

ADVANCED SEMICONDUCTOR ENGINEERING INC  
Form 20-F  
June 11, 2010

As filed with the Securities and Exchange Commission on June 11, 2010

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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, 2009

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  
(Title of Class)

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  
(Title of Class)

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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:

5,488,458,214 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, 2009, as of May 31, 2010, we had 5,497,801,294 shares outstanding.

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USE OF CERTAIN TERMS

All references herein to (i) the “Company”, “ASE Group”, “ASE Inc.”, “we”, “us”, or “our” are to Advanced Semiconductor Engineering, Inc. and, unless the context requires otherwise, its subsidiaries, (ii) “ASE Test” are to ASE Test Limited, a company incorporated under the laws of Singapore, and its subsidiaries, (iii) “ASE Test Taiwan” are to ASE Test, Inc., a company incorporated under the laws of the ROC, (iv) “ASE Test Malaysia” are to ASE Electronics (M) Sdn. Bhd., a company incorporated under the laws of Malaysia, (v) “ISE Labs” are to ISE Labs, Inc., a corporation incorporated under the laws of the State of California, (vi) “ASE Korea” are to ASE (Korea) Inc., a company incorporated under the laws of the Republic of Korea, (vii) “ASE Japan” are to ASE Japan Co. Ltd., a company incorporated under the laws of Japan, (viii) “ASE Shanghai” are to ASE (Shanghai) Inc., a company incorporated under the laws of the PRC, (ix) “ASE Electronics” are to ASE Electronics Inc., a company incorporated under the laws of the ROC, (x) “PowerASE” are to PowerASE Technology, Inc., a company incorporated under the laws of the ROC, (xi) “ASESH AT” are to ASE Assembly & Test (Shanghai) Limited, formerly known as Global Advanced Packaging Technology Limited, a company incorporated under the laws of the PRC, or GAP, (xii) “ASEN” are to Suzhou ASEN Semiconductors Co., Ltd., a company incorporated under the laws of the PRC, (xiii) “ASEWH” are to ASE (Weihai), Inc., a company incorporated under the laws of the PRC, (xiv) “Universal Scientific” are to Universal Scientific Industrial Co., Ltd., a company incorporated under the laws of the ROC, (xv) “Hung Ching” are to Hung Ching Development & Construction Co. Ltd., a company incorporated under the laws of the ROC, (xvi) “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, (xvii) “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, (xviii) the “Securities Act” are to the U.S. Securities Act of 1933, as amended, and (xix) the “Exchange Act” are to the U.S. Securities Exchange Act of 1934, as amended.

All references to the “Republic of China”, the “ROC” and “Taiwan” are to the Republic of China, including Taiwan and certain other possessions. All references to “Korea” or “South Korea” are to the Republic of Korea. All references to the “PRC” are to the People’s Republic of China and exclude Taiwan, Macau and Hong Kong.

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 “CNY” are to the currency of the PRC; references to “JP¥” are to the currency of Japan; references to “EUR” are to the currency of the European Union; and references to “KRW” are to the currency of the Republic of Korea. Unless otherwise noted, all translations from NT dollars to U.S. dollars were made at the noon buying rate in The City of New York for cable transfers in NT dollars per U.S. dollar as certified for customs purposes by the Federal Reserve Bank of New York as of December 31, 2009, which was NT\$31.95=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 or U.S. dollar amounts referred to herein could have been or could be converted into U.S. dollars or NT dollars, as the case may be, at any particular rate or at all. On June 4, 2010, the noon buying rate was NT\$32.25=US\$1.00.

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, including statements regarding our future results of operations and business prospects. 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. We were not involved in the

preparation of these projections. 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 cyclicalities and market conditions in the semiconductor or manufacturing industry; demand for the outsourced



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semiconductor packaging and testing 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.”

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## 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 statement of operations data and cash flow data for the years ended December 31, 2007, 2008 and 2009, and the selected consolidated balance sheet data as of December 31, 2008 and 2009, 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. The selected consolidated statement of operations data and cash flow data for the years ended December 31, 2005 and 2006 and the selected consolidated balance sheet data as of December 31, 2005, 2006 and 2007, set forth below, are derived from our audited consolidated financial statements not included herein and have been classified to conform to the presentation of the consolidated financial statements in this annual report. Our consolidated financial statements have been prepared and presented in accordance with accounting principles generally accepted in the ROC, or ROC GAAP, which differ in some material respects from accounting principles generally accepted in the United States of America, or U.S. GAAP. See note 32 to our consolidated financial statements for a description of the significant differences between ROC GAAP and U.S. GAAP for the periods covered by these consolidated financial statements.

	As of and for the Year Ended December 31,					
	2005	2006	2007	2008	2009	US\$
	NT\$	NT\$	NT\$	NT\$	NT\$	
	(in millions, except earnings per share and per ADS data)					
ROC GAAP:						
Statement of Operations Data:						
Net revenues	84,035.8	100,423.6	101,163.1	94,430.9	85,775.3	2,684.7
Cost of revenues(1)	(70,471.5)	(73,045.4)	(72,919.8)	(72,661.4)	(67,629.1)	(2,116.7)
Gross profit	13,564.3	27,378.2	28,243.3	21,769.5	18,146.2	568.0
Total operating expenses	(8,356.8)	(8,075.7)	(9,580.6)	(10,524.1)	(9,131.8)	(285.8)
Income from operations	5,207.5	19,302.5	18,662.7	11,245.4	9,014.4	282.2
Non-operating income (expense)						
(1)	(10,881.3)	2,948.9	(1,310.8)	(1,769.6)	(626.0)	(19.6)
Income (loss) before income tax	(5,673.8)	22,251.4	17,351.9	9,475.8	8,388.4	262.6
Income tax benefit (expense)	118.6	(2,084.8)	(3,357.4)	(2,268.3)	(1,484.9)	(46.5)
Income (loss) from continuing operations	(5,555.2)	20,166.6	13,994.5	7,207.5	6,903.5	216.1
Discontinued operations(2)	353.7	—	—	—	—	—
Cumulative effect of change in accounting principle	—	(342.5)(3)	—	—	—	—

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Net income (loss)	(5,201.5)	19,824.1	13,994.5	7,207.5	6,903.5	216.1
Attributable to						
Shareholders of the parent	(4,691.2)	17,416.2	12,165.3	6,160.1	6,744.6	211.1
Minority interest	(510.3)	2,407.9	1,829.2	1,047.4	158.9	5.0
	(5,201.5)	19,824.1	13,994.5	7,207.5	6,903.5	216.1
Income from operations per common share	0.99	3.65	3.46	2.09	1.75	0.05
Income (loss) from continuing operations per common share	(0.96)	3.36	2.26	1.14	1.31	0.04
Earnings (loss) per common share(4):						
Basic	(0.89)	3.29	2.26	1.14	1.31	0.04
Diluted	(0.89)	3.14	2.18	1.12	1.29	0.04
Dividends per common share(5)	1.10	—	2.96	2.00	0.50	0.02

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	As of and for the Year Ended December 31,					2009 US\$
	2005 NT\$	2006 NT\$	2007 NT\$	2008 NT\$	2009 NT\$	
(in millions, except earnings per share and per ADS data)						
<b>Earnings (loss) per equivalent ADS(4):</b>						
Basic	(4.47)	16.46	11.28	5.71	6.53	0.20
Diluted	(4.47)	15.69	10.90	5.59	6.45	0.20
<b>Number of common shares(6):</b>						
Basic	5,248.9	5,291.6	5,390.9	5,392.9	5,162.9	5,162.9
Diluted	5,248.9	5,603.5	5,633.1	5,457.4	5,207.6	5,207.6
<b>Number of equivalent ADSs:</b>						
Basic	1,049.8	1,058.3	1,078.2	1,078.6	1,032.6	1,032.6
Diluted	1,049.8	1,120.7	1,126.6	1,091.5	1,041.5	1,041.5
<b>Balance Sheet Data:</b>						
<b>Current assets</b>						
Current assets	47,544.0	48,762.8	56,902.0	46,366.9	61,413.0	1,922.2
Long-term investments	4,898.1	5,734.5	4,850.2	4,327.0	5,160.0	161.5
Property, plant and equipment, net	68,040.8	73,543.8	81,788.3	84,758.0	79,363.9	2,484.0
Intangible assets	3,589.1	3,449.0	4,732.3	12,592.0	12,232.7	382.9
Other assets	7,053.5	5,550.8	4,104.6	4,146.1	3,891.3	121.8
Total assets	131,125.5	137,040.9	152,377.4	152,190.0	162,060.9	5,072.4
<b>Short-term borrowings(7)</b>						
Short-term borrowings(7)	10,523.1	8,499.1	15,773.9	11,473.2	13,960.3	436.9
<b>Long-term debts(8)</b>						
Long-term debts(8)	42,862.1	29,398.3	23,936.0	51,622.2	49,392.1	1,545.9
<b>Other liabilities(9)</b>						
Other liabilities(9)	22,890.0	22,016.7	22,927.6	17,133.8	23,994.8	751.1
Total liabilities	76,275.2	59,914.1	62,637.5	80,229.2	87,347.2	2,733.9
Capital stock	45,573.7	45,925.1	54,475.6	56,904.3	54,798.8	1,715.1
<b>Minority interest in consolidated subsidiaries</b>						
Minority interest in consolidated subsidiaries	7,902.0	11,106.9	14,566.5	2,288.7	3,097.7	97.0
Total shareholders' equity	54,850.3	77,126.8	89,739.9	71,960.8	74,713.7	2,338.5
<b>Cash Flow Data:</b>						
<b>Net cash outflow from acquisition of property, plant and equipment</b>						
Net cash outflow from acquisition of property, plant and equipment	(15,611.5)	(17,764.2)	(17,190.4)	(18,583.3)	(11,445.6)	(358.2)
Depreciation and amortization	15,032.8	14,488.2	16,626.2	17,244.9	17,638.0	552.1
<b>Net cash inflow from operating activities</b>						
Net cash inflow from operating activities	18,751.1	37,310.8	28,310.6	30,728.8	15,517.2	485.7
<b>Net cash outflow from investing activities</b>						
Net cash outflow from investing activities	(11,632.0)	(22,104.5)	(18,108.4)	(36,359.2)	(15,980.7)	(500.2)
<b>Net cash inflow (outflow) from financing activities</b>						
Net cash inflow (outflow) from financing activities	(91.8)	(12,581.9)	(8,492.7)	13,862.4	(2,778.5)	(87.0)
<b>Segment Data:</b>						
<b>Net revenues:</b>						
Packaging	66,022.9	76,820.5	78,516.3	73,391.6	67,935.5	2,126.3
Testing	17,122.0	21,429.6	20,007.8	19,021.4	15,795.1	494.4
Others	890.9	2,173.5	2,639.0	2,017.9	2,044.7	64.0
<b>Gross profit (loss):</b>						
Packaging	9,543.9	18,334.1	20,254.9	14,213.4	12,378.0	387.4
Testing	4,091.3	8,466.9	7,373.5	6,255.2	4,453.0	139.4

Others	(70.9)	577.2	614.9	1,300.9	1,315.2	41.2
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As of and for the Year Ended December 31,

	2005	2006	2007	2008	2009	
	NT\$	NT\$	NT\$	NT\$	NT\$	US\$

(in millions, except earnings per share and per ADS data)

## U.S. GAAP:

## Statement of Operations Data:

Net revenues	84,035.8	100,423.6	101,163.1	94,430.9	85,775.3	2,684.7
Cost of revenues	(70,886.2)	(73,625.1)	(75,345.3)	(73,315.6)	(68,546.4)	(2,145.4)
Gross profit	13,149.6	26,798.5	25,817.8	21,115.3	17,228.9	539.3
Total operating expenses	(21,541.0)	(9,855.6)	(10,898.1)	(10,615.0)	(9,431.5)	(295.2)
Income (loss) from operations	(8,391.4)	16,942.9	14,919.7	10,500.3	7,797.4	244.1
Non-operating income (expense)	1,958.5	1,448.4	71.4	(1,351.2)	(484.0)	(15.2)
Income tax benefit (expense)	190.3	(1,980.7)	(3,262.5)	(2,503.5)	(1,793.0)	(56.1)
Discontinued operations(2)	353.7	—	—	—	—	—
Cumulative effect of change in accounting principle	—	(296.5)	(10)	—	—	—

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	As of and for the Year Ended December 31,					US\$
	2005 NT\$	2006 NT\$	2007 NT\$	2008 NT\$	2009 NT\$	
	(in millions, except earnings per share and per ADS data)					
Net income (loss)	(5,888.9)	16,114.1	11,728.6	6,645.6	5,520.4	172.8
Attributable to						
Shareholders of the parent	(5,530.5)	14,122.7	9,931.1	5,492.1	5,317.5	166.4
Noncontrolling interest	(358.4)	1,991.4	1,797.5	1,153.5	202.9	6.4
	(5,888.9)	16,114.1	11,728.6	6,645.6	5,520.4	172.8
Earnings (loss) per common share(4):						
Basic	(1.08)	2.71	1.87	1.02	1.03	0.03
Diluted	(1.08)	2.60	1.81	1.01	1.02	0.03
Earnings (loss) per equivalent ADS(4):						
Basic	(5.38)	13.57	9.34	5.11	5.15	0.16
Diluted	(5.38)	12.98	9.03	5.04	5.11	0.16
Number of common shares(11):						
Basic	5,141.1	5,202.7	5,317.7	5,368.7	5,162.9	
Diluted	5,141.1	5,505.5	5,566.1	5,405.3	5,180.7	
Number of equivalent ADSs(11):						
Basic	1,028.2	1,040.5	1,063.5	1,073.7	1,032.6	
Diluted	1,028.2	1,101.1	1,113.2	1,081.1	1,036.1	
Balance Sheet Data:						
Current assets	47,560.3	48,762.8	56,902.0	46,366.9	61,413.0	1,922.2
Long-term investments	3,469.2	4,266.9	3,045.4	2,842.7	3,341.2	104.5
Property, plant and equipment, net	67,547.9	70,894.1	80,036.6	82,694.5	77,869.2	2,437.2
Intangible assets	4,112.6	3,972.4	5,255.8	12,940.6	12,522.8	392.0
Other assets	7,284.7	5,834.9	3,766.7	3,963.5	2,814.2	88.1
Total assets	129,974.7	133,731.1	149,006.5	148,808.2	157,960.4	4,944.0
Short-term borrowings(7)	10,523.1	8,499.1	15,773.9	11,473.2	13,960.3	436.9
Long-term debts(8)	42,862.1	29,398.3	23,936.0	51,622.2	49,392.1	1,545.9
Other liabilities(9)	23,397.2	24,228.3	24,746.0	18,307.1	25,092.3	785.4
Total liabilities	76,782.4	62,125.7	64,455.9	81,402.5	88,444.7	2,768.2
Capital stock	45,573.7	45,925.1	54,475.6	56,904.3	54,798.8	1,715.1
Equity attributable to shareholders of the parent	44,959.3	60,584.1	70,101.4	65,303.0	66,555.5	2,083.1
Noncontrolling interest in consolidated subsidiaries	8,233.0	11,021.3	14,449.2	2,102.7	2,960.2	92.7

(1) Effective January 1, 2009, we adopted the newly revised ROC SFAS No. 10 "Accounting for Inventories". Abnormal cost, write-downs of inventories and any reversal of write-downs are recorded as cost of revenues from non-operating expenses. Information in this annual report from our consolidated statements of operations for each of the four years in the period ended December 31, 2008 has been adjusted to reflect the reclassification.

(2) In October 2005, we disposed of our camera module assembly operations in Malaysia. Amount for 2005 includes income from discontinued operations of NT\$121.0 million and gain on disposal of discontinued operations of NT\$232.7 million, net of income tax expense. Such operations were formerly classified as part of our packaging

operations.

- (3) Represents the cumulative effect of our adoption of ROC Statement of Financial Accounting Standards, or SFAS, No. 34 "Financial Instrument: Recognition and Measurement" and ROC SFAS, No. 36 "Financial Instruments: Disclosure and Presentation."
- (4) The denominators for diluted earnings per common share and diluted earnings per equivalent ADS are calculated to account for the potential exercise of options and conversion of our convertible bonds into our common shares and American depositary shares, or ADSs.
- (5) Dividends per common share issued as a cash dividend, a stock dividend and distribution from capital surplus.
- (6) Represents the weighted average number of shares after retroactive adjustments to give effect to stock dividends and employee stock bonuses. Beginning in 2002, common shares held by consolidated subsidiaries are classified as "treasury stock", and are deducted from the number of common shares outstanding.
- (7) Includes current portions of bonds payable, long-term bank loans and capital lease obligations.
- (8) Excludes current portions of bonds payable, long-term bank loans and capital lease obligations.
- (9) Includes current liabilities other than short-term borrowings.
- (10) Represents the cumulative effect of our adoption of U.S. GAAP related to "Share-Based Payment."
- (11) Represents the weighted average number of common shares after retroactive adjustments to give effect to stock dividends.

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## 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 the 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 based on the noon buying rate for cable transfers in NT dollars as certified for customs purposes by the Federal Reserve Bank of New York.

	NT Dollars per U.S. Dollar Noon Buying Rate			
	Average	High	Low	Period-End
2005	32.13	33.77	30.65	32.80
2006	32.51	33.31	31.28	32.59
2007	32.85	33.41	32.26	32.43
2008	31.52	33.58	29.99	32.76
2009	33.02	35.21	31.95	31.95
December	32.25	32.38	31.95	31.95
2010				
January	31.87	32.04	31.65	31.94
February	32.06	32.14	31.98	32.12
March	31.83	32.04	31.70	31.73
April	31.48	31.74	31.30	31.31
May	31.83	32.33	31.40	32.00
June (through June 4)	32.23	32.33	32.16	32.25

Source: Federal Reserve Statistical Release, Board of Governors of the Federal Reserve System.

On June 4, 2010, the noon buying rate was NT\$32.25=US\$1.00.

## CAPITALIZATION AND INDEBTEDNESS

Not applicable.

## REASON FOR THE OFFER AND USE OF PROCEEDS

Not applicable.

## RISK FACTORS

## Risks Relating to Our Business

Any global economic crisis 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 recent global economic crisis adversely affected businesses worldwide, including our customers, whose success is linked to the health of the economy. As widely reported, the global financial markets experienced extreme volatility and disruptions, which have severely diminished liquidity and credit availability. This market turmoil and tightening of credit led to an increased level of commercial and consumer delinquencies, lack of consumer confidence, increased market volatility and widespread reduction of business activity generally. The recent military tensions in the Korean peninsula have further increased the market volatility and may have a material adverse effect

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on the operations of ASE Korea. There can be no assurance that there will be no further deterioration in the global financial markets. In addition, any economic crisis may also cause our customers to do the following:

- 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.

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

Our semiconductor packaging and testing business is affected by market conditions in the highly cyclical semiconductor industry. 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 industry has experienced significant, and sometimes prolonged, downturns. As our business is, and will continue to be, dependent on the requirements of semiconductor companies for independent packaging and testing services, any future downturn in the semiconductor 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 average selling prices, our profitability will suffer and we may incur losses.

Market conditions in the semiconductor industry depend to a large degree on conditions in the markets for the end-use applications of semiconductor products, such as communications, computer and consumer electronics products. Any deterioration of conditions in the markets, such as the recent severe deterioration of global economic conditions in the fourth quarter of 2008, for the end-use applications of the semiconductors we package and test would reduce demand for our services, and would likely have a material adverse effect on our financial condition and results of operations. In 2007, approximately 44.5%, 22.8% and 32.1% of our net revenues were attributed to the packaging and testing of semiconductors used in communications, computer, and consumer electronics applications, respectively. In 2008, approximately 44.7%, 22.8% and 32.1% of our net revenues were attributed to the packaging and testing of semiconductors used in communications, computer, and consumer electronics applications, respectively. In 2009, approximately 46.2%, 16.8% and 36.0% of our net revenues were attributed to the packaging and testing of semiconductors used in communications, computer, and consumer electronics 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 the packaging and testing services provided by us and adversely affect our revenues and net income.

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

In recent years, semiconductor manufacturers that have their own in-house packaging and testing capabilities, known as integrated device manufacturers, have increasingly outsourced stages of the semiconductor production process, including packaging and testing, to independent companies in order to reduce costs and shorten production cycles. 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 integrated device manufacturers and fabless semiconductor companies will continue to outsource their packaging and testing requirements to third parties like us. Furthermore, during an economic downturn, these

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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.

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

The semiconductor packaging and testing markets 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. We believe that the principal competitive factors in the packaging and testing markets are:

- technological expertise;
- price;
- the ability to provide total solutions to our customers;
- range of package types and testing platforms available;
- the ability to work closely with our customers at the product development stage;
  - responsiveness and flexibility;
  - production cycle time;
  - capacity;
  - diversity in facility locations; and
  - production yield.

We face increasing competition from other packaging and testing companies, as most of our customers obtain packaging or testing services from more than one source. In addition, some of our competitors may have access to more advanced technologies and greater financial and other resources than we do. Any erosion in the prices for our packaging and testing services could cause our revenues and net income to decrease and have a material adverse effect on our financial condition and results of operations.

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. 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 given the recent global economic crisis and the cyclical nature of the semiconductor industry and the markets served by our customers;

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- 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;
  - 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 in relation to computers and peripherals, communications, industrial, automotive, and storage and server applications;
  - fluctuations in the exchange rate between the NT dollar and foreign currencies, especially the U.S. dollar; and
  - earthquakes, drought, epidemics 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.

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 will 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 packaging and testing equipment and facilities. Our profitability depends not only on the pricing levels for our services, but also on utilization rates for our packaging and testing 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 of packaging and testing services 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 increased in 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.

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We have significantly expanded our packaging and testing operations through both organic growth and acquisitions in recent years. In addition, we acquired Universal Scientific through a tender offer in February 2010. 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 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 in Shanghai, China. We may continue to make investments in this area in the future and our diversification in this connection may put pressure on our managerial, financial, operational and other resources. Our exposure to risks related to real estate development in China 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.

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 growth prospects and future profitability may decline.

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 loan 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 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

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the agreements governing our other existing debt. For example, we failed to comply with leverage ratios in some of our loan agreements as a result of additional borrowings to fund our privatization of ASE Test in May 2008 and the distribution of cash dividends in August 2008. See “Item 4. Information on the Company—History and Development of the Company—ASE Test Share Acquisition and Privatization” for more information on ASE Test. In addition, due to our increased borrowings to fund the acquisition of Universal Scientific in February 2010, we may breach certain financial covenants in some of our loan agreements that are tested semi-annually. 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 May 31, 2010, no lender has sought to declare a default or enforce remedies in respect of our existing debt as a result of cross-default provisions, breaches of financial covenants or otherwise, although we cannot provide any assurance that they will not take action 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 and other 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 any of our personnel. 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 cost of revenues and operating expenses, on the other hand, are incurred in several currencies, primarily NT dollars and U.S. dollars, as well as, to a lesser extent, Korean won, Japanese yen, Malaysian ringgit and Chinese yuan. 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 much of the remainder in Japanese yen. Fluctuations in exchange rates, primarily among the U.S. dollar, the NT dollar, the Japanese yen and the Chinese yuan, 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 incurred net foreign exchange

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gains of NT\$403.5 million, NT\$282.0 million and NT\$4.2 million (US\$0.1 million) in 2007, 2008 and 2009, respectively. 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 over 200 customers for our packaging and testing businesses, 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 industry. Our five largest customers together accounted for approximately 24.8%, 27.1% and 28.7% of our net revenues in 2007, 2008, 2009, respectively. No customer accounted for more than 10% of our net revenues in 2007, 2008 and 2009. 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 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 cyclicity 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.

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. In addition, on February 23, 2009, we and Advanced Microelectronic Products, Inc., or AMPI, a provider of foundry services, signed a memorandum of understanding to enter into a strategic alliance focused on providing semiconductor manufacturing turnkey services. These 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. These strategic alliances and any of 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 packaging operations require that we obtain adequate supplies of raw materials on a timely basis. Shortages in the supply of raw materials experienced by the semiconductor industry have in the past resulted in occasional price increases and delivery delays. Raw materials such as advanced substrates are prone to supply shortages since such materials are produced by a limited number of suppliers such as Kinsus Interconnect Technology Corporation, Nanya Printed Circuit Board Corporation and Unimicron Technology Corp. Our operations conducted through our wholly-owned subsidiary ASE Electronics and ASE Shanghai have improved our ability to obtain advanced substrates on a timely basis and at a reasonable cost. However, 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. Recent fluctuations in gold and copper prices 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.

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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. Although we have not suffered material environmental claims in the past, the failure to comply with any present or future regulations could result in the assessment of damages or imposition of fines against us, suspension of production or a cessation of our operations. New regulations could require us to acquire costly equipment or to incur other significant expenses that we may not be able to pass on to our customers. Additionally, any failure on our part to control the use, or adequately restrict the discharge, of hazardous substances could subject us to future liabilities that may have a material adverse effect on our financial condition and results of operations. Any failure on the environmental requests on our products, such as Directive 2002/95/EC, see “Item 4. Business Overview—Raw Materials and Suppliers—Packaging”, may have a material adverse effect on our results of operations.

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 would affect the results of our operations if any of our customers would request us to exceed any standards set for environmentally compliant products and services. 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.

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.

Our controlling 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 controlling 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 controlling 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 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 for our packaging and testing services.

Our ability to compete successfully also depends, in part, on our ability to operate without infringing the proprietary rights of others. The semiconductor industry is characterized by frequent litigation regarding patent and other intellectual property rights. In February 2006, Tessera Inc. filed a suit against us and others alleging patent infringement. See “Item 8. Financial Information—Legal Proceedings.” Any litigation, whether as plaintiff or defendant and regardless of the outcome, is costly and diverts company resources.

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Any of the foregoing could harm our competitive position and render us unable to provide some of our services operations.

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.

We face risks associated with uncertainties in PRC laws and regulations.

We operate, among other things, packaging and testing facilities, electronic manufacturing services and real estate in the PRC through our subsidiaries and joint ventures incorporated in the PRC. Under PRC laws and regulations, foreign investment projects, such as our subsidiaries and joint ventures, 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 and joint ventures. 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.

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

Under ROC GAAP and U.S. GAAP, 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, in 2007 we recognized an impairment charge of NT\$994.7 million, primarily as a result of idle capacity in our flip-chip substrate production line caused by a lack of demand for certain applications. In 2008, we recognized impairment charges of NT\$293.3 million related to our other-than-temporary loss in our financial assets and impaired idle equipment. In 2009, we recognized impairment charges of NT\$11.1 million (US\$0.3 million), primarily as a result of impaired idle equipment. As of December 31, 2009, goodwill under ROC GAAP and U.S. GAAP amounted to NT\$9,419.0 million (US\$294.8 million) and NT\$9,767.6 million (US\$305.7 million), respectively. See "Item 5. Operating and Financial Review and Prospects—Operating Results and Trend Information—Critical Accounting Policies and Estimates—Realizability of Long-Lived Assets" and "—Goodwill."

We are unable to estimate the extent and timing of any impairment charges for future years under ROC GAAP or U.S. GAAP, and we cannot give any assurance that impairment charges will not be required in periods subsequent to December 31, 2009. 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.



Risks Relating to Taiwan, ROC

Strained relations between the ROC and the PRC could negatively affect our business and the market value of your investment.

Our principal executive offices and our principal packaging and testing facilities are located in Taiwan and approximately 68.6%, 64.9% and 63.3% of our net revenues in 2007, 2008 and 2009, respectively, were derived from our operations in Taiwan. The ROC has a unique international political status. The government of the PRC

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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 and the PRC government has indicated that it may use military force to gain control over Taiwan in some circumstances, such as the declaration of independence by the ROC. Political uncertainty could adversely affect the prices of our common shares and ADSs. 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 wire bond packaging and testing services in the PRC through our subsidiaries, ASESH AT, ASEN and ASEWH. 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.” The ROC government currently restricts certain types of investments by ROC companies, including ourselves, in the PRC, including certain types of investments in facilities for the packaging and testing of semiconductors. In April 2006, these restrictions were amended to permit investments in facilities for certain less advanced wire bond packaging and testing services. 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 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. 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. In the third quarter of 2004, a typhoon caused a partial interruption for approximately two weeks in our water supply at ASE Chung Li’s substrate operations.

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.

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.

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Any outbreak of swine flu, avian flu or a recurrence of SARS or other contagious disease may have an adverse effect on the economies and financial markets of certain Asian countries and may adversely affect our results of operations.

In April 2009, outbreaks of swine flu caused by the H1N1 virus were first reported in Mexico and, subsequently, in several other locations including the U.S., the PRC and the ROC. Many of these cases were fatal and more cases have since been reported. In addition, the World Health Organization reported in January 2005 that “during 2004, large parts of Asia experienced unprecedented outbreaks of highly pathogenic avian influenza, caused by the H5N1 virus”, which moved the world closer than at any time since 1968 to an influenza pandemic “with high morbidity, excess mortality, and social and economic disruption.” There have continued to be cases of outbreaks of avian flu in certain regions of Asia, Europe and Africa with human casualties reported in countries such as Azerbaijan, Cambodia, Egypt, Indonesia, Iraq, the PRC, Thailand, Turkey and Vietnam. Additionally, in the first half of 2003, the PRC, Hong Kong, Taiwan, Singapore, Vietnam and certain other countries encountered an outbreak of severe acute respiratory syndrome, or SARS, which is a highly contagious form of atypical pneumonia. The SARS outbreak had an adverse effect on our results of operations for the first half of 2003, primarily due to the lower than expected demand for our packaging and testing services that resulted from the adverse effect of such SARS outbreak on the level of economic activity in the affected regions. There is no guarantee that an outbreak of swine flu, avian flu, SARS or other contagious disease will not occur again in the future and that any future outbreak of swine flu, avian flu, SARS or other contagious disease or the measures taken by the governments of the ROC, Hong Kong, the PRC or other countries against such potential outbreaks, will not seriously interrupt our production operations or those of our suppliers and customers, which may have a material adverse effect on our results of operations. The perception that an outbreak of swine flu, avian flu, SARS or other contagious disease may occur again may have an adverse effect on the economic conditions of certain countries in Asia.

### Risks Relating to Ownership of the ADSs

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

Although ADS holders are entitled to withdraw the common shares underlying the ADSs from the depositary at any time, ROC law requires that the 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 depositary 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.

If a non-ROC holder of ADSs withdraws common shares, such holder of ADSs will be required to appoint a tax guarantor, local agent and custodian bank 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 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

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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 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 the common shares on the Taiwan Stock Exchange or otherwise.

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, 2009 to December 31, 2009, the Taiwan Stock Exchange Index peaked at 8,188.1 on December 31, 2009, and reached a low of 4,242.6 on January 20, 2009. Over the same period, the trading price of our common shares ranged from NT\$10.75 per share to NT\$29.1 per share. On June 4, 2010, the Taiwan Stock Exchange Index closed at 7,344.6, and the closing value of our common shares was NT\$27.25 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 incur dilution as a result of the practice among ROC technology companies of issuing stock bonuses and stock options to employees.

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 the common shares on the day prior to our shareholders' meeting. In addition, under the revised ROC Company Law we may, upon approval from our board of directors and the ROC Securities and Futures Bureau of the Financial Supervisory Commission, Executive Yuan, establish employee stock option plans. We currently maintain four employee stock option plans pursuant to which our full-time employees and the full-time employees of our domestic and foreign subsidiaries are eligible to receive stock option grants. As of December 31, 2009, 246,566,440 options were outstanding. 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.

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,

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including you and us, may deposit our common shares in our ADS facility without specific approval of the ROC Financial Supervisory Commission, Executive Yuan, 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 ROC Financial Supervisory Commission, Executive Yuan plus any ADSs issued pursuant to the events described in subparagraphs (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.

The depository 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 the 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 depository to vote in the same manner regarding a resolution, including the election of directors and supervisors, the depository will cause all common shares represented by the ADSs to be voted in that manner. If the depository 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 depository or its nominee to authorize all the 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.

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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 the common shares and deposited into the depositary receipt facility; and
  - any cash dividends or distributions received from the 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.

Under current ROC law, a holder of the ADSs, without obtaining further approval from the Central Bank of the Republic of China (Taiwan), may convert from NT dollars into other currencies, including U.S. dollars, the following:

- the proceeds of the sale of any underlying common shares withdrawn from the depositary receipt facility or received as a stock dividend that has been deposited into the depositary receipt facility; and
  - any cash dividends or distribution received from the common shares.

However, such holder 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 the Central Bank of the Republic of China (Taiwan) is generally expected to grant this approval as a routine matter, we cannot assure you that you will actually obtain this approval in a timely manner, or at all.

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. We or 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 the common shares or the ADSs prevailing from

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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 the 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. We were listed on the Taiwan Stock Exchange in 1989. 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) 7361-7131. 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.

Acquisition of ASESH AT

On January 11, 2007, we completed the acquisition of 100.0% of GAPTECH, now known as ASESH AT, for a purchase price of US\$60.0 million. Based in Shanghai, China, ASESH AT provides wire bond packaging and testing services for a wide range of semiconductors.

Joint Venture with NXP Semiconductors

On September 25, 2007, we entered into a joint venture with NXP B.V., or NXP Semiconductors, formerly known as Philips Semiconductors, by completing the acquisition of 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.

Acquisition of ASE (Weihai), Inc.

On May 14, 2008, we completed the acquisition of 100.0% of Weihai Aimhigh Electronic Co. Ltd., now known as ASE (Weihai), Inc., from Aimhigh Global Corp. and TCC Steel for a purchase price of US\$7.0 million. ASE (Weihai), Inc. is based in Shandong, China and is engaged in semiconductor packaging and testing.

ASE Test Share Acquisition and Privatization

Our subsidiary, ASE Test, was previously the holding company for the majority of our testing services. On September 4, 2007, we and ASE Test entered into a scheme implementation agreement under which we agreed to acquire all the outstanding ordinary shares of ASE Test that we did not already directly or indirectly own, and ASE Test became our wholly-owned subsidiary as of May 30, 2008. Through this transaction, we acquired a total of 58,438,944 shares of ASE Test for a total consideration of US\$863.9 million. In order to finance our acquisition of ASE Test’s shares, we entered into two syndicated loan agreements for term loan facilities of NT\$17,500.0 million and US\$200.0 million, respectively. For a further description of these agreements, see “Item 5. Operating and Financial Review and Prospects—Liquidity and Capital Resources,” and Schedule 13E-3, as amended, filed by ASE Test with the United States Securities and Exchange Commission, or the SEC, on May 30, 2008.

Currently, ASE Test’s subsidiaries comprise ASE Test Malaysia, ISE Labs and ASE Singapore Pte. Ltd., all of which ASE Test wholly owns.

Acquisition of Shares of Universal Scientific

On February 3, 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 (US\$421.8 million) in total, resulting in our ownership of 78.1% of the outstanding common shares of Universal Scientific, including the shares we held prior to the acquisition. Universal Scientific's shareholders received 0.34 common shares of ASE Inc., owned by our two subsidiaries (totaling 218,166,985

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shares), for each United Scientific common share plus cash (equivalent to NT\$21 less 0.34 multiplied by the lowest of the average closing price of our common shares for the last one, three and five trading days prior to the last day of the tender offer period). As a result, Universal Scientific became our consolidated subsidiary.

For more information on our history and development, see “-Organizational Structure.”

**BUSINESS OVERVIEW**

We are the world’s largest independent provider of semiconductor packaging and testing services based on 2009 revenues. Our services include semiconductor packaging, production of interconnect materials, front-end engineering testing, wafer probing and final testing services. As a result of our acquisition of Universal Scientific, we now provide integrated solutions for electronics manufacturing services in relation to computers, peripherals, communications, industrial, automotive, and storage and server applications. We believe that, as a result of the following, 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 in 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 the trend for semiconductor companies to outsource their packaging and testing requirements is accelerating as semiconductor companies increasingly rely on independent providers of foundry and advanced packaging and testing services. In response to the increased pace of new product development and shortened product life and production cycles, semiconductor companies are increasingly seeking independent packaging and testing companies that can provide turnkey services in order to reduce time-to-market. We believe that our expertise and scale in advanced technology and our ability to integrate our broad range of solutions into turnkey 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 electronics manufacturing service providers, which are the end users of our customers’ products. 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. Our close proximity to end users of our customers’ products is attractive to our customers who wish to take advantage of the logistical efficiencies of direct shipment services that we offer. We believe that, as a result, we are well positioned to meet the advanced semiconductor engineering and manufacturing requirements of our customers.

Our global base of over 200 customers includes leading semiconductor companies across a wide range of end-use applications, such as:

- Atmel Corporation
- ATI Technologies, Inc.
- Broadcom Corporation
- NEC Electronics Corporation(1)
- NVIDIA Corporation
- NXP Semiconductors

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- Cambridge Silicon Radio Limited
- Freescale Semiconductor, Inc.
- Infineon Technologies
- Marvell Technology Group Ltd.
- Media Tek Inc.
- Microsoft Corporation
- Mstar Semiconductor Inc.
- Powerchip Semiconductor Corp.
- Qualcomm Incorporated
- Silicon Laboratories International Pte. Ltd.
- STMicroelectronics N.V.
- Toshiba Corporation
- Zoran Corporation

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(1) NEC Electronics Corporation has been renamed as Renesas Electronics Corporation after its merger with Renesas Technology effective April 1, 2010.

## 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, computers 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 billion in 1990 to approximately US\$219.7 billion in 2009. As a result of the global economic crisis, demand for semiconductors plummeted in the fourth quarter of 2008 and in the first quarter of 2009. Although the rate of growth may begin to slow, we believe that overall growth and cyclical fluctuations will continue over the long-term in the semiconductor industry.

### Electronic Manufacturing Services

According to Gartner, Inc., the overall size of the global market for electronics manufacturing services and original design manufacturing was estimated at approximately US\$314 billion for 2009. Electronics 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 are no longer forced to maintain large inventories of products. Outsourcing will also enable them to still respond quickly and efficiently to sudden spikes in demand.

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



### Outsourcing Trends in Semiconductor Manufacturing

Historically, semiconductor companies designed, manufactured, packaged and tested semiconductors primarily in their own facilities. Over the past several years, there has been a trend in the industry to outsource stages in the manufacturing process. Virtually every significant stage of the manufacturing process can be outsourced. Wafer foundry services and semiconductor packaging and testing services are currently the largest segments of the independent semiconductor manufacturing services market. Most of the world's major integrated device manufacturers use some independent manufacturing services to maintain a strategic mix of internal and external manufacturing capacity.

The availability of technologically advanced independent manufacturing services has also enabled the growth of "fabless" semiconductor companies that focus on semiconductor design and marketing and outsource 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

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and testing services. Similarly, the availability of technologically advanced independent manufacturing services has encouraged integrated device manufacturers, which had traditionally 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 from current levels 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. Technical expertise becomes increasingly important as the industry transitions from one generation of technology to another, as evidenced by the current migration of the fabrication process from 8-inches to 12-inches in sub-micron technology and the size of technology nodes fabricated from 65 nm to 45 nm, as well as the integration of different functions into a single-chip service. 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 packaging, testing and fabrication 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 and foundry 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.

In recent years, semiconductor companies have significantly reduced their investment in in-house packaging and testing technologies and capacity. 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 packaging and testing operations focusing on low-end leadframe-based packages are under increasing pressure to rationalize these operations by relocating to locations with lower costs or better infrastructure, such as the PRC, in order to lower manufacturing costs and shorten production cycle time. We expect semiconductor companies to increasingly outsource their packaging and testing requirements to take advantage of the advanced technology and scale of operations of 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 in outsourcing. 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

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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 also has an educated labor pool and a large number of engineers suitable for sophisticated manufacturing industries such as semiconductors.

Notwithstanding the recent effects of the global economic crisis, 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, long-term loans at favorable rates and research and development support, both directly and indirectly 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 Asian Regions

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 electronics 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 from circuit design to shipment:

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

Process	Description
Circuit Design	The design of a semiconductor is developed by laying out circuit components and interconnections.
Front-End Engineering Test	Throughout and following the design process, prototype semiconductors undergo front-end engineering testing, which involves software development, electrical design validation and reliability and failure analysis.
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.
Wafer Probe	Each individual die is electrically tested, or probed, for defects. Dies that fail this test are marked to be discarded.
Packaging	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. 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 wires or bumps to the input/output terminals on the chips, through the use of automated machines known as “bonders.” Each chip is then

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Process	Description
	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.
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 final testing and memory final testing. Memory final testing typically requires simpler test software but longer testing time per device tested.

Strategy

Our objective is to provide semiconductor packaging and testing services and interconnect materials design and production capabilities which set industry standards 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 fine-pitch wire bonding, stacked die packaging and bump chip carrier packaging. 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 accelerate our single outline legacy packaging production in Shanghai and expand into the discrete packaging business by leveraging the existing assets of ASE (Weihai), Inc. in Shandong, China.

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. We currently provide module assembly services primarily at our facilities in Korea. 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 test, which helps us to better anticipate industry trends and take advantage of potential growth opportunities. We expect to combine our packaging, testing and materials technologies with the expertise of Universal Scientific at the systems level to develop our system-in-package (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 through selective acquisitions and joint ventures, with a focus on providing cost competitive and innovative packaging and testing services.

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For our advanced packaging and testing business, we intend to invest in trends that are essential to the development of the industry. We plan to expand our capacity with respect to, among other things, 12-inch wafer process, bumping, FC-CSP and system-in-a-package products to meet demand for smaller form factors, higher performance and higher packaging density. We believe rising commodity prices will expedite the migration from leadframe and BGA-based packaging to flip-chip packaging and wafer level packaging, as the cost differential narrows. We intend to increase our capacity for flip-chip packaging and wafer level packaging in order to cope with rising demand for these packaging technologies.

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, which have in the past impacted our profitability. We believe that replacing gold wire in some of our packages with the copper wire technology that we are developing will enable us to provide more value to our customers, which will enhance our competitiveness. We plan to focus initially on integrating copper wire into traditional leadframe-based packages and thereafter into higher end substrate-based packages.

For our legacy packaging and testing business, we expect to focus on providing cost competitive services through our China operations by leveraging China's lower cost of labor and land and a rapidly growing end market. Our clients may also benefit from easier inventory management and savings in transportation costs and taxes by outsourcing their packaging and testing requirements to China. Through better management of capacity utilization and efficiency improvements, we plan to offer cost competitive legacy packaging and testing services on a large scale with the intention of driving more integrated device manufacturer outsourcing in the long-run.

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. In July 2006, we entered into a joint venture with Powerchip, a DRAM manufacturer in Taiwan that focuses on the packaging and testing of memory semiconductors, in order to help develop our capabilities with respect to memory semiconductors and to benefit from future growth in the market for memory products. The joint venture began operations in December 2006. In January 2007, we completed the acquisition of GAPT, a company that provides wire bond packaging and testing services for a wide range of semiconductors. In September 2007, we and NXP Semiconductors formed a joint venture in Suzhou, China focused on semiconductor testing and packaging. We currently own a 60.0% interest in the joint venture. In May 2008, we completed the acquisition of ASE (Weihai), Inc., a company that also engages in semiconductor packaging and testing services. On February 3, 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, amounting to NT\$13,475.1 million (US\$421.8 million), resulting in our ownership of 78.1% of the outstanding common shares of Universal Scientific, including the shares we held prior to the acquisition. Universal Scientific is an electronics 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 enhance our cooperation with Universal Scientific to provide our customers with more value-added products.

### 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 electronics 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 electronics 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, all within relatively close geographic proximity to our customers, complementary service providers and the end users of our customers' products. In addition to our current operations, we intend to expand our packaging and testing operations in Chung Li, Taiwan to better serve our customers located in northern Taiwan and customers who request that we maintain the capability of packaging and testing their products at more than one location in Taiwan.

In addition to our locations in Taiwan, we have primary operations in the following locations:

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IPRC — a fast-growing market for semiconductor and electronics manufacturing for domestic consumption and our primary sites for serving legacy packaging clients and electronics manufacturing services;

1 Korea — an increasingly important center for the manufacturing of memory and communications devices;

1 Malaysia and Singapore — an emerging center for outsourced semiconductor manufacturing in Southeast Asia;

1 Silicon Valley in California — the preeminent center for semiconductor design, with a concentration of fabless customers; and

1 Japan — an emerging market for semiconductor packaging and testing services as Japanese integrated device manufacturers increasingly outsource their semiconductor manufacturing requirements.

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

We intend to strengthen existing, and develop new, strategic relationships with 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.

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. In addition, on February 23, 2009, we and AMPI, a provider of foundry services, signed a memorandum of understanding to enter into a strategic alliance focused on providing semiconductor manufacturing turnkey services.

## Principal Products and Services

We offer a broad range of advanced and legacy semiconductor packaging and testing services. Our package types employ either leadframes or substrates as interconnect materials. The semiconductors we package are used in a wide range of end-use applications, including communications, computers, 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 logic semiconductors. We offer our customers turnkey services which consist of packaging, testing and direct shipment of semiconductors to end users designated by our customers. In 2007, 2008 and 2009, our packaging revenues accounted for 77.6%, 77.7% and 79.2% of our net revenues, respectively, and our testing revenues accounted for 19.8%, 20.1% and 18.4% of our net revenues, respectively.

Since the acquisition of Universal Scientific in February 2010, in addition to packaging and testing services, we provide integrated solutions for electronics manufacturing services in relation to computers, peripherals, communications, industrial, automotive, and storage and server applications.

## Packaging Services

We offer a broad range of package types to meet the requirements of our customers, with a focus on advanced packaging solutions. Within our portfolio of package types, we focus on the packaging of semiconductors for which there is expected to be strong demand. These include advanced 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,

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aQFN (advanced QFN) and package types based on substrates, such as flip-chip BGA, flip-chip CSP and other BGA types as well as other advanced packages such as wafer-level products, aCSP (advanced chip scale packages) and aWLP (advanced wafer level packages, fan-out). 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, and low cost flip-chip packages (a-fcCSP) solutions for our customers. Furthermore, we provide flexible 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 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.

The semiconductor packaging industry has evolved to meet the advanced packaging requirements of high-performance semiconductors. The development of high-performance electronics products has spurred the innovation of semiconductor packages that have higher interconnect density and better electrical performance. As a part of this technology migration, 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.

**Leadframe-Based Packages.** Leadframe-based packages are packaged by connecting the die, using wire bonders, to the leadframe with gold wire. As packaging technology improves, the number of leads per package increases. Packages have evolved from the lower pin-count plastic dual in-line packages to higher pin-count quad flat packages. 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. The following table sets forth our principal leadframe-based 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	Multimedia applications, cellular phones, personal computers, automotive and industrial products, hard disk drives,

processors.

communication boards such as ethernet, integrated services digital networks and notebook computers.

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Package Types	Number of Leads	Description	End-Use Applications
Quad Flat No-Lead Package (QFN)/Microchip Carrier (MCC)	12-84	QFN, also known as 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.	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 called FSRAM, and flash memory devices.	Consumer audio/video and entertainment products, cordless telephones, pagers, fax machines, printers, copiers, personal computer 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.

**Substrate-Based Packages.** Substrate-based packages generally employ the BGA design, which utilizes a substrate rather than a leadframe. 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.

The BGA package type was developed in response to the requirements of advanced semiconductors. The benefits of the BGA package type include:

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- smaller package size;
- higher pin-count;
- greater reliability;
- superior electrical signal transmission; and
- better heat dissipation.

The industry demand for BGA packages has grown significantly in recent years. BGA packages are generally used in applications where size, density and performance are important considerations, such as cellular handsets and high pin-count graphic chipsets. Our expertise in BGA packages also includes capabilities in stacked-die BGA, which assembles multiple dies into a single package. As an extension to stacked-die BGA, we also assemble system-in-a-package (SiP) products, which involve the integration of more than one chip into the same package. We believe that we are among the leaders in these packaging technologies.

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. In anticipation of this demand, we have focused on developing our capabilities in some advanced packaging solutions, such as flip-chip BGA, flip-chip CSP, aMAP POP. 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.

The following table sets forth our principal substrate-based packages.

Package Types	Number of Leads	Description	End-Use Applications
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.
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	Cellular phones, personal digital assistants and system boards.



this technology, the memory  
known good die issue can be  
mitigated and the development  
cycle time and cost can be  
reduced.

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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.
Cavity Down BGA	256-1140	Designed for memory devices such as flash memory devices, SRAM, DRAM and FSRAM, microprocessors/controllers and high-value, application-specific integrated circuits requiring a low profile, light and small package.	Telecommunications products, wireless and consumer systems, personal digital assistants, disk drives, notebook computers and memory boards.
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.
Flip-Chip BGA	16-2916	Using advanced interconnect technology, the flip-chip BGA package allows higher density of input/output connection over the entire surface of the dies. Designed for high-performance semiconductors that require high density of interconnects in a small package.	High-performance networking, graphics and processor applications.
Hybrid (Flip-Chip and Wire Bumping)	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 interconnecting them with wire bonding and molding. This technology suffers from known good die issues (i.e., one bad die will ruin the entire module).	Digital cameras, smartphones, Bluetooth applications and personal digital assistants.

Rework is also not an option in hybrid packages.

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 flexible routing and are capable of multichip module functions.

High frequency integrated circuits such as wireless communications products, computers servers and personal computer peripherals.

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

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 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.

We provide numerous technologies to meet various customer demands. The following table sets forth our principal wafer-level packaging products:

Package Types	Number of Leads	Description	End-Use Applications
Wafer Level Chip Scale Package (aCSP)	6-88	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.
Advanced Wafer Level Package (aWLP)	189-364	This technology allows the “fanout” of the package I/Os using an area larger than the die size without the need for a separate substrate. It offers cost effective alternatives to flip-chip and wire bumping packaging. 2D and 3D multi-die packages can enable leadless, multi-row and fine-pitch leadframe packages with enhanced thermal and electrical performance.	Telecommunications products, basebands and multiband transceivers.

Module Assembly. 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 surface mount technology, or 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 and toys. We currently provide module assembly services primarily at our facilities in Korea for radio frequency and power amplifier modules used in wireless communications and automotive applications.

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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. In 2009, our interconnect materials operations supplied approximately 54.4% 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,		
	2007	2008	2009
	(percentage of packaging revenues)		
Advanced substrate and leadframe-based packages(1)	86.7%	88.0%	88.9%
Traditional leadframe-based packages(2)	4.3	4.7	5.3
Module assembly	6.2	4.1	3.0
Other	2.8	3.2	2.8
Total	100.0%	100.0%	100.0%

(1) Includes leadframe-based packages such as QFP/TQFP, QFN/MCC and BCC and substrate-based packages such as various BGA package types (including flip-chip and others) and LGA.

(2) Includes leadframe-based packages such as SOP/TSOP, SOJ, PLCC and PDIP.

### 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/Discrete and memory final testing 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 and conversion programs on multiple equipment platforms for particular semiconductors.

In recent years, complex, high-performance logic/mixed-signal/RF/discrete 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 semiconductor using advanced testing equipment. Customized software, developed on specific testing platforms, is required to test the conformity of each particular semiconductor type to its unique functionality and specification.

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- **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.

**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/Discrete Final Testing.** We conduct final tests of a wide variety of logic/mixed-signal/RF/discrete semiconductors, with the number of leads ranging from the single digits to over one thousand and operating frequencies of over 5 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, chipsets, graphics and disk controllers for home entertainment and personal computer applications, as well as a variety of consumer and application-specific integrated circuits for various specialized applications.

**Memory Final Testing.** We provide final testing services for a variety of memory products, such as SRAM, DRAM, single-bit erasable programmable read-only memory semiconductors and flash memory semiconductors.

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

- **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 bench instrument testing and stand-alone testing to our customers with a complete solution with respect to wireless instruments, 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 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; and
-



Electric Interface Board and Mechanical Test Tool Design. Process of designing individualized testing apparatuses such as test load boards and probe cards for unique semiconductor devices and packages.

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/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

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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.

	Year Ended December 31,		
	2007	2008	2009
	(percentage of testing revenues)		
Testing Services:			
Front-end engineering testing	3.6%	3.2%	2.9%
Wafer probing	20.1	18.1	13.9
Final testing	76.3	78.7	83.2
Total	100.0%	100.0%	100.0%

Electronic Manufacturing Services. Since our acquisition of Universal Scientific in February 2010, we also provide integrated solutions for electronics manufacturing services in relation to computers, peripherals, communications, industrial, automotive, and storage and server applications.

## Seasonality

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

## Sales and Marketing

## Sales and Marketing Offices

We maintain sales and marketing offices in Taiwan, the United States, Austria, Belgium, France, Germany, Singapore, the Philippines, the PRC, Korea, Malaysia, Japan and other countries. 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

In 2009, our global base of over 200 customers includes leading semiconductor companies across a wide range of end-use applications, such as:

- Atmel Corporation
- ATI Technologies, Inc.
- Broadcom Corporation
- Cambridge Silicon Radio Limited
- NEC Electronics Corporation (Renesas Electronics Corporation effective on April 1, 2010)
- NVIDIA Corporation
- NXP Semiconductors

- Freescale Semiconductor, Inc.
- Infineon Technologies
- Marvell Technology Group Ltd.
- Media Tek Inc.
- Microsoft Corporation
- Mstar Semiconductor Inc.
- Powerchip Semiconductor Corp.
- Qualcomm Incorporated
- Silicon Laboratories International Pte. Ltd.
- STMicroelectronics N.V.
- Toshiba Corporation
- Zoran Corporation

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Our five largest customers together accounted for approximately 24.8%, 27.1% and 28.4% of our net revenues in 2007, 2008 and 2009, respectively. No customer accounted for more than 10% of our net revenues in 2007, 2008 and 2009.

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

	Year Ended December 31,		
	2007	2008	2009
Communications	44.5%	44.7%	46.2%
Computers	22.8	22.8	16.8
Consumer electronics/industrial/automotive	32.1	32.1	36.0
Other	0.6	0.4	1.0
Total	100.0%	100.0%	100.0%

Many of our customers are leaders in their respective end-use markets. For example, we provide Freescale Semiconductor, Inc., an industry leader in automotive and communications semiconductor products, with a substantial portion of its outsourced packaging and testing requirements. The following table sets forth some of our largest customers, in alphabetical order, categorized by the principal end-use applications of the products which we package and test for them.

Communications	Computers	Consumer Electronics/Industrial/Automotive
Broadcom Corporation	Marvell Technology Group Ltd.	Freescale Semiconductor, Inc.
Cambridge Silicon Radio Limited	ATI Technologies, Inc.	Microsoft Corporation
Infineon Technologies	NVIDIA Corporation	Mstar International Inc.
Media Tek Inc.	Powerchip Semiconductor Corp.	NEC Electronics Corporation
NXP Semiconductors	STMicroelectronics N.V.	(Renesas Electronics Corporation effective on April 1, 2010)
Qualcomm Incorporated		STMicroelectronics N.V.
Silicon Laboratories International Pte. Ltd.		Toshiba Corporation
		Zoran Corporation

We categorize our packaging and testing 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 packaging and testing revenues.

	Year Ended December 31,		
	2007	2008	2009
America	49.8%	53.0%	52.6%
Taiwan	21.2	19.8	20.8
Asia	16.6	13.7	14.0
Europe	12.4	13.5	12.6

Other	*	*	*
Total	100.0%	100.0%	100.0%

\* Indicates percentage is less than 0.1% of net revenues.

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The majority of our testing revenues is accounted for by the testing of semiconductors that were also packaged at our packaging facilities. The balance represented testing revenues from customers who delivered packaged semiconductors directly to our facilities for testing services alone. The majority of our packaging revenues is accounted for by the packaging of semiconductors which were subsequently tested at our facilities. We expect that more customers of our packaging facilities will begin to contract for our packaging and testing services on a turnkey basis.

### 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.

### Pricing

We price our packaging services primarily on a cost-plus basis 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 and testing services are confirmed at the time firm orders are received from customers, which is typically four to eight 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. Interconnect materials, such as leadframes, substrates, gold wire and molding compound represented approximately 10.4%, 33.2%, 38.7% and 6.9%, respectively, of our total cost of packaging materials in 2009.

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 for approximately one month's production 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, typically in amounts equal to the average monthly amounts supplied to

us, 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. Recent fluctuations in gold and copper prices have also affected the price at which we have been able to purchase the principal raw materials. 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 and at a reasonable price. In the

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event of a shortage, we generally inform our customers and work together to accommodate changes in delivery schedules.

We produce substrates for use in our packaging operations. In 2009, our interconnect materials operations supplied approximately 54.4% of our consolidated substrate requirements by value. See “—Principal Products and Services—Packaging 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 on the environmental requests on our products, such as Directive 2002/95/EC may have a material adverse effect on our results of operations.

### Testing

Apart from packaged semiconductors, no other raw materials are needed for the functional and burn-in testing of semiconductors. 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.

### 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. As of March 31, 2010, we operated an aggregate of 9,817 wire bonders, of which 9,440 were fine-pitch wire bonders. As of the same date, 48 of the wire bonders operated by us were consigned by customers. For the packaging of certain types of substrate-based packages, such as flip-chip BGA, die bonders are used in place of wire bonders. We purchase our die bonders principally from Hitachi High Technologies Corporation and ASM Assembly Automation Ltd. 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 Towa Corporation, Fico B.V. and ASM Assembly Automation Ltd.

### 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 Verigy Ltd., Teradyne, Inc., Credence Systems Corporation, LTX 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 March



31, 2010, we operated an aggregate of 1,634 testers, of which 299 were consigned by customers and 42 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.

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Test programs, which are the software that drive the testing of specific semiconductors, are written for a specific testing platform. We often 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 personal 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.

## Intellectual Property

As of April 30, 2010, we held 1,500 Taiwan patents, 508 U.S. patents and 175 PRC patents related to various semiconductor packaging technologies. In addition, we also filed several trademarks applications in Taiwan, the United States and China. For example, “ASE”, “aCSP”, “iWLP”, “iSiP”, “aQFN”, “a-QFN”, “aWLP”, “a-WLP” and “a-fcCSP” 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 Freescale Semiconductor Inc., Tessera Inc., Fujitsu Limited, Flip Chip International, L.L.C., Mitsui High-Tec, Inc. and Infineon Technologies AG. We paid royalties under our license agreements in the amount of NT\$246.8 million, NT\$199.2 million and NT\$200.6 million (US\$6.3 million) in 2007, 2008 and 2009, respectively. 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 and aQFN. The license agreement with Tessera Inc. will not expire until the expiration of the Tessera Inc. patents licensed by the agreement. For information regarding our intellectual property dispute with Tessera, see “Item 8. Financial Information—Legal Proceedings.” Our license agreements with Freescale Semiconductor Inc. will expire on December 31, 2010. Our license agreements with Flip Chip International, L.L.C. will not expire until the expiration of the Flip Chip International, L.L.C. patents licensed by the agreement. Our license agreement with Infineon Technologies AG will expire on November 5, 2017, and our license agreement with Mitsui High-Tec, Inc. will expire on June 24, 2012. Our license agreement with Fujitsu Limited renews automatically each year unless the parties to the agreement agree otherwise.

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 packaging and testing services. We maintain a quality control staff at each of our facilities. Our quality control staff typically includes engineers, technicians and other employees who monitor packaging and testing 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 service to customers, high product and 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 packaging and testing 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.

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Our packaging, testing and interconnect materials facilities in Taiwan, Malaysia, Japan, the PRC, Singapore and Korea have been certified as meeting ISO/TS16949:2002 standards. Such 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. The ISO/TS16949:2002 certification is required by some semiconductor manufacturers as a threshold indicator of company's quality control standards.

Our packaging, testing and interconnect materials facilities in Taiwan, Japan, Korea, Malaysia, the PRC, California and Singapore have been certified as meeting the ISO 9001 quality standards set by the ISO. Our packing, testing and interconnect materials facilities in Taiwan, Japan, Korea, Malaysia, the PRC, California and Singapore have also been certified as meeting the ISO 14001 quality standards. In addition, our packaging facilities in Kaohsiung, Taiwan have been certified as meeting the ISO 17025:2005 quality standards set by the ISO. ISO certifications are required by many countries in connection with sales of industrial products.

Our packaging, testing and interconnect materials facilities in Taiwan, Korea, Singapore and the PRC have also been certified to be in compliance with OHSAS 18001, 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.

ISE Labs's testing facilities in Fremont, California have been approved by the U.S. military's Defense Supply Center, Columbus, Sourcing and Qualifications Unit as a laboratory possessing the requisite level of performance, quality and reliability required of suppliers for the U.S. Department of Defense.

Our packaging, testing and interconnect materials facilities in Taiwan, Malaysia, the PRC, Japan, Singapore and Korea have been certified as a "Sony Green Partner", which indicates our compliance with the "Sony Green Package" standard requirements.

Our packaging, testing and interconnect material facilities in Taiwan, the PRC, Japan, Korea and Malaysia have been certified to be in compliance with IECQ HSPM QC080000, a certification designed to manage, reduce and eliminate hazardous substances.

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

Location	ISO 14001	TL 9000 (1)	ISO 9001	ISO/TS 16949	OHSAS18001	IECQ QC 080000	ISO 17025 (2)	ISO 13485 (3)
Taiwan	✓	✓	✓	✓	✓	✓	✓	✓
Shenzhen, PRC	✓	✓	✓	✓	✓	✓		
Shanghai, PRC	✓	✓	✓	✓	✓	✓		
Mexico	✓		✓	✓		✓		

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

(2) ISO 17025 is the main standard used by testing and calibration laboratories.

(3) ISO 13485 specifies requirements for a quality management system where an organization needs to demonstrate its ability to provide medical devices and related services that consistently meet customer requirements and regulatory requirements applicable to medical devices and related services.

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

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### 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.

Since the acquisition of Universal Scientific in February 2010, we also provide electronic manufacturing services. We face significant competition from other electronics 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 packaging and interconnect materials operations 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 all of our semiconductor packaging facilities. We believe that we have adopted adequate anti-pollution measures for the effective maintenance of environmental protection standards that are consistent with the 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.

### 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.

## ORGANIZATIONAL STRUCTURE

The following chart illustrates our corporate structure including our principal operating subsidiaries as of April 30, 2010. The following chart does not include wholly-owned intermediate holding companies and internal trading companies.

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Our Consolidated Subsidiaries

ASE Test Taiwan

ASE Test Taiwan, which was acquired in 1990, is our 99.99%-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 and Santa Clara, California. Through ASE Test, we acquired 70.0% of the outstanding shares of ISE Labs in 1999, and increased our holding to 100.0% through purchases made in 2000 and 2002.

ASE Singapore Pte. Ltd.

ASE Singapore Pte. Ltd. is incorporated in Singapore and provides testing services. It was previously our wholly-owned subsidiary through ISE Labs's 100% interest. Through a restructuring in November 2008, we acquired 100% of ASE Singapore Pte. Ltd. through one of our wholly-owned intermediate holding companies.

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



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requirements. The facilities of ASE Electronics are primarily located in the Nantze Export Processing Zone near our packaging and testing facilities in Kaohsiung, Taiwan.

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 with principally communications, consumer and automotive applications, thereby forming ASE Chung Li and ASE Korea. In August 2004, we acquired all of the outstanding shares of ASE Chung Li that we did not already own by means of a merger of 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.

PowerASE Technology, Inc.

In July 2006, we established PowerASE, a joint venture with Powerchip, focusing on the packaging and testing of memory semiconductors. PowerASE began operations in December 2006. Pursuant to the joint venture agreement, we invested US\$30.0 million for 60.0% of the equity interest in PowerASE and Powerchip invested US\$20.0 million for the remaining 40.0%. We currently own 56.0% of PowerASE, and Powerchip and its subsidiaries own 33.1%. The remaining 10.9% is owned by our employees and certain other individuals.

ASE Assembly & Test (Shanghai) Limited

We acquired 100.0% of GAPTECH, now known as ASES AT, in January 2007. ASES AT is a PRC company based in Shanghai, China that provides wire bond packaging and testing services for a wide range of semiconductors.

ASEN

In September 2007, we acquired 60.0% of ASEN from NXP Semiconductors. ASEN is based in Suzhou, China and is engaged in semiconductor packaging and testing.

ASE (Weihai), Inc.

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

Universal Scientific Group (Since February 2010)

Universal Scientific, which is an ROC company, manufactures electronics products in varying degrees of system integration principally on a contract basis for original equipment manufacturers, including:

- electronic components such as thick film mixed-signal devices, thick film resistors, high frequency devices and automotive and power electronic devices;
- board and sub-system assemblies such as customized surface mount technology board assemblies, mother boards for personal computers, wireless local area network cards and fax control boards; and
  - system assemblies such as portable computers, desktop personal computers, network computers and servers.

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We purchased 22.6% of the outstanding shares of Universal Scientific in 1999. We subsequently increased our holding to 23.3% in 2000. As of December 31, 2009, we held approximately 18.1% of Universal Scientific's outstanding equity shares, which allowed us to exercise significant influence over Universal Scientific and therefore accounted for this investment by the equity method.

On February 3, 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 with NT\$21 per shares, amounting to NT\$13,475.1 million (US\$421.8 million) in total, resulting in our ownership of 78.1% of the outstanding common shares of Universal Scientific, including the shares we held prior to the acquisition. Universal Scientific's shareholders received 0.34 common shares of ASE Inc., owned by our two subsidiaries (totaling 218,166,985 shares), for each United Scientific common share plus cash (equivalent to NT\$21 less 0.34 multiplied by the lowest of the average closing price of our common shares for the last one, three and five trading days prior to the last day of the tender offer period). As a result, Universal Scientific became our consolidated subsidiary. On April 19, 2010, the board of directors of ASE Inc. approved a cash-based acquisition of all outstanding Universal Scientific shares, not already owned by ASE, at NT\$21 per share.

Universal Scientific's principal manufacturing facilities are located in Nantou, Taiwan, and Shenzhen and Shanghai, China. The shares of Universal Scientific are listed on the Taiwan Stock Exchange under the symbol "2350". On April 19, 2010, Universal Scientific convened its board meeting to resolve the delisting application for Universal Scientific shares. On May 28, 2010, Taiwan Stock Exchange Corporation approved the delisting, which will become effective on June 17, 2010.

In 2007, Universal Scientific recorded net revenues of NT\$65,124.1 million, operating income of NT\$2,055.3 million and net income, excluding minority interests, of NT\$1,868.4 million. In 2008, Universal Scientific recorded net revenues of NT\$64,809.4 million, operating income of NT\$908.4 million and net income, excluding minority interests, of NT\$342.6 million. In 2009, Universal Scientific recorded net revenues of NT\$51,517.2 million (US\$1,612.4 million), operating income of NT\$1,855.2 million (US\$58.1 million) and net income, excluding minority interests, of NT\$1,734.6 million (US\$54.3 million).

#### 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 facilities as of April 30, 2010.

Facility	Location	Commencement of Operation	Primary Use	Approximate Floor Space (in sq. ft.)	Owned or Leased
ASE Inc.	Kaohsiung, Taiwan	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 packaging services,	3,189,000	Land: leased Buildings: owned and leased

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

Chung Li, Taiwan	Acquired in July 1999	An integrated packaging and testing facility that specializes in semiconductors for communications and consumer applications.	1,718,000	Land and buildings: owned
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Facility	Location	Commencement of Operation	Primary Use	Approximate Floor Space (in sq. ft.)	Owned or Leased
ASE Test Taiwan	Kaohsiung, Taiwan	December 1987	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/discrete testing for integrated device manufacturers, fabless design companies and system companies.	925,000	Land: leased Buildings: owned and leased
	Chung Li, Taiwan	October 2001	Our primary wafer probing testing facilities.	18,000	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.	621,000	Land and buildings: owned
ISE Labs	Silicon Valley, California, Austin, Texas	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 Texas.	108,000	Land and buildings: owned and leased
ASE Singapore	Singapore	Acquired in May 1999	An integrated testing, sorting and related backend supporting facility that specializes in semiconductors for communication, computers and consumer applications.	111,000	Land and buildings: leased
ASE Shanghai	Shanghai, China	June 2004	Design and production of semiconductor packaging materials.	1,431,000	Land: leased Buildings: owned

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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, Taiwan	August 2006	Facilities for the design and production of interconnect materials such as substrates used in the packaging of semiconductors.	311,000	Land and buildings: leased

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Facility	Location	Commencement of Operation	Primary Use	Approximate Floor Space (in sq. ft.)	Owned or Leased
	Chung Li, Taiwan	August 2006	Facilities for the design and production of interconnect materials such as substrates used in packaging of semiconductors.	237,000	Buildings: leased
PowerASE	Chung Li, Taiwan	December 2006	An integrated packaging and testing facility that specializes in memory semiconductors for personal computer applications.	212,000	Buildings: leased
ASESH AT	Shanghai, China	Acquired in January 2007	An integrated packaging and testing facility that specializes in semiconductors for communications and consumer applications.	796,000	Land: leased Buildings: owned
ASEN	Suzhou, China	Acquired in September 2007	An integrated packaging and testing facility that specializes in communication applications.	429,000	Land: leased Buildings: owned
ASE (Weihai), Inc.	Shandong, China	Acquired in May 2008	An integrated packaging and testing facility that specializes in semiconductors for communications, computers and consumer applications.	167,000	Land: leased Buildings: owned
Universal Scientific Industrial Co., Ltd.	Nantou, ROC	February 1974	Manufacturing site, the parent company of Universal Scientific Industrial (“USI”) Group, manufactures, maintains and markets motherboards for notebook and desktop personal computers (PCs), desktop PC systems, communications products, and various electronic components such as thick film resistors, thick film hybrid integrated circuits (ICs) and automotive parts.	1,009,000	Land: owned Buildings: owned and leased
Universal Scientific Industrial De Mexico S.A.	Guadalajara, Mexico	September 1997	Manufacturing site, which offer Motherboard manufacture and system assembly.	383,000	Land: owned Buildings: owned

De C.V. USI Japan Co., Ltd.	Yokohama, Japan	March 2000	After-sales services on USI's products sold outside Taiwan.	1,000	Buildings: leased
USI @Work, Inc.	North Carolina, U.S.A.	February 2001	1. After-sales services on USI's products sold outside Taiwan 2. This location is warehouse and repair center.	11,000	Buildings: leased
USI Electronics (Shenzhen) Co., Ltd.	Shenzhen, China	June 2000	Manufacturing site, design, manufacture and marketing of motherboards, electronic components, accessories and related products in China.	495,000	Land: leased Buildings: owned



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Facility	Location	Commencement of Operation	Primary Use	Approximate Floor Space (in sq. ft.)	Owned or Leased
USI Scientific Industrial (Shanghai) Co., Ltd.	Shanghai, China	February 2003	Manufacturing site, design, manufacture and marketing of motherboards, electronic components, accessories and related products in China.	709,000	Land: leased Buildings: owned and leased
Universal Global Technology (Shenzhen) Co., Ltd.	Shenzhen, China		Manufacturing site, design, manufacture and marketing of electronic components, accessories and related products.	129,000	Land and buildings: leased
USI Manufacturing Services, Inc.	California, U.S.A.	October 2000	Manufacturing site, assembly and manufacture of motherboards, manufacture of wireless communications products and repair services.	11,000	Buildings: leased
Universal Global Scientific Industrial Co., Ltd.	Nantou, ROC	February 2010	Design, manufacture and marketing of electronic components, accessories and related products.	314,000	Buildings: leased

Our 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, or the EPZA, under the Ministry of Economic Affairs. The leases have ten year terms that expire between June 2010 and August 2019. 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 months notice prior to the termination date.

For information on the aggregate capacity of our facilities in terms of the number of bonders and testers 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 and testing services. Since the acquisition of Universal Scientific in February 2010, we also provide electronic manufacturing services. In addition to offering each service separately, we also offer turnkey services, which consist of the integrated packaging, testing and direct shipment of

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semiconductors to end users designated by our customers. Our net revenues decreased from NT\$101,163.1 million in 2007 and NT\$94,430.9 million in 2008 to NT\$85,775.3 million (US\$2,684.7 million) in 2009.

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

### Global Economic Crisis

During the first half, and in particular the first quarter, of 2009, due to the global economic crisis our clients substantially reduced their demand for our services and we experienced a significant deterioration in sales volume, which led to a corresponding decline in our revenues. Although the worldwide demand for our services recovered significantly in the second half of 2009, this has not fully offset the negative impacts caused by the recession during the first half of 2009.

### Pricing and Revenue Mix

We price our services on a cost-plus basis, 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 the exchange rates, especially between NT dollars and U.S. dollars will affect our costs and, in turn, our pricing.

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.

The average selling prices of our testing services are more severely affected by a downturn in the semiconductor industry than the average selling prices of our packaging services. During an industry downturn, a decline in the average selling prices of our testing services is often exacerbated by a decrease in demand from our integrated device manufacturer customers, who typically maintain larger in-house testing capacity than in-house packaging capacity. These price declines are also exacerbated by intense price competition from other independent testing service providers, who typically offer large price discounts during periods of depressed demand in order to maintain higher capacity utilization rates to defray the high fixed costs associated with testing operations. In 2007, 2008 and 2009, packaging revenues, including revenues from module assembly, accounted for 77.6%, 77.7% and 79.2% while testing revenues accounted for 19.8%, 20.1% and 18.4%, respectively, of our net revenues.

We believe that, over the long term, the market for outsourced semiconductor testing services has more potential for growth than the market for outsourced semiconductor packaging services for two reasons. First, the portion of the semiconductor testing market that is currently accounted for by independent testing service providers is smaller than that for packaging. Second, the large capital expenditures needed for increasingly sophisticated testing equipment, as compared to less expensive packaging equipment, is also a driver for further outsourcing of testing services by integrated device manufacturers.

Declines in average selling prices have been partially offset over the last several years by changes in our revenue mix. 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 BGA and flip-chip BGA, 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.

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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 as a result of our acquisitions of packaging and testing equipment and facilities. Our profitability depends in part not only on absolute pricing levels for our services, but also on utilization rates for our packaging and testing 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 packaging and testing 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 packaged or tested using such machinery and equipment, the efficiency of our operations in terms of the loading and adjustment of machinery and equipment for the packaging or testing of 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.

The current generation of advanced testers typically cost between US\$1.0 million and US\$3.0 million each, while wire bonders used in packaging typically cost between US\$60,000 and US\$70,000 each. In 2007, 2008 and 2009, our depreciation and amortization included in cost of revenues as a percentage of net revenues was 15.1%, 16.7% and 18.9%, respectively. The increase in depreciation and amortization as a percentage of net revenues in 2009 compared to 2008 was primarily a result of a decrease in sales due to financial crisis, especially during the first quarter of 2009. See “Item 4. Information on the Company—Business Overview—Equipment.” We begin depreciating our equipment when it is placed into service. There may sometimes be a time lag between when our equipment is placed into service 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 net 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 testers operated under operating leases 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. 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 and the production of interconnect materials, as testing requires minimal raw materials. In 2007, 2008 and 2009, raw material cost as a percentage of our net revenues was 27.6%, 28.9% and 29.8%, respectively.

We have developed copper wire to gradually replace gold 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 cost of revenues. In 2009, the spot rate for gold fluctuated from

approximately US\$810 per ounce to approximately US\$1,218 per ounce. 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.

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### ASE Test Share Acquisition and Privatization

On May 30, 2008, we acquired, by way of a scheme of arrangement under Singapore law, all the outstanding ordinary shares of ASE Test that we did not already directly or indirectly own, making ASE Test our wholly-owned subsidiary. See “Item 4. Information on the Company—History and Development of the Company—ASE Test Share Acquisition and Privatization.” On May 30, 2008, ASE Inc. acquired from minority shareholders of ASE Test the remaining 53.4% of shares it did not own. As a result of the transaction, beginning on June 1, 2008, 100.0% of ASE Test’s net income or loss has been reflected in our consolidated net income. Any losses at ASE Test therefore have a greater adverse effect on our net income than prior to the effectiveness of the scheme of arrangement.

### Acquisition of Shares of Universal Scientific

On February 3, 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 (US\$421.8 million) in total, resulting in our ownership of 78.1% of the outstanding common shares of Universal Scientific, including the shares we held prior to the acquisition. As a result, Universal Scientific became our subsidiary and its net income or loss will be reflected in our consolidated net income or loss. Universal Scientific’s financial position may have a significant impact on our financial structure. See “Item 4. Information on the Company—History and Development of the Company—Acquisition of Shares of Universal Scientific.”

### Recent R.O.C. GAAP Accounting Pronouncements

Effective January 1, 2009, the Company adopted the newly revised ROC SFAS No. 10, “Accounting for Inventories (“ROC SFAS No.10”). The main revisions are (1) inventories are stated at the lower of cost or net realizable value, and inventories are written down to net realizable value item-by-item except when the grouping of similar or related items is appropriate; (2) unallocated overheads are recognized as cost of revenues in the period in which they are incurred; and (3) abnormal cost, write-downs of inventories and any reversal of write-downs are recorded as cost of revenues for the period. The adoption of ROC SFAS No.10 did not have a material impact on the Company’s consolidated financial statements.

### 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. We continually evaluate these estimates, including those related to revenue recognition, sales discounts, and allowances for doubtful accounts, inventory valuation, amortization of intangible assets and depreciation of property, plant and equipment, allowances for deferred income tax assets, pension expense, gains or losses on valuation of financial instruments, losses on impairment of assets, goodwill and investments, bonuses to employees, directors and supervisors and purchase price allocations on our investments. We base our estimates on historical experience and other assumptions which we believe to be reasonable under the circumstances. Actual results may differ from these estimates under different assumptions and conditions. We have identified below the accounting policies that are the most critical to our consolidated financial statements.

Revenue Recognition. Revenues are recognized upon completion of the services or shipment. We do not take ownership of:

- bare semiconductor wafers received from customers that we package into finished semiconductors; and

- packaged semiconductors received from customers that we test for performance specifications.

The title and risk of loss remains with the customer for those bare semiconductors and/or packaged semiconductors. Accordingly, the cost of customer-supplied semiconductor materials is not included in our consolidated financial statements. Other criteria that we use to determine when to recognize revenue are:

- existence of persuasive evidence of an arrangement;



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- the selling price is fixed or determinable; and
- collectibility is reasonably assured.

These policies are consistent with provisions issued by the SEC. We do not provide warranties to our customers except in cases of defects in the packaging services provided and deficiencies in testing services provided. An appropriate sales discount is recognized in the period during which the sale is recognized, and is estimated based on historical experience.

**Allowance for Doubtful Accounts.** We periodically record a provision for doubtful accounts based on our evaluation of the collectibility of our accounts receivable. The total amount of this provision is determined by us as follows. We first identify the receivables of customers that are considered to be a higher credit risk based on their current overdue accounts with us, difficulties collecting from these customers in the past or their overall financial condition. For each of these customers, we estimate the extent to which the customer will be able to meet its financial obligations to us, and we record an allowance that reduces our accounts receivable for that customer to the amount that we reasonably believe will be collected. For all other customers, we maintain an allowance for doubtful accounts equal to a percentage of their aggregate accounts receivable. As of December 31, 2007, 2008 and 2009, the allowance we set aside for doubtful accounts was NT\$109.7 million, NT\$99.2 million and NT\$68.7 million (US\$2.2 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. Materials received from customers for processing, mainly of semiconductor wafers, are excluded from inventories, as title and risk of loss remains with the customers. 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. An additional inventory provision may be required if actual market conditions are less favorable than those projected.

**Valuation Allowances for Deferred Income Tax Assets.** Tax benefits arising from deductible temporary differences, unused tax credits and net operating loss carryforwards are recognized as deferred income tax assets. We record a valuation allowance to the extent that we believe it is more likely than not that deferred income tax assets will not be realized. We have considered future taxable income and ongoing prudent and feasible tax planning strategies in assessing the need and amount for the valuation allowance. In the event we were to determine that we would be able to realize our deferred income tax assets in the future in excess of our net recorded amount, an adjustment to our deferred income tax assets would increase income in the period such determination was made. Alternatively, should we determine that we would not be able to realize all or part of our deferred income tax assets in the future, an adjustment to our deferred income tax assets would decrease income in the period such determination was made.

**Realizability of Long-Lived Assets.** We are required to evaluate our equipment and other long-lived assets for impairment whenever there is an indication of impairment. If certain criteria are met, we are required to record an impairment charge.

In accordance with ROC SFAS No. 35, long-lived assets held and used by us are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Under ROC GAAP, if the recoverable amount increases in a future period, the amount previously recognized as impairment will be reversed and recognized as a gain. However, the adjusted amount may not exceed the carrying amount that would have been determined, net of depreciation, had no impairment loss had been recognized. We measure any impairment for long-lived assets based on a projected future cash flow. If the long-lived assets are determined to be impaired, we

recognize an impairment loss to the extent the present value of discounted cash flows attributable to the assets are less than their carrying value. We also perform a periodic review to identify assets that are no longer used and are not expected to be used in future periods. An impairment charge is recorded to the extent, if any, that the carrying amount of the idle assets exceeds their fair value.

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The process of evaluating the potential impairment of long-lived assets requires significant judgment. We are required to review for impairment groups of assets related to the lowest level of identifiable independent cash flows. In addition, we must make subjective judgments regarding the remaining useful lives of assets and the expected future revenue and expenses associated with the assets. Any changes in these estimates based on changed economic conditions or business strategies may result in material impairment charges in future periods.

In accordance with U.S. GAAP, long-lived assets held and used by us are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. For purposes of evaluating the recoverability of long-lived assets, the recoverability test is performed by comparing undiscounted net cash flows of the assets against the carrying amount of the assets. If the recoverability test indicates that an impairment has occurred, the impairment loss is the amount of the asset's carrying amount in excess of the related fair value.

In 2007, we recognized impairment of NT\$816.2 million, on idle assets due to an impairment in our flip-chip substrate production line that was primarily the result of idle capacity, which was caused by lack of demand for certain applications. In 2008 and 2009, we recognized impairment of NT\$34.6 million and NT\$11.1 million (US\$0.3 million), respectively, on idle assets. See note 16 to our consolidated financial statements included in this annual report.

**Business Combinations.** When we acquire businesses, we allocate the purchase price to tangible assets and liabilities and identifiable intangible assets acquired. Any residual purchase price is recorded as goodwill. 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.

In May 2008, we acquired from minority shareholders 58,438,944 shares of ASE Test. See "Item 4. Information on the Company—History and Development of the Company—ASE Test Share Acquisition and Privatization" for more information on the ASE Test share acquisition and privatization. Pursuant to ROC SFAS No. 25 "Business Combinations", No. 37 "Intangible Assets", U.S. GAAP guidance relating to business combinations and goodwill and other intangible assets, acquired tangible assets were valued at estimates of their current fair value. The valuation of acquired intangible assets was determined based on management's estimates. Intangible assets of NT\$1,675.1 million consisted of patents, acquired special technology and customer relationships. These intangible assets are amortized on a straight-line basis over the estimated life of five to 11 years to reflect the pattern in which the economic benefits of the intangible asset are consumed or otherwise used up. In addition, we also recognized goodwill of NT\$6,271.2 million. We paid a premium for this acquisition in order to fully consolidate ASE Test's earnings with ours, simplify our organizational structure, reduce costs and administrative burdens associated with filing and compliance requirements relating to ASE Test's Nasdaq Global Market and Taiwan Stock Exchange listings and public company reporting obligations, enhance our brand recognition through the promotion of a single common brand and increase our flexibility in making investments and allocating resources among our subsidiaries.

On February 3, 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 (US\$421.8 million) in total, resulting in our ownership of 78.1% of the outstanding common shares of Universal Scientific, including the shares we held prior to the acquisition. See "Item 4. Information on the

Company—History and Development of the Company—Acquisition of Shares of Universal Scientific.” As of the date of this annual report, we have not completed the initial accounting for the acquisition of Universal Scientific.

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Goodwill. Goodwill is evaluated for impairment at least annually and we test for impairment between annual tests if an event occurs or circumstances change that would indicate that the carrying amount may be impaired. Goodwill is evaluated for impairment by comparing the recorded 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 assets. 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 recorded amount exceeds the recoverable amount. As of December 31, 2009, we had goodwill of NT\$9,419.0 million (US\$294.8 million) and NT\$9,767.6 million (US\$305.7 million) under ROC GAAP and U.S. GAAP, respectively. Based on our analysis, we believe that our estimated fair value exceeded the carrying value of the goodwill and no impairment existed as of December 31, 2009. Our conclusion could, however, change in the future if actual results differ from our estimates and judgments under different assumptions and conditions.

Valuation of Long-term Investments. We hold significant long-term investments in public and non-public entities. We evaluate these long-term investments annually for impairment based on market prices, if available, the financial condition of the investee company, economic conditions in the industry, and our intent and ability to hold the investment for a long period of time. These assessments usually require a significant amount of judgment, as a significant decline in the market price may not be the best indicator of impairment. Under U.S. GAAP, we evaluate long-term investments using the above mentioned criteria and, to the extent any decline in the value of a long-term investment is determined to be other than temporary, an impairment charge is recorded in the current period. The methods to measure the amount of impairment under ROC GAAP and U.S. GAAP may be based on different estimates of fair value depending on the circumstances. Under U.S. GAAP, market price is to be used, if available, to determine the fair value. Under ROC GAAP, however, if the market price is deemed to be a result of an inactive market, other measures of fair value may be used. Several of the long-term investments held by us are accounted for under the equity method or cost method. Any significant decline in the operations of an equity method or cost method investee could affect the value of the long-term investment and an impairment charge may occur. In 2007, we recognized an impairment of NT\$178.5 million on our investment in Taiwan Fixed Network Co., Ltd. We disposed of this investment in April 2007. In 2008, we recognized an impairment of NT\$ 21.4 million on our investment in ID Solutions, Inc. In 2009, we did not record any impairments on long-term investments. See note 11 to our consolidated financial statements included in this annual report.

## Results of Operations

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

	Year Ended December 31,		
	2007	2008	2009
	(percentage of net revenues)		
ROC GAAP:			
Net revenues	100.0%	100.0%	100.0%
Packaging	77.6	77.7	79.2
Testing	19.8	20.1	18.4
Others	2.6	2.2	2.4
Cost of revenues	(72.1)	(77.0)	(78.8)

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Gross profit	27.9	23.0	21.2
Operating expenses	(9.4)	(11.1)	(10.7)
Income from operations	18.5	11.9	10.5
Non-operating expense	(1.3)	(1.9)	(0.7)
Income before income tax	17.2	10.0	9.8
Income tax expense	(3.3)	(2.4)	(1.7)
Minority interest in net income of subsidiaries	(1.8)	(1.1)	(0.2)
Net income of parent company's shareholders	12.1%	6.5%	7.9%

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

	Year Ended December 31,		
	2007	2008	2009
	(percentage of net revenues)		
ROC GAAP:			
Gross margin			
Packaging	25.8%	19.4%	18.2%
Testing	36.9%	32.9%	28.2%
Overall	27.9%	23.0%	21.2%

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

	Year Ended December 31,		
	2007	2008	2009
	(percentage of net revenues)		
ROC GAAP:			
Cost of revenues			
Raw materials	27.6%	28.9%	29.8%
Labor	14.5	15.4	15.0
Depreciation and amortization	15.1	16.7	18.9
Others	14.9	16.0	15.1
Total cost of revenues	72.1%	77.0%	78.8%
Operating expenses			
Selling	1.0%	1.2%	1.4%
General and administrative	5.4	6.0	5.1
Research and development	3.0	3.9	4.2
Total operating expenses	9.4%	11.1%	10.7%

## Year Ended December 31, 2009 Compared to Year Ended December 31, 2008

**Net Revenues.** Net revenues decreased 9.2% to NT\$85,775.3 million (US\$2,684.7 million) in 2009 from NT\$94,430.9 million in 2008, primarily due to the decline in demand as a result of the global economic crisis. Packaging revenues decreased 7.4% to NT\$67,935.5 million (US\$2,126.3 million) in 2009 from NT\$73,391.6 million in 2008. Testing revenues decreased 17.0% to NT\$15,795.1 million (US\$494.4 million) in 2009 from NT\$19,021.4 million in 2008. The decrease in packaging revenues was primarily due to a decrease in average selling prices for our packaging services and the change of product portfolio. The decrease in testing revenues was primarily due to a decrease in average selling prices for our testing services and a decrease in testing volume. The decrease in average selling prices for our packaging and testing services was due to normal trends relating to the semiconductor industry. The decrease in testing volume resulted primarily from the global economic crisis.

**Gross Profit.** Gross profit decreased 16.6% to NT\$18,146.2 million (US\$568.0 million) in 2009 from NT\$21,769.5 million in 2008. Our gross profit as a percentage of net revenues, or gross margin, decreased to 21.2% in 2009 from 23.0% in 2008. Our gross margin for packaging decreased to 18.2% in 2009 from 19.4% in 2008. This decrease was

primarily due to an increase in depreciation expenses and utility expenses as a percentage of net



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packaging revenues, partially offset by a decrease in the provision for inventory obsolescence as a percentage of net revenues. Our gross margin for testing decreased to 28.2% in 2009 from 32.9% in 2008. This decrease was primarily due to a decrease in the absorption of fixed cost as a result a decrease in net revenues. Raw material costs in 2009 were NT\$25,536.0 million (US\$799.2 million) compared to NT\$27,275.6 million in 2008. As a percentage of net revenues, raw material costs increased to 29.8% in 2009 from 28.9% in 2008, primarily due to a change in our product mix toward packaging requiring more raw materials. Depreciation, amortization and rental expenses in 2009 was NT\$16,602.5 million (US\$519.6 million), compared to NT\$16,370.6 million in 2008. As a percentage of net revenues, depreciation, amortization and rental expenses increased to 19.4% in 2009 from 17.3% in 2008 primarily due to the decrease in net revenues. Labor cost in 2009 was NT\$12,897.2 million (US\$403.7 million) compared to NT\$14,549.9 million in 2008. As a percentage of net revenues, labor cost decreased to 15.0% in 2009 from 15.4% in 2008, primarily because of the decrease in salary and bonus.

Operating Income. Operating income decreased 19.8% to NT\$9,014.4 million (US\$282.2 million) in 2009 compared to NT\$11,245.4 million in 2008. Our operating income as a percentage of net revenues, or operating margin, decreased to 10.5% in 2009 from 11.9% in 2008, primarily due to under absorption of fixed costs as a result of the decrease in net revenues. Operating expenses decreased 13.2% to NT\$9,131.8 million (US\$285.8 million) in 2009 compared to NT\$10,524.1 million in 2008. The decrease in operating expenses was primarily due to a decrease in general and administrative expense. General and administrative expense decreased 24.3% to NT\$4,310.7 million (US\$134.9 million) in 2009 from NT\$5,694.2 million in 2008. This decrease was primarily the result of a decrease in salaries and bonuses, and professional fees due to privatization of ASE Test in 2008. General and administrative expense represented 5.1% of our net revenues in 2009 compared to 6.0% in 2008. Research and development expense decreased 1.6% to NT\$3,612.0 million (US\$113.1 million), accounting for 4.2% of net revenues, in 2009 from NT\$3,671.2 million, accounting for 3.9% of net revenues, in 2008. This increase in the research and development expense as a percentage of net revenues was primarily due to the decrease in net revenues. Selling expense increased 4.4% to NT\$1,209.2 million (US\$37.8 million) in 2009 from NT\$1,158.6 million in 2008. This increase was primarily due to an increase in salaries and bonuses. Selling expense as a percentage of net revenues increased to 1.4% in 2009 from 1.2% in 2008.

Non-Operating Income (Expense). We incurred a net non-operating expense of NT\$626.0 million (US\$19.6 million) in 2009 compared to a net non-operating expense of NT\$1,769.6 million in 2008. This overall decrease was primarily the result of a decrease in loss on the valuation of financial assets and liabilities, impairment losses and net interest expenses, an increase in the income earned from equity method investments. In 2009, we had a net gain of NT\$293.4 million (US\$9.2 million) in 2009 compared to a net loss on the valuation of financial assets and liabilities and foreign exchange of NT\$163.3 million in 2008 primarily due to a decrease in valuation loss on the public stocks. We recognized income from equity method investments of NT\$330.1 million (US\$10.3 million) in 2009 compared to NT\$77.5 million in 2008. The increase was due to the improved operating performance of such equity method investments. We recognized net interest expense of NT\$1,334.2 million (US\$41.8 million) in 2009 compared to NT\$1,486.5 million in 2008, primarily due to decreases in interest rates. We recognized impairment losses of NT\$11.1 million (US\$0.3 million) in 2009 compared to NT\$293.3 million in 2008, primarily due to impairment losses on available-for-sale investments and equipment in 2008.

Net Income. Net income, excluding minority interest, increased 9.5% to NT\$6,744.6 million (US\$211.1 million) in 2009 from NT\$6,160.1 million in 2008. Our diluted earnings per ADS increased to NT\$6.5 (US\$0.2) in 2009 compared to diluted earnings per ADS of NT\$5.6 in 2008. Our income tax expense decreased 34.5% to NT\$1,484.9 million (US\$46.5 million) in 2009 from NT\$2,268.3 million in 2008, primarily due to a decrease in withholding tax on dividends imposed on some of our foreign subsidiaries, a decrease in the valuation allowance against the deferred tax assets and an increase in tax-exempt income, offset by an increase in undistributed earnings.

Year Ended December 31, 2008 Compared to Year Ended December 31, 2007

Net Revenues. Net revenues decreased 6.7% to NT\$94,430.9 million in 2008 from NT\$101,163.1 million in 2007, primarily due to a sharp decline in demand in the fourth quarter of 2008 as a result of the global economic crisis. Packaging revenues decreased 6.5% to NT\$73,391.6 million in 2008 from NT\$78,516.3 million in 2007. Testing revenues decreased 4.9% to NT\$19,021.4 million in 2008 from NT\$20,007.8 million in 2007. The decrease in packaging revenues was primarily due to a decrease in average selling prices for our packaging services and the

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appreciation of the NT dollar against the U.S. dollar. The decrease in testing revenues was primarily due to a decrease in average selling prices for our testing services and the appreciation of the NT dollar against the U.S. dollar, offset by an increase in testing volume. The decrease in average selling prices for our packaging and testing services was due to normal trends relating to the semiconductor industry. The increase in testing volume resulted primarily from the strong demand in the first three quarters of 2008 and newly-acquired subsidiaries that focus on providing testing services, offset by a significant decline in demand in the fourth quarter of 2008.

**Gross Profit.** Gross profit decreased 22.9% to NT\$21,769.5 million in 2008 from NT\$28,243.3 million in 2007. Our gross profit as a percentage of net revenues, or gross margin, decreased to 23.0% in 2008 from 27.9% in 2007. Our gross margin for packaging decreased to 19.4% in 2008 from 25.8% in 2007. This decrease was primarily due to an increase in raw material costs, labor costs and depreciation expenses as a percentage of net packaging revenues. Our gross margin for testing decreased to 32.9% in 2008 from 36.9% in 2007. This decrease was primarily due to an increase in depreciation, utility expenses and labor costs as a percentage of net testing revenues. Raw material costs in 2008 were NT\$27,275.6 million compared to NT\$27,913.1 million in 2007. As a percentage of net revenues, raw material costs increased to 28.9% in 2008 from 27.6% in 2007, primarily due to a change in our product mix toward packaging requiring more raw materials. Depreciation, amortization and rental expenses in 2008 was NT\$16,370.6 million, compared to NT\$16,358.7 million in 2007. As a percentage of net revenues, depreciation, amortization and rental expenses increased to 17.3% in 2008 from 16.1% in 2007. Labor cost in 2008 was NT\$14,549.9 million compared to NT\$14,684.1 million in 2007. As a percentage of net revenues, labor cost increased to 15.4% in 2008 from 14.5% in 2007, primarily because of a change in an ROC accounting standard that requires us to record bonuses paid to employees, directors and supervisors as an expense rather than an appropriation of earnings. This increase in labor cost was partially offset by a decrease in our employee headcount.

**Operating Income.** Operating income decreased 39.7% to NT\$11,245.4 million in 2008 compared to NT\$18,662.7 million in 2007. Operating expenses increased 9.8% to NT\$10,524.1 million in 2008 compared to NT\$9,580.6 million in 2007. The increase in operating expenses was primarily due to an increase in research and development expense and, to a lesser extent, an increase in general and administrative expense and selling expense. General and administrative expense increased 3.3% to NT\$5,694.2 million in 2008 from NT\$5,512.9 million in 2007. This increase was primarily the result of an increase in salaries and bonuses, which reflected the impact from a change in an ROC accounting standard that requires us to record bonuses paid to employees, directors and supervisors as an expense rather than an appropriation of earnings. General and administrative expense represented 6.0% of our net revenues in 2008 compared to 5.4% in 2007. Research and development expense increased 19.4% to NT\$3,671.2 million in 2008 from NT\$3,073.5 million in 2007. This increase was primarily due to increases in salaries and bonuses and depreciation expense. The increase in salaries and bonuses was due to the expanded scope of our research and development efforts and a change in an ROC accounting standard that requires us to record bonuses paid to employees, directors and supervisors as an expense rather than an appropriation of earnings. The increase in depreciation expense was due to the purchase of new equipment and as a result of the expanded scope of our research and development efforts. Research and development expense accounted for 3.9% of our net revenues in 2008 compared to 3.0% in 2007. Selling expense increased 16.5% to NT\$1,158.6 million in 2008 from NT\$994.2 million in 2007. This increase was primarily due to the rearrangement of the sales department's functions. Selling expense as a percentage of net revenues increased to 1.2% in 2008 from 1.0% in 2007. Our operating income as a percentage of net revenues, or operating margin, decreased to 11.9% in 2008 from 18.5% in 2007, primarily as a result of an increase in operating expenses and a decrease in our net revenues.

**Non-Operating Income (Expense).** We incurred a net non-operating expense of NT\$1,769.6 million in 2008 compared to a net non-operating expense of NT\$1,310.8 million in 2007. This overall increase was primarily the result of an increase in loss on the valuation of financial assets and liabilities, a decrease on the income earned from equity method investments and an increase in interest expense, partially offset by a decrease in impairment loss. In 2008, we

recorded net loss on the valuation of financial assets and liabilities and foreign exchange gain of NT\$163.3 million in 2008 compared to a net gain of NT\$580.9 million in 2007 primarily due to a decline in the market value of marketable finance instruments. We recognized income from equity method investments of NT\$77.5 million in 2008 compared to NT\$345.7 million in 2007. The decrease was due to the weakened operating performance of such equity method investments. We recognized net interest expense of NT\$ 1,486.5 million in 2008 compared to NT\$1,225.9 million, primarily due to additional loans we obtained in connection with the privatization of ASE Test. We recognized impairment losses of NT\$293.3 million compared to NT\$994.7 million in 2007. The impairment of

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our flip-chip substrate production line in 2007 was primarily the result of idle capacity caused by lack of demand for certain applications.

Net Income. Net income, excluding minority interest, decreased 49.4% to NT\$6,160.1 million in 2008 from NT\$12,165.3 million in 2007. Our diluted earnings per ADS decreased to NT\$5.6 in 2008 compared to diluted earnings per ADS of NT\$10.9 in 2007 (retroactively adjusted to account for stock dividends issued in 2008). Our income tax expense decreased 32.4% to NT\$2,268.3 million in 2008 from NT\$3,357.4 million in 2007, primarily due to a decrease in our pre-tax income.

## Quarterly Net Revenues, Gross Profit and Gross Margin

The following table sets forth our unaudited consolidated net 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 net revenues, gross profit and gross margin for any quarter are not necessarily indicative of the results for any future period. Our quarterly net revenues, gross profit and gross margin may fluctuate significantly.

	Quarter Ended							
	Jun. 30, 2008 NT\$	Sept. 30, 2008 NT\$	Dec. 31, 2008 NT\$	Mar. 31, 2009 NT\$	Jun. 30, 2009 NT\$	Sept. 30, 2009 NT\$	Dec. 31, 2009 NT\$	Mar. 31, 2010 NT\$
	(in millions)							
<b>Consolidated Net Revenues</b>								
Packaging	20,033.3	20,126.6	14,004.6	10,208.0	16,591.2	20,005.2	21,131.1	22,080.4
Testing	5,101.6	5,194.9	3,830.4	2,767.9	3,877.5	4,587.4	4,562.3	4,662.4
Electronic manufacturing services *	-	-	-	-	-	-	-	10,138.7
Others	474.8	493.6	476.4	421.1	412.4	612.1	599.1	673.0
<b>Total</b>	<b>25,609.7</b>	<b>25,815.1</b>	<b>18,311.4</b>	<b>13,397.0</b>	<b>20,881.1</b>	<b>25,204.7</b>	<b>26,292.5</b>	<b>37,554.5</b>
<b>Consolidated Gross Profit (Loss)</b>								
Packaging	4,124.6	4,141.9	1,949.1	542.9	3,127.1	4,277.8	4,430.2	4,274.8
Testing	1,882.7	1,835.9	775.9	133.9	1,099.9	1,612.6	1,606.6	1,610.0
Electronic manufacturing services *	-	-	-	-	-	-	-	1,124.8
Others	366.9	418.5	211.5	(18.6)	297.3	466.5	570.0	545.9
<b>Total</b>	<b>6,374.2</b>	<b>6,396.3</b>	<b>2,936.5</b>	<b>658.2</b>	<b>4,524.3</b>	<b>6,356.9</b>	<b>6,606.8</b>	<b>7,555.5</b>
<b>Consolidated Gross Margin</b>								
Packaging	20.6%	20.6%	13.9%	5.3%	18.8%	21.4%	21.0%	19.4%
Testing	36.9%	35.3%	20.3%	4.8%	28.4%	35.2%	35.2%	34.5%
	-	-	-	-	-	-	-	11.1%

Electronic  
manufacturing  
services \*

Overall	24.9%	24.8%	16.0%	4.9%	21.7%	25.2%	25.1%	20.1%
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\*We have begun providing electronic manufacturing services as a result of our acquisition of Universal Scientific in February 2010.

Our results of operations are affected by seasonality. Our first quarter net 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. The increase from the fourth quarter of 2009 to the first quarter of 2010 was primarily attributed to our acquisition of Universal Scientific and the recovery of global economy. Moreover, the increase or decrease in net 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.”

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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 regular corporate income tax rate in the ROC applicable to us is 25% in 2009. Effective January 1, 2010, this rate has changed to 20%. However, on May 28, 2010, the Legislative Yuan of ROC approved the revision of the corporate income tax to 17% and this is effectively retroactively since January 1, 2010. The tax incentives schemes under the ROC Statute for Upgrading Industries, which expired on December 31, 2009, gave certain preferential tax treatment to companies that qualify as operating in a “newly-emerging important and strategic industry” or “manufacturing industry”. We have been granted tax holidays covering the portion of our income attributable to eligible machinery and equipment upon receipt of a cash infusion from our shareholders, including through rights offerings, if the proceeds of which are used to purchase eligible machinery and equipment. We have also been granted for this tax holiday after the capitalization of retained earnings through the issuance of stock dividends. In addition, we were entitled to tax credits for the purchase of qualifying manufacturing equipment. The tax credits were set at 7% for 2007, 2008 and 2009. Furthermore, we were also entitled to tax credits set at 30% of the amount spent on qualifying research and development expenses and employee training expenses. According to the Grandfather principle, we can continue to enjoy the tax holidays granted prior to the expiration of such statute by ROC tax authority. However, our tax burden may increase in the future.

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 company can be entitled to tax credits set at 15% of the amount spent on qualifying research and development expenses, but the amount of tax deductible should not exceed 30% of the company’s corporate income tax for that year.

As of April 30, 2010, we had five five-year tax exemptions on income derived from a portion of our operations in Kaohsiung, Taiwan. One such exemption will expire on December 31, 2013. We are in the process of applying for the use of the remaining four exemptions in connection with our operations in Kaohsiung, Taiwan, following the completion of related capacity expansions. As of April 30, 2010, we also had two five-year tax exemptions for two cash injections from our shareholders in connection with our operations in Chung Li, Taiwan. Both exemptions will expire at the end of 2011.

ASE Test Taiwan has one five-year tax exemption that will expire at the end of 2010 on income derived from a portion of its testing operations. ASE Test Taiwan is also in the process of applying for three additional five-year exemptions following the completion of related capacity expansions.

PowerASE has one five-year tax exemption that will expire on September 30, 2012 on income derived from a portion of its testing and packaging operations. It is also in the process of applying for two additional five-year tax exemptions following the completion of related capacity expansions.

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 sales taxes on imported machinery, equipment, raw materials and components which are directly used for manufacturing finished goods. Finished goods produced by companies located in these zones and exported or sold to others within the zones are exempt from otherwise applicable commodity or business taxes in Taiwan.

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.

The ROC government enacted the AMT Act, which became effective on January 1, 2006. The alternative minimum tax, or AMT, imposed under the AMT Act is a supplemental tax of 10% of taxable income as defined



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under the AMT Act, which includes most income that is exempt from income tax under various legislation such as tax holidays. If the amount of income tax determined by the AMT Act falls below the amount of the AMT, any difference should be payable. The AMT rate for business entities is 10%. However, the AMT Act grandfathered certain tax exemptions granted prior to the enactment of the AMT Act.

In 2008, our effective income tax rate increased to 24% from 19% in 2007 due to an increase in the valuation allowance against the deferred tax assets and a decrease in tax-exempt income. In 2009, our effective income tax rate decreased to 18% from 24% in 2008 primarily due to a decrease in withholding tax on dividends imposed on some of our foreign subsidiaries, a decrease in the valuation allowance against the deferred tax assets and an increase in tax-exempt income, offset by an increase in undistributed earnings. We believe that our future estimated taxable income will be sufficient to realize the current and long-term portion of our net deferred tax assets recorded as of December 31, 2009.

## Inflation

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

## U.S. GAAP Reconciliation

Our consolidated financial statements are prepared in accordance with ROC GAAP, which differ in certain material respects from U.S. GAAP. The following table sets forth a comparison of our net income and shareholders' equity in accordance with ROC GAAP and U.S. GAAP as of and for the periods indicated.

	As of and For the Year Ended December 31,			
	2007	2008	2009	
	NT\$	NT\$	NT\$	US\$
	(in millions)			
Net income:				
ROC GAAP	13,994.5	7,207.5	6,903.5	216.1
U.S. GAAP	11,728.6	6,645.6	5,520.4	172.8
Total shareholders' equity:				
ROC GAAP	89,739.9	71,960.8	74,713.7	2,338.5
U.S. GAAP	84,550.6	67,405.7	69,515.7	2,175.8

Note 32 to our consolidated financial statements included in this annual report provides a description of the significant differences between ROC GAAP and U.S. GAAP as they relate to us and a reconciliation of net income and shareholders' equity. Significant differences between ROC GAAP and U.S. GAAP, include impairment loss reversal, undistributed earnings tax and compensation expense pertaining to bonuses to employees, directors and supervisors.

## Recent U.S. GAAP Accounting Pronouncements

In April 2009, the Financial Account Standards Board ("FASB") issued a standard that provides additional guidance for estimating fair value when the volume and level of activity for an asset or liability have significantly decreased. It also included guidance on identifying circumstances that indicate a transaction is not orderly. This guidance is effective for interim and annual reporting periods ending after June 15, 2009, and should be applied prospectively. This standard is effective for us for the year ended December 31, 2009. We believe the adoption of the guidance has no material impact on our consolidated financial position or results of operations.

In April 2009, the FASB issued a standard that provides guidance on the recognition and presentation of other-than-temporary impairments of debt securities classified as available-for-sale and held-to-maturity. This standard is effective for interim and annual reporting periods ending after June 15, 2009. The adoption of the guidance did not have a material impact on our consolidated financial position and results of operations.

In May 2009, with a subsequent update in February 2010, the FASB issued new guidance on subsequent events that establishes general standards of accounting for and disclosure of events that occur after the balance sheet date

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but before financial statements are issued. This standard defines two types of subsequent events, recognized or nonrecognized. The new guidance is effective for us for the year ended December 31, 2009.

In June 2009, the FASB issued new guidance relating to the transfer of financial assets. The new guidance requires entities to provide more information regarding sales of securitized financial assets and similar transactions, particularly if the entity has continuing exposure to the risks related to transferred financial assets. It also eliminates the concept of a “qualifying special-purpose entity,” changes the requirements for derecognizing financial assets and requires additional disclosures. The new guidance becomes effective for annual reporting periods beginning after November 15, 2009. Based on our analysis, we currently do not anticipate that the new guidance will have a material effect on our consolidated financial position and results of operations.

In June 2009, the FASB issued new guidance to improve financial reporting by enterprises involved with variable interest entities, or VIE. The new guidance modifies the approach for determining the primary beneficiary of a VIE. Under the modified approach, an enterprise is required to make a qualitative assessment whether it has (1) the power to direct the activities of the VIE that most significantly impact the entity’s economic performance and (2) the obligation to absorb losses of the VIE or the right to receive benefits from the VIE that could potentially be significant to the VIE. If an enterprise has both of these characteristics, the enterprise is considered the primary beneficiary and must consolidate the VIE. The new guidance becomes effective for annual reporting periods beginning after November 15, 2009. Based on our analysis, we currently do not anticipate that the new guidance will have a material effect on our consolidated financial position and results of operations.

In June 2009, the FASB issued its Accounting Standards Codification (“ASC”) 105, which became the source of authoritative U.S. GAAP recognized by the FASB to be applied by nongovernmental entities. Rules and interpretive releases of the SEC under authority of federal securities law are also sources of authoritative U.S. GAAP for SEC registrants. The ASC became effective for the financial statements issued for interim and annual periods ending after September 15, 2009 and superseded all then-existing non-SEC accounting and reporting standards. All other non-grandfathered non-SEC accounting literature not included in the ASC will become nonauthoritative. The FASB will not issue new standards in the form of Statements (SFAS’s) FASB Staff Positions (FSP’s) or Emerging Issues Task Force Abstracts (EITF’s), but rather it will issue Accounting Standards Updates (ASU’s). FASB will not consider the ASU’s as authoritative in their own right as they will only serve to update the ASC, provide background information about guidance and provide the bases for conclusions on the changes in the ASC. We have adopted the ASC effective for our December 31, 2009 annual report on Form 20-F and have revised the disclosure of the U.S. GAAP source references in our financial reporting upon such adoption.

In September 2009, the FASB issued an accounting standard update which provides guidance on how to separate consideration in multiple-deliverable arrangements and significantly expands disclosure requirements. The standard establishes a hierarchy for determining the selling price of a deliverable, eliminates the residual method of allocation and requires that arrangement consideration be allocated at the inception of the arrangement to all deliverables using the relative selling price method. The update is effective for annual reporting periods beginning on or after June 15, 2010. Based on our analysis, we currently do not anticipate that the new guidance will have a material effect on our consolidated financial position and 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 long-term 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 electronics 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 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.” The average selling prices of our packaging and testing services are likely to be subject to further downward pressure in the future. 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.

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Net cash provided by operating activities amounted to NT\$15,517.2 million (US\$485.7 million) in 2009, primarily as a result of adjustment for non-cash depreciation and amortization of NT\$17,638.0 million (US\$552.1 million). Net cash provided by operating activities amounted to NT\$30,728.8 million in 2008, primarily as a result of adjustments for non-cash depreciation and amortization of NT\$17,244.9 million. Net cash provided by operating activities amounted to NT\$28,310.6 million in 2007, primarily as a result of adjusting for non-cash depreciation and amortization of NT\$16,626.2 million. The decrease in net cash provided by operating activities in 2009 compared to 2008 was primarily due to cash outflow as a result of an increase in accounts receivable and construction in process related to property development, partially offset by cash inflow as a result of an increase in accounts payable. The increase in accounts receivable and accounts payable in 2009 compared to 2008 primarily reflected the recovery of global economic crisis. The increase in net cash provided by operating activities in 2008 compared to 2007 was primarily due to cash inflow as a result of a decrease in accounts receivable of NT\$12,915.1 million and cash inflow as a result of a decrease of financial assets for trading of NT\$1,108.6 million, partially offset by a cash outflow as a result of a decrease in accounts payable of NT\$5,006.5 million and a decrease in net income of NT\$6,787.0 million.

Net cash used in investing activities amounted to NT\$15,980.7 million (US\$500.2 million) in 2009, primarily due to the acquisition of property, plant and equipment of NT\$11,445.6 million (US\$358.2 million). Net cash used in investing activities amounted to NT\$36,359.2 million in 2008, primarily due to the acquisition of our subsidiaries for NT\$26,490.5 million, the acquisition of property, plant and equipment of NT\$18,583.3 million, offset by net proceeds from sales of available-for-sale financial assets of NT\$9,021.6 million. Net cash used in investing activities amounted to NT\$18,108.4 million in 2007 primarily due to the acquisition of property, plant and equipment of NT\$17,190.4 million.

Net cash used in financing activities in 2009 amounted to NT\$2,778.5 million (US\$87.0 million). This amount reflected primarily cash dividend of NT\$2,575.7 million (US\$80.6 million). Net cash provided by financing activities in 2008 amounted to NT\$13,862.4 million. This amount reflected primarily net proceeds from long-term debts and capital lease obligations of NT\$30,162.4 million, which was offset by the issuance of cash dividends of NT\$8,826.6 million and repayment of bonds payable of NT\$5,550.0 million. Net cash used in financing activities in 2007 amounted to NT\$8,492.7 million. This amount reflected primarily the issuance of cash dividends of NT\$6,669.1 million and a net decrease in long-term debts of NT\$4,639.5 million, which was partially offset by an increase in short-term borrowings of NT\$3,784.1 million.

As of December 31, 2009, our primary source of liquidity was NT\$22,557.5 million (US\$706.0 million) of cash and equivalent and NT\$5,020.2 million (US\$157.1 million) of financial assets—current. Our financial assets—current primarily consisted of mutual funds. As of December 31, 2009, we had total unused short-term credit lines of NT\$48,611.0 million (US\$1,521.5 million), and total unused long-term credit lines of NT\$18,708.0 million (US\$585.5 million). As of December 31, 2009, we had working capital of NT\$26,838.9 million (US\$840.0 million).

As of December 31, 2009, we had total borrowings of NT\$63,024.9 million (US\$1,972.6 million), NT\$13,025.0 million (US\$407.7 million) of which were short-term borrowings and NT\$49,999.9 million (US\$1,564.9 million) of which were long-term borrowings. The interest rate for borrowings under our short-term borrowings ranged from 0.86% to 5.83% per year as of December 31, 2009. 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. As of December 31, 2009, we had outstanding long-term borrowings, less current portion, of NT\$49,076.6 million (US\$1,536.0 million). As of December 31, 2009, the current portion of our long-term borrowings was NT\$923.3 million (US\$28.9 million). Our long-term borrowings typically carried variable interest rates which ranged between 0.78% to 2.73% per year as of December 31, 2009.

We have pledged a portion of our assets, with a carrying value of NT\$2,669.8 million (US\$83.6 million) as of December 31, 2009, to secure our obligations under our short-term and long-term facilities.

In June 2009, we entered into a syndicated loan agreement with a banking syndicate led by Citibank, N.A., Taipei Branch for a NT\$12,000.0 million term loan facility for operating revolving fund, of which we have drawn down NT\$8,700.0 million (US\$272.3 million) as of March 31, 2010, mainly to finance our acquisition of Universal Scientific.

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In March 2008, we entered into a syndicated loan agreement with a banking syndicate led by Citibank, N.A., Taipei Branch for a NT\$24,750.0 million term loan facility, which we and the lenders subsequently agreed to reduce to NT\$17,500.0 million to afford us more flexibility to request additional loans in the future. As of June 3, 2008, we had drawn down NT\$17,500.0 million, the full amount of the facility, to finance a portion of the consideration for our acquisition, by way of a scheme of arrangement under Singapore law, of all the outstanding ordinary shares of ASE Test that we did not already directly or indirectly own. In May 2008, we entered into an additional syndicated loan agreement with a banking syndicate led by Citibank, N.A., Taipei Branch for a US\$200.0 million term loan facility, also for the purposes of financing our acquisition of ASE Test's outstanding ordinary shares.

In March 2008, ASESH AT entered into a US\$147.0 million five-year syndicated credit facility for our repayment requests and operating revolving fund, which the DBS Bank (China) Limited, Shanghai Branch acted as an arranger and agent. The facility bears interest at LIBOR plus 0.9% per annum.

Our long-term loans and facilities contain various financial and other covenants that could trigger a requirement for early payment. Among other things, these covenants require the maintenance of certain financial ratios, such as liquidity ratio, indebtedness ratio, interest coverage ratio and other technical requirements. 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. A default under one debt instrument may also trigger cross-defaults under our other debt instruments. An event of default under any debt instrument, if not cured or waived, could have a material adverse effect on our liquidity, as well as our financial condition and 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 leverage ratios in some of our loan agreements as a result of additional borrowings to fund our privatization of ASE Test in May 2008 and the distribution of cash dividends in August 2008. In addition, due to our increased borrowings to fund the acquisition of Universal Scientific in February 2010, we may breach certain financial covenants of some of our loan agreements that are tested semi-annually. If we are unable to timely remedy any of our non-compliance under such loan agreements or obtain waivers or amendments to such loan agreements, 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, 2009, we endorsed and guaranteed the promissory notes of our subsidiaries in the amount of US\$23.8 million. 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,			
	2007	2008	2009	US\$
	NT\$	NT\$	NT\$	
	(in millions)			
Machinery and equipment	14,592.8	12,312.5	11,389.5	356.5

Building and improvements	3,579.4	4,311.2	1,242.4	38.9
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We have budgeted capital expenditures of approximately US\$450-US\$500 million for 2010, primarily to purchase machinery and equipment in connection with the expansion of our packaging and testing operations. We may adjust the amount of our capital expenditures upward or downward based on market conditions, the progress of our expansion plans and cash flow from operations. 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



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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—Because of the highly cyclical nature of our industry, our capital requirements are difficult to plan. 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 twelve months. We currently hold cash primarily in U.S. dollars, New Taiwan dollars, Malaysian ringgit, Chinese yuan, Japanese yen and Korean won. As of December 31, 2009, we had contractual obligations of NT\$47,979.1 million (US\$1,501.7 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 relate 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. As of December 31, 2009, we had NT\$16,362.5 million and US\$200.0 million outstanding in interest rate swap contracts for NT dollar and U.S. dollar, respectively. See “Item 11. Quantitative and Qualitative Disclosures about Market Risk—Market Risk—Interest Rate Risk.” We have entered into forward exchange contracts, 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 note 5 and note 26 to our consolidated financial statements included in this annual report.

## RESEARCH AND DEVELOPMENT

For 2007, 2008 and 2009, our research and development expenditures totaled approximately NT\$3,073.5 million, NT\$3,671.2 million and NT\$3,612.0 million (US\$113.1 million), respectively. These expenditures represented approximately 3.0%, 3.9 and 4.2% of net revenues in 2007, 2008 and 2009, respectively. We have historically expensed all research and development costs as incurred and none is currently capitalized. As of April 30, 2010, we employed 4,347 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.

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

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packages. Development and production of advanced substrates involve complex technology and, as a result, high quality substrates are currently available only from a limited number of suppliers, located primarily in Japan. We believe that our successful development of substrate production capability has, among other things, 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 improving the efficiency and technology of our testing processes. These efforts include developing software for parallel testing of logic semiconductors, rapid automatic generation and cross-platform conversion of test programs to test logic/mixed-signal/RF/discrete semiconductors, automatic code generation for converting and writing testing programs, testing new products using existing machines and providing customers remote access to monitor test results. We are also continuing the development of interface designs to provide for high-frequency testing by minimizing electrical noise. We work closely with our customers in designing and modifying testing software and with equipment vendors to increase the efficiency and reliability of testing equipment. Our research and development operations also include a mechanical engineering group, which currently designs handler kits for semiconductor testing and wafer probing, as well as software to optimize capacity utilization.

## Electronics Manufacturing Services

To further enhance the quality of our services and products, we focus on developing diversified and innovative products to improve our competitiveness. 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.

## 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.

## TABULAR DISCLOSURE OF CONTRACTUAL OBLIGATIONS

The following table sets forth the maturity of our contractual obligations as of December 31, 2009.

	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)	49,999.9	7,221.8	38,227.5	4,550.6	—
Capital lease obligations(2)	15.8	12.1	3.7	—	—
Operating leases(3)	728.4	274.8	131.0	322.6	—
Purchase obligations(4)	2,108.2	2,108.2	—	—	—
Total(5)(6)(7)(8)	52,852.3	9,616.9	38,362.2	4,873.2	—

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- (1) Excludes interest payments.
- (2) Represents our commitments under property leases less 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 29 to our consolidated financial statements included in this annual report.
- (4) Represents unpaid commitments for construction. These commitments are not recorded on our consolidated balance sheets as of December 31, 2009. See note 29 to our consolidated financial statements included in this annual report. Total commitments for construction of buildings were approximately NT\$4,115.0 million (US\$128.8 million), of which NT\$2,006.8 million (US\$62.8 million) had been paid as of December 31, 2009.
- (5) Excludes non-binding commitments to purchase machinery and equipment of approximately NT\$4,897.0 million (US\$153.3 million), of which NT\$106.5 million (US\$3.3 million) had been paid as of December 31, 2009. See note 29 to our consolidated financial statements included in this annual report.
- (6) Excludes payments that vary based upon our net sales or sales volume, such as commissions, service fees and royalty payments for technology license agreements. Royalty expenses in 2009 were approximately NT\$200.6 million (US\$6.3 million). See note 29 to our consolidated financial statements included in this annual report.
- (7) Excludes our minimum pension funding requirements since such amounts have not been determined. Under defined benefit pension plans, we made pension contributions of approximately NT\$194.9 million (US\$ 6.1 million) in 2009, and we estimate that we will contribute approximately NT\$146.1 million (US\$4.6 million) in 2010. See “—Operating Results and Trend Information—Critical Accounting Policies and Estimates” and note 20 to our consolidated financial statements included in this annual report.
- (8) We recognized additional long term taxes payable of NT\$19.3 million (US\$ 0.6 million) and accrued interest and penalties of NT\$19.8 million (US\$ 0.6 million) related to uncertain tax positions in the year ended December 31, 2009. At that time, we were unable to make a reasonably reliable estimate of the timing of payments in individual years beyond 12 months due to uncertainties in the timing of the outcome of the tax audits.

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## Item 6. Directors, Senior Management and Employees

## DIRECTORS AND SENIOR MANAGEMENT AND BOARD PRACTICES

## 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.

The term of office for our directors is three years from the date of election. The current board of directors began serving on June 26, 2009. The terms of the current directors expire on June 25, 2012. 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.

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 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.

The following table sets forth information regarding all of our directors as of April 30, 2010.

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	65	None
Richard H.P. Chang(1)	Director, Vice Chairman and President	1984	63	None
Tien Wu(2)	Director and Chief Operating Officer	2003	52	None
Joseph Tung(2)	Director, Chief Financial Officer and Vice President	1997	51	Independent director of Ta Chong Bank Ltd.
Raymond Lo(2)	Director and General Manager, Kaohsiung packaging facility	2006	56	None
Jeffrey Chen(2)	Director and Vice President	2003	46	None
Rutherford Chang(3)	Director	2009	30	None



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Name	Position	Director Since	Age	Other Significant Positions Held Outside of the ASE Group
Shen-Fu Yu	Independent Director	2009	65	None
Ta-Lin Hsu	Independent Director	2009	67	Chairman and founder, H&Q Asia Pacific

(1) Jason C.S. Chang and Richard H.P. Chang are brothers.

(2) Representative of ASE Enterprises, a company organized under the laws of Hong Kong, which held 17.28% of our outstanding common shares as of March 31, 2010. All of the outstanding shares of ASE Enterprises 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) Rutherford Chang is the son of Jason C.S. Chang

## Supervisors

We currently have five supervisors, each serving a three-year term. The current supervisors began serving on June 26, 2009, and their terms will expire on June 25, 2012. 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, 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. The ROC Company Law requires at least one supervisor be appointed at all times, or two supervisors for a company with publicly issued equity shares, and that a supervisor's term of office be no more than three years.

The following table sets forth information regarding all of our supervisors as of April 30, 2010.

Name	Position	Supervisor Since	Age	Other Significant Positions Held Outside of the ASE Group
Samuel Liu(1)	Supervisor	2005	62	None
Tien-Szu Chen(1)	Supervisor	2006	48	None
John Ho(1)	Supervisor	1998	55	None
Yen-Yi Tseng(2)	Supervisor	2000	68	Chairman of Hung Ching
Jerry Chang(3)	Supervisor	2009	32	None

(1) Representative of ASE Test Taiwan.

(2) Representative of Hung Ching.

(3) 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, five represent ASE Enterprises, three represent ASE Test Taiwan and one represents Hung Ching. The remaining directors and supervisors serve in their capacity as individuals.

Executive Officers

The following table sets forth information regarding all of our executive officers as of April 30, 2010.

Name	Position	Years with the Company	Age
Jason C.S. Chang	Chairman and Chief Executive Officer	26	65
Richard H.P. Chang	Vice Chairman and President	26	63
Tien Wu	Chief Operating Officer; Chief Executive Officer, ISE Labs	10	52



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Name	Position	Years with the Company	Age
Joseph Tung	Chief Financial Officer and Vice President	15	51
Raymond Lo	President, ASE Test Taiwan; General Manager, Kaohsiung packaging facility	24	56
Tien-Szu Chen	President, PowerASE	22	48
Chih-Chiang Lee	President, ASESAT	23	48
Chun-Che Lee	President, ASE Shanghai	26	50
Ung Bae	President, ASE Korea	12	53
Nobukatsu Manabe	President, ASE Japan	6	66
Kwai Mun Lee	President, ASE South-East Asia operations	12	47
Samuel Liu	Chief Executive Officer, Universal Scientific	6	62
Cheng-Jung Wei	President, Universal Scientific	23	46

## 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 is also a director of Universal Scientific. He holds a 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. He is currently the chairman of Universal Scientific. He holds a 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. Before joining ASE Inc., Mr. Tung was a Vice President at Citibank, N.A. He received a 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 Inc., Mr. Lo was the Director of Quality Assurance at Zeny Electronics Co. He holds a 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 an Executive Vice President for Chairman Office. He is also director of Universal Scientific. Prior to joining the ASE Group, 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 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 a special assistant to the Chairman of ASE Group since March 2005. He 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.

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Shen-Fu Yu has served as an independent director of ASE Inc. since June 2009. He has 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.

Samuel Liu has served as a supervisor of ASE Inc. since May 2005. He is currently the Chief Executive Officer for Universal Scientific. Mr. Liu has worked in the electronics industry for over 30 years in various technical and management roles. He holds a bachelor's degree in electrical engineering from National Taiwan University and a doctorate degree in material science from Stanford University.

Tien-Szu Chen has served as a supervisor of ASE Inc. since June 2006. Mr. Chen holds a bachelor's degree in industrial engineering from Chung Yuan Christian University in Taiwan.

John Ho has served as a supervisor of ASE Inc. since April 1998. He is also a director of Universal Scientific. He served as Chief Financial Officer of ASE Inc. from 1988 until 1995. He holds a degree in business administration from National Taiwan University and a master's degree in business administration from the University of Iowa.

Yen-Yi Tseng has served as a supervisor of ASE Inc. since July 2000 and Chairman of Hung Ching since July 2002. Mr. Tseng served as President of Ret-Ser Engineering Agency from 1991 to 1998. He holds a 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 the ASE Group, 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.

Chih-Chiang Lee has served as a President of ARESH AT since 2007 prior to which he has occupied various managing positions at ASE Inc. since 1988. Mr. Lee holds a degree in engineering management from National Tsing Hua University in Taiwan.

Chun-Che Lee has served as a President of ASE Shanghai since July 2005. Mr. Lee has also served as a President of R&D of ASE Inc., prior to which he was a vice president, director and manager of research and development at ASE Inc. since 1984. Mr. Lee holds a degree in aeronautic from the Tamkung University of Taiwan.

Ung Bae has served as President 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.

Nobukatsu Manabe has served as President of ASE Japan since May 2004. Prior to this appointment, he served as Executive Officer of Yamaguchi NEC and Yamagata NEC Co., Ltd. after occupying various managing positions within the NEC Group including positions in the United Kingdom and Singapore. He holds a bachelor's degree in physics from Kyushu University of Japan.

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.

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Cheng-Jung Wei has served as a director of Universal Scientific since May 2008, the President of Universal Scientific since April 2008 and the vice president of Mobility Solution Business Unit of Universal Scientific since September 2004. He has joined Universal Scientific for 22 years from an engineer since July 1987. He holds a bachelor's degree in electrical engineering from Chinese Culture University and a master's degree in business administration from Tunghai University.

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

## COMPENSATION

In 2009, we paid to our directors, supervisors and executive officers approximately NT\$236.0 million (US\$7.4 million) in cash remuneration. We did not pay any remuneration in kind to our directors, supervisors or executive officers in 2009. In 2009, we accrued pension costs of NT\$22.5 million (US\$0.7 million) for retirement benefits for our management. The remuneration of our independent directors is set at NT\$2 million per person per year. In addition, according to our Articles of Incorporation, not more than 2% of our annual net earnings (after recovering any losses incurred in prior years and deducting the legal reserve and special reserve provisions, if any) may be distributed as bonuses to our directors. 7% to 10% of our annual net earnings (after recovering any losses incurred in prior years and deducting the legal reserve and special reserve provisions, if any) may be distributed as a bonus to employees, including executive officers.

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 20 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 the 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. In 2007, we granted an aggregate of 53,502,850 common shares as stock bonuses with an aggregate value of NT\$535.0 million. At our annual shareholders' meeting held on June 28, 2007, our shareholders, in addition to approving such stock bonus, also approved NT\$535.0 million as cash bonuses to employees. In 2008, we granted an aggregate of 38,320,500 common shares as stock bonuses with an aggregate value of NT\$383.2 million. At our annual shareholders' meeting held on June 19, 2008, our shareholders, in addition to approving such stock bonuses, also approved NT\$ 383.2 million as cash bonuses to employees. In 2009, we granted an aggregate value of NT\$554.4 million as cash bonuses to our employees. In 2010, our directors proposed a distribution of NT\$607.0 million (US\$19.0 million) as cash bonuses to employees. The proposal is still awaiting shareholders' approval.

We currently maintain four option plans, adopted in 2002, 2004, 2007 and 2010. Pursuant to these plans, our full-time employees as well as the full-time employees of our 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 2002, 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 exercisable upon vesting for five years. Forty percent of the options originally granted vest upon the second anniversary of the grant date, and an additional 10% 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, 2009, a total of 159,968,000 options had been granted under the 2002 plan, 145,989,000 of which had an original exercise price of NT\$20.80 per share (currently adjusted to NT\$9.80 per share) and 13,979,000 of which had an original exercise price of NT\$24.6 per share (currently adjusted to NT\$13.80 per share). As of December 31, 2009, 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\$18.90 per share) and 15,000,000 of which had an original exercise price of NT\$20.55 per share

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(currently adjusted to NT\$15.40 per share). As of December 31, 2009, 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\$29.60 per share). On April 20, 2010, we adopted a new option plan pursuant to which we can grant up to 200,000,000 options within one year. As of May 31, 2010, a total of 187,719,500 options have been granted under the 2010 plan with an exercise price of NT\$28.6 per share.

## ASE Mauritius Inc. Share Option Plan

As of December 31, 2009, 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\$1.70, 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 exercisable upon vesting for five years and expires after ten years. As of December 31, 2009, a total of 30,000,000 options had been granted under this plan with an exercise price of US\$1.70.

## Universal Scientific Share Option Plans

As a result of our acquisition of Universal Scientific, we assumed option plans previously adopted by Universal Scientific and USI Enterprise Limited, one of Universal Scientific's subsidiaries.

Universal Scientific adopted two option plans in 2002 and 2007 respectively, under which certain employees of Universal Scientific and its subsidiaries were granted options to purchase common shares of Universal Scientific. Each option is exercisable upon vesting for five years and will expire after ten years. As of March 31, 2010, we had 864,500 options outstanding with an exercise price of NT\$6.2 per share and 23,955,800 options outstanding with an exercise price of NT\$15.5 per share under these two plans respectively.

In addition, USI Enterprise Limited adopted two option plans in 2007 and 2010 respectively, under which certain employees of Universal Scientific were granted options to purchase common shares of USI Enterprise Limited. Pursuant to the 2010 plan, certain of our employees were also granted options to purchase common shares of USI Enterprise Limited. Each option under these two plans is exercisable upon vesting for five years and will expire after ten years. As of April 30, 2010, we had 18,470,500 options outstanding with an exercise price of US\$1.53 per share and 8,800,000 options outstanding with an exercise price of US\$2.42 per share under these two plans respectively.

## EMPLOYEES

The following table sets forth, for the periods indicated, certain information concerning our employees for the dates indicated.

	As of December 31,		
	2007	2008	2009
Total	29,942	26,977	29,538
Function			
Direct labor	17,172	15,114	17,718
Indirect labor (manufacturing)	7,321	6,704	6,629
Indirect labor (administration)	2,992	2,922	2,661
Research and development	2,457	2,237	2,530
Location			
Taiwan	18,614	16,291	16,927
Malaysia	2,558	2,324	2,110

PRC	5,187	4,846	7,170
Korea	1,859	1,826	1,910
Japan	1,009	974	758
Singapore	371	380	377
United States	344	336	286



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The reduction in our employee count in 2008 arose primarily as a response to the global economic crisis in late 2008. Since the second quarter of 2009, our headcount has gradually returned to the level that we had in 2007 as a result of the recovery of global economy.

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 Universal Scientific. See “—Compensation.”

With the exception of ASE Korea's employees, our employees are not covered by any collective bargaining arrangements. We believe that our relationship with our employees is good.

## SHARE OWNERSHIP

The following table sets forth certain information with respect to our common shares and options exercisable for our common shares held by our directors, supervisors and executive officers as of March 31, 2010.

Director, Supervisor or Executive Officer	Number of ASE Inc. Common Shares Held	Percentage of Total ASE Inc. Common Shares Issued and Outstanding	Number of Options Held(1)	Exercise Price of Options (NT\$)	Expiration Date of Options
Jason C.S. Chang	57,544,012 (2)	1.05 %	11,180,000	9.80–29.60	12/24/2012–12/19/2017
Richard H.P. Chang	73,453,840	1.34 %	6,770,000	9.80–29.60	12/24/2012–12/19/2017
Tien Wu	1,972,856	0.04 %	*	18.90–29.60	06/30/2014–12/19/2017
Joseph Tung	2,612,582	0.05 %	*	9.80–29.60	12/24/2012–12/19/2017
Raymond Lo	1,332,458	0.02 %	*	9.80–29.60	12/24/2012–12/19/2017
Jeffrey Chen	927,964	0.02 %	*	13.80–29.60	08/22/2013–12/19/2017
Rutherford Chang	23,622	0.00 %	*	13.80–29.60	08/22/2013–12/19/2017
Shen-Fu Yu	-	0.00 %	-	-	-
Ta-Lin Hsu	-	0.00 %	-	-	-
Samuel Liu	268,877	0.00 %	*	18.90	06/30/2014
Tien-Szu Chen	1,055,391	0.02 %	*	18.90–29.60	06/30/2014–12/19/2017
John Ho	2,086,211	0.04 %	*	18.90–29.60	06/30/2014–12/19/2017
Yen-Yi Tseng	33,526	0.00 %	*	29.60	12/19/2017
Jerry Chang	343,294	0.01 %	*	9.80–29.60	12/24/2012–12/19/2017
Chih-Chiang Lee	-	0.00 %	*	18.90–29.60	06/30/2014–12/19/2017
Chun-Che Lee	2,112,470	0.04 %	*	13.80–29.60	08/22/2013–12/19/2017
Ung Bae	-	0.00 %	*	9.80–29.60	12/24/2012–12/19/2017
Nobukatsu Manabe	30,000	0.00 %	*	18.90–29.60	06/30/2014–12/19/2017
Kwai Mun Lee	-	0.00 %	*	13.80–29.60	08/22/2013–12/19/2017
Cheng-Jung Wei	138,590	0.00 %	-	-	-

(1) Each option covers one of our common shares.

(2) In addition to holding 1.05% of our common shares directly, Jason C.S. Chang is the sole shareholder and director of a company that holds all the outstanding shares of ASE Enterprises, which holds 17.28% of our common shares. 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% of our total outstanding common shares.



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## 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 March 31, 2010, by each shareholder known by us to beneficially own more than 5% of our outstanding common shares and all directors, supervisors and executive officers as a group.

Name of Shareholder or Group	Common Shares Beneficially Owned	
	Number	Percentage
ASE Enterprises(1)	949,483,271	17.28 %
Directors, supervisors and executive officers as a group(2)	1,159,455,523	21.10 %

(1) ASE Enterprises is a company organized under the laws of Hong Kong. All of the outstanding shares of ASE Enterprises 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.

(2) Includes shareholding of ASE Enterprises, ASE Test Taiwan and Hung Ching.

The following table sets forth information relating to our common shares held directly by our consolidated subsidiaries and our equity method investee as of March 31, 2010.

Name of Shareholder	Common Shares Beneficially Owned	
	Number	Percentage
ASE Test(1)	63,098,779	1.15%
ASE Test Taiwan(2)	7,854,239	0.14%
J&R Holding Limited(3)	33,411,958	0.61%
Hung Ching(4)	61,230,021	1.11%

(1) ASE Test is our wholly-owned subsidiary. ASE Test's ownership of our common shares is 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.

(2) ASE Test Taiwan was our 99.99%-owned subsidiary as of March 31, 2010.

(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) As of March 31, 2010, we held 26.22% of the outstanding shares of Hung Ching.

In connection with the merger of ASE Chung Li and ASE Material with and into ASE Inc. in August 2004, we and ASE Test established a trust to hold and dispose of 149,175,000 and 5,000,000 of our common shares that were issued to ASE Test and ASE Test Taiwan, respectively, upon completion of the merger. As a result, the trustee appointed under the trust agreement has become one of our shareholders until such common shares are sold as permitted under the rules and regulations of the Taiwan Stock Exchange and the terms and conditions of the trust agreement. As of March 31, 2010, as a result of stock dividends and our acquisition of Universal Scientific through a cash and stock tender offer, the total amount of our common shares held by the trust was 69,966,795. See "—Related Party Transactions."

As of March 31, 2010, none of our major shareholders had voting rights different from those of our other shareholders. There were no significant changes in our major shareholders or significant changes in the percentage ownership of any of our major shareholders in 2009.

As of March 31, 2010, a total of 5,495,212,494 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 March 31, 2010, 243,633,810 common shares were registered in the name of a nominee of Citibank, N.A., the depository under our ADS deposit agreement. Citibank, N.A., has advised us that, as of March 31, 2010, 48,726,566 ADSs, representing 243,632,830 common shares, were held of record by Cede & Co., and 196 ADSs, representing 980 common shares, were held by seven other U.S. persons. The remaining 55 common shares held by Citibank, N.A. are a result of fractional shares distributed during stock distributions on the

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common shares underlying the ADSs. We have no further information as to common shares held, or beneficially owned, by U.S. persons.

RELATED PARTY TRANSACTIONS

In recent years, we have awarded our common shares and/or 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 the consolidated income. We expect this practice to continue in the future.

In order to comply with Singapore law and ROC Company Law, trusts organized under ROC law have been 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 the Companies Act, Chapter 50, of Singapore, 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 the common shares, (2) authorized to exercise all of the rights as a shareholder of the common shares, (3) authorized to sell the 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 the 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 the 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. As of March 31, 2010, these trusts held 63,098,779 of our common shares issued to ASE Test and 6,868,016 of our common shares issued to ASE Test Taiwan.

On May 30, 2008, we acquired, by way of a scheme of arrangement under Singapore law, all the outstanding ordinary shares of ASE Test that we did not already directly or indirectly own, making ASE Test our wholly-owned subsidiary. See "Item 4. Information on the Company—History and Development of the Company—ASE Test Share Acquisition and Privatization."

We have historically guaranteed the promissory notes of many of our subsidiaries. As of December 31, 2009, we had endorsed and guaranteed an aggregate amount of US\$23.8 million of the outstanding promissory notes of our subsidiaries.

On December 19, 2007, we purchased from Hung Ching a building in Chung Li, Taiwan for NT\$141.2 million. This building houses power generation and other ancillary support equipment. In addition, we entered into a contract with Hung Ching in connection with the construction of a factory and office building in Kaohsiung, Taiwan. The contract was terminated in 2008 as a result of which we paid Hung Ching NT\$36 million for certain costs incurred during the construction.

On July 30, 2009, ASE Inc. extended a loan of NT\$450 million (US\$14.1 million) to Powerchip Semiconductor Corp., our joint venture partner since July 2006, for an early redemption of its three-year unsecured corporate bonds due July 2011. The loan will be repaid through June 25, 2010 with an interest rate of 2.5%. Powerchip Semiconductor Corp. has pledged 42,614,000 common shares of its investee, Rexchip Electronics Corp., as collateral for the loan. In the first quarter of 2010, Powerchip Semiconductor Corp. has repaid NT\$225 million (US\$7.0 million).

INTERESTS OF EXPERTS AND COUNSEL

Not applicable.

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Item 8. Financial Information

CONSOLIDATED STATEMENTS AND OTHER FINANCIAL INFORMATION

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

LEGAL PROCEEDINGS

On February 1, 2006, Tessera, Inc. 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, and other companies to a suit alleging that ASE’s and the thirteen other defendants’ manufacturing, use, importation, offer for sale, and sale of various packaged semiconductor products infringed 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 March 27, 2006, ASE filed its answer and counterclaims with the court.

On May 15, 2007, at Tessera’s request, the United States International Trade Commission, or 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 in ITC Investigation No. 605, finding infringement of both asserted patents by the ITC Investigation No. 605 respondents’ accused semiconductor packages. The ITC also issued (1) a limited exclusion order prohibiting the unlicensed entry of semiconductor packages found to infringe, and products incorporating such chips, manufactured abroad by or on behalf of, or imported by or on behalf of, Spansion, Qualcomm, ATI, Motorola, ST-NV, and Freescale; and (2) cease and desist orders directed to Motorola, Qualcomm, Freescale, and Spansion. The foregoing remedies granted by the ITC could affect certain of ASE’s customers. The ITC did not grant a general exclusion order as requested by Tessera. The ITC’s determination is currently on appeal to the Court of Appeals for the Federal Circuit, and oral argument is scheduled for June 9, 2010. The district court in the California case has vacated the trial schedule and stayed all proceedings until a final resolution is reached in ITC Investigation No. 605.

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, or ITC Investigation No. 649, 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 Limited filed an action in the United States District Court for the Northern District of California against Tessera, Inc. 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 case in response to a joint motion of the parties. On August 7, 2009, the ITC terminated Investigation No. 649 in response to Tessera’s motion to terminate. Investigation No. 649 was terminated without the issuance of an exclusion order or any other remedy that would prevent the importation or sale in the United States of semiconductor packages assembled by ASE, or products containing such packages (other than as discussed above).

The United States Patent and Trademark Office has also instituted reexamination proceedings on all the patents Tessera has asserted in the California case and the ITC investigations. Thus far, the United States Patent and Trade Office has found that all of the patent claims asserted by Tessera in ITC Investigation No. 649 and the California cases are not patentable, but the reexamination proceedings have not yet concluded.

It is not possible to predict the outcome of the California litigation, the ITC investigations, the reexamination proceedings, the total costs of resolving these disputes, or when the stay of the California litigation will be lifted.

## 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 historically paid the large majority of our dividends in the form of stock. We have paid annual stock dividends on our common shares

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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, and in 2009 when we only distributed cash dividends. We also paid cash dividends of NT\$1.48 per share in 2007, NT\$1.71 per share in 2008 and NT\$0.50 per share in 2009. Our directors have proposed to pay stock dividends of NT\$1.00 and cash dividends of NT\$0.36 per share based on the 5,494,970,794 shares registered as of March 17, 2010. This proposal is awaiting shareholders' approval and the actual cash dividends per share will be adjusted by any fluctuations in the number of our shares due to, for example, the exercise of share options.

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

	Stock Dividends Per Common Share(1)	Total Common Shares Issued as Stock Dividends	Outstanding Common Shares on Record Date(2)	Percentage of Outstanding Common Shares Represented by Stock Dividends
	NT\$			
1997	3.80	277,020,000	729,000,000	38.0 %
1998	7.20	732,240,000	1,017,000,000	72.0 %
1999	1.07	190,460,000	1,780,000,000	10.7 %
2000	3.15	623,811,852	1,980,355,086	31.5 %
2001	1.70	467,840,000	2,752,000,000	17.0 %
2002	—	—	3,254,800,000	—
2003	1.00	325,480,000	3,254,800,000	10.0 %
2004	0.57	221,977,360	3,862,595,437	5.7 %
2005	1.00	411,221,140	4,113,744,200	10.0 %
2006	—	—	4,592,508,620	—
2007	1.48	694,101,071	4,645,295,431	14.9 %
2008	0.29	158,766,146	5,484,848,118	2.9 %
2009	—	—	5,474,320,814	—

(1) 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.

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 amended in 2009, 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 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 2% of our annual net income (less prior years' losses and legal and special reserves, if any) should be paid to our directors and supervisors as compensation; and
- between 7% and 10% of the annual net income (less prior years' losses and legal and special reserves, 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.

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- 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 the 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.

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. Accordingly, holders of outstanding ADSs on the relevant dividend record date will, subject to the terms of the deposit agreement, be similarly entitled to the full amount of any dividend declared.

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 May 31, 2010, there were an aggregate of 5,497,801,294 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 the 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 June 4, 2010 was NT\$27.25 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	Low	High	Low		High	Low
2005	31.00	17.59	26.28	13.49	29,280	6,575.5	5,633.0
2006	38.30	26.50	32.46	22.46	53,789	7,823.7	6,257.8
2007	48.80	29.55	41.36	26.20	28,931	9,809.9	7,344.6
2008	34.25	9.85	30.37	9.62	24,392	9,295.2	4,089.9
First Quarter	32.50	25.00	28.82	22.17	23,517	8,865.4	7,408.4
Second Quarter	34.25	27.10	30.37	24.03	21,689	9,295.2	7,523.5
Third Quarter	28.30	16.05	25.09	15.67	23,773	7,408.0	5,642.0
Fourth Quarter	16.95	9.85	16.55	9.62	28,388	5,764.0	4,089.9
2009							
First Quarter	18.50	10.75	18.06	10.50	35,485	5,390.7	4,242.6

Second Quarter	20.95	16.20	20.46	15.82	44,990	6,954.1	5,314.5
Third Quarter	27.10	18.95	27.10	18.50	28,863	7,526.6	6,530.8
Fourth Quarter	29.10	25.00	29.10	25.00	26,052	8,188.1	7,322.9
December 2010	28.85	25.00	28.85	25.00	32,596	8,188.1	7,649.2
First Quarter	31.60	24.05	31.60	24.05	33,600	8,356.9	7,212.9
January	31.60	25.40	31.60	25.40	29,698	8,356.9	7,560.0
February	27.95	24.05	27.95	24.05	45,695	7,597.4	7,212.9
March	29.00	26.00	29.00	26.00	30,157	7,962.2	7,569.8

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	Closing Price per Share		Adjusted Closing Price per Share(1)		Average Daily Trading Volume	Taiwan Stock Exchange Index	
	High	Low	High	Low	(in thousands of shares)	High	Low
Second Quarter							
April	32.00	29.45	32.00	29.45	31,544	8,171.9	7,854.2
May	30.80	26.00	30.80	26.00	32,683	7,952.2	7,086.4
June (through June 4)	27.35	26.75	27.35	26.75	18,700	7,360.3	7,195.7

(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—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% change either above or below the previous day’s closing price of such security.

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 April 30, 2010, a total of 48,251,503 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 June 4, 2010 was US\$4.12 per ADS.

	Closing Price per ADS		Adjusted Closing Price per ADS(1)		Average Daily Trading Volume	New York Stock Exchange Index	
	High US\$	Low US\$	High US\$	Low US\$	(in thousands of ADSs)	High	Low
2005	4.49	2.85	3.33	2.08	331	7,852.18	6,935.31
2006	6.12	4.00	4.54	2.97	404	9,179.40	7,719.78
2007	7.45	4.59	5.53	4.06	658	10,311.61	8,837.97
2008	5.57	1.42	4.94	1.39	622	9,656.00	4,651.21
First Quarter	4.98	3.98	4.42	3.53	812	9,656.00	8,489.38
Second Quarter	5.57	4.45	4.94	3.95	423	9,603.01	8,623.51
Third Quarter	4.51	2.54	4.00	2.48	645	8,641.28	7,204.01
Fourth Quarter	2.58	1.42	2.52	1.39	615	7,519.95	4,651.21
2009	4.63	1.49	4.63	1.46	1,188	7,261.24	4,226.31
First Quarter	2.89	1.49	2.82	1.46	673	5,968.84	4,226.31
Second Quarter	3.38	2.36	3.30	2.31	1,584	6,182.87	5,085.76

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Third Quarter	4.13	2.96	4.13	2.89	1,480	7,047.13	5,624.57
Fourth Quarter	4.63	3.87	4.63	3.87	998	7,261.24	6,674.57
December	4.43	3.95	4.43	3.95	1,301	7,261.24	7,056.26
2010							
First Quarter	5.07	3.84	5.07	3.84	1,179	7,478.76	6,713.87
January	5.07	3.90	5.07	3.90	1,262	7,449.05	6,883.78
February	4.47	3.84	4.47	3.84	1,227	7,101.44	6,713.87
March	4.53	4.07	4.53	4.07	1,071	7,478.76	7,100.75
Second Quarter							
April	5.12	4.65	5.12	4.65	975	7,728.96	7,463.09
May	4.89	4.00	4.89	4.00	852	7,543.12	6,631.36
June (through June 4)	4.34	4.12	4.34	4.12	1,418	6,860.39	6,600.27

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

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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.

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.



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We were incorporated on March 23, 1984 as a company limited by shares under the ROC Company Law. Our authorized capital was NT\$80,000,000,000, divided into 8,000,000,000 common shares, 5,497,801,294 of which were outstanding as of May 31, 2010. We do not have any equity in the form of preference shares or otherwise outstanding as of the date of this annual report.

With the approval of our board of directors and the ROC Financial Supervisory Commission, Executive Yuan, we may grant stock options to our employees, provided that NT\$8,000,000,000 of our authorized capital 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 and the total number of shares to be issued under all option plans shall not exceed 15% of our outstanding common shares. 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 May 31, 2010, we had granted 673,410,500 options pursuant to employee stock option plans established on August 28, 2002, May 27, 2004, November 22, 2007 and April 20, 2010 to our full-time employees as well as to full-time employees of our domestic and foreign subsidiaries. See “Item 6. Directors, Senior Management and Employees—Compensation—ASE Inc. Employee Bonus and Stock Option Plans.” We have 800,000,000 common shares reserved for issuance under our employee stock option plans.

## Directors

Our Articles of Incorporation provide that we are to have from seven to nine directors with tenures of three years who are elected at a shareholders’ meeting. With effect from our 2009 annual general meeting of shareholders, two of our directors will be required to 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 directors have 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 audited 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 teleconference. 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 2% of our annual net income (less prior years’ losses and legal and special reserves, if any) should be paid to our directors and supervisors as compensation; and
- between 7% and 10% of the annual net income (less prior years’ losses and legal and special reserves, 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 shareholders' meeting, 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

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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 amended in 2009, 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—Dividends and Dividend Policy.”

We are also permitted to make distributions to our shareholders of additional common shares by capitalizing reserves. However, the capitalized portion payable out of our legal reserve is limited to 50% of the total accumulated legal reserve and the capitalization can only be effected when the accumulated legal reserve exceeds 50% of our paid-in capital.

For information on the dividends we paid in recent years, see “Item 8. 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. In the case of a public company such as ourselves, the approval of the ROC Financial Supervisory Commission, Executive Yuan and the ROC Ministry of Economic Affairs is also required. Authorized but unissued common shares may be issued, subject to applicable ROC law, upon terms as our board of directors may determine.

## 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 offered by us to the public or privately placed.

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 ROC Financial Supervisory Commission, Executive Yuan. 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 ordinary 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 shareholders’ 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 more than one year. Shareholders’ meetings may also be convened by a supervisor. Notice in writing of general meetings of shareholders, stating the place, time and purpose, must be dispatched to each shareholder at least 30 days, in the case of ordinary 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, shareholders have one vote for each common share held, except that there are no voting rights for those shares held by us or directly or indirectly held by controlled companies or affiliates. Under

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the ROC Company Law, our directors and supervisors are elected at a shareholders' meeting through cumulative voting, unless our Articles of Incorporation provide otherwise.

In general, a resolution can be adopted by the holders of at least a majority of the 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 the 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:

- 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; and
  - removal of the directors or supervisors.

A shareholder may be represented at an ordinary or extraordinary meeting by proxy if a valid proxy form is delivered to us five days before the commencement of the ordinary 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 more than 3% of the issued and outstanding shares of a company for more than one year 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 depository to exercise the voting rights for the 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 depository to appoint our chairman or his designee to represent them at our shareholders' meetings and to vote the common shares deposited with the custodian according to the terms of the deposit agreement.

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

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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.

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 the 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, enters transfers of common shares in our register upon presentation of, among other documents, certificates representing the common shares transferred and acts as paying agent for any dividends or distributions with respect to our common shares. 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 the common shares. The specified period required is as follows:

- ordinary shareholders' meeting—60 days;
- extraordinary shareholders' meeting—30 days; and
- relevant record date—five days.

## Annual Financial Statements

At least ten days before the annual ordinary shareholders' meeting, our annual financial statements 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.



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### 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;
- to deliver shares upon the conversion or exercise of bonds with warrants, preferred shares with warrants, convertible notes, 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% of the total outstanding 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 Securities 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 amended ROC Company Law, effective from November 14, 2001, our subsidiaries are not permitted to acquire our common shares. This restriction does not affect any acquisition of our common shares made by our subsidiaries prior to November 14, 2001.

### 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 10% or more 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 ROC Financial Supervisory Commission, Executive Yuan; 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 ROC Financial Supervisory Commission, Executive Yuan at least three days before the intended transfer, unless the number of shares to be transferred is less than 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

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- 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% 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 ROC Financial Supervisory Commission, Executive Yuan.

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

### Common Shares Issued in Connection with a Merger

The rules and regulations of the Taiwan Stock Exchange impose certain transfer restrictions on common shares of a Taiwan Stock Exchange listed company issued to a director, supervisor or substantial shareholder (as defined under the ROC Securities and Exchange Law and described under “Substantial Shareholders”) of an unlisted company to be merged with and into the acquiror. A director, supervisor or substantial shareholder of an unlisted company to be merged with and into a Taiwan Stock Exchange listed company is restricted from selling or transferring common shares received in connection with such merger for a period of six months after such shares are listed on the Taiwan Stock Exchange. After the initial six-month lock-up period, such holder is permitted to sell or transfer 50% of its holdings of the common shares received in the merger. After one year from the date of the listing of the common shares, the holder is permitted to sell or transfer all the remaining common shares received in the merger.

## MATERIAL CONTRACTS

### Sale and Purchase Agreement by and among Seacoast Profits Limited and J&R Holding Limited

On January 11, 2007, we, through our subsidiary J&R Holding Limited, entered into a sale and purchase agreement with Seacoast Profits Limited in connection with the acquisition of all the shares of Top Master Enterprises Limited, the sole shareholder of ASES AT, for a purchase price of US\$60.0 million.

### Equity Interests Transfer Agreement by and among NXP B.V., NXP Semiconductors Suzhou Ltd. and J&R Holding Limited

On August 6, 2007, we, through our subsidiary J&R Holding Limited, entered into an equity interests transfer agreement with NXP Semiconductors and NXP Semiconductors Suzhou Ltd. in connection with our establishment of a joint venture with NXP Semiconductors. Pursuant to the equity interests transfer agreement, we acquired 60.0% of the shares of NXP Semiconductors Suzhou Ltd., now known as ASEN, from NXP Semiconductors for a purchase price of US\$21.6 million. NXP Semiconductors retained the remaining 40.0% of the shares.

### Scheme Implementation Agreement between Advanced Semiconductor Engineering, Inc. and ASE Test

On September 4, 2007, we and ASE Test entered into a scheme implementation agreement under which we agreed to acquire, by way of a scheme of arrangement under Singapore law, or the Scheme, all the outstanding ordinary shares of ASE Test that we did not already directly or indirectly own for US\$14.78 in cash for each ASE Test ordinary share and the New Taiwan dollar equivalent of US\$0.185 in cash (based on the prevailing exchange rate) for each ASE Test depositary share. The Scheme became effective on May 30, 2008 and ASE Test became our wholly-owned subsidiary. For additional information on this transaction, see “Item 4. Information on the Company—History and Development of the Company—ASE Test Share Acquisition and Privatization.”

Syndicated Loan Agreements between Advanced Semiconductor Engineering, Inc. and banking syndicates led by Citibank, N.A., Taipei Branch

On March 3, 2008, we entered into a syndicated loan agreement with a banking syndicate led by Citibank, N.A., Taipei Branch for a NT\$24,750.0 million term loan facility, which we and the lenders subsequently agreed to reduce to NT\$17,500.0 million, for the purposes of financing our acquisition of all the outstanding ordinary shares of ASE Test pursuant to the Scheme. On May 29, 2008, we entered into an additional syndicated loan agreement with a

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banking syndicate led by Citibank, N.A., Taipei Branch for a US\$200.0 million term loan facility, also in connection with the Scheme. For more information on the Scheme, see “Item 4. Information on the Company—History and Development of the Company—ASE Test Share Acquisition and Privatization.”

Equity Purchase Agreement between Aimhigh Global Corp., TCC Steel and J&R Holding Limited in respect of Weihai Aimhigh Electronic Co. Ltd.

On March 17, 2008, we, through our subsidiary J&R Holding Limited, entered into an equity purchase agreement with Aimhigh Global Corp. and TCC Steel in connection with the acquisition of 100.0% of ASE (Weihai), Inc., formerly known as Weihai Aimhigh Electronic Co. Ltd., for a purchase price of US\$7.0 million.

## FOREIGN INVESTMENT IN THE ROC

Historically, foreign investment in the ROC securities market has been restricted. Since 1983, the ROC government has periodically 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 Regulations Governing Investment in Securities by Overseas Chinese and Foreign National, or the Regulations, which took effect on October 2, 2003. According to the Regulations, the ROC Financial Supervisory Commission, Executive Yuan, 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 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. 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 ROC Financial Supervisory Commission, Executive Yuan, 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 foreign investors who have registered with the Taiwan Stock Exchange for making investments in the ROC securities market) who wish to make direct investments in the shares of ROC companies are required to submit a foreign investment approval application to the Investment Commission of the ROC. Ministry of Economic Affairs or other applicable government authority. The Investment Commission 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 ROC Financial Supervisory Commission, Executive Yuan).

Under current ROC law, any non- ROC person possessing a foreign investment approval may repatriate annual net profits, interest and cash dividends attributable to the approved investment. Stock dividends attributable to this investment, investment capital and capital gains attributable to this investment may be repatriated by the non-ROC person possessing a foreign investment approval after approvals of the Investment Commission or other government authorities have been obtained.

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In addition to the general restriction against direct investment by non-ROC persons in securities of ROC companies, non-ROC persons (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 non-ROC persons (except in limited cases) may invest in these industries only up to a specified level and with the specific approval of the relevant competent authority that is responsible for enforcing the relevant legislation that the negative list is intended to implement.

The ROC Financial Supervisory Commission, Executive Yuan, announced on April 30, 2009 the Regulations Governing Mainland Chinese Investors' Securities Investments ("PRC Regulations"). According to the PRC Regulations, a qualified domestic institutional investor ("QDII") is allowed to invest in ROC securities (including up to 10% shareholding of an ROC company listed on Taiwan Stock Exchange or Over-the-Counter (GreTai) Securities Market). There is no assurance that in the future, there will not be further restrictions or prohibitions imposed on PRC persons (including QDIIs) from investing in certain industries in the ROC. In addition to investments permitted under the PRC Regulations, PRC investors other than QDII are prohibited from making investments in an ROC company listed on the Taiwan Stock Exchange or the Over-the-Counter (GreTai) Securities Market if the investment is less than 10% of the equity interest of such ROC company.

In addition to the general restriction against direct investment by PRC investment by PRC investors in securities of ROC companies, PRC investors may only invest in certain industries in a "the positive list", as promulgated by the ROC Executive Yuan. In addition, PRC investor who wishes to be elected as an ROC company's director or supervisor shall also submit an investment approval application to the Investment Commission of the ROC Ministry of Economic Affairs 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 ROC Financial Supervisory Commission, Executive Yuan and by the Central Bank of the Republic of China (Taiwan) to engage in such transactions. Current regulations favor trade-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, ROC companies and resident individuals may, without foreign exchange approval, remit outside and into the ROC foreign currency of up to US\$50 million (or its equivalent) and US\$5 million (or its equivalent) respectively in each calendar year. The above limits apply to remittances involving a conversion of NT dollars to a foreign currency and vice versa. 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 outside and into the ROC foreign currencies of up to US\$100,000 (or its equivalent) for each remittance. The above limit applies to remittances involving a conversion of NT dollars to a foreign currency and vice versa. The above limit does not, however, apply to the conversion of NT dollars into other currencies, including U.S. dollars, from the proceeds of sale of any underlying shares withdrawn from a depositary receipt facility.

## TAXATION

### ROC Taxation

The following discussion describes the material ROC tax consequences of the ownership and disposition of common shares or ADSs to a non-resident individual or non-resident entity that holds 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-



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ROC national who owns 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 the 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 in respect of common shares or ADSs are subject to ROC withholding tax, currently at the rate of 20% 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 10% of the dividend to be distributed, will be credited against the 20% withholding tax imposed on the non-ROC holders.

Distributions of stock dividends out of capital reserves will not be subject to withholding tax.

### Capital Gains

Under current ROC law, capital gain realized upon the sale or other disposition of securities is exempt from ROC income tax. This exemption currently applies to capital gains derived from the sale of common shares.

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

### Sale

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 the common shares in compliance with the ROC Company Act are currently not subject to ROC tax. Proceeds derived from sales of statutory subscription rights evidenced by securities are currently exempted from income tax but are subject to securities transaction tax, currently at the rate of 0.3% of the gross amount received. Income derived from sales of statutory subscription rights which are not evidenced by securities are treated as income generated from property transactions and are subject to income tax at a fixed rate of 20% of the income if the seller is a non-ROC holder. Subject to compliance with ROC law, we, in our sole discretion, may determine whether statutory subscription rights are evidenced by securities.

### Estate and Gift Tax

ROC estate tax is payable on any property within the ROC of 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, shares and bonds 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 and Vietnam. These tax treaties may limit the rate of ROC withholding tax on dividends paid with respect to common shares in 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

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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 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. For these purposes, you are a U.S. holder if you are a beneficial owner of common shares or ADSs and are, for U.S. federal income tax purposes:

- a citizen or 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 your 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;
- insurance companies;
- tax-exempt entities, including an “individual retirement account” or “Roth IRA”;
- 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;
- persons carrying on a trade or business outside 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 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 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 the common shares or ADSs.

This discussion is based on the Internal Revenue Code of 1986, as amended (the “Code”), final, temporary and proposed Treasury regulations, administrative announcements 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

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representations by the depository 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 depository shares are released before delivery of shares to the depository (“pre-release”), or intermediaries in the chain of ownership between holders and the issuer of the security underlying the American depository shares, may be taking actions that are inconsistent with the claiming of foreign tax credits by the holders of American depository shares. Such actions would also be inconsistent with the claiming of the reduced rate of tax applicable to dividends received by certain noncorporate U.S. holders. Accordingly, the analysis of the creditability of ROC taxes and the availability of the reduced tax rate for dividends received by certain noncorporate U.S. holders, both described below, could be affected by actions that may be taken by such parties or intermediaries.

Please consult your tax adviser with regard to the application of the U.S. federal income tax laws to your 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 common shares or ADSs (other than certain pro rata distributions of 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 you 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 you (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 you do not convert the amount of any dividend income received into U.S. dollars on the date of receipt and you subsequently realize gain or loss on a sale or other disposition of NT dollars, it generally will be U.S. source ordinary income or loss. The amount of any distribution of property other than cash will be the fair market value of such property on the date of distribution. The amount of any dividend will not be eligible for the dividends-received deduction generally available to U.S. corporations under the Code.

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 noncorporate U.S. holders in taxable years beginning before January 1, 2011 are taxable at a maximum rate of 15%. A foreign corporation is treated as a qualified foreign corporation with respect to dividends paid on stock that is readily tradable on a securities market in the United States, such as the New York Stock Exchange, where our ADSs are traded. You should consult your own tax advisers to determine whether the favorable rates may apply to dividends you receive and whether you are subject to any special rules that limit your ability to be taxed at this favorable rate.

Subject to applicable limitations and restrictions 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 the Company on account of the 10% retained earnings tax, will be eligible for credit against your

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, you should consult your own tax adviser regarding the availability of foreign tax credits in your particular circumstances. Instead of claiming a credit, you may, at your election, deduct such otherwise creditable ROC taxes in computing your taxable income, subject to generally applicable limitations under U.S. law.

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Certain pro rata distributions of common shares by a company to all of 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. You should consult your tax adviser as to whether any ROC tax imposed on these pro rata distributions of common shares may be creditable against your foreign source income from other sources.

### Capital Gains

You generally will recognize U.S. source capital gain or loss for U.S. federal income tax purposes on the sale or exchange of common shares or ADSs, which will be long-term capital gain or loss if the common shares or ADSs were held for more than one year. The amount of gain or loss will be equal to the difference between your tax basis in the common shares or ADSs disposed of and the amount realized on disposition, in each case as determined in U.S. dollars. You should consult your own tax adviser 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 2009 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 the U.S. holder.

### Information Reporting and Backup Withholding

Payment 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) you are an exempt recipient or (ii) in the case of backup withholding, you provide a correct taxpayer identification number and certify that you are not subject to backup withholding.

The amount of any backup withholding from a payment to you will be allowed as a credit against your United States federal income tax liability and may entitle you 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.



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## 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. To mitigate these risks we utilize derivative financial instruments, the application of which is primarily to manage these exposures and not for speculative purposes.

**Interest Rate Risk.** Our exposure to interest rate risks relates primarily to our long-term floating rate debt, which is normally incurred to support our corporate activities and capital expenditures.

We entered into several interest rate swap contracts to mitigate the interest rate risk on our long-term loans. In August 2008 we entered into a set of contracts in the amount of NT\$12,000.0 million, all of which expires in March 2013. In February 2009 we entered into another set of contracts in the amount of NT\$5,500.0 million, all of which expire in March 2013. We also entered into a set of contracts in April 2009 in the amount of US\$200.0 million, all of which expire in May 2011. The notional amounts as of December 31, 2009 are NT\$11,220.0 million, NT\$5,142.5 million and US\$200.0 million, respectively. Interest receipt and payment were based on a floating rate of 0.23%~0.5% and fixed rates of 0.96%~2.48% as of December 31, 2009. See note 26 to our consolidated financial statements for details of these contracts.

The fair value of these contracts as of December 31, 2009 was negative NT\$311.8 million (US\$9.8 million) and we recognized them as hedging derivative liabilities-noncurrent with an adjustment to shareholders' equity.

The tables below set forth information relating to our significant obligations, including interest rate swap, short-term borrowings, long-term bank loans and capital lease obligations, that are sensitive to interest rate fluctuations as of December 31, 2009.

	Expected Maturity Date						Total	Fair Value
	2010	2011	2012	2013	2014	Thereafter		
	(in millions, except percentage)							
<b>Interest Rate Swaps</b>								
Variable to Fixed (US\$)	–	200.0	–	–	–	–	200.0	1.7
Average pay rate	–	1.52%	–	–	–	–	1.52%	
Average receive rate	–	1.64%	–	–	–	–	1.64%	
Variable to Fixed (NT\$)	3,675.0	5,075.0	5,075.0	2,537.5	–	–	16,362.5	
Average pay rate	2.00%	2.00%	2.00%	2.00%	–	–	2.00%	255.8
Average receive rate	0.80%	1.52%	2.15%	2.48%	–	–	1.70%	

	Expected Maturity Date						Total	Fair Value
	2010	2011	2012	2013	2014	Thereafter		
	(in millions, except percentages)							
<b>Short-term borrowings:</b>								
Variable rate (US\$)	168.5	–	–	–	–	–	168.5	168.5
	1.72%	–	–	–	–	–	1.72%	

Average interest rate								
Fixed rate (US\$)	1.4	–	–	–	–	–	1.4	1.4
Average interest rate	1.24%	–	–	–	–	–	1.24%	
Variable rate (CNY)	1,238.9	–	–	–	–	–	1,238.9	1,238.9
Average interest rate	5.29%	–	–	–	–	–	5.29%	
Fixed rate (CNY)	378.0	–	–	–	–	–	378.0	378.0
Average interest rate	4.37%	–	–	–	–	–	4.37%	
Long-term bank loans and capital lease obligations:								
Variable rate (NT\$)	6,198.5	14,019.3	7,739.3	3,251.8	357.1	–	31,566.0	31,566.0
Average interest rate	1.60%	1.35%	2.10%	3.03%	3.04%	–	1.78%	
Fixed rate (NT\$)	111.8	2.1	0.3	–	–	–	114.2	114.2
Average interest rate	3.00%	5.72%	7.82%	–	–	–	3.06%	
Variable rate (US\$)	28.8	445.4	68.8	29.4	–	–	572.4	572.4

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	Expected Maturity Date						Total	Fair Value
	2010 (in millions, except percentages)	2011	2012	2013	2014	Thereafter		
Average interest rate	1.31%	0.99%	2.60%	3.4% <sup>1</sup>	—	—	1.32%	
Fixed rate (US\$)	*	*	—	—	—	—	*	*
Average interest rate	15.30%	15.30%	—	—	—	—	15.3%	—

\* Indicates amount is less than US\$0.1 million.

**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 and U.S. dollars, as well as, to a lesser extent, Korean won, Japanese yen, Malaysian ringgit and Chinese yuan. 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. Fluctuations in exchange rates, primarily among the U.S. dollar, the NT dollar, the Chinese yuan 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. 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\$403.5 million, NT\$282.0 million and NT\$4.2 million (US\$0.1 million) in 2007, 2008 and 2009, respectively. In 2007, 2008 and 2009, the average exchange rate of the NT dollar to the U.S. dollar was 32.85, 31.52 and 33.02, respectively, calculated using noon buying rates in The City of New York for cable transfers in NT dollars as certified for customs purposes by the Federal Reserve Bank of New York.

Foreign currency denominated liabilities as of December 31, 2009 primarily include U.S. dollar debt and Chinese yuan debt. As of December 31, 2009, approximately 50% of our cash and accounts receivable were denominated in U.S. dollars, with a substantial portion of the remainder denominated primarily in NT dollars and Chinese yuan. As of December 31, 2009, approximately 60% of our accounts payable and payable for properties were denominated in U.S. dollars, with a substantial portion of the remainder denominated primarily in NT dollars and Japanese yen. 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, swap contracts and cross currency 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 the outstanding cross currency swap contracts as of December 31, 2009, which will expire in 2010.

Notional Amount	NT\$ Interest Rate Paid (Received)		US\$ Interest Rate Received %
	%		
US\$130 million/NT\$4,291.0 million	(0.21)-0.90		0.23-0.91

The table below sets forth our outstanding forward exchange contracts and swap contracts, for which the expected maturity dates are in 2010, in aggregate terms by type of contract as of December 31, 2009.

## Forward Exchange Contracts and Swap Contracts

	Forward Exchange Contracts	Swap Contracts
Sell US\$ against NT\$		
Notional Amount	US\$129 million	US\$85.5 million
Weighted Average Strike Price	US\$/NT\$33.207	US\$/NT\$32.224
Fair Value	US\$0.770 million	US\$0.55 million

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## Forward Exchange Contracts and Swap Contracts

	Forward Exchange Contracts	Swap Contracts
<b>Buy US\$ against NT\$</b>		
Notional Amount	US\$100.0 million	US\$194.0 million
Weighted Average Strike Price	US\$/NT\$32.095	US\$/NT\$32,262
Fair Value	Negative US\$0.393 million	Negative US\$1.58 million
<b>Sell US\$ against JP¥</b>		
Notional Amount	US\$5.5 million	-
Weighted Average Strike Price	US\$/JP¥88.283	-
Fair Value	Negative US\$0.228 million	-
<b>Sell US\$ against CNY</b>		
Notional Amount	US\$20.0 million	-
Weighted Average Strike Price	US\$/CNY6.792	-
Fair Value	Negative US\$0.076 million	-
<b>Sell US\$ against MYR</b>		
Notional Amount	US\$7.5 million	-
Weighted Average Strike Price	US\$/MYR3.413	-
Fair Value	Negative US\$0.055 million	-

Other Market Risk. Our exposure to other market risk relates primarily to our investments in publicly-traded stock, corporate bonds and open-end mutual funds. 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. Of our investments in publicly-traded stocks, government and corporate bonds and open-end mutual funds held as of December 31, 2009, NT\$974.7 million (US\$30.5 million) were classified as financial assets held for trading and NT\$3,995.5 million (US\$125.1 million) were classified as available-for-sale financial assets. In addition, 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

## Item 12A. Debt Securities.

None.

## Item 12B. Warrants and Rights.

None.

## Item 12C. Other Securities.

Not applicable.

## Item 12D. American Depositary Shares.

### Depository Fees and Charges

Under the terms of the amended and restated deposit agreement dated September 29, 2000 among Citibank, N.A., as depository, 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, (collectively, the "Deposit Agreement") for our ADSs, an ADS holder may have to pay the following service fees to the depository bank:

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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
Depository 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 depository 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 depository 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 depository in the conversion of foreign currency;
- such fees and expenses as are incurred by the depository 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 depository, the custodian or any nominee in connection with the servicing or delivery of deposited securities.

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

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date. Depositary 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 depositary 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 depositary 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 depositary 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 depositary banks.

In the event of refusal to pay depositary fees, the depositary 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 depositary 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 depositary bank. You will receive prior notice of such changes.

## Depositary Payments

In 2009, we received the following payments from Citibank, N.A, the depositary bank for our ADR program:

Reimbursement of listing fees:	US\$81,819.00
Reimbursement of proxy process expenses:	US\$24,283.61
Reimbursement of ADR holders identification expenses:	US\$769.23
Reimbursement of legal fees:	US\$150,000.00
Contributions towards our investor relations efforts:	US\$368,900.00
Total payments received by us	US\$625,771.84

## 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, 2009, 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.

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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, 2009. 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.

Based on this assessment, management concluded that, as of December 31, 2009, 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 "Company") as of December 31, 2009, based on the criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission. The Company'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 Company'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 accordance with generally accepted accounting principles. 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 accordance with generally accepted accounting principles, 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.

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

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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 Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2009, based on the criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We have also audited, in accordance with auditing standards generally accepted in the Republic of China and the standards of the Public Company Accounting Oversight Board (United States), the consolidated financial statements as of and for the year ended December 31, 2009 of the Company and our report dated April 28, 2010 expressed an unqualified opinion on those financial statements and included explanatory paragraphs regarding (i) the Company's adoption of the newly revised Republic of China Statement of Financial Accounting Standards No.10, "Accounting for Inventories"; (ii) the reconciliation to accounting principles generally accepted in the United States of America; and (iii) the convenience translation of New Taiwan dollar amounts into U.S. dollar amounts.

/s/Deloitte & Touche  
Taipei, Taiwan  
The Republic of China  
April 28, 2010

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 is 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. Accordingly, we have not established any pre-approval policies and procedures.

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.

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	For the Year Ended December 31,		
	2008	2009	
	NT\$	NT\$	US\$
	(in thousands)		
Audit fees(1)	113,110.1	95,204.8	2,979.8
Audit-related fees(2)	-	-	-
Tax fees(3)	9,877.5	7,830.0	245.1
All other fees(4)	14,023.3	10,411.9	325.9
<b>Total</b>	<b>137,010.9</b>	<b>113,446.7</b>	<b>3,550.8</b>

- (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, auditing of non-recurring transactions and application of new accounting policies, pre-issuance reviews of quarterly financial results, consents and comfort letters and any other audit services required for SEC or other regulatory filings.
- (2) Audit-related fees include assurance and related services provided by auditors that are reasonably related to the performance of the audit or review of our financial statements and not reported above under "Audit fees." They comprise amounts for services such as acquisition due diligence and consultation concerning financial accounting and reporting matters.
- (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 fees for assistance with IFRS implementation 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 17, 2008 and January 23, 2009, we announced share repurchase programs to repurchase up to 171 million and 285 million of our common shares at prices between NT\$8.00 to NT\$18.00 and NT\$8.00 to NT\$17.00 per share during the period from November 18, 2008 to January 17, 2009 and from February 2, 2009 to April 1, 2009, respectively. The share repurchase programs concluded on January 18, 2009 and April 2, 2009, when a total of 144.0 million and 73.9 million, respectively, of our common shares had been repurchased pursuant to the programs. As of June 30, 2009, all of these common shares we repurchased had been cancelled. The table below sets forth certain information about the repurchase of our common shares under the share repurchase program.

Period	(a) Total Number of Common Shares Purchased	(b) Average Price Paid Per Common Share	(c) Total Number of Common Shares Purchased as Part of Publicly Announced Programs	(d) Maximum Number (or Approximate Dollar Value) of Common Shares that May Yet Be Purchased Under the Programs

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November 2008 (November 18, 2008 – November 30, 2008)	28,729,000	10.74	28,729,000	142,271,000
December 2008 (December 1, 2008 – December 31, 2008)	79,971,000	9.90	79,971,000	62,300,000
January 2009 (January 1, 2009 – January 17, 2009)	35,337,000	11.86	35,337,000	26,963,000
Total	144,037,000	10.55	144,037,000	-
February 2009 (February 2, 2009 – February 28, 2009)	66,096,000	12.12	66,096,000	218,904,000
March 2009 (March 1, 2009 – March 3, 2009)	7,841,000	12.02	7,841,000	211,063,000
Total	73,937,000	12.11	73,937,000	-

Item 16F. Change In Registrant's Certifying Accountant

Not applicable.



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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 United States Securities Exchange Act of 1934, as amended (the "Exchange Act"). We do not assess the independence of our directors under the independence requirements of the NYSE listing standards.

Pursuant to relevant laws and regulations of the Republic of China (the "ROC"), we have two independent directors on our board of directors that were elected through the candidate nomination system at our annual general shareholders meeting on June 25, 2009.

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.

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

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	<p>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.</p>
<p>Compensation committee</p>	
<p>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.</p>	<p>We do not have a compensation committee. Under the ROC Company Law, companies incorporated in the ROC are not required to have a compensation committee. However, the ROC Company Law requires that the measures by which director compensation is determined either be set forth in the company's articles of incorporation or be approved at a shareholders meeting. Our articles of incorporation currently provide that total director and supervisor remuneration shall be no more than 2% (inclusive) of our net income after payment of all income taxes, deduction of any past losses, allocation of 10% of our net income for legal reserves and allocation for special reserves.</p> <p>The ROC Company Law requires the compensation of managers, including executive officers, of a company limited by shares to be approved by a resolution of the board of directors or pursuant to a higher standard specified in its articles of incorporation. Our articles of incorporation do not provide measures by which the compensation of executive officers is determined and such compensation is determined by our board of directors according to our internal compensation policies.</p>
<p>Audit committee</p>	
<p>Listed companies must have an audit committee that satisfies the requirements of Rule 10A-3 under the Exchange Act.</p>	<p>We have an audit committee that satisfies the requirements of Rule 10A-3 under the Exchange Act. Pursuant to the ROC Securities and Exchange Law, beginning January 1, 2007, public companies shall either establish an audit committee satisfying specified requirements or install supervisors. Under certain circumstances, public companies may be required by the Financial Supervisory Commission (the "FSC") to establish an audit committee. In addition to our Rule 10A-3 audit committee, we currently have supervisors pursuant to the ROC Securities and Exchange Law.</p>
<p>The audit committee must have a minimum of three members.</p>	<p>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.</p>
<p>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.</p>	

The audit committee must have a written charter that provides for the duties and responsibilities set out in

Our audit committee charter provides for the audit committee to assist our board of directors in its

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Rule 10A-3 and addresses certain other matters required by the NYSE listing standards.

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.

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, 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 GreTai Stock Market Listed Companies promulgated by the Taiwan Stock Exchange

and the GreTai Stock Market, and we provide an explanation of differences between our practice and

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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.

the principles, if any, in our ROC annual report.

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.

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.

PART III

Item 17. Financial Statements

The Company has elected to provide financial statements for fiscal year 2009 and the related information pursuant to Item 18.

Item 18. Financial Statements

Reference is made to pages F-1 to F-75 of this annual report.





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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 April 28, 2010 (page F-1 to F-2).
- (b) Consolidated Balance Sheets of the Company and subsidiaries as of December 31, 2008 and 2009 (page F-3).
- (c) Consolidated Statements of Income of the Company and subsidiaries for the years ended December 31, 2007, 2008 and 2009 (page F-4 to F-5).
- (d) Consolidated Statements of Changes in Shareholders' Equity of the Company and subsidiaries for the years ended December 31, 2007, 2008 and 2009 (page F-6).
- (e) Consolidated Statements of Cash Flows of the Company and subsidiaries for the years ended December 31, 2007, 2008 and 2009 (pages F-7 to F-9).
- (f) Notes to Consolidated Financial Statements of the Company and subsidiaries (pages F-10 to F-75).

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).

(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).

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- 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).
- (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(1) to our annual report on Form 20-F (File No. 001-16125) for the year ended December 31, 2008 filed on June 24, 2009).

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(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).

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.

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† Does not contain portions for which confidential treatment has been granted.

The Company agrees to furnish to the Securities and Exchange Commission upon request a copy of any instrument which defines the rights of holders of long-term debt of the Company and its consolidated subsidiaries.

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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  
Joseph Tung  
Chief Financial Officer

Date: June 11, 2010

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Advanced Semiconductor Engineering, Inc. and Subsidiaries

Consolidated Financial Statements as of  
December 31, 2008 and 2009 and for the  
Years Ended December 31, 2007, 2008 and 2009 and  
Report of Independent Registered Public Accounting Firm

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Shareholders  
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 “Company”) as of December 31, 2008 and 2009, and the related consolidated statements of income, changes in shareholders’ equity and cash flows for each of the three years in the period ended December 31, 2009, all expressed in New Taiwan dollars. These consolidated financial statements are the responsibility of the Company’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 Rules Governing the Audit of Financial Statements by Certified Public Accountants, auditing standards generally accepted in the Republic of China (“ROC”) and the Standards of the Public Company Accounting Oversight Board (United States). Those rules and standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall 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 consolidated financial position of the Company as of December 31, 2008 and 2009, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2009, in conformity with the Guidelines Governing the Preparation of Financial Reports by Securities Issuers and accounting principles generally accepted in the ROC.

As discussed in Note 3 to the consolidated financial statements, starting from January 1, 2009, the Company adopted the newly revised ROC Statement of Financial Accounting Standards (“SFAS”) No.10, “Accounting for Inventories”. Besides, starting from January 1, 2008, the Company changed its method of accounting for bonuses paid to employees, directors and supervisors upon adoption of Interpretation 96-052, “Accounting for Bonuses to Employees, Directors and Supervisors” issued by the ROC Accounting Research and Development Foundation (“ARDF”) in March 2007.

Accounting principles generally accepted in the ROC differ in certain significant respects from accounting principles generally accepted in the United States of America. Information relating to the nature and effect of such differences is presented in Note 32 to the consolidated financial statements.

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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 2 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 Company's internal control over financial reporting as of December 31, 2009, based on the criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated April 28, 2010 expressed an unqualified opinion on the Company's internal control over financial reporting.

/s/ Deloitte & Touche  
Taipei, Taiwan  
The Republic of China  
April 28, 2010

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## ADVANCED SEMICONDUCTOR ENGINEERING, INC. AND SUBSIDIARIES

## CONSOLIDATED BALANCE SHEETS

(Amounts in Thousands, Except Par Value)

ASSETS	2008	December 31		US\$ (Note 2)	LIABILITIES AND SHAREHOLDERS' EQUITY	2008
	NT\$	NT\$	2009			NT\$
<b>CURRENT ASSETS</b>					<b>CURRENT LIABILITIES</b>	
Cash and cash equivalents (Notes 2 and 4)	\$ 26,138,930	\$ 22,557,494	\$ 706,025		Short-term borrowings (Note 17)	\$ 8,779,200
Financial assets at fair value through profit or loss - current (Notes 2 and 5)	537,480	1,024,711	32,072		Financial liabilities at fair value through profit or loss - current (Notes 2 and 5)	82,800
Available-for-sale financial assets - current (Notes 2 and 6)	279,812	3,995,524	125,056		Hedging derivative liabilities - current (Notes 2 and 26)	
Bond investments with no active market - current (Notes 2 and 7)	450,000	-	-		Accounts payable	5,167,300
Accounts receivable, net (Notes 2 and 8)	11,388,105	17,811,541	557,482		Income tax payable (Note 2)	1,265,200
Other receivables	587,030	763,679	23,902		Accrued expenses (Note 20)	4,194,000
Other receivables from related parties (Note 27)	32,003	463,068	14,494		Payable for properties	2,246,900
Guarantee deposits - current	16,074	256,876	8,040		Advance real estate receipts (Notes 2 and 10)	
Inventories (Notes 2, 3 and 9)	3,635,032	4,955,227	155,093		Current portion of long-term bank loans (Notes 19 and 28)	2,670,800
Construction in progress related to property development (Notes 2, 10 and 28)	1,144,113	7,251,193	226,954		Current portion of capital lease obligations (Note 2)	23,100
Deferred income tax assets - current (Notes 2 and 24)	1,085,448	893,622	27,969			

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Other current assets	1,072,824	1,440,067	45,072	Other current liabilities	840,98
Total current assets	46,366,851	61,413,002	1,922,159	Total current liabilities	25,270,69
<b>LONG-TERM INVESTMENTS</b>			<b>LONG-TERM DEBTS</b>		
Financial assets carried at cost - noncurrent (Notes 2 and 11)	547,368	692,059	21,661	Hedging derivative liabilities - noncurrent (Notes 2 and 26)	391,69
Bond investments with no active market - noncurrent (Notes 2 and 7)	-	96,090	3,007	Long-term bonds payable (Notes 2 and 18)	1,375,00
Equity method investments (Notes 2 and 12)	3,779,670	4,371,841	136,834	Long-term bank loans (Notes 19 and 28)	49,839,50
				Capital lease obligations (Note 2)	15,92
Total long-term investments	4,327,038	5,159,990	161,502	Total long-term debts	51,622,18
<b>PROPERTY, PLANT AND EQUIPMENT</b> (Notes 2, 13, 27, 28 and 29)					
Cost				<b>OTHER LIABILITIES</b>	
Land	2,395,951	2,374,530	74,320	Accrued pension cost (Notes 2 and 20)	2,663,77
Buildings and improvements	39,763,199	41,186,763	1,289,101	Deferred income tax liabilities (Notes 2 and 24)	151,72
Machinery and equipment	129,424,251	131,206,473	4,106,619	Others	520,85
Transportation equipment	212,956	201,003	6,291		
Furniture and fixtures	3,765,175	3,800,859	118,963	Total other liabilities	3,336,36
Leased assets and leasehold improvements	390,209	343,204	10,742		
Total cost	175,951,741	179,112,832	5,606,036	Total liabilities	80,229,24
Less: Accumulated depreciation	(98,560,461)	(109,231,262)	(3,418,819)		
Less: Accumulated impairment	(12,991)	(5,401)	(169)	<b>EQUITY ATTRIBUTABLE TO SHAREHOLDERS OF THE PARENT</b>	
	77,378,289	69,876,169	2,187,048	Capital stock - NT\$10 par value	
Construction in progress	4,989,149	4,167,279	130,431	Authorized - 8,000,000 thousand shares	
Machinery in transit and prepayments	2,390,546	5,320,412	166,523	Issued - 5,690,428 thousand shares in 2008 and 5,479,878 thousand shares in 2009 (Note 21)	56,904,27
	84,757,984	79,363,860	2,484,002	Capital received in advance (Note 21)	3,38

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Net property, plant  
and equipment

				Capital surplus (Note 21)	
INTANGIBLE ASSETS				Capital in excess of par value	1,329,63
Patents (Notes 2 and 14)	130,373	101,716	3,184	Treasury stock transactions	823,81
Goodwill (Notes 2 and 14)	9,456,091	9,419,005	294,805	Long-term investment	3,536,85
Deferred pension cost (Notes 2 and 20)	73,793	58,450	1,829	Others	682,98
Acquired special technology (Notes 2 and 14)	626,362	484,544	15,166	Total capital surplus	6,373,28
Land use rights (Notes 2 and 14)	1,438,351	1,385,144	43,353	Retained earnings (Note 21)	9,221,40
Other intangible assets (Notes 2 and 14)	867,079	783,839	24,533	Other equity adjustments (Notes 2, 20 and 21)	
				Unrealized gain or loss on financial instruments	(439,43
Total intangible assets	12,592,049	12,232,698	382,870	Cumulative translation adjustments	4,873,93
				Unrecognized pension cost	(230,40
				Treasury stock - 431,232 thousand shares in 2008 and 322,532 thousand shares in 2009	(7,034,48
OTHER ASSETS					
Assets leased to others (Notes 2 and 15)	688,656	586,067	18,343	Total other equity adjustments	(2,830,30
Idle assets (Notes 2 and 16)	361,388	361,835	11,325		
Guarantee deposits - noncurrent	45,150	50,628	1,585	Total equity attributable to shareholders of the parent	69,671,99
Deferred charges (Note 2)	1,156,213	1,030,404	32,251		
Deferred income tax assets - noncurrent (Notes 2 and 24)	1,629,709	1,621,017	50,736	MINORITY INTEREST	2,288,74
Restricted assets (Note 28)	191,416	177,565	5,557		
Others (Note 20)	73,533	63,830	1,998	Total shareholders' equity	71,960,74
Total other assets	4,146,065	3,891,346	121,795		
TOTAL	\$ 152,189,987	\$ 162,060,896	\$ 5,072,328	TOTAL	\$ 152,189,98

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

(With Deloitte & Touche audit report dated April 28, 2010)

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## ADVANCED SEMICONDUCTOR ENGINEERING, INC. AND SUBSIDIARIES

## CONSOLIDATED STATEMENTS OF INCOME

(Amounts in Thousands, Except Per Share Data)

	Year Ended December 31			
	2007	2008	2009	
	NT\$	NT\$	NT\$	US\$ (Note 2)
<b>NET REVENUES (Note 2)</b>				
Packaging	\$ 78,516,274	\$ 73,391,622	\$ 67,935,456	\$ 2,126,305
Testing	20,007,839	19,021,360	15,795,108	494,370
Other	2,638,956	2,017,930	2,044,750	63,998
<b>Total net revenues</b>	<b>101,163,069</b>	<b>94,430,912</b>	<b>85,775,314</b>	<b>2,684,673</b>
<b>COST OF REVENUES (Notes 3, 9 and 23)</b>				
Packaging	58,261,353	59,178,272	55,557,439	1,738,887
Testing	12,634,387	12,766,132	11,342,103	354,995
Other	2,024,020	717,034	729,588	22,835
<b>Total cost of revenues</b>	<b>72,919,760</b>	<b>72,661,438</b>	<b>67,629,130</b>	<b>2,116,717</b>
<b>GROSS PROFIT</b>	<b>28,243,309</b>	<b>21,769,474</b>	<b>18,146,184</b>	<b>567,956</b>
<b>OPERATING EXPENSES (Notes 2, 23 and 27)</b>				
Research and development	3,073,491	3,671,204	3,611,950	113,050
Selling	994,229	1,158,637	1,209,199	37,847
General and administrative	5,512,880	5,694,224	4,310,692	134,920
<b>Total operating expenses</b>	<b>9,580,600</b>	<b>10,524,065</b>	<b>9,131,841</b>	<b>285,817</b>
<b>INCOME FROM OPERATIONS</b>	<b>18,662,709</b>	<b>11,245,409</b>	<b>9,014,343</b>	<b>282,139</b>
<b>NON-OPERATING INCOME AND GAINS</b>				
Interest income (Notes 26 and 27)	348,660	326,772	173,870	5,442
Gain on valuation of financial assets, net (Notes 2 and 5)	205,997	286,914	934,938	29,262
Equity in earnings of equity method investees (Notes 2 and 12)	345,705	77,450	330,117	10,332
Foreign exchange gain, net (Notes 2 and 26)	403,532	282,031	4,203	132
Others (Note 15)	1,176,137	985,336	815,680	25,530
<b>Total non-operating income and gains</b>	<b>2,480,031</b>	<b>1,958,503</b>	<b>2,258,808</b>	<b>70,698</b>
<b>NON-OPERATING EXPENSES AND LOSSES</b>				
Interest expense (Notes 2, 10, 13 and 26)	1,574,524	1,813,296	1,508,023	47,200
Loss on valuation of financial liabilities (Notes 2 and 5)	28,583	732,204	645,774	20,212

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Impairment loss (Notes 2, 6, 11, 13 and 16)	994,682	293,319	11,117	348
Others (Note 27)	1,193,083	889,328	719,847	22,530
Total non-operating expenses and losses	3,790,872	3,728,147	2,884,761	90,290
INCOME BEFORE INCOME TAX	17,351,868	9,475,765	8,388,390	262,547
INCOME TAX EXPENSE (Notes 2 and 24)	3,357,384	2,268,282	1,484,922	46,476
NET INCOME	\$ 13,994,484	\$ 7,207,483	\$ 6,903,468	\$ 216,071
ATTRIBUTABLE TO				
Shareholders of the parent	\$ 12,165,249	\$ 6,160,052	\$ 6,744,546	\$ 211,097
Minority interest	1,829,235	1,047,431	158,922	4,974
	\$ 13,994,484	\$ 7,207,483	\$ 6,903,468	\$ 216,071

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## ADVANCED SEMICONDUCTOR ENGINEERING, INC. AND SUBSIDIARIES

## CONSOLIDATED STATEMENTS OF INCOME

(Amounts in Thousands, Except Per Share Data)

	Year Ended December 31			
	2007	2008	2009	
	NT\$	NT\$	NT\$	US\$ (Note 2)
<b>EARNINGS PER SHARE (Note 25)</b>				
<b>Basic earnings per share</b>				
Before income tax	\$ 2.55	\$ 1.36	\$ 1.49	\$ 0.05
After income tax	\$ 2.26	\$ 1.14	\$ 1.31	\$ 0.04
<b>Diluted earnings per share</b>				
Before income tax	\$ 2.46	\$ 1.33	\$ 1.47	\$ 0.05
After income tax	\$ 2.18	\$ 1.12	\$ 1.29	\$ 0.04
<b>EARNINGS PER ADS (Note 25)</b>				
<b>Basic earnings per ADS</b>				
Before income tax	\$ 12.73	\$ 6.81	\$ 7.43	\$ 0.23
After income tax	\$ 11.28	\$ 5.71	\$ 6.53	\$ 0.20
<b>Diluted earnings per ADS</b>				
Before income tax	\$ 12.32	\$ 6.67	\$ 7.34	\$ 0.23
After income tax	\$ 10.90	\$ 5.59	\$ 6.45	\$ 0.20

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

(Concluded)

(With Deloitte &amp; Touche audit report dated April 28, 2010)

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## ADVANCED SEMICONDUCTOR ENGINEERING, INC. AND SUBSIDIARIES

## CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY

(Amounts in Thousands)

	Capital Stock	Capital Received in Advance	Capital Surplus	Legal Reserve	Retained Earnings Unappro- priated Earnings	Total	Unrealized Gain (Loss) on Financial Instru- ments	Other Equ Cumulativ Translatio Adjust- ments
New Taiwan Dollars								
BALANCE, JANUARY 1, 2007	\$ 45,925,086	\$ 384,428	\$ 3,805,768	\$ -	\$ 16,985,043	\$ 16,985,043	\$ 416,400	\$ 1,330,600
Appropriations of 2006 earnings								
Legal reserve	-	-	-	1,698,504	(1,698,504)	-	-	-
Compensation to directors and supervisors	-	-	-	-	(300,000)	(300,000)	-	-
Bonus to employees - cash	-	-	-	-	(535,028)	(535,028)	-	-
Bonus to employees - stock	535,029	-	-	-	(535,029)	(535,029)	-	-
Cash dividends - 15%	-	-	-	-	(6,941,011)	(6,941,011)	-	-
Stock dividends - 15%	6,941,011	-	-	-	(6,941,011)	(6,941,011)	-	-
Adjustment of equity method investments	-	-	15,867	-	-	-	(15,069)	-
Cash dividends received by subsidiaries from parent company	-	-	271,945	-	-	-	-	-
Unrealized gain on available-for-sale financial assets	-	-	-	-	-	-	1,187	-
Stock options exercised by employees								

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Common stock	697,276	(384,428)	649,392	-	-	-	-	-
Capital received in advance	-	61,952	-	-	-	-	-	-
Conversion of convertible bonds								
Common stock	377,187	-	923,608	-	-	-	-	-
Capital received in advance	-	429,931	-	-	-	-	-	-
Capital surplus from accrued interest on convertible bonds	-	-	728,254	-	-	-	-	-
Net income in 2007	-	-	-	-	12,165,249	12,165,249	-	-
Changes in minority interest	-	-	-	-	-	-	-	-
Changes in minority interest from acquisition of subsidiaries	-	-	-	-	-	-	-	-
Cumulative translation adjustments	-	-	-	-	-	-	-	849,111
<b>BALANCE, DECEMBER 31, 2007</b>	<b>54,475,589</b>	<b>491,883</b>	<b>6,394,834</b>	<b>1,698,504</b>	<b>12,199,709</b>	<b>13,898,213</b>	<b>402,518</b>	<b>2,179,811</b>
Appropriations of 2007 earnings								
Legal reserve	-	-	-	1,216,525	(1,216,525)	-	-	-
Compensation to directors and supervisors	-	-	-	-	(216,000)	(216,000)	-	-
Bonus to employees - cash	-	-	-	-	(383,205)	(383,205)	-	-
Bonus to employees - stock	383,205	-	-	-	(383,205)	(383,205)	-	-
Cash dividends - 17.1%	-	-	-	-	(9,361,728)	(9,361,728)	-	-
Stock dividends - 0.9%	492,723	-	-	-	(492,723)	(492,723)	-	-
Issuance of common stock from capital surplus	1,094,939	-	(1,094,939)	-	-	-	-	-
Adjustment of equity method investments	-	-	1,014	-	-	-	(432,247)	-
Cash dividends received by subsidiaries from parent company	-	-	535,100	-	-	-	-	-

Unrealized gain on available-for-sale financial assets	-	-	-	-	-	-	-	(18,014)	
Change in unrealized loss on cash flow hedging financial instruments	-	-	-	-	-	-	-	(391,695)	
Stock options exercised by employees									
Common stock	198,067	(61,952)	101,268	-	-	-	-	-	
Capital received in advance	-	3,387	-	-	-	-	-	-	
Conversion of convertible bonds	259,755	(429,931)	436,010	-	-	-	-	-	
Net income in 2008	-	-	-	-	6,160,052	6,160,052	-	-	
Changes in minority interest	-	-	-	-	-	-	-	-	
Changes in minority interest from acquisition of subsidiaries	-	-	-	-	-	-	-	-	
Cumulative translation adjustments	-	-	-	-	-	-	-	-	2,694,100
Change in net loss not recognized as pension cost	-	-	-	-	-	-	-	-	
Acquisition of treasury stock - 108,700 thousand shares	-	-	-	-	-	-	-	-	
BALANCE, DECEMBER 31, 2008	56,904,278	3,387	6,373,287	2,915,029	6,306,375	9,221,404	(439,438)	4,873,900	
Appropriations of 2008 earnings (Note 21)									
Legal reserve	-	-	-	616,005	(616,005)	-	-	-	
Cash dividends - 5.0%	-	-	-	-	(2,736,568)	(2,736,568)	-	-	
Adjustment of equity method investments	-	-	1,369	-	27	27	380,464	-	
Cash dividends received by subsidiaries from	-	-	160,895	-	-	-	-	-	

parent company									
Change in unrealized loss on cash flow hedging financial instruments	-	-	-	-	-	-	-	84,472	
Stock options exercised by employees									
Common stock	74,245	(3,387)	32,726	-	-	-	-	-	
Capital received in advance	-	135,205	-	-	-	-	-	-	
Net income in 2009	-	-	-	-	6,744,546	6,744,546			
Changes in minority interest	-	-	-	-	-	-	-	-	
Cumulative translation adjustments	-	-	-	-	-	-	-	-	(1,597,400)
Change in net loss not recognized as pension cost	-	-	-	-	-	-	-	-	
Acquisition of treasury stock - 109,274 thousand shares	-	-	-	-	-	-	-	-	
Retirement of treasury stock - 217,974 thousand shares	(2,179,740)	-	(234,522)	-	-	-	-	-	
BALANCE, DECEMBER 31, 2009	\$ 54,798,783	\$ 135,205	\$ 6,333,755	\$ 3,531,034	\$ 9,698,375	\$ 13,229,409	\$ 25,498	\$ 3,276,500	
U.S. Dollars (Note 2)									
BALANCE, DECEMBER 31, 2009	\$ 1,715,142	\$ 4,232	\$ 198,240	\$ 110,517	\$ 303,549	\$ 414,066	\$ 798	\$ 102,500	

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

(With Deloitte & Touche audit report dated April 28, 2010)

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## ADVANCED SEMICONDUCTOR ENGINEERING, INC. AND SUBSIDIARIES

## CONSOLIDATED STATEMENTS OF CASH FLOWS

(Amounts in Thousands)

	Year Ended December 31			
	2007	2008	2009	
	NT\$	NT\$	NT\$	US\$ (Note 2)
<b>CASH FLOWS FROM OPERATING ACTIVITIES</b>				
Net income	\$ 13,994,484	\$ 7,207,483	\$ 6,903,468	\$ 216,071
Adjustments to reconcile net income to net cash provided by operating activities:				
Depreciation	15,558,722	16,333,515	16,775,929	525,068
Amortization	1,067,430	911,337	862,153	26,984
Impairment loss	994,682	293,319	11,117	348
Equity in earnings of equity method investees, net of cash dividends of NT\$154,517 thousand, NT\$292,094 thousand and NT\$82,299 thousand (US\$2,576 thousand) received in 2007, 2008 and 2009, respectively	(191,188)	214,644	(247,818)	(7,756)
Accrued interest on convertible bonds	177,111	-	-	-
Provision for inventory valuation and obsolescence	588,699	510,038	191,904	6,006
Deferred income taxes	2,029,567	701,722	229,744	7,190
Others	(89,358)	213,514	406,416	12,721
Changes in operating assets and liabilities				
Financial assets for trading	(44,091)	1,064,514	(487,231)	(15,250)
Accounts receivable	(5,441,054)	7,474,046	(6,470,810)	(202,529)
Other receivables (including receivables from related parties)	(95,286)	223,690	(129,022)	(4,038)
Inventories	(281,463)	767,071	(1,509,143)	(47,234)
Construction in progress related to property development	(68,160)	(591,148)	(6,107,080)	(191,145)
Other current assets	120,897	96,399	(411,045)	(12,865)
Financial liabilities for trading	(308,252)	38,545	(8,346)	(261)
Accounts payable	661,423	(4,345,030)	3,786,668	118,518
Income tax payable	(94,783)	27,949	(83,789)	(2,623)
Advance real estate receipts	-	-	1,507,472	47,182
Accrued expenses and other current liabilities	(268,766)	(412,809)	296,641	9,285
Net cash provided by operating activities	28,310,614	30,728,799	15,517,228	485,672
<b>CASH FLOWS FROM INVESTING ACTIVITIES</b>				
Acquisition of available-for-sale financial assets	(11,768,642)	(7,692,649)	(42,695,001)	(1,336,307)
Proceeds from disposal of available-for-sale financial assets	11,825,157	16,714,277	38,971,185	1,219,755

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Acquisition of bond investments with no active market	-	(450,000)	(97,740)	(3,059)
Proceeds from disposal of bond investments with no active market	-	-	450,000	14,085
Acquisition of financial assets carried at cost	(17,970)	(74,477)	(154,544)	(4,837)
Proceeds from disposal of financial assets carried at cost	910,307	6,295	3,203	100
Proceeds from disposal of held-to-maturity financial assets	-	50,000	-	-
Acquisition of equity method investments	-	-	(84,000)	(2,629)
Acquisition of subsidiaries	(846,889)	(26,490,526)	-	-
Acquisition of property, plant and equipment	(17,190,432)	(18,583,343)	(11,445,621)	(358,235)
Proceeds from disposal of property, plant and equipment	347,470	187,521	93,116	2,914
Decrease (increase) in guarantee deposits	147,399	429,082	(246,280)	(7,708)
Decrease in restricted assets	57,395	87,652	13,851	434
Increase in other assets	(894,892)	(442,555)	(337,864)	(10,575)
Acquisition of patents	(6,595)	(96,109)	(1,020)	(32)
Acquisition of land use rights	(670,669)	(4,335)	-	-
Increase in other receivables from related parties	-	-	(450,000)	(14,085)
Net cash used in investing activities	(18,108,361)	(36,359,167)	(15,980,715)	(500,179)

(Continued)

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## ADVANCED SEMICONDUCTOR ENGINEERING, INC. AND SUBSIDIARIES

## CONSOLIDATED STATEMENTS OF CASH FLOWS

(Amounts in Thousands)

	Year Ended December 31			
	2007	2008	2009	US\$ (Note 2)
	NT\$	NT\$	NT\$	
<b>CASH FLOWS FROM FINANCING ACTIVITIES</b>				
Proceeds from (repayments of):				
Short-term borrowings	\$ 3,784,091	\$ (1,702,051)	\$ 4,245,726	\$ 132,887
Short-term bills payable	149,831	(149,831)	-	-
Bonds payable	-	(5,549,983)	(1,375,000)	(43,036)
Proceeds from long-term debts	3,072,061	42,020,525	31,145,664	974,825
Repayments of long-term debts and capital lease obligations	(7,711,576)	(11,858,119)	(33,385,917)	(1,044,942)
Increase (decrease) in guarantee deposits received	(212,271)	(48,634)	28,800	901
Decrease in collection of accounts receivable sold	(2,378,464)	-	-	-
Proceeds from exercise of stock options by employees	1,024,192	240,770	238,789	7,474
Compensation to directors and supervisors and bonus to employees	(835,028)	(599,205)	-	-
Cash dividends, net of cash dividends received by subsidiaries	(6,669,066)	(8,826,628)	(2,575,673)	(80,616)
Repurchase of treasury stock	-	(1,099,989)	(1,314,273)	(41,135)
Increase in minority interest	1,283,507	1,435,527	213,335	6,677
Net cash provided by (used in) financing activities	(8,492,723)	13,862,382	(2,778,549)	(86,965)
EFFECT OF EXCHANGE RATE CHANGES	(281,670)	748,981	(339,400)	(10,623)
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	1,427,860	8,980,995	(3,581,436)	(112,095)
CASH AND CASH EQUIVALENTS, BEGINNING OF YEAR	15,730,075	17,157,935	26,138,930	818,120
CASH AND CASH EQUIVALENTS, END OF YEAR	\$ 17,157,935	\$ 26,138,930	\$ 22,557,494	\$ 706,025
<b>SUPPLEMENTAL INFORMATION</b>				
Interest paid (excluding capitalized interest)	\$ 1,605,936	\$ 1,719,200	\$ 1,659,164	\$ 51,930
Income tax paid	\$ 1,604,529	\$ 1,538,611	\$ 1,338,967	\$ 41,908
Cash paid for acquisition of property, plant and equipment				
Acquisition of property, plant and equipment	\$ 18,172,155	\$ 16,623,705	\$ 12,631,932	\$ 395,365
Decrease (increase) in payable	(973,359)	1,963,582	(1,186,311)	(37,130)



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Increase in capital lease obligations	(8,364)	(3,944)	-	-
	\$ 17,190,432	\$ 18,583,343	\$ 11,445,621	\$ 358,235
Cash received from disposal of property, plant and equipment				
Proceeds from disposal of property, plant and equipment	\$ 259,924	\$ 100,162	\$ 115,263	\$ 3,608
Decrease (increase) in other receivables	87,546	87,359	(22,147)	(694)
	\$ 347,470	\$ 187,521	\$ 93,116	\$ 2,914

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## ADVANCED SEMICONDUCTOR ENGINEERING, INC. AND SUBSIDIARIES

## CONSOLIDATED STATEMENTS OF CASH FLOWS

(Amounts in Thousands)

	Year Ended December 31			
	2007	2008	2009	
	NT\$	NT\$	NT\$	US\$ (Note 2)
<b>Cash paid for acquisition of new subsidiaries</b>				
Fair value of assets acquired from Top Master Enterprises Limited ("TME") and Suzhou ASEN Semiconductors Co., Ltd. ("ASEN")	\$ 10,244,745	\$ -	\$ -	\$ -
Less: Fair value of liabilities from TME and ASEN	(7,094,243)	-	-	-
Fair value of net assets of TME and ASEN	3,150,502	-	-	-
Attributable to minority interest of ASEN	(489,134)	-	-	-
Fair value of net assets acquired	2,661,368	-	-	-
Less: Cash received at acquisition	(1,814,479)	-	-	-
Net cash outflow	\$ 846,889	\$ -	\$ -	\$ -
<b>Fair value of assets acquired from ASE WeiHai Inc. ("ASE WeiHai")</b>				
	\$ -	\$ 919,505	\$ -	\$ -
Less: Fair value of liabilities from ASE WeiHai	-	(706,649)	-	-
Fair value of net assets acquired	-	212,856	-	-
Less: Cash received at acquisition	-	(31,641)	-	-
Net cash outflow	\$ -	\$ 181,215	\$ -	\$ -
Net cash outflow for acquisition of ASE Test Limited ("ASE Test") (Note 2)	\$ -	\$ 26,309,311	\$ -	\$ -
<b>FINANCING ACTIVITIES NOT AFFECTING CASH FLOWS</b>				
Current portion of long-term bank loans	\$ 5,258,946	\$ 2,670,845	\$ 923,284	\$ 28,898
Current portion of capital lease obligations	67,838	23,133	12,055	377
Bonds converted to capital stock	1,730,726	265,834	-	-
Current portion of bonds payable	1,375,000	-	-	-

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

(Concluded)

(With Deloitte &amp; Touche audit report dated April 28, 2010)

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ADVANCED SEMICONDUCTOR ENGINEERING, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

FOR THE YEARS ENDED DECEMBER 31, 2007, 2008 AND 2009

(Amounts in Thousands, Except Per Share Data and Unless Otherwise Stated)

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1. ORGANIZATION

Advanced Semiconductor Engineering, Inc. (“ASE Inc.” or including its subsidiaries, collectively the “Company”), a corporation incorporated under the laws of Republic of China (the “ROC”), is an independent provider of semiconductor packaging and testing services and offers a comprehensive range of IC packaging and testing service. The common shares of ASE Inc. are traded on the Taiwan Stock Exchange (the “TSE”) under the symbol “2311”. Since September 2000, the common shares of ASE Inc. have been traded on the New York Stock Exchange under the symbol “ASX” in the form of American depositary shares (“ADS”).

As of December 31, 2008 and 2009, the Company had approximately 27,000 and 29,500 employees, respectively.

2. SIGNIFICANT ACCOUNTING POLICIES

The accompanying consolidated financial statements have been prepared in conformity with the Guidelines Governing the Preparation of Financial Reports by Securities Issuers and accounting principles generally accepted in the Republic of China (“ROC GAAP”). Under these guidelines and principles, the Company should reasonably estimate the amounts of allowances for doubtful accounts, sales discounts, inventory valuations, depreciation of property, plant and equipment, losses on impairment of assets, amortization of intangible assets, pension expenses, gains or losses on valuation of financial instruments, valuation allowances for deferred income tax assets and bonuses to employees, directors and supervisors. Actual results may differ from these estimates. Significant accounting policies are summarized as follows:

Basis of Presentation

The Company prepares its consolidated financial statements pursuant to ROC GAAP with a reconciliation to accounting principles generally accepted in the United States of America (“U.S. GAAP”) (Note 32). The accompanying consolidated balance sheets are presented as of December 31, 2008 and 2009, and the accompanying consolidated statements of income, changes in shareholders’ equity and cash flows are presented for each of the three years in the period ended December 31, 2009.

Basis of Consolidation

The consolidated financial statements include the accounts of all directly and indirectly majority owned subsidiaries of ASE Inc. All significant intercompany balances and transactions are eliminated upon consolidation.

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The consolidated entities of the Company were as follows:

Name of Investor	Name of Investee	Percentage of Ownership December 31		Remark
		2008	2009	
ASE Inc.	A.S.E. Holding Limited (ASE Holding)	100.0	100.0	Holding company
	J&R Holding Limited (J&R Holding)	100.0	100.0	Holding company
	Innosource Limited (Innosource)	100.0	100.0	Holding company
	Omniquiest Industrial Limited (Omniquiest)	77.6	76.2	Holding company
	ASE Marketing & Service Japan Co., Ltd.	100.0	100.0	Engaged in marketing and sales services
	ASE Test, Inc.	-	100.0	Engaged in the testing of semiconductors
	PowerASE Technology Inc. (PowerASE)	56.0	56.0	Engaged in the packaging and testing of memory integrated circuits
	ASE Test	53.4	-	Holding company
	ASE Technologies, Inc.	99.5	-	Dissolved in December 2008
ASE Holding	ASEP Realty Corporation	100.0	100.0	In the process of liquidation
	ASE Holding Electronics (Philippines), Incorporated	100.0	100.0	In the process of liquidation
	ASE Investment (Labuan) Inc.	70.0	70.0	Holding company
	ASE Test	10.2	10.2	Holding company
ASE Investment (Labuan) Inc.	ASE (Korea) Inc. (ASE Korea)	100.0	100.0	Engaged in the packaging and testing of semiconductors
J&R Holding	J&R Industrial Inc.	100.0	100.0	Engaged in the leasing equipment and investing activity
	ASE Japan Co., Ltd. (ASE Japan)	100.0	100.0	Engaged in the packaging and testing of semiconductors
	ASE (U.S.) Inc. (ASE US)	100.0	100.0	After-sales service and sales support
	Global Advanced Packaging Technology Ltd., Cayman Islands (GAPT Cayman)	100.0	100.0	Holding company
	ASE WeiHai	100.0	100.0	Engaged in the packaging and testing of semiconductors
	ASEN	60.0	60.0	Engaged in the packaging and testing of semiconductors

(Continued)



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Name of Investor	Name of Investee	Percentage of Ownership December 31		Remark
		2008	2009	
	Omniquest	9.4	9.2	Holding company
	ASE Test	36.4	89.8	Holding company
Innosource	ASE Module (Shanghai) Inc. (ASE Module Shanghai)	100.0	100.0	Will engage in the production of electronic components and printed circuit boards
	Omniquest	13.0	14.6	Holding company
ASE Module Shanghai	ASE (Shanghai) Inc. (ASE Shanghai)	0.6	0.6	Engaged in the production of substrates
Omniquest	ASE Corporation	100.0	100.0	Holding company
ASE Corporation	ASE Mauritius Inc.	100.0	100.0	Holding company
	ASE Labuan Inc.	100.0	100.0	Holding company
ASE Mauritius Inc.	ASE Hi-Tech (Shanghai) Inc.	100.0	100.0	Will engage in the production of electronic components and printed circuit boards
	ASE (Kun Shan) Inc.	100.0	100.0	Will engage in the packaging and testing of semiconductors
	ASE Shanghai	98.8	98.8	Engaged in the production of substrates
	ASE Module (Kunshan) Inc.	100.0	100.0	Will engage in the production of electronic components
ASE Shanghai	Shanghai Ding Hui Real Estate Development Co., Ltd. (Shanghai DH)	90.0	14.0	Engaged in the development and sale of real estate properties
	Advanced Semiconductor Engineering (HK) Limited	100.0	100.0	Engaged in trading
Shanghai DH	Shanghai Ding Wei Real Estate Development Co., Ltd. (Shanghai DW)	-	100.0	Established in October 2009 to engage in the development and sale of real estate properties
ASE Labuan Inc.	ASE Electronics Inc. (ASE Electronics)	100.0	100.0	Engaged in the production of substrates
ASE Test	ASE Test, Inc.	100.0	-	Engaged in the testing of semiconductors
	ASE Test Holdings, Ltd.	100.0	100.0	Holding company
	ASE Holdings (Singapore) Pte Ltd	100.0	100.0	Holding company
	ASE Test Finance Limited	100.0	100.0	Engaged in financing activity

(Continued)

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Name of Investor	Name of Investee	Percentage of Ownership		Remark
		2008	2009	
	ASE Investment (Labuan) Inc.	30.0	30.0	Holding company
	ASE Singapore Pte. Ltd. (ASE Singapore)	100.0	100.0	Engaged in the testing of semiconductors
ASE Test Holdings, Ltd.	ISE Labs, Inc. (ISE)	100.0	100.0	Engaged in the testing of semiconductors
ASE Holdings (Singapore) Pte Ltd	ASE Electronics (M) Sdn. Bhd. (ASE Malaysia)	100.0	100.0	Engaged in the packaging and testing of semiconductors
GAPT Cayman	ASE Assembly & Test (HK) Limited	100.0	100.0	Engaged in trading
	ASE Assembly & Test (Shanghai) Limited (ASESH AT)	100.0	100.0	Engaged in the packaging and testing of semiconductors
ASESH AT	Shanghai Wei Yu Hong Xin Semiconductors Inc.	100.0	100.0	In the development stage
	ASE Shanghai	0.6	0.6	Engaged in the production of substrates
	Shanghai DH	-	76.0	Engaged in the development and sale of real estate properties

(Concluded)

## ASE Test Acquisition

On May 30, 2008, ASE Inc. acquired from minority shareholders of ASE Test the remaining 53.4% of shares it did not own. ASE Inc. acquired by cash the ordinary shares of ASE Test (the “ASE Test Acquisition”) listed on NASDAQ (the “ASE Test NASDAQ Shares”) for US\$14.78 per share and those listed on the TSE in the form of Taiwan Depository Receipts (the “TDRs”) for NT\$5.6314 per TDR. The purpose of the acquisition of the minority shareholders’ shares of ASE Test was to fully consolidate ASE Test’s earnings with the Company’s, simplify the organizational structure, reduce costs and administrative burdens associated with filing and compliance requirements, enhance brand recognition, and increase flexibility in making investments and allocating resources among subsidiaries. The total purchase price was NT\$26,309,311 thousand. After the ASE Test Acquisition, ASE Test became a wholly-owned subsidiary of ASE Inc., and the ASE Test NASDAQ Shares and TDRs were delisted from NASDAQ and the TSE, respectively.

The ASE Test Acquisition was accounted for as a purchase as prescribed by ROC SFAS No. 25, “Business Combinations-Accounting Treatment under Purchase Method” (“ROC SFAS No. 25”), and the purchase price has been reflected in the Company’s consolidated financial statements since May 31, 2008. This acquisition resulted in stepping up ASE Test’s net assets to fair value for the acquired interest.

## Other Major Intragroup Restructures

ASE Inc. transferred 53.4% of shares of ASE Test to J&R Holding in March 2009. The total consideration was NT\$29,608,501 thousand (US\$ 853,517 thousand), of which NT\$8,794,470 thousand became the capital injected by ASE Inc. to J&R Holding in September 2009. In addition, ASE Inc. acquired 100% ownership of ASE Test, Inc.’s shares from ASE Test for NT\$20,694,585 thousand (US\$ 596,545 thousand).

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### Current and Noncurrent Assets and Liabilities

Current assets include cash and cash equivalents, and those assets held primarily for trading purposes or to be realized, sold or consumed within twelve months from the balance sheet date. Current liabilities are obligations incurred for trading purposes or to be settled within twelve months from the balance sheet date. Assets and liabilities that are not classified as current are noncurrent assets and liabilities, respectively.

Because the Company's real estate business has an operating cycle greater than one year, its classification of current or noncurrent assets and liabilities related to the real estate business is based on its operating cycle.

### Cash Equivalents

Bonds with repurchase agreements are highly liquid financial instruments with maturities of less than three months when acquired and with carrying amounts that approximate their fair values.

### Financial Assets and Liabilities at Fair Value through Profit or Loss

Financial instruments classified as financial assets or financial liabilities at fair value through profit or loss ("FVTPL") include financial assets or financial liabilities held for trading. The Company recognizes a financial asset or financial liability on its balance sheet when the Company becomes a party to the contractual provisions of the financial instrument. A financial asset is derecognized when the Company has lost control of its contractual rights over the financial asset. A financial liability is derecognized when the obligation specified in the relevant contract is discharged, cancelled or expired.

Financial instruments at FVTPL are initially measured at fair value. Transaction costs directly attributable to the acquisition of financial assets at FVTPL are recognized immediately in profit or loss. At each balance sheet date subsequent to initial recognition, financial assets or financial liabilities at FVTPL are remeasured at fair value, with changes in fair value recognized directly in profit or loss in the year in which they arise. Cash dividends received subsequently (including those received in the year of investment) are recognized as income for the year. On derecognition of a financial asset or a financial liability, the difference between its carrying amount and the sum of the consideration received and receivable or consideration paid and payable is recognized in profit or loss. A regular way purchase or sale of financial assets is recognized and derecognized on a settlement date basis.

A derivative that does not qualify for hedge accounting is classified as a financial asset or a financial liability held for trading. If the fair value of the derivative is positive, the derivative is recognized as a financial asset; otherwise, the derivative is recognized as a financial liability.

Fair value is determined as follows: Open-end mutual funds - the net asset value; publicly traded stocks - the closing-price at the balance sheet date; derivatives with no quoted price in an active market - using valuation techniques.

### Available-for-sale Financial Assets

Available-for-sale financial assets are initially recognized at fair value plus transaction costs that are directly attributable to the acquisition. Changes in fair value of financial assets are reported in a separate component of shareholders' equity. The corresponding accumulated gains or losses are recognized in earnings when the financial asset is derecognized from the balance sheet. A regular way purchase or sale of financial assets is recognized and derecognized on a settlement date basis.

The recognition and derecognition bases of available-for-sale financial assets are the same with those of financial assets at FVTPL.

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Cash dividends are recognized on the ex-dividend date. Stock dividends are not recognized as investment income but are recorded as an increase in the number of shares. The total number of shares subsequent to the increase is used for recalculation of cost per share.

Fair values of open-end mutual funds and publicly traded stocks are the same with those of financial assets at FVTPL. Bonds are determined at the prices quoted by Taiwan GreTai Securities Market.

If certain objective evidence indicates that an available-for-sale financial asset is impaired, a loss is recognized currently; if, in a subsequent period, the amount of the impairment loss decreases, for equity securities, the previously recognized impairment loss is reversed to the extent of the decrease and recorded as an adjustment to shareholders' equity; for debt securities, the amount of the decrease is recognized in earnings, provided that the decrease is clearly attributable to an event which occurred after the impairment loss was recognized.

### Revenue Recognition, Allowance for Doubtful Accounts and Allowance for Sales Discounts

Revenues from semiconductor packaging and testing services are recognized upon completion of the services or shipment. The Company does not take ownership of: (i) bare semiconductor wafers received from customers that the Company packages into finished semiconductors and (ii) packaged semiconductors received from customers that the Company tests as to whether they meet certain performance specifications. The title and risk of loss remain with the customer for those bare semiconductors and/or packaged semiconductors. Accordingly, the costs of customer-supplied semiconductor materials are not included in the accompanying consolidated financial statements. Other criteria the Company uses to determine when to recognize revenue are: (i) existence of persuasive evidence of an arrangement, (ii) the selling price is fixed or determinable and (iii) collectibility is reasonably assured.

Revenues are determined using the fair value taking into account related sales discounts agreed to by the Company and customers. Since the receivables from sales are collectible within one year and such transactions are frequent, the fair value of receivables is equivalent to the nominal amount of cash received or receivable.

An allowance for doubtful accounts is provided based on an evaluation of the collectibility of receivables. The Company determines the amount of the allowance for doubtful accounts by examining the aging analysis of the outstanding accounts receivable and current trends in the credit quality of its customers. An allowance for sales discounts is recognized based on historical experience in the same period sales are recognized.

### Inventories and Construction In Progress Related to Property Development

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. Prior to January 1, 2009, inventories were stated at the lower of cost or market value. Any write-down was made on a category by category basis. Market value represented replacement cost for raw materials, supplies and net realizable value for finished goods and work in process. As stated in Note 3, effective January 1, 2009, inventories are stated at the lower of cost or net realizable value. Inventory write-downs are made on an item by item basis. Net realizable value is the estimated selling price of inventories less all estimated costs to complete production and selling expenses necessary to make the sale.

Raw materials and supplies are recorded at moving average cost; work in process and finished goods are recorded at standard cost and adjusted to the approximate weighted average cost at the balance sheet date.

Construction in progress related to property development for the Company's real estate business is accounted for using the completed-contract method. Prior to the completion, borrowing costs directly attributable to the acquisition or construction of construction in progress related to property development are capitalized as part of the cost of those assets. Construction in progress related to property development

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is stated at the lower of cost or net realizable value. The amounts received in advance are first recorded as advance receipts and then recognized as revenue when the construction is completed and the title and risk of the real estate property are transferred to customers.

### Bond Investments with No Active Market

Bond investments with fixed or determinable payments and with no quoted prices in an active market are carried at amortized cost using the effective interest method. Those financial assets are initially measured at fair value plus transaction costs that are directly attributable to the acquisition. Gains or losses are recognized when the financial assets are derecognized, impaired or amortized.

If certain objective evidence indicates that a bond investment with no active market is impaired, a loss is recognized currently. If, in a subsequent period, the amount of the impairment loss decreases and the decrease is clearly attributable to an event which occurred after the impairment loss was recognized, the previously recognized impairment loss is reversed to the extent of the decrease. The reversal may not result in a carrying amount that exceeds the amortized cost that would have been determined as if no impairment loss had been recognized.

### Financial Assets Carried at Cost

Investments that do not have a quoted market price in an active market and whose fair value cannot be reliably measured, are carried at their original cost. The accounting for dividends on financial assets carried at cost is the same with that for dividends on available-for-sale financial assets. If certain objective evidence indicates that such a financial asset is impaired, a loss is recognized. A subsequent reversal of such impairment loss is not allowed.

### Equity Method Investments

Investments in companies of which the Company owns at least 20% but less than 50% of the outstanding voting shares or where the Company exercises significant influence over the investee companies' operating and financial policy decisions are accounted for using the equity method. The acquisition cost is allocated to the assets acquired and liabilities assumed based on their fair values at the date of acquisition, and the excess of the acquisition cost over the fair value of the identifiable net assets acquired, representing goodwill, shall not be amortized.

When the Company subscribes for additional investees' shares at a percentage different from its existing ownership percentage, the resulting carrying amount of the investment in the investees differs from the amount of the Company's share in the investee's net equity. The Company records such a difference as an adjustment to equity method investments with the corresponding amount charged or credited to capital surplus.

Gains or losses from downstream or upstream transactions with equity method investees are eliminated in proportion to the Company's percentage of ownership in the investee.

### Business Combination

Acquisitions are accounted for using the purchase method of accounting. The cost of the acquisition is measured at the aggregate of the fair values, at the date of acquisition, of assets given and liabilities incurred or assumed, by the Company in exchange for control of the acquiree, plus any costs directly attributable to the business combination. The acquiree's identifiable assets and liabilities are recognized at their fair values at the acquisition date.

Goodwill arising on acquisition is recognized as an asset and initially measured at cost, being the excess of the cost of acquisition over the Company's interest in the fair value of the identifiable net assets.

The interest of minority shareholders in the acquiree is measured at historical cost.

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### Property, Plant and Equipment and Assets Leased to Others

Property, plant and equipment and assets leased to others are stated at cost less accumulated depreciation and accumulated impairment. Borrowing costs directly attributable to the acquisition or construction of property, plant and equipment are capitalized as part of the cost of those assets. Major additions and improvements to property, plant and equipment are capitalized, while maintenance and repairs are expensed as incurred.

Assets held under capital leases are initially recognized as assets of the Company at the lower of their fair value at the inception of the lease or the present value of the minimum lease payments; the corresponding liability is included in the balance sheet as capital lease obligations. The interest included in lease payments is expensed when paid.

Depreciation is computed using the straight-line method over estimated service lives, which range as follows: buildings and improvements, 2 to 55 years; machinery and equipment, 2 to 10 years; furniture and fixtures, 2 to 13 years; transportation equipment, 2 to 10 years; and leased assets and leasehold improvements, 3 to 6 years. In the event that an asset which has been depreciated to its residual value is still in service, its residual value is further depreciated over its re-estimated service life.

When property, plant and equipment and assets leased to others are retired or disposed of, their cost, accumulated depreciation and accumulated impairment are removed from the accounts and any gain or loss is credited or charged to non-operating income or losses.

### Intangible Assets

Patents and land use rights acquired are initially recorded at cost. Patent, acquired special technology and customer relationship arising on the acquisition are initially recorded at fair value at the date of acquisition.

Amortization is computed using the straight-line method over estimated service lives, which range as follows: land use rights, 50 to 60 years; patent, acquired special technology and customer relationship, 5 to 11 years.

Goodwill represents the excess of the consideration paid for an acquisition over the fair value of identifiable net assets acquired. Prior to January 1, 2006, goodwill was amortized on a straight-line basis over the estimated life of 10 years. Effective January 1, 2006, pursuant to the revised ROC SFAS No. 25, goodwill is no longer amortized and instead is tested for impairment annually.

### Idle Assets

Idle assets are stated at the lower of their fair value or carrying amount. The carrying amount in excess of the fair value is recognized as an impairment loss. The remaining book value is depreciated using the straight-line method.

### Asset Impairment

The Company evaluates whether or not there are indications that assets (primarily property, plant and equipment, intangible assets, assets leased to others and equity method investments) may be impaired as of the balance sheet date. If there are indications, the Company estimates the recoverable amount for the asset. If an asset's recoverable amount is lower than its carrying amount, the carrying amount of the asset is reduced to its recoverable amount by recording an impairment loss. When the recoverable amount subsequently increases, the impairment loss previously recognized is reversed and recorded as a gain. However, the carrying amount of an asset (other than goodwill) after the reversal of the impairment loss should not exceed the carrying amount of the asset that would have been determined, net of depreciation, as if no impairment loss had been recognized.

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For the purpose of goodwill impairment testing, goodwill is allocated to each of the relevant cash-generating units (“CGU(s)”) that are expected to benefit from the synergies of the acquisition. A CGU to which goodwill has been allocated is tested for impairment annually or whenever there is an indication that an impairment loss may exist. If the recoverable amount of the CGU becomes less than its carrying amount, the impairment loss is allocated to first reduce the carrying amount of the goodwill allocated to the CGU and then to the other assets of the CGU pro rata on the basis of the carrying amount of each asset in the CGU. A reversal of an impairment loss on goodwill is disallowed.

For equity method investments, the carrying amount (including goodwill) of each investment is compared with its own recoverable amount for the purpose of impairment testing.

## Deferred Charges

Deferred charges mainly consist of tools and computer systems software. Amortization of deferred charges is computed on a straight-line basis over 2 to 5 years. For the years ended December 31, 2007, 2008 and 2009, the amortization expense was NT\$1,054,876 thousand, NT\$734,321 thousand and NT\$579,281 thousand (US\$ 18,130 thousand), respectively.

## Stock-based Compensation

Employee stock options granted on or after January 1, 2008 are accounted for under ROC SFAS No. 39, “Accounting for Share-based Payment” (“ROC SFAS No.39”). Under the statement, the value of the stock options granted, which is equal to the best available estimate of the number of stock options expected to vest multiplied by the grant-date fair value, is expensed on a straight-line basis over the vesting period, with a corresponding adjustment to capital surplus - employee stock options. The estimate is revised if subsequent information indicates that the number of stock options expected to vest differs from previous estimates.

Employee stock options granted before December 31, 2007 were accounted for under the interpretations issued by the ROC ARDF. The Company adopted the intrinsic value method, under which compensation cost was recognized on a straight-line basis over the vesting period.

## Pension Cost

Pension cost under defined benefit plans are determined by actuarial valuations. Contributions made under defined contribution plans are recognized as pension cost during the period in which employees render services.

Curtailment or settlement gains or losses of the defined benefit plans are recognized as part of the net pension cost for the year.

## Convertible Bonds

Prior to the adoption of ROC SFAS No. 34 “Financial Instruments : Recognition and Measurement” (“ROC SFAS No.34”) and No. 36 “Financial Instruments : Disclosure and Presentation” (“ROC SFAS No.36”) on January 1, 2006, convertible bonds were recorded as a financial liability. The stated redemption price in excess of the face value of the bonds is recognized as interest expense over the period from the issuance date to the date the put option becomes exercisable, using the effective interest rate method. If the market price of the common shares into which the bonds are convertible is higher than the redemption price at the time the put option expires, the related accrued interest is transferred to capital surplus. Conversion of convertible bonds into common shares is accounted for by the book value method. Under this method, unamortized bond issuance costs and accrued interest, together with face value of converted bonds, are written off, and the common shares issued are recorded at their par value, with any excess

recorded as capital surplus. No change in accounting treatment was required for convertible bonds issued before January 1, 2006 after ROC SFAS No. 34 and No. 36 were effective.

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### Treasury Stock

Treasury stock is stated at cost and shown as a deduction in shareholders' equity. When ASE Inc. retires treasury stock, the treasury stock account is reduced and the common stock as well as the capital surplus - capital in excess of par value are reversed on a pro rata basis. When the book value of the treasury stock exceeds the sum of the par value and capital surplus - capital in excess of par value, the difference is charged to capital surplus - treasury stock transactions and to retained earnings for any remaining amount.

ASE Inc.'s shares held by its subsidiaries are accounted for as treasury stock and, accordingly, the cost of such shares is reclassified from equity method investments to treasury stock. Cash dividends received by subsidiaries from ASE Inc. are recorded as capital surplus - treasury stock transactions.

### Research and Development Costs

Research and development costs are charged to expenses as incurred.

### Income Taxes

The Company applies inter-period allocations for its income tax whereby deferred income tax assets and liabilities are recognized for the tax effects of temporary differences, loss carryforwards and unused tax credits. Valuation allowances are provided to the extent, if any, that it is more likely than not that deferred income tax assets will not be realized. A deferred tax asset or liability is classified as current or noncurrent in accordance with the classification of its related asset or liability. However, if a deferred tax asset or liability does not relate to an asset or liability in the financial statements, then it is classified as either current or noncurrent based on the expected length of time before it is realized or settled.

The temporary differences between the book value and taxable base of equity method investments in foreign subsidiaries are not recognized as deferred income tax assets or liabilities since the Company could control the timing of reversal of the temporary differences and would not reverse them in the foreseeable future.

Any tax credits arising from purchases of machinery, equipment and technology, research and development expenditures, and personnel training expenditures are recognized using the flow - through method.

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

Income tax on undistributed earnings is recorded by ASE Inc. and subsidiaries under jurisdiction of ROC at the rate of 10% and is recorded as an expense in the year shareholders resolve the distribution of earnings.

### Foreign Currency Transactions and Translation of Foreign-currency Financial Statements

The functional and reporting currency of ASE Inc. is the New Taiwan dollar, while the functional currencies of its major subsidiaries are their local currencies, namely, the U.S. dollar, Japanese Yen, Korea Won, PRC CNY and Malaysia Ringgit, respectively.

Non-derivative foreign currency transactions are recorded in local currencies at the rates of exchange in effect when the transactions occur. Exchange differences arising from settlement of foreign-currency assets and liabilities are recognized in profit or loss.

At the balance sheet date, foreign-currency monetary assets and liabilities are revalued using prevailing exchange rates and the exchange differences are recognized in profit or loss.

At the balance sheet date, foreign-currency nonmonetary assets (such as equity instruments) and liabilities that are measured at fair value are revalued using prevailing exchange rates, with the exchange differences treated as follows:

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- a. Recognized in shareholders' equity if the changes in fair value are recognized in shareholders' equity;
- b. Recognized in profit or loss if the changes in fair value is recognized in profit or loss.

Foreign-currency nonmonetary assets and liabilities that are carried at cost continue to be stated at exchange rates at trade dates.

The financial statements of foreign subsidiaries are translated into New Taiwan dollars at the following exchange rates: Assets and liabilities - spot rates at the end of year; shareholders' equity - historical rates; income and expenses - average rates during the year. The resulting translation adjustments are recorded as a separate component of shareholders' equity.

Hedging Derivative Financial Instruments

Derivatives that qualify as effective hedging instruments are measured at fair value, with subsequent changes in fair value recognized in profit or loss, or in shareholders' equity, depending on the nature of the hedging relationship.

Hedge Accounting

Hedge accounting recognizes the offsetting effects on profit or loss of changes in the fair values of the hedging instrument and the hedged item as follows:

- a. Fair value hedge

The gain or loss from remeasuring the hedging instrument at fair value and the gain or loss on the hedged item attributable to the hedged risk are recognized in profit or loss.

- b. Cash flow hedge

The portion of the gain or loss on the hedging instrument that is determined to be an effective hedge is recognized in shareholders' equity. The amount recognized in shareholders' equity is recognized in profit or loss in the same year or years during which the hedged forecasted transaction or an asset or liability arising from the hedged forecasted transaction affects profit or loss. However, if all or a portion of a loss recognized in shareholders' equity is not expected to be recovered in the future, the amount that is not expected to be recovered is reclassified into profit or loss.

U.S. Dollar Amounts

The Company prepares its consolidated financial statements in New Taiwan dollars. A translation of the 2009 consolidated financial statements into U.S. dollars is included solely for the convenience of the readers, and has been based on the U.S. Federal Reserve Bank of New York noon buying rate of NT\$31.95 to US\$1.00 in effect on December 31, 2009. The translation should not be construed as a representation that the New Taiwan dollar 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.

Reclassifications

Certain accounts in the consolidated financial statements as of December 31, 2008 and for the years ended December 31, 2007 and 2008 have been reclassified to conform to the presentation of the consolidated financial statements as of



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## 3. ACCOUNTING CHANGE

## Adoption of New and Revised Standards

Effective January 1, 2009, the Company adopted the newly revised ROC SFAS No. 10, "Accounting for Inventories ("ROC SFAS No.10"). The main revisions are (1) inventories are stated at the lower of cost or net realizable value, and inventories are written down to net realizable value item-by-item except when the grouping of similar or related items is appropriate; (2) unallocated overheads are recognized as cost of revenues in the period in which they are incurred; and (3) abnormal cost, write-downs of inventories and any reversal of write-downs are recorded as cost of revenues for the period. The adoption of ROC SFAS No.10 did not have a material impact on the Company's consolidated financial statements as of and for the year ended December 31, 2009. For the comparison purpose, the Company also reclassified non-operating losses of NT\$634,457 thousand and NT\$554,106 thousand to cost of revenues for the year ended December 31, 2007 and 2008, respectively.

Starting January 1, 2008, the Company adopted Interpretation 96-052, "Accounting for Bonuses to Employees, Directors and Supervisors," issued in March 2007 by the ROC ARDF, which requires companies to record bonuses paid to employees, directors and supervisors as an expense rather than as an appropriation of earnings. The adoption of this Interpretation resulted in a decrease in net income attributable to shareholders of the parent and earnings per share of NT\$675,111 thousand and NT\$0.13, respectively, for the year ended December 31, 2008. For purposes of the consolidated statements of cash flows, such bonuses represent appropriations of the earnings from prior years and have been classified as financing activities for the years ended December 31, 2007 and 2008. Starting from 2009, such bonuses are classified as operating activities for purposes of the consolidated statements of cash flows when paid.

Besides, starting January 1, 2008, the Company adopted ROC SFAS No. 39, which requires companies to record share-based payment transactions in the financial statements at fair value. The adoption of ROC SFAS No. 39 had no impact on the consolidated results of operations and consolidated financial position of the Company.

Starting January 1, 2007, the Company adopted the released ROC SFAS No. 37, "Intangible Assets" and ROC SFAS No. 38 "Non-current Assets Held for Sale and Discontinued Operations". The adoption of ROC SFAS No. 37 and ROC SFAS No. 38 had no impact on the consolidated results of operations and consolidated financial positions of the Company.

## 4. CASH AND CASH EQUIVALENTS

	2008	December 31	
	NT\$	NT\$	2009
			US\$
			(Note 2)
Cash on hand	6,694	4,441	139
Checking and saving accounts	13,960,753	15,845,797	495,956
Time deposits	10,501,483	5,738,307	179,603
Cash equivalents - bonds with repurchase agreements	1,670,000	968,949	30,327
	26,138,930	22,557,494	706,025





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## 5. FINANCIAL INSTRUMENTS AT FAIR VALUE THROUGH PROFIT OR LOSS

	2008	December 31	
	NT\$	NT\$	2009 US\$ (Note 2)
<b>Financial assets for trading - current</b>			
Open-end mutual funds	-	974,702	30,507
Forward exchange contracts	1,053	24,648	771
Swap contracts	-	17,605	551
European foreign currency option contracts	-	7,756	243
Domestic publicly traded stocks	536,427	-	-
	537,480	1,024,711	32,072
<b>Financial liabilities for trading - current</b>			
Swap contracts	61,257	50,468	1,580
Forward exchange contracts	21,410	24,062	753
Interest rate swap contracts	209	-	-
	82,876	74,530	2,333

The Company entered into derivative contracts to manage exposures to foreign exchange and interest rate risks. The derivative contracts entered into by the Company did not meet the criteria for hedge accounting except those described in Note 26h.

Information on such derivative transactions was as follows:

## a. Forward exchange contracts

The outstanding forward exchange contracts of the Company as of December 31, 2008 and 2009 were as follows:

Currency	Maturity Date	Contract Amount (In Thousands)
December 31, 2008		
USD/JPY	2009.01.05-2009.01.09	USD1,105/JPY99,192
USD/NTD	2009.01.12-2009.01.20	USD4,000/NTD132,242
USD/MYR	2009.01.15-2009.01.22	USD1,500/MYR5,278
NTD/USD	2009.01.09-2009.02.23	NTD4,072,502/USD123,426
December 31, 2009		
USD/JPY	2010.01.12	USD5,500/JPY485,558
USD/NTD	2010.01.07-2010.03.22	USD129,000/NTD4,154,707
USD/MYR	2010.01.29-2010.05.27	USD7,500/MYR25,595
NTD/USD	2010.01.06-2010.01.15	NTD3,209,480/USD100,000
USD/CNY	2010.04.20-2010.04.22	USD20,000/CNY135,829



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## b. Swap contracts

The outstanding swap contracts of ASE Inc. as of December 31, 2008 and 2009 were as follows:

Currency	Maturity Date	Contract Amount (In Thousands)
December 31, 2008		
NTD/USD	2009.01.12-2009.04.10	NTD5,133,164/USD154,500
December 31, 2009		
NTD/USD	2010.01.06-2010.01.20	NTD6,258,897/USD194,000
USD/NTD	2010.01.07-2010.03.15	USD85,500/NTD2,755,120

c. The outstanding European foreign currency options contracts of the Company as of December 31, 2009 were as follows:

Contract	Maturity Date	Contract Amount (In Thousands)	Strike Price
Sell USD Put/CNY Call	2010.04.22	USD10,000 CNY66,875	6.6875
Sell USD Put/CNY Call	2010.04.21	USD5,000 CNY33,447	6.6894
Sell USD Put/CNY Call	2010.04.22	USD5,000 CNY33,447	6.6894
Buy USD Call/CNY Put	2010.04.22	USD10,000 CNY66,875	6.6875 (Note)
Buy USD Call/CNY Put	2010.04.21	USD5,000 CNY33,447	6.6894 (Note)
Buy USD Call/CNY Put	2010.04.22	USD5,000 CNY33,447	6.6894 (Note)

Note: If the spot rate for CNY against USD at the expiry date exceeds 6.850, there is no settlement obligation between both parties.

## d. Interest rate swap contract

As of December 31, 2008, the notional amount of the outstanding contract of ASE Inc. was NT\$1,375,000 thousand. Interest receipt and payment were based on floating rates semi-annually. The contract was matured on January 9, 2009.

For the years ended December 31, 2007, 2008 and 2009, the gain on valuation of financial assets held for trading was NT\$205,997 thousand, NT\$286,914 thousand and NT\$934,938 thousand (US\$29,262 thousand), respectively; the loss on valuation of financial liabilities held for trading was NT\$28,583 thousand, NT\$732,204 thousand and NT\$645,774 thousand (US\$20,212 thousand), respectively.

## 6. AVAILABLE-FOR-SALE FINANCIAL ASSETS - CURRENT

2008	December 31	
	2009	US\$
NT\$	NT\$	

(Note 2)

Open-end mutual funds	-	3,770,000	117,997
Corporate bonds	100,000	200,000	6,260
Overseas publicly traded stocks	21,578	21,033	658
Domestic publicly traded stocks	165,623	-	-
	287,201	3,991,033	124,915
Adjustment of valuations	(7,389)	4,491	141
	279,812	3,995,524	125,056

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The other than temporary or realized loss on impairment of available-for-sale financial assets was nil for the years ended December 31, 2007 and 2009. For the year ended December 31, 2008, the other than temporary or realized loss on impairment of available-for-sale financial assets was NT\$149,954 thousand and all the impaired available-for-sale financial assets were disposed of during the year ended December 31, 2009.

## 7. BOND INVESTMENTS WITH NO ACTIVE MARKET

In July 2008, ASE Inc. purchased 3-year unsecured corporate bonds with a coupon rate 4.202% issued by Powerchip Semiconductor Corp. ("PSC") at face value of NT\$450,000 thousand. The investment was recorded as bond investments with no active market - current. ASE Inc. exercised the put right to require PSC to redeem the bonds on July 15, 2009.

In October 2009, the Company purchased 3-year unsecured convertible corporate bonds with a coupon rate of 3.0% issued by SiPhoton Inc. at face value of USD\$3,000 thousand and warrants. The debt host contract of the investment was recorded as bond investments with no active market - noncurrent. According to the agreement, the Company has the right to require SiPhoton Inc. to redeem the convertible bonds in whole or in part on or after 30 months from October 2009, or convert, at any time, into SiPhoton Inc.'s common stock at the specified conversion price. The Company may also exercise the warrants to purchase additional SiPhoton Inc.'s common stock at the conversion price.

## 8. ACCOUNTS RECEIVABLE

	2008	December 31	
	NT\$	NT\$	2009
			US\$
			(Note 2)
Accounts receivable	11,590,294	18,024,943	564,161
Allowance for doubtful accounts	(99,160)	(68,705)	(2,150)
Allowance for sales allowances	(103,029)	(144,697)	(4,529)
	11,388,105	17,811,541	557,482

## 9. INVENTORIES

	2008	December 31	
	NT\$	NT\$	2009
			US\$
			(Note 2)
Finished goods	577,757	624,334	19,541
Work in process	352,905	833,091	26,075
Raw materials	2,200,631	2,911,720	91,134
Supplies	444,478	400,315	12,529
Materials and supplies in transit	59,261	185,767	5,814
	3,635,032	4,955,227	155,093

As of December 31, 2008 and 2009, the allowance for inventory devaluation was NT\$800,702 thousand and NT\$359,020 thousand (US\$11,237 thousand), respectively.

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The cost of inventories sold recognized as cost of revenues for the years ended December 31, 2007, 2008 and 2009 was NT\$72,919,760 thousand, NT\$72,661,438 thousand and NT\$67,629,130 thousand (US\$2,116,717 thousand), respectively, which included NT\$588,699 thousand, NT\$510,038 thousand and NT\$191,904 thousand (US\$6,006 thousand), respectively, due to write-downs of inventories.

## 10. CONSTRUCTION IN PROGRESS RELATED TO PROPERTY DEVELOPMENT

Construction in progress related to property development represents real estate development projects of Shanghai DH and Shanghai DW. The advance receipts from construction in progress amounted to NT\$1,507,472 thousand (US\$47,182 thousand) as of December 31, 2009. The capitalized interest expense for the years ended December 31, 2007, 2008 and 2009 is presented in Note 13 to the consolidated financial statements.

## 11. FINANCIAL ASSETS CARRIED AT COST - NONCURRENT

	2008	December 31	
	NT\$	NT\$	2009
			US\$
			(Note 2)
Non-publicly traded common and preferred stocks			
H&HH Venture Investment Corporation	73,921	73,921	2,314
Global Strategic Investment Inc.	65,720	64,060	2,005
UC Fund II	26,288	22,421	702
ID Solutions, Inc.	10,236	19,616	614
Other	1,153	7	-
Limited Partnership			
Ripley Cable Holdings I, L.P.	287,467	297,881	9,323
Crimson Velocity Fund, L.P.	82,583	81,217	2,542
H&QAP Mega Investment Holdings Fund, L.P.	-	38,436	1,203
Private placement of common stocks of publicly traded company			
Advanced Microelectronic Products, Inc.	-	94,500	2,958
	547,368	692,059	21,661

There is no quoted price from an active market for these investments and fair value is not readily available. In addition, the Company owns less than 20% of these investments and cannot exercise significant influence. Therefore, these investments are carried at cost.

For the years ended December 31, 2007, 2008 and 2009, the loss on impairment of financial assets carried at cost was NT\$178,500 thousand, NT\$21,395 thousand and nil, respectively.

## 12. EQUITY METHOD INVESTMENTS

	2008	December 31	
	% of	2009	% of

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	NT\$	Owner- ship	NT\$	US\$ (Note 2)	Owner- ship
Publicly traded					
Universal Scientific Industrial Co., Ltd. (“USI”)	3,067,864	18.3	3,295,598	103,149	18.1
Hung Ching Development & Construction Co. (“HCDC”)	635,296	26.2	936,370	29,307	26.2
Non-publicly traded					
Hung Ching Kwan Co. (“HCKC”)	346,308	27.3	326,609	10,222	27.3
StarChips Technology Inc. (“SCT”)	-	-	82,010	2,567	33.3

(Continued)



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	2008		December 31		2009	
	NT\$	% of Owner-ship	NT\$	US\$ (Note 2)	% of Owner-ship	
Universal Scientific Industrial (Shanghai) Co., Ltd. ("USISH")	28,127	0.5	31,403	983	0.5	
Inprocomm, Inc.	2,224	32.1	-	-	-	
	4,079,819		4,671,990	146,228		
Deferred gain on transfer of land	(300,149)		(300,149)	(9,394)		
	3,779,670		4,371,841	136,834		(Concluded)

Market values of the publicly traded equity method investees as of December 31, 2008 and 2009 were as follows:

	December 31		US\$ (Note 2)
	2008 NT\$	2009 NT\$	
USI	1,524,259	3,897,473	121,987
HCDC	288,245	1,221,610	38,235
	1,812,504	5,119,083	160,222

The differences between the cost of investments and equity in investees' net assets were attributable to goodwill and deferred gain on transfer of land. As of December 31, 2008 and 2009, the amounts of goodwill were NT\$371,436 thousand and NT\$416,437 thousand (US\$13,034 thousand), respectively; and the amount of deferred gain on transfer of land was both NT\$300,149 thousand (US\$9,394 thousand).

As of December 31, 2008 and 2009, the Company had made an accumulated investment in USI of NT\$3,838,677 thousand (US\$120,146 thousand). USI is engaged in the manufacturing, processing and sale of computer peripherals, integrated circuits, electrical parts, personal computers and related accessories.

As of December 31, 2008 and 2009, the Company had made an accumulated investment in HCDC of NT\$2,845,913 thousand (US\$89,074 thousand). HCDC is engaged in the development and management of commercial, residential and industrial real estate properties in the ROC.

The Company acquired HCKC in 1992 by transferring a parcel of land valued at NT\$390,470 thousand to HCKC. The resulting gain of NT\$300,149 thousand, which represents the excess of such value over the cost of the land plus land value increment tax, has been deferred until the disposal of this investment.

As of December 31, 2008 and 2009, the Company had made an accumulated investment in USISH, which is a subsidiary of USI, of NT\$27,441 thousand (US\$859 thousand). USISH is engaged in the designing and manufacturing of electronic products, manufacturing and processing of new electronic components, computer high-performance motherboards and wireless network communication components and provision of related technical

consulting.

As of December 31, 2009, the Company had made an investment in SCT of NT\$84,000 thousand (US\$2,629 thousand). SCT is engaged in the designing, manufacturing and sale of LED driver ICs.

As of December 31, 2009, Inprocomm, Inc. had completed its liquidation.

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As of December 31, 2009, the Company had significant influence over USI and USISH, therefore the investments were accounted for by the equity method. In addition, in order to enhance the technical and business cooperation relationship, the board of directors of ASE Inc. has resolved to launch a cash and stock tender offer to buy all of the outstanding common shares of USI not owned by the Company at a fixed price of NT\$21 per share, which comprises of a fixed 0.34 share of ASE Inc.'s common shares which are owned by the subsidiaries, J&R Holding and ASE Test, and plus cash consideration determined pursuant to the formula (equivalent to NT\$21 less 0.34 multiplied by the lowest of the average closing price of ASE Inc.'s common shares for the last one, three and five trading days prior to the last day of the tender offer period). The public tender offer period was from November 18, 2009 to February 3, 2010 (Note 30).

The Company recorded equity in earnings of equity method investees of NT\$345,705 thousand, NT\$77,450 thousand and NT\$330,117 thousand (US\$10,332 thousand) in 2007, 2008 and 2009, respectively.

## 13. PROPERTY, PLANT AND EQUIPMENT

Accumulated depreciation consisted of:

	2008	December 31	2009	US\$
	NT\$	NT\$		(Note 2)
Buildings and improvements	11,568,335	13,687,777		428,413
Machinery and equipment	84,004,673	92,304,040		2,889,015
Transportation equipment	115,124	123,734		3,873
Furniture and fixtures	2,610,209	2,822,938		88,355
Leased assets and leasehold improvements	262,120	292,773		9,163
	98,560,461	109,231,262		3,418,819

For the years ended December 31, 2007 and 2009, the loss on impairment of property, plant and equipment was nil. For the year ended December 31, 2008, the loss on impairment of property, plant and equipment was NT\$87,375 thousand.

Information about capitalized interest expense was as follows:

	2007	Year Ended December 31		2009	US\$
	NT\$	2008	NT\$	NT\$	(Note 2)
Total interest expense including capitalized interest	1,747,048	1,990,097		1,681,192	52,620
Less: Capitalized interest					
Included in construction in progress related to property development	(2,330)	(42,666)		(111,855)	(3,501)
Included in property, plant and equipment	(170,194)	(134,135)		(61,314)	(1,919)

Interest expense	1,574,524	1,813,296	1,508,023	47,200
Capitalization rate				
Construction in progress related to property development	7.47%-7.56%	7.47%-7.56%	4.78%-5.70%	
Property, plant and equipment	1.56%-6.33%	2.16%-6.48%	1.10%-4.80%	

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## 14. INTANGIBLE ASSETS

The movements of intangible assets other than deferred pension cost were as follows:

	Patents NT\$	Goodwill NT\$	Acquired Special Technology NT\$	Land Use Rights NT\$	Other- Customer Relationship NT\$
Balance at January 1, 2008	5,950	3,188,117	-	1,486,209	-
Additions					
From newly acquired subsidiaries	50,416	6,271,247	709,088	1,651	915,635
Acquisition	96,109	-	-	4,335	-
Amortization	(22,134)	-	(82,726)	(23,600)	(48,556)
Reclassified to assets leased to others	-	-	-	(121,736)	-
Translation adjustment	32	(3,273)	-	91,492	-
Balance at December 31, 2008	130,373	9,456,091	626,362	1,438,351	867,079
Additions - acquisition	1,020	-	-	-	-
Amortization	(28,584)	-	(141,818)	(29,230)	(83,240)
Reclassified from assets leased to others	-	-	-	10,254	-
Translation adjustment	(1,093)	(37,086)	-	(34,231)	-
Balance at December 31, 2009	101,716	9,419,005	484,544	1,385,144	783,839
	Patents US\$ (Note 2)	Goodwill US\$ (Note 2)	Acquired Special Technology US\$ (Note 2)	Land Use Rights US\$ (Note 2)	Other- Customer Relationship US\$ (Note 2)
Balance at January 1, 2009	4,081	295,965	19,605	45,018	27,138
Additions - acquisition	32	-	-	-	-
Amortization	(895)	-	(4,439)	(915)	(2,605)
Reclassified from assets leased to others	-	-	-	321	-
Translation adjustment	(34)	(1,160)	-	(1,071)	-
Balance at December 31, 2009	3,184	294,805	15,166	43,353	24,533

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As of December 31, 2009, the future estimated aggregate amortization expense for each of the five succeeding fiscal years was as follows:

	Amount	
	NT\$	US\$ (Note 2)
2010	271,260	8,490
2011	271,260	8,490
2012	271,260	8,490
2013	174,450	5,460
2014	104,276	3,264

The intangible assets arising from newly acquired subsidiaries in 2008 were mainly related to the ASE Test Acquisition. The acquired special technology represented the existing know-how of customizing testing programs for individual customer's needs. A portion of the purchase price was allocated to customer relationships as the Company can exploit revenue associated with the existing customer relationships. The valuation of acquired intangible assets was determined based on management's estimates.

## 15. ASSETS LEASED TO OTHERS

	December 31		
	2008	2009	US\$
	NT\$	NT\$	(Note 2)
<b>Cost</b>			
Land	-	1,280	40
Buildings and improvements	615,666	560,501	17,543
Machinery and equipment	54,097	51,587	1,615
Transportation equipment	5,302	4,362	137
Land use rights	132,727	120,432	3,769
	807,792	738,162	23,104
<b>Accumulated depreciation/amortization</b>			
Buildings and improvements	64,506	91,229	2,855
Machinery and equipment	47,593	50,442	1,579
Transportation equipment	1,407	1,550	49
Land use rights	5,630	8,874	278
	119,136	152,095	4,761
	688,656	586,067	18,343

The assets leased to others were mainly buildings and improvements and land use rights leased to USISH. For the years ended December 31, 2007, 2008 and 2009, the rental revenue was NT\$70,869 thousand, NT\$114,131 thousand and NT\$131,712 thousand (US\$4,122 thousand), respectively.



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## 16. IDLE ASSETS

	2008	December 31	2009	US\$
	NT\$	NT\$		(Note 2)
Cost				
Land	34,216	34,216		1,071
Buildings and improvements	24,019	36,144		1,131
Machinery and equipment	799,563	906,265		28,365
Furniture and fixtures	24,877	9,308		291
Deferred charges	647	-		-
	883,322	985,933		30,858
Accumulated depreciation	(280,753)	(373,138)		(11,678)
Accumulated impairment	(241,181)	(250,960)		(7,855)
	361,388	361,835		11,325

In December 2007, ASE Electronics' Flip-Chip production line became idle due to various commercial factors. The Company recognized an impairment loss of NT\$816,182 thousand in 2007, of which NT\$394,842 thousand was recognized for deferred charges, NT\$34,595 thousand in 2008, and NT\$11,117 thousand (US\$348 thousand) in 2009.

## 17. SHORT-TERM BORROWINGS

Short-term borrowings represented revolving bank loans with annual interest rates of 1.50%-8.59% and 0.86%-5.83% as of December 31, 2008 and 2009, respectively.

## 18. LONG-TERM BONDS PAYABLE

In January 2004, the Company issued NT\$2.75 billion of domestic secured bonds, which consisted of 275 units with face value of NT\$10 million each. The bonds were repaid in two equal installments in January 2008 and 2009.

As of December 31, 2008, the Company had obtained new long term credit lines to refinance the bonds payable on a long-term basis. Therefore, the bonds payable were not classified as short-term debts as of December 31, 2008.

## 19. LONG-TERM BANK LOANS

Long-term bank loans consisted of the following:

	2008	December 31	2009	US\$
	NT\$	NT\$		(Note 2)
Loans for specified purposes	24,811,650	23,440,634		733,666



Revolving bank loans	26,455,101	26,535,748	830,540
Mortgage loans	1,243,659	23,520	736

(Continued)

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	2008 NT\$	December 31 2009 NT\$	US\$ (Note 2)
Current portion	52,510,410 (2,670,845)	49,999,902 (923,284)	1,564,942 (28,898)
(Concluded)	49,839,565	49,076,618	1,536,044

## a. Loans for specified purposes

	2008 NT\$	December 31 2009 NT\$	US\$ (Note 2)
Syndicated bank loan (Led by Citi bank) Repayable through March 2013 in semi-annual installments, interest rate was 2.99% and 1.97% as of December 31, 2008 and 2009, respectively	17,500,000	16,362,500	512,128
US\$200,000 thousand, repayable at maturity in May 2011; interest rate was 5.11% and 1.09% as of December 31, 2008 and 2009, respectively	6,572,000 24,072,000	6,406,000 22,768,500	200,501 712,629
Others - interest rate was 1.35%-5.00% and 1.35%-1.78% as of December 31, 2008 and 2009, respectively	739,650	672,134	21,037
	24,811,650	23,440,634	733,666

The above syndicated bank loans led by Citi bank were restricted for use in the ASE Test Acquisition. Pursuant to the loan agreements, ASE Inc. should hold no less than 51%, directly or indirectly, of ASE Test's equity and maintain control over ASE Test at all time.

Other loans for specified purposes were designated to repay other loans or purchase equipment.

## b. Revolving bank loans

	2008 NT\$	December 31 2009 NT\$	US\$
Syndicated bank loans - due from March 2010 to June 2014 - interest rate was 1.53%-2.93% and 1.13%-2.02% as of December 31, 2008 and 2009,			

respectively

ASE Inc.	6,520,000	5,500,000	172,144
ASESH AT	3,622,815	4,708,410	147,368
ASE Shanghai	2,346,204	762,314	23,860

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	2008	December 31	2009	
	NT\$	NT\$		US\$
Other bank loans - due from May 2010 to December 2012 - interest rate was 1.82%-6.25% and 0.78%-2.73% as of December 31, 2008 and 2009, respectively				
ASE Inc.	12,220,000	13,943,900		436,429
ASE Shanghai	212,736	1,281,200		40,100
Other	1,533,346	339,924		10,639
	26,455,101	26,535,748		830,540
				(Concluded)

## c. Mortgage loans

The Company has mortgaged the construction in progress related to property development, buildings, machinery and equipment as collateral for the loans, which are repayable in quarterly installments or in a lump sum payment at maturity. The interest rates were 1.85% to 7.56% and 1.31% as of December 31, 2008 and 2009, respectively.

Pursuant to the above loan agreements, the Company should maintain certain financial ratios. Such financial ratios are calculated based on annual audited consolidated financial statements or semi-annual reviewed consolidated financial statements. As of December 31, 2009, the Company was in compliance with all of the loan covenants.

As of December 31, 2008 and 2009, loans of NT\$4,466,620 thousand and NT\$6,298,520 thousand (US\$197,137 thousand), respectively, would mature within one year. However, because the Company had obtained new long term credit lines to refinance the loans on a long-term basis, the loans were not classified as short-term debts.

As of December 31, 2009, the future maturities of long-term bank loans were as follows:

	Amount	
	NT\$	US\$
		(Note 2)
Within one year	7,221,804	226,035
During the second year	28,284,537	885,275
During the third year	9,942,950	311,203
During the fourth year	4,193,468	131,251
During the fifth year and thereafter	357,143	11,178
	49,999,902	1,564,942

Long-term bonds payable (Note 18) and long-term bank loans by currencies were detailed as follows:

	December 31	
2008	2009	

New Taiwan dollars	NT\$38,032,640	NT\$31,666,020
U.S. dollars	US\$460,486	US\$572,397
PRC CNY	CNY150,000	CNY -

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20. PENSION PLANS

Defined Contribution Pension Plans

- a. Based on the pension plan under the ROC Labor Pension Act, the Company makes monthly contributions to employees' individual pension accounts at 6% of monthly salaries and wages.
- b. ISE has a defined contribution savings plan ("401k plan") for eligible employees. This plan permits employees to make contributions up to the maximum limits allowable under the U.S. Internal Revenue Code Section 401(k). Also, ASE Malaysia and ASE Singapore each has a defined contribution pension plan.
- c. According to local regulations, the subsidiaries in China made contributions to local governments based on each employee's average wage at specific rates.

Under defined contribution plans, the Company recognized pension costs of NT\$483,717 thousand, NT\$508,651 thousand and NT\$450,466 thousand (US\$14,099 thousand) for the years ended December 31, 2007, 2008 and 2009, respectively.

Defined Benefit Pension Plans

- a. The Company has a defined benefit pension plan under the ROC Labor Standards Law ("LS Law"). The pension benefits are calculated based on the length of service and average base salary in the six months prior to retirement. The Company contributes a certain percentage of monthly salaries of its ROC employees to a retirement fund, which is deposited with the Bank of Taiwan.
- b. 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 salary at the time of termination. In addition, ASE Korea 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 salary at the time of termination.
- c. ASE Inc., ASE Test, Inc. and ASE Electronics maintain pension plans for executive managers. Pension costs for these managers were NT\$42,916 thousand, NT\$74,154 thousand and NT\$22,474 thousand (US\$703 thousand) for the years ended December 31, 2007, 2008 and 2009, respectively. As of December 31, 2008 and 2009, accrued pension costs were NT\$155,105 thousand and NT\$161,613 thousand (US\$5,058 thousand), respectively. Pension payments were NT\$2,666 thousand in 2008 and NT\$15,966 thousand (US\$500 thousand) in 2009.

Under the LS Law, the government is responsible for the administration of the fund and determination of the investment strategies and policies.

As of December 31, 2008 and 2009, the asset allocation was primarily in cash, equity securities and debt securities. Furthermore, under the LS Law, the rate of return on assets shall not be less than the average interest rate on a two-year time deposit published by 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.

Information about defined benefit pension plans is summarized as follows:



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a. Pension costs for these entities consist of:

	Year Ended December 31			US\$ (Note 2)
	2007 NT\$	2008 NT\$	2009 NT\$	
Service cost	379,750	333,538	369,833	11,575
Interest	86,490	107,726	106,430	3,331
Projected return on plan assets	(37,312)	(46,788)	(35,621)	(1,115)
Amortization	17,958	20,674	61,487	1,924
Curtailement gain	-	(8,746)	(19,787)	(619)
	446,886	406,404	482,342	15,096

b. Other pension information based on actuarial calculations of the plans is as follows:

	December 31		
	2008 NT\$	2009 NT\$	US\$ (Note 2)
Benefit obligation			
Vested benefit obligation	2,516,940	2,559,381	80,106
Non-vested benefit obligation	1,907,886	1,932,697	60,491
Accumulated benefit obligation	4,424,826	4,492,078	140,597
Additional benefit based on future salaries	1,348,973	1,278,068	40,002
Projected benefit obligation	5,773,799	5,770,146	180,599
Fair value of plan assets	(2,055,781)	(2,097,594)	(65,652)
Funded status	3,718,018	3,672,552	114,947
Unrecognized net transition obligation	(72,818)	(57,761)	(1,808)
Unrecognized prior service cost	(11,617)	(10,891)	(341)
Unrecognized net actuarial loss	(1,427,640)	(1,340,574)	(41,958)
Additional pension liability	310,048	311,742	9,757
Recorded under accrued expenses	(7,320)	(8,316)	(260)
Prepaid pension cost (recorded as other assets-other)	-	1,479	46
Accrued pension cost	2,508,671	2,568,231	80,383
c. Vested benefit	2,598,524	2,619,611	81,991

d. Actuarial assumptions used:

	December 31	
	2008	2009
Discount rate	2.00%-4.90%	2.25%-4.92%
Increase in future salary level	2.75%-5.00%	2.50%-5.00%
Expected rate of return on plan assets	2.25%-2.50%	1.50%-2.50%



	Year Ended December 31		
	2008	2009	US\$
	NT\$	NT\$	(Note 2)

e. Contributions to the funds	153,370	194,889	6,100
f. Payments from the funds	93,653	220,541	6,903

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g. The Company expects to make contributions of NT\$146,122 thousand (US\$4,573 thousand) to its defined benefit pension plans in 2010.

h. Expected benefit payments:

Year of Payments	Amount	
	NT\$	US\$ (Note 2)
2010	\$ 211,000	\$ 6,604
2011	221,985	6,948
2012	225,528	7,059
2013	275,977	8,638
2014	270,811	8,476
2015 and thereafter	917,384	28,713

Plan assets and obligations reflected herein were measured as of December 31, 2008 and 2009.

## 21. SHAREHOLDERS' EQUITY

### Common Stock

The Company reserved common stocks of NT\$8,000,000 thousand, representing 800,000 thousand shares, for employee stock option plans. For the years ended December 31, 2008 and 2009, employees exercised options and paid NT\$240,770 thousand and NT\$238,789 thousand (US\$7,474 thousand), of which NT\$3,387 thousand and NT\$135,205 thousand (US\$4,232 thousand) were recorded as "capital received in advance" as of December 31, 2008 and 2009, respectively.

For the year ended December 31, 2008, long-term bonds payable converted to common stock amounted to NT\$265,834 thousand. For the years ended December 31, 2007, 2008 and 2009, the Company issued shares in the amount of NT\$1,074,463 thousand (107,446 thousand shares), NT\$457,822 thousand (45,782 thousand shares) and NT\$74,245 thousand (7,425 thousand shares), respectively, due to the exercise of employee stock options and the conversion of long-term bonds payable aforementioned. For the year ended December 31, 2009, the Company applied for a capital reduction in the amount of NT\$2,179,740 thousand (US\$68,223 thousand) by retirement of treasury stock. In addition, the shareholders' meetings held in June 2007 and June 2008 resolved to distribute stock dividends out of capital surplus and retained earnings, including bonuses to employees through issuance of common stock, in the amount of NT\$7,476,040 thousand (747,604 thousand shares) and NT\$1,970,867 thousand (197,087 thousand shares), respectively. The Company has completed the registration formalities for all the above-mentioned increases and reduction of capital.

### American Depositary Shares

ASE Inc. issued ADS, each ADS representing five common shares. As of December 31, 2008 and 2009, 42,330 thousand and 46,256 thousand ADS were outstanding and represented approximately 211,648 thousand and 231,280 thousand common shares of ASE Inc., respectively.

### Capital Surplus

Under ROC Company Law, capital surplus from paid-in capital in excess of par value, treasury stock transactions and reversed interest of convertible bonds may be used to offset a deficit. In addition, such capital surplus may be transferred to capital, subject to a specified percentage of paid-in capital.

Capital surplus from equity method investments may not be used for any purpose.

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Appropriation of Retained Earnings

The Articles of Incorporation of ASE Inc. provide that the annual net income shall be distributed in the following order:

- a. Replenishment of losses;
- b. 10.0% as legal reserve;
- c. Special reserve in accordance with laws or regulations set forth by the authorities concerned;
- d. An amount equal to the excess of the income from long-term investments accounted for by the equity method over cash dividends as special reserve;
- e. Not more than 2.0% of the remainder from a. to d. as compensation to directors and supervisors;
- f. Between 7.0% to 10.0% of the remainder from a. to d. as a 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 as decided by the board of directors; and
- g. The remainder from a. to f. as dividends to shareholders.

Employees referred to in f. above include employees of subsidiary companies that meet certain conditions, which are to be prescribed by the board of directors.

The Company is currently in the business stability stage. To meet the capital needs for business development now and in the future and satisfy the requirements of shareholders for cash inflow, the Company shall use residual dividend policy to distribute dividends, of which the cash dividend distribution rate is not lower than 30% of the total dividend amount, with the remainder to be distributed as stock dividends. A distribution plan is also to be made by the board of directors and passed by resolution of the shareholders' meeting.

For the years ended December 31, 2008 and 2009, the bonus to employees was NT\$554,405 thousand and NT\$607,009 thousand (US\$18,999 thousand), respectively, and the compensation to directors and supervisors was NT\$110,881 thousand and NT\$121,402 thousand (US\$ 3,800 thousand), respectively. The bonus to employees and compensation to directors and supervisors represented 10% and 2%, respectively, of net income (net of the bonus and compensation). Significant differences between such estimated amounts and the amounts proposed by the board of directors in the following year are adjusted for in the current year. If the actual amounts subsequently resolved by the shareholders differ from the proposed amounts, the differences are recorded in the year of shareholders' resolution 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.

Based on a directive issued by the Securities and Futures Bureau, an amount equal to the net debit balance of certain shareholders' equity accounts (including unrealized loss on financial instruments, net loss not recognized as pension cost and cumulative transaction adjustments) shall be transferred from unappropriated earnings to a special reserve. In addition, the excess of book value over market value of treasury shares held by subsidiaries shall be also transferred from unappropriated earnings to a special reserve based on the proportion owned by ASE Inc. Any special reserve appropriated may be reversed to the extent of the decrease in the net debit balance.

Under the ROC Company Law, the appropriation for legal reserve shall be made until the reserve reaches the paid-in capital. The reserve may be used to offset a deficit, or be distributed as dividends and bonuses for the portion in excess of 50% of paid-in capital if the Company has no unappropriated earnings and the

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reserve balance has exceeded 50% of paid-in capital. Also, when the reserve has reached 50% of paid-in capital, up to 50% thereof may be transferred to capital stock if the Company doesn't have a deficit.

The appropriation of 2007 and 2008 earnings resolved at the Company's annual shareholders' meetings and the appropriation of 2009 earnings proposed by the Company's board meeting and to be resolved by the Company's annual shareholders' meeting is as follows:

	2007 NT\$	2008 NT\$	2009 NT\$	US\$ (Note 2)
Legal reserve	1,216,525	616,005	674,455	21,110
Compensation to directors and supervisors	216,000	-	-	-
Bonus to employees - cash	383,205	-	-	-
Bonus to employees - stock	383,205	-	-	-
Stock dividends - NT\$0.09, nil and NT\$0.84 in 2007, 2008 and 2009, respectively	492,723	-	4,615,775	144,469
Cash dividends - NT\$1.71, NT\$0.50 and NT\$0.36 in 2007, 2008 and 2009, respectively	9,361,728	2,736,568	1,978,190	61,915
	12,053,386	3,352,573	7,268,420	227,494

Aside from the 2008 earnings appropriation listed above, the shareholders also resolved to distribute bonuses to employees and compensation to directors and supervisors of NT\$554,404 thousand and NT\$88,800 thousand in cash, respectively. In addition, the shareholders resolved the transfer of NT\$1,094,939 thousand of capital surplus to paid-in capital in their meeting in June 2008.

Aside from the 2009 earnings appropriation listed above, the board meeting also proposed to distribute bonuses to employees and compensation to directors and supervisors of NT\$607,009 thousand (US\$18,999 thousand) and NT\$120,000 thousand (US\$3,756 thousand), respectively. The board meeting held in March 2010 also proposed the transfer of NT\$879,195 thousand (US\$27,518 thousand) of capital surplus to paid-in capital.

The cash bonus to employees of NT\$554,404 thousand and the compensation to directors and supervisors of NT\$88,800 thousand for 2008 were approved in the shareholders' meeting in June 2009. The approved amounts of the bonus to employees and the compensation to directors and supervisors were different from the accrual amounts of NT\$554,405 thousand and NT\$110,881 thousand, respectively, reflected in the consolidated financial statements for the year ended December 31, 2008, and the total difference of NT\$22,082 thousand (US\$691 thousand) had been adjusted in earnings for the year ended December 31, 2009.

Information about the appropriations of earnings, bonus to employees and compensation to directors and supervisors are available on the Market Observation Post System website of the TSE.

#### Unrealized Gain (Loss) on Financial Instruments

Movements of the unrealized gain on financial instruments for the years ended December 31, 2008 and 2009 were as follows:

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	Available- for-sale Financial Assets NT\$	Equity Method Investments NT\$	Cash Flow Hedges (Note 26) NT\$	NT\$	Total US\$ (Note 2)
Balance at January 1, 2008	18,014	384,504	-	402,518	12,598
Recognized directly in shareholders' equity	38,345	(432,247)	(403,687)	(797,589)	(24,964 )
Removed from shareholders' equity and recognized in earnings	(56,359 )	-	11,992	(44,367 )	(1,388 )
Balance at December 31, 2008	-	(47,743 )	(391,695)	(439,438)	(13,754 )
Recognized directly in shareholders' equity	58	380,464	(165,552)	214,970	6,728
Removed from shareholders' equity and recognized in earnings	(58 )	-	250,024	249,966	7,824
Balance at December 31, 2009	-	332,721	(307,223)	25,498	798

## Treasury Stock (Shares in Thousands)

	Beginning Shares	Addition	Retirement	Ending Shares
Year ended December 31, 2008				
Parent company shares held by subsidiaries	313,464	9,068	-	322,532
Repurchase under share buyback plan	-	108,700	-	108,700
	313,464	117,768	-	431,232
Year ended December 31, 2009				
Parent company shares held by subsidiaries	322,532	-	-	322,532
Repurchase under share buyback plan	108,700	109,274	217,974	-
	431,232	109,274	217,974	322,532

ASE Inc's board of directors held meetings in November 2008 and January 2009 and approved share buyback plans to repurchase ASE Inc's common shares listed on the TSE. ASE Inc. had repurchased 217,974 thousand common shares with total repurchase costs of NT\$2,414,262 thousand (US\$75,564 thousand). All the treasury stock repurchased under the above-mentioned share buyback plans were retired in March 2009 and June 2009.



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As of December 31, 2008 and 2009, information regarding treasury stock held by subsidiaries was as follows:

Subsidiary	Shares Held By Subsidiaries	Calculated by the Company's Ownership		
		Shares	Book Value NT\$	Market Value NT\$
December 31, 2008				
ASE Test	204,907	204,907	4,483,761	2,417,906
J&R Holding	109,771	109,771	1,254,053	1,295,291
ASE Test, Inc.	7,854	7,854	196,677	92,680
	322,532	322,532	5,934,491	3,805,877

## December 31, 2009

ASE Test	204,907	204,907	4,483,761	5,911,575
J&R Holding	109,771	109,771	1,254,053	3,166,877
ASE Test, Inc.	7,854	7,854	196,677	226,595
	322,532	322,532	5,934,491	9,305,047

Subsidiary	Book Value		Market Value	
	US\$	US\$	US\$	US\$
December 31, 2009				
ASE Test		140,337		185,026
J&R Holding		39,250		99,120
ASE Test, Inc.		6,156		7,092
		185,743		291,238

ASE Inc. issued common shares in connection with its merger with ASE Chung Li and ASE Material in August 2004. The shares held by its subsidiaries were reclassified from long-term investments to treasury stock. Cash dividends received in 2007, 2008 and 2009 by the subsidiaries from ASE Inc. were NT\$271,945 thousand, NT\$535,100 thousand and NT\$160,895 thousand (US\$5,036 thousand), respectively, which were recorded as capital surplus. Stock dividends received in 2007, 2008 and 2009 by the subsidiaries from ASE Inc. were 40,396 thousand shares, 9,068 thousand shares and nil, respectively.

Although these shares are treated as treasury stock in the consolidated financial statements, the shareholders are entitled to exercise their rights on these shares, except for participation in capital increases through cash contributions and exercise of voting rights.

22.

## EMPLOYEE STOCK OPTION PLANS

ASE Inc. Option Plans

In order to attract, retain and reward employees, ASE Inc. had three employee stock option plans, the 2002 Plan, 2004 Plan and 2007 Plan, which were approved in August 2002, May 2004 and November 2007, respectively. The maximum number of units authorized to be granted under the 2002 Plan, 2004 Plan and 2007 Plan was 160,000 thousand, 140,000 thousand and 200,000 thousand, respectively, with each unit representing the right to purchase one share of common stock when exercisable. Under the terms of the plans, stock option rights are granted at an exercise price equal to the closing price of the common shares

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listed on the TSE on the date of grant. The option rights of these plans are valid for ten years and exercisable at certain percentages subsequent to the second anniversary of the grant date.

Information regarding stock options for the years ended December 31, 2007, 2008 and 2009 was as follows:

	Year Ended December 31								
	2007			2008			2009		
	Weighted	Weighted		Weighted	Weighted		Weighted	Weighted	
	Average	Average		Average	Average		Average	Average	
Number	Exercise	Grant	Number	Exercise	Grant	Number	Exercise	Grant	
of	Price	Date	of	Price	Date	of	Price	Date	
Options	Per	Fair	Options	Per	Fair	Options	Per	Fair	
(In	Share	Value	(In	Share	Value	(In	Share	Value	
Thousands)	(NT\$)	(NT\$)	Thousands)	(NT\$)	(NT\$)	Thousands)	(NT\$)	(NT\$)	(NT\$)
Beginning outstanding balance	171,256	16.6	295,748	24.5		271,838	25.0		
Options granted	185,806	30.7	11.8	-	-	-	-	-	-
Options forfeited	(6,927 )	19.3	(7,891 )	26.9		(9,211 )	26.7		
Options exercised	(54,387 )	18.8	(16,019 )	15.0		(16,061 )	14.9		
Ending outstanding balance	295,748	25.6	271,838	25.0		246,566	25.6		
Ending exercisable balance	71,096	16.0	78,141	15.8		140,003	22.7		

The exercise prices have been adjusted to reflect the dilution attributable to the distribution of stock dividends in accordance with the terms of the plans.

The weighted average stock price at the date of exercise for stock options exercised for the years ended December 31, 2007, 2008 and 2009 was NT\$37.66, NT\$22.49 and NT\$20.47 (US\$0.64), respectively.

Information regarding outstanding and exercisable stock options as of December 31, 2009 was as follows:

Exercise Price (NT\$)	Number of Options (In Thousands)	Outstanding	Remaining Contractual Life (Years)	Number of Options (In Thousands)	Exercisable	Remaining Contractual Life (Years)
		Weighted Average Exercise Price (NT\$)			Weighted Average Exercise Price (NT\$)	
9.8	16,833	9.8	3.0	16,790	9.8	3.0

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13.8	4,935	13.8	3.6	4,935	13.8	3.6
18.9	45,048	18.9	4.5	44,726	18.9	4.5
15.4	6,855	15.4	5.4	5,385	15.4	5.4
29.6	172,895	29.6	8.0	68,167	29.6	8.0
	246,566	25.6		140,003	22.7	

As of December 31, 2009, the number of options that were expected to vest was 95,195 thousand units.

As of December 31, 2009, the aggregate intrinsic value of outstanding and exercisable stock options was NT\$935,370 thousand (US\$29,276 thousand) and NT\$911,573 thousand (US\$28,531 thousand), respectively.

Total intrinsic value of options exercised for the years ended December 31, 2007, 2008 and 2009 was NT\$1,198,329 thousand, NT\$183,166 thousand and NT\$160,669 thousand (US\$5,029 thousand), respectively.

#### ASE Test Option Plans

As of May 30, 2008, all of ASE Test stock options that had a per share exercise price lower than the per share acquisition price of US\$14.78 had been exercised. The ASE Test ordinary shares issued upon exercise of the options were acquired by ASE Inc. for US\$14.78 per ASE Test NASDAQ Share in cash. Each ASE Test option that had a per share exercise price equal to or higher than the per share acquisition price was cancelled without any payment.

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Information regarding outstanding and exercisable stock options granted or modified after January 1, 2004 for the years ended December 31, 2007 and 2008 was as follows:

	Year Ended December 31						
	2007	2007			2008	2008	
	Number	Weighted	Weighted	Number	Weighted	Weighted	Weighted
	of	Average	Average	of	Average	Average	Average
	Options	Exercise	Grant	Options	Exercise	Grant	Grant
	(In	Price	Date	(In	Price	Date	Date
	Thousands)	Per Share	Fair	Thousands)	Per Share	Fair	Fair
		(US\$)	Value		(US\$)	Value	Value
		(US\$)	(US\$)		(US\$)	(US\$)	(US\$)
Beginning outstanding balance	414	7.28		368	7.31		
Options granted	-	-	-	-	-	-	-
Options forfeited	(12 )	6.10		-	-		
Options exercised	(34 )	7.38		(368 )	7.31		
Ending outstanding balance	368	7.31		-	-		
Ending exercisable balance	185	6.79		-	-		

## ASE Mauritius Inc. Option Plan

ASE Mauritius Inc. had an employee stock option plan which was approved in November 2007 and granted 30,000 thousand units in December 2007. Under the terms of the plan, each unit represents the right to purchase one share of common stock of ASE Mauritius Inc. when exercisable. The options are valid for ten years and exercisable at certain percentages subsequent to the second anniversary of the grant date.

Information regarding stock options for the years ended December 31, 2007, 2008 and 2009 was as follows:

	Year Ended December 31								
	2007			2008			2009		
	Number	Exercise	Grant	Number	Exercise	Grant	Number	Exercise	Grant
	of	Price	Date	of	Price	Date	of	Price	Date
	Options	Per	Fair	Options	Per	Fair	Options	Per	Fair
	(In	Share	Value	(In	Share	Value	(In	Share	Value
	Thousands)	(US\$)	(US\$)	Thousands)	(US\$)	(US\$)	Thousands)	(US\$)	(US\$)
Beginning outstanding balance	-	-		30,000	1.7		29,620	1.7	
Options granted	30,000	1.7	0.9	-	-	-	-	-	-
Options forfeited	-	-		(380 )	1.7		(200 )	1.7	

Ending outstanding balance	30,000	1.7	29,620	1.7	29,420	1.7
Ending exercisable balance	-	-	-	-	11,236	1.7

For the years ended December 31, 2008 and 2009, the remaining contractual life is nine years and eight years, respectively.

No compensation cost was recognized under the intrinsic value method for the years ended December 31, 2007, 2008 and 2009.

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For purposes of pro forma disclosure, the estimated fair values of the options are amortized to expense over the option vesting periods. Had the Company recorded compensation cost based on the estimated grant date fair value which was determined using the Black-Scholes option pricing model, the Company's net income would have been reduced to the pro forma amounts below:

	Year Ended December 31			
	2007	2008	2009	
<b>Assumptions:</b>				
<b>ASE Inc.</b>				
Expected dividend yield	3.00%	3.00%	3.00%	
Expected volatility	46.0%-59.0%	46.0%-59.0%	46.0%-59.0%	
Risk free interest rate	1.80%-2.51%	1.80%-2.51%	1.80%-2.51%	
Expected life	5.0-6.5 years	5.0-6.5 years	5.0-6.5 years	
<b>ASE Test</b>				
Expected dividend yield	-	-	-	
Expected volatility	59.95%-62.03%	59.95%-62.03%	-	
Risk free interest rate	4.88%	4.88%	-	
Expected life	3-5 years	3-5 years	-	
<b>ASE Mauritius Inc.</b>				
Expected dividend yield	-	-	-	
Expected volatility	47.21%	47.21%	47.21%	
Risk free interest rate	4.17%	4.17%	4.17%	
Expected life	6.5 years	6.5 years	6.5 years	
		Year Ended December 31		
	2007	2008	2009	
	NT\$	NT\$	NT\$	US\$
				(Note 2)
<b>Net income attributable to shareholders of the parent for calculation of basic EPS:</b>				
As reported	12,165,249	6,160,052	6,744,546	211,097
Pro forma	12,013,309	5,436,867	6,127,405	191,781
<b>Net Income attributable to shareholders of the parent for calculation of diluted EPS:</b>				
As reported	12,280,224	6,099,460	6,718,074	210,268
Pro forma	12,128,284	5,376,275	6,100,933	190,953
<b>Earnings per share</b>				
Basic EPS - as reported	2.26	1.14	1.31	0.04
Basic EPS - pro forma	2.23	1.01	1.19	0.04
Diluted EPS - as reported	2.18	1.12	1.29	0.04
Diluted EPS - pro forma	2.15	0.99	1.17	0.04

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## 23. PERSONNEL EXPENDITURE AND DEPRECIATION AND AMORTIZATION

	Year Ended December 31, 2007			Year Ended December 31, 2008		
	Cost of Revenues NT\$	Operating Expenses NT\$	Total NT\$	Cost of Revenues NT\$	Operating Expenses NT\$	Total NT\$
<b>Personnel</b>						
Salary	11,553,243	3,938,597	15,491,840	11,578,736	4,862,392	16,441,128
Pension cost	745,641	227,878	973,519	688,237	309,718	997,955
Labor and health insurance	851,918	291,508	1,143,426	861,532	306,506	1,168,038
Others	985,870	368,971	1,354,841	1,194,641	353,482	1,548,123
	14,136,672	4,826,954	18,963,626	14,323,146	5,832,098	20,155,244
Depreciation	14,668,139	890,583	15,558,722	15,360,782	972,733	16,333,515
Amortization	630,435	436,995	1,067,430	440,024	471,313	911,337

	Year Ended December 31, 2009			
	Cost of Revenues NT\$	Operating Expenses NT\$	Total NT\$	US\$ (Note 2)
<b>Personnel</b>				
Salary	10,353,640	4,449,980	14,803,620	463,337
Pension cost	716,876	264,652	981,528	30,721
Labor and health insurance	786,049	304,170	1,090,219	34,123
Others	1,071,270	312,026	1,383,296	43,295
	12,927,835	5,330,828	18,258,663	571,476
Depreciation	15,800,086	975,843	16,775,929	525,068
Amortization	410,522	451,631	862,153	26,984

## 24. INCOME TAX

a. A reconciliation of income tax expense based on income before income tax at statutory rates and income tax expense was as follows:

	Year Ended December 31			
	2007 NT\$	2008 NT\$	2009 NT\$	US\$ (Note 2)
<b>Tax expense based on pre-tax income at statutory rates</b>				
Domestic entities	3,403,967	2,006,503	1,799,140	56,311
Foreign entities	1,087,662	973,280	362,969	11,361
	4,491,629	2,979,783	2,162,109	67,672



Add (less) tax effects of:				
Permanent differences				
Tax-exempt income	(1,016,270)	(598,361 )	(654,839 )	(20,496 )
Other	(113,709 )	23,908	271,352	8,493
Temporary differences				
Unrealized foreign exchange loss (gain)	18,212	235,882	(108,357 )	(3,392 )

(Continued)

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	Year Ended December 31			US\$ (Note 2)
	2007 NT\$	2008 NT\$	2009 NT\$	
Loss (gain) on valuation of financial instruments	(77,130 )	160,271	(148,735 )	(4,655 )
Others	(454,209 )	(155,366 )	(7,835 )	(245 )
	2,848,523	2,646,117	1,513,695	47,377
Loss carryforwards	77,863	151,359	28,774	901
Income tax on undistributed earnings	298,782	176,860	284,576	8,907
Credits for investments and research and development	(1,754,907)	(1,423,852)	(599,070 )	(18,750 )
Adjustment of prior year's income tax	(142,444 )	16,076	27,203	851
Current income tax	1,327,817	1,566,560	1,255,178	39,286
Deferred income tax	2,029,567	701,722	229,744	7,190
Income tax expense	3,357,384	2,268,282	1,484,922	46,476

(Concluded)

In January 2009, the ROC Legislative Yuan passed the amendment of Article 39 of the ROC Income Tax Law, which extends the operating loss carryforward period from five years to ten years. In May 2009, the ROC Legislative Yuan also passed the amendment of Article 5 of the ROC Income Tax Law, which reduces a profit-seeking enterprise's income tax rate from 25% to 20%, effective in 2010. The Company recalculated its deferred tax assets and liabilities in accordance with the amended Articles and recorded the resulting difference as a deferred income tax benefit or expense.

b. Deferred income tax assets (liabilities) were as follows:

	December 31		
	2008 NT\$	2009 NT\$	US\$ (Note 2)
Deferred income tax assets - current			
Unused tax credits	772,658	764,492	23,928
Unrealized foreign exchange loss	137,035	65,351	2,045
Others	384,268	203,234	6,361
	1,293,961	1,033,077	32,334
Valuation allowance	(208,513 )	(139,455 )	(4,365 )
	1,085,448	893,622	27,969
Deferred income tax assets - noncurrent			
Unused tax credits	1,669,503	1,275,556	39,923
Accrued pension costs	596,522	555,673	17,392
Loss carryforwards	412,091	365,283	11,433
Depreciation	(344,156 )	(119,960 )	(3,755 )
Others	141,024	51,812	1,622

	2,474,984	2,128,364	66,615
Valuation allowance	(845,275 )	(507,347 )	(15,879 )
	1,629,709	1,621,017	50,736

(Continued)

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	2008	December 31	
	NT\$	2009	US\$
		NT\$	(Note 2)
Deferred income tax liabilities - noncurrent			
Mainly depreciated differences	(151,729)	(180,955)	5,663

(Concluded)

The decrease in the valuation allowance for 2009 was mainly because management currently believes that achievement of the required future taxable income is more likely than not due to the recovery from the economic crisis. In assessing the realizability of deferred income tax assets, the Company considers its future taxable earnings and expected timing of the reversal of temporary differences. In addition, in the event future taxable earnings do not materialize as forecasted, the Company will consider executing certain tax planning strategies available to realize the deferred income tax assets. The valuation allowance is provided to reduce the gross deferred income tax assets to an amount which the Company believes will more likely than not be realized. Deferred income tax assets and liabilities are classified in the consolidated balance sheets based on the classification of the related assets or liabilities or the expected timing of the reversal of temporary differences.

The tax holidays for the Company are as follows:

- 1) A portion of ASE Inc.'s income from packaging of semiconductors is exempt from income tax for five years ending September 2009 and December 2013, respectively. A portion of ASE Chung Li branch's income from manufacturing, processing and testing of semiconductors is exempt from income tax for five years ending December 2011.
- 2) A portion of ASE Test, Inc.'s income from testing of semiconductors is exempt from income tax for five years ending December 2010.
- 3) A portion of PowerASE's income is exempt from income tax for five years ending September 2012.
- 4) Under the previous tax laws in China, those subsidiaries located in China were eligible to enjoy the five-year tax holiday (two-year tax exemption and subsequent three-year 50% reduction of applicable tax rate) starting from the first profit-making year. However, under the amended tax laws effective from January 1, 2008, manufacturing foreign-invested enterprises whose tax holidays under the prior tax laws have not started will have their tax holidays become effective starting from the effective date of the amended tax laws, and those subsidiaries would be eligible for a five-year transition period to move up to 25% tax rate. The tax rates applied to above subsidiaries in China for 2008 and 2009 were 18% and 20%, respectively.

In addition, ASE Shanghai and ASESAT qualify as high technology enterprises which are entitled to research and development tax credits and a reduced tax rate of 15%. However, ASE Shanghai and ASESAT are currently enjoying the three-year 50% tax reduction and have not start to use the 15% tax rate.

Under new income tax laws, the distribution of China-sourced income generated after January 1, 2008 is subject to a 10% withholding tax, and enterprises originating from those countries that have tax treaties with China may apply for lower withholding tax rates.

- 5) ASE Singapore has been granted pioneer status under the provisions of the Economic Expansion Incentives (Relief from Income Tax) Act for its operation in Singapore for a qualifying period of 10 years commencing September 1,

1998. During the qualifying period, all income arising from pioneer status activities is exempt from income tax. The tax exempt period was approved to be extended for five years.

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The per share effect of these tax holidays was NT\$0.19, NT\$0.11 and NT\$0.13 (US\$0.01) per share for the years ended December 31, 2007, 2008 and 2009, respectively.

c. As of December 31, 2009, unused tax credits, which may be utilized to offset future income tax, were set forth below:

Year of Expiry	Amount	
	NT\$	US\$ (Note 2)
2010	503,375	15,755
2011	561,687	17,580
2012	399,473	12,503
2013	507,168	15,874
2014 and thereafter	68,345	2,139
	2,040,048	63,851

d. Loss carryforwards as of December 31, 2009 comprised of:

Year of Expiry	Amount	
	NT\$	US\$ (Note 2)
2015	78,350	2,452
2016	9,281	291
2017	65,105	2,038
2018	141,969	4,443
2019 and thereafter	70,578	2,209
	365,283	11,433

Income tax returns of ASE Inc. have been examined by the ROC tax authorities through 2004. ASE Inc. disagreed with the result of an examination relating to its income tax returns from 2002 to 2004 and applied for related tax relief and procedures. ASE Inc. has recognized the related income tax expense in 2006 and 2007 upon completion of examination. Income tax returns of other subsidiaries have been examined by the tax authorities through 2002 to 2008.

#### Information regarding Imputation Tax System

As of December 31, 2008 and 2009, the balance of the Imputation Credit Account (“ICA”) amounted to NT\$57,415 thousand and NT\$517,526 thousand (US\$ 16,198 thousand), respectively. The creditable ratio for the distribution of 2008 and 2009 earnings is 9.83% (actual) and 11.65% (estimated), respectively.

Under the Integrated Income Tax System which became effective on January 1, 1998, ROC resident shareholders are allowed a tax credit for their proportionate share of the income tax paid by the Company on earnings generated since 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. 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 distribution of dividends. The expected creditable ratio for the 2009 earnings may be adjusted, depending on the ICA balance on the date of dividend distribution.

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## EARNINGS PER SHARE

	2007		2008		2009			
	Before Income Tax NT\$	After Income Tax NT\$	Before Income Tax NT\$	After Income Tax NT\$	Before Income Tax NT\$	US\$ (Note 2)	After Income Tax NT\$	US\$ (Note 2)
Basic EPS	2.55	2.26	1.36	1.14	1.49	0.05	1.31	0.04
Diluted EPS	2.46	2.18	1.33	1.12	1.47	0.05	1.29	0.04

EPS is computed as follows:

	Amounts (Numerator)		Number of Shares(Denominator) (In Thousands)	EPS		
	Before Income Tax NT\$	After Income Tax NT\$		Before Income Tax NT\$	After Income Tax NT\$	
Year ended December 31, 2007						
Basic EPS						
Income attributable to shareholders of the parent		13,729,800	12,165,249	5,390,907	2.55	2.26
Effect of dilutive potential common stock						
Convertible bonds		177,111	139,635	179,120		
Employee stock options issued by ASE Inc.		-	-	63,118		
Employee stock options issued by subsidiaries		(24,660 )	(24,660 )	-		
Diluted EPS						
Income attributable to shareholders of the parent plus effect of potential dilutive common stock		13,882,251	12,280,224	5,633,145	2.46	2.18
Year ended December 31, 2008						
Basic EPS						
Income attributable to shareholders of the parent		7,341,503	6,160,052	5,392,872	1.36	1.14
Effect of dilutive potential common shares						
Bonus to employees		-	-	25,472		
Convertible bonds (Expired in September, 2008)		-	-	6,164		



Employee stock options issued by ASE Inc.	-	-	32,848		
Bonus to employees and employee stock options issued by subsidiaries	(60,592 )	(60,592 )	-		
<b>Diluted EPS</b>					
Income attributable to shareholders of the parent plus effect of potential dilutive common stock	7,280,911	6,099,460	5,457,356	1.33	1.12
Year ended December 31, 2009					
<b>Basic EPS</b>					
Income attributable to shareholders of the parent	7,667,691	6,744,546	5,162,884	1.49	1.31
Effect of dilutive potential common shares					
Bonus to employees	-	-	26,383		
Employee stock options issued by ASE Inc.	-	-	18,307		
Bonus to employees and employee stock options issued by subsidiaries	(26,472 )	(26,472 )	-		

(Continued)

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	Amounts (Numerator)		Number of Shares (Denominator) (In Thousands)	EPS	
	Before Income	After Income		Before Income	After Income
	Tax NT\$	Tax NT\$		Tax NT\$	Tax NT\$
<b>Diluted EPS</b>					
Income attributable to shareholders of the parent plus effect of potential dilutive common stock	7,641,219	6,718,074	5,207,574	1.47	1.29 (Concluded)

	Amounts (Numerator)		Number of Shares (Denominator) (In Thousands)	EPS	
	Before Income	After Income		Before Income	After Income
	Tax US\$ (Note 2)	Tax US\$ (Note 2)		Tax US\$ (Note 2)	Tax US\$ (Note 2)
<b>Year ended December 31, 2009</b>					
<b>Basic EPS</b>					
Income attributable to shareholders of the parent	239,990	211,097	5,162,884	0.05	0.04
Effect of dilutive potential common shares					
Bonus to employees	-	-	26,383		
Employee stock options issued by ASE Inc.	-	-	18,307		
Bonus to employees and employee stock options issued by subsidiaries	(829 )	(829 )	-		

<b>Diluted EPS</b>					
Income attributable to shareholders of the parent plus effect of potential dilutive common stock	239,161	210,268	5,207,574	0.05	0.04

For purposes of the ADS calculation, the denominator represents the above-mentioned weighted average outstanding shares divided by five (one ADS represents five common shares). The numerator was the same.

The ROC ARDF issued Interpretation 96-052 that requires companies to recognize bonuses paid to employees, directors and supervisors as compensation expenses beginning January 1, 2008. These bonuses were previously recorded as appropriations from earnings. If the Company may settle the bonus to employees by cash or shares, the Company should presume that the entire amount of the bonus will be settled in shares and the resulting potential shares should be included in the weighted average number of shares outstanding used in the calculation of diluted EPS, if the shares have a dilutive effect. The number of shares is estimated by dividing the entire amount of the bonus by the closing price (after consideration of the dilutive effect of dividends) of the shares at the balance sheet date. Such dilutive effect of the potential shares needs to be included in the calculation of diluted EPS until the

shareholders resolves the number of shares to be distributed to employees at their meeting in the following year.

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## 26. DISCLOSURES FOR FINANCIAL INSTRUMENTS

a. Fair values of financial instruments were as follows:

	2008		December 31			
	Carrying Amount NT\$	Fair Value NT\$	Carrying Amount NT\$	US\$ (Note 2)	2009 Fair Value NT\$	US\$ (Note 2)
Non-derivative financial instruments						
Assets						
Financial assets at fair value through profit or loss - current	536,427	536,427	974,702	30,507	974,702	30,507
Available-for-sale financial assets - current	279,812	279,812	3,995,524	125,056	3,995,524	125,056
Bond investments with no active market - current	450,000	450,000	-	-	-	-
Guarantee deposits - current	16,074	16,074	256,876	8,040	256,876	8,040
Financial assets carried at cost - noncurrent	547,368		692,059	21,661		
Bond investments with no active market - noncurrent	-	-	96,090	3,007	96,090	3,007
Guarantee deposits - noncurrent	45,150	45,150	50,628	1,585	50,628	1,585
Restricted assets	191,416	191,416	177,565	5,557	177,565	5,557
Liabilities						
Long-term bonds payable (including current portion)	1,375,000	1,344,379	-	-	-	-
Long-term bank loans (including current portion)	52,510,410	51,510,410	49,999,902	1,564,942	49,999,902	1,564,942
Capital lease obligations (including current portion)	39,060	39,060	15,773	493	15,773	493
Derivative financial instruments						
Assets						

Forward exchange contracts	1,053	1,053	24,648	771	24,648	771
Swap contracts	-	-	17,605	551	17,605	551
European foreign currency options contracts	-	-	7,756	243	7,756	243
<b>Liabilities</b>						
Interest rate swap contract	391,904	391,904	311,778	9,758	311,778	9,758
Swap contracts	61,257	61,257	50,468	1,580	50,468	1,580
Cross currency swap contracts	-	-	122,495	3,834	122,495	3,834
Forward exchange contracts	21,410	21,410	24,062	753	24,062	753

b. Methods and assumptions used in the estimation of fair values of financial instruments were as follows:

- 1) The aforementioned financial instruments do not include cash and cash equivalents, accounts receivable, other receivables (including receivables from related parties), short-term borrowings, accounts payable, accrued expenses and payable for properties. Due to their short term nature, these financial instruments' carrying amounts approximate their fair values.
- 2) Fair values of financial assets at FVTPL and available-for-sale financial assets were determined using their quoted market prices in an active market. Fair values of derivatives and bond investments with no active market were determined using valuation techniques incorporating estimates and assumptions which are similar with those generally used by other market participants to price financial instruments.
- 3) Financial assets carried at cost are investments in unquoted securities, which have no quoted prices in an active market and entail an unreasonably high cost to obtain verifiable fair values. Therefore, no fair value is presented.
- 4) The carrying amounts of guarantee deposits and restricted assets reflect their fair values due to their short term nature.

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5) The interest rates of long-term debt other than bonds payable were mainly floating; therefore, their fair values approximate carrying amounts. Fair value of bonds payable was based on their quoted market price.

c. Valuation gains from changes in fair value of financial instruments determined using valuation techniques were NT\$147,498 thousand, NT\$251,616 thousand and NT\$361,085 thousand (US\$11,302 thousand) for the years ended December 31, 2007, 2008 and 2009, respectively.

d. As of December 31, 2008 and 2009, financial assets exposed to fair value interest rate risk amounted to NT\$53,544 thousand and NT\$21,562 thousand (US\$675 thousand), respectively, financial liabilities exposed to fair value interest rate risk amounted to NT\$215,927 thousand and NT\$103,718 thousand (US\$3,246 thousand), respectively, financial assets exposed to cash flow interest rate risk amounted to NT\$16,263,728 thousand and NT\$17,465,721 thousand (US\$546,658 thousand), respectively, and financial liabilities exposed to cash flow interest rate risk amounted to NT\$61,302,873 thousand and NT\$61,106,915 thousand (US\$1,912,579 thousand), respectively.

e. For the years ended December 31, 2007, 2008 and 2009, interest income of NT\$348,660 thousand, NT\$326,772 thousand and NT\$173,870 thousand (US\$5,442 thousand), and interest expense (including capitalized interest) of NT\$1,698,939 thousand, NT\$1,973,684 thousand and NT\$1,680,978 thousand (US\$52,613 thousand) were associated with financial assets or liabilities other than those at FVTPL.

f. Strategy for financial risk

The derivative instruments employed by the Company are to mitigate risks arising from ordinary business operation. All derivative transactions entered into by the Company are designated as either hedging or trading, which are governed by separate internal guidelines and controls. Derivative transactions entered into for hedging purposes must hedge risk against fluctuations in foreign exchange and interest rates arising from operating activities. The currency and the amount of derivative instruments held by the Company must match its assets and liabilities.

g. Information about financial risk

1) Market risk

All derivative financial instruments are mainly held to hedge the exchange rate fluctuations of foreign-currency-denominated assets and liabilities and interest rate fluctuations on its floating rate long-term loans. Exchange gains or losses on these derivative contracts are likely to be offset by gains or losses on the hedged assets and liabilities. Interest rate risks are also controlled because the expected cost of capital is fixed. Thus, market risk for derivative contracts is believed to be immaterial.

The Company holds open-end mutual funds, corporate bonds and publicly traded stocks, which are subject to market risk. The fair value of these funds will decrease by NT\$49,702 thousand (US\$1,556 thousand) if their market price decreases by 1%.

2) Credit risk

Credit risk represents the potential loss that would be incurred by the Company if counter-parties or third parties breached contracts. Credit risk represents the positive fair values of contracts as of the balance sheet date. The counter-parties to the foregoing financial instruments are reputable financial institutions and business organizations. Management does not expect the Company's exposure to default by those parties to be material.

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## 3) Liquidity risk

The Company's operating funds are deemed sufficient to meet cash flow demand; therefore, the Company's liquidity risk is not considered to be significant.

The Company's investments in open-end mutual funds, corporate bonds and publicly traded stocks are traded in active markets and can be disposed of quickly at close to their fair values. The Company's bond investment with no active market and financial assets carried at cost have no active markets; therefore, liquidity risk for such assets is expected to be high.

## 4) Cash flow interest rate risk

The Company's loans are mainly floating interest rate debts. When the market interest rate increases by 1%, the Company's annual cash outflows will increase by NT\$611,069 thousand (US\$19,126 thousand).

## h. Fair value hedge and cash flow hedge

The Company entered into interest rate swap contracts and cross currency swap contracts to hedge exposures from fluctuations in both foreign exchange and interest rates arising from its long-term loans and its receivable from affiliates.

1) The outstanding interest rate swap contracts of ASE Inc. as of December 31, 2008 and 2009 were as follows:

Maturity Date	Notional Amount (In Thousands)	Interest Rate Paid (%)	Interest Rate Received (%)	Further Cash Demand	Expected Period for the Recognition of Gains or Losses from Hedge
<b>December 31, 2008</b>					
2013.03.01	NTD 12,000,000	2.45-2.48	1.88	2008-2013	2008-2013
<b>December 31, 2009</b>					
2013.03.01	NTD 11,220,000	2.45-2.48	0.50	2008-2013	2008-2013
2013.03.01	NTD 5,142,500	0.96-0.99	0.50	2009-2013	2009-2013
2011.05.27	USD 200,000	1.48-1.55	0.23	2009-2011	2009-2011

The fair value of the above interest rate swap contracts as of December 31, 2008 and 2009 was a loss of NT\$391,695 thousand and NT\$311,778 thousand (US\$9,758 thousand), respectively, and was recorded as unrealized loss on cash flow hedging financial instruments.

For the years ended December 31, 2008 and 2009, the increase of unrealized loss on cash flow hedging financial instruments was NT\$403,687 thousand and NT\$201,465 thousand (US\$6,306 thousand), respectively, and the amount recorded as interest expense was NT\$11,992 thousand and 281,382 thousand (US\$8,807 thousand), respectively.

2) The outstanding cross currency swap contract of ASE Inc. as of December 31, 2009 was as follows:



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Maturity Date	Notional Amount (In Thousands)	NT Interest Rate Paid (Received) (%)	USD Interest Rate Received (%)
2010.03.15-2010.09.28	USD130,000 / NTD4,290,950	(0.21)-0.90	0.23-0.91

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The fair value of the above cross currency swap contract as of December 31, 2009 was a loss of NT\$122,495 thousand (US\$3,834 thousand) (recorded as hedging derivative liabilities-current), which was recorded as foreign exchange losses of NT\$127,050 thousand (US\$3,977 thousand) and a deduction in unrealized loss on cash flow hedging financial instruments of NT\$4,555 thousand (US\$143 thousand), respectively. For the year ended December 31, 2009, the amounts recognized as a deduction of interest expense and a gain on valuation of financial assets were NT\$29,358 thousand (US\$919 thousand) and \$2,000 thousand (US\$63 thousand), respectively.

ASESH AT entered into an interest rate swap contract in 2009. For the year ended December 31, 2009, net gains from the interest rate swap contract were NT\$3,878 thousand (US\$ 121 thousand) and were recorded as a deduction of interest expense; unrealized gains from the interest rate swap contract were NT\$47,847 thousand (US\$ 1,498 thousand) and were recorded as unrealized gain (loss) on financial instruments. The unrealized gains will be recorded as a deduction of interest expense over the term of the long-term loan, which is being hedged. The contract will mature in March 2013.

ASE Test, Inc. entered into cross currency swap contracts in 2007 and 2008. Net gains from cross currency swap contracts for hedging purposes were NT\$5,475 thousand (recorded as a deduction in interest income of NT\$16,273 thousand and foreign exchange gains of NT\$21,748 thousand) and NT\$ 58,282 thousand (recorded as a deduction in interest income of NT\$24,514 thousand and foreign exchange gains of NT\$82,796 thousand) for the years ended December 31, 2007 and 2008, respectively.

27.

RELATED PARTY TRANSACTIONS

The related parties and their relationships with the Company are disclosed in Note 12 to the consolidated financial statements, except Hung Ching Shin Investment Co., a subsidiary of one of ASE Inc.'s equity method investees. Besides, PSC and NXP B.V. continue to exercise significant influence over PowerASE and ASEN, respectively, therefore they are also deemed related parties of the Company.

Except the transactions as discussed in Note 15 to the consolidated financial statements, the Company purchased real estate properties from HCDC for NT\$141,238 thousand in 2007 and the prices were based on their fair market values as assessed by appraisers. As of December 31, 2008, all of the amounts had been paid.

The Company contracted with HCDC for factory and office building construction, but the contract was terminated in 2008. As a result of the termination, NT\$36,000 thousand was paid by the Company to HCDC and was recorded as non-operating losses in 2008.

In July 2006, ASE Inc. entered into an agreement with PSC to form a joint venture company, PowerASE. In consideration of strategic purposes and the short-term financing requirement, ASE Inc. loaned NT\$450,000 thousand (US\$14,085 thousand) to PSC for repayment of its corporate bonds on July 30, 2009, and recorded the financing as other receivable from related parties. The receivable will be repaid through June 2010 with an interest rate of 2.5%. For the year ended December 31, 2009, ASE Inc. recognized interest income of NT\$4,777 thousand (US\$150 thousand). Also, PSC has pledged 42,614 thousand shares of common stocks of its investee, Rexchip Electronics Corp., as collateral for the loan. ASE Inc. assessed that the above financing provided to PSC is collectible at maturity and the value of the collateral approximates the financing amount.

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Information regarding compensation to directors, supervisors and management personnel was as follows:

	Year Ended December 31			
	2007 NT\$	2008 NT\$	2009 NT\$	2009 US\$ (Note 2)
Salary, incentives and special compensation	545,656	455,078	402,520	12,598
Bonus	102,635	71,453	81,806	2,561
	648,291	526,531	484,326	15,159

The compensation of directors, supervisors and management personnel for the year ended December 31, 2007 included the bonuses appropriated from earnings for 2007 which had been approved by shareholders in their annual meeting held in 2008.

## 28. ASSETS PLEDGED OR MORTGAGED

The following assets have been pledged or mortgaged as collateral for bank loans, import duties for raw materials and as guaranty deposits for employment of foreign labor, etc:

	December 31		
	2008 NT\$	2009 NT\$	2009 US\$ (Note 2)
Property, plant and equipment			
Land	511,644	497,441	15,569
Buildings and improvements	2,073,292	1,901,477	59,514
Machinery and equipment	434,907	93,348	2,922
Restricted assets	191,416	177,565	5,557
Construction in progress related to property development	1,144,113	-	-
	4,355,372	2,669,831	83,562

## 29. COMMITMENTS AND CONTINGENCIES

a. As of December 31, 2009, the outstanding derivative contracts and covenants of loan agreements were discussed in Note 5 and Note 19 to the consolidated financial statements, respectively.

b. ASE Inc. and ASE Test, Inc. lease the land on which their buildings are situated under various operating lease agreements with the ROC government expiring on various dates through August 2019. 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 Company leases buildings, machinery and equipment under non-cancelable operating leases.



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Future minimum lease payments under the above-mentioned operating leases as of December 31, 2009 were as follows:

	Amount	
	NT\$	US\$ (Note 2)
2010	274,774	8,600
2011	80,973	2,534
2012	50,046	1,566
2013	40,999	1,283
2014 and thereafter	281,584	8,813
<b>Total minimum lease payments</b>	<b>728,376</b>	<b>22,796</b>

c. As of December 31, 2009, unused letters of credit of the Company were approximately NT\$322,000 thousand (US\$10,078 thousand).

d. As of December 31, 2009, commitments to purchase machinery and equipment of the Company were approximately NT\$4,897,000 thousand (US\$153,271 thousand), of which NT\$106,495 thousand (US\$3,333 thousand) had been prepaid.

e. As of December 31, 2009, outstanding commitments related to construction of buildings of the Company were approximately NT\$4,115,000 thousand (US\$128,795 thousand), of which NT\$2,006,800 thousand (US\$62,811 thousand) had been prepaid.

f. The Company entered into technology license agreements with foreign companies which will expire on various dates through 2013. Pursuant to the agreements, the Company shall pay royalties based on specified percentages of sales volume and licensing fees to the counter parties. Royalties and licensing fees paid for the years ended December 31, 2007, 2008 and 2009 were approximately NT\$246,849 thousand, NT\$199,195 thousand and NT\$200,590 thousand (US\$6,278 thousand), respectively.

g. Tessera Inc. ("Tessera") filed an amended complaint in the United States District Court for the Northern District of California in February 2006 adding the Company to a suit alleging that the Company infringed patents owned by Tessera (the "California Litigation"). At Tessera's request, the United States International Trade Commission ("ITC") instituted an investigation of certain of the Company's co-defendants and other companies.

The district court in the California Litigation has vacated the trial schedule and stayed all proceedings pending a final resolution of the first ITC investigation. At Tessera's request in May 2008, ITC instituted an investigation of ASE Inc., ASEUS, ASE Test and other co-defendants. However, Tessera moved to terminate the investigation in July 2009. The United States Patent and Trademark Office has also instituted reexamination proceedings on all the patents Tessera has asserted in the California Litigation and the ITC Investigation.

As of April 28, 2010, the impact of the California Litigation or the ITC Investigation cannot be estimated.

30.

SUBSEQUENT EVENT

As discussed in Note 12 to the consolidated financial statements, the period of the tender offer for the common shares of USI launched by the Company expired on February 3, 2010 and the total number of common shares of USI tendered was 641,669 thousand with a total consideration of NT\$13,475,056 thousand (US\$ 421,754 thousand). The number of common shares of ASE Inc. to be transferred and delivered by J&R Holding and ASE Test is 218,167 thousand and the cash consideration of NT\$8,228,140 thousand (US\$257,532 thousand) has been paid by ASE Inc. out of the funds available from the long-term

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credit facility for acquisition of the additional 60.0% ownership of USI. As a result of the acquisition of USI shares, the Company has owned 78.1% of the outstanding common shares of USI and USI's operations will be consolidated with the Company's commencing on February 9, 2010. On April 19, 2010, ASE Inc.'s board of directors further approved to purchase in cash all outstanding USI shares, not owned by the Company, at the price of NT\$21 per share. USI also convened its board meeting on April 19, 2010 to resolve the delisting application for USI shares.

## 31. SEGMENT AND GEOGRAPHICAL INFORMATION

## a. Geographical sales and long-lived assets information

	1) Net revenues:						
	2007		Year Ended December 31			2009	
		% of	2008				% of
	NT\$	Total	NT\$	% of	NT\$	US\$ (Note	Total
	Revenues	Revenues	Total	Revenues	2)	Revenues	
America	50,389,904	50	50,082,695	53	45,109,107	1,411,865	52
Taiwan	21,413,369	21	18,681,217	20	17,815,026	557,591	21
Asia	16,760,893	17	12,950,935	14	12,050,672	377,173	14
Europe	12,597,299	12	12,714,009	13	10,800,509	338,044	13
Others	1,604	-	2,056	-	-	-	-
	101,163,069	100	94,430,912	100	85,775,314	2,684,673	100

## 2) Long-lived assets:

	December 31					
	2008		2009			
	NT\$	%	NT\$	US\$	%	
			(Note 2)			
Taiwan	44,802,206	53	42,914,804	1,343,187	54	
Asia	39,090,983	46	35,686,149	1,116,937	45	
America	864,795	1	762,907	23,878	1	
	84,757,984	100	79,363,860	2,484,002	100	

## b. Major customers

For the years ended December 31, 2007, 2008 and 2009, the Company did not have a single customer to which the net revenues exceeded 10% of total net revenues.

## c. Reported segment information

The Company has three reportable segments: Packaging, testing and other. The Company 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; and engages in other activities. The accounting policies for segments are the same as those described in Note 2. Segment information for the years ended December 31, 2007, 2008 and 2009 was as follows:

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	Packaging NT\$	Testing NT\$	Other NT\$	Total NT\$
<b>2007</b>				
Revenue from external customers	78,516,274	20,007,839	2,638,956	101,163,069
Inter-segment revenues	222,086	45,576	8,769,842	9,037,504
Interest income	229,917	85,363	33,380	348,660
Interest expense	(773,671 )	(87,635 )	(713,218 )	(1,574,524 )
Net interest expense	(543,754 )	(2,272 )	(679,838 )	(1,225,864 )
Depreciation and amortization	(9,379,964 )	(5,410,619 )	(1,835,569 )	(16,626,152 )
Segment profit (loss)	14,544,571	5,340,978	(1,222,840 )	18,662,709
Segment assets	91,802,902	36,968,716	23,605,832	152,377,450
Expenditures for segment assets	10,502,494	6,330,268	1,339,393	18,172,155
Goodwill	1,040,509	1,708,255	439,353	3,188,117
<b>2008</b>				
Revenue from external customers	73,391,622	19,021,360	2,017,930	94,430,912
Inter-segment revenues	1,227,553	71,513	10,047,595	11,346,661
Interest income	174,358	80,379	72,035	326,772
Interest expense	(1,201,699 )	(62,048 )	(549,549 )	(1,813,296 )
Net interest income (expense)	(1,027,341 )	18,331	(477,514 )	(1,486,524 )
Depreciation and amortization	(9,706,923 )	(5,799,216 )	(1,738,713 )	(17,244,852 )
Segment profit (loss)	7,666,072	4,153,091	(573,754 )	11,245,409
Segment assets	80,552,601	48,609,998	23,027,388	152,189,987
Expenditures for segment assets	9,266,015	6,323,387	1,034,303	16,623,705
Goodwill	1,392,743	7,639,685	423,663	9,456,091
<b>2009</b>				
Revenue from external customers	67,935,456	15,795,108	2,044,750	85,775,314
Inter-segment revenues	3,309,104	85,605	11,445,929	14,840,638
Interest income	96,409	58,309	19,152	173,870
Interest expense	(1,258,295 )	(23,156 )	(226,572 )	(1,508,023 )
Net interest income (expense)	(1,161,886 )	35,153	(207,420 )	(1,334,153 )
Depreciation and amortization	(10,093,653 )	(5,775,612 )	(1,768,817 )	(17,638,082 )
Segment profit (loss)	6,673,183	2,738,527	(397,367 )	9,014,343
Segment assets	91,769,196	43,106,391	27,185,309	162,060,896
Expenditures for segment assets	9,427,126	3,013,536	191,270	12,631,932
Goodwill	1,380,415	7,614,927	423,663	9,419,005
	Packaging	Testing	Other	Total
	US\$ (Note 2)	US\$ (Note 2)	US\$ (Note 2)	US\$ (Note 2)
<b>2009</b>				
Revenue from external customers	2,126,305	494,370	63,998	2,684,673
Inter-segment revenues	103,571	2,679	358,245	464,495

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Interest income	3,017	1,825	600	5,442
Interest expense	(39,383 )	(725 )	(7,092 )	(47,200 )
Net interest income (expense)	(36,366 )	1,100	(6,492 )	(41,758 )
Depreciation and amortization	(315,920 )	(180,770 )	(55,362 )	(552,052 )
Segment profit (loss)	208,863	85,713	(12,437 )	282,139
Segment assets	2,872,275	1,349,183	850,870	5,072,328
Expenditures for segment assets	295,059	94,320	5,986	395,365
Goodwill	43,206	238,339	13,260	294,805

32. SUMMARY OF SIGNIFICANT DIFFERENCES BETWEEN ACCOUNTING PRINCIPLES FOLLOWED BY THE COMPANY AND ACCOUNTING PRINCIPLES GENERALLY ACCEPTED IN THE UNITED STATES OF AMERICA

The Company's consolidated financial statements have been prepared in accordance with ROC GAAP, which differs in the following respects from U.S. GAAP:

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a. Pension benefits

The Company adopted the U.S. guidance relating to employers' accounting for pensions on January 1, 1987, which requires the Company to determine the accumulated pension obligation and the pension expense on an actuarial basis.

The U.S. guidance relating to employers' accounting for pensions was amended on September 29, 2006 to require employers to recognize the overfunded or underfunded status of a defined benefit pension plan as an asset or liability in its statement of financial position and to recognize changes in that funded status in the year in which the changes occur through comprehensive income. Specifically, the amended U.S. GAAP guidance defines the funded status of a benefit plan as the difference between the fair value of the plan assets and the projected benefit obligation. In addition, it requires companies to recognize actuarial gains or losses, prior service costs or credits, and the transition asset or obligation remaining that were unrecognized as of the initial adoption date of the amended U.S. GAAP guidance. The Company adopted the amended U.S. GAAP guidance on December 31, 2006.

ROC SFAS No. 18, "Accounting for Pensions" ("ROC SFAS No. 18") is similar in many respects to the U.S. guidance relating to employers' accounting for pensions and was adopted by the Company in 1996. However, ROC SFAS No. 18 does not require a company to recognize the overfunded or underfunded status of a defined benefit pension plan as an asset or liability in the statement of financial position. The difference in the dates of adoption gives rise to a U.S. GAAP difference in the actuarial computation for transition obligation and the related amortization.

b. Bonuses to employees, directors and supervisors

According to ROC regulations and the Articles of Incorporation of ASE Inc., a portion of distributable earnings is required to be set aside as bonuses to employees, directors and supervisors. Bonuses to directors and supervisors are always paid in cash. However, bonuses to employees may be granted in cash or stock or both. Prior to January 1, 2008, all of these appropriations, including stock bonuses which were valued at par value of NT\$10, were charged against retained earnings under ROC GAAP after approval by the shareholders in the following year.

Under U.S. GAAP, such bonuses are charged to earnings in the year earned. Shares issued as part of these bonuses are recorded at fair value. Since the amount and form of such bonuses are not usually determinable until the shareholders' meeting in the subsequent year, the total amount of the aforementioned bonuses is initially accrued based on management's estimate regarding the amount to be paid based on the Articles of Incorporation. Any difference between the initially accrued amount and the fair value of any shares issued as bonuses is recognized in the year of approval by the shareholders.

Effective January 1, 2008, the Company adopted Interpretation 96-052, "Accounting for Bonuses to Employees, Directors and Supervisors" issued in March 2007 by the ROC ARDF, which requires companies to record bonuses paid to employees, directors and supervisors as an expense rather than as an appropriation of earnings. The amount of compensation expense related to stock bonuses is determined based on the market value of ASE Inc.'s common stock at the date immediately preceding the shareholders' meeting.

Accordingly, the Company is no longer required to record the first reconciling adjustment for the year ended December 31, 2008 as mentioned above. However, the Company recorded the second reconciling adjustment to reflect the additional compensation expense recognized in 2008 for 2007 bonuses paid in stock, which was measured at the fair value on the date of stock distribution. Starting from January 1, 2009, the only U.S. GAAP reconciling adjustment for the bonuses paid in stock will be the difference of the fair value of the stock bonuses between the date of stock distribution (U.S. GAAP) and the date immediately preceding the shareholders' meeting (ROC GAAP).

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c. Depreciation of buildings

Under ROC GAAP, buildings may be depreciated over their estimated life based on ROC practices and tax regulations. For U.S. GAAP purposes, buildings are depreciated over their estimated economic useful life.

d. Depreciation on the excess of book value of buildings transferred between subsidiaries

ASE Test, Inc. purchased buildings and facilities from ASE Technologies Inc. in 1997. The purchase price was based on market value, which meant the portion of the purchase price in excess of book value of NT\$17,667 thousand was capitalized by ASE Test, Inc. as allowed under ROC GAAP. Under U.S. GAAP, transfers of assets between entities under common control are recorded at historical cost. Therefore, depreciation on the capitalized excess amount recorded under ROC GAAP is reversed under U.S. GAAP until the buildings and facilities are fully depreciated or disposed of.

e. Gain on sales of subsidiary's stock

The carrying value of stock investments in ASE Test by J&R Holding under ROC GAAP is different from that under U.S. GAAP, therefore differences in the amount of related gains upon the sale of such stock investments have been recorded in the equity reconciliation.

f. Effects of U.S. GAAP adjustments on equity method investments

The carrying amounts of equity method investments and the investment income (loss) recognized by the equity method are reflected in the consolidated financial statements under ROC GAAP. The financial statements of these equity method investees prepared under ROC GAAP are different from the financial statements of such equity method investees prepared under U.S. GAAP mainly due to the differences in accounting for bonuses to employees, directors and supervisors, stock options and the depreciation of buildings. Therefore, the investment income (loss) has been adjusted to reflect the differences between ROC GAAP and U.S. GAAP in the investees' financial statements.

g. Impairment of long-lived assets

Under U.S. GAAP, an impairment loss is recognized when the carrying amount of an asset or a group of assets is not recoverable from the expected future cash flows and the impairment loss is measured as the difference between the fair value and the carrying amount of the asset or group of assets. The impairment loss is recorded in earnings and cannot be reversed subsequently. Long-lived assets (excluding goodwill and other indefinite lived assets) held and used by the Company are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable.

Under ROC GAAP, for purposes of evaluating the recoverability of long-lived assets, assets purchased for use in the business but subsequently determined to have no use were written down to fair value and recorded as idle assets. Under ROC GAAP, effective January 1, 2005, the Company is required to recognize an impairment loss when an indication is identified that the carrying amount of an asset or a group of assets is not recoverable from the expected discounted future cash flows. However, if the recoverable amount increases in a future period, the amount previously recognized as impairment would be reversed and recognized as a gain. The adjusted amount should not exceed the carrying amount that would have been determined, net of depreciation, if no impairment loss had been recognized.

In 2006, the Company reversed NT\$2,190,583 thousand of impairment loss recognized in 2005 under ROC GAAP after a careful analysis of the increase in the estimated service potential of the production line and facilities by an

external specialist. Such reversal is prohibited under U.S. GAAP. As such, differences in the cost basis of these impaired machinery and equipment, associated depreciation expense and gain on recoveries related to restoration of such impaired machinery and equipment

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between ROC GAAP and U.S. GAAP are reflected in the reconciliation.

h. Stock dividends

Under ROC GAAP, stock dividends are recorded at par value with a charge to retained earnings. Under U.S. GAAP, if the ratio of distribution is less than 25 percent of the same class of shares outstanding, the fair value of the shares issued should be charged to retained earnings. The difference for stock dividends paid in 2007 and 2008 is treated as an additional reduction to retained earnings and an increase to capital surplus of NT\$14,264 million and NT\$687 million, respectively. However, no stock dividends were paid in 2009.

i. Stock-based compensation

Under U.S. GAAP, stock-based compensation expense for the year ended December 31, 2006 includes compensation expense for all unvested stock-based compensation awards granted prior to January 1, 2006 that are expected to vest, based on the grant-date fair value estimated in accordance with the transition method and the original provision of the U.S. guidance relating to accounting for stock-based compensation. Upon an employee's termination, unvested awards are forfeited, which affects the quantity of options to be included in the calculation of stock-based compensation expense. Forfeitures do not include vested options that expire unexercised. Stock-based compensation expense for all stock-based compensation awards granted after January 1, 2006 is based on the grant-date fair value estimated in accordance with the provisions of the U.S. guidance relating to share-based payment. The Company recognizes compensation expense using the graded vesting method over the requisite service period of the award, which is generally the option vesting term of five years. See Note 33d for a further discussion on stock-based compensation.

Certain characteristics of the stock options granted under the ASE 2002 Option Plan made the fair values of these options not reasonably estimable using appropriate valuation methodologies as prescribed under the U.S. guidance relating to accounting for stock-based compensation; therefore, these options have been accounted for using the intrinsic value method. Upon the adoption of the U.S. guidance relating to share-based payment, the Company continued to account for these stock options based on their intrinsic value, remeasured at each reporting date through the date of exercise or other settlement.

Under ROC GAAP, employee stock option plans that were granted or modified in the period from January 1, 2004 to December 31, 2007 are accounted for by the interpretations 92-070 072 and 93-073 issued by the ROC ARDF. The Company adopted the intrinsic value method and any compensation expense determined using this method is recognized over the vesting period.

Effective January 1, 2008, the Company adopted ROC SFAS No. 39, which is similar in many respects to the U.S. guidance relating to share-based payment and requires companies to record share-based payment transactions in the financial statements at fair value for the employee stock options that were granted or modified after December 31, 2007. The Company has not granted or modified employee stock options since January 1, 2008. No stock-based compensation expense was recognized under ROC GAAP for the years ended December 31, 2007, 2008 and 2009.

j. Goodwill

Before January 1, 2006, under ROC GAAP, the Company amortized goodwill arising from acquisitions over 10 years. Effective January 1, 2006, the Company adopted ROC SFAS No. 25 (revised in 2005), which is similar to the U.S. guidance relating to goodwill and other intangible assets. The Company reviews goodwill for impairment in accordance with the provision of the standards under ROC and U.S. GAAP and found no impairment as of December 31, 2008 and 2009.

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Under U.S. GAAP, the Company adopted the U.S. guidance relating to goodwill and other intangible assets on January 1, 2002, which requires the Company to review goodwill for possible impairment on at least an annual basis. As a result, for U.S. GAAP purposes, the Company ceased to amortize goodwill effective January 1, 2002. Definite-lived intangible assets continue to be amortized over their estimated useful lives.

The determination of whether or not goodwill is impaired under the U.S. guidance relating to goodwill and other intangible assets is made by first estimating the fair value of the reporting unit and comparing the fair value of a reporting unit with its carrying amount, including goodwill. If the carrying amount of a reporting unit exceeds its fair value, the Company calculates an implied fair value of the goodwill based on an allocation of the fair value of the reporting unit to the underlying assets and liabilities. If the carrying amount of the reporting unit's goodwill exceeds the implied fair value of that goodwill, an impairment loss shall be recognized in an amount equal to that excess.

k. Undistributed earnings tax

In the ROC, a 10% tax is imposed on unappropriated earnings. For ROC GAAP purposes, the Company records the 10% tax on unappropriated earnings in the year of shareholders' approval. In 2002, the American Institute of Certified Public Accountants International Practices Task Force (the "Task Force") concluded that in accordance with the U.S. guidance relating to accounting for tax credits related to dividends in accordance with accounting for income taxes, the 10% tax on unappropriated earnings should be accrued under U.S. GAAP during the period the earnings arise and adjusted to the extent that distributions are approved by the shareholders in the following year.

l. Impairment loss on equity method investments

ROC GAAP and U.S. GAAP require an assessment of impairment of long-term investments whenever events or circumstances indicate a decline in value that may be other than temporary. The criteria for determining whether or not an impairment charge is required are similar under ROC GAAP and U.S. GAAP; however, the methods to measure the amount of impairment may be based on different estimates of fair values depending on the circumstances. When impairment is determined to have occurred, U.S. GAAP generally requires the market price to be used, if available, to determine the fair value of the long-term investment and measure the amount of impairment at the reporting date. Under ROC GAAP, if the investments have an inactive market, the fair value is estimated according to the best information available at the reporting date. No impairment charge was incurred under U.S. GAAP in 2007, 2008 and 2009. The accumulated GAAP difference of NT\$2,078,620 thousand was caused by the impairment charges recorded in 2002 and 2004.

m. Uncertainty in income taxes

Under ROC GAAP, uncertainty in income taxes or adjustments of prior years' income taxes is recorded as current year's income tax expense. Under U.S. GAAP, effective January 1, 2007, the Company accounts for uncertainties in income taxes in accordance with the U.S. guidance relating to accounting for uncertainty in income taxes. The U.S. guidance clarifies the accounting for uncertainty in income taxes by prescribing the recognition threshold a tax position is required to meet before being recognized in the consolidated financial statements. It also provides guidance on derecognition, classification, interest and penalties, accounting in interim periods, disclosure, and transition. The adoption of the U.S. guidance relating to accounting for uncertainty in income taxes resulted in a cumulative effect of NT\$24,154 thousand, which was recorded as an adjustment to retained earnings at the beginning of 2007 (Note 33h).

n. Earnings per share

Under ROC GAAP, basic earnings per share is calculated by dividing net income by the weighted-average number of shares outstanding in each period, which is retroactively adjusted to the beginning of the year for stock dividends and stock bonuses issued subsequently. Starting from 2008,

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shares issued to employees for stock bonuses are included in the calculation of weighted-average number of shares outstanding from the date of issuance. Under U.S. GAAP, basic earnings per share is calculated by dividing net income by the weighted-average number of shares outstanding in each period, which is retroactively adjusted for stock dividends issued subsequently. For stock bonuses to employees, shares are included in the calculation of weighted-average number of shares outstanding from the date of issuance. For diluted earnings per share, unvested stock options are included in the calculation using the treasury stock method if the inclusion of such would be dilutive. However, the calculation of share using the treasury stock method is different between U.S. GAAP and ROC GAAP.

The U.S. guidance on applying the treasury stock method for equity instruments granted in share-based payment transactions in determining diluted earnings per share states that the assumed proceeds shall be the sum of (a) the exercise price, (b) the amount of compensation cost attributed to future services and not yet recognized, and (c) the amount of excess tax benefits that would be credited to additional paid-in capital assuming exercise of the options. Prior to January 1, 2006, the Company used the intrinsic value method to account for its stock-based compensation under the U.S. guidance, and had no unrecognized compensation cost to be included in the assumed proceeds. However, upon adoption of the U.S. guidance relating to share-based payment, the Company has unrecognized compensation cost, and therefore, the number of shares included in the diluted earnings per share calculation under U.S. GAAP is different from that under ROC GAAP.

The following schedule reconciles net income and shareholders' equity under ROC GAAP as reported in the consolidated financial statements to the net income and shareholders' equity amounts as determined under U.S. GAAP, giving effect to adjustments for the differences listed above.

	2007 (Note)	Year Ended December 31		2009
	NT\$	2008 (Note)	NT\$	US\$
		NT\$	NT\$	(Note 2)
Net income				
Net income based on ROC GAAP	13,994,484	7,207,483	6,903,468	216,071
Adjustments:				
a. Pension benefits	4,382	1,920	(10,692 )	(335 )
b. Bonuses to employees, directors and supervisors	(2,054,493 )	(328,013 )	(3,394 )	(106 )
c. Depreciation of buildings	(116,574 )	(117,394 )	(115,766 )	(3,623 )
d. Depreciation on the excess of book value of buildings transferred between subsidiaries	432	432	432	13
f. Effect of U.S. GAAP adjustments on equity method investments	(26,414 )	5,453	(59,876 )	(1,874 )
g. Impairment of long-lived assets				
Depreciation and gain on recoveries related to restoration of impaired machinery and equipment	313,277	195,790	97,598	3,055
i. Stock-based compensation	(489,490 )	(84,835 )	(983,309 )	(30,776 )
k. Undistributed earnings tax	122,448	(215,601 )	(213,418 )	(6,680 )
m. Uncertainty in income taxes adjustment upon adoption of related U.S. guidance	24,154	-	-	-
	(43,603 )	(19,599 )	(94,666 )	(2,963 )

Income tax effect of U.S. GAAP adjustments				
Net decrease in net income	(2,265,881 )	(561,847 )	(1,383,091)	(43,289 )
Net income based on U.S. GAAP	11,728,603	6,645,636	5,520,377	172,782
Attributable to				
Shareholders of the parent	9,931,106	5,492,101	5,317,509	166,432
Noncontrolling interest	1,797,497	1,153,535	202,868	6,350
	11,728,603	6,645,636	5,520,377	172,782
Earnings per share (Note 33g)				
Basic	1.87	1.02	1.03	0.03
Diluted	1.81	1.01	1.02	0.03

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	Year Ended December 31			2009 US\$ (Note 2)
	2007 (Note) NT\$	2008 (Note) NT\$	NT\$	
<b>Earnings per ADS (Note 33g)</b>				
Basic	9.34	5.11	5.15	0.16
Diluted	9.03	5.04	5.11	0.16
<b>Number of weighted average outstanding shares (in thousands) (Note 33g)</b>				
Basic	5,317,695	5,368,718	5,162,884	
Diluted	5,566,118	5,405,280	5,180,663	
<b>Number of ADS (in thousands) (Note 33g)</b>				
Basic	1,063,539	1,073,744	1,032,577	
Diluted	1,113,224	1,081,057	1,036,133	

(Concluded)

	December 31			2009 US\$ (Note 2)
	2007 (Note) NT\$	2008 (Note) NT\$	NT\$	
<b>Shareholders' equity</b>				
<b>Shareholders' equity based on ROC GAAP</b>				
	89,739,888	71,960,742	74,713,694	2,338,458
<b>Adjustments:</b>				
<b>a. Pension benefits and additional liability</b>				
Pension benefits	62,600	64,520	53,828	1,685
Unrecognized pension cost on adoption of the amended U.S. guidance relating to pension	(613,362 )	(613,362 )	(613,362 )	(19,198 )
Defined benefit pension plan adjustment	(26,153 )	(627,783 )	(596,400 )	(18,666 )
<b>b. Bonuses to employees, directors and supervisors</b>				
	(1,241,391 )	3,394	-	-
<b>c. Depreciation of buildings</b>				
	(698,861 )	(816,255 )	(932,021 )	(29,171 )
<b>d. Depreciation on the excess of book value of buildings transferred between subsidiaries</b>				
	(13,167 )	(12,735 )	(12,303 )	(385 )
<b>e. Gain on sale of subsidiary's stock</b>				
	(8,619 )	(8,619 )	(8,619 )	(270 )
<b>f. Effects of U.S. GAAP adjustments on equity method investments</b>				
	273,901	594,283	259,879	8,134
<b>g. Impairment loss reversal, net</b>				
	(1,791,675 )	(1,595,885 )	(1,498,287 )	(46,895 )
<b>i. Stock-based compensation</b>				
	(908,661 )	(908,661 )	(908,661 )	(28,440 )
<b>j. Goodwill</b>				
Amortization	3,041,351	3,041,351	3,041,351	95,191
Impairment loss	(1,600,618 )	(1,600,618 )	(1,600,618 )	(50,098 )
From ASE Test Acquisition	-	(174,864 )	(174,864 )	(5,473 )
<b>k. Undistributed earnings tax</b>				
	(177,990 )	(393,591 )	(607,009 )	(18,999 )
	(2,078,620 )	(2,078,620 )	(2,078,620 )	(65,059 )

I. Impairment loss on equity method investments				
Income tax effect of U.S. GAAP adjustments	592,022	572,423	477,757	14,953
Net decrease in shareholders' equity	(5,189,243 )	(4,555,022 )	(5,197,949 )	(162,691 )

Shareholders' equity based on U.S. GAAP	84,550,645	67,405,720	69,515,745	2,175,767
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	Year Ended December 31			
	2007 (Note) NT\$	2008 (Note) NT\$	2009 NT\$	US\$ (Note 2)
Changes in shareholders' equity based on U.S. GAAP				
Balance, beginning of year	71,605,363	84,550,645	67,405,720	2,109,725
Net income for the year	11,728,603	6,645,636	5,520,377	172,782
Adjustment for bonuses to employees, directors and supervisors	1,634,513	973,593	-	-
Adjustment for stock option compensation	489,490	84,835	983,309	30,776
Translation adjustment	849,157	2,694,149	(1,164,331 )	(36,442 )
Adjustment from changes in ownership percentages of investees	15,867	1,014	1,396	44
Unrealized gain (loss) on available-for-sale financial assets	(13,882 )	(450,261 )	380,464	11,908

(Continued)

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	Year Ended December 31			2009 US\$ (Note 2)
	2007 (Note) NT\$	2008 (Note) NT\$	NT\$	
Unrealized gain (loss) on cash flow hedging financial instruments	-	(391,695 )	84,472	2,644
Issuance of common stock from stock options exercised by employees	962,240	237,383	103,584	3,242
Capital received in advance for stock options	491,883	3,387	135,205	4,232
Cash dividends	(6,941,011 )	(9,361,728 )	(2,736,568 )	(85,652 )
Conversion of convertible bonds	1,300,795	265,834	-	-
Cash dividends received by subsidiaries from parent company	271,945	535,100	160,895	5,036
Capital surplus from accrued interest on convertible bonds	728,254	-	-	-
Adjustment upon adoption of related U.S. guidance relating to uncertainty in income taxes	(24,154 )	-	-	-
Adjustment related to treasury stock arising from changes in ownership percentage of subsidiaries	3,259	(3,522,406 )	-	-
Effects of U.S. GAAP adjustments on equity method investments	(310,690 )	314,929	(274,528 )	(8,593 )
Change in noncontrolling interest	1,283,507	1,435,527	213,335	6,677
Change in noncontrolling interest from acquisition of subsidiaries	489,134	(14,684,718)	-	-
Unrecognized pension cost	12,525	(223,885 )	-	-
Defined benefit pension plan adjustment	(26,153 )	(601,630 )	16,688	523
Acquisition of treasury stock	-	(1,099,989 )	(1,314,273 )	(41,135 )
<b>Balance, end of year</b>	<b>84,550,645</b>	<b>67,405,720</b>	<b>69,515,745</b>	<b>2,175,767</b>
<b>Attributable to</b>				
Shareholders of the parent	70,101,406	65,303,020	66,555,528	2,083,115
Noncontrolling interest	14,449,239	2,102,700	2,960,217	92,652
	84,550,645	67,405,720	69,515,745	2,175,767

(Concluded)

The following U.S. GAAP condensed consolidated balance sheets as of December 31, 2008 and 2009, and consolidated statements of income for the years ended December 31, 2007, 2008 and 2009 have been derived from the audited consolidated financial statements and reflect the adjustments presented above.

	December 31		2009 US\$ (Note 2)
	2008 NT\$	NT\$	
Current assets	46,366,851	61,413,002	1,922,159

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Long-term investments	2,842,701	3,341,249	104,578
Property, plant and equipment, net	82,694,497	77,869,151	2,437,219
Intangible assets	12,940,638	12,522,837	391,951
Other assets	3,963,509	2,814,192	88,081
<b>Total assets</b>	<b>148,808,196</b>	<b>157,960,431</b>	<b>4,943,988</b>
<b>Current liabilities</b>	<b>25,267,300</b>	<b>34,574,089</b>	<b>1,082,131</b>
Long-term debts	51,622,187	49,392,114	1,545,918
Other liabilities	4,512,989	4,478,483	140,172
<b>Total liabilities</b>	<b>81,402,476</b>	<b>88,444,686</b>	<b>2,768,221</b>
Equity attributable to shareholders of the parent	65,303,020	66,555,528	2,083,115
Noncontrolling interest in consolidated subsidiaries	2,102,700	2,960,217	92,652
<b>Total liabilities and shareholders' equity</b>	<b>148,808,196</b>	<b>157,960,431</b>	<b>4,943,988</b>

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	Year Ended December 31			2009 US\$ (Note 2)
	2007 (Note) NT\$	2008 (Note) NT\$	2009 NT\$	
Net revenues	101,163,069	94,430,912	85,775,314	2,684,673
Cost of revenues	75,345,304	73,315,552	68,546,415	2,145,427
Gross profit	25,817,765	21,115,360	17,228,899	539,246
Operating expenses	10,898,110	10,615,048	9,431,512	295,196
Income from operations	14,919,655	10,500,312	7,797,387	244,050
Net non-operating income (expenses)	71,382	(1,351,194 )	(484,004 )	(15,149 )
Income before income tax	14,991,037	9,149,118	7,313,383	228,901
Income tax expense	3,262,434	2,503,482	1,793,006	56,119
Net income	11,728,603	6,645,636	5,520,377	172,782
Attributable to				
Shareholders of the parent	9,931,106	5,492,101	5,317,509	166,432
Noncontrolling interest	1,797,497	1,153,535	202,868	6,350
	11,728,603	6,645,636	5,520,377	172,782

Note: Prior to the adoption of the new guidance for noncontrolling interest in consolidated financial statements issued by FASB in December 2007, the noncontrolling interest in the income of subsidiaries is deducted in arriving at net income. Upon the adoption of the new guidance beginning from January 1, 2009, the noncontrolling interest forms part of net income. In addition, prior to the adoption of the new guidance, the noncontrolling interest in subsidiaries is classified as a mezzanine equity. Upon the adoption of the new guidance beginning from January 1, 2009, the non-controlling interest in subsidiaries is classified as a separate component of shareholders' equity and the presentation and disclosure requirements of the new guidance are applied retrospectively for all periods presented. Therefore, from January 1, 2009, there are no differences in presentation for non-controlling interest (or minority interest as referred to under ROC GAAP) between ROC GAAP and US GAAP.

The Company applies ROC SFAS No. 17, "Statement of Cash Flows". Its objectives and principles are similar to those set out in the U.S. guidance relating to statement of cash flows. Summarized cash flow data by operating, investing and financing activities in accordance with the U.S. GAAP are as follows:

	Year Ended December 31			2009 US\$ (Note 2)
	2007 NT\$	2008 NT\$	2009 NT\$	
Net cash inflow (outflow) from:				
Operating activities	27,475,586	30,129,594	15,517,228	485,672
Investing activities	(18,108,361)	(36,359,167)	(15,980,715)	(500,179)
Financing activities	(7,657,695 )	14,461,587	(2,778,549 )	(86,965 )
Net increase (decrease) in cash and cash equivalents	1,709,530	8,232,014	(3,242,036 )	(101,472)
Cash and cash equivalents, beginning of year	15,730,075	17,157,935	26,138,930	818,120
Effect of exchange rate changes	(281,670 )	748,981	(339,400 )	(10,623 )

Cash and cash equivalents, end of year	17,157,935	26,138,930	22,557,494	706,025
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The significant reclassifications for U.S. GAAP cash flow statements pertained to bonuses to employees, directors and supervisors shown in the operating activities under U.S. GAAP as opposed to financing activities under ROC GAAP.

As discussed in Note 3, starting from 2009, bonuses paid to employees, directors and supervisors are classified as operating activities for purposes of the statement of cash flows when paid under ROC GAAP. Therefore, the reclassification of such bonus is no longer required for the cash flow statement starting in 2009.

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33. ADDITIONAL DISCLOSURES REQUIRED BY U.S. GAAP

a. Recently issued accounting standards

In April 2009, the FASB issued a standard that provides additional guidance for estimating fair value when the volume and level of activity for an asset or liability have significantly decreased. It also included guidance on identifying circumstances that indicate a transaction is not orderly. This guidance is effective for interim and annual reporting periods ending after June 15, 2009, and should be applied prospectively. This standard is effective for the Company for the year ended December 31, 2009. The Company believes the adoption of the guidance has no material impact on its consolidated financial position or results of operations.

In April 2009, the FASB issued a standard that provides guidance on the recognition and presentation of other-than-temporary impairments of debt securities classified as available-for-sale and held-to-maturity. This standard is effective for interim and annual reporting periods ending after June 15, 2009. The adoption of the guidance did not have a material impact on the Company's consolidated financial position and results of operations.

In May 2009 and subsequently updated in February 2010, the FASB issued new guidance on subsequent events that establishes general standards of accounting for and disclosure of events that occur after the balance sheet date but before financial statements are issued. This standard defines two types of subsequent events, recognized or nonrecognized. The new guidance is effective for the Company for the year ended December 31, 2009.

In June 2009, the FASB issued new guidance relating to the transfer of financial assets. The new guidance requires entities to provide more information regarding sales of securitized financial assets and similar transactions, particularly if the entity has continuing exposure to the risks related to transferred financial assets. It also eliminates the concept of a "qualifying special-purpose entity," changes the requirements for derecognizing financial assets and requires additional disclosures. The new guidance becomes effective for annual reporting periods beginning after November 15, 2009. Based on the Company's analysis, the Company currently does not anticipate that the new guidance will have a material effect on the Company's consolidated financial position and results of operations.

In June 2009, the FASB issued new guidance to improve financial reporting by enterprises involved with variable interest entities ("VIE"). The new guidance modifies the approach for determining the primary beneficiary of a VIE. Under the modified approach, an enterprise is required to make a qualitative assessment whether it has (1) the power to direct the activities of the VIE that most significantly impact the entity's economic performance and (2) the obligation to absorb losses of the VIE or the right to receive benefits from the VIE that could potentially be significant to the VIE. If an enterprise has both of these characteristics, the enterprise is considered the primary beneficiary and must consolidate the VIE. The new guidance becomes effective for annual reporting periods beginning after November 15, 2009. Based on the Company's analysis, the Company currently does not anticipate that the new guidance will have a material effect on the Company's consolidated financial position and results of operations.

In June 2009, the FASB issued its Accounting Standards Codification ("ASC") 105, which became the source of authoritative U.S. GAAP recognized by the FASB to be applied by nongovernmental entities. Rules and interpretive releases of the SEC under authority of federal securities law are also sources of authoritative U.S. GAAP for SEC registrants. The ASC became effective for the financial statements issued for interim and annual periods ending after September 15, 2009 and superseded all then-existing non-SEC accounting and reporting standards. All other non-grandfathered non-SEC accounting literature not included in the ASC will become nonauthoritative. The FASB will not issue new standards in the form of Statements (SFAS's) FASB Staff Positions (FSP's) or Emerging Issues Task Force Abstracts (EITF's), but rather it will issue Accounting Standards Updates (ASU's). FASB will not consider the ASU's as authoritative in their own right as they will only serve to update the ASC,

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provide background information about guidance and provide the bases for conclusions on the changes in the ASC. The Company has adopted the ASC effective for its December 31, 2009 annual report on Form 20-F and has revised the disclosure of the U.S. GAAP source references in its financial reporting upon such adoption.

In September 2009, the FASB issued an accounting standard update which provides guidance on how to separate consideration in multiple-deliverable arrangements and significantly expands disclosure requirements. The standard establishes a hierarchy for determining the selling price of a deliverable, eliminates the residual method of allocation and requires that arrangement consideration be allocated at the inception of the arrangement to all deliverables using the relative selling price method. The update is effective for annual reporting periods beginning on or after June 15, 2010. Based on the Company's analysis, the Company currently does not anticipate that the new guidance will have a material effect on the Company's consolidated financial position and results of operations.

b. Pension

In December 2008, the FASB issued new guidance relating to the disclosure requirements for defined benefit plans, which provides guidance on an employer's disclosures about plan assets of a defined benefit pension or other postretirement plan. As discussed in Note 20, pension funds are administered by the Labor Pension Fund Supervisory Committee ("the Committee") and the investment policies, strategies and plan assets allocation is under the Committee's control. In addition, the Committee does not provide detailed information to the public for the investment portfolios of the pension plan assets. Therefore, the Company cannot meet the pension plan asset disclosure requirements included in the new guidance.

Set forth below is pension information about the defined benefit plans disclosed in accordance with the U.S. guidance related to employers' disclosures about pensions and other postretirement benefits:

	Year Ended December 31			
	2007 NT\$	2008 NT\$	2009 NT\$	US\$ (Note 2)
<b>Components of net periodic benefit cost</b>				
Service cost	382,371	333,538	369,833	11,575
Interest cost	86,490	107,726	106,430	3,331
Expected return on plan assets	(37,312 )	(46,788 )	(35,621 )	(1,115 )
Amortization	10,955	14,185	55,718	1,744
Curtailement gain	-	(4,177 )	-	-
<b>Net periodic benefit cost</b>	<b>442,504</b>	<b>404,484</b>	<b>496,360</b>	<b>15,535</b>
<b>Changes in benefit obligation</b>				
Benefit obligation at beginning of year	4,474,962	4,851,185	5,773,799	180,714
Service cost	382,371	333,538	369,833	11,575
Interest cost	86,490	107,726	106,430	3,331
Curtailement effect	(13,562 )	(4,177 )	(57,266 )	(1,792 )
Actuarial gain	112,780	650,236	13,295	416
Benefits paid	(245,692 )	(274,252 )	(403,267 )	(12,622 )
Exchange loss (gain)	53,836	109,543	(32,678 )	(1,023 )
<b>Benefit obligation at end of year</b>	<b>4,851,185</b>	<b>5,773,799</b>	<b>5,770,146</b>	<b>180,599</b>

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	Year Ended December 31			
	2007 NT\$	2008 NT\$	2009 NT\$	US\$ (Note 2)
<b>Change in plan assets</b>				
Fair value of plan assets at beginning of year	1,657,132	2,132,706	2,055,781	64,344
Actual return (loss) on plan assets	41,577	(144,737 )	70,896	2,219
Employer contribution	485,244	153,370	194,889	6,100
Benefits paid	(48,285 )	(93,653 )	(220,541 )	(6,903 )
Translation adjustment	(2,962 )	8,095	(3,431 )	(108 )
	2,132,706	2,055,781	2,097,594	65,652
Unfunded status	2,718,479	3,718,018	3,672,552	114,947

(Concluded)

Actuarial assumptions:

	December 31		
	2007	2008	2009
Discount rate	2.25% to 4.90%	2.00% to 4.90%	2.25% to 4.92%
Increase in future salary level	2.50% to 5.00%	2.50% to 5.00%	2.50% to 5.00%
Expected rate of return on plan assets	2.50% to 3.00%	2.25% to 2.50%	1.50% to 2.50%

The Company has no other post-retirement or post-employment benefit plans.

## c. Marketable securities

At December 31, 2008 and 2009, marketable securities by category were as follows:

	December 31								
	2008			2009			Unrealized Holding Gross Gains (Losses) (Within One Year)		
	Adjusted Cost	Fair Value	Unrealized Holding Gross Losses	Cost	Fair Value	Unrealized Holding Gross Gains (Losses) (Within One Year)	US\$ (Note 2)	US\$ (Note 2)	US\$ (Note 2)
	NT\$	NT\$	NT\$	NT\$	NT\$	NT\$	US\$ (Note 2)	US\$ (Note 2)	US\$ (Note 2)
<b>Available-for-sale</b>									
Open-end mutual funds	-	-	-	3,770,000	117,997	3,770,435	118,011	435	14
Corporate bonds	550,000	550,000	-	200,000	6,260	198,730	6,220	(1,270)	(40)
Publicly traded stocks	187,201	179,812	(7,389)	21,033	658	26,359	825	5,326	167
Convertible bonds	-	-	-	96,090	3,007	96,090	3,007	-	-

737,201	729,812	(7,389)	4,087,123	127,922	4,091,614	128,063	4,491	141
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Bond investments with no active market under ROC GAAP (Note 7) were reclassified as available-for-sale securities under U.S. GAAP since the Company doesn't intend to hold to maturity.

As of December 31, 2009, maturity dates of the corporate bonds are December 24, 2015 and October 8, 2016.

The Company uses the average cost method for available-for-sale securities when determining their cost basis. Proceeds from sales of available-for-sale securities for the years ended December 31, 2007, 2008 and 2009 were NT\$11,825,157 thousand, NT\$16,714,277 thousand and NT\$38,971,185 thousand (US\$1,219,755 thousand), respectively. Gross realized gains on these sales for the years ended December 31, 2007, 2008 and 2009 were NT\$111,749 thousand, NT\$198,059 thousand and NT\$8,235 thousand (US\$258 thousand), respectively. Gross realized losses on these sales for the years ended December 31, 2007, 2008 and 2009 were NT\$163 thousand, NT\$66,038 thousand and NT\$27,673 thousand (US\$866 thousand), respectively. The other than temporary or realized loss on impairment of available-for-sale financial assets was nil for the years ended December 31, 2007 and 2009. For the



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year ended December 31, 2008, the other than temporary or realized loss on impairment of available-for-sale financial assets was NT\$149,954 thousand.

d. Employee stock option plans

Effective January 1, 2006, the Company adopted the fair value recognition provisions of the U.S. guidance relating to share-based payment, using the modified prospective transition method and therefore has not restated results for prior periods. Under this transition method, stock-based compensation expense for the year ended December 31, 2006 included stock-based compensation expense for all share-based payment awards granted prior to but not yet vested as of January 1, 2006, based on the grant-date fair value estimated in accordance with the original provision of the U.S. guidance relating to accounting for stock-based compensation. In addition, the stock-based compensation expense also includes the intrinsic value of certain outstanding share-based awards for which it was not possible to reasonably estimate their grant-date fair value under the requirement of the U.S. guidance relating to accounting for stock-based compensation. Stock-based compensation expense for all share-based payment awards granted after January 1, 2006 is based on the grant-date fair value estimated in accordance with the provision of the U.S. guidance relating to share-based payment. The Company recognizes these compensation costs using the graded vesting method over the requisite service period of the award, which is generally a five-year vesting period. In March 2005, the SEC issued an interpretation relating to share-based payment and the value of share-based payments for public companies. The Company has applied the interpretation relating to share-based payment.

In December 2007, the SEC issued an amendment for prior interpretation regarding the use of the simplified method in developing estimates of the expected life of stock options in accordance with the guidance relating to share-based payment. The amendment allowed the continued use, subject to specific criteria, of the simplified method in estimating the expected life of stock options granted after December 31, 2008. The Company has not granted any employee stock options since January 1, 2008.

Information regarding the Company's stock option plans is as follows:

ASE Inc. and ASE Mauritius Inc. Option Plan

Information regarding these employee stock option plans is provided in Note 22.

ASE Test Option Plan

As discussed in Note 22, all ASE Test employee stock options were exercised or forfeited as of May 30, 2008.

Information regarding ASE Test's option plan is presented below (in U.S. dollars):

	Number of Shares	Weighted Average Exercise Price Per Share	Aggregate Intrinsic Value (In Thousands)
Outstanding options at January 1, 2007	10,325,038	10.34	
Options exercised	(1,200,503 )	8.98	
Options forfeited	(401,363 )	14.00	
Outstanding options at December 31, 2007	8,723,172	10.36	
Options exercised	(8,085,352 )	9.69	

Options forfeited	(637,820 )	18.92	
Outstanding options at December 31, 2008	-	-	\$ -

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Total intrinsic value of options exercised for the years ended December 31, 2007 and 2008 was US\$4,952 thousand and US\$40,074 thousand, respectively.

ASE Test has used the fair value based method (based on the Black-Scholes model) to evaluate the options granted with the following assumptions:

	Year Ended December 31, 2007
Risk-free interest rate	3.88%-4.88%
Expected life	3-5 years
Expected volatility	59.06%-62.03%
Expected dividend yield	-

e. In accordance with the U.S. guidance relating to reporting comprehensive income, the statements of comprehensive income for the years ended December 31, 2007, 2008 and 2009 are presented below:

	Year Ended December 31			
	2007	2008	2009	US\$
	NT\$	NT\$	NT\$	(Note 2)
Net income based on U.S. GAAP	11,728,603	6,645,636	5,520,377	172,782
Other comprehensive income (loss), net of tax:				
Translation adjustments	849,157	2,694,149	(1,164,331)	(36,442 )
Unrealized gain (loss) on financial instruments	(13,882 )	(841,956 )	464,936	14,552
Unrecognized pension cost	(13,628 )	(825,515 )	16,688	523
<b>Comprehensive income</b>	<b>12,550,250</b>	<b>7,672,314</b>	<b>4,837,670</b>	<b>151,415</b>
Attributable to				
Shareholders of the parent	10,752,753	6,518,779	4,198,139	131,398
Noncontrolling interest	1,797,497	1,153,535	639,531	20,017
	12,550,250	7,672,314	4,837,670	151,415

f. Goodwill

On January 1, 2002, the Company adopted the U.S. guidance relating to goodwill and other intangible assets, which requires that goodwill no longer be amortized, and instead, be tested for impairment on at least an annual basis.

As of December 31, 2008 and 2009, the Company had goodwill of NT\$9,804,680 thousand and NT\$9,767,594 thousand (US\$305,715 thousand), respectively, primarily from the reporting unit of testing operation.

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Changes in the carrying amount of goodwill for the years ended December 31, 2008 and 2009, by reporting units, were as follows:

	Packaging NT\$	Testing NT\$	Other NT\$	Total NT\$	US\$ (Note 2)
Balance as of January 1, 2008	1,170,031	2,029,705	511,834	3,711,570	116,168
Goodwill acquired	315,657	5,780,726	-	6,096,383	190,810
Translation adjustment	5,370	(8,845 )	202	(3,273 )	(102 )
Balance as of December 31, 2008	1,491,058	7,801,586	512,036	9,804,680	306,876
Translation adjustment	(10,689 )	(25,996 )	(401 )	(37,086 )	(1,161 )
Balance as of December 31, 2009	1,480,369	7,775,590	511,635	9,767,594	305,715

## g. Earnings per share

The U.S. guidance relating to earnings per share requires the presentation of basic and diluted earnings per share. Basic earnings per share was computed based on the weighted average number of common shares outstanding during the year. Diluted earnings per share included the effect of dilutive potential common shares (such as stock options issued calculated using the treasury stock method).

The following table presents the calculation of basic and diluted earnings per share:

	2007 NT\$	Year Ended December 31 2008 NT\$	2009 NT\$	US\$ (Note 2)
<b>Basic EPS</b>				
Income attributable to shareholders of the parent	9,931,106	5,492,101	5,317,509	166,432
Effect of ASE Test and ASE Mauritius Inc.'s stock option plans	(20,185 )	(42,696 )	(26,411 )	(827 )
Interest on convertible bonds, net of tax	139,635	-	-	-
<b>Diluted EPS</b>				
Income attributable to shareholders of the parent plus effect of potential dilutive common stock	10,050,556	5,449,405	5,291,098	165,605
<b>Weighted average outstanding shares (in thousands)</b>				
Basic	5,317,695	5,368,718	5,162,884	
Effect of dilutive potential common stock	248,423	36,562	17,779	
Diluted	5,566,118	5,405,280	5,180,663	

For the years ended December 31, 2007, 2008 and 2009, no options or convertible bonds were excluded from the calculation of diluted EPS.

The denominator used for purposes of calculating earnings per ADS was the above-mentioned weighted average outstanding shares divided by five (one ADS represents five common shares). The numerator was the same as mentioned in the above EPS calculation.

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h. In accordance with disclosure requirements under the U.S. guidance relating to accounting for uncertainty in income taxes, the following table summarizes the activity related to the gross unrecognized tax benefits for the years ended December 31, 2008 and 2009:

	Year Ended December 31		
	2008 NT\$	2009 NT\$	US\$ (Note 2)
Balance, beginning of year	18,405	19,820	620
Increase related to current year tax positions	1,415	-	-
Translation adjustment	-	(501 )	(15 )
Balance, end of year	19,820	19,319	605

Upon adoption of the above-mentioned U.S. guidance, the Company recorded interest expense and penalties as interest expense and other non-operating expense, respectively. For the years ended December 31, 2008 and 2009, the total amount of interest expense and penalties related to tax uncertainty was approximately NT\$4,614 thousand and NT\$2,375 thousand (US\$74 thousand), respectively. The total amount of interest and penalties recognized as of December 31, 2008 and 2009 was NT\$17,424 thousand and NT\$19,799 thousand (US\$620 thousand), respectively.

i. Fair Value Disclosure

On January 1, 2008, the Company adopted the U.S. guidance relating to fair value measurements, which defines fair value, establishes a framework for measuring fair value and expands disclosures about fair value measurements.

The U.S. guidance relating to fair value measurements defines fair value as the price that would be received upon sale of an asset or paid upon transfer of a liability in an orderly transaction between market participants at the measurement date and in the principal or most advantageous market for that asset or liability. The fair value should be calculated based on assumptions that market participants would use in pricing the asset or liability, not on assumptions specific to the Company.

In addition to defining fair value, the U.S. guidance relating to fair value measurements expands the disclosure requirements around fair value and establishes a fair value hierarchy for valuation inputs. The hierarchy prioritizes the inputs into three levels based on the extent to which inputs used in measuring fair value are observable in the market. Each fair value measurement is reported in one of the three levels which is determined by the lowest level input that is significant to the fair value measurement in its entirety. These levels are:

Level 1 - Use unadjusted quoted prices in active markets for identical assets or liabilities.

Level 2 - Use observable inputs other than Level 1 prices such as quoted prices for identical or similar instruments in markets that are not active, quoted prices for similar instruments in active markets, and model-based valuation in which all significant inputs are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

Level 3 - Use inputs that are generally unobservable and reflect the use of significant management judgments and estimates.

The following section describes the valuation methodologies we use to measure financial assets and liabilities at fair value.

For investments other than derivative financial instruments, the Company uses quoted prices in active markets for identical assets to determine fair value where applicable.

For derivative financial instruments, fair values are estimated using industry standard valuation models. 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.

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The following table presents our assets and liabilities measured at fair value on a recurring basis as of December 31, 2008 and 2009:

	Level 1 NT\$	Level 2 NT\$	Level 3 NT\$	Total NT\$
<b>December 31, 2008</b>				
<b>Assets</b>				
<b>Derivative financial assets</b>				
Forward exchange contracts	-	1,053	-	1,053
<b>Marketable securities - trading</b>				
Publicly traded stocks	536,427	-	-	536,427
<b>Marketable securities - available-for-sale</b>				
Corporate bonds	100,000	-	450,000	550,000
Publicly traded stocks	179,812	-	-	179,812
	816,239	1,053	450,000	1,267,292
<b>Liabilities</b>				
<b>Derivative financial liabilities</b>				
Swap contracts	-	61,257	-	61,257
Forward exchange contracts	-	21,410	-	21,410
Interest rate swap contracts	-	391,904	-	391,904
	-	474,571	-	474,571
<b>December 31, 2009</b>				
<b>Assets</b>				
<b>Derivative financial assets</b>				
Forward exchange contracts	-	24,648	-	24,648
Swap contracts	-	17,605	-	17,605
European foreign currency option contracts	-	7,756	-	7,756
<b>Marketable securities - trading</b>				
Open-end mutual funds	974,702	-	-	974,702
<b>Marketable securities - available-for-sale</b>				
Open-end mutual funds	3,770,435	-	-	3,770,435
Corporate bonds	198,730	-	-	198,730
Convertible bonds	-	-	96,090	96,090
Publicly traded stocks	26,359	-	-	26,359
	4,970,226	50,009	96,090	5,116,325
<b>Liabilities</b>				
<b>Derivative financial liabilities</b>				
Swap contracts	-	50,468	-	50,468
Forward exchange contracts	-	24,062	-	24,062
Interest rate swap contracts	-	311,778	-	311,778
Cross currency swap contracts	-	122,495	-	122,495
	-	508,803	-	508,803
<b>December 31, 2009</b>				
<b>Assets</b>				
<b>Derivative financial assets</b>				
Forward exchange contracts	-	771	-	771
Swap contracts	-	551	-	551



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European foreign currency option contracts	-	243	-	243
Marketable securities - trading				
Open-end mutual funds	30,507	-	-	30,507
Marketable securities - available-for-sale				
Open-end mutual funds	118,011	-	-	118,011

(Continued)

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	Level 1 US\$	Level 2 US\$	Level 3 US\$	Total US\$
Corporate bonds	6,220	-	-	6,220
Convertible bonds	-	-	3,007	3,007
Publicly traded stocks	825	-	-	825
	155,563	1,565	3,007	160,135
<b>Liabilities</b>				
<b>Derivative financial liabilities</b>				
Swap contracts	-	1,580	-	1,580
Forward exchange contracts	-	753	-	753
Interest rate swap contracts	-	9,758	-	9,758
Cross currency swap contracts	-	3,834	-	3,834
	-	15,925	-	15,925

(Concluded)

Reconciliation of the beginning and ending balance of marketable securities - available-for-sale classified as Level 3 and measured at fair value on a recurring basis for the year ended December 31, 2009:

	NT\$	US\$
Balance, beginning of year	450,000	14,085
Purchase	97,740	3,059
Disposal	(450,000)	(14,085)
Translation adjustment	(1,650)	(52)
Balance, end of year	96,090	3,007

The table below sets out the balances for those assets required to be measured at fair value on a nonrecurring basis and the associated losses recognized during the years ended December 31, 2008 and 2009:

	Balance NT\$	Level 1 NT\$	Level 2 NT\$	Level 3 NT\$	Total Losses NT\$
<b>December 31, 2008</b>					
Financial assets carried at cost	10,236	-	-	10,236	21,395
<b>December 31, 2009</b>					
Idle assets	-	-	-	-	11,117
	Balance US\$	Level 1 US\$	Level 2 US\$	Level 3 US\$	Total Losses US\$
<b>December 31, 2009</b>					
Idle assets	-	-	-	-	348

The Company evaluated its financial assets carried at cost for impairment by using valuation models based on future cash flow because there are no quoted fair value for such investments. Financial assets carried at cost held with a carrying amount of NT\$31,631 thousand were written down to their fair value of NT\$10,236 thousand, resulting in an impairment loss of NT\$21,395 thousand, which was included in earnings for the year ended December 31, 2008.

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## j. Acquisition

## ASE Test Acquisition

As discussed in Note 2 to the consolidated financial statements, ASE Inc. acquired from minority shareholders the remaining 53.4% of shares it did not own on May 30, 2008. The ASE Test Acquisition was accounted for as a purchase as prescribed by the U.S. guidance relating to business combinations, and the purchase price has been reflected in the Company's consolidated financial statements since May 31, 2008. This results in stepping up ASE Test's net assets to fair value for the acquired interest. Information for all periods prior to May 31, 2008 is presented using the historical basis of accounting.

The purchase price allocation based on the fair value analysis was as follows:

	Assets and liabilities acquired as of May 31, 2008 (NT\$)
Current assets	\$ 9,008,176
Property, plant and equipment	6,407,633
Intangible assets	1,675,139
Goodwill	6,761,987
Other assets	5,474,004
Liabilities assumed	(3,017,628 )
Net assets acquired	\$ 26,309,311

Current assets, property, plant and equipment, other assets and liabilities were recorded at fair value. The valuation of acquired intangible assets was determined based on management's estimates. The identifiable intangible assets acquired were as follows:

- 1) NT\$709,088 thousand for acquired special technology representing the existing "know-how" of customizing testing programs for individual customers' needs. Integrated circuit "IC" testing is a unique process as IC differs by function, design and specifications. Testers must be configured to meet the unique requirements of each test. "Know-how" is amortized over the estimated useful life of 5 years.
- 2) NT\$50,416 thousand for patents that relate to the maintenance of special technology "know-how" (mentioned above) and testing environments. Patents are amortized over the estimated useful life of 5 years.
- 3) NT\$915,635 thousand for customer relationships that represents what a firm would be willing to pay ASE Test in order to exploit revenue associated with existing customers relationships and is amortized over the estimated useful life of 11 years.

The excess of the purchase price over the fair value of net assets acquired is allocated to goodwill. The Company paid a premium for this acquisition in order to fully consolidate ASE Test's earnings, simplify organizational structure, reduce costs and administrative burdens associated with filing and compliance requirements relating to ASE Test's listings on the NASDAQ Global Market and the TSE and public company reporting obligations, enhance brand recognition through the promotion of a single common brand and increase flexibility in making investments and allocating resources among our subsidiaries.

The following unaudited pro forma information is for illustrative purposes only and presents the results of operations for the years ended December 31, 2007 and 2008 under U.S. GAAP as though the ASE Test Acquisition had occurred at the beginning of each of the periods presented. The unaudited pro forma financial information is not necessarily indicative of the consolidated results of operations in

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future periods or the results that actually would have been realized had the Company and ASE Test been a combined company during the specified periods. The unaudited pro forma financial information under U.S. GAAP does not reflect any operating efficiencies or cost savings the Company may achieve with respect to the combined companies. Prior to the acquisition of the additional interest, ASE Test was consolidated within the Company's consolidated financial statements with appropriate amount reflected as noncontrolling interest.

	Year Ended December 31,	
	2007	2008
	NT\$	NT\$
Net revenues	101,163,069	94,430,912
Cost of revenues	75,345,304	73,315,552
Gross profit	25,817,765	21,115,360
Operating expenses	10,898,110	10,615,048
Income from operations	14,919,655	10,500,312
Non-operating income (expenses)	71,382	(1,351,194)
Income before income tax	14,991,037	9,149,118
Income tax expense	3,262,434	2,503,482
Net income	11,728,603	6,645,636
Attributable to		
Shareholders of the parent	11,238,650	5,998,109
Noncontrolling interest	489,953	647,527
	11,728,603	6,645,636
Earnings per share (NT\$)	2.11	1.12
Basic EPS		
Diluted EPS	2.04	1.10

## USI Acquisition

As discussed in Note 12 and Note 30, the Company acquired an additional 60.0% of USI's outstanding common shares on February 9, 2010. The USI Acquisition will be accounted for in accordance with the amended U.S. guidance relating to business combination and non-controlling interest in consolidated financial statements. The Company has not yet completed the initial accounting for the USI acquisition.

The following unaudited pro forma information is for illustrative purposes only and presents the results of operations for the years ended December 31, 2007, 2008 and 2009 and under U.S. GAAP as though the USI Acquisition had occurred at the beginning of each of the periods presented. The unaudited pro forma financial information is not necessarily indicative of the consolidated results of operations in future periods or the results that actually would have been realized had the Company and USI been a combined company during the specified periods. The unaudited pro forma financial information under U.S. GAAP does not reflect any operating efficiencies or cost savings the Company may achieve with respect to the combined companies.

	Year Ended December 31			
	2007	2008	2009	
	NT\$	NT\$	NT\$	US\$
				(Note 2)

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Net revenues	166,285,132	159,222,300	137,273,051	4,296,496
Net income	12,918,242	6,872,836	6,841,111	214,119

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