generated are less than expected, a material reversal of deferred tax assets may arise, which would be recognized in profit or loss for the period in which such a reversal takes place.

## Recognition and Measurement of Defined Benefit Plans

Accrued pension liabilities and the resulting pension expenses under defined benefit pension plans are calculated using the Projected Unit Credit Method. Actuarial assumptions comprise discount rates and expected rates of salary increase. 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.

## Fair value of Derivatives and Other Financial Instruments

As disclosed in Note 32, the Group's management uses its judgments applying appropriate valuation techniques commonly applied by market practitioners. The assumptions applied are based on observable quoted market prices, foreign exchange rates and interest rates to the extent it is available. The fair value of unquoted equity instruments is estimated based on the assumptions supported by unobservable market prices and interest rates which are disclosed in Note 32. The Group's management believes that the valuation techniques and the assumptions applied are appropriate in determining the fair value of financial instruments.

## 6. CASH AND CASH EQUIVALENTS

	2013	December 31 2014	
	NT\$	NT\$	US\$ (Note 4)
Cash on hand	\$40,392	\$9,953	\$315
Checking accounts and demand deposits	38,090,014	43,059,911	1,362,655
Cash equivalent	6,895,965	8,624,546	272,929
	\$45,026,371	\$51,694,410	\$1,635,899

Cash equivalents include time deposits that are of a short maturity of three months or less from the date of acquisitions, and are highly liquid, readily convertible to known amounts in cash and the risk of changes in values is insignificant. Cash equivalents are held for the purpose of meeting short-term cash commitments rather than for investments or other purposes.

## 7. FINANCIAL INSTRUMENTS AT FAIR VALUE THROUGH PROFIT OR LOSS

	2013	December 31 2014	
	NT\$	NT\$	US\$ (Note 4)

Financial assets designated as at FVTPL

Structured time deposits	\$2,228,643	\$2,376,050	\$75,192
Private-placement convertible bonds (Note 13)	100,500	100,500	3,180
	2,329,143	2,476,550	78,372

(Continued)

F-32

---

Table of Contents

	December 31		
	2013	2014	US\$ (Note 4)
	NT\$	NT\$	
<b>Financial assets held for trading</b>			
Swap contracts	\$219,324	\$1,907,705	\$60,370
Open-end mutual funds	172,000	533,425	16,881
Quoted shares	33,624	43,352	1,372
Forward exchange contracts	10,178	27,811	880
	435,126	2,512,293	79,503
	\$2,764,269	\$4,988,843	\$157,875
<b>Financial liabilities held for trading</b>			
Conversion option, redemption option and put option of convertible bonds (Note 19)	\$1,742,996	\$2,520,606	\$79,766
Swap contracts	74,170	99,165	3,138
Forward exchange contracts	31,315	31,581	999
Cross currency swap contracts	4,180	-	-
Foreign currency option contracts	643	-	-
	\$1,853,304	\$2,651,352	\$83,903
			(Concluded)

The Group entered into investment portfolios consisting of structured time deposits and invested in private-placement convertible bonds, and all included embedded derivative instruments which are not closely related to the host contracts. The Group designated the entire contracts as financial assets at FVTPL on initial recognition.

At each balance sheet date, the outstanding swap contracts not accounted for hedge accounting were as follows:

Currency	Maturity Period	Notional Amount (In Thousands)
December 31, 2013		
Sell NT\$/Buy US\$	2014.01-2014.12	NT\$31,707,176/US\$1,075,000
Sell US\$/Buy NT\$	2014.01-2014.02	US\$46,500/NT\$1,377,874
Sell US\$/Buy JPY	2014.02	US\$53,965/JPY5,550,000
Sell US\$/Buy CNY	2014.01-2014.06	US\$60,000/CNY368,148
December 31, 2014		
Sell NT\$/Buy US\$	2015.01-2015.12	NT\$36,199,735/US\$1,209,000
Sell US\$/Buy NT\$	2015.01-2015.02	US\$132,100/NT\$4,149,958
Sell US\$/Buy JPY	2015.01	US\$72,248/JPY8,450,000

Sell US\$/Buy CNY	2015.01-2015.06	US\$80,000/CNY503,452
Sell CNY/Buy US\$	2015.03	CNY217,288/US\$35,000

At each balance sheet date, the outstanding forward exchange contracts not accounted for hedge accounting were as follow:

F-33

---

Table of Contents

Currency	Maturity Period	Notional Amount (In Thousands)
December 31, 2013		
Sell US\$/Buy NT\$	2014.01-2014.02	US\$51,000/NT\$1,521,484
Sell US\$/Buy CNY	2014.01-2014.04	US\$88,220/CNY537,100
Sell US\$/Buy MYR	2014.01-2014.02	US\$8,500/MYR27,508
Sell US\$/Buy KRW	2014.01	US\$4,000/KRW4,253,000
Sell US\$/Buy SGD	2014.01-2014.02	US\$9,500/SGD11,870
Sell US\$/Buy JPY	2014.01-2014.03	US\$28,950/JPY3,003,944
Sell NT\$/Buy US\$	2014.03	NT\$294,370/US\$10,000

December 31, 2014

Sell US\$/Buy NT\$	2015.01	US\$14,000/NT\$438,434
Sell US\$/Buy CNY	2015.01-2015.03	US\$127,000/CNY785,683
Sell US\$/Buy MYR	2015.01-2015.02	US\$6,000/MYR20,860
Sell US\$/Buy SGD	2015.01-2015.02	US\$11,700/SGD15,211
Sell US\$/Buy JPY	2015.01-2015.04	US\$18,385/JPY2,177,800

(Concluded)

At each balance sheet date, the outstanding cross currency swap contracts not accounted for hedge accounting were as follows:

Notional Amount (In Thousands)	Maturity Period	Range of Interest Rates Paid	Range of Interest Rates Received
December 31, 2013			
NT\$598,600/US\$20,000	2014.07	(0.19)	0.16

At each balance sheet date, the outstanding foreign currency option contracts not accounted for hedge accounting were as follows:

Currency	Maturity Period	Notional Amount (In Thousands)
December 31, 2013		
Sell US\$ Put/NT\$ Call	2016.03 (Note)	US\$4,000/NT\$113,400
Buy US\$ Call/NT\$ Put	2016.03 (Note)	US\$2,000/NT\$56,700

Note: The contracts will be settled once a month and the counterparty has the right to early terminate the contracts. The aforementioned outstanding contracts as of December 31, 2013 were all early settled in 2014.



F-34

---

Table of Contents

## 8. AVAILABLE-FOR-SALE FINANCIAL ASSETS

	2013	December 31 2014	US\$ (Note 4)
	NT\$	NT\$	
Open-end mutual funds	\$2,321,826	\$1,500,434	\$47,482
Limited partnership	583,441	555,361	17,575
Unquoted ordinary shares	199,051	211,726	6,700
Quoted ordinary shares	328,656	195,070	6,173
Unquoted preferred shares	14,670	11,779	373
Private-placement ordinary shares	69,655	-	-
	3,517,299	2,474,370	78,303
Current	2,376,970	1,533,265	48,521
Non-current	\$1,140,329	\$941,105	\$29,782

In 2012, 2013 and 2014, the Group assessed its investees' financial conditions as well as future operating performance and charged an impairment loss of NT\$23,693 thousand, NT\$106,916 thousand and NT\$10,390 thousand (US\$329 thousand), respectively, to the carrying amounts of a portion of the aforementioned investments and debt investments with no active market.

## 9. DERIVATIVE FINANCIAL INSTRUMENTS FOR HEDGING

The Group entered into interest rate swap contracts as cash flow hedge to mitigate exposures to future cash flow fluctuations resulting from interest rate changes from the Group's borrowings.

At each balance sheet date, the outstanding interest rate swap contracts of the Group were as follows:

Maturity Period	Notional Amount (In Thousands)	Interest Rates Paid (%)	Interest Rates Received (%)	Expected Period for Future Cash Flow	Expected Period for the Recognition of Gains or Losses from Hedging
December 31, 2013					
2014.04	CNY 240,000	2.00	1.05-2.80	2014	2014

All interest rate swap contracts exchanging floating interest rates for fixed interest rates were designated as cash flow hedges in order to reduce the Group's cash flow exposure to floating interest rates on borrowings. The interest rate swaps and the interest payments on the borrowings occur simultaneously and the amounts accumulated in equity are reclassified to profit or loss over the period that the floating rate interest payments on the borrowings affect profit or loss. (Note 22e)

10.	TRADE RECEIVABLES, NET		
	2013	December 31 2014	US\$ (Note 4)
	NT\$	NT\$	
Trade receivables	\$43,303,693	\$53,004,955	\$1,677,372
Less: Allowance for doubtful debts	68,120	84,145	2,663
Trade receivables, net	\$43,235,573	\$52,920,810	\$1,674,709

F-35

Table of Contents

## a. Trade receivables

The Group's average credit terms were during 30 to 90 days. Allowance for doubtful debts is assessed by reference to the collectability of receivables by evaluating the account aging, historical experience and current financial condition of customers.

As of December 31, 2013 and 2014, except that the Group's five largest customers accounted for 21% and 30% of accounts receivable, respectively, the concentration of credit risk is insignificant for the remaining accounts receivable.

Age of receivables that are past due but not impaired

	2013	December 31 2014	US\$ (Note 4)
	NT\$	NT\$	
Less than 30 days	\$ 4,090,787	\$ 5,191,521	\$ 164,289
31 to 90 days	195,741	131,247	4,153
More than 91 days	1,585	1,407	45
<b>Total</b>	<b>\$ 4,288,113</b>	<b>\$ 5,324,175</b>	<b>\$ 168,487</b>

The above aging schedule was based on the past due date.

Except for those impaired, the Group had not provided an allowance for doubtful debts on trade receivables at each balance sheet date since there has not been a significant change in credit quality and the amounts were still considered recoverable. The Group did not hold any collateral or other credit enhancements over these balances nor did it have a legal right to offset against any amounts owed by the Group to counterparties.

Movement in the allowance for impairment loss recognized on trade receivables

	Individually Assessed for Impairment NT\$	Collectively Assessed for Impairment NT\$	Total NT\$
Balance at January 1, 2012	\$ 70,750	\$ 58,119	\$ 128,869
Impairment losses reversed	(34,893 )	(9,202 )	(44,095 )
Amount written off during the period as uncollectible	(1,132 )	(990 )	(2,122 )
Effect of foreign currency exchange	(500 )	(2,015 )	(2,515 )
<b>Balance at December 31, 2012</b>	<b>\$ 34,225</b>	<b>\$ 45,912</b>	<b>\$ 80,137</b>
Balance at January 1, 2013	\$ 34,225	\$ 45,912	\$ 80,137
Impairment losses reversed	(5,860 )	(4,033 )	(9,893 )
Amount written off during the period as uncollectible	-	(757 )	(757 )

Effect of foreign currency exchange	(1,480 )	113	(1,367 )
Balance at December 31, 2013	\$ 26,885	\$ 41,235	\$ 68,120

F-36

---

Table of Contents

	Individually Assessed for Impairment NT\$	Collectively Assessed for Impairment NT\$	Total NT\$
Balance at January 1, 2014	\$ 26,885	\$ 41,235	\$ 68,120
Impairment losses recognized	2,875	15,156	18,031
Amount written off during the period as uncollectible	(891 )	(917 )	(1,808 )
Effect of foreign currency exchange	(564 )	366	(198 )
Balance at December 31, 2014	\$ 28,305	\$ 55,840	\$ 84,145

	Individually Assessed for Impairment US\$ (Note 4)	Collectively Assessed for Impairment US\$ (Note 4)	Total US\$ (Note 4)
Balance at January 1, 2014	\$ 851	\$ 1,305	\$ 2,156
Impairment losses recognized	91	479	570
Amount written off during the period as uncollectible	(28 )	(29 )	(57 )
Effect of foreign currency exchange	(18 )	12	(6 )
Balance at December 31, 2014	\$ 896	\$ 1,767	\$ 2,663

## Age of impaired trade receivables

	December 31		US\$ (Note 4)
	2013 NT\$	2014 NT\$	
Not past due	\$ -	\$ 2,701	\$ 85
Less than 30 days	11,501	31,422	994
31 to 90 days	109,376	174,805	5,532
More than 91 days	115,203	86,665	2,743
Total	\$ 236,080	\$ 295,593	\$ 9,354

The above aging schedule was based on the past due date.

## b. Transfers of financial assets

Factored trade receivables of the Group were as follows:

Counterparties	Receivables	Amounts	Advances	Credit Line
----------------	-------------	---------	----------	-------------

Edgar Filing: ADVANCED SEMICONDUCTOR ENGINEERING INC - Form 20-F

	Sold (In Thousands)	Collected (In Thousands)	Received At Year-end (In Thousands)	Interest Rates on Advances Received (%)	(In Thousands)
Year ended December 31, 2013					
Citi bank	US\$ 258,660	US\$ 202,532	US\$ 56,128	1.06	US\$ 92,000
Year ended December 31, 2014					
Citi bank	US\$ 103,744	US\$ 103,744	-	-	US\$ 92,000

F-37

---

Table of Contents

Pursuant to the factoring agreement, losses from commercial disputes (such as sales returns and discounts) should be borne by the Group, while losses from credit risk should be borne by the banks. In the commencement of the factoring agreement in 2010, the Company also issued promissory notes to the banks for commercial disputes which remained undrawn since. The promissory notes amounted to US\$27,000 thousand and US\$5,000 thousand in 2013 and 2014, respectively. There were no significant losses from commercial disputes in the past and the Group does not expect any significant commercial dispute losses in the foreseeable future.

## 11. INVENTORIES

	2013	December 31 2014	US\$ (Note 4)
	NT\$	NT\$	
Finished goods	\$4,863,676	\$6,568,459	\$207,862
Work in process	1,701,257	2,064,377	65,328
Raw materials	8,766,638	10,155,006	321,361
Supplies	573,588	797,353	25,233
Raw materials and supplies in transit	376,077	577,898	18,288
	\$16,281,236	\$20,163,093	\$638,072

The cost of inventories recognized as operating costs for the years ended December 31, 2012, 2013 and 2014 were NT\$156,785,228 thousand, NT\$176,637,295 thousand and NT\$202,960,428 thousand (US\$6,422,798 thousand), respectively, which included write-downs of inventories at NT\$519,431 thousand, NT\$453,468 thousand and NT\$601,726 thousand (US\$19,042 thousand), respectively.

## 12. INVENTORIES RELATED TO REAL ESTATE BUSINESS

	2013	December 31 2014	US\$ (Note 4)
	NT\$	NT\$	
Land and buildings held for sale	\$16,764	\$5,558	\$176
Construction in progress	13,676,668	22,242,065	703,863
Land held for construction	1,682,735	1,738,855	55,027
Prepayments for land use rights	3,213,088	-	-
	\$18,589,255	\$23,986,478	\$759,066

Land and buildings held for sale located in Shanghai Zhangjiang was successively completed and sold. Construction in progress is mainly located on Caobao Road and Hutai Road in Shanghai and Lidu Road and Xinhong Road in Kunshan, China. The capitalized borrowing costs for the years ended December 31, 2012, 2013 and 2014 are disclosed in Note 23d.

As of December 31, 2013 and 2014, inventories related to real estate business of NT\$18,572,491 thousand and NT\$23,697,339 thousand (US\$749,916 thousand), respectively, are expected to be recovered longer than twelve



months.

Refer to Note 34 for the carrying amount of inventories related to real estate business that had been pledged by the Group to secure bank borrowings.

F-38

---

Table of Contents

## 13. INVESTMENTS ACCOUNTED FOR USING THE EQUITY METHOD

Investments in associates accounted for using the equity method consisted of the following:

Name of Associate	Main Business	Establishment and Operating Location	Carrying Amount as of December 31		
			2013 NT\$	2014 NT\$	US\$ (Note 4)
<b>Listed company</b>					
Hung Ching Development & Construction Co. ("HC")	Engaged in the development, construction and leasing of real estate properties	ROC	\$1,152,153	\$1,327,201	\$42,000
Advanced Microelectronic Products, Inc. ("AMPI")	Engaged in integrated circuit	ROC	-	99,052	3,134
<b>Unlisted companies</b>					
Hung Ching Kwan Co. ("HCK")	Engaged in the leasing of real estate properties	ROC	353,154	342,138	10,827
StarChips Technology Inc. ("SCT")	Engaged in design, manufacturing and sale of LED driver IC	ROC	47,856	-	-
			1,553,163	1,768,391	55,961
	Less: Deferred gain on transfer of land		300,149	300,149	9,498
	Accumulated impairment - SCT		47,856	-	-
			\$1,205,158	\$1,468,242	\$46,463

a. The percentage of ownership held by the Group was as follow:

Name of Associate	December 31	
	2013	2014
HC	26.2 %	26.2 %
AMPI	-	18.2 %
HCK	27.3 %	27.3 %
SCT	33.3 %	-

b. In January 2014, the Company subscribed for 20,000 thousand private-placement ordinary shares of AMPI in NT\$100,000 thousand (US\$3,165 thousand). The Company obtained significant influence over AMPI since the percentage of ownership was increased to 27.4% after taking into account the shares previously held which were recognized as available-for-sale financial assets. The private-placement ordinary shares were restricted for disposal during a 3-year lock-up period. In addition, the Company did not join AMPI's cash capital increase in February and

April 2014 and, as the result, the percentage of ownership decreased from 27.4% to 18.2%. After the consideration of potential voting rights that are currently convertible, the Company still has significant influence over AMPI.

c. The Company did not subscribe for SCT's cash capital increase in May 2014 and, therefore, the percentage of ownership decreased from 33.3% to 5.6%. As the result, the Company had no significant influence over SCT and the investment in SCT was reclassified to available-for-sale financial assets.

Table of Contents

d. Fair values of investments in associates for which there are published price quotation are summarized as follows, based on the closing price, which is a level 1 input in terms of IFRS 13, of those investments at the balance sheet date,:

Name of Associate	2013	December 31	
	NT\$	2014	US\$ (Note 4)
HC	\$ 1,242,199	\$ 1,427,499	\$ 45,174
AMPI	\$ -	\$ 184,862	\$ 5,850

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

	For the Years Ended December 31			US\$ (Note 4)
	2012	2013	2014	
	NT\$	NT\$	NT\$	
The Group's share of profits (Note)	\$ 78,947	\$ 76,783	\$ 133,927	\$ 4,238
The Group's share of other comprehensive income, net of income tax	55,401	56,485	234,125	7,409
The Group's share of total comprehensive income	\$ 134,348	\$ 133,268	\$ 368,052	\$ 11,647

Note: Unrealized profits and losses were excluded.

The Group's share of profit and other comprehensive income of associates for the years ended December 31, 2012, 2013 and 2014 were based on the associates' financial statements prepared in accordance with IFRSs as issued by the IASB.

#### 14. PROPERTY, PLANT AND EQUIPMENT

The carrying amounts of each class of property, plant and equipment were as follows:

	2013	December 31	
	NT\$	2014	US\$ (Note 4)
Land	\$ 3,295,758	\$ 3,348,018	\$ 105,950
Buildings and improvements	44,766,601	56,395,710	1,784,674
Machinery and equipment	75,085,182	84,171,647	2,663,660
Transportation equipment	82,228	88,119	2,788
Furniture and fixtures	1,243,556	1,310,703	41,478
Leased assets and leasehold improvement	14,304	417,865	13,224
Construction in progress and machinery in transit	7,009,702	5,855,053	185,287

\$ 131,497,331	\$ 151,587,115	\$ 4,797,061
----------------	----------------	--------------

F-40

---

Table of Contents

For the year ended December 31, 2012

	Land NT\$	Buildings and improvements NT\$	Machinery and equipment NT\$	Transportation equipment NT\$	Furniture and fixtures NT\$	Leased assets and leasehold improvement NT\$	Construction in progress and machinery in transit NT\$	Total NT\$
Cost								
Balance at January 1, 2012	\$3,309,074	\$57,156,997	\$178,376,359	\$291,694	\$5,360,029	\$540,841	\$8,472,341	\$253,507,333
Additions	-	5,668,397	24,602,273	25,344	366,786	56,612	8,257,413	38,976,825
Disposals	-	(91,760 )	(12,721,889 )	(21,695 )	(264,301 )	(16,166 )	(248,402 )	(13,364,213 )
Reclassification	-	1,744,929	6,558,800	6,184	197,816	(355,518)	(8,141,020)	11,191
Acquisitions through business combinations	-	67,194	319,175	-	-	-	-	386,369
Effect of foreign currency exchange differences	(34,988 )	(1,063,018 )	(3,160,750 )	(7,150 )	(224,617 )	(14,292 )	(161,505 )	(4,666,320 )
Balance at December 31, 2012	\$3,274,086	\$63,482,739	\$193,973,968	\$294,377	\$5,435,713	\$211,477	\$8,178,827	\$274,851,187
Accumulated depreciation and impairment								
Balance at January 1, 2012	\$-	\$19,443,081	\$116,397,207	\$197,510	\$4,078,287	\$395,194	\$-	\$140,511,279
Depreciation expense	-	3,340,498	18,500,676	29,379	519,168	84,136	-	22,473,857
Impairment losses recognized	-	27,974	45,567	-	-	-	-	73,541
Disposals	-	(183,311 )	(12,564,694 )	(15,514 )	(162,264 )	(13,878 )	-	(12,939,661 )
Reclassification	-	(10,317 )	360,098	(123 )	(20,884 )	(326,297)	-	2,477
Acquisitions through business combinations	-	2,540	117,927	-	-	-	-	120,467
Effect of foreign	-	(313,319 )	(2,081,330 )	(4,235 )	(178,694 )	(10,969 )	-	(2,588,547 )

Edgar Filing: ADVANCED SEMICONDUCTOR ENGINEERING INC - Form 20-F

currency  
exchange  
differences

Balance at  
December 31,  
2012

\$-	\$22,307,146	\$120,775,451	\$207,017	\$4,235,613	\$128,186	\$-	\$147,653,411
-----	--------------	---------------	-----------	-------------	-----------	-----	---------------

For the year ended December 31, 2013

	Land NT\$	Buildings and improvements NT\$	Machinery and equipment NT\$	Transportation equipment NT\$	Furniture and fixtures NT\$	Leased assets and leasehold improvement NT\$	Construction in progress and machinery in transit NT\$	Total NT\$
--	--------------	--	---------------------------------------	-------------------------------------	--------------------------------------	--	---	---------------

Cost

Balance at

January 1, 2013	\$3,274,086	\$63,482,739	\$193,973,968	\$294,377	\$5,435,713	\$211,477	\$8,178,827	\$274,851,187
-----------------	-------------	--------------	---------------	-----------	-------------	-----------	-------------	---------------

Additions	-	5,447,913	14,484,611	22,920	285,276	10,645	6,792,707	27,044,072
-----------	---	-----------	------------	--------	---------	--------	-----------	------------

Disposals	-	(412,648 )	(9,479,630 )	(42,581 )	(154,622 )	-	(38,565 )	(10,128,046 )
-----------	---	------------	--------------	-----------	------------	---	-----------	---------------

Reclassification	-	758,850	7,661,570	4,935	241,193	(103,337)	(8,638,840)	(75,629)
------------------	---	---------	-----------	-------	---------	-----------	-------------	----------

Acquisitions through business combinations	-	5,106	278,862	114	121,994	-	-	406,076
---	---	-------	---------	-----	---------	---	---	---------

Effect of foreign currency exchange differences	21,672	1,311,577	1,432,524	8,806	43,747	3,932	715,573	3,537,831
---	--------	-----------	-----------	-------	--------	-------	---------	-----------

Balance at December 31, 2013	\$3,295,758	\$70,593,537	\$208,351,905	\$288,571	\$5,973,301	\$122,717	\$7,009,702	\$295,635,499
------------------------------------	-------------	--------------	---------------	-----------	-------------	-----------	-------------	---------------

Accumulated depreciation and impairment								
---	--	--	--	--	--	--	--	--

Balance at January 1, 2013	\$-	\$22,307,146	\$120,775,451	\$207,017	\$4,235,613	\$128,186	\$-	\$147,653,411
-------------------------------	-----	--------------	---------------	-----------	-------------	-----------	-----	---------------

Depreciation expense	-	3,555,865	20,486,896	26,766	566,575	60,505	-	24,696,607
-------------------------	---	-----------	------------	--------	---------	--------	---	------------

Impairment losses recognized (reversed)	-	(15,754 )	508,894	-	2,407	-	-	495,547
--	---	-----------	---------	---	-------	---	---	---------

Disposals	-	(368,707 )	(9,285,927 )	(34,810 )	(131,561 )	-	-	(9,821,005 )
-----------	---	------------	--------------	-----------	------------	---	---	--------------

Reclassification	-	(24,797 )	58,448	2,016	35,491	(83,242 )	-	(12,084)
------------------	---	-----------	--------	-------	--------	-----------	---	----------

Acquisitions through business combinations	-	2,473	108,365	4	36,814	-	-	147,656
Effect of foreign currency exchange differences	-	370,710	614,596	5,350	(15,594 )	2,964	-	978,026
Balance at December 31, 2013	\$-	\$25,826,936	\$133,266,723	\$206,343	\$4,729,745	\$108,413	\$-	\$164,138,160

For the year ended December 31, 2014

	Land NT\$	Buildings and improvements NT\$	Machinery and equipment NT\$	Transportation equipment NT\$	Furniture and fixtures NT\$	Leased assets and leasehold improvement NT\$	Construction in progress and machinery in transit NT\$	Total NT\$
--	--------------	--	---------------------------------------	-------------------------------------	--------------------------------------	--	---	---------------

Cost

Balance at January 1, 2014	\$3,295,758	\$70,593,537	\$208,351,905	\$288,571	\$5,973,301	\$122,717	\$7,009,702	\$295,635,484
Additions	-	1,246,123	1,140,822	8,603	87,903	476,260	40,488,876	43,448,587
Disposals	-	(299,515 )	(8,188,532 )	(26,982 )	(312,774 )	(107,291 )	(56,209 )	(8,991,303 )
Reclassification	-	12,683,476	27,935,525	26,832	378,928	(10,645 )	(41,044,364 )	(30,248 )
Effect of foreign currency exchange differences	52,260	2,501,633	4,429,907	11,103	263,949	2,099	(535,788 )	6,725,163
Balance at December 31, 2014	\$3,348,018	\$86,725,254	\$233,669,627	\$308,127	\$6,391,307	\$483,140	\$5,862,217	\$336,787,695

Accumulated depreciation and impairment

Balance at January 1, 2014	\$-	\$25,826,936	\$133,266,723	\$206,343	\$4,729,745	\$108,413	\$-	\$164,138,160
Depreciation expense	-	3,980,337	21,180,214	30,152	550,126	64,213	-	25,805,042
Impairment losses recognized	-	79,124	211,466	-	-	-	7,164	297,754
Disposals	-	(248,477 )	(7,786,216 )	(24,199 )	(302,373 )	(107,291 )	-	(8,468,556 )



Reclassification	-	7,459	(7,122)	)	-	(6,133)	)	(1,774)	)	-	(7,570)
Effect of foreign currency exchange differences	-	684,165	2,632,915	7,712	109,239	1,714	-				3,435,745
Balance at December 31, 2014	\$-	\$30,329,544	\$149,497,980	\$220,008	\$5,080,604	\$65,275	\$7,164				\$185,200,5

F-41

---

Table of Contents

	Land	Buildings and improvements	Machinery and equipment	Transportation equipment	Furniture and fixtures	Leased assets and leasehold improvement	Construction in progress and machinery in transit	Total
	US\$ (Note 4)	US\$ (Note 4)	US\$ (Note 4)	US\$ (Note 4)	US\$ (Note 4)	US\$ (Note 4)	US\$ (Note 4)	US\$ (Note 4)
Cost								
Balance at January 1,2014	\$104,296	\$2,233,973	\$6,593,415	\$9,132	\$189,029	\$3,883	\$221,826	\$9,355,554
Additions	-	39,434	36,102	272	2,782	15,072	1,281,294	1,374,956
Disposals	-	(9,478 )	(259,131 )	(854 )	(9,898 )	(3,395 )	(1,779 )	(284,535 )
Reclassification	-	401,376	884,036	849	11,991	(337 )	(1,298,872)	(957 )
Effect of foreign currency exchange differences	1,654	79,165	140,187	351	8,352	67	(16,955 )	212,821
Balance at December 31,2014	\$105,950	\$2,744,470	\$7,394,609	\$9,750	\$202,256	\$15,290	\$185,514	\$10,657,839
Accumulated depreciation and impairment								
Balance at January 1,2014	\$-	\$817,308	\$4,217,301	\$6,530	\$149,675	\$3,431	\$-	\$5,194,245
Depreciation expense	-	125,960	670,260	954	17,409	2,032	-	816,615
Impairment losses recognized	-	2,504	6,692	-	-	-	227	9,423
Disposals	-	(7,863 )	(246,399 )	(766 )	(9,569 )	(3,395 )	-	(267,992 )
Reclassification	-	236	(225 )	-	(194 )	(56 )	-	(239 )
Effect of foreign currency exchange differences	-	21,651	83,320	244	3,457	54	-	108,726
Balance at December 31,2014	\$--	\$959,796	\$4,730,949	\$6,962	\$160,778	\$2,066	\$227	\$5,860,778

A portion of property, plant and equipment used in packaging segment, testing segment, EMS segment and other segment was unable to be used for the Group's production due to operation plans and production demands. After carrying out individual assessment, the Group recognized an impairment loss of NT\$73,541 thousand, NT\$495,547 thousand and NT\$297,754 thousand (US\$9,423 thousand) under the line item of other income and expenses in the consolidated statements of comprehensive income for the years ended December 31, 2012, 2013 and 2014, respectively. The recoverable amount of a portion of impaired property, plant and equipment is determined through a fair value less cost to sell calculation which is based on the recent quoted prices of assets with similar age and obsolescence that provided by the vendors in secondary market. The recent quoted prices of assets are a level 2 input in terms of IFRS 13 because the secondary market is not very active. The other portion of impaired property, plant and equipment is determined on the basis of their value in use which the discount rates were 8.47%~10.78%, 12.40% and 9.70%~11.50% per annum for 2012, 2013 and 2014, respectively.

Each class of property, plant and equipment was depreciated on a straight-line basis over the following useful lives:

Buildings and improvements	
Main plant buildings	10-40 years
Cleanrooms	10-20 years
Others	3-20 years
Machinery and equipment	2-10 years
Transportation equipment	2-7 years
Furniture and fixtures	2-20 years
Leased assets and leasehold improvements	2-10 years

The capitalized borrowing costs for the years ended December 31, 2012, 2013 and 2014 are disclosed in Note 23d.

Refer to Note 34 for the carrying amount of property, plant and equipment that had been pledged by the Group to secure bank borrowings.

Table of Contents

15.	GOODWILL			
		2013	2014	US\$
		NT\$	NT\$	(Note 4)
	Cost			
	Balance at January 1	\$ 12,295,819	\$ 12,336,816	\$ 390,406
	Effect of foreign currency exchange differences	40,997	97,595	3,088
	Balance at December 31	\$ 12,336,816	\$ 12,434,411	\$ 393,494
	Accumulated impairment			
	Balance at January 1 and December 31	\$(1,988,996 )	\$(1,988,996 )	\$(62,943 )

## a. Allocating goodwill to cash-generating units

Goodwill had been allocated for impairment testing purposes to the following cash-generating units: packaging segment, testing segment, EMS segment and other segment. The carrying amount of goodwill allocated to cash-generating units was as follows:

	2013	December 31 2014	US\$ (Note 4)
Cash-generating units	NT\$	NT\$	
Testing segment	\$ 7,777,268	\$ 7,846,460	\$ 248,306
Others	2,570,552	2,598,955	82,245
	\$ 10,347,820	\$ 10,445,415	\$ 330,551

## b. Impairment assessment

At the end of each year, the Group performs impairment assessment by reviewing the recoverable amounts based on value in use. In assessing value in use, the estimated 5-year future cash flows are discounted to their present value using annual discount rates of 8.47%-10.78%, 9.56%-11.80% and 9.70%-11.50% as of December 31, 2012, 2013 and 2014, respectively, that reflect the risks specific to each cash-generating unit.

Cash flow projection is based on the expected operating revenue, gross profit, capital expenditure and the growth of other operating costs. The Group's capital expenditure is based on the forecast of market demands, capacity strategy and improvement of manufacturing process.

For the years ended December 31, 2012, 2013 and 2014, the Group did not recognize impairment loss on goodwill.



Table of Contents

## 16. OTHER INTANGIBLE ASSETS

The carrying amounts of each class of other intangible assets were as follows:

	2013	December 31 2014	US\$ (Note 4)
	NT\$	NT\$	
Patents	\$35,751	\$15,768	\$499
Acquired specific technology	88,674	5,116	162
Customer relationships	654,821	501,501	15,870
Computer software and others	826,578	945,486	29,921
	\$1,605,824	\$1,467,871	\$46,452

For the year ended December 31, 2012

	Patents NT\$	Acquired Specific Technology NT\$	Customer Relationships NT\$	Computer Software and Others NT\$	Total NT\$
Cost					
Balance at January 1, 2012	\$1,029,944	\$1,113,947	\$1,579,015	\$3,146,432	\$6,869,338
Additions	3,611	-	-	442,340	445,951
Disposals	-	-	-	(33,149)	(33,149)
Reclassification	235	-	-	4,035	4,270
Acquisitions through business combinations	-	-	-	1,721	1,721
Effect of foreign currency exchange differences	(15,257)	-	-	(39,067)	(54,324)
Balance at December 31, 2012	\$1,018,533	\$1,113,947	\$1,579,015	\$3,522,312	\$7,233,807
Accumulated amortization					
Balance at January 1, 2012	\$542,189	\$657,249	\$596,252	\$2,514,155	\$4,309,845
Amortization expense	245,477	225,376	180,348	310,821	962,022
Disposals	-	-	-	(28,840)	(28,840)
Reclassification	16	-	-	13,466	13,482
Acquisitions through business combinations	-	-	-	1,112	1,112
Effect of foreign currency exchange differences	(13,523)	-	-	(64,737)	(78,260)
Balance at December 31, 2012	\$774,159	\$882,625	\$776,600	\$2,745,977	\$5,179,361

F-44

---

Table of Contents

For the year ended December 31, 2013

	Patents NT\$	Acquired Specific Technology NT\$	Customer Relationships NT\$	Computer Software and Others NT\$	Total NT\$
Cost					
Balance at January 1, 2013	\$1,018,533	\$ 1,113,947	\$ 1,579,015	\$3,522,312	\$7,233,807
Additions	-	-	-	313,110	313,110
Disposals	-	-	-	(11,294 )	(11,294 )
Reclassification	-	-	-	(8,684 )	(8,684 )
Acquisitions through business combinations	-	-	-	3,508	3,508
Effect of foreign currency exchange differences	3,217	-	-	29,841	33,058
Balance at December 31, 2013	\$1,021,750	\$ 1,113,947	\$ 1,579,015	\$3,848,793	\$7,563,505
Accumulated amortization					
Balance at January 1, 2013	\$774,159	\$ 882,625	\$ 776,600	\$2,745,977	\$5,179,361
Amortization expense	210,900	142,648	147,594	273,162	774,304
Disposals	-	-	-	(11,294 )	(11,294 )
Reclassification	-	-	-	25	25
Acquisitions through business combinations	-	-	-	688	688
Effect of foreign currency exchange differences	940	-	-	13,657	14,597
Balance at December 31, 2013	\$985,999	\$ 1,025,273	\$ 924,194	\$3,022,215	\$5,957,681

For the year ended December 31, 2014

	Patents NT\$	Acquired Specific Technology NT\$	Customer Relationships NT\$	Computer Software and Others NT\$	Total NT\$
Cost					
Balance at January 1, 2014	\$1,021,750	\$ 1,113,947	\$ 1,579,015	\$3,848,793	\$7,563,505
Additions	-	-	-	396,466	396,466
Disposals or derecognition	-	-	-	(1,239,163)	(1,239,163)
Reclassification	-	-	-	6,228	6,228
Effect of foreign currency exchange differences	3,441	-	-	55,017	58,458



Balance at December 31, 2014	\$1,025,191	\$ 1,113,947	\$ 1,579,015	\$3,067,341	\$6,785,494
------------------------------	-------------	--------------	--------------	-------------	-------------

(Continued)

F-45

---

Table of Contents

	Patents NT\$	Acquired Specific Technology NT\$	Customer Relationships NT\$	Computer Software and Others NT\$	Total NT\$
Accumulated amortization					
Balance at January 1, 2014	\$985,999	\$ 1,025,273	\$ 924,194	\$3,022,215	\$5,957,681
Amortization expense	21,958	83,558	153,320	286,898	545,734
Disposals or derecognition	-	-	-	(1,227,346)	(1,227,346)
Reclassification	-	-	-	2,516	2,516
Effect of foreign currency exchange differences	1,466	-	-	37,572	39,038
Balance at December 31, 2014	\$1,009,423	\$ 1,108,831	\$ 1,077,514	\$2,121,855	\$5,317,623

(Concluded)

	Patents US\$ (Note 4)	Acquired Specific Technology US\$ (Note 4)	Customer Relationships US\$ (Note 4)	Computer Software and Others US\$ (Note 4)	Total US\$ (Note 4)
Cost					
Balance at January 1, 2014	\$32,334	\$ 35,251	\$ 49,969	\$121,797	\$239,351
Additions	-	-	-	12,546	12,546
Disposals or derecognition	-	-	-	(39,214 )	(39,214 )
Reclassification	-	-	-	197	197
Effect of foreign currency exchange differences	109	-	-	1,743	1,852
Balance at December 31, 2014	\$32,443	\$ 35,251	\$ 49,969	\$97,069	\$214,732

Accumulated amortization					
Balance at January 1, 2014	\$31,203	\$ 32,445	\$ 29,247	\$95,640	\$188,535
Amortization expense	695	2,644	4,852	9,079	17,270
Disposals or derecognition	-	-	-	(38,840 )	(38,840 )
Reclassification	-	-	-	80	80
Effect of foreign currency exchange differences	46	-	-	1,189	1,235
Balance at December 31, 2014	\$31,944	\$ 35,089	\$ 34,099	\$67,148	\$168,280

Each class of other intangible assets, except a portion of customer relationships amortized based on the pattern in which the economic benefits are consumed, were amortized on the straight-line basis over the following useful lives:

F-46

---

Table of Contents

Patents	5-15 years
Acquired specific technology	5 years
Customer relationships	11 years
Computer software and others	2-32 years

## 17. LONG-TERM PREPAYMENTS FOR LEASE

Long-term prepayments for lease mainly represent land use right located in China with period for use from 50 to 60 years. As of December 31, 2013 and 2014, the carrying amount of the land use right which the Group was in the process of obtaining the certificates was NT\$1,541,453 thousand and NT\$17,594 thousand (US\$557 thousand), respectively.

## 18. BORROWINGS

## a.Short-term borrowings

Short-term borrowings mainly represented unsecured revolving bank loans with annual interest rates at 0.80%-6.30% and 0.81%-6.00% as of December 31, 2013 and 2014, respectively.

## b.Long-term borrowings

As of December 31, 2013 and 2014, the long-term borrowings with fixed interest rates were NT\$706,562 thousand and NT\$1,192,975 thousand (US\$37,752 thousand), respectively, with annual interest rates at 2.50%-6.15% and 1.10%-6.15%, respectively, and all repayable through May 2015 to November 2016. As of December 31, 2013 and 2014, the current portion of long-term borrowings with fixed interest rates were zero and NT\$116,876 thousand (US\$3,699 thousand). The others were floating interest rate borrowings and consisted of the followings:

	December 31		
	2013	2014	US\$ (Note 4)
	NT\$	NT\$	
Specified purpose loans			
Repaid in March 2014, annual interest rate was 6.15% as of December 31, 2013	\$ 16,080	\$ -	\$ -
Working capital bank loans			
Syndicated bank loans - repayable through April 2015 to July 2018, annual interest rates were 0.90%-2.28% and 0.90%-1.83% as of December 31, 2013 and 2014, respectively	11,537,135	10,760,548	340,524
Others - repayable through January 2016 to August 2019, annual interest rates were 1.04%-4.43% and 1.03%-3.74% as of December 31, 2013 and 2014, respectively	22,260,633	12,479,650	394,926
Mortgage loans			
Repayable through December 2015 to June 2023, annual interest rates were 1.40%-7.20% and 6.77% as of December 31, 2013 and 2014, respectively	395,177	2,534,483	80,205

34,209,025	25,774,681	815,655
------------	------------	---------

(Continued)

F-47

---

Table of Contents

	2013	December 31 2014	US\$ (Note 4)
	NT\$	NT\$	
Less: unamortized arrangement fee	\$ 58,722	\$ 32,225	\$ 1,020
	34,150,303	25,742,456	814,635
Less: current portion	5,276,206	2,714,131	85,890
Long-term borrowings	\$ 28,874,097	\$ 23,028,325	\$ 728,745

(Concluded)

Pursuant to the above loan agreements, the Group should maintain certain financial covenants including current ratio, leverage ratio, tangible net assets and interest coverage ratio. Such financial ratios are calculated based on the Group's annual audited consolidated financial statements or semi-annual reviewed consolidated financial statements or subsidiaries' annual audited financial statements under local GAAP. As of December 31, 2013 and 2014, the Group was in compliance with all of the loan covenants.

The Group had sufficient long term credit facility obtained before December 31, 2013 to refinance some portion of the loans on a long-term basis. Therefore, NT\$5,962,343 thousand were not classified as current portion of long-term borrowings as of December 31, 2013.

## 19. BONDS PAYABLE

	2013	December 31 2014	US\$ (Note 4)
	NT\$	NT\$	
Secured domestic bonds - secured by banks			
Repayable at maturity in August 2016; interest due annually with annual interest rate 1.45%	\$8,000,000	\$8,000,000	\$253,164
Unsecured convertible overseas bonds	11,922,000	12,660,000	400,633
Secured overseas bonds - secured by the Company			
US\$300,000 thousand, repayable at maturity in July 2017; interest due semi-annually with annual interest rate 2.125%	-	9,495,000	300,475
CNY500,000 thousand, repayable at maturity in September 2016; interest due semi-annually with annual interest rate 4.25%	2,444,275	2,586,207	81,842
CNY150,000 thousand with annual interest rate 3.13% and repaid in September 2014	733,282	-	-
	23,099,557	32,741,207	1,036,114
Less: discounts on bonds payable	1,785,552	1,471,076	46,553
	21,314,005	31,270,131	989,561
Less: current portion	731,438	-	-
	\$20,582,567	\$31,270,131	\$989,561



Table of Contents

In September 2013, the Company offered the third unsecured convertible overseas bonds (the “Bonds”) in US\$400,000 thousand. The Bonds is zero coupon bonds with the maturity of 5 years, in denominations of US\$200 thousand or in any integral multiples thereof. Each holder of the Bonds has the right at any time on or after October 16, 2013 and up to (and including) August 26, 2018, except during legal lock-up period, to convert Bonds into newly issued listed common shares at the conversion price NT\$33.085, determined on the basis of a fixed exchange rate of US\$1 to NT\$29.956. The conversion price will be adjusted in accordance with the conversion provisions due to anti-dilution clause. As of December 31, 2014, the conversion price was NT\$31.93 (US\$1.01).

The Bonds may be redeemed at the option of the Company, in whole or in part, at any time on or after the third anniversary of the offering date provided that (1) the closing price, translated into U.S. dollars, of the common shares for a period of 20 consecutive trading days is at least 130% of the conversion price, (2) at least 90% in aggregate principal amount of the Bonds originally outstanding has been redeemed, repurchased and canceled or converted, or (3) the Company is required to pay additional taxes on the Bonds as a result of certain changes in tax laws in the ROC.

Each holder shall have the right to request the Company repurchase all or any portion of the principal amount thereof of a holder’s Bonds (1) on or after the third anniversary of the offering date, (2) in the event of a change of control, or (3) in the event of delisting.

The Bonds contained a debt host contract, recognized as bonds payable, and the Bonds Options aggregately recognized as financial liabilities at FVTPL. The effective interest rate of the debt host contract was 3.16% and the aggregate fair value of the Bonds Options was NT\$1,667,950 thousand on initial recognition. As a result of changes in fair value, we recognized a loss of NT\$75,046 thousand and NT\$777,610 thousand (US\$24,608 thousand) for the years ended December 31, 2013 and 2014, respectively, in other gains and losses.

To focus on corporate sustainability and to carry out the commitment to environmental protection and energy conservation, Anstock II Limited, the Company’s 100% owned and newly established subsidiary, offered overseas bonds in US\$300,000 thousand with the maturity of 3 years and annual interest rate of 2.125% (the “Green Bonds”) in July 2014. The Green Bonds are unconditionally and irrevocably guaranteed by the Company and the proceeds will be used to fund certain eligible projects to promote the Group's transition to low-carbon and climate resilient growth.

## 20. OTHER PAYABLES

	2013	December 31 2014	US\$ (Note 4)
	NT\$	NT\$	
Payables for property, plant and equipment	\$3,408,603	\$7,097,129	\$224,593
Accrued salary and bonus	4,414,581	5,550,040	175,634
Accrued bonus to employees and remuneration to directors and supervisors	1,778,422	2,602,796	82,367
Accrued legal settlement fee	-	814,185	25,765
Accrued employee insurance	473,575	572,259	18,110
Accrued utilities	450,506	495,404	15,677
Others	4,232,866	5,232,703	165,592
	<b>\$14,758,553</b>	<b>\$22,364,516</b>	<b>\$707,738</b>



The Company and its subsidiary, ASE US, reached the final settlement agreement with Tessera Inc. (“Tessera”) in October 2014 to resolve the patent infringement lawsuit, and Tessera has dismissed all claims against the Company and ASE US. The Company recognized the originally agreed settlement amount of NT\$894,150 thousand (US\$30,000 thousand as resolved in the term sheet agreement in February 2014) in the

F-49

---

Table of Contents

fourth quarter of 2013 under the line item of long-term payables. The final settlement amount was reduced to NT\$814,185 (US\$27,000 thousand as resolved in the final settlement agreement in October 2014) and reclassified from long-term payables to other payables which was paid in January 2015.

21. RETIREMENT BENEFIT PLANS

a. Defined contribution plans

- 1) The pension plan under the ROC Labor Pension Act (“LPA”) for the Group’s ROC resident employees is a government-managed defined contribution plan. Based on the LPA, the Company and its subsidiaries in Taiwan makes monthly contributions to employees’ individual pension accounts at 6% of their monthly salaries.
- 2) The subsidiaries located in China, U.S.A., Malaysia, Singapore and Mexico also make contributions at various ranges according to relevant local regulations.

b. Defined benefit plans

- 1) The Company and its subsidiaries in Taiwan joined the defined benefit pension plan under the ROC Labor Standards Law (“LS Law”). Pension benefits are calculated on the basis of the length of service and average monthly salaries of the last six months before retirement. The Company and its subsidiaries in Taiwan make contributions based on a certain percentage of their domestic employees monthly salaries to a pension fund administered by the Labor Pension Fund Supervisory Committee (the Committee) and deposited in the names of the Committees in the Bank of Taiwan.
- 2) ASE Japan has a pension plan under which eligible employees with more than ten years of service are entitled to receive pension benefits based on their length of service and salaries at the time of termination of employment. ASE Japan makes contributions based on a certain amount of pension cost to employees.

ASE Korea also has a pension plan under which eligible employees and directors with more than one year of service are entitled to receive a lump-sum payment upon termination of their service with ASE Korea, based on their length of service and salaries at the time of termination. ASE Korea makes contributions based on a certain percentage of pension cost to an external financial institution administered by the management and in the names of employees.

- 3) ASE Inc., ASE Test, Inc. and ASE Electronics Inc. maintain pension plans for executive managers. Pension costs under the plans were NT\$34,571 thousand, NT\$4,950 thousand and NT\$ 16,645 thousand (US\$527 thousand) for the years ended December 31, 2012, 2013 and 2014, respectively. Pension payments were NT\$37,642 thousand, NT\$2,666 thousand and NT\$ 25,315 thousand (US\$801 thousand) for the years ended December 31, 2012, 2013 and 2014, respectively. As of December 31, 2013 and 2014, accrued pension liabilities for executive managers were NT\$208,512 thousand and NT\$199,842 thousand (US\$6,324 thousand), respectively.
- 4) The present value of the defined benefit obligation and the related current service cost and past service cost were measured using the Projected Unit Credit Method.

Except the pension plans for executive managers, the key assumptions used for the actuarial valuations were as follow:

December	December
31,	31,

	2013	2014
Discount rates	0.20%-4.94%	0.12%-4.03%
Expected rates of salary increase	0.00%-5.05%	2.00%-4.70%

F-50

---

Table of Contents

5) Amounts recognized in consolidated statements of comprehensive income in respect of the defined benefit plans excluding those for executive managers were as follows:

	For the Years Ended December 31			
	2012	2013	2014	US\$ (Note 4)
	NT\$	NT\$	NT\$	
<b>Service cost</b>				
Current service cost	\$ 297,861	\$ 347,629	\$ 327,707	\$ 10,370
Net interest expense	97,574	77,799	79,407	2,513
Past service cost	-	-	22,036	698
<b>Components of defined benefit costs recognized in profit or loss</b>				
	395,435	425,428	429,150	13,581
<b>Remeasurement on the net defined benefit liability</b>				
Return on plan assets (excluding amounts included in net interest expense)	8,212	16,983	29,338	928
Actuarial losses (gains) arising from changes in financial assumptions	360,188	(465,360)	(46,913 )	(1,484 )
Actuarial losses arising from experience adjustments	365,389	35,839	38,516	1,219
Actuarial losses arising from changes in demographic assumptions	84,757	313	7,204	228
<b>Components of defined benefit costs recognized in other comprehensive (income) loss</b>				
	818,546	(412,225)	28,145	891
<b>Total</b>	<b>\$ 1,213,981</b>	<b>\$ 13,203</b>	<b>\$ 457,295</b>	<b>\$ 14,472</b>

The pension costs for the years ended December 31, 2012, 2013 and 2014 were as follows:

	For the Years Ended December 31			
	2012	2013	2014	US\$ (Note 4)
	NT\$	NT\$	NT\$	
Operating cost	\$ 314,219	\$ 337,069	\$ 345,309	\$ 10,928
Selling and marketing expenses	10,555	10,181	11,448	362
General and administrative expenses	36,502	43,381	35,867	1,135

(Continued)

Table of Contents

	For the Years Ended December 31			
	2012	2013	2014	US\$ (Note 4)
	NT\$	NT\$	NT\$	
Research and development expenses	\$ 34,159	\$ 34,797	\$ 36,526	\$ 1,156
	\$ 395,435	\$ 425,428	\$ 429,150	\$ 13,581

(Concluded)

6) For the years ended December 31, 2012, 2013 and 2014, the Group recognized actuarial loss of NT\$677,666 thousand, actuarial gain of NT\$345,519 thousand and actuarial loss of NT\$4,260 thousand (US\$135 thousand) in other comprehensive income (loss), respectively. As of December 31, 2013 and 2014, the accumulated actuarial loss of NT\$328,513 thousand and NT\$332,947 thousand (US\$10,536 thousand) were recognized in other comprehensive income (loss) and NT\$3,634 thousand and NT\$4,491 thousand (US\$142 thousand) were recognized in non-controlling interests, respectively.

7) The amounts included in the consolidated balance sheets arising from the Group's obligation in respect of its defined benefit plans excluding those for executive managers were as follows:

	December 31		
	2013	2014	US\$ (Note 4)
	NT\$	NT\$	
Present value of funded defined benefit obligation	\$ 7,472,145	\$ 7,674,293	\$ 242,858
Fair value of plan assets	(3,118,804)	(3,502,487)	(110,838)
Present value of unfunded defined benefit obligation	4,353,341	4,171,806	132,020
Recorded under others payables	(15,893 )	(1,028 )	(33 )
Recorded under prepaid pension cost	-	11,910	377
Accrued pension liability	\$ 4,337,448	\$ 4,182,688	\$ 132,364

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

	For the Years Ended December 31			
	2012	2013	2014	US\$ (Note 4)
	NT\$	NT\$	NT\$	
Balance at January 1	\$ 6,664,941	\$ 7,751,862	\$ 7,472,145	\$ 236,460
Current service cost	297,861	347,629	327,707	10,370
Interest cost	153,044	156,157	189,043	5,982
Past service cost	-	-	22,036	698
Remeasurement loss (gain)				
Actuarial losses (gains) arising from changes in financial assumptions	360,188	(465,360 )	(46,913 )	(1,484 )

(Continued)

F-52

---

Table of Contents

	For the Years Ended December 31			
	2012	2013	2014	US\$ (Note 4)
	NT\$	NT\$	NT\$	
Actuarial losses arising from experience adjustments	\$ 365,389	\$ 35,839	\$ 38,516	\$ 1,219
Actuarial losses arising from changes in demographic assumptions	84,757	313	7,204	228
Benefits paid from the pension fund	(96,901 )	(154,608 )	(292,996 )	(9,272 )
Benefits paid from the Group	(29,365 )	(99,025 )	(16,237 )	(514 )
Exchange differences on foreign plans	(48,052 )	(100,662 )	(26,212 )	(829 )
Balance at December 31	\$ 7,751,862	\$ 7,472,145	\$ 7,674,293	\$ 242,858

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

	For the Years Ended December 31			
	2012	2013	2014	US\$ (Note 4)
	NT\$	NT\$	NT\$	
Balance at January 1	\$ 1,961,355	\$ 2,682,803	\$ 3,118,804	\$ 98,696
Interest income	55,470	78,358	109,636	3,469
Return on plan assets (excluding amounts included in net interest expense)	(8,212 )	(16,983 )	(29,338 )	(928 )
Contributions from plan by employer	734,864	470,592	556,555	17,613
Benefits paid	(96,901 )	(154,608 )	(292,996 )	(9,272 )
Exchange differences on foreign plans	36,227	58,642	39,826	1,260
Balance at December 31	\$ 2,682,803	\$ 3,118,804	\$ 3,502,487	\$ 110,838

8)The fair value of the plan assets by major categories at each balance sheet date was as follows:

	December 31		
	2013	2014	US\$ (Note 4)
	NT\$	NT\$	
Cash and cash equivalents	\$ 1,140,149	\$ 1,854,926	\$ 58,700
Debt instruments	1,031,863	691,720	21,890
Equity instruments	802,066	869,752	27,524
Others	144,726	86,089	2,724
Total	\$ 3,118,804	\$ 3,502,487	\$ 110,838





Table of Contents

Under the ROC LS Law, the government is responsible for the administration of the funds and determination of the investment strategies and policies. Furthermore, the rate of return on assets shall not be less than the average interest rate on a 2-year time deposit published by the local banks. The government is responsible for any shortfall in the event that the rate of return is less than the required rate of return. Since the plan assets are held in a commingled fund which is operated and managed by the government's designated authorities, the Group does not have any right to intervene in the fund's investment.

The management of ASE Korea is responsible for the administration of the fund and determination of the investment strategies according to related regulations. ASE Korea is responsible for the shortfall between the fund and the defined benefit obligation. All of the plan assets are invested in the certificates of deposits.

9) Significant actuarial assumptions for the determination of the defined obligation excluding those for executive managers are discount rates and expected rates of salary increase. The sensitivity analysis below has been determined based on reasonably possible changes of the respective assumptions occurring at each balance sheet date, while holding all other assumptions constant.

If the discount rate is 0.5% higher or lower, the defined benefit obligation would decrease by NT\$440,350 thousand (US\$13,935 thousand) or increase by NT\$503,593 thousand (US\$15,936 thousand), respectively. If the expected rate of salary increase increases or decreases by 0.5%, the defined benefit obligation would increase by NT\$493,722 thousand (US\$15,624 thousand) or decrease by NT\$430,706 thousand (US\$13,630 thousand), 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 each balance sheet date, which is the same as that applied in calculating the defined benefit obligation liability recognized in the consolidated balance sheets.

As of December 31, 2014, the average duration of the defined benefit obligation excluding those for executive managers of the Group was 9 to 18 years, respectively.

Maturity profile of defined benefit obligation was as follows:

Fiscal Year Ending	Expected Benefit Payments	
	NT\$	US\$ (Note 4)
December 31, 2015	\$ 249,000	\$ 7,880
December 31, 2016	267,368	8,461
December 31, 2017	329,118	10,415
December 31, 2018	376,489	11,914
December 31, 2019	489,095	15,478
December 31, 2020 and thereafter	14,468,022	457,849

The Group expects to make contributions of NT\$510,434 thousand (US\$16,153 thousand) to the defined benefit plans excluding those for executive managers in the next year starting from January 1, 2015.

F-54

---

Table of Contents

22.	EQUITY		
	a.Share capital		
Ordinary shares			
		December 31, 2013	December 31, 2014
Numbers of shares authorized (in thousands)		9,600,000	10,000,000
Numbers of shares reserved (in thousands)			
Employee share options		800,000	800,000
Numbers of shares registered (in thousands)		7,756,004	7,852,538
Numbers of shares subscribed in advance (in thousands)		31,823	9,187
Number of shares issued and fully paid (in thousands)		7,787,827	7,861,725
		December 31, 2013	December 31, 2014
		NT\$	NT\$ US\$ (Note 4)
Shares authorized	\$ 96,000,000	\$ 100,000,000	\$ 3,164,557
Shares reserved			
Employee share options	\$ 8,000,000	\$ 8,000,000	\$ 253,165
Shares registered	\$ 77,560,040	\$ 78,525,378	\$ 2,484,980
Shares subscribed in advance	620,218	189,801	6,007
Shares issued	\$ 78,180,258	\$ 78,715,179	\$ 2,490,987

The holders of issued ordinary shares with a par value at \$10 per share are entitled the right to vote and receive dividends, except the shares held by the Group's subsidiaries which are not entitled the right to vote. As of December 31, 2013 and 2014, there were 100,000 thousand and 500,000 thousand ordinary shares, respectively, included in the authorized shares had not completed the share registration process.

In July 2013, the board of directors approved the issue of 130,000 thousand ordinary shares for cash capital increase at NT\$26.1 per share. The aforementioned cash capital increase has been approved by the Financial Supervisory Commission in the ROC and effectively registered on August 15, 2013. The record date of the cash capital increase was October 2, 2013 and the Company has completed the registration formalities.

## American Depositary Receipts

The Company issued ADSs and each ADS represents five ordinary shares. As of December 31, 2013 and 2014, 96,649 thousand and 125,731 thousand ADSs were outstanding and represented approximately 483,243 thousand and 628,657 thousand ordinary shares of the Company, respectively.

F-55

---

Table of Contents

## b.Capital surplus

	December 31		US\$ (Note 4)
	2013	2014	
	NT\$	NT\$	
Arising from the excess of the consideration received over the carrying amounts of the subsidiaries' net assets	\$ 2,178,384	\$ 9,055,250	\$ 286,559
Arising from issuance of ordinary shares	4,134,295	5,325,382	168,525
Arising from employee share options	1,369,232	1,178,210	37,285
Arising from treasury share transactions	236,214	425,004	13,449
Arising from share of changes in capital surplus of associates	3,250	30,134	954
	\$ 7,921,375	\$ 16,013,980	\$ 506,772

As of December 31, 2013 and 2014, capital surplus arising from issuance of ordinary shares of NT\$3,626 thousand represented the reclassification arising from the unexercised portion for employees' subscription on cash capital increase of the Company in 2013 (Note 26c).

The premium from ordinary shares issued in excess of par, including the premium from issuance of ordinary shares, treasury share transactions and carrying amount of expired options, may be used to offset deficits; in addition, when the Company has no deficit, such capital surplus may be distributed as cash dividends or transferred to capital up to a certain percentage of the Company's capital surplus each year.

The capital surplus arising from investments accounted for using the equity method and employee share options may not be used for any purpose.

## c.Retained earnings and dividend policy

The Articles of Incorporation of ASE Inc. (the "Articles") provides that annual net income shall be distributed in the following order:

- 1) Replenishment of deficits;
- 2) 10.0% as legal reserve;
- 3) Special reserve appropriated or reversed in accordance with laws or regulations set forth by the authorities concerned;
- 4) An amount equal to the excess of the income from investments accounted for using the equity method over cash dividends as special reserve;
- 5) Addition or deduction of realized gains or losses on equity instruments at fair value through other comprehensive income;

- 6) Not more than 1.0% of the remainder, from 1) to 5), as compensation to directors and supervisors;
- 7) Between 7.0% to 11.0% of the remainder, from 1) to 5), as bonus to employees, of which 7.0% shall be distributed in accordance with the employee bonus plan and the excess shall be distributed to specified employees at the board of directors' discretion; and

- 8) Any remainder from above as dividends to shareholders.

Table of Contents

Employees to whom referred in 7) above include employees of subsidiaries that meet certain conditions, which are to be determined by the board of directors.

The Company is currently in the mature growth stage. To meet the capital needs for business development now and in the future and satisfy the shareholders' demand for cash inflows, the Company shall use residual dividend policy to distribute dividends, of which the cash dividend is not lower than 30% of the total dividend distribution, with the remainder to be distributed in stock. A distribution plan is also to be made by the board of directors and passed for resolution in the shareholders' meeting.

As of December 31, 2013 and 2014, the accrued bonus to employees of the Company was NT\$1,586,672 thousand and NT\$2,335,786 thousand (US\$73,917 thousand), respectively, and the accrued remuneration to directors and supervisors of the Company was NT\$144,243 thousand and NT\$212,344 thousand (US\$6,720 thousand), respectively. The accrued bonus to employees and remuneration to directors and supervisors represented 11% and 1%, respectively, of net income (net of the bonus and remuneration) for the years ended December 31, 2013 and 2014. Material differences between such estimated amounts and the amounts proposed by the board of directors on or before the consolidated financial statements are authorized for issue are adjusted in the year the bonus and remuneration were recognized. If there is a change in the proposed amounts after the consolidated financial statements are authorized for issue, the differences are recorded as a change in accounting estimate. If a share bonus is resolved to be distributed to employees, the number of shares is determined by dividing the amount of the share bonus by the closing price (after considering the effect of cash and stock dividends) of the shares of the day immediately preceding the shareholders' meeting.

Pursuant to existing regulations, the Company should appropriate to a special reserve of an amount that was the same as these of unrealized revaluation increment and cumulative translation differences (gains) transferred to retained earnings as a result of the company's adoption of the exemptions under IFRS 1. The special reserve appropriated as above may be reversed in proportion to the usage, disposal or reclassification of the related assets and thereafter distributed.

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

The appropriations of earnings for 2012 and 2013 resolved at the Company's annual shareholders' meetings in June 2013 and June 2014, respectively, were as follows:

	Appropriation of Earnings		Dividends Per Share	
	For Year 2012 NT\$	For Year 2013 NT\$	For Year 2012 NT\$	For Year 2013 NT\$
Legal reserve	\$ 1,309,136	\$ 1,568,907		
Special reserve	309,992	(309,992 )		
Cash dividends	7,987,974	10,156,005	\$ 1.05	\$ 1.30
	\$ 9,607,102	\$ 11,414,920		

The bonus to employees and the remuneration to directors and supervisors for 2012 and 2013 distributed in cash were also approved in the aforementioned shareholders' meetings. The information was as follows:

	For Year 2012 NT\$	For Year 2013 NT\$
Bonus to employees	\$ 1,147,223	\$ 1,587,300
Remuneration to directors and supervisors	228,000	144,000

F-57

---



Table of Contents

The differences between the resolved amounts of the bonus to employees and remuneration to directors and supervisors and the accrued amounts reflected in the consolidated financial statements for the years ended December 31, 2012 and 2013 were deemed changes in estimates. The difference was NT\$38,644 thousand and NT\$385 thousand (US\$12 thousand) and had been adjusted in earnings for the years ended December 31, 2013 and 2014, respectively.

As of March 11, 2015, the board of directors has not yet approved the appropriation of 2014 earnings.

Information regarding the bonus to employees and the remuneration to directors and supervisors resolved by the shareholders' meeting is available on the Market Observation Post System website of the TSE.

## d.Special reserve

On January 1, 2013, the Company appropriated to the special reserve of NT\$3,353,938 thousand relating to the exchange differences on translating foreign operations transferred to retained earnings in accordance with existing regulations.

## e.Others equity items

## 1)Exchange differences on translating foreign operations

	For the Years Ended December 31			
	2012	2013	2014	US\$ (Note 4)
	NT\$	NT\$	NT\$	
Balance at January 1	\$ -	\$ (3,210,248)	\$ (525,521 )	\$ (16,630 )
Exchange differences arising on translating foreign operations	(3,210,032)	2,685,647	5,064,616	160,272
Share of exchange difference of associates accounted for using the equity method	(216 )	(920 )	1,767	56
Balance at December 31	\$ (3,210,248)	\$ (525,521 )	\$ 4,540,862	\$ 143,698

## 2) Unrealized gain on available-for-sale financial assets

	For the Years Ended December 31			
	2012	2013	2014	US\$ (Note 4)
	NT\$	NT\$	NT\$	
Balance at January 1	\$ 283,460	\$ 355,254	\$ 426,246	\$ 13,489
Unrealized gain (loss) arising on revaluation of available-for-sale financial assets	16,340	14,985	(142,418)	(4,507 )

(Continued)



Table of Contents

	For the Years Ended December 31			
	2012	2013	2014	US\$ (Note 4)
	NT\$	NT\$	NT\$	
Cumulative losses (gains) reclassified to profit or loss on disposal of available-for-sale financial assets	\$ (163 )	\$ (96 )	\$ 9,561	\$ 302
Share of unrealized gain on available-for-sale financial assets of associates accounted for using the equity method	55,617	56,103	233,389	7,386
Balance at December 31	\$ 355,254	\$ 426,246	\$ 526,778	\$ 16,670

(Concluded)

## 3)Cash flow hedges

	For the Years Ended December 31			
	2012	2013	2014	US\$ (Note 4)
	NT\$	NT\$	NT\$	
Balance at January 1	\$ (48,372 )	\$ (3,755 )	\$ (3,279 )	\$ (104 )
Gain (loss) arising on changes in the fair value of hedging instruments - Interest rate swap contracts	877	(2,597 )	795	25
Cumulative gains or losses arising on changes in fair value of hedging instruments reclassified to profit or loss - Interest rate swap contracts	52,878	3,842	2,484	79
Income tax related to cash flow hedges	(9,138 )	(769 )	-	-
Balance at December 31	\$ (3,755 )	\$ (3,279 )	\$ -	\$ -

f.

## Treasury shares

There was no change in the Company's shares held by subsidiaries in 2013 and 2014. The Company's shares held by its subsidiaries at each balance sheet date were as follows:

Table of Contents

	Shares Held By Subsidiaries (in thousand shares)	Carrying amount NT\$	Carrying amount US\$ (Note 4)	Fair Value (Level 1) NT\$	Fair Value (Level 1) US\$ (Note 4)
December 31, 2013					
ASE Test	88,200	\$ 1,380,721		\$ 2,443,153	
J&R Holding	46,704	381,709		1,293,694	
ASE Test, Inc.	10,979	196,677		304,112	
	145,883	\$ 1,959,107		\$ 4,040,959	
December 31, 2014					
ASE Test	88,200	\$ 1,380,721	\$ 43,694	\$ 3,360,438	\$ 106,343
J&R Holding	46,704	381,709	12,079	1,779,413	56,311
ASE Test, Inc.	10,979	196,677	6,224	418,291	13,237
	145,883	\$ 1,959,107	\$ 61,997	\$ 5,558,142	\$ 175,891

The Company issued ordinary shares in connection with its merger with its subsidiaries. The shares held by its subsidiaries were reclassified from investments accounted for using the equity method to treasury shares on the proportion owned by the Company.

Under the Securities and Exchange Act in the ROC, the Company shall neither pledge treasury shares nor exercise shareholders' rights on these shares, such as rights to dividends and voting. The subsidiaries holding treasury shares, however, retain shareholders' rights except the rights to participate in any share issuance for cash and voting.

In February 2015, the board of directors approved to repurchase up to 120,000 thousand of the Company's ordinary shares which will be used for equity conversion of convertible overseas bonds to be issued in the future. The shares to be repurchased account for 1.53% of our total issued shares, at prices between NT\$32.0 (US\$1.0) to NT\$55.0 (US\$1.7) per share during the period from March 2, 2015 to April 30, 2015. The Company will keep buying back if the price is under the lower limit. As of March 11, 2015, we have repurchased 59,508 thousand of the Company's ordinary shares with a total consideration of NT\$2,669,265 thousand (US\$84,470 thousand).

## g.Non-controlling interests

	For the Years Ended December 31			
	2012	2013	2014	US\$ (Note 4)
	NT\$	NT\$	NT\$	
Balance at January 1	\$ 1,512,947	\$ 3,505,743	\$ 4,128,361	\$ 130,644
Attributable to non-controlling interests:				
Share of profit for the year	456,681	465,656	640,499	20,269

Exchange difference on translating foreign operations	(59,591 )	131,621	340,392	10,772
Unrealized gains (losses) on available-for-sale financial assets	362	(50 )	(857 )	(27 )
Additional non-controlling interests arising from partial disposal of subsidiaries (Note 28)	1,454,165	-	-	-

(Continued)

F-60

---

Table of Contents

	For the Years Ended December 31			
	2012	2013	2014	
	NT\$	NT\$	NT\$	US\$ (Note 4)
Purchase of non-controlling interests (Note 28)	\$ (10,967 )	\$ -	\$ -	\$ -
Cash capital increase of subsidiary (Note 28)	-	27,826	3,067,712	97,080
Non-controlling interest relating to outstanding vested share options held by the employees of subsidiaries	175,194	100,547	120,376	3,809
Defined benefit plan actuarial losses	(249 )	(3,385 )	(857 )	(27 )
Cash dividends to non-controlling interests	(22,799 )	(99,597 )	(85,766 )	(2,714 )
Balance at December 31 (Concluded)	\$ 3,505,743	\$ 4,128,361	\$ 8,209,860	\$ 259,806

23.

## PROFIT BEFORE INCOME TAX

## a.Other income and expenses

	For the Years Ended December 31			
	2012	2013	2014	
	NT\$	NT\$	NT\$	US\$ (Note 4)
Rental income	\$ 58,552	\$ 63,130	\$ 59,624	\$ 1,887
Gains (losses) on disposal of property, plant and equipment and other assets	18,743	127,375	(45,509 )	(1,440 )
Impairment loss on property, plant and equipment	(73,541 )	(495,547 )	(297,754)	(9,423 )
Loss on damages and claims	(121,831)	(1,058,810)	(102,101)	(3,231 )
Others	201,269	15,606	614,355	19,442
	\$ 83,192	\$ (1,348,246)	\$ 228,615	\$ 7,235

## b.Other income

	For the Years Ended December 31			
	2012	2013	2014	
	NT\$	NT\$	NT\$	US\$ (Note 4)
Interest income	\$ 322,197	\$ 212,801	\$ 243,474	\$ 7,705
Government subsidy	164,762	149,634	184,525	5,840
Dividends income	66,129	131,449	101,252	3,204

\$ 553,088	\$ 493,884	\$ 529,251	\$ 16,749
------------	------------	------------	-----------

F-61

---

Table of Contents

## c. Other gains and losses

	For the Years Ended December 31			US\$ (Note 4)
	2012	2013	2014	
	NT\$	NT\$	NT\$	
Net gains (losses) arising on financial instruments held for trading	\$ (761,276)	\$ 615,207	\$ 1,266,653	\$ 40,084
Net gains on financial assets designated as at FVTPL	43,612	180,152	572,187	18,107
Foreign exchange gains or losses, net	965,404	(276,201)	(1,221,979)	(38,670)
Impairment loss on financial assets	(23,693 )	(196,325)	(10,390 )	(329 )
Bargain purchase gain	-	28,860	-	-
Others	20,783	96,193	828	26
	\$ 244,830	\$ 447,886	\$ 607,299	\$ 19,218

In 2013, the Group assessed the financial condition of its debt investments with no active market - current and wrote off the entire carrying amount of NT\$89,409 thousand which was recognized as an impairment loss under the line item of other gains and losses in the consolidated statement of comprehensive income.

## d. Finance costs

	For the Years Ended December 31			US\$ (Note 4)
	2012	2013	2014	
	NT\$	NT\$	NT\$	
Total interest expense for financial liabilities measured at amortized cost	\$ 2,200,276	\$ 2,433,868	\$ 2,548,850	\$ 80,660
Less: Amounts included in the cost of qualifying assets				
Inventories related to real estate business	(46,476 )	(42,999 )	(100,705 )	(3,187 )
Property, plant and equipment	(202,363 )	(137,567 )	(126,203 )	(3,994 )
	1,951,437	2,253,302	2,321,942	73,479
Loss arising on derivatives as designated hedging instruments in cash flow hedge accounting relationship reclassified from equity to profit or loss	52,878	3,842	2,484	79
Other finance costs	38,229	50,311	29,671	939
	\$ 2,042,544	\$ 2,307,455	\$ 2,354,097	\$ 74,497



Table of Contents

Information relating to the capitalized borrowing costs was as follows:

	For the Years Ended December 31		
	2012	2013	2014
Annual interest capitalization rates			
Inventories related to real estate business	5.23%-7.22%	5.90%-7.21%	6.00%-7.21%
Property, plant and equipment	1.62%-5.88%	1.54%-6.15%	0.88%-6.15%

## e. Depreciation and amortization

	For the Years Ended December 31			
	2012	2013	2014	US\$ (Note 4)
	NT\$	NT\$	NT\$	
Property, plant and equipment	\$ 22,473,857	\$ 24,696,607	\$ 25,805,042	\$ 816,615
Intangible assets	962,022	774,304	545,734	17,270
<b>Total</b>	<b>\$ 23,435,879</b>	<b>\$ 25,470,911</b>	<b>\$ 26,350,776</b>	<b>\$ 833,885</b>
Summary of depreciation by function				
Operating costs	\$ 20,880,124	\$ 23,025,115	\$ 24,050,546	\$ 761,093
Operating expenses	1,593,733	1,671,492	1,754,496	55,522
	\$ 22,473,857	\$ 24,696,607	\$ 25,805,042	\$ 816,615
Summary of amortization by function				
Operating costs	\$ 508,869	\$ 397,976	\$ 180,719	\$ 5,719
Operating expenses	453,153	376,328	365,015	11,551
	\$ 962,022	\$ 774,304	\$ 545,734	\$ 17,270

## f. Employee benefits expense

	For the Years Ended December 31			
	2012	2013	2014	US\$ (Note 4)
	NT\$	NT\$	NT\$	
Post-employment benefits (Note 21)				
Defined contribution plans	\$ 1,095,039	\$ 1,324,178	\$ 1,589,505	\$ 50,301
Defined benefit plans	430,006	430,378	445,795	14,108
	1,525,045	1,754,556	2,035,300	64,409
Equity-settled share-based payments	537,461	260,801	110,157	3,486
Salary, incentives and bonus	30,139,149	34,032,023	40,475,594	1,280,873

Other employee benefits	4,703,034	5,211,948	5,984,074	189,369
	\$ 36,904,689	\$ 41,259,328	\$ 48,605,125	\$ 1,538,137

F-63

---

Table of Contents

	For the Years Ended December 31			
	2012	2013	2014	US\$ (Note 4)
	NT\$	NT\$	NT\$	
Summary of employee benefits expense by function				
Operating costs	\$ 24,802,599	\$ 28,053,492	\$ 33,243,224	\$ 1,052,001
Operating expenses	12,102,090	13,205,836	15,361,901	486,136
	\$ 36,904,689	\$ 41,259,328	\$ 48,605,125	\$ 1,538,137

## 24. INCOME TAX

## a. Income tax expense recognized in profit or loss

The major components of income tax expense were as follows:

	For the Years Ended December 31			
	2012	2013	2014	US\$ (Note 4)
	NT\$	NT\$	NT\$	
Current income tax				
In respect of the current year	\$ 2,595,070	\$ 2,594,114	\$ 3,524,456	\$ 111,533
Income tax expense of unappropriated earnings	33,131	209,616	1,281,877	40,566
In respect of prior years	6,747	(91,633 )	72,380	2,290
	2,634,948	2,712,097	4,878,713	154,389
Deferred income tax				
In respect of the current year	453,692	821,592	714,850	22,622
Effect of foreign currency exchange differences	(134,722 )	(62,285 )	75,305	2,383
Others	6,508	28,191	(2,914 )	(92 )
	325,478	787,498	787,241	24,913
Income tax expense recognized in profit or loss	\$ 2,960,426	\$ 3,499,595	\$ 5,665,954	\$ 179,302

A reconciliation of income tax expense calculated at the statutory rate and income tax expense recognized in profit or loss was as follows:

	For the Years Ended December 31			
	2012	2013	2014	US\$ (Note 4)
	NT\$	NT\$	NT\$	

Edgar Filing: ADVANCED SEMICONDUCTOR ENGINEERING INC - Form 20-F

Profit before income tax	\$ 16,608,724	\$ 19,369,756	\$ 28,535,055	\$ 903,008
Income tax expense calculated at the statutory rate	\$ 3,392,253	\$ 3,684,109	\$ 5,101,984	\$ 161,455
Nontaxable income in determining taxable income	(14,379 )	(172,322 )	128,644	4,071
Tax-exempt income	(312,587 )	(373,113 )	(623,652 )	(19,736 )
Additional income tax on unappropriated earnings	33,131	558,042	1,887,845	59,742

(Continued)

F-64

---

Table of Contents

	For the Years Ended December 31			US\$ (Note 4)
	2012	2013	2014	
	NT\$	NT\$	NT\$	
Loss carry-forward and income tax credits currently used	\$ (852,351 )	\$ (684,309 )	\$ (1,329,753)	\$ (42,081 )
Remeasurement of deferred income tax assets, net	318,953	341,863	435,143	13,770
Adjustments for prior years' tax	6,747	(91,633 )	72,380	2,291
Land value increment tax	388,659	236,958	(6,637 )	(210 )
Income tax expense recognized in profit or loss	\$ 2,960,426	\$ 3,499,595	\$ 5,665,954	\$ 179,302

(Concluded)

For the years ended December 31, 2012, 2013 and 2014, the Group applied a tax rate of 17% for entities subject to the Income Tax Law of the ROC; for the subsidiaries located in China, the applied tax rate was 25%; and for other jurisdictions, the Group measures taxes by using the applicable tax rate for each individual jurisdiction.

## b. Income tax recognized directly in equity

	For the Years Ended December 31			US\$ (Note 4)
	2012	2013	2014	
	NT\$	NT\$	NT\$	
Deferred income tax				
Employee share options	\$ -	\$ -	\$ 4,481	\$ 142

## c. Income tax expense recognized in other comprehensive income

	For the Years Ended December 31			US\$ (Note 4)
	2012	2013	2014	
	NT\$	NT\$	NT\$	
Deferred income tax				
Actuarial gains or losses on defined benefit plan	\$ 140,880	\$ (66,706 )	\$ 23,885	\$ 756
Fair value changes of hedging instruments for cash flow hedges	(9,138 )	(769 )	-	-
	\$ 131,742	\$ (67,475 )	\$ 23,885	\$ 756

## d. Current tax assets and liabilities

December 31

Edgar Filing: ADVANCED SEMICONDUCTOR ENGINEERING INC - Form 20-F

	2013	2014	
	NT\$	NT\$	US\$ (Note 4)
Current tax assets			
Tax refund receivable	\$ 92,430	\$ 23,616	\$ 747
Prepaid income tax	58,166	41,696	1,320
	\$ 150,596	\$ 65,312	\$ 2,067

F-65

---

Table of Contents

	2013	December 31 2014	US\$ (Note 4)
	NT\$	NT\$	
<b>Current tax liabilities</b>			
Income tax payable	\$ 4,225,390	\$ 6,630,696	\$ 209,832

## e. Deferred tax assets and liabilities

The Group offset certain deferred tax assets and deferred tax liabilities which met the offset criteria.

The movements of deferred tax assets and deferred tax liabilities were as follows:

	Balance at January 1 NT\$	Recognized in Profit or Loss NT\$	Recognized in Other Comprehensive Income NT\$	Additions through Business Combinations NT\$	Exchange Differences NT\$	Balance at December 31 NT\$
Year ended December 31, 2012						
Temporary differences						
Property, plant and equipment	\$ (476,385 )	\$ (482,679 )	\$ -	\$ -	\$ (18,224 )	\$ (977,288 )
Defined benefit obligation	919,981	(1,192 )	140,880	-	(62,151 )	997,518
Cash flow hedges	9,907	-	(9,138 )	-	-	769
FVTPL financial instruments	(60,846 )	122,337	-	-	8	61,499
Others	430,077	59,003	-	95	(43,271 )	445,904
	822,734	(302,531)	131,742	95	(123,638)	528,402
Loss carry-forward	203,114	179,909	-	-	(2,329 )	380,694
Investment credits	1,234,295	(198,961)	-	2,518	(8,755 )	1,029,097
Others	-	(3,895 )	-	3,895	-	-
	\$ 2,260,143	\$ (325,478)	\$ 131,742	\$ 6,508	\$ (134,722)	\$ 1,938,193

	Balance at January 1 NT\$	Recognized in Profit or Loss NT\$	Recognized in Other Comprehensive Income NT\$	Exchange Differences NT\$	Balance at December 31 NT\$
--	---------------------------------	--	---	---------------------------------	-----------------------------------

Year ended December 31, 2013

Temporary differences

Edgar Filing: ADVANCED SEMICONDUCTOR ENGINEERING INC - Form 20-F

Property, plant and equipment	\$ (977,288 )	\$ (730,743 )	\$ -	\$ 23,415	\$ (1,684,616)
Defined benefit obligation	997,518	(16,526 )	(66,706 )	(59,746 )	854,540
Cash flow hedges	769	-	(769 )	-	-
FVTPL financial instruments	61,499	(73,832 )	-	4	(12,329 )
Others	445,904	336,473	-	(14,633 )	767,744
	528,402	(484,628)	(67,475 )	(50,960)	(74,661 )
Loss carry-forward	380,694	(117,007)	-	6,344	270,031
Investment credits	1,029,097	(185,863)	-	(17,669)	825,565
	\$ 1,938,193	\$ (787,498)	\$ (67,475 )	\$ (62,285 )	\$ 1,020,935

Balance at January 1 NT\$	Recognized		Recognized in Equity NT\$	Exchange Differences NT\$	Balance at December 31 NT\$
	Recognized in Profit or Loss NT\$	in Other Comprehensive Income NT\$			

Year ended December  
31, 2014

Temporary differences						
Property, plant and equipment	\$ (1,684,616)	\$ (804,082)	\$ -	\$ -	\$ 56,843	\$ (2,431,855)
Defined benefit obligation	854,540	(59,807 )	23,885	-	(21,976)	796,642
FVTPL financial instruments	(12,329 )	(170,722)	-	-	12,992	(170,059 )
Others	767,744	372,563	-	4,481	21,509	1,166,297
	(74,661 )	(662,048)	23,885	4,481	69,368	(638,975 )
Loss carry-forward	270,031	246,334	-	-	3,533	519,898
Investment credits	825,565	(370,674)	-	-	(2,560 )	452,331
Others	-	(853 )	-	-	-	(853 )
	\$ 1,020,935	\$ (787,241)	\$ 23,885	\$ 4,481	\$ 70,341	\$ 332,401

F-66



Table of Contents

	Balance at January 1 US\$ (Note 4)	Recognized in Profit or Loss US\$ (Note 4)	Recognized in Other Comprehensive Income US\$ (Note 4)	Recognized in Equity US\$ (Note 4)	Exchange Differences US\$ (Note 4)	Balance at December 31 US\$ (Note 4)
Year ended December 31, 2014						
Temporary differences						
Property, plant and equipment	\$ (53,311 )	\$ (25,446 )	\$ -	\$ -	\$ 1,799	\$ (76,958 )
Defined benefit obligation	27,042	(1,893 )	756	-	(695 )	25,210
F V T P L financial instruments	(390 )	(5,403 )	-	-	411	(5,382 )
Others	24,296	11,790	-	142	681	36,909
	(2,363 )	(20,952 )	756	142	2,196	(20,221 )
Loss carry-forward	8,545	7,795	-	-	112	16,452
Investment credits	26,125	(11,730 )	-	-	(81 )	14,314
Other	-	(26 )	-	-	-	(26 )
	\$ 32,307	\$ (24,913 )	\$ 756	\$ 142	\$ 2,227	\$ 10,519

f.Items for which no deferred tax assets have been recognized

Unrecognized deferred tax assets related to loss carry-forward, investment credits and deductible temporary differences were summarized as follows:

	2013	December 31 2014	US\$ (Note 4)
	NT\$	NT\$	
Loss carry-forward	\$ 669,410	\$ 694,960	\$ 21,992
Investment credits	91,536	629,231	19,913
Deductible temporary differences	901,580	957,183	30,291
	\$ 1,662,526	\$ 2,281,374	\$ 72,196

The unrecognized loss carry-forward will expire through 2023 and the unrecognized investment credits will expire through 2017.

g.Information about unused loss carry-forward, unused investment credits, tax-exemption and other tax relief

As of December 31, 2014, the unused loss carry-forward comprised of:

Year of Expiry	NT\$	US\$
----------------	------	------

(Note 4)

2015	\$ 70,223	\$ 2,222
2016	167,001	5,285
2017	352,030	11,140
2018	277,680	8,787
2019 and thereafter	347,924	11,010
	\$ 1,214,858	\$ 38,444

F-67

---

Table of Contents

As of December 31, 2014, unused investment credits comprised of:

Laws and Statutes	Tax Credit Source	Remaining Creditable Amount		Expiry Year
		NT\$	US\$ (Note 4)	
Statute for Upgrading Industries	Purchase of machinery and equipment	\$ 1,025,895	\$ 32,465	2015 and thereafter 2017
	Others	55,667	1,762	
		\$ 1,081,562	\$ 34,227	

As of December 31, 2014, profits attributable to the following expansion projects were exempted from income tax for a 3-year or 5-year period:

	Tax-exemption Period
Construction and expansion of 2004 by the Company	2012.01-2016.12
Construction and expansion of 2005 by the Company	2012.01-2016.12
Construction and expansion of 2007 by the Company	2013.01-2015.12
Construction and expansion of 2008 by the Company.	2014.01-2018.12
Construction and expansion of 2005 by ASE Test Inc.	2011.01-2015.12
Construction and expansion of 2008 by ASE Test Inc.	2014.01-2018.12
Construction and expansion of 2005 by ASE Electronics Inc.	2012.01-2016.12

In addition, the Group had additional 3 unused construction and expansion projects.

Some China subsidiaries qualify as high technology enterprises which entitle them to a reduced income tax rate of 15% and also make them eligible to deduct certain times of research and development expenses from their taxable income.

#### h.Unrecognized deferred tax liabilities associated with investments

As of December 31, 2013 and 2014, the taxable temporary differences associated with investments in subsidiaries for which no deferred tax liabilities have been recognized were NT\$9,326,560 thousand and NT\$11,400,826 thousand (US\$360,786 thousand), respectively.

#### i.Integrated income tax

As of December 31, 2013 and 2014, unappropriated earnings were all generated on and after January 1, 1998. As of December 31, 2013 and 2014, the balance of the Imputation Credit Account ("ICA") was NT\$733,341 thousand and NT\$934,038 thousand (US\$29,558 thousand), respectively.

The creditable ratio for the distribution of earnings of 2013 and 2014 was 6.10% and 6.19% (estimated), respectively.

Under the Integrated Income Tax System, ROC resident shareholders are allowed a tax credit for their proportionate share of the income tax paid in the ROC by the Company on earnings generated after January 1, 1998. Non-resident shareholders are allowed only a tax credit from the 10% income tax on undistributed earnings, which can be used to reduce the withholding income tax on dividends. Starting from 2015, the allowed tax credit is adjusted to 50% of the income tax paid in the ROC by the Company for ROC resident shareholders or 50% of the 10% income tax on undistributed earnings for non-resident shareholders. An ICA is maintained by the Company for such income tax and the tax credit allocated to each shareholder. The maximum credit available for allocation to each shareholder cannot exceed the balance shown in the ICA on the date of dividend distribution. The expected creditable ratio for

F-68

---

Table of Contents

the 2014 earnings may be adjusted, depending on the ICA balance on the date of dividend distribution.

j. Income tax returns of ASE Inc. and its subsidiaries in Taiwan have been examined by authorities through 2012 and through 2010 to 2012, respectively. ASE Inc. and some of its subsidiaries in Taiwan disagreed with the result of examinations relating to its income tax returns for 2004 through 2008 and 2010 through 2012 and applied for appeal procedures. The related income tax expenses in the years resulting from the examinations have been accrued in respective tax years.

## 25. EARNINGS PER SHARE

The earnings and weighted average number of ordinary shares outstanding in the computation of earnings per share were as follows:

Profit for the year

	For the Years Ended December 31			US\$ (Note 4)
	2012	2013	2014	
	NT\$	NT\$	NT\$	
Profit for the year attributable to owners of the Company	\$ 13,191,617	\$ 15,404,505	\$ 22,228,602	\$ 703,437
Effect of potentially dilutive ordinary shares:				
Employee share options issued by subsidiaries	(102,587 )	(131,756 )	(260,925 )	(8,257 )
Convertible bonds	-	156,193	931,344	29,473
Earnings used in the computation of diluted earnings per share	\$ 13,089,030	\$ 15,428,942	\$ 22,899,021	\$ 724,653

Weighted average number of ordinary shares outstanding (in thousand shares):

	For the Years Ended December 31		
	2012	2013	2014
Weighted average number of ordinary shares in computation of basic earnings per share	7,445,469	7,508,539	7,687,930
Effect of potentially dilutive ordinary shares:			
Convertible bonds	-	117,085	375,271
Employee share options	70,057	67,081	101,850
Bonus to employees	52,695	54,926	55,643
Weighted average number of ordinary shares in computation of diluted earnings per share	7,568,221	7,747,631	8,220,694

For purposes of the ADS calculation, the denominator represents the above-mentioned weighted average outstanding shares divided by five (one ADS represents five ordinary shares). The numerator was the same.

The Group is able to settle the bonus to employees by cash or shares. The Group presumed that the entire amount of the bonus would be settled in shares and the resulting potential shares were included in the weighted average number of ordinary shares outstanding used in the computation of diluted earnings per share if the effect is dilutive. Such dilutive effect of the potential shares was included in the computation of diluted earnings per share until the shareholders approve the number of shares to be distributed to employees at their meeting in the following year.

F-69

---

Table of Contents

26.

## SHARE-BASED PAYMENT ARRANGEMENTS

## a. Employee share option plans of the Company and its subsidiaries

In order to attract, retain and reward employees, ASE Inc. has four employee share option plans for full-time employees of the Group. Each unit represents the right to purchase one ordinary share of ASE Inc. when exercised. Under the terms of the plans, share options are granted at an exercise price equal to or not less than the closing price of the ordinary shares listed on the TSE at the grant date. The option rights of these plans are valid for 10 years, non-transferable and exercisable at certain percentages subsequent to the second anniversary of the grant date. For any subsequent changes in the Company's capital structure, the exercise price is accordingly adjusted.

In December 2014, the board of directors approved the 5th employee share option plan.

## ASE Inc. Option Plans

Information about share options was as follows:

	For the Years Ended December 31					
	2012		2013		2014	
	Number of Options (In Thousands)	Weighted Average Exercise Price Per Share (NT\$)	Number of Options (In Thousands)	Weighted Average Exercise Price Per Share (NT\$)	Number of Options (In Thousands)	Weighted Average Exercise Price Per Share (NT\$)
Balance at January 1	371,034	\$ 22.8	344,332	\$ 20.3	285,480	\$ 20.5
Options forfeited	(6,233 )	22.6	(3,307 )	20.7	(1,515 )	20.5
Options expired	(9 )	5.5	(10 )	7.4	(322 )	13.5
Options exercised	(20,460 )	15.4	(55,535 )	19.3	(73,898 )	19.7
Balance at December 31	344,332	20.3	285,480	20.5	209,745	20.7
Options exercisable, end of year	243,930	20.1	228,685	20.4	189,240	20.7

The weighted average share price at exercise dates of share options for the years ended December 31, 2012, 2013 and 2014 was NT\$25.2, NT\$26.2 and NT\$35.1 (US\$1.11), respectively.

Information about the Company's outstanding share options at each balance sheet date was as follows:

Range of Exercise Price Per Share (NT\$)	Weighted Average Remaining Contractual Life (Years)
---	---

December 31, 2013	\$	11.1-13.5 20.4-22.6	0.6 5.4
December 31, 2014		11.1-13.5 20.4-22.6	0.4 4.4

F-70

---



Table of Contents

## ASE Mauritius Inc. Option Plan

ASE Mauritius Inc. has an employee share option plan for full-time employees of the Group which granted 30,000 thousand units in December 2007. Under the terms of the plan, each unit represents the right to purchase one ordinary share of ASE Mauritius Inc. when exercised. The option rights of the plan are valid for 10 years, non-transferable and exercisable at certain percentages subsequent to the second anniversary of the grant date.

Information about share options was as follows:

	For the Years Ended December 31					
	2012		2013		2014	
	Number of Options  (In Thousands)	Exercise Price Per Share (US\$)	Number of Options  (In Thousands)	Exercise Price Per Share (US\$)	Number of Options  (In Thousands)	Exercise Price Per Share (US\$)
Balance at January 1	28,770	\$ 1.7	28,595	\$ 1.7	28,545	\$ 1.7
Options forfeited	(175 )	1.7	(50 )	1.7	-	-
Balance at December 31	28,595	1.7	28,545	1.7	28,545	1.7
Options exercisable, end of year	28,575	1.7	28,545	1.7	28,545	1.7

As of December 31, 2013 and 2014, the share options were all vested and the remaining contractual life was 4 years and 3 years, respectively.

## USIE Option Plans

The terms of the plans issued by USIE were the same with those of the Company's option plans.

Information about share options was as follows:

	For the Years Ended December 31					
	2012		2013		2014	
	Number of Options  (In Thousands)	Weighted Average Exercise Price Per Share (US\$)	Number of Options  (In Thousands)	Weighted Average Exercise Price Per Share (US\$)	Number of Options  (In Thousands)	Weighted Average Exercise Price Per Share (US\$)

Edgar Filing: ADVANCED SEMICONDUCTOR ENGINEERING INC - Form 20-F

Balance at January 1	35,462	\$ 2.1	34,966	\$ 2.1	34,939	\$ 2.1
Options forfeited	(283 )	2.1	(27 )	2.9	-	-
Options exercised	(213 )	1.5	-	-	(780 )	1.5
Balance at December						
31	34,966	2.1	34,939	2.1	34,159	2.1
Options exercisable,						
end of year	22,252	1.7	28,281	2.0	30,874	2.0

F-71

---

Table of Contents

Information on USIE's outstanding share options at each balance sheet date was as follows:

	Range of Exercise Price Per Share (US\$)	Weighted Average Remaining Contractual Life (Years)
December 31, 2013	\$ 1.5 2.4-2.9	4.0 6.8
December 31, 2014	1.5 2.4-2.9	5.0 5.8

## b. Fair value of share options

Share options granted by the Group were measured using the Black-Scholes Option Pricing Model or the Hull & White Model (2004) incorporated with Ritchken's Trinomial Tree Model (1995), and the inputs to the models were as follows:

	ASE Inc.	ASE Mauritius Inc.	USIE
Share price/market price at the grant date	NT\$28.60-30.65	US\$1.7	US\$1.53-2.62
Exercise prices	NT\$28.60-30.65	US\$1.7	US\$1.53-2.94
Expected volatility	28.59%-40.82%	47.21%	32.48%-42.58%
Expected lives	10 years	10 years	10-12 years
Expected dividend yield	3.00%-4.00%	-	-
Risk free interest rates	1.56%-2.51%	3.87%-3.90%	1.63%-4.02%

Expected volatility was based on the historical share price volatility over the past 10 years of ASE Inc. and the comparable companies of ASE Mauritius Inc. and USIE, respectively. Under the Hull & White Model (2004) incorporated with Ritchken's Trinomial Tree Model (1995) to allow for the effects of early exercise, the Group assumed that employees would exercise the options after vesting date when the share price was 1.58-1.69 times the exercise price.

In December 2013 and 2014, USIE had modified the terms of its option plan granted in 2007 to extend the valid period from 10 years to 11 years and 11 years to 12 years, respectively. The incremental fair value of NT\$15,497 thousand and NT\$10,378 thousand (US\$328 thousand) was all recognized as employee benefits expense in 2013 and 2014, respectively, since the options were all vested.

Employee benefits expense recognized on employee share options was NT\$537,461 thousand, NT\$234,093 thousand and NT\$110,157 thousand (US\$3,486 thousand) for the years ended December 31, 2012, 2013 and 2014, respectively.

## c. New shares issued under cash capital increase reserved for subscription by employees

In July 2013, the board of directors approved the cash capital increase and, as required under the Company Act of the ROC, simultaneously granted options to employees to purchase 15% of such newly issued shares with such options exercisable within 3 days and vested when granted. The grant of the options was treated as employee options, accordingly a share-based compensation, and measured at fair value in accordance with IFRS 2. The Group recognized employee benefits expense and capital surplus of NT\$26,708 thousand in full at the grant date (also the vested date).

Information about the Company's employee share options related to the aforementioned newly issued shares was as follows:

F-72

---

Table of Contents

	Number of Options (In Thousand)	Fair Value (NT\$)
Balance at January 1, 2013	-	\$ -
Options granted	14,437	1.85
Options exercised	(12,477 )	1.85
Options forfeited	(1,960 )	-
Balance at December 31, 2013	-	-

Fair value was measured using the Black-Scholes Option Pricing Model and the inputs to the model were as follows:

Share price at the grant date	NT\$27.95 per share
Exercise price	NT\$26.10 per share
Expected volatility	17.98%
Expected lives	3 days
Expected dividend yield	-
Risk free interest rate	0.57%

Expected volatility was based on the Company's historical share prices volatility.

## 27. BUSINESS COMBINATIONS

## a.Subsidiaries acquired

	Principal Activity	Date of Acquisition	Proportion of Voting Equity Interests Acquired	Cash Consideration NT\$
Yang Ting Tech Co., Ltd. ("Yang Ting")	Packaging and testing of semiconductors	January 13, 2012	100%	\$ 300,016
Wuxi Tongzhi	Packaging and testing of semiconductors	May 27, 2013	100%	\$ 338,021

b.Consideration transferred, fair value of assets acquired and liabilities assumed as well as net cash outflow on acquisition of subsidiaries at the acquisition date were as follows:

## 1)Yang Ting

	NT\$
Current assets	\$ 171,015

Non-current assets	
Property, plant and equipment	265,902
Other non-current assets	4,574
Current liabilities	(96,929 )
Non-current liabilities	
Long-term borrowings	(44,800 )
Other non-current liabilities	(1,200 )
	298,562

(Continued)

F-73

---

Table of Contents

	NT\$
Goodwill	\$ 1,454
Total consideration	300,016
Less: Cash and cash equivalent acquired	(38,409 )
Net cash outflow on acquisition of Yang Ting	\$ 261,607

(Concluded)

Goodwill arising on above acquisition was not expected to be deductible for tax purposes. Yang Ting was merged into the Company in August 2013.

## 2)Wuxi Tongzhi

	NT\$
Current assets	\$ 158,100
Non-current assets	
Property, plant and equipment	258,420
Other non-current assets	35,656
Current liabilities	(85,295 )
	366,881
Bargain purchase gain - recognized in other gains and losses	(28,860 )
Total consideration	338,021
Less: Cash and cash equivalent acquired	(87,634 )
Net cash outflow on acquisition of Wuxi Tongzhi	\$ 250,387

## b.Impact of acquisitions on the operating results of the Group

The operating results of Yang Ting, since the acquisition date to December 31, 2012, included in the consolidated statements of comprehensive income were operating revenue NT\$321,748 thousand and loss for the period NT\$183,010 thousand.

The operating results of Wuxi Tongzhi, since the acquisition date to December 31, 2013, included in the consolidated statements of comprehensive income were operating revenue NT\$316,380 thousand and profit for the period NT\$15,762 thousand.

## c.Pro-forma information

Had these business combinations been in effect at the beginning of each year, the Group's operating revenues for the years ended December 31, 2012 and 2013 would have been NT\$193,972,392 thousand and NT\$220,093,736 thousand, respectively, and profit for the years ended December 31, 2012 and 2013 would have been NT\$13,648,298 thousand and NT\$15,873,615 thousand, respectively.

This pro-forma information is for illustrative purposes only and is not necessarily an indication of operating revenue and results of operations of the Group that actually would have been achieved had the acquisition been completed at the beginning of each year, nor is it intended to be a projection of future results.

F-74

---



Table of Contents

## 28. EQUITY TRANSACTIONS WITH NON-CONTROLLING INTERESTS

The Group's subsidiary, Power ASE Technology Inc. was merged into the Company in May 2012 and the Company acquired the remaining outstanding 733 thousand shares at the consideration of NT\$10,933 thousand.

The Group's subsidiary, Luchu, issued new ordinary shares for cash capital increase of NT\$400,000 thousand in August 2013. The Group subscribed for additional new shares at a percentage different from its existing ownership percentage and accordingly the Group's shareholdings of Luchu increased from 84.3% to 86.1%.

The ordinary shares of USISH have been traded on the SSE under the symbol "601231" since February 2012 and USISH issued ordinary shares upon its public offering for CNY773,419 thousand. After the public offering, the Group's shareholdings of USISH decreased from 99.2% to 88.6% since the Group did not subscribe for additional shares of the offering. In November 2014, USISH completed its cash capital increase of CNY2,017,690 thousand and the Group's shareholdings of USISH decreased from 88.6% to 82.1% since the Group did not subscribe for additional new shares.

The above transactions were accounted for as equity transactions since the Group did not cease to have control over these subsidiaries and, as a result, capital surplus was charged a deduction of NT\$330 thousand, an addition of NT\$2,169,893 thousand and an addition of NT\$6,871,062 thousand (US\$217,439 thousand) due to Luchu capital increase in 2013 and USISH capital increase in 2012 and 2014, respectively.

## 29. NON-CASH TRANSACTIONS

For the years ended December 31, 2012, 2013 and 2014, the Group entered into the following non-cash investing activities which were not reflected in the consolidated statements of cash flows:

	For the Years Ended December 31			
	2012	2013	2014	US\$ (Note 4)
	NT\$	NT\$	NT\$	
Payments for property, plant and equipment				
Purchase of property, plant and equipment	\$38,976,825	\$27,044,072	\$43,448,587	\$1,374,956
Increase (decrease) in prepayments for property, plant and equipment	(153,122 )	327,810	(34,894 )	(1,104 )
Decrease (increase) in payables for property, plant and equipment	408,156	1,908,404	(3,688,526 )	(116,726 )
Capitalized borrowing costs	(202,363 )	(137,567 )	(126,203 )	(3,994 )
	\$39,029,496	\$29,142,719	\$39,598,964	\$1,253,132
Proceeds from disposal of property, plant and equipment				
Consideration from disposal of property, plant and equipment	\$442,675	\$350,873	\$462,438	\$14,634
Decrease in other receivables	42,125	673	(41,231 )	(1,305 )
	\$484,800	\$351,546	\$421,207	\$13,329

F-75

---

Table of Contents

30. OPERATING LEASE ARRANGEMENTS

Except those discussed in Note 17, the Company and its subsidiary, ASE Test, Inc., lease the land on which their buildings are located under various operating lease agreements with the ROC government expiring through January 2023. The agreements grant these entities the option to renew the leases and reserve the right for the lessor to adjust the lease payments upon an increase in the assessed value of the land and to terminate the leases under certain conditions. In addition, the Group leases buildings, machinery and equipment under various operating leases.

The subsidiaries' offices located in U.S.A. and Japan, etc. are leased from other parties and the lease term will expire through 2015 to 2017 with the option to renew the leases upon expiration.

The Group recognized rental expense of NT\$1,026,384 thousand, NT\$1,301,550 thousand and NT\$1,459,835 thousand (US\$46,197 thousand) for the years ended December 31, 2012, 2013 and 2014, respectively.

31. CAPITAL MANAGEMENT

The capital structure of the Group consists of debt and equity. The Group manages its capital to ensure that entities in the Group will be able to continue as going concerns while maximizing the return to shareholders through the optimization of the debt and equity balance. Key management personnel of the Group periodically reviews the cost of capital and the risks associated with each class of capital. In order to balance the overall capital structure, the Group may adjust the amount of dividends paid to shareholders, the number of new shares issued or repurchased, and the amount of new debt issued or existing debt redeemed.

The Group is not subject to any externally imposed capital requirements except those discussed in Note 18.

32. FINANCIAL INSTRUMENTS

a. Fair value of financial instruments

1) Fair value measurements recognized in the consolidated balance sheets

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

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

Assets and liabilities measured at fair value on a recurring basis

The following table presents the Group's assets and liabilities measured at fair value on a recurring basis as of December 31, 2013 and 2014:

F-76

---

Table of Contents

	Level 1 NT\$	Level 2 NT\$	Level 3 NT\$	Total NT\$
December 31, 2013				
Financial assets at FVTPL				
Financial assets designated as at FVTPL				
Structured time deposits	\$ -	\$ 2,228,643	\$ -	\$ 2,228,643
Private-placement convertible bonds	-	100,500	-	100,500
Derivative financial assets				
Swap contracts	-	219,324	-	219,324
Forward exchange contracts	-	10,178	-	10,178
Non-derivative financial assets held for trading				
Open-end mutual funds	172,000	-	-	172,000
Quoted shares	33,624	-	-	33,624
	\$ 205,624	\$ 2,558,645	\$ -	\$ 2,764,269
Available-for-sale financial assets				
Open-end mutual funds	\$ 2,321,826	\$ -	\$ -	\$ 2,321,826
Limited partnership	-	-	583,441	583,441
Quoted shares	328,656	-	-	328,656
Unquoted shares	-	-	213,721	213,721
Private-placement shares	-	69,655	-	69,655
	\$ 2,650,482	\$ 69,655	\$ 797,162	\$ 3,517,299
Financial liabilities at FVTPL				
Derivative financial liabilities				
Conversion option, redemption option and put option of convertible bonds	\$ -	\$ 1,742,996	\$ -	\$ 1,742,996
Swap contracts	-	74,170	-	74,170
Forward exchange contracts	-	31,315	-	31,315
Cross currency swap contracts	-	4,180	-	4,180
Foreign currency option contracts	-	643	-	643
	\$ -	\$ 1,853,304	\$ -	\$ 1,853,304

(Continued)

Table of Contents

	Level 1		Level 2		Level 3		Total	
	NT\$		NT\$		NT\$		NT\$	
Derivative financial liabilities for hedging								
Interest rate swap contracts			\$ -		\$ 3,310		\$ -	\$ 3,310
	Level 1		Level 2		Level 3		Total	
	NT\$	US\$	NT\$	US\$	NT\$	US\$	NT\$	US\$
		(Note 4)		(Note 4)		(Note 4)		(Note 4)
December 31, 2014								
Financial assets at FVTPL								
Financial assets designated as at FVTPL								
Structured time deposits	\$-	\$-	\$2,376,050	\$75,192	\$-	\$-	\$2,376,050	\$75,192
Private-placement convertible bonds	-	-	100,500	3,180	-	-	100,500	3,180
Derivative financial assets								
Swap contracts	-	-	1,907,705	60,370	-	-	1,907,705	60,370
Forward exchange contracts	-	-	27,811	880	-	-	27,811	880
Non-derivative financial assets held for trading								
Open-end mutual funds	533,425	16,881	-	-	-	-	533,425	16,881
Quoted shares	43,352	1,372	-	-	-	-	43,352	1,372
	\$576,777	\$18,253	\$4,412,066	\$139,622	\$-	\$-	\$4,988,843	\$157,875
Available-for-sale financial assets								
Open-end mutual funds	\$1,500,434	\$47,482	\$-	\$-	\$-	\$-	\$1,500,434	\$47,482
Limited partnership	-	-	-	-	555,361	17,575	555,361	17,575
Unquoted shares	-	-	-	-	223,505	7,073	223,505	7,073
Quoted shares	195,070	6,173	-	-	-	-	195,070	6,173

	\$1,695,504	\$53,655	\$-	\$-	\$778,866	\$24,648	\$2,474,370	\$78,303
Financial liabilities at FVTPL								
Derivative financial liabilities								
Conversion option, redemption option and put option of convertible bonds	\$-	\$-	\$2,520,606	\$79,766	\$-	\$-	\$2,520,606	\$79,766
Swap contracts	-	-	99,165	3,138	-	-	99,165	3,138
Forward exchange contracts	-	-	31,581	999	-	-	31,581	999
	\$-	\$-	\$2,651,352	\$83,903	\$-	\$-	\$2,651,352	\$83,903

For assets and liabilities held as of December 31, 2013 and 2014 that are measured at fair value on a recurring basis, there were no transfers between Level 1 and Level 2 of the fair value hierarchy.

2) Fair value of financial instruments not measured at fair value but for which fair value is disclosed

Except bonds payable measured at amortized cost, the management considers that the carrying amounts of financial assets and financial liabilities not measured at fair value approximate their fair values.

The carrying amounts and fair value of bonds payable as of December 31, 2013 and 2014, respectively, were as follows:

Table of Contents

	Carrying Amount		Fair Value (Level 3)	
	NT\$	US\$ (Note 4)	NT\$	US\$ (Note 4)
December 31, 2013	\$ 21,314,005		\$ 21,913,590	
December 31, 2014	31,270,131	\$ 989,561	31,702,988	\$ 1,003,259

The fair values were determined using discounted cash flow analysis with the applicable yield curve for the duration and recent transaction prices.

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

The financial assets measured at Level 3 fair value were equity investments with no quoted prices classified as available-for-sale financial assets - non-current. Reconciliation for the years ended December 31, 2012, 2013 and 2014 was as follows:

	For the Years Ended December 31			
	2012	2013	2014	
	NT\$	NT\$	NT\$	US\$ (Note 4)
Balance at January 1	\$ 893,283	\$ 776,683	\$ 797,162	\$ 25,227
Purchases	52,791	73,358	38,793	1,228
Disposals	(101,938)	(27,368 )	(21,012 )	(665 )
Total gains or losses				
In profit or loss	2,013	(106,916)	(10,390 )	(329 )
In other comprehensive income	(69,466 )	81,405	(25,687 )	(813 )
Balance at December 31	\$ 776,683	\$ 797,162	\$ 778,866	\$ 24,648

As of December 31, 2013 and 2014, unrealized gain of 20,175 thousand and unrealized loss of 21,519 thousand (US\$681 thousand), recorded in other comprehensive income under the heading of unrealized gain on available-for-sale financial assets, were included in the carrying amount of the financial assets at fair value on Level 3 fair value measurement and held at each balance sheet date.

## 4) Valuation techniques and assumptions applied for the purpose of measuring fair value

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

- a) The fair values of financial assets and financial liabilities with standard terms and conditions and traded in active markets were determined with reference to quoted market prices (includes quoted shares and open-end mutual funds). The fair value of private-placement shares was derived using quoted market prices and adjusted for the liquidity discount due to the selling restrictions relating to the lock-up period. The liquidity discount was the option value using the Black-Scholes Model with all observable inputs.
- b) The fair values of derivative instruments were calculated using quoted prices. Where such prices were not available, a discounted cash flow analysis was performed using the applicable yield curve for the duration of the instruments for non-optional derivatives, and option pricing models for optional derivatives. These models use



market-based observable inputs including interest rate curves, foreign exchange rates, and forward and spot prices for currencies to project fair value. The estimates and assumptions used by the Group were consistent with those that market participants would use in pricing financial instruments.

- c) The fair value of the Group's investments in unquoted shares on Level 3 fair value measurement were measured using market approach based on investees' recent financing activities, technical development, valuation of investees comparable companies, market conditions and other economic indicators.

Table of Contents

The fair values of investments in limited partnership are valued using discounted cash flow technique and a comparable multiple technique. The significant unobservable inputs used in the discounted cash flow technique were discount rate of 9.10% to 12.98% and the terminal growth rate of 2.00% to 2.50%. Any significant increase in discount rate or any decrease of terminal growth rate would result in a decrease in the fair value of limited partnership. The significant unobservable inputs used in the comparable technique was EBITDA multiple of 9.00 to 9.36. A significant decrease in this multiple would result in a decrease in the fair value of limited partnership.

d) Except the aforementioned, the fair values of other financial assets and financial liabilities were measured using the generally accepted pricing models based on a discounted cash flow analysis.

## b. Categories of financial instruments

	December 31		
	2013 NT\$	2014 NT\$	2014 US\$ (Note 4)
Financial assets			
FVTPL			
Designated as at FVTPL	\$ 2,329,143	\$ 2,476,550	\$ 78,372
Held for trading	435,126	2,512,293	79,503
Available-for-sale financial assets	3,517,299	2,474,370	78,303
Loans and receivables (Note 1)	89,317,657	106,158,279	3,359,439
Financial liabilities			
FVTPL			
Held for trading	1,853,304	2,651,352	83,903
Derivative instruments in designated hedge accounting relationships	3,310	-	-
Measured at amortized cost (Note 2)	145,430,744	157,157,392	4,973,335

Note 1: The balances included loans and receivables measured at amortized cost which comprise cash and cash equivalents, trade and other receivables and other financial assets.

Note 2: The balances included financial liabilities measured at amortized cost which comprise short-term and long-term borrowings, trade and other payables, bonds payable and long-term payables.

## c. Financial risk management objectives and policies

The derivative instruments used by the Group are to mitigate risks arising from ordinary business operations. All derivative transactions entered into by the Group are designated as either hedging or trading. Derivative transactions entered into for hedging purposes must hedge risk against fluctuations in foreign exchange rates and interest rates arising from operating activities. The currencies and the amount of derivative instruments held by the Group must match its hedged assets and liabilities denominated in foreign currencies.

The Group's risk management department monitors risks to mitigate risk exposures, reports unsettled position, transaction balances and related gains or losses to the Group's chief financial officer on monthly basis.

F-80

---

Table of Contents

## 1) Market risk

The Group's activities exposed it primarily to the financial risks of changes in foreign currency exchange rates and interest rates. Gains or losses arising from fluctuations in foreign currency exchange rates of a variety of derivative financial instruments were approximately offset by those of hedged items. Interest rate risk was not significant due to the cost of capital was expected to be fixed.

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

## a) Foreign currency exchange rate risk

The Group had sales and purchases as well as financing activities denominated in foreign currency which exposed the Group to foreign currency exchange rate risk. The Group entered into a variety of derivative financial instruments to hedge foreign currency exchange rate risk to minimize the fluctuations of assets and liabilities denominated in foreign currencies.

The carrying amounts of the Group's foreign currency denominated monetary assets and liabilities (including those eliminated upon consolidation) as well as derivative instruments which exposed the Group to foreign currency exchange rate risk at each balance sheet date are presented in Note 37.

The Group was principally subject to the impact to exchange rate fluctuation in U.S. dollars and Japanese yen against NT\$ or Chinese Yuan Renminbi ("CNY"). 1% is the sensitivity rate used when reporting foreign currency exchange rate risk internally to key management personnel and represents management's assessment of the reasonably possible change in foreign currency exchange rates. The sensitivity analysis included financial assets and liabilities and inter-company receivables and payables within the Group. The changes in profit before income tax due to a 1% change in U.S. dollars and Japanese yen both against NT\$ and CNY would be approximately NT\$15,000 thousand, NT\$15,000 thousand and NT\$41,000 thousand (US\$1,297 thousand) for the years ended December 31, 2012, 2013 and 2014, respectively. Hedging contracts and hedged items have been taken into account while measuring the changes in profit before income tax. The sensitivity analysis for foreign currency exchange rate risk to which the Group was exposed at the each balance sheet date was unrepresentative of a risk inherent for the years ended December 31, 2012, 2013 and 2014.

## b) Interest rate risk

Except a portion of long-term borrowings and bonds payable at fixed interest rates, the Group was exposed to interest rate risk because group entities borrowed funds at floating interest rates. Changes in market interest rates will lead to variances in effective interest rates of borrowings from which the future cash flow fluctuations arise.

The carrying amounts of the Group's financial assets and financial liabilities with exposure to interest rates at each balance sheet date were as follows:

	2013 NT\$	December 31	
		2014 NT\$	US\$ (Note 4)
Fair value interest rate risk			
Financial liabilities	\$ 22,186,535	\$ 34,003,038	\$ 1,076,046

Cash flow interest rate risk

Financial assets	46,206,830	51,603,455	1,633,021
Financial liabilities	78,502,073	65,149,698	2,061,699

F-81

---

Table of Contents

For assets and liabilities with floating interest rates, a 100 basis point increase or decrease was used when reporting interest rate risk internally to key management personnel. If interest rates had been 100 basis points (1%) higher or lower and all other variables held constant, the Group's profit before income tax for the years ended December 31, 2012, 2013 and 2014 would have decreased or increased approximately by NT\$566,000 thousand, NT\$323,000 thousand and NT\$135,000 thousand (US\$4,272 thousand), respectively.

c) Other price risk

The Group was exposed to equity price risk through its investments in financial assets at FVTPL, including private-placement convertible bonds, quoted shares and open-end mutual funds, and available-for-sale financial assets. If equity prices were 1% higher or lower, profit before income tax for the years ended December 31, 2012, 2013 and 2014 would have increased or decreased by NT\$1,900 thousand, NT\$3,100 thousand and NT\$6,800 thousand (US\$215 thousand), respectively and other comprehensive income before income tax for the years ended December 31, 2012, 2013 and 2014 would have increased or decreased by NT\$12,000 thousand, NT\$35,000 thousand and NT\$25,000 thousand (US\$791 thousand), respectively.

In addition, the Group was also exposed to the Company's share price risk through Bonds Options recognized as financial liabilities held for trading. 7% is the sensitivity rate used when reporting price risk internally to key management personnel. If the Company's share price increased or decreased by 7%, profit before income tax for the years ended December 31, 2013 and 2014 would have decreased approximately by NT\$353,000 thousand and NT\$651,000 thousand (US\$20,601 thousand), respectively, or increased approximately by NT\$319,000 thousand and NT\$608,000 thousand (US\$19,241 thousand), respectively.

2) Credit risk

Credit risk refers to the risk that counterparty will default on its contractual obligations resulting in financial loss to the Group. The Group's credit risk arises from cash and cash equivalents, receivables and other financial assets. The Group's maximum exposure to credit risk was the carrying amounts of financial assets in the consolidated balance sheets.

The Group dealt with counterparties creditworthy and has a credit policy and trade receivable management procedures to ensure recovery and evaluation of trade receivables. The Group's counterparties consisted of a large number of customers and banks and there was no significant concentration of credit risk exposure.

3) Liquidity risk

The Group manages liquidity risk by maintaining adequate working capital and banking facilities to fulfill the demand for cash flow used in the Group's operation and capital expenditure. The Group also monitors its compliance with all the loan covenants. Liquidity risk is not considered to be significant.

In the table below, financial liabilities with a repayment on demand clause were included in the earliest time band regardless of the probability of counter-parties choosing to exercise their rights. The maturity dates for other non-derivative financial liabilities were based on the agreed repayment dates.

To the extent that interest flows are floating rate, the undiscounted amounts were derived from the interest rates at each balance sheet date.

F-82

---

Table of Contents

	On Demand or Less than 1 Month NT\$	1 to 3 Months NT\$	3 Months to 1 Year NT\$	2 to 5 Years NT\$	More than 5 Years NT\$
December 31, 2013					
Non-derivative financial liabilities					
Non-interest bearing	\$ 16,755,995	\$ 18,506,103	\$ 2,193,722	\$ 979,923	\$ -
Floating interest rate liabilities	22,940,649	11,905,684	21,552,430	23,383,218	-
Fixed interest rate liabilities	4,051	169,271	1,105,439	23,523,781	-
	\$ 39,700,695	\$ 30,581,058	\$ 24,851,591	\$ 47,886,922	\$ -

December 31, 2014					
Non-derivative financial liabilities					
Non-interest bearing	\$ 23,660,711	\$ 21,370,876	\$ 4,606,064	\$ 155,599	\$ 29,139
Floating interest rate liabilities	21,534,220	9,003,403	12,364,453	23,870,629	175,302
Fixed interest rate liabilities	684,039	838,234	846,899	34,458,859	-
	\$ 45,878,970	\$ 31,212,513	\$ 17,817,416	\$ 58,485,087	\$ 204,441

	On Demand or Less than 1 Month US\$ (Note 4)	1 to 3 Months US\$ (Note 4)	3 Months to 1 Year US\$ (Note 4)	2 to 5 Years US\$ (Note 4)	More than 5 Years US\$ (Note 4)
December 31, 2014					
Non-derivative financial liabilities					
Non-interest bearing	\$ 748,757	\$ 676,294	\$ 145,762	\$ 4,924	\$ 922
Floating interest rate liabilities	681,463	284,918	391,280	755,400	5,548
Fixed interest rate liabilities	21,647	26,526	26,801	1,090,470	-
	\$ 1,451,867	\$ 987,738	\$ 563,843	\$ 1,850,794	\$ 6,470

The amounts included above for floating interest rate instruments for non-derivative financial liabilities was subject to change if changes in floating interest rates differ from those estimates of interest rates determined at each balance sheet date.



The following table detailed the Group's liquidity analysis for its derivative financial instruments. The table was based on the undiscounted contractual net cash inflows and outflows on derivative instruments that settle on a net basis, and the undiscounted gross cash inflows and outflows on those derivatives that require gross settlement. When the amounts payable or receivable are not fixed, the amounts disclosed have been determined by reference to the projected interest rates as illustrated by the yield curves at each balance sheet date.

	On Demand or Less than 1 Month NT\$	1 to 3 Months NT\$	3 Months to 1 Year NT\$
December 31, 2013			
Net settled			
Forward exchange contracts	\$ 3,520	\$ (2,670 )	\$ -
Foreign currency option contracts	-	2,910	-
	\$ 3,520	\$ 240	\$ -
Gross settled			
Forward exchange contracts			
Inflows	\$ 2,703,738	\$ 1,540,707	\$ 208,348
Outflows	(2,725,667)	(1,541,515)	(208,635)
	(21,929 )	(808 )	(287 )

Table of Contents

	On Demand or Less than 1 Month NT\$	1 to 3 Months NT\$	3 Months to 1 Year NT\$
<b>Swap contracts</b>			
Inflows	\$6,565,374	\$6,384,442	\$23,843,432
Outflows	(6,524,921 )	(6,368,366)	(23,596,540)
	40,453	16,076	246,892
<b>Cross currency swap contracts</b>			
Inflows	175	356	596,801
Outflows	-	-	(598,600 )
	175	356	(1,799 )
<b>Interest rate swap contracts</b>			
Inflows	3,744	-	3,089
Outflows	(5,995 )	-	(5,865 )
	(2,251 )	-	(2,776 )
	\$16,448	\$15,624	\$242,030
December 31, 2014			
<b>Gross settled</b>			
<b>Forward exchange contracts</b>			
Inflows	\$3,662,813	\$1,959,573	\$9,241
Outflows	(3,655,279 )	(1,940,145)	(9,331 )
	7,534	19,428	(90 )
<b>Swap contracts</b>			
Inflows	10,342,259	4,621,200	33,399,031
Outflows	(10,215,834)	(4,461,118)	(31,646,310)
	126,425	160,082	1,752,721
	\$133,959	\$179,510	\$1,752,631
	On Demand or Less than 1 Month US\$ (Note 4)	1 to 3 Months US\$ (Note 4)	3 Months to 1 Year US\$ (Note 4)

December 31, 2014

## Gross settled

## Forward exchange contracts

Inflows	\$ 115,912	\$ 62,012	\$ 292
Outflows	(115,673)	(61,397 )	(295 )
	239	615	(3 )

## Swap contracts

Inflows	327,287	146,241	1,056,931
Outflows	(323,286)	(141,175 )	(1,001,466)
	4,001	5,066	55,465

	\$ 4,240	\$ 5,681	\$ 55,462
--	----------	----------	-----------

F-84

Table of Contents

## 33. RELATED PARTY TRANSACTIONS

Balances and transactions within the Group had been eliminated upon consolidation. Details of transactions between the Group and other related parties were disclosed as follows:

a. The Company and its subsidiary, ASE Test, Inc., acquired real estate from HC in May 2012 at NT\$1,429,679 thousand and the Company acquired real estate from HC in December 2013 at NT\$1,473,905 thousand, which were all primarily based on independent professional appraisal reports and fully paid before December 31, 2012 and 2013.

In 2014, the Company acquired real estate from HC at NT\$4,540,086 thousand (US\$143,674 thousand), which was primarily based on independent professional appraisal reports and fully paid before December, 2014. In addition, the construction of buildings with green design concept and other projects on current leased property for which the Company contracted with Fu Hwa Construction Co., Ltd. has been completed with a total consideration of NT\$349,646 thousand (US\$11,065 thousand), which was primarily based on independent professional appraisal reports, as well as request for quotation and price negotiation, and the payment schedule was based on the agreed acceptance progress.

b. In addition to the donation of NT\$15,000 thousand (US\$475 thousand) to Social Affairs Bureau of Kaohsiung City Government through ASE Cultural and Educational Foundation (the "ASE Foundation") in August 2014, the Company contributed NT\$100,000 thousand (US\$3,165 thousand) to ASE Foundation in September 2014 for environmental charity in promoting the related domestic environmental protection and public service activities.

## c. Remuneration to key management personnel

	For the Years Ended December 31			US\$ (Note 4)
	2012	2013	2014	
	NT\$	NT\$	NT\$	
Short-term employee benefits	\$ 797,632	\$ 741,232	\$ 989,720	\$ 31,320
Post-employment benefits	5,146	4,766	4,049	128
Share-based payments	114,738	78,701	50,327	1,593
	\$ 917,516	\$ 824,699	\$ 1,044,096	\$ 33,041

The remuneration to the Company's key management personnel is determined according to personal performance and market trends.

Except for the aforementioned, the Group had no material transactions with related parties for the years ended December 31, 2012, 2013 and 2014.

## 34. ASSETS PLEDGED AS COLLATERAL OR FOR SECURITY

In addition to Note 10, the following assets were provided as collateral for bank borrowings and the tariff guarantees of imported raw materials:

	December 31		
	2013		2014
	NT\$	NT\$	US\$ (Note 4)
Inventories related to real estate business	\$ 12,239,500	\$ 15,164,858	\$ 479,901

F-85

---

Table of Contents

	2013	December 31	
	NT\$	2014	US\$ (Note 4)
	NT\$	NT\$	
Property, plant and equipment			
Land	\$ 299,059	\$ -	\$ -
Buildings and improvements	337,222	-	-
Other financial assets (including current and non-current)	250,656	268,562	8,499
	\$ 13,126,437	\$ 15,433,420	\$ 488,400

## 35. SIGNIFICANT CONTINGENT LIABILITIES AND UNRECOGNIZED COMMITMENTS

In addition to those disclosed in other notes, significant commitments and contingencies of the Group as of each balance sheet date were as follows:

## a. Significant commitments

- 1) As of December 31, 2013 and 2014, unused letters of credit of the Group were approximately NT\$271,000 thousand and NT\$137,000 thousand (US\$4,335 thousand), respectively.
- 2) As of December 31, 2013 and 2014, outstanding commitments to purchase property, plant and equipment of the Group were approximately NT\$8,249,000 thousand and NT\$17,498,000 thousand (US\$553,734 thousand), respectively, of which NT\$1,291,306 thousand and NT\$1,516,396 thousand (US\$47,987 thousand) had been prepaid, respectively.
- 3) In consideration of corporate social responsibility for environmental protection, the Company's board of directors, in December 2013, approved contributions to be made in the next 30 years, at a total amount of NT\$3,000,000 thousand, at the minimum, to environmental protection efforts in Taiwan. In January 2015, the Company's board of directors approved to contribute NT\$100,000 thousand (US\$3,165 thousand) to ASE Foundation continuously implementing environmental effort in promoting the related domestic environmental protection and public service activities.

## b. Non-cancellable operating lease commitments

	December 31, 2014	
	NT\$	US\$ (Note 4)
Less than 1 year	\$ 224,600	\$ 7,108
1 to 5 years	275,463	8,717
More than 5 years	421,949	13,353
	\$ 922,012	\$ 29,178

36.

SIGNIFICANT SUBSEQUENT EVENTS

To enhance operational flexibility via structural adjustments, the board of directors of the Company's subsidiary, USI, resolved in January 2015 the spin-off of its investment business as well as capital reduction of NT\$16,012,966 thousand (US\$506,739 thousand) by reducing 1,601,297 thousand shares (a reduction ratio of 97.56%), and will assign its investment business to USI, Inc. ("New USI"), a newly established business entity. As the consideration of the business value to be spun-off by USI, New USI will issue 1,000,000 thousand new ordinary shares to the shareholders of USI. Based on the shareholdings on the record date of the spin-off, the shareholders of USI will receive 609.27 shares of New USI's ordinary share

F-86

---

Table of Contents

in exchange of each 1,000 shares of USI's ordinary share. The tentative record date of the spin-off is March 6, 2015. After the spin-off, the Group will have control over both USI and New USI, and the spin-off will not have material impact on the financial position and business operation of the Group. As of March 11, 2015, the spin-off transaction is currently being reviewed by the Investment Commission and will be effective upon the approval by the Investment Commission.

### 37. EXCHANGE RATE INFORMATION OF FINANCIAL ASSETS AND LIABILITIES DENOMINATED IN FOREIGN CURRENCIES

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

	Foreign Currencies (In Thousand)	Exchange Rate	Carrying Amount (In Thousand)
December 31, 2013			
Monetary financial assets			
US\$	\$3,381,706	US\$1=NT\$29.805	\$100,791,747
JPY	12,302,816	JPY1=NT\$0.2839	3,492,769
Monetary financial liabilities			
US\$	3,438,847	US\$1=NT\$29.805	102,494,835
JPY	11,659,321	JPY1=NT\$0.2839	3,310,081
December 31, 2014			
Monetary financial assets			
US\$	3,761,345	US\$1=NT\$31.65	119,046,569
JPY	12,543,157	JPY1=NT\$0.2646	3,318,919
Monetary financial liabilities			
US\$	3,888,563	US\$1=NT\$31.65	123,073,019
JPY	12,728,820	JPY1=NT\$0.2646	3,368,046

### 38. OTHERS

On December 20, 2013, the Kaohsiung Environmental Protection Bureau ("KEPB") issued an official letter No. Kao-Shih-Huan-Chu-Tu-Tzu 10243758100 and an administrative sanction letter No. Kao-Shih-Huan-Chu-Shui-Chu-Tzu 30-102-120022 ("the Administrative Decision"). The Administrative Decision was to suspend the operation at ASE K7 Plant's wafer-level process where nickel is used and impose a fine of NT\$110,065 thousand, which has been recorded under the line item of other income and expenses for the year ended December 31, 2013. On April 7, 2014, the amount of the fine was amended to NT\$109,359 thousand (US\$3,461 thousand) by the KEPB. On January 17, 2014, the Company retained lawyers to file an administrative appeal to nullify the Administrative Decision with the Kaohsiung City Government, but the administrative appeal was dismissed. The Company next retained lawyers to file an administrative complaint to revoke the part of the Administrative Decision



pertaining to the fine, and the case is being heard by the Kaohsiung High Administrative Court. As to the suspended operation at ASE K7 Plant's wafer-level process where nickel is used, the KEPB issued official letter No. Kao-Shih-Huan-Chu-Tu-Tzu 10343171000, on December 15, 2014, to grant the resumption.

Meanwhile, owing to the event above, on January 3, 2014, the Kaohsiung District Prosecutors Office charged the Company with violation of the Waste Disposal Act and the judgment was handed down on October 20, 2014, in which the Company was fined NT\$3,000 thousand (US\$95 thousand), recorded under the line item of other income and expenses for the year ended December 31, 2014, for violation of Article 47 of the Waste Disposal Act. The Company filed an appeal against the judgment, and the case is being heard by the Taiwan High Court's Kaohsiung Branch Court.

F-87

---

Table of Contents

## 39. OPERATING SEGMENTS INFORMATION

The Group has the following reportable segments: Packaging, Testing and EMS. The Group packages bare semiconductors into finished semiconductors with enhanced electrical and thermal characteristics; provides testing services, including front-end engineering testing, wafer probing and final testing services; provides electronics manufacturing services. Information about other business activities and operating segments that are not reportable are combined and disclosed in "Others." The Group engages in other activities such as substrate production and real estate business.

The accounting policies for segments are the same as those described in Note 4. The measurement basis for resources allocation and performance evaluation are based on profit before income tax.

Segment information for the years ended December 31, 2012, 2013 and 2014 was as follows:

## a. Segment revenues and results

	Packaging NT\$	Testing NT\$	EMS NT\$	Others NT\$	Total NT\$
For the year ended December 31, 2012					
Revenue from external customers	\$ 104,298,275	\$ 22,657,058	\$ 62,747,665	\$ 4,269,394	\$ 193,972,392
Inter-segment revenues (Note)	303,374	213,210	43,628,905	7,252,285	51,397,774
Segment revenues	104,601,649	22,870,268	106,376,570	11,521,679	245,370,166
Interest income	112,632	9,837	166,105	33,623	322,197
Interest expense	(1,435,831 )	(28,039 )	(170,781 )	(369,664 )	(2,004,315 )
Depreciation and amortization	(14,526,443 )	(6,098,479 )	(1,621,899 )	(1,189,058 )	(23,435,879 )
Share of the profit of associates	63,076	-	-	-	63,076
Impairment loss	(55,477 )	(12,026 )	-	(29,731 )	(97,234 )
Segment profit before income tax	8,047,189	5,110,442	2,987,544	463,549	16,608,724
Investments accounted for using the equity method	1,171,089	-	-	-	1,171,089
Segment assets	126,562,552	40,390,481	43,750,250	37,019,307	247,722,590
Expenditures for segment assets	28,066,806	7,964,966	2,043,085	901,968	38,976,825
For the year ended December 31, 2013					
	112,603,927	24,732,197	78,530,594	3,995,728	219,862,446

Edgar Filing: ADVANCED SEMICONDUCTOR ENGINEERING INC - Form 20-F

Revenue from external customers					
Inter-segment revenues (Note)	3,337,074	246,223	42,960,432	8,048,827	54,592,556
Segment revenues	115,941,001	24,978,420	121,491,026	12,044,555	274,455,002
Interest income	74,171	11,958	85,491	41,181	212,801
Interest expense	(1,542,047 )	(44,167 )	(96,620 )	(574,310 )	(2,257,144 )
Depreciation and amortization	(16,412,763 )	(6,293,170 )	(1,658,743 )	(1,106,235 )	(25,470,911 )
Share of the profit of associates	22,039	-	-	-	22,039
Impairment loss	(344,150 )	(115,966 )	(99,843 )	(131,913 )	(691,872 )
Segment profit before income tax	9,975,902	6,321,022	2,928,223	144,609	19,369,756
Investments accounted for using the equity method	1,205,158	-	-	-	1,205,158
Segment assets	146,160,484	44,100,564	55,112,632	41,348,403	286,722,083
Expenditures for segment assets	18,648,304	6,068,085	1,224,698	1,102,985	27,044,072

For the year ended December 31, 2014

Revenue from external customers	121,336,453	25,874,694	105,784,427	3,595,873	256,591,447
Inter-segment revenues (Note)	9,418,359	177,793	48,596,814	8,437,439	66,630,405
Segment revenues	130,754,812	26,052,487	154,381,241	12,033,312	323,221,852
Interest income	96,737	10,245	116,451	20,041	243,474
Interest expense	(1,566,595 )	(15,663 )	(155,702 )	(586,466 )	(2,324,426 )
Depreciation and amortization	(17,533,267 )	(6,160,378 )	(1,435,509 )	(1,221,622 )	(26,350,776 )
Share of the profit of associates	(121,882 )	-	-	-	(121,882 )
Impairment loss	(231,936 )	(4,701 )	(10,390 )	(61,117 )	(308,144 )
Segment profit before income tax	17,279,239	6,800,894	3,818,393	636,529	28,535,055
Investments accounted for using the equity method	1,468,242	-	-	-	1,468,242
Segment assets	166,359,949	44,147,813	78,865,897	44,345,158	333,718,817
Expenditures for segment assets	29,863,337	6,157,154	6,562,513	865,583	43,448,587

(Continued)

Table of Contents

	Packaging US\$ (Note 4)	Testing US\$ (Note 4)	EMS US\$ (Note 4)	Others US\$ (Note 4)	Total US\$ (Note 4)
For the year ended December 31, 2014					
Revenue from external customers	\$ 3,839,761	\$ 818,820	\$ 3,347,609	\$ 113,793	\$ 8,119,983
Inter-segment revenues (Note)	298,049	5,626	1,537,874	267,008	2,108,557
Segment revenues	4,137,810	824,446	4,885,483	380,801	10,228,540
Interest income	3,061	324	3,685	635	7,705
Interest expense	(49,576 )	(496 )	(4,927 )	(18,559 )	(73,558 )
Depreciation and amortization	(554,850 )	(194,949 )	(45,427 )	(38,659 )	(833,885 )
Share of the profit of associates	(3,857 )	-	-	-	(3,857 )
Impairment loss	(7,340 )	(149 )	(329 )	(1,934 )	(9,752 )
Segment profit before income tax	546,811	215,218	120,835	20,144	903,008
Investments accounted for using the equity method	46,463	-	-	-	46,463
Segment assets	5,264,555	1,397,083	2,495,756	1,403,328	10,560,722
Expenditures for segment assets	945,042	194,847	207,675	27,392	1,374,956

(Concluded)

Note: Inter-segment revenues were eliminated upon consolidation.

b. Revenue from major products and services

	For the Years Ended December 31			US\$ (Note 4)
	2012	2013	2014	
	NT\$	NT\$	NT\$	
Advanced packaging and IC wirebonding service	\$ 93,314,688	\$ 100,457,184	\$ 108,384,405	\$ 3,429,887
Wafer probing and final testing service	22,140,124	24,120,370	25,116,026	794,811
Electronic components manufacturing service	61,650,121	77,731,347	104,904,455	3,319,761
Others	16,867,459	17,553,545	18,186,561	575,524
	\$ 193,972,392	\$ 219,862,446	\$ 256,591,447	\$ 8,119,983

## c. Geographical information

Geographical information about revenue from external customers and noncurrent assets are reported based on the country where the external customers are headquartered and noncurrent assets are located.

## 1) Net revenues from external customers

	For the Years Ended December 31			
	2012	2013	2014	US\$ (Note 4)
	NT\$	NT\$	NT\$	
United States	\$ 118,842,871	\$ 143,753,891	\$ 173,912,974	\$ 5,503,575
Taiwan	33,443,120	31,277,147	36,747,699	1,162,902
Asia	22,295,261	23,779,212	24,042,586	760,841
Europe	19,068,043	20,392,268	20,826,125	659,055
Others	323,097	659,928	1,062,063	33,610
	\$ 193,972,392	\$ 219,862,446	\$ 256,591,447	\$ 8,119,983

Table of Contents

## 2) Noncurrent assets, excluding financial instruments, post-employment benefit assets and deferred tax assets

	2013	December 31	
	NT\$	NT\$	2014 US\$ (Note 4)
Taiwan	\$ 82,174,469	\$ 97,159,564	\$ 3,074,670
China	40,121,292	43,384,186	1,372,917
Others	25,864,658	26,177,965	828,417
	\$ 148,160,419	\$ 166,721,715	\$ 5,276,004

## d. Major customers

Except one customer from which the operating revenues generated from packaging and EMS segments was NT\$32,588,464 thousand and NT\$54,431,222 thousand (US\$1,722,507 thousand) in 2013 and 2014, respectively, the Group did not have other single customer to which the operating revenues exceeded 10% of operating revenues for the years ended December 31, 2012, 2013 and 2014.

F-90

Table of Contents