

ADVANCED SEMICONDUCTOR ENGINEERING INC  
Form 20-F  
June 30, 2004

As filed with the Securities and Exchange Commission on June 30, 2004

=====

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, 2003

OR

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

Commission file number: 001-16125

[CHINESE TEXT OMITTED]  
(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)

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

None

Securities registered or to be registered pursuant to Section 12(g) 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 for which there is a reporting obligation pursuant to Section 15(d) of the Act:

None  
(Title of Class)

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

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

report:

3,580,280,000 Common Shares, par value NT\$10 each

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 X No
---

Indicate by check mark which financial statement item the Registrant has elected to follow.

Item 17 Item 18 X
---

Table of Contents

Table of Contents listing items and page numbers: USE OF CERTAIN TERMS...1, SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS...1, PART I...2, Item 1. Identity of Directors...2, Item 2. Offer Statistics...2, Item 3. Key Information...2, Item 4. Information on the Company...19, Item 5. Operating and Financial Review...45, Item 6. Directors, Senior Management...64, Item 7. Major Shareholders...70, Item 8. Financial Information...73, Item 9. The Offer and Listing...75.

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

	OFFER AND LISTING DETAILS.....	75
	PLAN OF DISTRIBUTION.....	77
	MARKETS.....	77
	SELLING SHAREHOLDERS.....	77
	DILUTION.....	77
	EXPENSES OF THE ISSUE.....	77
Item 10.	Additional Information.....	77
	SHARE CAPITAL.....	77
	ARTICLES OF INCORPORATION.....	78
	MATERIAL CONTRACTS.....	83
	EXCHANGE CONTROLS.....	84
	TAXATION.....	84
	DIVIDENDS AND PAYING AGENTS.....	88
	STATEMENT BY EXPERTS.....	88
	DOCUMENTS ON DISPLAY.....	88
	SUBSIDIARY INFORMATION.....	88
Item 11.	Quantitative and Qualitative Disclosures about Market Risk...	88
Item 12.	Description of Securities Other Than Equity Securities.....	90

i

PART II.....		91
Item 13.	Defaults, Dividend Arrearages and Delinquencies.....	91
Item 14.	Material Modifications to the Rights of Security Holders and Use of Proceeds.....	91
Item 15.	Controls and Procedures.....	91
Item 16A.	Audit Committee Financial Expert.....	91
Item 16B.	Code of Ethics.....	91
Item 16C.	Principal Accountant Fees And Services.....	91
PART III.....		92
Item 17.	Financial Statements.....	92
Item 18.	Financial Statements.....	92
Item 19.	Exhibits.....	93

ii

### 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 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 Philippines" are to ASE Holdings Electronics (Philippines) Inc., a company incorporated under the laws of the Philippines, (vii) "Universal Scientific" are to Universal Scientific Industrial Co., Ltd., a company incorporated under the laws of the ROC, (viii) "ASE Material" are to ASE Material Inc., a company incorporated under the laws of the ROC, (ix) "ASE Korea" are to ASE (Korea) Inc., a company incorporated under the laws of the Republic of Korea, (x) "ASE Chung Li" are to ASE (Chung Li) Inc., a company incorporated under the laws of the ROC, (xi) "Hung Ching" are to Hung Ching Development & Construction Co. Ltd., a company incorporated under the laws of the ROC, (xi) the "Securities Act" are to the U.S. Securities Act of 1933, as amended, and (xii) the "Exchange Act" are to the U.S. Securities Exchange Act of

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

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.

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 United States dollars and references to "New Taiwan dollars", "NT dollars" and "NT\$" are to New Taiwan dollars. 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, 2003, which was NT\$33.99=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 16, 2004, the noon buying rate was NT\$33.58=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 of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, 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. Some of these forward-looking statements are derived from projections made and published by Gartner Dataquest and Semiconductor Industry Association. 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 cyclicity and market conditions in the semiconductor industry; demand for the outsourced semiconductor packaging and testing services we offer and for such outsourced services generally; the highly competitive semiconductor industry; our ability to introduce new packaging, interconnect materials and testing technologies in order to remain competitive; our ability to successfully integrate pending and future mergers and acquisitions; international business activities; our business strategy; our future expansion plans and capital expenditures; the strained relationship between the ROC and the People's Republic of China, or the PRC; general economic and political conditions; possible disruptions in commercial activities caused by natural or human-induced disasters, including terrorist activity and armed conflict; 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".

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

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 income statement data and cash flow data for the years ended December 31, 2001, 2002 and 2003, and the selected consolidated balance sheet data as of December 31, 2002 and 2003, 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. Our consolidated financial statements as of and for the years ended December 31, 2001 and 2002 have been audited by TN Soong & Co., independent public accountants, an associate member firm of Deloitte Touche Tohmatsu. TN Soong & Co. and Deloitte & Touche (Taiwan) combined to establish Deloitte & Touche effective June 1, 2003. Our consolidated financial statements as of and for the year ended December 31, 2003 have been audited by Deloitte & Touche. The selected consolidated income statement data and cash flow data for the years ended December 31, 1999 and 2000 and the selected consolidated balance sheet data as of December 31, 1999, 2000 and 2001 set forth below are derived from our audited consolidated financial statements not included in this annual report. These consolidated financial statements have been audited by TN Soong & Co., independent public accountants, an associate member firm of Deloitte Touche Tohmatsu. Our consolidated financial statements have been prepared and presented in accordance with generally accepted accounting principles in the ROC, or ROC GAAP, which differ in material respects from generally accepted accounting principles in the United States, or U.S. GAAP. See notes 25 and 26 to our consolidated financial statements for a description of the principal 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			
	1999	2000	2001	2002
	NT\$	NT\$	NT\$	NT\$
	(in millions, except earnings per share and per			
ROC GAAP:				
Income Statement Data:				
Net revenues .....	32,609.6	50,893.4	38,367.8	45,586.8
Cost of revenues .....	(23,959.6)	(35,567.3)	(32,957.0)	(38,492.2)
<hr style="border-top: 1px dashed black;"/>				
Gross profit .....	8,650.0	15,326.1	5,410.8	7,094.6
Total operating expenses .....	(3,801.4)	(5,449.0)	(5,872.9)	(7,779.8)
<hr style="border-top: 1px dashed black;"/>				
Operating expenses:				
Selling .....	(924.3)	(1,020.5)	(877.9)	(909.4)
General and administrative .....	(1,655.0)	(2,606.2)	(2,797.6)	(4,005.8)
Goodwill amortization .....	(507.8)	(559.8)	(692.9)	(815.6)
Research and development .....	(714.3)	(1,262.5)	(1,504.5)	(2,049.0)
<hr style="border-top: 1px dashed black;"/>				
Income (loss) from operations .....	4,848.6	9,877.1	(462.1)	(685.2)

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

Net non-operating income (expense):				
Investment income (loss) on				
long-term investments--net .....	329.9	195.7	(868.8)	(162.4)
Goodwill amortization .....	(279.3)	(363.0)	(378.0)	(247.9)
Gain (loss) on sale of				
investments-net .....	5,544.2	91.7	50.7	101.3
Foreign exchange gain (loss)--net .	(538.4)	302.7	247.5	(397.9)
Realized loss on long-term				
investments .....				
Interest income (expense)--net ....	(1,046.6)	(1,538.0)	(1,739.3)	(1,578.6)
Others--net .....	204.0	(162.6)	164.5	261.0
-----				
Income (loss) before income tax .....	9,062.4	8,403.6	(2,985.5)	(2,709.7)
Income tax benefit (expense) .....	(459.5)	(1,065.8)	199.2	1,140.3
-----				

2

	As of and for the Year Ended December			
	1999	2000	2001	2002
	NT\$	NT\$	NT\$	NT\$
	(in millions, except earnings per share and per			
Income (loss) before minority interest	8,602.9	7,337.8	(2,786.3)	(1,569.4)
Income before acquisition .....	(65.1)	--	--	--
Extraordinary loss .....	--	--	(144.6)	(34.6)
Minority interest in net loss				
(income) of subsidiaries .....	(743.1)	(1,500.6)	788.7	1,733.0
-----				
Net income (loss) .....	7,794.7	5,837.2	(2,142.2)	129.0
=====				
Earnings per common share:				
Basic(1) .....	2.26	1.67	(0.60)	0.04
Diluted(1) .....	2.23	1.64	(0.60)	0.04
Dividends per common share(2) .....	1.07	3.15	1.70	--
Earnings per equivalent				
ADS:				
Basic(1) .....	11.30	8.38	(2.99)	0.19
Diluted(1) .....	11.17	8.19	(2.99)	0.19
Number of common shares(3)				
Basic .....	3,448.7	3,483.5	3,580.3	3,399.7
Diluted .....	3,448.7	3,483.5	3,580.3	3,399.7
Number of equivalent ADSs				
Basic .....	689.7	696.7	716.1	679.9
Diluted .....	689.7	696.7	716.1	679.9
Balance Sheet Data:				
Current assets:				
Cash and cash equivalents .....	11,809.1	14,166.5	11,770.7	9,829.5
Short-term investments .....	216.3	1,682.7	4,601.2	2,590.4
Notes and accounts receivable .....	7,463.4	9,260.6	7,126.1	8,998.5
Inventories .....	2,449.7	3,246.3	2,768.4	3,131.7
Others .....	1,411.8	2,431.6	3,383.2	2,481.7
-----				
Total .....	23,350.3	30,787.7	29,649.6	27,031.8

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

Long-term investments .....	9,674.4	10,712.2	9,530.4	6,566.7
Properties .....	38,107.5	60,566.2	60,555.1	63,088.9
Other assets .....	952.8	1,275.6	1,342.3	2,675.8
Consolidated debits .....	5,245.8	4,999.5	5,248.9	5,541.8
	-----	-----	-----	-----
Total assets .....	77,330.8	108,341.2	106,326.3	104,905.0
	=====	=====	=====	=====
Short-term borrowings (4) .....	9,868.2	13,768.0	13,983.1	13,453.8
Long-term liabilities (5) .....	24,551.5	25,976.9	30,674.3	30,553.7
Other liabilities and minority interest .....	12,854.1	24,927.1	19,722.6	21,466.8
	-----	-----	-----	-----
Total liabilities and minority interest .....	47,273.8	64,672.0	64,380.0	65,474.3
	=====	=====	=====	=====
Capital Stock .....	19,800.0	27,520.0	32,548.0	32,548.0
Shareholders' equity .....	30,057.0	43,669.2	41,946.3	39,430.7
Cash Flow Data:				
Net cash outflow from acquisition of fixed assets .....	(9,869.2)	(30,063.6)	(13,816.5)	(12,657.9)
Depreciation and amortization .....	5,554.4	8,593.8	11,127.3	12,286.3
Net cash inflow from operations .....	7,017.2	17,459.9	11,578.4	11,313.8
Net cash inflow from sale of ASE Test shares .....	4,718.3	--	--	--
Net cash inflow from sale of ASE Inc. common shares .....	3,171.0	--	--	--
Net cash outflow from investing activities .....	(11,782.7)	(33,392.0)	(17,302.0)	(13,719.7)
Net cash inflow from financing activities .....	8,569.0	17,607.3	2,854.5	530.5
Segment Data:				
Net revenues				
Packaging .....	24,523.0	38,028.8	28,898.2	35,515.4
Testing .....	7,793.2	12,768.4	9,459.2	10,060.6
Others .....	293.4	96.2	10.4	10.8
Gross profit				
Packaging .....	5,753.0	10,016.9	4,625.8	6,255.4
Testing .....	3,105.2	5,294.4	782.8	841.2
Others .....	(208.2)	14.8	2.2	(2.0)

3

As of and for the Year Ended December 31,

	2000	2001	2002	N
	NT\$	NT\$	NT\$	N

(in millions, except earnings per share and pe

U.S. GAAP:

Income Statement Data:

Net revenues .....	50,893.4	38,367.8	45,586.8	57,31
Cost of revenues .....	37,081.2	34,538.3	39,308.2	47,74
	-----	-----	-----	-----
Gross profit .....	13,812.2	3,829.5	6,278.6	9,56
Total operating expenses .....	5,820.8	6,209.9	9,294.2	7,11

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

Income (loss) from operations .....	7,991.4	(2,380.4)	(3,015.6)	2,44
Net non-operating income (expense) .	(1,502.5)	(2,704.6)	(2,793.8)	(1,31
Income tax benefit (expense) .....	(1,059.2)	254.4	1,162.6	1,28
Minority interest in net loss (income) of subsidiaries .....	(1,499.7)	784.0	1,572.5	(7
Net income (loss) .....	3,930.0	(4,046.6)	(3,074.3)	2,35
Earnings per common share:				
Basic(1) .....	1.22	(1.20)	(0.90)	
Diluted(1) .....	1.18	(1.20)	(0.90)	
Earnings per equivalent ADS:				
Basic(1) .....	6.08	(5.99)	(4.52)	
Diluted(1) .....	5.88	(5.99)	(4.52)	
Number of common shares(6)				
Basic .....	3,231.8	3,378.4	3,399.7	3,50
Diluted .....	3,231.8	3,378.4	3,399.7	3,53
Number of equivalent ADSs				
Basic .....	646.4	675.7	679.9	70
Diluted .....	646.4	675.7	679.9	70
Balance Sheet Data:				
Current Assets				
Cash and cash equivalents .....		11,770.7	9,829.5	8,56
Short-term investments .....		4,642.1	2,592.4	3,02
Notes and accounts receivable ....		7,126.1	8,998.5	12,90
Inventories .....		2,768.4	3,131.7	4,69
Others .....		3,383.2	2,481.7	2,27
Total .....		29,690.5	27,033.8	31,46
Long-term investments .....		6,608.3	5,609.3	5,57
Properties .....		60,363.1	62,797.4	66,94
Other assets .....		1,371.0	2,715.3	4,63
Consolidated debits .....		4,331.6	3,227.0	3,10
Total assets .....		102,364.5	101,382.8	111,72
Short-term borrowings (4) .....		13,983.1	13,453.8	14,09
Long-term liabilities (5) .....		30,674.3	30,553.7	30,84
Other liabilities and minority interest .....		19,746.8	21,658.5	24,70
Total liabilities and minority interest .....		64,404.2	65,666.0	69,63
Capital stock .....		32,548.0	32,548.0	35,80
Shareholders' equity .....		37,960.3	35,716.8	42,08

(1) The numerator of both basic and diluted earnings per share is calculated with consideration of the adjustment of ASE Test's basic and diluted earnings per share. See notes 18 and 26(i) to the consolidated financial statements.

(2) Dividends per common share issued as a stock dividend.

(3) 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 for accounting purposes as "treasury stock", and are deducted



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

from the number of common shares outstanding.

- (4) Includes current portions of long-term debt and long-term payable for investments.
- (5) Excludes current portions of long-term debt and long-term payable for investments.
- (6) Represents the weighted average number of common shares after retroactive adjustments to give effect to stock dividends.

4

### 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 among us, Citibank N.A., as depositary, and the holders and beneficial owners from time to time of the ADSs, and supplemented by a letter agreement between us and the depositary dated September 25, 2003, which we collectively 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
1999.....	32.28	33.40	31.39	31.39
2000.....	31.37	33.25	30.35	33.17
2001.....	33.91	35.13	32.23	35.00
2002.....	34.53	34.79	34.70	34.70
2003.....	34.40	34.98	33.72	33.99
December.....	34.04	34.06	33.99	33.99
2004 (through June 16).....	33.32	33.98	32.73	33.58
January.....	33.67	33.98	33.33	33.39
February.....	33.21	33.36	33.10	33.28
March.....	33.25	33.42	33.00	33.00
April.....	32.97	33.27	32.73	33.27
May.....	33.44	33.70	33.14	33.36
June (through June 16).....	33.49	33.70	33.35	33.58

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

On June 16, 2004, the noon buying rate was NT\$33.58 to US\$1.00.

### CAPITALIZATION AND INDEBTEDNESS

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

Not applicable.

### REASON FOR THE OFFER AND USE OF PROCEEDS

Not applicable.

### RISK FACTORS

#### Risks Relating to Our Business

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. All 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, a worldwide slowdown in demand for semiconductors led to excess capacity and increased competition

5

beginning in early 1998. As a result, price declines in 1998 accelerated more rapidly and, together with a significant decrease in demand, adversely affected our operating results in 1998. Prices for packaging and testing services improved due to an upturn in the industry in the second half of 1999 that continued through the third quarter of 2000, but have fallen since an industry downturn that commenced in the fourth quarter of 2000. This most recent worldwide downturn resulted in an even more significant deterioration in the average selling prices, as well as demand, for our services in 2001, and significantly and adversely affected our operating results in 2001. Although there has been a modest recovery in the semiconductor industry during 2002, 2003 and the first half of 2004, we expect market conditions to continue to exert downward pressure on the average selling prices for our packaging and testing services. If we cannot reduce our costs 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, personal computer and consumer electronics products. Any deterioration of conditions in the markets 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 2003, approximately 34.9%, 35.7% and 28.3% of our net revenues were attributable to the packaging and testing of semiconductors used in communications, personal computer, and consumer electronics applications, respectively. In 2002, approximately 34.4%, 35.4% and 28.8% of our net revenues were attributable to the packaging and testing of semiconductors used in communications, personal 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.

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

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 that 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. 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 markets for our products and services are:

- o the ability to provide total solutions to our customers;
- o technological expertise;
- o range of package types and testing platforms available;
- o the ability to design and produce advanced and cost-competitive interconnect materials;
- o the ability to work closely with our customers at the product development stage;
- o responsiveness and flexibility;
- o capacity;
- o production cycle time;

6

- o production yield; and
- o price.

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. Many of our competitors have shown a willingness to quickly and sharply reduce prices, as they did in 1998 and in 2001, in order to maintain capacity utilization in their

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

facilities during periods of reduced demand. Although prices have stabilized, any renewed 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 the common shares and the ADSs. Among the more important factors affecting our quarterly and annual operating results are the following:

- o changes in general economic and business conditions, particularly given the cyclical nature of the semiconductor industry and the markets served by our customers;
- o our ability to quickly adjust to unanticipated declines or shortfalls in demand and market prices for our packaging and testing services, due to our high percentage of fixed costs;
- o timing of capital expenditures in anticipation of future orders;
- o changes in prices of our packaging and testing services;
- o volume of orders relative to our packaging and testing capacity;
- o our ability to design and produce advanced and cost-competitive interconnect materials;
- o our ability to obtain adequate packaging and testing equipment on a timely basis;
- o changes in costs and availability of raw materials, equipment and labor; and
- o earthquakes, drought and other natural disasters, as well as industrial accidents.

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

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

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

We expect that interconnect materials will become an increasingly important value-added component of the semiconductor packaging business as technology migrates from the traditional wirebonding process towards the flip-chip wafer bumping process and interconnect materials such as advanced substrates represent a higher percentage of the cost of the packaging process. As a result, we expect that we will need to offer more advanced interconnect materials designs and production processes in order to respond to competitive industry conditions and customer requirements. In particular, our competitive position will depend to a significant extent 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 further develop our in-house expertise and enhance our design and production capabilities. We intend to enhance our interconnect materials capabilities through our merger with ASE Material and our joint venture with Compeq Manufacturing Co. Ltd., or Compeq. See "Item 4. Information on the Company--History and Development of the Company--Joint Venture with Compeq Manufacturing Co., Ltd.". If we are unable to maintain and enhance our in-house interconnect materials expertise to offer advanced interconnect materials that meet the requirements of our customers, we may become less competitive and our margins and profitability may suffer as a result.

If any of our acquisition of NEC's packaging and testing business or our proposed joint venture with Compeq or our pending merger with ASE Chung Li and ASE Material is not completed as planned or is not otherwise successful, we may not be able to realize the anticipated benefits of such transactions and our business prospects and profitability may be adversely affected.

On February 3, 2004, we and J&R Holding Limited, our wholly-owned subsidiary, entered into a share sale and purchase agreement with NEC Electronics Corporation, or NEC, and NEC Yamagata in connection with the acquisition of the semiconductor packaging and testing business of NEC Yamagata, a wholly-owned subsidiary of NEC. Pursuant to the terms and conditions of the agreement, the packaging and testing business of NEC Yamagata was transferred to a newly established company named ASE Japan Co., Ltd., or ASE Japan, and all of the issued and outstanding shares of ASE Japan were purchased by J&R Holding Limited. The acquisition was completed on May 31, 2004. The acquisition of the packaging and testing business of NEC Yamagata involves certain risks, including: integration and management of the acquired business; retention of select management personnel; unforeseen difficulties and liabilities of the acquired business; and diversion of our management's attention from other business concerns. These risks may adversely affect our short-term results of operations as we integrate and operate the acquired business.

On October 28, 2003, we entered into a joint venture agreement with Compeq to establish ASE-Compeq Technologies, Inc., which will focus on the design and production of interconnect materials for packaging semiconductors. The joint venture has been approved by the ROC Fair Trade Commission. Pursuant to the joint venture agreement, either party can terminate the joint venture at any time with 90 days' prior written notice. The success of our joint venture is dependent on a number of factors, including the ability of Compeq to meet the design and production requirements of the customers of the joint venture, the ability of the management of the two companies to work effectively together and the effectiveness of the sales and marketing strategy of ASE-Compeq

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

Technologies, Inc. The joint venture with Compeq is intended to provide us with access to Compeq's production capacity and expertise, know-how and engineering capabilities in the design and production of advanced substrates. If the joint venture with Compeq is not successful, and we are not able to enter into a similar joint venture, or otherwise obtain access to similar capacity, expertise and capabilities, our interconnect materials design and production capability may be adversely affected and we may not be able to meet our customers' demand for advanced interconnect materials, which could have an adverse effect on our profitability.

On October 28, 2003, we also entered into a merger agreement with ASE Chung Li and ASE Material pursuant to which ASE Chung Li and ASE Material will be merged with and into ASE Inc., with ASE Inc. as the surviving corporation. Upon the completion of the merger, all of the assets and liabilities of ASE Chung Li and ASE Material will be owned and assumed by ASE Inc., and the operations of ASE Chung Li and ASE Material will be integrated with the operations of ASE Inc. The merger of ASE Chung Li and ASE Material is intended to enhance our ability

8

to provide to our customers turnkey packaging and testing services and turnkey services that incorporate interconnect materials, increase our economies of scale, improve our operating efficiency and simplify our corporate structure.

We cannot assure you that we will be able to complete the merger as planned or that we will be successful in achieving the anticipated benefits of the merger. We expect the merger to be completed on August 1, 2004, subject to receipt of all necessary approvals and consents. In addition, the success of the merger will depend on a number of factors, including our ability to integrate the operations of ASE Chung Li and ASE Material with those of ASE Inc. and retention of select management personnel. If the merger with ASE Chung Li and ASE Material is not completed for any reason, including the failure to obtain the required approvals and consents, or we are not otherwise successful in integrating the operations of the merged companies, we may not be able to realize the anticipated benefits of the merger and our business prospects and profitability may be adversely affected.

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 as a result of our previous acquisitions of packaging and testing machinery and 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 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. In periods of low demand, we experience relatively low capacity utilization rates in our operations, which leads to reduced margins. During 2001, 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 our capacity utilization rates have improved recently, 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.

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

If we are unable to manage our expansion effectively, our growth prospects may be limited and our future profitability may be affected.

We have significantly expanded our packaging and testing operations in recent years, and expect to continue to expand our operations in the future, including the expansion of our interconnect materials operations. In particular, we intend to provide total solutions covering all stages of the semiconductor manufacturing process to attract new customers and broaden our product range to include products packaged and tested for a variety of end-use applications. In the past, we have expanded through both internal growth and the acquisition of new operations. Rapid expansion puts strain on our managerial, technical, financial, operational and other resources. As a result of our expansion, we have implemented and will continue to need 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.

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.

Our capital requirements are difficult to plan in our highly cyclical and rapidly changing industry. We will need capital to fund the expansion of our facilities as well as research and development activities in order to remain competitive. We believe that our existing cash and cash equivalents, short-term investments, expected cash flow from operations and existing credit lines under our short-term 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:

- o our future financial condition, results of operations and cash flows;

9

- o general market conditions for financing activities by semiconductor companies; and
- o 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 and encumber or dispose of assets. In the event of a prolonged downturn in the demand for our services as a result of a downturn in the worldwide semiconductor industry or otherwise, we cannot assure you that we

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

will be able to remain in compliance with our financial covenants which, as a result, may lead to a default. Furthermore, a default under one agreement by us or one of our subsidiaries may also trigger cross-defaults under other agreements. In the event of default, we may not be able to cure the default or obtain a waiver on a timely basis, and our operations would be significantly disrupted or harmed and our liquidity would be adversely affected. An event of default under any agreement governing our existing or future debt, if not cured or waived, would have a material adverse effect on our liquidity, financial condition and results of operations.

As a result of the reduced levels of operating cash flow due primarily to the recent downturn in the worldwide semiconductor industry, 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. We have obtained waivers from the relevant lenders relating specifically to such non-compliance. In addition, we have repaid or refinanced all amounts owed under agreements containing cross-default provisions that we have identified which may have been triggered by such non-compliance. Such non-compliance has not had any significant effect on our ability to repay or refinance amounts due in respect of our existing debt. For these and other reasons, including our financial condition and our relationship with our lenders, no lender has to date sought and we do not believe that any of our lenders would seek to declare a default or enforce remedies in respect of our existing debt, as a result of cross-default provisions or otherwise, although we cannot provide any assurance in this regard.

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 the semiconductor 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 import 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.

10

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 business is capital intensive and requires significant investment in expensive equipment manufactured by a limited number of suppliers. The market for semiconductor packaging and testing



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

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, including, in the case of wire bonders, Kulicke & Soffa Industries Inc., and in the case of testers, Advantest Corporation, Agilent Technologies, Inc., Credence Systems Corporation, LTX Corporation, NP Test Inc. and Teradyne, Inc. 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 requires 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.

Fluctuations in exchange rates could result in foreign exchange losses.

Currently, the majority of our revenues from packaging and testing services are denominated in U.S. dollars and NT dollars. Our costs of revenues and operating expenses associated with packaging and testing services, on the other hand, are incurred in several currencies, primarily NT dollars and U.S. dollars, as well as, to a lesser extent, Malaysian ringgit, Korean won and Japanese yen. 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 and the Japanese yen, 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 a foreign exchange loss of NT\$397.9 million in 2002 and NT\$386.8 million (US\$11.4 million) in 2003.

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, due in part to the concentration of market share in the semiconductor industry, 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. Our five largest customers together accounted for approximately 41.2%, 39.6% and 34.8% of our net revenues in 2001, 2002 and 2003, respectively. Other than Motorola, Inc. and VIA Technologies, Inc. in 2001, and Motorola, Inc. in 2002 and 2003, no other customer accounted for more than 10% of our net revenues in 2001, 2002 or 2003. The demand for our services from each customer is directly dependent upon that customer's level of business activity, which could vary significantly from year to year. The loss of a large customer may adversely affect our revenues and profitability. Our key customers typically operate in the cyclical semiconductor business and have varied in the past, 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 prior 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 reduce our 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.

Our strategic alliance with TSMC, the world's largest dedicated semiconductor foundry, 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. This strategic alliance and any of our other commercial arrangements may be terminated at any time. A termination of this strategic alliance and other

11

commercial arrangements, and our failure to enter into substantially similar alliances and commercial arrangements, may adversely affect our competitiveness and our revenues and profitability.

We depend on our agents for sales and customer service in North America and Europe. Any serious disruption in our relationship with these agents, or substantial loss in their effectiveness, could significantly reduce our revenues and profitability.

We depend on non-exclusive agents for sales and customer service in North America and Europe. Our sales agents help us identify customers, monitor delivery acceptance and payment by customers and, within parameters set by us, help us negotiate price, delivery and other terms with our customers. Purchase orders are placed directly with us by our customers. Our customer service agents provide customer service and after-sales support to our customers.

Currently, our sales and customer service agents perform services only for us and our subsidiaries but they are not owned or controlled by us. These agents are free to perform sales and support services for others, including our competitors. In particular, we may not be able to find an adequate replacement for these agents or to develop sufficient capabilities internally on a timely basis. Any serious disruption in our relationship with these agents or substantial loss in their effectiveness in performing their sales and customer service functions could significantly reduce 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. For example, in 1999 and the first half of 2000, the industry experienced a shortage in the supply of advanced substrates used in ball grid array, or BGA, packaging. 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, Ibiden Co., Ltd., Japan Circuit Industrial Co., Ltd. and Phoenix Precision Technology Corporation. Our merger with ASE Material and our joint venture with Compeq to establish ASE-Compeq Technologies, Inc. are expected to help improve our ability to obtain advanced substrates on a timely basis and at a reasonable cost. However, we do not expect that our internal substrates operations, even after the effectiveness of the ASE Material merger and the formation of ASE-Compeq Technologies, Inc., to be able to meet all of our raw materials requirements. Consequently, we will remain dependent on market supply and demand for our raw materials. We cannot assure you that we will be able to obtain adequate supplies of raw materials in a timely manner and at a reasonable price. Our revenues and net income could decline if we were unable to obtain adequate supplies of high quality raw materials in a timely

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

manner or if there were significant increases in the costs of raw materials that we could not pass on to our customers.

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

We are subject to a variety of 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. 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.

12

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:

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

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

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

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

Any required impairment charges may have a material adverse effect on our financial condition and results of operations.

Under currently effective accounting principles, we are required to evaluate our equipment, goodwill and other indefinite-lived assets for possible

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

impairment whenever there is an indication of impairment. If certain criteria are met, we are required to record an impairment charge. We can give no assurance that impairment charges will not be required in periods subsequent to December 31, 2003.

As a result of standards under U.S. GAAP that became effective on January 1, 2002, we are no longer permitted to amortize remaining goodwill. Total goodwill amortization expense amounted to NT\$815.6 million and NT\$819.3 million (US\$24.1 million) under ROC GAAP in 2002 and 2003, respectively. Starting from January 2002, all goodwill must be tested at least annually for impairment under U.S. GAAP. As a result of our impairment test as of December 31, 2002, we wrote off the remaining goodwill associated with our purchase of shares of ASE Test of NT\$2,213.0 million under U.S. GAAP. No impairment charges were required to be recognized for the year ended December 31, 2003. As of December 31, 2002 and December 31, 2003, goodwill under U.S. GAAP amounted to NT\$3,227.0 million and NT\$3,100.7 million (US\$91.2 million), respectively. We currently are not able to estimate the extent and timing of any goodwill impairment charge for future periods. Any goodwill impairment charge required under U.S. GAAP may have a material adverse effect on our financial condition and results of operations on a U.S. GAAP reconciled basis.

The determination of an impairment charge at any given time is based significantly on our expected results of operations over a number of years subsequent to that time. As a result, an impairment charge is more likely to occur during a period when our operating results are otherwise already depressed.

Terrorist attacks, such as the attacks that occurred on September 11, 2001, the current military action in Iraq and general instability in the Middle East may adversely affect the markets in which we operate, our operations and our profitability.

The attacks of September 11, 2001 and subsequent events, including the current military action in Iraq, have caused volatility in the world financial markets and have led, and may continue to lead to, further armed hostilities,

13

prolonged military action in Iraq, or further acts of terrorism in the United States or abroad, which could cause further instability in financial markets. These developments could have an adverse impact on, among other things, our ability to expand the market for our services, obtain financing as needed and enter into strategic relationships, and, depending on their magnitude, could have a material adverse effect on our business, financial condition, results of operations or cash flows.

### 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 77.4% and 77.0% of our net revenues in 2002 and 2003, respectively, were derived from our operations in Taiwan. The ROC has a unique international political status. The government of the PRC asserts sovereignty over all of China, including Taiwan, and does not recognize the legitimacy of the ROC government. Although significant economic and cultural relations have been established in recent years between the ROC and the PRC, relations have often been strained and the government of the PRC 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. Relations between the ROC and the PRC have been particularly strained in recent years. On March 20, 2004, Taiwan's incumbent president was re-elected by a narrow majority and the opposition is contesting the election results. The political uncertainty surrounding the election has affected the securities markets in Taiwan. The recent political uncertainty and related developments could adversely affect the prices of the common shares and ADSs. It is unclear what effects the recent presidential election may have on relations with the PRC. 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 the common shares and the ADSs.

In July 2000, our shareholders approved a resolution which authorized our board of directors to make investments in the PRC. However, the ROC government currently restricts certain types of investments by ROC companies in the PRC, including investments in facilities for the packaging and testing of semiconductors. 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 any such amendments to the ROC investment laws and policies will permit us to make an investment that we consider beneficial to us in the PRC in the future. As a result, our growth prospects and profitability may be adversely affected if we are restricted from making certain 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, 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 regions of Taiwan. These earthquakes damaged production facilities and adversely affected the operations of many companies involved in the semiconductor and other industries. We experienced no structural damage to our facilities and no damage to our machinery and equipment as a result of these earthquakes. There were, however, interruptions to our production schedule primarily as a result of power outages caused by the earthquakes.

Taiwan is also susceptible to typhoons, which may cause damage and business interruption to companies with facilities located in Taiwan. In 2001, Taiwan experienced severe damage from typhoons, including a typhoon on September 16 that caused over 100 deaths, severe flooding and extensive damage to property and businesses. We have not experienced any material damage or business interruption from the increased typhoon activity in Taiwan.

In May 2002, Taiwan experienced a severe drought. Although our manufacturing process does not rely on an adequate supply of water and we were not affected by the May 2002 drought directly, a drought may 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, any temporary or sustained adverse impact

from any future droughts may adversely affect Taiwan's economic, social or political conditions and may lead to fluctuations in the market price of the common shares and the ADSs.

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

While we maintain several insurance policies relating to our business, we do not currently carry any insurance coverage for interruptions in public utility services or any other business interruption insurance except in connection with fire. Should these interruptions occur, we will be exposed to substantial risks and may be liable for the full amount of any losses.

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 other natural disasters, it could result in a decline in the demand for our packaging and testing services. If our suppliers and 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 disasters in Taiwan could severely disrupt the normal operation of business and have a material adverse effect on our financial condition and results of operations.

Any future outbreak of SARS may have an adverse effect on the economies of certain Asian countries and may adversely affect our results of operations.

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 SARS or SARS-like outbreaks will not occur in the future and no guarantee that any future SARS or SARS-like outbreaks, or the measures taken by the governments of the ROC, Hong Kong, the PRC or other countries against SARS or SARS-like 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.

### 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 for the common shares outside the ROC 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.

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

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, or a tax guarantor, in the ROC. The tax guarantor will be required to meet the qualifications set by the ROC Ministry of Finance and will

15

act as the guarantor of the withdrawing holder's tax payment obligations. Evidence of the appointment of a tax guarantor, the approval of such appointment by the ROC tax authorities and tax clearance certificates or evidentiary documents issued by such tax guarantor may be required as conditions to such holder repatriating the profits derived from the sale of common shares. We cannot assure you that a withdrawing holder will be able to appoint and obtain approval for a tax guarantor in a timely manner.

In addition, under current ROC law, such withdrawing holder is required to appoint a local agent in the ROC to, among other things, 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 holders of ADSs that withdraw and hold the common shares represented thereby would not be able to hold or otherwise transfer the common shares on the Taiwan Stock Exchange or otherwise.

In addition, non-ROC holders of common shares will be required to register with the Taiwan Stock Exchange in order to buy and sell securities on the Taiwan Stock Exchange prior to withdrawing common shares.

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

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 June 16, 2004, the Taiwan Stock Exchange Index closed at 5,560.2. The Taiwan Stock Exchange has experienced problems such as market manipulation, insider trading and payment defaults. The recurrence of these or similar problems could have a material adverse effect on the market price and liquidity of the securities of ROC companies, including the common shares and the ADSs, in both the domestic and the 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 valued at par under our employee stock bonus plan. In addition, under the revised ROC Company Law we may, upon approval from

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

our board of directors and the ROC Securities and Futures Commission, establish employee stock option plans. We currently maintain two 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, 2003, 159,968,000 options have been issued. 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, including you and us, may deposit our common shares in our ADS facility without specific approval of the ROC Securities and Futures Commission, unless:

- (1) we pay stock dividends on our common shares;
- (2) we make a free distribution of common shares;

16

- (3) holders of ADSs exercise preemptive rights in the event of capital increases for cash; 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 Securities and Futures Commission, 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.



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

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 depositary to vote in the same manner regarding a resolution, including the election of directors and supervisors, the depositary will cause all common shares represented by the ADSs to be voted in that manner. If the depositary does not receive timely instructions representing at least 51% of the ADSs outstanding at the relevant record date to vote in the same manner for any resolution, including the election of directors and supervisors, holders of ADSs will be deemed to have instructed the depositary or its nominee to authorize all 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.

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

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

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

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

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

17

- o 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
- o 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 China 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 China will grant this approval as a routine matter, we cannot assure you that in the future any approval will be obtained in

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

a timely manner, or at all.

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

- o 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
- o 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 China 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 China 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.

On October 28, 2003, we entered into a merger agreement with ASE Chung Li and ASE Material, pursuant to which ASE Chung Li and ASE Material will be merged with and into ASE Inc., with ASE Inc. as the surviving corporation. The merger is to be consummated by means of a share exchange pursuant to which the respective shareholders (other than ASE Inc.) of ASE Chung Li and ASE Material will receive common shares of ASE Inc. in exchange for the common shares of each of ASE Chung Li and ASE Material. We expect to issue 282,315,437 common shares, or approximately 7.9% of our outstanding shares as of October 28, 2003, in connection with the merger. Of these shares, the 149,175,000 common shares to be issued to ASE Test, our consolidated subsidiary, will be subject to certain transfer restrictions and will become available for resale in accordance with the Taiwan Stock Exchange rules and regulations. See "Item 10. Additional Information--Articles of Incorporation--Transfer Restrictions--Common Shares Issued to Substantial Shareholders in Connection with a Merger". The 5,000,000 common shares to be issued to ASE Test Taiwan will not be subject to transfer restrictions under the rules and regulations of the Taiwan Stock Exchange. In order to comply with Singapore and ROC law, trusts have been set up to hold and dispose of the shares of ASE Inc. to be issued to ASE Test and ASE Test Taiwan in connection with our

merger with ASE Chung Li and ASE Material. See "Item 7. Major Shareholders and Related Party Transactions--Related Party Transactions".

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 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

We were 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. In 1990, we acquired ASE Test Taiwan, which provides our customers with testing services. In 1991, we established ASE Test Malaysia, which provides our customers with testing and packaging services. In 1997, we established ASE Material, which designs and produces interconnect materials. In 1997, we constructed a new facility in Kaohsiung, Taiwan for packaging services and established a research and development laboratory. 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 (8867) 361-7131. Our agent for service in the United States is CT Corporation, 111 Eighth Avenue, New York, New York 10011, and our agent's telephone number is (212) 894-8940.

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. The businesses are now operated by ASE Chung Li and ASE Korea. We acquired substantially all of the assets of ASE Chung Li for a base price of US\$150.0 million in cash, consisting of an initial payment of US\$80.0 million at closing and an additional US\$70.0 million in three annual installments ending in July 2002, contingent upon certain targets of revenue from packaging and testing services provided to Motorola being met. These targets were met for the first two years. In 2002, we and Motorola re-negotiated the agreement for the payment of the final installment to take place in three installments ending in July 2004, contingent upon certain targets of revenue for packaging and testing services provided to Motorola being met.

We acquired 100% of the outstanding shares of ASE Korea for a base price of US\$140.0 million in cash, consisting of an initial payment of US\$36.0 million and an additional US\$104.0 million payable over five years. In addition to the combined base price of US\$290.0 million, we also paid an aggregate of approximately US\$60.1 million in cash to purchase capital assets at both facilities which were acquired after January 1, 1999 and specified inventories and cash positions at both facilities. Under the acquisition agreements, ASE Inc. acquired a 70.0% interest in each of the two businesses, and ASE Test acquired the remaining 30.0% interest. This division of the investment reflected in part our estimate of the relative packaging and testing values at the facilities. Both facilities provide semiconductor packaging and testing services to Motorola's Semiconductor Products Sector.

ISE Labs

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

In May 1999, we acquired 70.0% of the outstanding shares of ISE Labs, a semiconductor testing company with its principal facilities located in Fremont, California at a purchase price of US\$100.1 million. We subsequently increased our holding to 100% through purchases made in April, July and November 2000 and in January 2002. The total price for our acquisition of 100% of the outstanding shares of ISE Labs amounted to US\$221.2 million.

### Universal Scientific

From February through July of 1999, we purchased 22.6% of the outstanding shares of Universal Scientific for approximately NT\$3,532.5 million (US\$102.1 million), principally through open market purchases on the Taiwan

19

Stock Exchange. We subsequently increased our holding to 23.3% following open market purchases of additional shares in July and August of 2000. As of May 31, 2004, we held 23.5% of Universal Scientific's outstanding equity shares. Six out of the nine directors on the Universal Scientific board of directors, including the chairman, are our representatives.

### Acquisition of NEC's Packaging and Testing Operations in Yamagata, Japan

On February 3, 2004, we and J&R Holding Limited, our wholly-owned subsidiary, entered into a share sale and purchase agreement with NEC and NEC Yamagata, Ltd. in connection with the acquisition of the semiconductor packaging and testing business of NEC Yamagata, a wholly-owned subsidiary of NEC. The acquisition was completed on May 31, 2004 and the purchase price was approximately US\$24 million, which is subject to certain purchase price adjustments. The acquisition was consummated by means of a company split under the Japanese Commercial Code through which the packaging and testing business of NEC Yamagata was transferred to a company formed by NEC Yamagata named ASE Japan Co., Ltd. Pursuant to the terms and conditions of the share sale and purchase agreement, all of the issued and outstanding shares of ASE Japan were purchased by J&R Holding Limited, and ASE Japan now owns and operates the semiconductor packaging and testing business acquired from NEC Yamagata. In connection with the acquisition, we and ASE Japan also entered into a packaging and testing services agreement with NEC to provide packaging and testing services to NEC for an initial period of four years after the completion of the acquisition.

### Pending Merger with ASE Chung Li and ASE Material

On October 28, 2003, we entered into a merger agreement with ASE Chung Li and ASE Material, pursuant to which ASE Chung Li and ASE Material will be merged with and into ASE Inc., with ASE Inc. as the surviving corporation. Upon the completion of the merger, all of the assets and liabilities of ASE Chung Li and ASE Material will be owned and assumed by ASE Inc., and the operations of ASE Chung Li and ASE Material will be integrated with the operations of ASE Inc.

The merger is to be consummated by means of a share exchange pursuant to which the respective shareholders (other than ASE Inc.) of ASE Chung Li and ASE Material will receive common shares of ASE Inc. in exchange for the common shares of each of ASE Chung Li and ASE Material. We expect to issue 282,315,437 common shares, or approximately 7.9% of our outstanding shares as of October 28, 2003, in connection with the merger. The number of shares to be issued will not be adjusted on account of any stock dividend paid by us prior to the completion of the merger. The merger agreement has been approved by the board of directors and shareholders of each of ASE Inc., ASE Chung Li and ASE Material. We have

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

also obtained the approval of the Taiwan Stock Exchange in connection with the issuance of ASE Inc. common shares pursuant to the share exchange. The completion of the merger is conditional upon the approval of the ROC Securities and Futures Commission and consent from lenders under certain loan agreements. We expect that the merger will be completed on August 1, 2004.

ASE Chung Li focuses on the packaging and testing of semiconductors used principally in communications applications. We believe that our merger with ASE Chung Li will increase our economies of scale, improve our operating efficiency, allow us to better manage our production capacity and resources in Taiwan and simplify our corporate structure. As a result, we believe that the merger will enhance our ability to provide turnkey packaging and testing services to our customers.

As of October 28, 2003, 57.6% of the outstanding common shares of ASE Chung Li was held by ASE Inc., 14.8% was held by J&R Holding Limited, our wholly-owned subsidiary, and 27.6% was held by ASE Test, our consolidated subsidiary. Pursuant to the merger agreement, all of the common shares of ASE Chung Li held by shareholders of ASE Chung Li (other than ASE Inc.) will be exchanged for ASE Inc. common shares at an exchange ratio of 0.85 ASE Inc. common share per ASE Chung Li common share. In connection with the merger, we will issue 79,914,225 common shares to J&R Holding Limited, 149,175,000 common shares to ASE Test and four common shares to certain individuals who were the original shareholders of ASE Chung Li. See "Item 7. Major Shareholders and Related Party Transactions--Related Party Transactions". The merger with ASE Chung Li has a transaction value of approximately NT\$7,101.8 million (US\$208.9 million), based on NT\$31.00 per ASE Inc. common share, which is the average of the closing prices of ASE Inc.'s common shares on the Taiwan Stock Exchange for two days prior to and following October 28, 2003.

20

ASE Material was established in December 1997 to design and manufacture packaging materials. We expect that interconnect materials will become an increasingly important value-added component of the semiconductor packaging business, as packaging technology migrates from the traditional wirebonding process towards the flip-chip wafer bumping process. We believe that our merger with ASE Material will further strengthen our ability to provide turnkey services that incorporate interconnect materials to our customers, finance the growth of the interconnect materials business, and simplify our corporate structure.

As of October 28, 2003, 57.4% of the outstanding common shares of ASE Material was held by ASE Inc. and 4.0% was held by ASE Test, Inc., with the remaining 38.6% held by the management and employees of ASE Material and the management and employees of ASE Inc. and its affiliates, as well as a strategic investor. Pursuant to the merger agreement, all of the common shares of ASE Material held by these shareholders will be exchanged for ASE Inc. common shares at an exchange ratio of 0.5 ASE Inc. common share per ASE Material common share. In connection with the merger, we will issue 53,226,208 common shares to these shareholders of ASE Material. The merger with ASE Material has a transaction value of approximately NT\$1,650.0 million (US\$48.5 million), based on NT\$31.00, which is the average of the closing prices of ASE Inc.'s common shares on the Taiwan Stock Exchange for two days prior and following October 28, 2003.

Joint Venture with Compeq Manufacturing Co. Ltd.

On October 28, 2003, we entered into a joint venture agreement with Compeq to establish ASE-Compeq Technologies, Inc., which will focus on the design and

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

production of interconnect materials for packaging semiconductors. Pursuant to the joint venture agreement, we own 60% of the equity interest in ASE-Compeq Technologies, Inc. and Compeq owns the remaining 40% of the equity interest. As of May 31, 2004, we had invested NT\$12 million (US\$0.4 million) in ASE-Compeq Technologies, Inc. Our Chairman, Jason C.S. Chang, serves as the Chairman, and C.C. Tong, the Executive Vice President of Compeq, is the General Manager of ASE-Compeq Technologies, Inc. The joint venture has been approved by the ROC Fair Trade Commission and was incorporated in January 2004. We expect that our joint venture with Compeq will further strengthen our capabilities in interconnect materials by providing us access to Compeq's production capacity and expertise, know-how and engineering capabilities in the design and production of advanced substrates. We expect that ASE-Compeq Technologies, Inc. will initially focus on meeting our substrates requirements and gradually expand its customer base to include integrated device manufacturers and other backend subcontractors. ASE-Compeq Technologies, Inc. will initially utilize Compeq's existing facilities in Ta Yuan, Taiwan, and is expected to establish new facilities as the existing facilities reach full capacity.

### Closure of ASE Philippines

In order to consolidate our operations and improve operating efficiency across our various locations, we closed our facilities and discontinued our operations in the Philippines in October 2003, which had been conducted through ASE Philippines. ASE Philippines was established in 1996 to provide packaging and testing services. We estimate that the charges associated with the closure of our operations in the Philippines will amount to approximately NT\$271.9 million (US\$8.0 million), approximately NT\$102.0 million (US\$3.0 million) of which was recognized in 2003.

### BUSINESS OVERVIEW

Together with our subsidiary ASE Test, we are the world's largest independent provider of semiconductor packaging and testing services based on 2003 revenues. Our services include semiconductor packaging, design and production of interconnect materials, front-end engineering testing, wafer probing and final testing services. We believe that, as a result of the following, we are better positioned than our competitors to meet the requirements of semiconductor companies worldwide for outsourced packaging and testing services across a wide range of end-use applications:

- o our ability to provide a broad range of advanced semiconductor packaging and testing services on a large-scale turnkey basis;
- 21
- o our expertise in developing and providing advanced packaging, interconnect materials and testing technologies and solutions;
  - o 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;
  - o our geographic presence in key centers of outsourced semiconductor and electronics manufacturing; and
  - o our long-term relationships with providers of complementary semiconductor manufacturing services, including our strategic alliance with TSMC, the world's largest dedicated semiconductor foundry.

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

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, in addition, 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:

- o Agilent Technologies, Inc.
- o Altera Corporation
- o ATI Technologies, Inc.
- o Conexant Systems, Inc.
- o IBM Corporation
- o Koninklijke Philips Electronics N.V.
- o LSI Logic Corporation
- o Motorola, Inc.
- o NVIDIA Corporation
- o ON Semiconductor Corp.
- o Qualcomm Incorporated
- o RF Micro Devices, Inc.
- o Silicon Integrated Systems Corp.
- o STMicroelectronics N.V.
- o Sunplus Technology Co., Ltd.
- o VIA Technologies, Inc.

### Industry Background

#### General

Semiconductors are the basic building blocks used to create an increasing variety of electronic products and systems. Continuous improvements in semiconductor manufacturing processes and design technologies have enabled manufacturers to produce 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 systems. As a result, semiconductor demand has grown substantially in our primary markets of communications, personal computers and consumer electronics, and has experienced increased growth in other markets such as automotive products, 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 estimates that worldwide sales of semiconductors increased from approximately US\$50.5 billion in 1990 to US\$166.4 billion in 2003. The semiconductor industry

experienced strong growth between 1992 and 1995 and between 1998 and 2000, with declines between 1996 and the first half of 1997 as well as in 1998. Starting from the fourth quarter of 2000, the semiconductor industry experienced a severe downturn due to a slowdown in the global economy, overcapacity in the semiconductor industry and worldwide inventory adjustment. The semiconductor industry started to show signs of a modest recovery in 2002, primarily as a result of inventory replenishment and the introduction of new products. This modest recovery has continued in 2003 and the first half of 2004. We believe that the pattern of long-term growth and cyclical fluctuations will continue in the semiconductor industry.

#### 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 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 fabrication, packaging and testing requirements to independent semiconductor manufacturing companies. The growth in the number and scale of fabless semiconductor companies that rely solely on independent companies to meet their manufacturing requirements will continue to be a driver of growth in the market for independent foundry, packaging and testing services. Similarly, the availability of technologically advanced independent manufacturing services has encouraged integrated device manufacturers, which 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 fabrication technology from 8-inch to 12-inch wafers. 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.



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

Since the recent industry downturn in 2001, 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. 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.

23

**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.

Gartner Dataquest forecasts that the total outsourced semiconductor packaging market will grow from US\$8.1 billion in 2003 to US\$19.2 billion in 2008. Gartner Dataquest also forecasts that the total outsourced semiconductor testing market will grow from US\$2.2 billion in 2003 to US\$5.6 billion in 2008.

### 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 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 several 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 semiconductor 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.

As a result of the growth of the global semiconductor market, the semiconductor industry in Taiwan has in recent years 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 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

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

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 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:

24

[GRAPH OMITTED]

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. A complex circuit may be designed with as many as 20 layers of patterns or more.
Front-End Engineering Test...	Throughout and following the design process, prototype semiconductors undergo front-end engineering testing, which involves software development, electrical design validation, 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

25

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 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 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 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 advanced 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:

Maintain Our Focus on Providing a Complete Range of Semiconductor Packaging

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

### and Testing Services

We believe that an important factor in our ability to attract leading semiconductor companies as our customers has been our ability to provide turnkey services on a large scale. Turnkey services consist of the integrated packaging, testing and direct shipment of semiconductors to end users designated by our customers. As part of our integrated packaging solution, we also design and produce advanced and cost-competitive interconnect materials for both internal use in our packaging operations and for sale to third-party customers. As a result of our technical expertise and large production capacity in both packaging and testing, we are able to provide turnkey services on a large scale. As product lives and production cycles shorten and packaging and testing technologies advance more rapidly, our customers increasingly value our ability to work with them as an integral and strategic partner in the development of their products. The front-end engineering testing expertise of ISE Labs has greatly enhanced our ability to participate in the earlier stages of circuit design and the semiconductor manufacturing process. Our establishment of ASE Material in 1997 for the design and production of interconnect materials, such as substrates and leadframes, has provided us with expertise in interconnect materials technology, which has become increasingly critical for our customers both in terms of cost and production cycle time.

26

### Continue to Focus on Advanced Technological, Processing and Interconnect Materials Capabilities

We intend to continue our focus on developing advanced process and product technologies in order to meet the advanced semiconductor engineering requirements of our customers. 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 intend to continue to focus on developing and enhancing our existing interconnect materials capabilities, both through the operations of ASE Material, which will be integrated with our packaging operations upon the completion of our merger with ASE Material, and through our joint venture with Compeq. We expect that interconnect materials will become an increasingly important value-added component of the semiconductor packaging business as packaging technology migrates from the traditional wire bonding process towards the flip-chip wafer bumping process and interconnect materials such as advanced substrates represent a higher percentage of the cost of the packaging process. By focusing on the design and production of interconnect materials, we plan to capture most of the value added components of the packaging business and lead the migration in packaging technology. In 2003, ASE Material supplied approximately one-half of our substrate requirements by value. We intend to capture more of the value-added components of the packaging business by increasing the percentage of our substrate requirements obtained from our own operations and through our joint venture with Compeq. We believe that our merger with ASE Material will further strengthen our ability to provide turnkey services that incorporate interconnect materials to our customers and finance the growth of the interconnect materials business. In addition, we expect that our joint venture with Compeq will further strengthen our capabilities in the interconnect materials business by providing us access to Compeq's production capacity and expertise, know-how and engineering capability in the design and production of advanced substrates.

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

We intend to continue to strengthen our capabilities in testing complex, high-performance semiconductors. In particular, we plan to focus on testing logic/mixed-signal semiconductors that are characterized by very high clock speeds, high pin count and high levels of integration.

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 Malaysia. Our controlling interest in 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.

### Strategically Expand Production Capacity

We intend to strategically expand our production capacity, both through internal growth and through selective acquisitions and joint ventures, with a focus on providing more advanced packaging and testing services, which we believe present greater opportunities to achieve higher growth in our revenues and higher margins. We believe that the demand for advanced semiconductor packaging and testing services will grow at a faster pace than demand for traditional packaging and testing services. The gradual upturn in the demand for advanced packaging and testing services is partly due to the trend of integrated device manufacturers outsourcing their manufacturing requirements for advanced packaging and testing services rather than undertaking the high capital investment costs of maintaining in-house advanced packaging and testing capabilities. Packaging and testing services for more advanced semiconductors also generally have higher margins for two reasons. First, as the packaging and testing of advanced semiconductors become more complex, requiring greater expertise in process and technology, such services typically command higher average selling prices. Second, we have been able to achieve higher utilization rates for the equipment we use for more advanced packaging and testing, compared to other equipment that we maintain. We believe that our technical expertise, as well as our scale of operations and financial position, which had enabled us to continue to make investments in more advanced packaging and testing equipment even in times of market downturn, have enabled us to attract a greater proportion of the demand for more advanced packaging and testing services.

27

We evaluate acquisition 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 1999, we acquired ISE Labs, an independent testing company with operations in California, Texas, Hong Kong and Singapore. Through combining the front-end engineering testing capabilities of ISE Labs with our existing final testing capabilities, we are able to provide our customers with complete semiconductor testing solutions. We acquired ASE Chung Li and ASE Korea in 1999, formerly the semiconductor packaging and testing operations of Motorola, Inc. located in Chung Li, Taiwan and Paju, South Korea, which enabled us to expand our capacity and gain access to specialized packaging and testing technologies with a focus on wireless communications and automotive end-products. In February 2004, we acquired NEC's semiconductor packaging and testing operations located in Yamagata, Japan, which enabled us to expand our capacity and gain access to the Japanese market and advanced packaging and testing facilities and know-how.

In October 2003, we entered into a joint venture agreement with Compeq to

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

establish ASE-Compeq Technologies, Inc. We expect that our joint venture with Compeq will further strengthen our capabilities in the interconnect materials business by providing us access to Compeq's production capacity and expertise, know-how and engineering capability in the design and production of advanced substrates.

### 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 and testing operations in Taiwan, currently the largest center for outsourced semiconductor 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 manufacturing services early in the semiconductor design process, enhances our responsiveness to the requirements of our customers and shortens production cycles. In addition, as a provider of turnkey services, we are able to offer in Taiwan packaging and testing services, including interconnect materials solutions, all within relatively close geographic proximity to our customers, other service providers and the end users of our customers' products. In addition to our expansion plans in Kaohsiung, Taiwan, we intend to expand our packaging, testing and interconnect materials 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 operations in the following locations:

- o Korea -- an increasingly important center for the manufacturing of memory and communications devices with a concentration of integrated device manufacturers specializing in these products;
- o Malaysia and Singapore -- an emerging center for outsourced semiconductor manufacturing in Southeast Asia with a concentration of integrated device manufacturers;
- o Silicon Valley in California -- the preeminent center for semiconductor design with a concentration of fabless customers; and
- o 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, the world's largest dedicated semiconductor foundry, which designates us as the non-exclusive preferred provider of packaging and testing services for semiconductors manufactured by TSMC. Through our strategic alliance with and close geographic proximity to

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

#### Principal Products and Services

We offer a broad range of advanced 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, personal 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 2001, 2002 and 2003, our packaging revenues accounted for 75.3%, 77.9% and 78.6% of our net revenues, respectively, and our testing revenues accounted for 24.7%, 22.1% and 21.2% of our net revenues, respectively.

#### 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 package, thin quad flat package, bump chip carrier and quad flat no-lead package, and package types based on substrates, such as BGA, including flip-chip BGA. 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:

- o the size of the package;
- o the density of electrical connections the package can support; and
- o the thermal and electrical characteristics of the package.

**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.

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

Package Types	of Leads	Description	End-Use
Quad Flat Package (QFP)/ Thin Quad Flat Package (TQFP).....	44-256	Designed for advanced processors and controllers, application-specific integrated circuits and digital signal processors.	Multimedia applications, mobile phones, personal computers, automotive and industrial products, hard disk drives, communication products, ethernet, internet, digital network computers.

29

Package Types	Number of Leads	Description	End-Use
Quad Flat No-Lead Package (QFN)/Microchip Carrier (MCC)...	12-84	QFN or 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 phone applications, personal digital devices and devices.
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 phone applications, personal digital devices and devices.
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 products, entertainment products, telephones, personal computers, printers, copiers, computer peripherals, telecommunication products, recording disks and hard drives.
Small Outline Plastic J-Bend Package (SOJ).....	20-44	Designed for memory and low pin-count applications.	DRAM memory devices, microcontroller applications, conversions and applications.
Plastic Leaded Chip Carrier (PLCC)	28-84	Designed for applications that do not require low profile packages with high density of interconnects.	Personal computer applications, electronic games.
Plastic Dual In-line Package (PDIP)	8-64	Designed for consumer electronic products.	Telephones, telecommunication products, audio/video applications, 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:

30

- o smaller package size;
- o higher pin-count;
- o greater reliability;
- o superior electrical signal transmission; and
- o 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 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 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. We commenced volume production of flip-chip packages in July 2000.

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

Package Types	Number of Leads	Description	End-Use
Plastic BGA.....	5-1156	Designed for semiconductors which require the enhanced performance provided by plastic BGA, including personal computer	Wireless products, global systems, notebook drives and vid

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

		chipsets, graphic controllers and microprocessors, application-specific integrated circuits, digital signal processors and memory devices.	
Film BGA.....	100-280	Substrate-based package that has higher performance and lower profile than plastic BGA.	Cellular phone communications processors and applications a disk drives.
Cavity Down BGA.....	256-854	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.	Cellular and o telecommunicat wireless and c personal digit PDAs, disk dri computers and

31

Package Types	Number of Leads	Description	End-Use
-----			
Stacked-Die BGA.....	44-569	Combination of multiple dies in a single package enables package to have multiple functions within a small surface area.	Cellular phone networks, grap digital camera
Flip-Chip BGA.....	16-2401	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-performan graphics and p applications.
System-in-Package.....	148-972	Integrated combination of microprocessor, logic controller and memory chips assembled in one package.	Digital televi personal compu compact disc p
Land Grid Array.....	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 circuits such communications computers serv computer perip

Module Assembly. We also offer module assembly services, which combine one or more semiconductor packages 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 PDAs, wireless LAN applications, Bluetooth applications, camera modules, automotive applications

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

and toys. The substantial majority of our module assembly services are provided at our facilities in Malaysia to a customer for the assembly of camera modules used in handsets. We also provide module assembly services at our facilities in Korea for radio frequency and power amplifier modules used in wireless communications and automotive applications.

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

	Year Ended December 31,	
	2001	2002
	-----	
	(percentage of packaging revenue)	
Package Types:		
BGA and other substrate-based package types	52.0%	53.5%
TQFP/LQFP.....	14.3	15.2
QFP.....	12.7	12.1
SOJ/SOP.....	6.7	5.8
PLCC.....	2.1	1.8
PDIP.....	3.0	3.4
Modules.....	0.8	2.7
Others.....	8.4	5.5
	-----	
Total.....	100.0%	100.0%
	=====	

32

Interconnect Materials. Interconnect materials connect the input/output on the semiconductor dies to the printed circuit board. Interconnect materials include leadframe, which is a miniature sheet of metal, generally made of copper and silver alloys, on which the pattern of input /output leads has been cut, and substrate, which is a multi-layer miniature printed circuit board. Interconnect materials are an important element of the electrical characteristics and overall performance of semiconductors. We produce both leadframes and substrates for our packaging operations through ASE Material. In 2003, ASE Material supplied approximately one-fourth, by value, of the leadframes and one-half, by value, of the substrates used in our operations.

We expect substrates will become an increasingly important value-added component of the semiconductor packaging business. 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, especially for advanced packages such as flip-chip BGA packages. In the past, substrates we designed for our customers were produced by independent substrate manufacturers. In anticipation of the migration in packaging technology, we established ASE Material in 1997 to develop our capabilities in the design and production of interconnect materials for use in our packaging operations. On October 28, 2003, we entered into a merger agreement to merge ASE Material with and into ASE Inc., with ASE Inc. as the surviving corporation. In addition, on October 28, 2003, we entered into a joint venture agreement with Compeq to establish ASE-Compeq Technologies Inc., which will focus on the design and production of interconnect materials for packaging

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

semiconductors. Through our merger with ASE Material and our joint venture with Compeq, we believe we can capture the growth opportunities in the interconnect materials business as well as reduce the production cycle time for our customers by integrating substrate design and production into our packaging services. See "Item 3. Key Information--Risk Factors--Risk Relating to Our Business--If we are not successful in developing and enhancing our in-house interconnect materials capabilities, our margins and profitability may be adversely affected".

### Testing Services

We provide a complete range of semiconductor testing services, including front-end engineering testing, wafer probing, final testing of logic/mixed-signal and memory semiconductors 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 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.

- o Customized Software Development. Test engineers develop customized software to test the semiconductor using advanced testing equipment. A customized software, developed on specific testing platforms, is required to test the conformity of each particular semiconductor type to its unique functionality and specification.

33

- o 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.
- o 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.
- o Failure Analysis. In the event that the prototype semiconductor does not function to specifications during either the electrical

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

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 Final Testing.** We conduct final tests of a wide variety of logic/mixed signal semiconductors, with the number of leads ranging from the single digits to over one thousand and operating frequencies of over 2.5 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 networking and wireless communications, graphics and disk controllers for home entertainment and personal computer applications, as well as a variety of 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:

- o **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.
- o **Dry Pack.** Process which involves heating semiconductors in order to remove moisture before packaging and shipping to customers.
- o **Tape and Reel.** Process which involves transferring semiconductors from a tray or tube into a tape-like carrier for shipment to customers.

**Drop Shipment Services.** We offer drop shipment services for shipment of semiconductors directly to end users designated by our customers. Drop shipment services are provided mostly in conjunction with logic/mixed-signal testing. We provide drop shipment services to a significant percentage of our testing customers. A substantial portion of our customers at each of our facilities have qualified these facilities for drop shipment services. Since drop shipment eliminates the additional step of inspection by the customer before shipment to the end user, quality of service is a key consideration. We believe that our ability to successfully execute our full range of services, including drop shipment services, is an important factor in maintaining existing customers as well as attracting new customers.

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

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

	Year Ended December 31,		
	2001	2002	2003
	(percentage of packaging revenues)		
Testing Services:			
Front-end engineering test.....	8.7%	7.4%	4.3%
Wafer probe.....	9.0	8.9	14.9
Final test.....	82.3	83.7	80.8
	-----		
Total.....	100.0%	100.0%	100%
	=====		

### Sales and Marketing

#### Sales and Marketing Offices

We maintain sales and marketing offices in Taiwan, the United States, Europe, Malaysia and Japan. Our Hsinchu and Kaohsiung offices in Taiwan are staffed with employees from both ASE Inc. and ASE Test Taiwan. In addition, the sales agent for our packaging and testing services maintains sales and marketing offices in Austria, Belgium, Germany, Japan, Korea, Malaysia and the United States. We conduct marketing research through our customer service personnel and those of our sales agent 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 "Item 4. Business Overview--Sales and Marketing--Qualification and Correlation by Customers".

#### Sales and Customer Service Agents

Under commission agreements, each of ASE Inc., ASE Test Taiwan, ASE Korea, ASE Chung Li and ASE Test Malaysia has appointed Gardex International Limited, or Gardex, as the non-exclusive sales agent for its services and products worldwide, excluding Asia. Gardex helps us identify customers, monitor delivery acceptance and payment by customers and, within parameters set by us, negotiate price, delivery and other terms with our customers. Purchase orders are placed directly with us by our customers. We pay Gardex a commission of between 0.4% and 0.7% of our sales outside of Asia, payable monthly, depending on the amount of these sales. In 2001, 2002 and 2003, we paid US\$5.9 million, US\$5.6 million and US\$6.7 million, respectively, in commissions to Gardex.

Under service agreements, each of ASE Inc., ASE Test Taiwan, ASE Korea, ASE Chung Li, ISE Labs and ASE Test Malaysia has appointed ASE (U.S.) Inc. as its non-exclusive agent to provide customer service and after-sales support to its customers in Europe and North America. We pay ASE (U.S.) Inc. a monthly fee based on its monthly associated costs and expenses plus a commission set by reference to the lower of a percentage of sales or a fixed fee. In 2001, 2002 and 2003, we paid US\$15.8 million, US\$15.6 million and US\$21.8 million, respectively, in fees and service charges to ASE (U.S.) Inc.

Both Gardex and ASE (U.S.) Inc. are wholly-owned by Y.C. Hsu, who has had a long personal relationship with Jason C.S. Chang, our Chairman and Chief Executive Officer, that pre-dates the founding of our company. We have maintained business relationships with Gardex, ASE (U.S.) Inc. and their predecessors since 1985. Gardex and ASE (U.S.) Inc. currently perform services only for us.

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

See "Item 3. Key Information -- Risk Factors -- Risks Relating to Our Business -- We depend on our agents for sales and customer service in North America and Europe. Any serious disruption in our relationship with these agents, or substantial loss in their effectiveness, could significantly reduce our revenues and profitability".

35

### Customers

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

- |  |                                    |
|--|------------------------------------|
| o Agilent Technologies, Inc.           | o NVIDIA Corporation               |
| o Altera Corporation                   | o ON Semiconductor Corp.           |
| o ATI Technologies, Inc.               | o Qualcomm Incorporated            |
| o Conexant Systems, Inc.               | o RF Micro Devices, Inc.           |
| o IBM Corporation                      | o Silicon Integrated Systems Corp. |
| o Koninklijke Philips Electronics N.V. | o STMicroelectronics N.V.          |
| o LSI Logic Corporation                | o Sunplus Technology Co., Ltd.     |
| o Motorola, Inc.                       | o VIA Technologies, Inc.           |

Our five largest customers together accounted for approximately 41.2%, 39.6% and 34.8% of our net revenues in 2001, 2002 and 2003, respectively. Other than Motorola, Inc. and VIA Technologies, Inc. in 2001 and Motorola, Inc. in 2002 and 2003, no customer accounted for more than 10% of our net revenues in 2001, 2002 or 2003.

We package and test for our customers a wide range of products with end-use applications in the communications, personal 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	
	2001	2002
End-Use Applications:		
Communications.....	36.0%	34.4%
Personal computers.....	35.5	35.4
Consumer electronics/ industrial/ automotive.....	27.7	28.8
Others.....	0.8	1.4
Total.....	100.0%	100.0%

Many of our customers are leaders in their respective end-use markets. For example, we provide Motorola, an industry leader in automotive and wireless communications semiconductor products, with most 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

Personal Computers

Consumer Electron

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

Agilent Technologies, Inc.  
 Conexant Systems, Inc.  
 Koninklijke Philips Electronics N.V.  
 Motorola, Inc.  
 Qualcomm Incorporated  
 RF Micro Devices, Inc.  
 STMicroelectronics N.V.

ATI Technologies, Inc.  
 IBM Corporation  
 NVIDIA Corporation  
 Silicon Integrated Systems Corp.  
 VIA Technologies, Inc.  
 Winbond Electronics Corporation  
 Marvell Technology Group Ltd.

Altera Corporation  
 LSI Logic Corporation  
 Motorola, Inc.  
 ON Semiconductor  
 STMicroelectronics  
 Sunplus Technology  
 Micronas Semiconductor

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,		
	2001	2002	2003
North America.....	65.0%	59.1%	60.2%
Taiwan.....	26.7	24.9	27.0

36

	Year Ended December 31,		
	2001	2002	2003
Europe.....	3.9	6.1	8.3
Others.....	4.4	9.9	4.5
Total.....	100.0%	100.0%	100%

In 2003, approximately 84% of the testing revenues of ASE Taiwan and 90% of the testing revenues of ASE Test Malaysia were accounted for by the testing of semiconductors packaged at our packaging facilities in Kaohsiung, Taiwan and Malaysia, respectively. The balance represented testing revenues from customers who delivered packaged semiconductors directly to ASE Test Taiwan or ASE Test Malaysia for testing. In 2003, approximately 36% of our packaging revenues in Kaohsiung, Taiwan and 64% of our packaging revenues in Malaysia were accounted for by the packaging of semiconductors which were subsequently tested at ASE Test Taiwan and ASE Test Malaysia, respectively. We expect that more customers of our packaging facilities in Kaohsiung, Taiwan and Malaysia 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 eight 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



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

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 and substrates, gold wire and molding compound represented approximately 56.2%, 23.0% and 8.1%, respectively, of our total cost of packaging materials in 2003.

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

37

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 1999 and the first half of 2000, the industry experienced a shortage in the supply of advanced substrates used in BGA packages, which, at the time, were only available from a limited number of suppliers located primarily in Japan. In these instances, we generally negotiate an extension of the delivery date from our customers. See "Item 4. Information on the Company--Business Overview--Strategy--Continue to Focus on Advanced Technological, Processing and Interconnect Materials Capabilities".

### Testing

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

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 May 31, 2004, we operated an aggregate of 5,918 wire bonders, of which 4,832 were fine-pitch wire bonders. As of the same date, 29 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. 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.

#### 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 Advantest Corporation, Agilent Technologies, Inc., Credence Systems Corporation, LTX Corporation, NP Test Inc. and Teradyne, Inc. 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 May 31, 2004, we operated an aggregate of 1,348 testers, 266 of which were consigned by customers and 53 of which 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.

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.

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

### Intellectual Property

As of May 31, 2004, we held 388 Taiwan patents and 134 U.S. patents related to various semiconductor packaging technologies. In addition, we registered "ASE" as a trademark and as a servicemark in Taiwan.

We have also entered into various non-exclusive technology license agreements with other companies involved in the semiconductor manufacturing process, including Motorola, Inc., Tessera Inc., Fujitsu Limited, Flip Chip Technologies, L.L.C. and LSI Logic Corporation. We paid royalties under our license agreements in the amount of NT\$151.2 million, NT\$176.7 million, and NT\$200.1 million (US\$5.9 million) in 2001, 2002 and 2003, respectively. The technology we license from these companies includes solder bumping, redistribution, ultraCSP assembly and other technologies used in the production of package types, such as BCC, flip-chip BGA and film BGA. The license agreement with Tessera Inc. will not expire until the expiration of the Tessera Inc. patents licensed by the agreement. The license agreements with Motorola, Inc., Flip Chip Technologies, L.L.C. and LSI Logic Corporation will expire on December 31, 2010, March 1, 2009 and January 1, 2010, respectively. We are in the process of negotiating the renewal of our license agreement with Fujitsu Limited.

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 agreement with Motorola, Inc.

### 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 have maintained an average packaging yield rate of 99.8% or greater in each of the last three years. 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. 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 209E class 1,000, 10,000 and 100,000 standards.

ISE Labs' testing facility in Fremont, California has 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 and testing facilities in Kaohsiung, Taiwan, and the United States have been certified as meeting the ISO 9001 quality standards set by the International Standards Organization, or ISO. In addition, our packaging and testing facilities in Kaohsiung, Taiwan, Korea and Malaysia and our interconnect

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

materials facilities have also been certified as meeting the ISO 14001 quality standards. ISO certifications are required by many countries in connection with sales of industrial products in these countries.

Our packaging and testing facilities in Taiwan and Korea have also been certified as meeting TS 16949 standards. These standards provide for continuous improvement with an emphasis on the prevention of defects and reduction of variation and waste in the supply chain. Like ISO certifications, TS 16949 certification is required by some semiconductor manufacturers as a threshold indicating a company's quality control standards.

Furthermore, our packaging and testing facilities in Kaohsiung, Taiwan have received the SAC Level-1 certification for quality assurance from the Semiconductor Assembly Council. The Semiconductor Assembly

39

Council is an organization of semiconductor manufacturers, subcontractors, end-users and materials and service providers established to certify subcontract quality systems and process control practices.

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

### Competition

We compete in the highly competitive independent semiconductor packaging and testing markets. We face competition from a number of sources, including other independent semiconductor packaging and testing companies, especially those that also offer turnkey packaging and testing services. 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. Furthermore, several independent packaging and testing companies have established their packaging 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 and lower costs 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 the advanced packaging and testing requirements on a large scale.

### 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

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

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 liabilities in connection with certain accidents. 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 and our effective equity interest in each of our principal operating subsidiaries and affiliates as of May 31, 2004. The following chart does not include wholly-owned intermediate holding companies.

40

[GRAPH OMITTED]

- 
- (1) The common shares of ASE Inc. are listed on the Taiwan Stock Exchange under the symbol "2311". The ADSs of ASE Inc. are listed on the New York Stock Exchange under the symbol "ASX".
  - (2) The ordinary shares of ASE Test are quoted for trading on the Nasdaq National Market under the symbol "ASTSF". ASE Test's Taiwan depository shares, which represent its ordinary shares, are listed for trading on the Taiwan Stock Exchange under the symbol "9101".
  - (3) On October 28, 2003, we entered into a merger agreement with ASE Chung Li and ASE Material pursuant to which ASE Chung Li Inc. and ASE Material will be merged with and into ASE Inc., with ASE as the surviving corporation. For more information on the pending merger, see "Item 4. Information on the Company--History and Development of the Company--Pending Merger with ASE Chung Li and ASE Material".
  - (4) The common shares of Universal Scientific Industrial Co., Ltd. are listed on the Taiwan Stock Exchange under the symbol "2350".
  - (5) The common shares of Hung Ching are listed on the Taiwan Stock Exchange under the symbol "2527".
  - (6) The remaining shares of ASE Material are owned by the management and employees of ASE Material and the management and employees of ASE Inc. and its affiliates, as well as a strategic investor.
  - (7) On October 28, 2003, we entered into a joint venture agreement with Compeq to establish ASE-Compeq Technologies, Inc., which will focus on the design and production of interconnect materials for packaging semiconductors. Pursuant to the joint venture agreement, we own 60% of the equity interest in ASE-Compeq Technologies, Inc. and Compeq owns the remaining 40% of the equity interest. For more information on the joint venture, see "Item 4. Information on the Company--History and Development of the Company--Joint Venture with Compeq Manufacturing Co., Ltd.".
  - (8) Our acquisition of ASE Japan was completed on May 31, 2004. For more information on the acquisition, see "Item 4. Information on the Company--History and Development of the Company--Acquisitions of NEC's Packaging and Testing Operations in Yamagata, Japan".

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

### Our Consolidated Subsidiaries

#### ASE Test

ASE Test is the largest independent testing company in the world, providing a complete range of semiconductor testing services to leading international semiconductor companies. ASE Test also provides semiconductor packaging services. ASE Test has testing operations in Taiwan, the United States, Hong Kong and Singapore, and also maintains testing and packaging operations in Malaysia.

ASE Test was incorporated in 1995 and its ordinary shares have been quoted for trading on the Nasdaq National Market since June 1996 under the symbol "ASTSF". ASE Test's Taiwan depository shares representing its ordinary shares have been listed for trading on the Taiwan Stock Exchange under the symbol "9101" since January 1998. As of May 31, 2004, we held 51.0% of the outstanding shares of ASE Test.

ASE Test is a holding company incorporated in Singapore whose significant assets are its ownership interests in the following operating companies as of May 31, 2004:

- o 100% of ASE Test, Inc., also called ASE Test Taiwan;
- o 100% of ASE Test Malaysia;
- o 100% of ISE Labs;

41

- o 27.6% of ASE Chung Li (the remaining 72.4% of which is owned by ASE Inc.); and
- o 30% of ASE Korea (the remaining 70% of which is owned by ASE Inc.).

In 2003, ASE Test recorded net revenues of US\$391.9 million, operating income of US\$1.2 million and a net loss of US\$3.5 million. In 2002, ASE Test recorded net revenues of US\$302.0 million, an operating loss of US\$76.0 million and a net loss of US\$81.3 million. In 2001, ASE Test recorded net revenues of US\$298.5 million, an operating loss of US\$24.1 million and a net loss of US\$45.8 million.

#### ASE Material

ASE Material, which is an ROC company, was established in 1997 for the design and production of interconnect materials, such as leadframes and substrates, used in the packaging of semiconductors. ASE Material currently supplies our packaging facilities in Kachsiung, Taiwan with a substantial portion of our leadframe and substrate requirements. See "Item 4. Information on the Company--Business Overview--Raw Materials and Suppliers--Packaging". As of May 31, 2004, we held 61.4% of the outstanding shares of ASE Material, comprising 57.4% held by ASE Inc. and 4.0% held by ASE Test Taiwan. The remaining shares of ASE Material are owned by the management and employees of ASE Material, the management and employees of ASE Inc. and its affiliates, as well as a strategic investor. As of May 31, 2004, the supervisors and two of the four directors of ASE Material are representatives of ASE Inc. and one director of ASE Material is a representative of ASE Test Taiwan. The remaining director of ASE Material is Richard H.P. Chang, our Vice Chairman and President, who

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

serves in his individual capacity.

ASE Material's facilities are located in the Nantze Export Processing Zone near our packaging and testing facilities in Kaohsiung, and in Chung Li, Taiwan. In 2003, ASE Material recorded net revenues of NT\$5,225.1 million (US\$153.7 million), an operating gain of NT\$102.9 million (US\$3.0 million) and a net income of NT\$168.3 million (US\$5.0 million). In 2002, ASE Material recorded net revenues of NT\$3,136.4 million, an operating loss of NT\$583.6 million and a net loss of NT\$854.3 million. In 2001, ASE Material recorded net revenues of NT\$2,458.4 million, operating income of NT\$273.5 million and net income of NT\$181.6 million. Substantially all of ASE Material's sales are to us and our affiliates. Accordingly, substantially all of its sales and net income are eliminated in the preparation of our consolidated financial statements.

On October 28, 2003, we entered into a merger agreement to merge ASE Material with and into ASE Inc., with ASE Inc. as the surviving corporation. Assuming receipt of all necessary approvals and consents, we expect the merger will be completed on August 1, 2004. See "Item 4. Information on the Company--History and Development of the Company -- Pending Merger with ASE Chung Li and ASE Material".

### Our Unconsolidated Affiliates

As of May 31, 2004, we held approximately 23.5% of the outstanding shares of Universal Scientific and 26.4% of the outstanding shares of Hung Ching.

#### Universal Scientific

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:

- o electronic components such as thick film mixed-signal devices, thick film resistors, high frequency devices and automotive and power electronic devices;
- o 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
- o system assemblies such as portable computers, desktop personal computers, network computers and servers.

42

We are the largest shareholder in Universal Scientific and six out of the nine directors on its board of directors, including the chairman, are representatives of ASE Inc.

Universal Scientific's principal manufacturing facilities are located in Nantou, Taiwan. In 2003, Universal Scientific recorded net revenues of NT\$40,928.1 million (US\$1,204.1 million), an operating income of NT\$967.7 million (US\$28.5 million) and net income of NT\$776.3 million (US\$22.8 million). In 2002, Universal Scientific recorded net revenues of NT\$31,775.9 million, operating income of NT\$803.4 million and net income of NT\$276.0 million. In 2001, Universal Scientific recorded net revenues of NT\$34,214.8 million, operating income of NT\$556.5 million and a net loss of NT\$163.1 million. The shares of Universal Scientific are listed on the Taiwan Stock Exchange under the symbol "2350". As of May 31, 2004, Universal Scientific had a market

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

capitalization of NT\$9,880.0 million (US\$290.7 million).

### Hung Ching

Hung Ching is an ROC company engaged in the development and management of commercial, residential and industrial real estate properties in Taiwan. Hung Ching's completed development projects include the ASE Design Center commercial project and the Earl Village residential project, both located in Hsichih, Taiwan. Hung Ching was founded in 1986 by Chang Yao Hung-ying. Chang Yao Hung-ying is the mother of both Jason C.S. Chang, our Chairman and Chief Executive Officer, and Richard H.P. Chang, our Vice Chairman and President, and was a director of ASE Inc. from 1984 to June 2003. Jason C.S. Chang, Richard H.P. Chang, Chang Yao Hung-ying and other members of the Chang family are controlling shareholders of Hung Ching.

In 2003, Hung Ching recorded net revenues of NT\$1,014.9 million (US\$29.9 million), an operating loss of NT\$491.5 million (US\$14.5 million) and a net loss of NT\$483.8 million (US\$14.2 million). In 2002, Hung Ching recorded net revenues of NT\$546.7 million, an operating loss of NT\$253.8 million and a net loss of NT\$521.5 million. In 2001, Hung Ching recorded net revenues of NT\$2,600.1 million, an operating loss of NT\$101.3 million and a net loss of NT\$811.3 million. The shares of Hung Ching are listed on the Taiwan Stock Exchange under the symbol "2527". As of May 31, 2004, Hung Ching had a market capitalization of NT\$2,939.4 million (US\$86.5 million).

### PROPERTY, PLANTS AND EQUIPMENT

We operate a number of packaging and testing 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. Our facilities range from our large-scale turnkey facilities in Taiwan and Malaysia to our specialized Korea facility dedicated to wireless communications and automotive end-products. With our diverse facilities we are able to tailor our packaging and testing 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 May 31, 2004.

Facility	Location	Commencement of Operation	Primary Use	A Flo sq
ASE Inc.	Kaohsiung, Taiwan	March 1984	Our primary packaging facility. Offers complete semiconductor manufacturing solutions in conjunction with ASE Test Taiwan and foundries located in Taiwan. Focuses primarily on advanced packaging services, including flip-chip, wafer bumping and fine-pitch wire bonding.	
ASE Test, Taiwan	Kaohsiung, Taiwan Chung Li, Taiwan	December 1987	Our primary testing facilities. Offers complete semiconductor solutions in conjunction with ASE Inc.'s facility in Kaohsiung and foundries located in Taiwan. Focuses primarily on advanced	



Facility	Location	Commencement of Operation	Primary Use
ASE Material(1)	Kaohsiung, Taiwan Chung Li, Taiwan	December 1997	logic/mixed-signal testing for integrated device manufacturers, fabless design companies and system companies. Design and production of interconnect materials such as leadframes and substrates used in packaging of semiconductors.
ASE Test Malaysia	Penang, Malaysia	February 1991	An integrated packaging and testing facility which focuses primarily on the requirements of integrated device manufacturers and system companies, including those for module assembly.
ASE Chung Li(1) (2)	Chung Li, Taiwan	April 1985	An integrated packaging and testing facility which specializes in semiconductors for communications and consumer applications.
ASE Korea(3)	Paju, Korea	March 1967	An integrated packaging and testing facility which specializes in semiconductors for radio frequency, sensor and automotive applications.
ISE Labs(4)	Fremont, California Austin, Texas Hong Kong Singapore	November 1983	Front-end engineering and final testing facilities located in northern California in close proximity to several of the world's largest fabless design companies. Testing facilities located in close proximity to integrated device manufacturers and fabless companies in Texas, Hong Kong and Southeast Asia.

- (1) On October 28, 2003, we entered into a merger agreement with ASE Chung Li and ASE Material pursuant to which ASE Chung Li and ASE Material will be merged with and into ASE Inc., with ASE Inc. as the surviving corporation. For more information on the pending merger, see "Item 4. Information on the Company--History and Development of the Company--Pending Merger with ASE Chung Li and ASE Material".
- (2) We acquired a 70.0% interest in ASE Chung Li and ASE Test acquired the remaining 30.0% interest in July 1999. As of October 31, 2003, we held a 72.4% interest in ASE Chung Li and ASE Test held a 27.6% interest in ASE Chung Li.
- (3) We acquired a 70.0% interest in ASE Korea and ASE Test acquired the remaining 30.0% interest in July 1999.
- (4) We acquired a 70.0% interest in ISE Labs in May 1999, which was subsequently increased to 80.4% following ASE Test's purchase of additional

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

shares of ISE Labs in 2000. In January 2002, we purchased the remaining outstanding shares of ISE Labs.

For information on the aggregate capacity of our facilities in terms of the number of testers and bonders we operate, see "Item 4. Information on the Company -- Business Overview -- Equipment". 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 different 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, the experience and schedule of work shifts of operators, and others.

44

### Expansion

We are in the process of constructing two new buildings in Chung Li, Taiwan. The new buildings are expected to have an estimated floor space of approximately 1,023,000 square feet, and are intended to house a part of our testing operations and a part of our interconnect materials operations. Construction commenced in September 2003 and we expect it to be completed by the second half of 2004. The total cost of the construction project, including the land and the completed buildings, is estimated to be approximately NT\$1,200.0 million (US\$35.3 million). We are currently in discussions with Hung Ching, our affiliate engaged in the development and management of commercial, residential and industrial real estate in Taiwan, on the terms of the construction agreement.

We are in the process of constructing a new building in Kaohsiung, Taiwan. The new building is expected to have approximately 1,163,000 square feet of floor space. Upon completion of the development, which is currently expected to be in the second half of 2004, we will own the first two floors of the building with floor space of approximately 235,000 square feet, and Hung Ching will own remaining floors of the building with floor space of approximately 928,000 square feet. We plan to use our floor space to house part of our operations in Kaohsiung. We and our affiliates will have priority in purchasing the remaining floor space from Hung Ching. The total cost of the construction project, including land and the completed building, is estimated at NT\$1,400.0 million (US\$41.2 million). See "Item 7. Major Shareholders and Related Party Transactions--Related Party Transactions".

We plan to finance both of these construction projects with internally generated cash. We have not yet paid any portion of the construction costs for either of these projects.

We have not finalized the portion of our productive capacity, either existing capacity or new capacity budgeted to be added in 2004, which will be allocated to these new buildings upon their completion.

### 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

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

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 "Forward-Looking Statements".

### Overview

We offer a broad range of semiconductor packaging and testing services. In addition to offering each service separately, we also offer turnkey services, which consist of the integrated packaging, testing and direct shipment of semiconductors to end users designated by our customers. Our net revenues increased from NT\$38,367.8 million in 2001 to NT\$45,586.8 million in 2002 and NT\$57,311.8 million (US\$1,686.1 million) in 2003. The increase in our net revenues in 2002 and 2003 reflected a modest recovery in the semiconductor industry and increased outsourcing of the packaging of advanced package types such as BGA. In 2002 and 2003, we experienced a gradual improvement in our net revenues compared to 2001 across each of the end-use applications of the semiconductors that we packaged and tested. This improvement was generally concentrated in the packaging of more advanced package types, the testing of more complex, high-performance semiconductors and the assembly of modules.

### 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. However, as more than half of our costs, including most of our labor and overhead costs, are denominated in NT dollars, we consider the NT dollar to be our functional currency. Furthermore, the majority of our financing costs are denominated in NT dollars.

45

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 that experienced 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. During the industry downturn commencing in the fourth quarter of 2000, we experienced a significant deterioration in average selling prices which resulted in our company incurring a net loss in 2001 and a significant decrease in net income in 2002, as compared with the years prior to 2001. As a result of the modest recovery in the semiconductor industry and a gradual upturn in the outsourcing trend in 2002 and 2003, our average selling prices for packaging and testing services stabilized in 2002 and 2003 as compared to the average selling price in 2001.

In 2001, 2002 and 2003, packaging revenues accounted for 75.3%, 77.9% and 78.6% while testing revenues accounted for 24.7%, 22.1% and 21.2%, respectively, of our net revenues. Testing revenues as a percentage of our net revenues decreased in 2002 and 2003 as 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. In periods of an industry downturn, the decline in the average selling prices of our

testing services is often exacerbated by the 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 the intense price competition from other independent testing service providers, who typically offer large price discounts during periods of depressed demand, such as in 2001, in order to maintain higher capacity utilization rates to defray the high fixed costs associated with testing operations.

Although the growth rate for outsourced semiconductor testing services slowed down as a result of the industry downturn in 2000 and 2001, we expect this growth rate to improve due to the modest recovery in the semiconductor industry in 2002, 2003 and the first half of 2004. We believe that the market for outsourced semiconductor testing services has more potential for growth than the market for outsourced semiconductor packaging services over the long term 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, are 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 three years by a change in our revenue mix. In particular, revenues derived from packaging more advanced package types, such as BGA, higher density packages with finer lead-to-lead spacing, or pitch, and testing of more complex, high-performance semiconductors, as well as module assembly, 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 technology, in order to mitigate the effects of declining average selling prices on our profitability.

#### 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 previous 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 current generation of advanced testers typically cost between US\$2.0 million and US\$5.0 million each, while wire bonders used in packaging typically cost approximately US\$100,000 each. In 2001, 2002 and 2003, our depreciation expense as a percentage of net revenues was 27.0%, 24.9% and 20.1%, respectively. The significant decrease in depreciation expense as a percentage of net revenues in 2003 compared to 2001 and 2002 was primarily a result of higher equipment utilization and an increase in revenues from advanced processes that translated into

higher average selling prices in 2003. We begin depreciating our equipment when

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

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 2000 and 2001, we may experience lower than expected demand from customers and a sharp decline in the average selling price of our testing services, resulting in an increase in depreciation expense 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 the decrease in outsourcing demand from integrated device manufacturers, which typically maintain larger in-house testing capacity than in-house packaging capacity. We expect that our capacity utilization rate will improve in 2004 as a result of the modest recovery in the semiconductor industry and a gradual upturn in the outsourcing trend.

In 2003, we entered into operating leases with leasing companies to lease advanced testers, generally for a term of three years. We believe that these operating leases will allow us to better manage our capacity utilization rates and cash flow. Since testers operated under operating leases could be replaced with more advanced testers upon the expiration of the lease, we expect that these operating leases would improve our capacity utilization rate by reducing the number of testers with lower utilization. As of May 31, 2004, we leased 53 testers.

### 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 2001, 2002 and 2003, raw material cost as a percentage of our net revenues was 30.7%, 30.2% and 28.8%, respectively. We expect interconnect materials to become an increasingly important component of the cost of our packaging revenues and we plan to continue to develop and enhance our in-house interconnect materials capabilities in order to maintain and enhance our profitability, ensure an adequate supply of interconnect materials at competitive prices and reduce production time. On October 28, 2003, we entered into a merger agreement to merge ASE Material with and into ASE Inc., with ASE Inc. as the surviving corporation. In addition, on October 28, 2003, we entered into a joint venture agreement with Compeq to establish ASE-Compeq Technologies, Inc., which will focus on the design and production of interconnect materials for packaging semiconductors. We believe that our merger with ASE Material and our joint venture with Compeq will enhance our interconnect materials capabilities. For more information on the pending merger, see "Item 4. Information on the Company - History and Development of the Company - Pending Merger with ASE Chung Li and ASE Material".

### Goodwill Amortization

Our operating income and non-operating income in recent years have been affected by goodwill amortization charges in connection with the restructuring of our investment holdings and other share repurchases. Under ROC GAAP, additional purchases of shares of consolidated subsidiaries (majority owned) or of companies accounted for using the equity method (less than majority but at least 20% owned) will generate goodwill in an amount equal to the difference between the purchase price and the book value per share of those shares. The goodwill generated is amortized over ten years. Goodwill amortization from the purchases of shares of consolidated subsidiaries are recognized under general and administrative expense. Goodwill amortization from the purchases of shares of companies accounted for using the equity method are recognized as a debit under investment income. Transactions which created significant goodwill charges were (1) the purchase of additional ordinary shares of ASE Test in the open market in 2002, (2) the purchase of additional ordinary shares of ASE Test in 2001 from two of our directors at the prevailing market price, (3) the purchase of a total of 26,250,000 shares of ISE Labs in 1999, 2000 and 2002 and (4) the open market purchase of shares of Universal Scientific between 1999 and 2000.

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

See "Item 7. Major Shareholders and Related Party Transactions -- Related Party Transactions" and note 8 to the consolidated financial statements.

### Pending Merger of ASE Chung Li and ASE Material

On October 28, 2003, we entered into a merger agreement with ASE Chung Li and ASE Material pursuant to which ASE Chung Li and ASE Material will be merged with and into ASE Inc., with ASE Inc. as the surviving corporation. The merger is to be consummated by means of a share exchange pursuant to which the respective shareholders (other than ASE Inc.) of ASE Chung Li and ASE Material will receive common shares of ASE Inc. in exchange for the common shares of each of ASE Chung Li and ASE Material. The planned share exchange pursuant to the merger agreement between ASE Inc. and entities under the control of ASE Inc. will be treated as a transaction between entities under common control, and all assets and liabilities exchanged will be transferred at their carrying

47

amounts. With respect to the share exchange between ASE Inc. and the outstanding minority interests, the purchase method of accounting will be applied as the exchange represents the acquisition of non-controlling equity interests in a subsidiary. To the extent that the fair value of the ASE Inc. common shares (based on NT\$31.00 per ASE Inc. common share, which is the average of the closing prices of ASE Inc.'s common shares on the Taiwan Stock Exchange for two days prior to and following October 28, 2003) exchanged for the non-controlling equity interests exceeds the fair value of the acquired net assets (as determined on the effective date of the merger), the merger will generate goodwill. For more information on the pending merger, see "Item 4. Information on the Company--History and Development of the Company--Pending Merger with ASE Chung Li and ASE Material".

### 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, allowances for doubtful accounts, inventories, allowances for deferred income tax assets, useful lives of properties, realizability of long-term assets, goodwill and the valuation of marketable securities and long-term 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 from semiconductor packaging services that we provide are recognized upon shipment. Revenues from testing services that we provide are recognized upon completion of the services. We do not take ownership of: (1) bare semiconductor wafers received from customers that we package into finished semiconductors, and (2) packaged semiconductors received from customers that we test. 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: (1) existence of persuasive evidence of the services provided, (2) the selling price is fixed or determinable and (3) collectibility is reasonably assured. These policies are consistent with provisions in the Staff Accounting Bulletin No. 101 issued by the United States Securities and Exchange Commission,

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

or 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 allowance 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. Based on our experience, we currently maintain an allowance for the accounts receivables of these other customers which average between 3% and 4%, on a consolidated basis, of our net revenues. Additional allowances may be required in the future if the financial condition of our customers or general economic conditions deteriorate, and this additional allowance would reduce our net income.

**Inventories.** Inventories are recorded at cost when acquired and stated at the lower of weighted average cost or market value. Unbilled processing charges incurred are included in finished goods and work in progress and are stated at actual cost. Market value for finished goods and work in process is estimated to be the net realizable value. Market value for raw materials, supplies and spare parts is the replacement cost. 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.

48

**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 tax assets. We record a valuation allowance to reduce our deferred income tax assets to an amount that we believe will more likely than 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 net 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.

**Useful Lives of Properties.** Our properties primarily consist of machinery and equipment, buildings and improvements and land improvements. As our operations are capital intensive, we have significant investments in expensive packaging and testing equipment. Properties represented 57.0%, 60.1% and 58.9% of our total assets as of December 31, 2001, 2002 and 2003, respectively. We

depreciate our properties based on our estimate of their economic useful lives to us, which is in turn based on our judgment, historical experience and the potential obsolescence of our existing equipment brought about by the introduction of more sophisticated packaging and testing technologies and processes. If we subsequently determine that the actual useful life of properties is shorter than what we had estimated, we will depreciate the remaining undepreciated value of that asset over its remaining economic useful life. This would result in increased depreciation expense and decreased net income during those periods. Similarly, if the actual lives of properties are longer than what we had estimated, we would have a smaller depreciation expense and higher net income in subsequent periods. As a result, if our estimations of the useful lives of our properties are not accurate or are required to be changed in the future, our net income in future periods would be affected.

**Realizability of Long-Term Assets.** We are required to evaluate our equipment, goodwill 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. We have adopted U.S. Statement of Financial Accounting Standards, or U.S. SFAS, No. 144, "Accounting for the Impairment for Disposal of Long-Lived Assets" to account for the impairment of our long-lived assets under both ROC GAAP and U.S. GAAP. In accordance with U.S. SFAS No. 144, 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 net book value of the assets. If the recoverability test indicates that an impairment has occurred, the impairment loss is the amount of the asset's net book value in excess of the related fair value. For example, we took a NT\$1,225.6 million (US\$36.1 million) impairment charge in 2002 against some of our testing equipment to reflect the decline in economic value of this equipment. In 2003, we did not take any impairment charges against long-lived assets.

**Goodwill.** The U.S. Financial Accounting Standards Board, or FASB, recently issued U.S. SFAS No. 142, "Goodwill and Other Intangible Assets". U.S. SFAS No. 142 requires the use of a non-amortization approach to account for purchased goodwill and certain intangibles. Under U.S. SFAS No. 142, goodwill and intangibles are evaluated at least annually to determine if an impairment write-down is required. Under U.S. GAAP, we realized an impairment charge as of December 31, 2002 related to the goodwill from the acquisition of ASE Test. See "Item 5. Operating and Financial Review and Prospects--Operating Results and Trend Information--U.S. GAAP Reconciliation". We continue to carry goodwill resulting from the acquisition of ASE Korea and the purchase of shares of ISE Labs and Universal Scientific, and will have to assess such goodwill for impairment on at least an annual basis in the future. If events and circumstances deteriorate in the future, the value of the goodwill could be further impaired under U.S. GAAP. The merger of ASE Chung Li and ASE Material may generate goodwill to the extent that the fair value of the ASE Inc. common shares exchanged for the non-controlling equity interests exceeds the fair value of the acquired net assets. See "Item 5. Operating and Financial Review and Prospects--Operating Results and Trend Information--Pending Merger of ASE Chung Li and ASE Material".

**Valuation of Marketable Securities and Long-term Investments.** Under ROC GAAP, marketable equity securities are carried at the lower of aggregate cost or market value and are classified as trading or long-term investments depending on management's intent to hold the security for long-term investment purposes. Trading securities are primarily mutual funds with readily determinable market values. We hold significant long-term



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

investments in public and non-public entities. We periodically evaluate these long-term investments 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. Any significant decline in the operations of an equity method investee could affect the value of the long-term investment and an impairment charge may occur.

In determining whether an other-than-temporary impairment occurred in our long-term investments as of December 31, 2003, no amount was recorded under ROC GAAP based on the difference between the carrying value and the net-asset value of the investee with adjustments made to significant assets of the investee using appraised values and other appropriate information. In 2003, no impairment charge was incurred under U.S. GAAP. See "Item 5. Operating and Financial Review and Prospects--Operating Results and Trend Information--U.S. GAAP Reconciliation".

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	
	2001	2002
	(percentage of net revenue)	
ROC GAAP:		
Net revenues.....	100.0%	100.0%
Packaging.....	75.3	77.9
Testing.....	24.7	22.1
Others.....	0.0	0.0
Cost of revenues.....	(85.9)	(84.4)
Gross profit.....	14.1	15.6
Operating expenses.....	(15.3)	(17.1)
Income (loss) from operations.....	(1.2)	(1.5)
Non-operating income (expenses).....	(6.6)	(4.4)
Income (loss) before income tax and minority interest.....	(7.8)	(5.9)
Income tax benefit (expense).....	0.5	2.5
Income (loss) before minority interest.....	(7.3)	(3.4)
Extraordinary loss.....	(0.4)	(0.1)
Minority interest in net (income) loss of subsidiary.....	2.1	3.8
Net income (loss).....	(5.6)%	0.3%

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

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 sales.

	Year Ended December	
	2001	2002
	(percentage of net revenue)	
ROC GAAP:		
Gross margin		
Packaging.....	16.0%	17.6%
Testing.....	8.3	8.4
Overall.....	14.1%	15.6%

50

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	
	2001	2002
	(percentage of net revenue)	
ROC GAAP:		
Cost of revenues		
Raw materials.....	30.7%	30.2%
Labor.....	14.6	14.8
Depreciation.....	27.0	24.9
Others.....	13.6	14.5
Total cost of revenues.....	85.9%	84.4%
	=====	=====
Operating expenses		
Selling.....	2.3%	2.0%
General and administrative(1).....	7.3	8.8
Goodwill amortization(2).....	1.8	1.8
Research and development.....	3.9	4.5
Total operating expenses.....	15.3%	17.1%
	=====	=====

-----  
 (1) Excludes goodwill amortization for purposes of this table only.

(2) Included in general and administrative expense in the consolidated financial statements.

Year Ended December 31, 2003 Compared to Year Ended December 31, 2002

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

**Net Revenues.** Net revenues increased 25.7% to NT\$57,311.8 million (US\$1,686.1 million) in 2003 from NT\$45,586.8 million in 2002. Packaging revenues increased 26.8% to NT\$45,026.9 million (US\$1,324.7 million) in 2003 from NT\$35,515.4 million in 2002. Testing revenues increased 20.7% to NT\$12,142.4 million (US\$357.2 million) in 2003 from NT\$10,060.6 million in 2002. The increase in packaging revenues was primarily due to an increase in packaging volume. The increase in testing revenues was primarily due to an increase in testing volume, which was partially offset by a decrease in the averaging selling prices for testing services. The increase in packaging and testing volume resulted primarily from the recovery in the semiconductor industry and the increase in outsourcing of the packaging and testing of semiconductor devices. This increase was tempered in part by adverse global political and economic conditions as well as the impact of the outbreak of SARS in the first half of 2003. The decrease in the average selling prices for testing services reflected the general trend in the semiconductor industry of declining prices for testing services.

**Gross Profit.** Gross profit increased 52.9% to NT\$10,845.3 million (US\$319.1 million) in 2003 from NT\$7,094.6 million in 2002. Our gross margin increased to 18.9% in 2003 compared to 15.6% in the comparable period in 2002. This increase was primarily a result of a decrease in depreciation expense and raw materials, which was partially offset by an increase in factory supplies, all as a percentage of net revenues. Our gross margin for packaging increased slightly to 17.7% in 2003 from 17.6% in 2002. This increase was primarily due to a decrease in raw materials costs and depreciation expense, which was partially offset by an increase in factory supplies and components for use in modules, all as a percentage of packaging revenues. Our gross margin for testing increased to 23.5% in 2003 from 8.4% in 2002. This increase was primarily due to higher utilization rates for our testers, which resulted in a decrease in depreciation expense as a percentage of testing revenues. Depreciation expense in 2003 was NT\$11,517.0 million (US\$338.8 million), compared to NT\$11,366.9 million in 2002. As a percentage of net

51

revenues, however, depreciation expense decreased to 20.1% in 2003 from 24.9% in 2002, reflecting higher capacity utilization rates.

**Operating Income (Loss).** We had an operating profit of NT\$3,270.5 million (US\$96.2 million) in 2003, compared to an operating loss of NT\$685.2 million in 2002. Operating margin was 5.7% in 2003, compared to negative 1.5% in 2002. Operating margin is calculated by dividing net income (loss) by net sales. Operating expenses decreased 2.6% to NT\$7,574.8 million (US\$222.9 million) in 2003, compared to NT\$7,779.8 million in 2002. The decrease in operating expenses was primarily due to lower general and administrative expense, which was partially offset by higher selling and research and development expenses. Selling expense increased 32.5% to NT\$1,204.9 million (US\$35.5 million) in 2003 from NT\$909.4 million in 2002. This increase was primarily due to increased commission and fee payments to our sales and customer service agents, reflecting increased sales. Selling expense represented 2.1% of our net revenues in 2003, compared to 2.0% in 2002. General and administrative expense, excluding goodwill amortization, decreased 20.2% to NT\$3,196.6 million (US\$94.0 million) in 2003 from NT\$4,005.8 million in 2002. The decrease was attributable to the asset impairment charge of NT\$1,225.6 million which was recorded in 2002, but for which there was no similar charge in 2003. The decrease was offset by higher general and administrative expense, which absent the impairment charge in 2002, would have increased by approximately 15% in 2003. General and administrative expense, excluding goodwill amortization, represented 5.6% of our net revenues

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

in 2003, compared to 8.8% in 2002. Goodwill amortization expense was NT\$819.3 million (US\$24.1 million) in 2003 compared to NT\$815.6 million in 2002. Goodwill amortization expense represented 1.4% of our net revenues in 2003, compared to 1.8% in 2002. Research and development expense increased 14.9% to NT\$2,354.0 million (US\$69.3 million) in 2003 from NT\$2,049.0 million in the comparable period in 2002. This increase was primarily a result of an increase in the number of our research and development employees. Research and development expense accounted for 4.1% of our net revenues in 2003, compared to 4.5% of our net revenues in 2002.

Net Non-Operating Income (Expense). We incurred a net non-operating expense of NT\$1,782.9 million (US\$52.5 million) in 2003, compared to a net non-operating expense of NT\$2,024.5 million in 2002. This overall decrease was primarily a result of a decrease in net interest expense and an increase in gain on disposal of investments, which was partially offset by an increase in realized loss on long-term investments. Net interest expense decreased 17.4% to NT\$1,304.7 million (US\$38.4 million) in 2003 from NT\$1,578.6 million in 2002, primarily due to lower interest rates on our bank loans and NT\$511.5 million in interest income recognized in connection with the redemption of the US\$160 million 1% guaranteed convertible notes due 2004 issued by ASE Test through its finance subsidiary. We recorded net other non-operating income of NT\$114.6 million (US\$3.4 million) in 2003, compared to net other non-operating income of NT\$261.0 million in 2002. We recorded a realized loss on long-term investments of NT\$354.8 million (US\$10.4 million) in 2003 due to the recognition of a loss on the sale of our common shares by our wholly-owned subsidiary ASE Capital Inc. in connection with our ADS offering in June 2003.

Net Income (Loss). We had a net income of NT\$2,742.8 million (US\$80.7 million) in 2003, compared to net income of NT\$129.0 million in 2002. Our net income per ADS was NT\$3.88 (US\$0.11) in 2003 compared to a net income of NT\$0.19 per ADS in 2002. We had an income tax benefit of NT\$1,278.1 million (US\$37.6 million) in 2003, compared to an income tax benefit of NT\$1,140.3 million in 2002, primarily as a result of the additional tax credits generated from qualifying equipment purchases made for our facilities in Kaohsiung, Taiwan.

Year Ended December 31, 2002 Compared to Year Ended December 31, 2001

Net Revenues. Net revenues increased 18.8% to NT\$45,586.8 million in 2002 from NT\$38,367.8 million in 2001. Packaging revenues increased 22.9% to NT\$35,515.4 million in 2002 from NT\$28,898.2 million in 2001. Testing revenues increased 6.4% to NT\$10,060.6 million in 2002 from NT\$9,459.2 million in 2001. The increase in packaging and testing revenues was primarily due to an increase in packaging and testing volume, which was partially offset by a decrease in the average selling prices for packaging and testing services. The increase in volume resulted primarily from the modest recovery in the semiconductor industry and the increase in outsourcing of packaging and testing of semiconductor devices. The decrease in the average selling prices reflected the general trend in the semiconductor industry of declining prices for each input/output lead on a semiconductor device. This decrease was partially offset by a change in the revenue mix as our BGA packages and fine-pitch packages,

which typically command higher average selling prices, accounted for a greater portion of the packaging volume, and as we tested more complicated semiconductor devices, which generally command higher prices.

Gross Profit. Gross profit increased 31.1% to NT\$7,094.6 million in 2002 from NT\$5,410.8 million in 2001. Our gross margin increased to 15.6% in 2002

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

compared to 14.1% in 2001, primarily as a result of decreased depreciation expense as a percentage of net revenues. Our gross margin for packaging increased to 17.6% in 2002 from 16.0% in 2001. This increase was primarily due to a decrease in depreciation expense as a percentage of packaging revenues as a result of improved capacity utilization rates, as well as a decrease in raw material costs as a result of an increase in our sourcing of packaging materials from ASE Material. Our gross margin for testing increased to 8.4% in 2002 from 8.3% in 2001. This slight increase was primarily due to higher capacity utilization rates, which was partially offset by a decrease in average selling prices. Depreciation expense in 2002 was NT\$11,366.9 million, compared to NT\$10,375.0 million in 2001. This increase was due to increased capital expenditures in 2002. As a percentage of net revenues, depreciation expense decreased to 24.9% in 2002 from 27.0% in 2001, reflecting higher capacity utilization rates in 2002.

Operating Income (Loss). We had an operating loss of NT\$685.2 million in 2002 compared to operating loss of NT\$462.1 million in 2001. Operating margin decreased to negative 1.5% in 2002 compared to negative 1.2% in 2001. This decrease was primarily due to an asset impairment charge of NT\$1,225.6 million booked under general and administrative expense. Operating expenses increased 32.5% to NT\$7,779.8 million in 2002 compared to NT\$5,872.9 million in 2001. The increase in operating expenses was primarily due to higher general and administrative, goodwill amortization and research and development expenses. Selling expense increased 3.6% to NT\$909.4 million in 2002 from NT\$877.9 million in 2001. Selling expense amounted to 2.0% of our net revenues in 2002 compared to 2.3% in 2001. General and administrative expense, excluding goodwill amortization, increased 43.2% to NT\$4,005.8 million in 2002 from NT\$2,797.6 million in 2001. This increase was primarily due to the asset impairment charge of NT\$1,225.6 million booked under general and administrative expense. General and administrative expense, excluding goodwill amortization, amounted to 8.8% of our net revenues in 2002 compared to 7.3% in 2001. Goodwill amortization expense increased 17.7% to NT\$815.6 million in 2002 from NT\$692.9 million in 2001. This increase was primarily due to additional goodwill amortization expense resulting from our purchase of shares of ASE Test and ISE Labs in 2001 and 2002. Goodwill amortization expense amounted to 1.8% of our net revenues in 2002 compared to 1.8% in 2001. Research and development expense increased 36.2% to NT\$2,049.0 million in 2002 from NT\$1,504.5 million in 2001. This increase was largely a result of an increase in the number of research and development employees, an increase in factory supplies expense as well as an increase in depreciation charges associated with testers and other equipment dedicated to research and development uses. Research and development expense amounted to 4.5% of our net revenues in 2002 compared to 3.9% in 2001.

Net Non-Operating Income (Expense). We recorded a net non-operating loss of NT\$2,024.5 million in 2002 compared to a net non-operating loss of NT\$2,523.4 million in 2001. This decrease was primarily a result of a decrease in net long-term investment loss and a decrease in net interest expense, which were partially offset by our incurrence of a net foreign exchange loss. Net investment loss decreased 67.1% to NT\$410.3 million in 2002 from NT\$1,246.8 million in 2001. The significantly larger net investment loss in 2001 was primarily due to a one-time write-down of goodwill arising from our investment in Hung Ching as a result of the prolonged weakness of Hung Ching's stock price, as well as the improvement in the financial performance of Hung Ching and Universal Scientific in 2002 compared to 2001. Net interest expense decreased 9.2% to NT\$1,578.6 million in 2002 from NT\$1,739.3 million in 2001, primarily due to lower market interest rates in 2002 as well as the refinancing of certain of our long-term debt. We recorded a net foreign exchange loss of NT\$397.9 million in 2002 compared to net foreign exchange gain of NT\$247.5 million in 2001. The net foreign exchange loss in 2002 was primarily due to the depreciation of the NT dollar, which had a negative impact on our U.S. dollar-denominated and Japanese yen-denominated liabilities.

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

Net Income (Loss). After taking into account an extraordinary loss of NT\$34.6 million due to our repurchase of US\$68 million in aggregate principal amount of our US\$200 million zero coupon convertible bonds due 2002, we had net income of NT\$129.0 million in 2002. In 2001, we recorded a net loss, after taking into account an extraordinary loss of NT\$144.6 million due to our repurchase of US\$131 million in aggregate principal amount of our US\$200 million zero coupon convertible bonds due 2002, of NT\$2,142.2 million. Our net income per ADS was NT\$0.19 in 2002 compared to a net loss per ADS of NT\$2.99 in 2001. We had an income tax benefit of NT\$1,140.3

53

million in 2002, compared to an income tax benefit of NT\$199.2 million in 2001, primarily as a result of the additional tax credits generated by ASE Inc. in 2002 from qualifying equipment purchases. See "Item 5. Operating and Financial Review and Prospects--Operating Results and Trend Information--Taxation".

### 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. You should read the following table in conjunction with the consolidated financial statements and related notes included 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, 2002	Sept. 30, 2002	Dec. 31, 2002	Mar. 31, 2003	Jun. 30, 2003	Sept. 2003
	NT\$	NT\$	NT\$	NT\$	NT\$	NT\$
	(in millions)					
Consolidated Net Revenues						
Packaging .....	8,437.5	9,205.8	10,057.5	9,021.5	9,986.6	11,420.0
Testing .....	2,390.4	2,654.8	2,788.0	2,534.7	2,752.3	3,065.0
Others .....	0.6	0.3	8.2	28.2	33.9	38.0
Total .....	10,828.5	11,860.9	12,853.7	11,584.4	12,772.8	14,524.0
Consolidated Gross Profit						
Packaging .....	1,507.5	1,598.2	1,867.8	1,159.9	1,437.5	2,018.0
Testing .....	132.4	287.1	455.9	355.3	531.6	758.0
Others .....	--	(0.1)	(2.1)	(4.1)	1.1	6.0
Total .....	1,639.9	1,885.2	2,321.6	1,511.1	1,970.2	2,782.0
Consolidated Gross Margin						
Packaging .....	17.9%	17.4%	18.6%	12.9%	14.4%	17.4%
Testing .....	5.5%	10.8%	16.4%	14.0%	19.3%	24.1%
Overall .....	15.1%	15.9%	18.1%	13.0%	15.4%	19.3%

Our results of operations have been adversely affected by the global semiconductor industry downturn which commenced in the fourth quarter of 2000 and continued through the fourth quarter of 2001. Beginning the second quarter

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

of 2002, we experienced an improvement in our net revenues as a result of a modest recovery in the semiconductor industry. However, in the first quarter of 2003, our net revenues were adversely affected by global political and economic conditions. To a lesser extent, our results of operations have also been 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 Malaysia. 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".

Our testing operations historically have higher gross margins than our packaging operations. However, during periods of lower-than-normal capacity utilization, such as the last three quarters of 2001 and the full year of 2002, our testing operations have experienced lower gross margins than our packaging operations.

### Exchange Rate Fluctuations

Currently, the majority of our revenues from packaging and testing services are denominated in U.S. dollars, with a portion denominated in NT dollars. Our cost of revenues and operating expenses associated with packaging and testing services are incurred in several currencies, primarily NT dollars and U.S. dollars, as well as, to a lesser extent, Malaysian ringgit, Korean won and Japanese yen. 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 and the Japanese yen, 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

54

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 a net foreign exchange gain of NT\$247.5 million in 2001 and we incurred a net foreign exchange loss of NT\$397.9 million in 2002 and NT\$386.8 million (US\$11.4 million) in 2003. For a 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%. We have obtained preferential tax treatment under the tax laws of the ROC and Malaysia. Under the ROC Statute of Upgrading Industries, which gives certain preferential tax treatment to companies that qualify as operating in an "important technology industry", we have a tax exemption on income derived from the packaging of BGA products which expires at the end of 2005. In addition, ASE Test Malaysia qualified as a "pioneer" company in Malaysia and enjoyed a tax exemption which expired on June 30, 1999. ASE Test Malaysia subsequently obtained the status of "high-tech pioneer" and was granted a five-year tax exemption which expires on June 30, 2004. These tax exemptions resulted in tax savings for us of approximately NT\$26.4 million, NT\$52.1 million and NT\$0

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

million (US\$0 million) in 2001, 2002 and 2003, respectively. In order to qualify for a more beneficial reinvestment allowance, ASE Test Malaysia applied for and was granted cancellation of its pioneer status. The effective date of the cancellation has not been established.

We also have tax credits under the ROC Statute of Upgrading Industries. Under the previous tax credit rules, we obtained a tax credit of 20% for the purchase of equipment manufactured in Taiwan and 10% for the purchase of equipment manufactured outside Taiwan. In April 2002, the ROC Executive Yuan amended the tax credit rules and adopted a 13% rate of tax credit to be applied to the purchase of equipment regardless of where it was manufactured.

Under ROC tax laws, we may apply for additional tax holidays 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 may also apply for this tax holiday after the capitalization of retained earnings through the issuance of stock dividends. See note 17 to the consolidated financial statements.

In addition, since we have facilities located in special export zones such as the Nantze Export Processing Zone in Taiwan and the Bayan Lepas Free Industrial Zone in Malaysia, we enjoy exemptions from various import duties and commodity taxes on imported machinery, equipment, raw materials and components. 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.

Our effective income tax rate was 0% in 2003 because of tax credits generated from qualifying equipment purchases made at our facilities in Kaohsiung, Taiwan. Our effective tax rate was 0% in 2001 and 2002 because we incurred a net loss before income tax, minority interests and extraordinary loss in those periods, which resulted in income tax benefits of NT\$199.2 million and NT\$1,140.3 million in 2001 and 2002, respectively.

The net deferred tax assets in 2001 consisted primarily of tax credits that we utilized in 2002 and expect to utilize thereafter. These tax credits were generated primarily as a result of our purchase of packaging equipment for our facilities in Kaohsiung, Taiwan. In 2002, we generated sufficient taxable income to utilize these tax credits, and thus realized the current portion of the net deferred tax assets recorded at December 31, 2001. We generated additional tax credits in 2002 and 2003 and believe that the 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, 2002 and 2003.

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

### Inflation

We do not believe that inflation in the ROC has had a material impact on our results of operations.



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

Our financial statements are prepared in accordance with ROC GAAP, which differ in significant 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,			
	2001	2002	2003	2003
	NT\$	NT\$	NT\$	US\$
	-----			
	(in millions)			
Net income (loss) in accordance				
with:				
ROC GAAP .....	(2,142.2)	129.0	2,742.8	80.7
U.S. GAAP .....	(4,046.6)	(3,074.3)	2,352.0	69.2
Shareholders' equity in accordance				
with:				
ROC GAAP .....	41,946.3	39,430.7	45,122.6	1,327.5
U.S. GAAP .....	37,960.3	35,716.8	42,083.0	1,238.1

Note 25 to the consolidated financial statements provides a description of the principal differences between ROC GAAP and U.S. GAAP as they relate to us, and a reconciliation to U.S. GAAP of select items, including net income and shareholders' equity. Differences between ROC GAAP and U.S. GAAP, which primarily affect our net income as reported under ROC GAAP, relate to impairment of goodwill and long-term investments and compensation expense pertaining to bonuses to employees, directors and supervisors.

Effective January 1, 2002, we adopted U.S. SFAS No. 142, "Goodwill and Other Intangible Assets", which requires that goodwill no longer be amortized, and instead, be tested for impairment annually, or more frequently if events or changes in circumstances indicate that the asset might be impaired. In conjunction with the implementation of U.S. SFAS No. 142, we completed a goodwill impairment review as of January 1, 2002 in accordance with the provisions of the standard and found no impairment. SFAS No. 142 also required that companies discontinue amortizing goodwill and other indefinite lived assets beginning January 1, 2002. This resulted in a decrease in amortization expense of approximately NT\$815.6 million and NT\$819.3 million (US\$24.1 million) in 2002 and 2003, respectively, which continues to be recorded for ROC GAAP purposes. We completed our annual goodwill impairment tests as of December 31, 2002 and determined that NT\$2,213.0 million of the goodwill attributable to shares of ASE Test was impaired and accordingly wrote-off the full amount of the goodwill. No impairment charges were recorded for goodwill, attributable to other reporting units, for the year ended December 31, 2003.

ROC GAAP and U.S. GAAP require an assessment of impairment of long-term investments whenever events or circumstances indicate a decline in value may be other-than-temporary. The criteria for determination 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 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 market price is deemed to be a result of an inactive market, another measure of fair value may be used. As such, when determining whether an other-than-temporary impairment occurred in our long-term investment in Hung Ching as of December 31, 2002, the fair value, under ROC GAAP, was based on the difference between the carrying value and the net-asset value of Hung Ching

with adjustments made to significant assets of Hung Ching using appraised values and other appropriate information. Using this method under ROC GAAP, we determined that no impairment occurred in our long-term investment in Hung Ching in 2002. Under U.S. GAAP, we determined an other-than-temporary impairment occurred in our long-term investment in Hung Ching as of December 31, 2002 in the amount of NT\$883.6 million. We did not record any impairment charge for long-term investments in 2003.

In 2001, we purchased 2,480,000 shares of ASE Test from two of our directors following their exercise of employee stock options in ASE Test shares. We entered into the transaction in order to maintain our investment in ASE Test at a level above 50% of the outstanding shares of ASE Test. We purchased these shares directly from these two directors based on a 10-day average of the market price of the shares. Although we entered into the transaction in order to maintain our majority ownership of ASE Test and not for compensation purposes, under U.S.

56

GAAP, all shares issued upon the exercise of employee incentive stock options which are repurchased by the ASE Test or ASE Test's affiliates within six months of exercise results in compensation expense, which in our case equals the excess of the purchase price over the exercise price. The transaction resulted in a US\$26.7 million increase in ASE Test's compensation expense and a corresponding increase in ASE Test's capital surplus, which in turn led to a NT\$908.7 million increase in ASE Inc.'s compensation expense. See "Item 7. Major Shareholders and Related Party Transactions -- Related Party Transactions".

In 1999, three of our consolidated subsidiaries sold an aggregate of 32.5 million of ASE Inc.'s common shares in open market sales. Under U.S. GAAP, when a subsidiary holds its parent's common shares as investments, the common shares are treated as treasury stock and are presented in the consolidated balance sheet as a deduction to shareholders' equity. The capital gain or loss from the sale of treasury stock is added to or deducted from the balance of treasury stock. Under ROC GAAP, this treatment is not required and, as a result, the investment in ASE Inc. common shares by its subsidiaries is presented as long-term investment in the consolidated balance sheet and the capital gain or loss from the sale of treasury stock is recognized as income or loss. As a result of these transactions, we recognized under ROC GAAP capital gains on sale of investments of NT\$1,388.5 million in 1999. Under U.S. GAAP, these investments in ASE Inc.'s common shares should be classified as treasury stock and the capital gain is not recognized as income but is deducted from treasury stock under capital surplus. Effective January 1, 2002, we adopted the ROC Statement of Financial Accounting Standards No. 30, "Accounting for Treasury Stock", which is similar to the accounting and financial statement presentation under U.S. GAAP except the minority ownership portion is deducted from the gross amount of treasury stock for ROC GAAP reporting purposes.

We typically pay all or a portion of employee bonuses in the form of common shares. We paid employee bonuses in 2000 and 2001 in the form of common shares with respect to the results of the preceding fiscal years. We did not pay any employee bonuses in the form of common shares in 2002 or 2003 because we incurred a net loss in 2001 and had minimal net income in 2002. The number of common shares distributed as part of employee bonuses is obtained by dividing the total nominal NT dollar amount of the bonus to be paid in the form of common shares by the par value of the common shares, or NT\$10 per share, rather than their market value, which has generally been substantially higher than par value. Under ROC GAAP, the distribution of employee bonus shares is

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

treated as an allocation from retained earnings, and we are not required to, and do not, charge the value of the employee bonus shares to employee compensation expense. Under U.S. GAAP, however, we are required to charge the market value of the employee bonus shares to employee compensation expense in the period to which they relate, and correspondingly reduce our net income and income per common share. See "Item 6. Directors, Senior Management and Employees -- Compensation -- ASE Inc. Employee Bonus and Stock Option Plans".

The amount and the form of the payment of this compensation is subject to approval at our annual general shareholders' meeting. Under U.S. GAAP, the compensation expense is initially accrued at the nominal NT dollar amount of the aggregate bonus in the period to which it relates. For U.S. GAAP purposes, the difference between the amount initially accrued and the market value of the common shares issued as payment of all or any part of the bonus is recorded as employee compensation expense in the period in which shareholders' approval is obtained, which normally occurs during the second quarter of each year. The amount of the adjustment for market price for the purpose of U.S. GAAP reconciliation for the special stock bonus paid in 2000 was allocated over a period of three years commencing in the second quarter of the year following the year in which the bonus was paid, reflecting the additional length of service required from employees who received the special stock bonus.

### Recent U.S. GAAP Accounting Pronouncements

In June 2001, the FASB issued U.S. SFAS No. 143, "Accounting for Asset Retirement Obligations". The statement requires, among other provisions, retirement obligations to be recognized when they are incurred and displayed as liabilities, with a corresponding amount capitalized as part of the related long-lived asset. The capitalized element is required to be expensed using a systematic and rational method over its useful life. We adopted U.S. SFAS No. 143 on January 1, 2003, which did not have a material impact on our U.S. GAAP financial information.

In June 2002, the FASB issued U.S. SFAS No. 146, "Accounting for Costs Associated with Exit or Disposal Activities", which requires that costs associated with exit or disposal activities be recognized when they are incurred rather than at the date of a commitment to an exit or disposal plan. Costs covered by the statement include lease

57

termination costs and certain employee severance costs that are associated with a restructuring, discontinued operations, plant closing, or other exit or disposal activity. SFAS No. 146 replaces the previous accounting guidance provided by the Emerging Issues Task Force Issue No. 94-3, "Liability Recognition for Certain Employee Termination Benefits and Other Costs to Exit an Activity (including Certain Costs Incurred in a Restructuring)." SFAS No. 146 is to be applied prospectively to exit or disposal activities initiated after December 31, 2002 and adoption of this statement did not have a material impact on our financial position, results of operations or cash flows.

In November 2002, the FASB issued Interpretation Number ("FIN") No. 45, "Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Other". This interpretation requires certain disclosures to be made by a guarantor in its interim and annual financial statements about its obligations under certain guarantees that it has issued. It also requires a guarantor to recognize, at the inception of a guarantee, a liability for the fair value of the obligation undertaken in issuing the guarantee. The disclosure requirements of FIN No. 45 are effective

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

for interim and annual periods ending after December 15, 2002 and have been adopted in the financial statements. The initial recognition and initial measurement requirements of FIN No. 45 are effective prospectively for guarantees issued or modified after December 31, 2002. The adoption of the recognition and initial measurement requirements of FIN No. 45 did not have a material impact on our financial position, cash flows or results of operations.

In January 2003, the FASB issued FASB Interpretation No. 46, "Consolidation of Variable Interest Entities" ("FIN 46"). FIN 46 clarifies the application of Accounting Research Bulletin No. 51, "Consolidated Financial Statements" and provides guidance on the identification of entities for which control is achieved through means other than voting rights ("variable interest entities" or "VIEs") and how to determine when and which business enterprise should consolidate the VIEs. This new model for consolidation applies to an entity in which either: (1) the equity investors (if any) lack one or more characteristics deemed essential to a controlling financial interest or (2) the equity investment at risk is insufficient to finance that entity's activities without receiving additional subordinated financial support from other parties. FIN 46 was applicable for periods ending December 15, 2003. In December 2003 the FASB issued FIN 46R, which defers the implementation date to the end of the first reporting period after March 15, 2004 unless the company has a special purpose entity, in which case the provisions must be applied for fiscal years ending December 31, 2003. We do not have a special purpose entity therefore will adopt the provisions in December 2004.

In November 2002, the FASB Emerging Issues Task Force ("EITF") reached a consensus on EITF 00-21, "Revenue Arrangements with Multiple Deliverables," related to the timing of revenue recognition for arrangements in which goods or services or both are delivered separately in a bundled sales arrangement. The EITF requires that when the deliverables included in this type of arrangement meet certain criteria, they should be accounted for separately as separate units of accounting. This may result in a difference in the timing of revenue recognition but will not result in a change in the total amount of revenue recognized in a bundled sales arrangement. The allocation of revenue to the separate deliverables is based on the relative fair value of each item. If the fair value is not available for the delivered items then the residual method must be used. This method requires that the amount allocated to the undelivered items in the arrangement is their full fair value. This would result in the discount, if any, being allocated to the delivered items. This consensus is effective prospectively for arrangements entered into in fiscal periods beginning after June 15, 2003. The adoption of this consensus did not have a material impact on the our financial position, cash flows or results of operations.

In May 2003, the FASB issued SFAS No. 150, "Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity." The statement establishes standards for how an issuer classifies and measures certain financial instruments. This statement is effective for financial instruments entered into or modified after May 31, 2003, and otherwise is effective at the beginning of the first interim period beginning after June 15, 2003. The statement requires that certain financial instruments that, under previous guidance, issuers could account for as equity be classified as liabilities (or assets in some circumstances) in statement of positions or consolidated balance sheets, as appropriate. The financial instruments within the scope of this statement are: (i) mandatorily redeemable shares that an issuer is obligated to buy back in exchange for cash or other assets; (ii) financial instruments that do or may require the issuer to buy back some of its shares in exchange for cash or other assets; and (iii) financial instruments that embodies obligation that can be settled with shares, the monetary value of which is

fixed, tied solely or predominantly to a variable such as a market index, or varies inversely with the value of the issuer's shares (excluding certain financial instruments indexed partly to the issuer's equity shares and partly, but not predominantly, to something else). This statement does not apply to features embedded in a financial instrument that is not a derivative in its entirety. The statement also requires disclosures about alternative ways of settling the instruments and the capital structure of entities, all of whose shares are mandatorily redeemable. The adoption of SFAS No. 150 did not have a material impact on our financial position, cash flows or results of operations.

#### LIQUIDITY AND CAPITAL RESOURCES

We have historically been able to satisfy our working capital needs from 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 and testing 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 semiconductor 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. We have not historically relied, and we do not plan to rely in the foreseeable future, on off-balance sheet financing arrangements to finance our working capital or capacity expansion.

Net cash provided by operating activities amounted to NT\$13,306.2 million (US\$391.5 million) in 2003, partly as a result of adjusting for non-cash depreciation and amortization, including amortization of consolidated debits, of NT\$13,585.8 million (US\$399.7 million). Net cash provided by operating activities amounted to NT\$11,313.8 million in 2002, partly as a result of adjusting for non-cash depreciation and amortization, including amortization of consolidated debits, of NT\$13,101.9 million. Net cash provided by operating activities amounted to NT\$11,578.4 million in 2001, partly as a result of adjusting for non-cash depreciation and amortization, including amortization of consolidated debits, of NT\$11,820.2 million. The increase in net cash generated by operating activities in 2003 compared to 2002 was primarily due to a significant increase in net income from NT\$129.0 million in 2002 to NT\$2,742.8 million (US\$80.7 million) in 2003, and adjustments for loss on long-term investments of NT\$354.8 million (US\$10.4 million) in 2003 due to the recognition of a loss for the sale of our common shares by our wholly-owned subsidiary ASE Capital Inc. in connection with our ADS offering in June 2003. Depreciation and amortization increased in 2002 and 2003 compared to the prior year primarily due to an increase in capital expenditure in 2002 and the first half of 2003.

Net cash used in investing activities amounted to NT\$18,572.6 million (US\$546.4 million) in 2003, primarily as a result of the acquisition of properties, such as machinery and equipment for our packaging, testing and interconnect materials operations, of NT\$17,534.1 million (US\$515.9 million), and for short-term investments of NT\$371.6 million (US\$10.9 million). Net cash used in investing activities amounted to NT\$13,719.7 million in 2002, primarily

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

due to the increase in pledged time deposits and other assets of NT\$1,119.1 million, the acquisition of properties of NT\$12,657.9 million and the purchases of ASE Test shares and ISE Labs shares of NT\$2,072.1 million. Net cash used in investing activities decreased to NT\$13,719.7 million in 2002 from NT\$17,302.0 million in 2001. This decrease reflected a decline in short-term investments of NT\$2,112.1 million in 2002, as compared to an increase of NT\$2,913.6 million in 2001, and a decline in the acquisition of ASE Test shares to NT\$317.0 million in 2002 from NT\$1,202.2 million in 2001, partially offset by the purchase of NT\$1,755.1 million of ISE Labs shares in 2002.

Net cash provided by financing activities in 2003 was NT\$4,210.9 million (US\$123.9 million). This amount reflected proceeds from the sale of ASE Inc. common shares of NT\$2,850.5 million (US\$83.9 million) and proceeds from our issuance of foreign convertible bonds of NT\$6,684.9 million (US\$196.7 million), which was partially offset by the early redemption of foreign convertible bonds totaling NT\$4,908.4 million (US\$144.4 million). Net cash provided by financing activities in 2002 amounted to NT\$530.5 million. This amount reflected proceeds from short-term and

59

long-term debt of NT\$3,536.8 million, which was partially offset by the reduction in commercial papers and bank acceptances payable of NT\$1,739.3 million, and payment of NT\$1,674.1 million for the repurchase of the remaining outstanding portion of our US\$200 million zero coupon convertible bonds due 2002. Net cash provided by financing activities in 2001 was NT\$2,854.5 million. This amount primarily reflected proceeds from long-term debt of NT\$9,746.6 million, which was partially offset by the payment of NT\$6,066.0 million for the repurchase of a portion of our US\$200 million zero coupon convertible bonds due 2002 and the contribution to a sinking fund in connection with our US\$200 million zero coupon convertible bonds due 2002 of NT\$1,568.1 million.

As of December 31, 2003, our primary source of liquidity was NT\$8,562.4 million (US\$251.9 million) of cash and cash equivalents and NT\$3,017.8 million (US\$88.8 million) of short-term investments. Our short-term investments primarily consisted of investments in fixed income mutual funds. As of December 31, 2003, we had total unused short-term credit lines of NT\$7,654.0 million (US\$225.2 million), and total unused long-term credit lines of NT\$3,622.1 million (US\$106.6 million). We believe that our existing credit lines under our short-term loan facilities, together with cash generated from our operations, are sufficient to finance our working capital needs for the next 12 months. As of December 31, 2003, we had working capital of NT\$3,795.9 million (US\$111.7 million).

As of December 31, 2003, we had total borrowings of NT\$42,620.3 million (US\$1,253.9 million), NT\$6,124.2 million (US\$180.2 million) of which were short-term borrowings and NT\$36,496.1 million (US\$1,073.7 million) of which were long-term borrowings. The interest rate for borrowings under our short-term borrowings ranged from 0.86% to 6.00% per year as of December 31, 2003. All of our short-term loans are revolving facilities with a term of one year, each of which may be extended on an annual basis with lender consent. Our long-term borrowings consist primarily of bank loans and bonds payable. As of December 31, 2003, we had outstanding long-term borrowings, less current portion, of NT\$30,840.1 million (US\$907.3 million). As of December 31, 2003, the current portion of our long-term borrowings was NT\$5,656.0 million (US\$166.4 million). Our long-term borrowings carried variable interest rates which ranged between 0.83% and 7.92% per year as of December 31, 2003.

We have pledged a portion of our assets, with a carrying value of

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

NT\$12,216.0 million (US\$359.4 million) as of December 31, 2003, to secure our obligations under our short-term and long-term facilities.

In January 2004, we issued eleven series of secured non-convertible bonds in the aggregate principal amount of NT\$2.75 billion. These bonds bear semi-annual interest at floating LIBOR-based rates. We are required to repay half of the aggregate principal amount of the bonds in January 2008 with the remaining due in January 2009. Our payment obligations under the bonds are secured by guarantees provided by syndicate banks pursuant to a guarantee agreement entered into in December 2003, for which Chinatrust Commercial Bank, Ltd. and The Hongkong and Shanghai Banking Corporation Limited, Taipei Branch acted as arrangers.

In September 2003, we issued US\$200 million in aggregate principal amount of unsecured zero coupon convertible bonds due 2008. The convertible bonds are convertible into our common shares and ADSs. As of May 31, 2004, these convertible bonds are convertible into our common shares at a conversion price of NT\$37.716 per common share. As of May 31, 2004, none of the convertible bonds had been converted.

In September 2003, we entered into a NT\$7.0 billion (US\$205.9 million) five-year syndicated credit facility, for which Citibank, N.A., Taipei Branch acted as the lead manager. We used NT\$3.0 billion (US\$88.3 million) of the amount available to refinance our NT\$6.0 billion syndicated loan facility, for which Citibank, N.A., Taipei Branch acted as the lead manager, entered into on December 11, 2001. The remaining NT\$4.0 billion (US\$117.7 million) was used to fund our capital expenditure requirements.

In August 2003, ASE Test redeemed US\$159.9 million aggregate principal amount of the US\$160 million 1% guaranteed convertible notes due 2004 issued through its finance subsidiary. The early redemption of the US\$160 million 1% guaranteed convertible notes due 2004 was financed in part through a five-year syndicated credit facility entered into in June 2003 by ASE Test Finance Limited, a wholly-owned finance subsidiary of ASE Test. The total commitments under the facility totaled US\$150 million. ASE Inc., ASE Test and ASE Test's wholly-owned subsidiary, ASE Test, Inc., provided guarantees for ASE Test Finance Limited's payment obligations under the facility.

60

In June 2003, our wholly-owned subsidiaries, ASE Investment Inc. and ASE Capital Inc., sold an aggregate of 32,757,600 of our ADSs. The net proceeds from the offering were approximately NT\$2,850.5 million (US\$83.9 million). We used the net proceeds to repay borrowings of ASE Inc. in an aggregate principal amount of NT\$6.0 billion (US\$176.5 million), borrowings of ASE Investment Inc. in an aggregate principal amount of NT\$1.2 billion (US\$35.3 million) and borrowings of ASE Capital Inc. in an aggregate principal amount of NT\$150 million (US\$4.4 million). In addition, pursuant to a merger agreement dated July 17, 2002, ASE Investment Inc. and ASE Capital Inc. merged with and into ASE Inc. in July 2003, and ASE Inc. assumed all of the assets and liabilities of both ASE Investment Inc. and ASE Capital Inc.

In December 2002, we entered into a NT\$7.0 billion (US\$205.9 million) three-year syndicated credit facility, for which Citibank, N.A., Taipei Branch acted as the lead arranger. We used NT\$5.2 billion (US\$153.0 million) of the amount available under the facility to refinance a NT\$5.2 billion (US\$153.0 million) syndicated credit facility, for which Citibank, N.A., Taipei Branch acted as the lead arranger, entered into on June 22, 2001. The remaining NT\$1.8 billion (US\$53.0 million) was used to repay a portion of our existing revolving

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

credit lines.

In November 1997, we issued US\$200 million in aggregate principal amount of zero coupon convertible bonds due 2002. These bonds had an implied interest rate of 6.37%, and were convertible into our common shares. These bonds, which matured in November 2002, were convertible at the option of the holders from December 1997 through October 2002. As of November 2002, we had repurchased in the open market all of the outstanding bonds.

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 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.

As a result of the reduced levels of operating cash flow due primarily to the recent downturn in the worldwide semiconductor industry, 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. We have obtained waivers from the relevant lenders relating specifically to such non-compliance. We cannot assure you that we will be able to remain in compliance with our financial covenants under our loan agreements. In the event of default, we may not be able to cure the default or obtain a waiver, and our operations could be significantly disrupted and harmed. See "Item 3. Key Information--Risk Factors--Risks Relating to Our Business--Restrictive covenants and broad default provisions in the agreements governing our existing debt 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, 2003, we endorsed and guaranteed the promissory notes of our subsidiaries in the amount of NT\$12,114.2 million (US\$356.4 million). Other than such guarantees, we have no other contingent obligations. See note 20 to the consolidated financial statements.

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,			
	2001	2002	2003	
	NT\$	NT\$	NT\$	US\$
	(in millions)			
Machinery and equipment .....	8,024.9	13,786.8	14,833.9	436.4
Building and improvements .....	3,540.8	1,963.0	2,400.4	70.6



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

We have budgeted capital expenditures of approximately NT\$23.8 billion (US\$700 million) for 2004, primarily to purchase machinery and equipment in connection with the expansion of our packaging, testing, and interconnect materials 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 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 and cash equivalents, short-term investments, expected cash flow from operations and existing credit lines under our short-term 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. As of December 31, 2003, we had contractual obligations of NT\$25,187.2 million (US\$741.0 million) due in the next three years. We intend 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. We currently have no commitments to make any material investment, acquisition or divestment. In July 2000, our shareholders approved a resolution which authorizes our board of directors to make investments in the PRC. However, the ROC government currently restricts certain types of investments by ROC companies in the PRC. We intend to consider establishing semiconductor packaging, testing and interconnect materials operations in the PRC if ROC investment law and policy is amended to permit such investments, and if suitable opportunities are available at that time.

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, 2003, there were no outstanding interest rate swap transactions. We have entered into foreign currency option contracts and forward exchange contracts to hedge our existing assets and liabilities denominated in foreign currencies and identifiable foreign currency purchase commitments. As of December 31, 2003, we had US\$510.0 million outstanding in foreign currency option contracts and no forward exchange contracts outstanding. In October 2003, we entered into cross-currency swap contracts to hedge against reductions in value caused by changes in foreign currency exchange rates in connection with the proceeds received from our offering of US\$200 million unsecured zero coupon convertible bonds due 2008. See "Item 11. Quantitative and Qualitative Disclosures about Market Risk" and note 22 to the consolidated financial statements included elsewhere in this annual report.

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

### RESEARCH AND DEVELOPMENT

For 2001, 2002 and 2003, our research and development expenditures totaled approximately NT\$1,504.5 million, NT\$2,049.0 million and NT\$2,354.0 million (US\$69.3 million), respectively. These expenditures represented approximately 3.9%, 4.5% and 4.1% of net revenues in 2001, 2002 and 2003, respectively. We have historically expensed all research and development costs as incurred and none is currently capitalized. As of May 31, 2004, we employed 1,680 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 the new

62

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. We expect these efforts to continue. We are now also putting significant research and development efforts into the development and adoption of new technology. We work closely with the manufacturers of our packaging equipment, including Kulicke & Soffa Industries Inc., in designing and modifying the equipment used in our production process. We also work closely with our customers to develop new product and process technology.

A significant portion of our research and development efforts is also focused on the development of advanced substrate production technology for BGA packaging through ASE Material. Substrate is the principal raw material for BGA 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 the successful development of substrate production capability by ASE Material will, among other things, enable us to capture an increasingly important value-added component of the packaging process, help ensure a stable and cost-effective supply of substrates for our BGA packaging operations and shorten production time. In 2002, ASE Material supplied approximately one-half of our substrate requirements by value. On October 28, 2003, we entered into a merger agreement to merge ASE Material with and into ASE Inc., with ASE Inc. as the surviving corporation. In addition, on October 28, 2003, we entered into a joint venture agreement with Compeq to establish ASE-Compeq Technologies, Inc., which will focus on the design and production of interconnect materials for packaging semiconductors. See "Item 4. Information on the Company - History and Development of the Company".

#### Testing

Our research and development efforts in the area of testing have focused primarily on improving the efficiency and technology of our testing processes. The 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 semiconductors, automatic code generation for converting and writing testing programs, testing new products using existing machines and providing customers remote access to monitor test

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

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.

### OFF-BALANCE SHEET ARRANGEMENTS

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

### TABULAR DISCLOSURE OF CONTRACTUAL OBLIGATIONS

The following table sets forth the maturity of our contractual obligations as of December 31, 2003.

	Payments Due by Period			
	Total	Under 1 Year	1 to 3 Years	3 to 5 Year
	NT\$	NT\$	NT\$ (in millions)	NT\$
<b>Contractual Obligations:</b>				
Long-term debt (1) .....	36,226.0	5,491.4	14,169.0	13,755.0
Capital lease obligations (2)	270.1	164.6	104.0	1.0
Operating leases (3) .....	3,318.8	998.4	1,725.6	359.0
Payable for investment (4) ..	2,310.0	2,310.0	--	--
Purchase obligations (5) ....	224.2	224.2	--	--
Total (6) (7) (8) .....	42,349.1	9,188.6	15,998.6	14,117.0

63

-----  
(1) Excludes interest payments.

(2) Represents our commitments under property leases. These obligations are recorded on our consolidated balance sheets. See note 20 to our consolidated financial statements.

(3) See note 20 to our consolidated financial statements.

(4) Relates to our earn-out arrangement with Motorola in connection with our acquisition of ASE Chung Li and ASE Korea in 1999. Under this arrangement, a portion of the purchase price is paid in installments ending in July 2004, contingent upon certain targets of revenues from packaging and testing services provided to Motorola being met. See "Item 4. Information on the Company -- History and Development of the Company -- ASE Chung Li and ASE Korea".

(5) Represents unpaid commitments for construction. These commitments are not

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

recorded on our consolidated balance sheets as of December 31, 2003. See note 20 to our consolidated financial statements. Total commitments for construction of buildings were approximately NT\$625.0 million (US\$18.4 million), NT\$400.8 million (US\$11.8 million) of which had been paid as of December 31, 2003.

- (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. Commission and service fee expenses in 2003 were approximately NT\$973.0 million (US\$28.6 million). Royalty expenses in 2003 were approximately NT\$200.1 million (US\$5.9 million). See note 20 to our consolidated financial statements.
- (7) Excludes non-binding commitments to purchase machinery and equipment of approximately NT\$8,231.0 million (US\$242.2 million) as of December 31, 2003.
- (8) Excludes our minimum pension funding requirements since such amounts have not been determined. We made pension contributions of approximately NT\$113.1 million (US\$3.3 million) in 2003 and we estimate that we will contribute approximately NT\$133.0 million (US\$3.9 million) in 2004. See note 13 to our consolidated financial statements.

### 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 seven-member board of 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 19, 2003. The terms of the current directors will expire on June 18, 2006. Directors may serve any number of consecutive terms and may be removed from office at any time for a valid reason by a resolution adopted at a general meeting of shareholders. Normally, all board members are elected at the same time, 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.

Under Rule 10A-3 of the Exchange Act and the rules of the New York Stock Exchange, we are required to have an audit committee that meets certain requirements by July 31, 2005. We are currently in the process of reviewing examples of audit committee charters and considering candidates for appointment as audit committee members with a view to fully complying with these new requirements in the specified time period, including the appointment of an audit committee financial expert, as defined under Item 16A of Form 20-F.

The following table sets forth information regarding all of our directors as of June 15, 2004.

Name	Position	Director Since	Age	Other S Posit
Jason C.S. Chang(1)	Director, Chairman and	1984	60	Chairman of ASE

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

Name	Position	Director Since	Age	Other S Posit
Richard H.P. Chang(1).....	Chief Executive Officer Director, Vice Chairman and President	1984	57	ASE Test Taiwan Vice Chairman of of Universal Sci
Joseph Tung(2).....	Director and Chief Financial Officer	1997	45	Supervisor of Un Director of ASE
Chin Ko-Chien(2).....	Director and Executive Vice President	1997	58	Director of ASE

64

Name	Position	Director Since	Age	Other S Posit
David Pan(2).....	Director	1997	59	Director of ASE
Jeffrey Chen(2).....	Director and Vice President	2003	40	Director of ASE
Tien Wu(2).....	Director	2003	46	Chief Executive

(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 19.3% of our outstanding common shares as of May 31, 2004. 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.

Supervisors

We currently have five supervisors, each serving a three-year term. The current supervisors began serving on June 15, 2004, and their terms will expire on June 14, 2007. The supervisors' duties and powers include investigation of our business condition, inspection of our corporate records, verification and review of financial statements 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 or in contravention of our Articles of Incorporation. 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 directors as of June 15, 2004.

Name	Position	Supervisor Since	Age	Other S Posit
Feng Mei-Jean(1).....	Supervisor	1984	49	Supervisor of AS
Yen-Yi Tseng(2).....	Supervisor	2000	63	Chairman of Hung

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

Alan Cheng (2) .....	Supervisor	1997	59	Director of ASE
John Ho (2) .....	Supervisor	1998	49	Director of Univ
Raymond Lo (2) .....	Supervisor	2000	50	President of ASE

-----

- (1) Feng Mei-Jean is the wife of Richard H.P. Chang.
- (2) Representative of ASE Enterprises.

In accordance with ROC law, each of our directors and supervisors is elected either in the 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. Of the current directors and supervisors, nine represent ASE Enterprises. 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 June 15, 2004.

Name	Position	Years with the Company
-----		
Jason C.S. Chang.....	Chairman and Chief Executive Officer	20
Richard H.P. Chang.....	Vice Chairman and President	20
Chin Ko-Chien.....	Executive Vice President and General Manager, Kaohsiung packaging facility	20
Raymond Lo.....	President, ASE Test; President of ASE Test Taiwan	18

65

Name	Position	Years with the Company
-----		
Tien-Sgu (T.S.) Chen.....	President, ASE Chung Li	12
Joseph Tung.....	Chief Financial Officer	9
Kanapathi A/L Kuppusamy.....	President, ASE Test Malaysia	5
Sang Jin Maeng.....	President, ASE Korea	5
Tien Wu.....	Chief Executive Officer, ISE Labs	4

### 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. Mr. Chang is also the Chairman of ASE Test. 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.

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

Richard H.P. Chang has served as Vice Chairman of ASE Inc. since November 1999 after having served as President of ASE Inc. since its founding in March 1984, and served as Chief Executive Officer of ASE Inc. from July 2000 to April 2003. In February 2003, he was again appointed President of ASE Inc. upon the retirement of Mr. Leonard Y. Liu. Mr. Chang is also the Vice Chairman of ASE Test. 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.

Joseph Tung has served as a director of ASE Inc. since April 1997 and Chief Financial Officer since December 1994. He is also a director of ASE Test. 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.

Chin Ko-Chien has served as a director of ASE Inc. since March 1984 and Executive Vice President and General Manager of our packaging facility in Kaohsiung, Taiwan since March 1990. Mr. Chin is also a director of ASE Test. Before joining ASE Inc., he held managerial positions at Fu Hua Construction Co. Ltd. and De Ji Trading Company. He holds a degree in bearings technology from Taiwan Ocean University.

David Pan has served as a director of ASE Inc. since April 1997 and as a director of ASE Test since November 1995. Before joining ASE Test, Mr. Pan was the Vice President responsible for research and development at Ultratech Stepper Inc. He holds a degree in physics from the University of Illinois and master's and doctorate degrees in physics from the University of California at Berkeley.

Jeffrey Chen has served as a director of ASE Inc. since June 2003 and a director of ASE Test since 1998. He is also a Vice President of ASE Inc. and a Special Assistant to the Chairman of ASE Inc. He was the Chief Financial Officer of ASE Test from July 1998 to August 2002. Prior to joining the ASE group, he worked in the corporate banking department of Citibank, N.A., in Taipei and as the 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.

Tien Wu has served as a director of ASE Inc. since June 2003 and the Chief Executive Officer of ISE Labs since March 2003. He also serves as the Vice 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 B.S.C.E. degree from the National Taiwan University and a M.S. degree in mechanical engineering and a Ph.D. in applied mechanics from the University of Pennsylvania.

Feng Mei-Jean has served as a supervisor of ASE Inc. since March 1984. She holds a degree in economics from National Taiwan University. She is the wife of Richard H.P. Chang, our Vice Chairman and President.

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

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

of Technology in Thailand. He was also a participant in the Program for Management Development at Harvard Business School.

Alan Cheng has served as a supervisor of ASE Inc. since April 1997. Mr. Cheng served as the Chairman of Hung Ching from April 1997 to July 2002. He holds a degree in industrial engineering from Chung-Yuan University.

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.

Raymond Lo has served as a supervisor of ASE Inc. since July 2000 and President of ASE Test since April 2004, after serving as President of ASE Test Taiwan since 1999 and Vice President of Operations of ASE Inc. since July 1993. 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.

Kanapathi A/L Kuppusamy has served as President of ASE Test Malaysia since July 1999. Before joining ASE Test Malaysia, Mr. Kanapathi was President of Motorola Asia Final Manufacturing. He holds a master's degree in business administration from the University of East Asia in Kuala Lumpur, Malaysia.

Sang Jin Maeng has served as President of ASE Korea since January 2004, after serving as Senior Vice President of ASE Korea since July 1999. Mr. Maeng was Vice President of Motorola Korea, Limited before joining ASE Korea when we acquired Motorola Korea, Limited. He holds a degree in communication and electronic engineering from the Civil Aviation College of Korea.

Tien-Sgu (T.S.) Chen has served as President of ASE Chung Li since July 2003. He served as manufacturing director of ASE Inc.'s packaging facility in Kaohsiung, Taiwan from 1992, plant manager from May 1998 and Vice President of Operations of ASE Inc. from January 2000 to June 2003. He holds a degree in industrial engineering from Chung-Yuan Christian University of Taiwan.

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

### COMPENSATION

In 2003, we paid to our directors, supervisors and executive officers approximately NT\$128.4 million (US\$3.8 million) in cash remuneration. In August 2003, we granted an aggregate of 900,000 options to our directors, supervisors and executive officers under our employee stock option plan at an initial exercise price of NT\$24.60 per share. We did not grant any common shares of ASE Inc. in 2003 to our directors, supervisors and executive officers. In 2003, we also set aside an aggregate of NT\$1.58 million (US\$0.05 million) to provide pension, retirement and similar benefits for our executive officers pursuant to existing plans provided by or contributed to by our company or its subsidiaries. We did not pay any remuneration in kind to our directors, supervisors or executive officers in 2003. We have not granted any loans or guarantees to any of our directors, supervisors or executive officers.

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

We award bonuses to employees of ASE Inc. and its affiliates who are located in Taiwan based on overall income and individual performance targets. These employees are eligible to receive bonuses in the form of common shares of



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

ASE Inc. valued at par. Actual amounts of bonuses to individual employees are determined based upon the employee meeting specified individual performance objectives. We granted an aggregate of 34,960,000 common shares in 2001 as stock bonuses to employees of ASE Inc. and its affiliates with a fair market value at the date of grant of NT\$830.6 million. We did not grant any stock bonuses to employees of ASE Inc. or its affiliates in 2002 or 2003. At our annual shareholders' meeting held on June 15, 2004, our shareholders approved the grant of 15,427,203 common shares as stock bonuses and NT\$18.4 million (US\$0.5 million) as cash bonuses to employees.

We currently maintain two option plans, which include plans adopted in 2002 and 2004. Pursuant to these plans, full-time employees of ASE Inc. as well as the full-time employees of our domestic and foreign subsidiaries are

67

eligible to receive stock option grants. Under the 2002 plan, for a period of one year from August 28, 2002, we could issue up to 160,000,000 options on one or more occasions. Under the 2004 plan, for a period of one year from May 27, 2004, we can issue up to 140,000,000 options on one or more occasions. Each option entitles the holder to purchase one common share of ASE Inc. at a price equal to the closing market price on the date of the option issuance. Each option is exercisable upon vesting for five years. 40% 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 10th year following its issue date. The options are generally not transferable. As of December 31, 2003, a total of 159,968,000 options had been issued under the 2002 plan, 145,989,000 of which have an exercise price of NT\$18.90 per share and 13,979,000 of which have an exercise price of NT\$24.60 per share. No options have been granted under the 2004 plan.

### ASE Test Share Option Plans

ASE Test currently maintains five option plans, which include plans adopted in each year from 1996 to 2000. The board of directors has also approved a sixth option plan, which became effective on June 25, 2004. Under ASE Test's share option plans, its directors and the employees, advisors and consultants of ASE Test and its affiliates may, at the discretion of a committee of its directors administering the plan, be granted options to purchase its shares at an exercise price of no less than their market value on the date of grant. The committee has complete discretion to determine which eligible individuals are to receive option grants, the number of shares subject to each grant, the vesting schedule for each option grant and the maximum term for which each granted option is to remain outstanding, up to a maximum term of five years, or in the case of the 1999, 2000 and 2004 option plans, ten years. ASE Test's board of directors may amend or modify the plans at any time. As of December 31, 2003, an aggregate of 28,800,000 of ASE Test's shares had been reserved for issuance and 13,301,418 options to purchase its shares remained outstanding under its various option plans. An aggregate of 7,695,000 options (of which 2,920,000 had expired as of December 12, 2003) had been granted to the directors and executive officers of ASE Test. Options granted under the various plans are exercisable at exercise prices ranging from US\$3.00 to US\$25.00 per share. Options granted under the 1996, 1997 and 1998 option plans will expire five years from the date of grant, and in the case of the 1999, 2000 plans and the 2004 plans, ten years from the date of grant.

For information regarding the pension and other retirement plans of ASE Inc. and our subsidiaries, see note 13 to the consolidated financial statements included elsewhere in this annual report.

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

### Interests of Management in Related Party Transactions

Several of our directors, supervisors and executive officers also serve as directors, supervisors or executive officers of companies with which we do business. These companies include our affiliates. See "Item. 7--Major Shareholders and Related Party Transactions--Related Party Transactions". We conduct these transactions on an arms' length commercial basis.

### EMPLOYEES

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

	As of December 31,			
	2000	2001	2002	2003
Total .....	18,121	15,681	20,401	24,443
Function				
Direct labor .....	12,011	9,690	13,059	15,808
Indirect labor (manufacturing) .....	3,577	3,366	4,264	5,389
Indirect labor (administration) .....	1,370	1,350	1,517	1,704
Research and development .....	1,163	1,275	1,561	1,542
Location				
Taiwan .....	12,430	10,811	15,061	18,202
Malaysia .....	3,407	2,854	3,140	4,207
Korea .....	965	885	1,305	1,617
United States .....	523	438	361	273

68

	As of December 31,			
	2000	2001	2002	2003
Philippines(1) .....	568	571	461	20
Singapore .....	104	68	65	116
Hong Kong .....	124	54	8	8

-----  
 (1) In October 2003, we closed our facilities and discontinued our operations in the Philippines.

Eligible employees may participate in the ASE Inc. Employee Share Bonus Plan and Stock Option Plans and the ASE Test Share Option Plans. See "Item 6. Directors, Senior Management and Employees--Compensation of Directors, Supervisors and Executive Officers--ASE Inc. Employee Bonus and Stock Option Plans" and "Item 6. Directors, Senior Management and Employees--Compensation of Directors, Supervisors and Executive Officers--ASE Test Share Option Plans".

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

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

common shares and options exercisable for our common shares held by our directors, supervisors and executive officers as of May 31, 2004.

Executive Officer or Director	Number of ASE Inc. Common Shares Held	Percentage of Total ASE Inc. Common Shares Issued and Outstanding	O
Jason C.S. Chang.....	22,280,327 (1)	0.62%	4,
Richard H.P. Chang.....	40,899,973	1.14	3,
Joseph Tung.....	858,433	0.02	
Chin Ko-Chien.....	587,983	0.02	
David Pan.....	261,948	0.01	
Feng Mei-Jean.....	63,383,829	1.77	
Yen-Yi Tseng.....	21,210	0.00	
Alan Cheng.....	316,466	0.01	
John Ho.....	313,181	0.01	
Raymond Lo.....	528,192	0.01	
Kanapathi A/L Kuppusamy.....	--	--	
Sang Jin Maeng.....	--	--	
Jeffrey Chen.....	526	0.00	
Tien Wu.....	71,258	0.00	
Tien-Sgu (T.S.) Chen.....	900	0.00	

(1) In addition to holding 0.62% 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 19.3% of our common shares. See "Item 7. Major Shareholders and Related Party Transactions -- Major Shareholders".

(2) Each option covers one common share of ASE Inc., has an exercise price of NT\$18.90 and an expiration date of December 24, 2012.

\* 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.

### 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 May 31, 2004, by (1) each shareholder known by us to beneficially own more than 5% of our total outstanding common shares and (2) all directors, supervisors and executive officers as a group.

Name of Shareholder or Group	Common Shares Number
------------------------------	-------------------------

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

ASE Enterprises(1).....	691,235,41
Capital Group International, Inc.(2).....	321,990,42
Directors, supervisors and executive officers as a group(3).....	819,846,31

- 
- (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) Beneficial ownership information as of December 31, 2003 as reported by Capital Group International, Inc.'s Schedule 13G filed with the SEC on February 13, 2004. Capital Group International, Inc. is a company organized under the laws of the state of California. We do not have any information with respect to Capital Group International Inc.'s ownership of our common shares subsequent to its Schedule 13G filed on February 13, 2004.
- (3) Includes shareholding of ASE Enterprises.

The following table sets forth information relating to our common shares held by our consolidated subsidiaries and unconsolidated affiliates as of May 31, 2004.

Name of Shareholder	Common Shares ----- Number
ASE Test Taiwan(1).....	717,98
Hung Ching(2).....	43,489,40

- 
- (1) ASE Test Taiwan is a subsidiary of ASE Test, our subsidiary.
- (2) As of May 31, 2004, we held 26.4% of the outstanding shares of Hung Ching. Chang Yao Hung-ying, who was our director from 1984 to June 2003, our Chairman and Chief Executive Officer, Jason C.S. Chang, our Vice Chairman and President, Richard H.P. Chang, and other members of the Chang family are controlling shareholders of Hung Ching. See "Item 4. Information on the Company--Organizational Structure--Our Unconsolidated Affiliates".

In connection with the proposed merger of ASE Chung Li with and into ASE Inc., we and ASE Test have established a trust to hold and dispose of the 149,175,000 common shares of ASE Inc. to be issued to ASE Test upon completion of the merger. As a result, the trustee appointed under the trust agreement will 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. See "Item 7.--Major Shareholders and Related Party Transactions--Related Party Transactions".

In June 2003, we completed an offering of ADSs in which our wholly-owned subsidiaries ASE Investment Inc. and ASE Capital Inc. together sold 163,788,000 of our common shares. ASE Investment Inc. and ASE Capital Inc. also sold an

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

additional 1,144 of our common shares on the Taiwan Stock Exchange following the ADS offering.

None of our major shareholders has voting rights different from those of our other shareholders. Other than Capital Group International, Inc. becoming the beneficial owner of more than 5% of our outstanding common shares in 2003, there were no changes in our major shareholders or significant changes in the percentage ownership of any of our major shareholders in 2001, 2002 or 2003.

As of May 31, 2004, a total of 3,580,280,000 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 May 31, 2004, 85,519,110 common shares were registered in the name of a

70

nominee of Citibank, N.A., the depository under our ADS deposit agreement. Citibank, N.A., has advised us that, as of May 31, 2004, 17,102,755 ADSs, representing 85,513,775 common shares, were held of record by Cede & Co., and 1,067 ADSs, representing 5,335 common shares, were held by 6 other U.S. persons. We have no further information as to common shares held, or beneficially owned, by U.S. persons.

### RELATED PARTY TRANSACTIONS

In recent years, ASE Inc. has made awards of ASE Inc.'s common shares to the employees of affiliates of ASE Inc. as part of their compensation, based in part on the consolidated net income of ASE Inc. and the affiliates' contribution to the consolidated income. ASE Inc. granted an aggregate of 9,872,725 common shares in 2001 as stock awards to employees of affiliates of ASE Inc. with a fair market value at the time of grant of NT\$234.6 million. At our annual shareholders' meeting held on June 15, 2004, our shareholders approved the grant of 15,427,203 common shares as stock bonuses to employees. ASE Inc. expects this practice to continue in future periods.

ASE Material sold interconnect materials in the aggregate amount of NT\$2,346.9 million, NT\$2,885.6 million and NT\$4,416.3 million (US\$129.9 million) to ASE Inc. in 2001, 2002 and 2003, respectively. In 2003, we purchased approximately 54% of our substrate requirements by value for our packaging facilities from ASE Material. We purchase materials from ASE Material at prevailing market prices.

On October 28, 2003, we entered into a merger agreement with ASE Chung Li and ASE Material pursuant to which ASE Chung Li and ASE Material will be merged with and into ASE Inc., with ASE Inc. as the surviving corporation. The merger is to be consummated by means of a share exchange pursuant to which the respective shareholders (other than ASE Inc.) of ASE Chung Li and ASE Material will receive shares of ASE Inc. in exchange for the common shares of each of ASE Chung Li and ASE Material. We expect to issue 282,315,437 common shares, or approximately 7.9% of our outstanding shares as of October 28, 2003, in connection with the merger. In connection with our merger with ASE Chung Li, we will issue 149,175,000 of our common shares to ASE Test, our consolidated subsidiary, 79,914,225 of our common shares to J&R Holding, our wholly-owned subsidiary, and four common shares to certain individuals who were the original shareholders of ASE Chung Li. The merger with ASE Chung Li has a transaction value of approximately NT\$7,101.8 million (US\$208.9 million), based on NT\$31.00 per ASE Inc. common share, which is the average of the closing prices of ASE Inc.'s common shares on the Taiwan Stock Exchange for two days prior to and

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

following October 28, 2003. In connection with our merger with ASE Material, we will issue 5,000,000 of our common shares to ASE Test Taiwan, a consolidated subsidiary of ASE Test, 1,086,800 of our common shares to Hung Ching, our affiliate, and 47,139,409 of our common shares to employees and other shareholders (other than ASE Inc.) of ASE Material and a strategic investor. The merger with ASE Material has a transaction value of approximately NT\$1,650.0 million (US\$48.5 million), based on NT\$31.00 per ASE Inc. common share, which is the average of the closing prices of ASE Inc.'s common shares on the Taiwan Stock Exchange for two days prior to and following October 28, 2003. In connection with our merger with ASE Material, Richard H.P. Chang, our Vice Chairman and President, in his individual capacity as a shareholder and director of ASE Material, will also receive common shares of ASE Inc. in exchange for common shares of ASE Material held by him.

Upon the completion of the merger, all of the assets and liabilities of ASE Chung Li and ASE Material will be owned and assumed by ASE Inc. and the operations of ASE Chung Li and ASE Material will be integrated with the operations of ASE Inc. The merger agreement has been approved by the board of directors and shareholders of each of ASE Inc., ASE Chung Li and ASE Material. The merger is expected to be completed on August 1, 2004, subject to receipt of all necessary approvals and consents.

In order to comply with Singapore and ROC law, trusts have been established to hold and dispose of the 149,175,000 common shares of ASE Inc. to be issued to ASE Test and the 5,000,000 common shares of ASE Inc. to be issued to ASE Test Taiwan in connection with the merger. 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 ASE Inc., its parent company. Pursuant to the applicable trust agreements, the trustee under each trust will (1) be the registered owner of the common shares, (2) exercise all of the rights as a shareholder of the common shares, (3) sell the common shares pursuant to the terms and conditions of the trust agreement, and (4) transfer and deliver the proceeds from the sale of the common shares and cash dividends distributed by ASE Inc. to ASE Test or ASE Test Taiwan, as the case may be. Neither ASE Test nor ASE Test Taiwan will have any rights

71

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.

ASE Test Taiwan has historically collected payments through ASE Inc. for the testing of semiconductors packaged for a small number of customers that prefer to be billed through ASE Inc. for testing services performed by ASE Test Taiwan. These turnkey sales amounted to NT\$178.3 million, NT\$397.7 million and NT\$466.3 million (US\$13.7 million) in 2001, 2002 and 2003, respectively.

ASE Test Malaysia has historically purchased a portion of the raw materials used in its packaging operations, principally leadframes, from ASE Inc. when it faces a shortage in the supply of these types of raw materials. These types of raw materials are typically resold by ASE Inc. to ASE Test Malaysia. Purchases of raw materials by ASE Test Malaysia amounted to NT\$17.2 million, NT\$11.7 million and NT\$11.8 million (US\$0.3 million) in 2001, 2002 and 2003, respectively. ASE Inc. purchased raw materials, principally leadframes, from ASE Test Malaysia in an amount of NT\$12.8 million, NT\$0.1 million and NT\$0 million (US\$0 million) in 2001, 2002 and 2003, respectively.

In 2002 and 2003, ASE Test Malaysia purchased raw materials, primarily

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

leadframes and substrates, from ASE Material in the aggregate amount of NT\$181.6 million and NT\$283.1 million (US\$8.3 million), respectively. These types of raw materials are typically sold by ASE Material to ASE Test Malaysia at the prevailing market price.

ASE Inc. has historically guaranteed the promissory notes of many of its subsidiaries. As of December 31, 2003, ASE Inc. had endorsed and guaranteed an aggregate amount of NT\$12,114.2 million (US\$356.4 million) of the outstanding promissory notes of its subsidiaries.

In 2001, 2002 and 2003, ASE Inc. sold to ASE Philippines at book value machinery and equipment for the packaging of plastic dual in-line packages at an aggregate price of NT\$30.5 million, NT\$0.1 million and NT\$0 million (US\$0 million), respectively.

In connection with the discontinuation of our operations in the Philippines, in 2003, ASE Philippines sold to ASE Inc. and its subsidiaries at book value machinery and equipment at an aggregate price of NT\$445.9 million (US\$13.1 million), including NT\$196.2 million (US\$5.8 million) to ASE Inc. and NT\$158.9 million (US\$4.7 million) to ASE Chung Li.

In January 2000, ASE Chung Li and Hung Ching entered into an agreement for the development of buildings on land currently owned by ASE Chung Li. Under the agreement, Hung Ching will bear all costs relating to the development. Upon completion of the development, floor space in the buildings will be sold by Hung Ching at prices to be negotiated between Hung Ching and the buyers. ASE Chung Li and its affiliates will have priority in the purchase of the floor space. In the event that floor space is sold to persons other than ASE Chung Li, ASE Chung Li will receive 25% of the selling price. The first phase of the development project is the construction of a building with aggregate floor space of approximately 800,000 square feet, which was completed in September 2000. The total value of the first phase of the project, including land and the completed buildings, is estimated at NT\$2.0 billion. The new building houses ASE Chung Li's testing operations as well as part of the operations of other subsidiaries of ASE Inc.

In April 2003, ASE Inc. and Hung Ching entered into an agreement for the development of a building in the Nantze Export Processing Zone on land currently leased by ASE Inc. Under the agreement, Hung Ching will bear all costs relating to the development. Upon completion of the development, which is currently expected to be in the second half of 2004, ASE Inc. will own the first two floors of the building with floor space of approximately 235,000 square feet, and Hung Ching will own remaining floors of the building with floor space of approximately 928,000 square feet. ASE Inc. plans to use its floor space to house part of its operations in Kaohsiung, Taiwan. ASE Inc. and its affiliates will have priority in purchasing the remaining floor space from Hung Ching. The total cost of the construction project, including land and the completed building, is estimated at NT\$1,400.0 million (US\$41.2 million).

We are currently in discussions with Hung Ching, our affiliate, on the terms of a construction agreement in connection with the construction of two new buildings in Chung Li, Taiwan. The new buildings are expected to have

an estimated floor space of approximately 1,023,000 square feet, and are intended to house a part of our testing operations and a part of our interconnect materials operations. Construction commenced in September 2003 and we expect it to be completed by the second half of 2004. The total cost of the

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

construction project, including the land and the completed buildings, is estimated to be approximately NT\$1,200.0 million (US\$35.3 million).

ASE Chung Li entered into leases with ASE Material and ASE Test Taiwan to lease floor space in a building located at 550-5, Section 1, Chung-hwa Road, Chung Li, Taiwan. An area of approximately 266,000 square feet was leased to ASE Material and approximately 55,000 square feet was leased to ASE Test Taiwan. The leased area is used primarily for production facilities.

In October 1997, J&R Holding entered into agreements with Swiss Bank Corporation to purchase call options on a portion of our US\$200 million zero coupon convertible bonds due 2002. The call options were offered by Swiss Bank Corporation as a part of the repackaging of our convertible bonds by SBC Warburg, an affiliate of Swiss Bank Corporation, into two separate instruments consisting of: (1) US\$200 million callable floating rate notes secured by the convertible bonds and (2) call options on the convertible bonds. SBC Warburg decided to repackage the convertible bonds because the adverse market conditions resulting from the Asian financial crisis during the second half of 1997 made it difficult to market the convertible bonds. SBC Warburg was able to obtain commitments for the entire issue of the floating rate notes but, as a result of the adverse market conditions described above, was able to obtain commitments for only a portion of the call options. As a result, Swiss Bank Corporation approached a number of large institutional investors, including J&R Holding, with a proposal to sell a portion of the call options.

J&R Holding decided to purchase the call options because its management considered the call options to be a good investment. Under the first agreement with Swiss Bank Corporation, J&R Holding was required to make four cash payments to Swiss Bank Corporation in November 1998, 1999, 2000 and 2001. In return, J&R Holding had the right to call the convertible bonds back at any time during the period from November 1998 through November 2002. Under the second agreement, Swiss Bank Corporation paid US\$200,000 to J&R Holding. In return, Swiss Bank Corporation had the right to sell a portion of the call options to J&R Holding at any time between November 4, 1997 and November 1, 1998. These options were terminated by agreement on December 11, 2001. As of November 2002, we had repurchased in the open market all of the remaining bonds.

ASE Holding Limited, one of our subsidiaries through which we hold ASE Test shares, entered into a share purchase agreement dated as of May 19, 2001 with two of our directors under which ASE Holding Limited agreed to purchase 2,480,000 shares of ASE Test from these directors upon the exercise of certain options granted to them under ASE Test's 1996 option plan for an aggregate purchase price of US\$35,389,600. The closing date of this acquisition of shares was May 22, 2001. We engaged in this acquisition principally to maintain our investment in ASE Test at a level above 50% of the outstanding shares of ASE Test. For more information relating to the transaction, see "Item 7. Major Shareholders and Related Party Transactions--Related Party Transactions" of our annual report on Form 20-F for the fiscal year ended December 31, 2001 publicly filed with the SEC.

In August 2003, ASE Test Finance Limited obtained a loan of US\$60.0 million from J&R Holding Limited in connection with the redemption of its convertible notes issued in 1999. The loan is due in full in February 2005 and bears interest of 2.27% per annum.

### Item 8. Financial Information

#### CONSOLIDATED STATEMENTS AND OTHER FINANCIAL INFORMATION

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



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

## LEGAL PROCEEDINGS

We are not involved in material legal proceedings the outcome of which we believe would have a material adverse effect on us.

Criminal charges were brought in December 1998 by the district attorney for Taipei against Jason C.S. Chang, our Chairman and Chief Executive Officer, Richard H.P. Chang, our Vice Chairman and President and the Vice Chairman of ASE Test, and Chang Yao Hung-ying, our former director and a former director of ASE Test, and four

73

others for alleged breach of fiduciary duties owed to Hung Ching, an affiliate of ASE Inc., in their capacity as directors and officers of Hung Ching in connection with a land sale transaction in 1992 valued at approximately NT\$1.7 billion. ASE Inc. was not a party to these proceedings. It was alleged that the transaction in which Jason C.S. Chang sold the land to Hung Ching unfairly benefited him to the detriment of Hung Ching. Hung Ching at that time was a privately-owned company whose principal shareholders were members of the Chang family. Ancillary charges were brought against Jason C.S. Chang, Chang Yao Hung-ying and another person for alleged forgery of Hung Ching board resolutions relating to that transaction. Following proceedings before the District Court of Taipei, the High Court of the ROC and the Supreme Court of the ROC, the case was finally concluded in January 2004, and Jason C.S. Chang, Richard H.P. Chang and Chang Yao Hung-ying were found not guilty on all charges.

## DIVIDENDS AND DIVIDEND POLICY

To date we have not paid cash dividends on our common shares, and we expect that we will continue to pay a substantial portion, if not all, of our dividends in the form of stock. We have paid annual stock dividends on our common shares since 1989 except in 2002, in which we did not pay any dividend due to the losses we incurred in the 2001 fiscal year.

The following table sets forth the aggregate number of outstanding common shares entitled to dividends, as well as the stock dividends paid during each of the years indicated. The stock dividends per common share represent dividends paid in the fiscal year for common shares outstanding on the record date applicable to the payment of these dividends.

	Stock Dividends Per Common Shares(1)	Total Common Shares Issued as Stock Dividends	Outstanding Common Shares on Record Date(2)	O
	-----			
	NT\$			
1995.....	3.60	93,600,000	260,000,000	
1996.....	8.00	319,840,000	399,800,000(3)	
1997.....	3.80	277,020,000	729,000,000	
1998.....	7.20	732,240,000	1,017,000,000	
1999.....	1.07	190,460,000	1,780,000,000	
2000.....	3.15	623,811,852	1,980,355,086	
2001.....	1.70	467,840,000	2,752,000,000	
2002.....	--	--	3,254,800,000	

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

2003.....	1.00	325,480,000	3,254,800,000
-----------	------	-------------	---------------

-----

- (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.
- (3) Includes 43,000,000 common shares issued in connection with an offering of global depository shares in July 1995.

We have historically paid stock dividends on our common shares with respect to the results of the preceding year after approval by our shareholders at the annual general meeting of shareholders. At our annual shareholders' meeting held on June 15, 2004, our shareholders approved a stock dividend of 221,977,360 common shares, or NT\$0.62 (US\$0.02) per common share. Such dividend will be reduced to NT\$0.574 (US\$0.02) per common share upon the completion of our merger with ASE Chung Li and ASE Material, which we expect to occur on August 1, 2004, subject to receipt of all necessary approvals and consents. See "Item 4. Information on the Company-- History and Development of the Company--Pending Merger with ASE Chung Li and ASE Material". The form, frequency and amount of future cash or stock dividends on our common shares and ADSs will depend upon our net income, cash flow, financial condition and other factors. 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

74

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:

- o 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
- o between 5% and 7% 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 5% portion is to be distributed to all employees in accordance with our employee bonus distribution rules, while any portion exceeding 5% 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.

In order to meet the needs of our present and future capital expenditures, our dividend distribution will be primarily in the form of common shares. Cash dividends may also be distributed in certain circumstances. However, the percentage of cash dividends generally will not exceed 20% in any dividend

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

distribution, provided that cash dividends will not be paid if the dividend per share is less than NT\$0.10.

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 depository in NT dollars and, except as otherwise provided in the deposit agreement, will be converted by the depository 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 depository and, except as otherwise provided in the deposit agreement, will be distributed by the depository, 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 entitled to the full amount of any dividend declared at our next general meeting of the shareholders.

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 June 16, 2004, there were an aggregate of 3,580,280,000 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 16, 2004 was NT\$22.90 per share.

75

	Closing Price per Share		Adjusted Closing Price per Share(1)		Average Daily Trading Volume
	High	Low	High	Low	(in thousand of share)
1999.....	117.00	51.00	66.18	27.22	47,782
2000.....	123.00	22.60	72.68	17.56	24,507

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

2001.....	38.80	14.00	31.09	12.73	25,079
2002.....	38.50	15.90	35.00	14.45	24,798
First Quarter.....	35.80	26.00	32.55	23.64	35,735
Second Quarter.....	38.50	20.80	35.00	18.91	19,479
Third Quarter.....	24.50	17.10	22.27	15.55	17,232
Fourth Quarter.....	24.30	15.90	22.09	14.45	28,264
2003.....	35.50	16.90	35.50	15.36	24,852
First Quarter.....	22.50	16.90	20.45	15.36	16,422
Second Quarter.....	22.50	17.80	20.45	16.18	27,240
Third Quarter.....	27.80	21.50	27.80	19.55	33,764
Fourth Quarter.....	35.50	26.30	35.50	26.30	20,889
December.....	34.90	31.20	34.90	31.20	16,361
2004 (through June 16).....	39.30	21.10	39.30	21.10	26,011
First Quarter.....	39.30	33.20	39.30	33.20	26,838
January.....	39.30	34.90	39.30	34.90	31,255
February.....	39.30	35.00	39.30	35.00	27,855
March.....	38.80	33.20	38.80	33.20	23,942
Second Quarter (through June 16)..	36.20	21.10	36.20	21.10	25,140
April.....	36.20	27.60	36.20	27.60	26,040
May.....	28.00	21.10	28.00	21.10	29,090
June (through June 16).....	24.60	22.30	24.60	22.30	17,060

-----

- (1) As adjusted retroactively by the Taiwan Stock Exchange to give effect to stock dividends paid in the periods indicated. See "Item 8. 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.

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 June 16, 2004, a total of 16,990,822 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 16, 2004 was US\$3.35 per ADS.

76

	Closing Price per ADS		Adjusted Closing Price per ADS (1)		Average Daily Trading Volume
	High	Low	High	Low	(In thousands of ADSs)
	US\$	US\$	US\$	US\$	
2000.....	6.75	3.06	5.24	2.38	31

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

2001.....	6.05	1.75	4.70	1.59	106	7
2002.....	5.54	2.21	5.04	2.01	111	6
First Quarter.....	5.35	3.75	4.86	3.41	135	6
Second Quarter.....	5.54	3.05	5.04	2.77	130	6
Third Quarter.....	3.70	2.39	3.36	2.17	110	5
Fourth Quarter.....	3.50	2.21	3.18	2.01	72	5
2003.....	5.27	2.45	5.27	2.23	195	6
First Quarter.....	3.23	2.45	2.94	2.23	41	5
Second Quarter.....	3.22	2.50	2.93	2.27	229	5
Third Quarter.....	4.11	3.17	4.11	2.88	257	5
Fourth Quarter.....	5.27	3.88	5.27	3.88	244	6
December.....	5.05	4.38	5.05	4.38	151	6
2004 (through June 16).....	5.95	3.22	5.95	3.22	313	6
First Quarter.....	5.95	5.05	5.95	5.05	328	6
January.....	5.87	5.05	5.87	5.05	374	6
February.....	5.95	5.22	5.95	5.22	402	6
March.....	5.85	5.12	5.85	5.12	237	6
Second Quarter (through June 16).....	5.46	3.22	5.46	3.22	294	6
April.....	5.46	4.05	5.46	4.05	304	6
May.....	4.23	3.22	4.23	3.22	358	6
June (through June 16).....	3.70	3.35	3.70	3.35	175	6

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

### PLAN OF DISTRIBUTION

Not Applicable.

### MARKETS

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

### SELLING SHAREHOLDERS

Not Applicable.

### DILUTION

Not Applicable.

### EXPENSES OF THE ISSUE

Not Applicable.

### Item 10. Additional Information

#### SHARE CAPITAL

Not Applicable.

### ARTICLES OF INCORPORATION

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

### 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 are to engage in the following types of business:

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

We were incorporated on March 23, 1984 as a company limited by shares under the ROC Company Law. Our authorized capital was NT\$51,500,000,000, divided into 51,500,000,000 common shares, 3,580,280,000 were issued in registered form and outstanding as of June 16, 2004. 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 Securities and Futures Commission, we may issue stock options to our employees, provided 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 issue date of the option. As of December 31, 2003, we had issued 159,968,000 options to our full-time employees as well as full-time employees of our domestic and foreign subsidiaries pursuant to an employee stock option plan established on August 13, 2002. See "Item 6. Directors, Senior Management and Employees--Compensation--ASE Inc. Employee Bonus Plan and Stock Option Plans". We have 300,000,000 common shares reserved for issuance under our employee stock option plans.

### Directors

Our Articles of Incorporation provide that we are to have from five to seven directors with tenures of three years who are elected at a shareholders'

meeting. There is no minimum amount of shares necessary to stand for election to a directorship. Many of our directors are corporate shareholders, who appoint 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 or shareholders resolutions.

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

Our Articles of Incorporation contain no provisions relating to a director's power to vote on a proposal in which that director is interested, the directors' power to vote compensation to themselves, borrowing powers, retirement or age-limit requirements.

78

#### 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:

- o 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
- o between 5% and 7% 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 5% portion is to be distributed to all employees in accordance with our employee bonus distribution rules, while any portion exceeding 5% 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 affiliated companies who meet the criteria set by our board of directors.

At the annual general shareholders' meeting, our board of directors submits to the shareholders for their approval any proposal for the distribution of a dividend or the making of any other distribution to shareholders from our net income for the preceding fiscal year. All common shares outstanding and fully paid as of the relevant record date are entitled to share equally in any dividend or other distribution so approved. Dividends may be distributed in cash, in the form of common shares or a combination of the two, as determined by the shareholders at the meeting. Cash dividends should not exceed 20% of the distribution for any given year; provided that cash dividends will not be paid if the dividend per share is less than NT\$0.10.

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

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 "Item 10. Additional Information--Taxation--ROC Taxation-- Common Shares and ADSs--Dividends on Common Shares and ADSs".

### 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 ASE Inc., the approval of the ROC Securities and Futures Commission 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. 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.

79

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. 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. Extraordinary 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.



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

### Voting Rights

Under the ROC Company Law, shareholders have one vote for each common share held. Under the ROC Company Law, our directors and supervisors are elected at a shareholders' meeting through cumulative voting, unless the articles of incorporation of a company 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:

- o amendment to the Articles of Incorporation, including increase of authorized share capital and any changes of the rights of different classes of shares;
- o transfer of the company's entire business or assets or substantial part of its business or assets;
- o 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;
- o acquisition of the entire business or assets of any other company, which would have a significant impact on the company's operations;
- o distribution of any stock dividend;
- o dissolution, merger or spin-off of the company; and
- o 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.

### Voting 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'

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

meeting received from us together with information explaining how to instruct the depositary to exercise the voting rights of the securities represented by ADSs.

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

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 the instructions to 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 he 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.

### 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:

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

### Annual Financial Statements

At least 10 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.

81

#### 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:

- o to transfer common shares to our employees;
- o 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
- o 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.

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 (1) each director, supervisor, manager or substantial shareholder (that is, a shareholder who together with his or her spouse, minor children or nominees, holds more than 10% of the shares of a public company) to report any change in that person's shareholding to the issuer of the shares and the ROC Securities and Futures Commission and (2) each director, supervisor, manager or substantial shareholder, after acquiring its 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 Securities and Futures Commission at least three days before the intended transfer, unless the number of shares to be transferred is less than 10,000 shares.

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

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:

- o 0.2% of the outstanding shares of the company in the case of a company with no more than 30 million outstanding shares; or
- o 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
- o 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 Securities and Futures Commission.

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

82

### Common Shares Issued to Substantial Shareholders 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 substantial shareholder (as defined under the ROC Securities and Exchange Law) of an unlisted company to be merged with and into the acquiror. A 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 two years from the date of the listing of the common shares, the holder is permitted to sell or transfer an additional 10% of its holdings of the common shares and an additional 10% of the common shares every six months thereafter.

### MATERIAL CONTRACTS

Manufacturing Services Agreement dated as of July 3, 1999 among Motorola, Inc., ASE Inc. and ASE Chung Li

This contract was entered into to provide a strategic supplier relationship in which we use our ASE Chung Li subsidiary to provide testing and packaging services to Motorola on a priority basis. This contract has a duration of five years. The contract governs capacity reservation by Motorola at the Chung Li facility as well as our facilities in Kaohsiung, Taiwan or the facilities of ASE Test Taiwan and specifications of the work to be performed. Remuneration to us is confidential and the contract, as filed as an exhibit to our Form F-1 Registration Statement in 2000, was granted confidential treatment by the SEC.

Manufacturing Services Agreement dated as of July 3, 1999 among Motorola, Inc., ASE Inc. and ASE Korea

This contract was entered into to provide a strategic supplier relationship in which we use our ASE Korea subsidiary to provide testing and packaging services to Motorola on a priority basis. This contract has a

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

duration of five years. The contract governs capacity reservation by Motorola at the Korea facility and specifications of the work to be performed. Remuneration to us is confidential and the contract, as filed as an exhibit to our Form F-1 Registration Statement in 2000, was granted confidential treatment by the SEC.

Joint Venture Agreement dated October 28, 2003 by and between ASE Inc. and Compeq

This contract was entered into with Compeq to establish the joint venture ASE-Compeq Technologies, Inc., which will focus on the design and production of interconnect materials for packaging semiconductors. We own a 60% equity interest in ASE-Compeq Technologies, Inc. and Compeq owns the remaining 40% equity interest. See "Item 4. Information on the Company - History and Development of the Company - Joint Venture with Compeq Manufacturing Co., Ltd."

Merger Agreement dated October 28, 2003 by and among ASE Inc., ASE Chung Li and ASE Material

Under this contract, ASE Chung Li and ASE Material are to be merged with and into ASE Inc., with ASE Inc. as the surviving corporation. Upon the completion of the merger, all of the assets and liabilities of ASE Chung Li and ASE Material will be owned and assumed by ASE Inc. The merger is to be consummated by means of a share exchange pursuant to which each common share of ASE Chung Li not directly owned by ASE Inc. will be exchanged for 0.85 ASE Inc. common share and each common share of ASE Material not directly owned by ASE Inc. will be exchanged for 0.5 ASE Inc. common share. We expect the merger to be completed on August 1, 2004, subject to receipt of all necessary approvals and consents. See "Item 4. Information on the Company - History and Development of the Company - Pending Merger with ASE Chung Li and ASE Material".

Share Sale and Purchase Agreement dated as of February 3, 2004 among NEC Electronics Corporation, NEC Yamagata Ltd., J&R Holding Ltd., and ASE Inc.

On February 3, 2004, we and J&R Holding Limited, our wholly-owned subsidiary, entered into a share sale and purchase agreement with NEC and NEC Yamagata, Ltd. in connection with the acquisition of the semiconductor

83

packaging and testing business of NEC Yamagata, a wholly-owned subsidiary of NEC. The acquisition was completed on May 31, 2004 and the purchase price was approximately US\$24 million, which is subject to certain purchase price adjustments. The acquisition was consummated by means of a company split under the Japanese Commercial Code through which the packaging and testing business of NEC Yamagata was transferred to a company formed by NEC Yamagata named ASE Japan Co., Ltd. Pursuant to the terms and conditions of the share sale and purchase agreement, all of the issued and outstanding shares of ASE Japan were purchased by J&R Holding Limited, and ASE Japan now owns and operates the semiconductor packaging and testing business acquired from NEC Yamagata.

See "Item 4. Information on the Company -- Business Overview -- Sales and Marketing -- Sales and Customer Service Agents" for a summary of contracts we have entered into with agents for sales and customer service.

EXCHANGE CONTROLS

ROC Exchange Controls

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

The Foreign Exchange Control Statute and regulations provide that all foreign exchange transactions must be executed by banks designated to handle the business, by the ROC Ministry of Finance and by the Central Bank of China. 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.

Trade aside, ROC companies and resident individuals may, without foreign exchange approval, remit into and outside 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 China.

In addition, foreign persons may, subject to specified requirements, but without foreign exchange approval of the Central Bank of China, 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 depository receipt facility.

### TAXATION

#### ROC Taxation

The following discussion describes the material ROC tax consequences of the ownership and disposition of the common shares or ADSs to a non-resident individual or non-resident entity that holds the common shares or ADSs, or a non-ROC holder. As used in the preceding sentence, a "non-resident individual" is a foreign national who owns the 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

84

organized under the laws of a jurisdiction other than the ROC and has no fixed place of business or other permanent establishment in the ROC.

#### Dividends

Dividends (whether in cash, common shares or ADSs) 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% retained earnings tax is imposed on an ROC company for its after-tax earnings generated after January 1, 1998 which are not distributed in the following year. The retained earnings tax so paid will further reduce the retained earnings available for future distribution. When we declare a dividend out of those retained earnings, up to a maximum amount of 10% of the net dividend received will be credited against the 20% withholding tax imposed on the non-ROC holders of its common shares or ADSs.

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

It is currently unclear whether dividends paid by us out of our capital reserves are subject to ROC withholding tax because there are two possible interpretations of the relevant tax laws and regulations that lead to different conclusions on whether such dividends will be taxable, and there is currently no authoritative guidance on this issue.

### 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 ADRs 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 Law 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. Proceeds derived from sales of statutory subscription rights which are not evidenced by securities are subject to capital gains tax at the rate of (i) 25% of the gross amount realized for non-resident entities and (ii) 35% of the gross amount realized for non-resident individuals. Subject to compliance with ROC law, we, in our sole discretion, may determine whether statutory subscription rights are securitized.

### Inheritance and Gift Tax

ROC inheritance 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. Inheritance tax is currently imposed at rates ranging from 2% of the first NT\$600,000 to 50% of amounts in excess of NT\$100 million. Gift tax is imposed at rates ranging from 4% of the first NT\$600,000 donated to 50% of amounts donated in excess of NT\$45 million. Under ROC Inheritance and Gift Tax Law, 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 and Vietnam. It is unclear whether a non-ROC holder of ADSs will be considered to own common shares for the purposes of such treaties. Accordingly, a holder of ADSs who is otherwise entitled to the benefit of a treaty should consult its own tax advisers

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

concerning eligibility for benefit under the treaty with respect to the ADSs, as the case may be. 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 ADSs to those U.S. holders described below. For these purposes, you are a U.S. holder if you are a beneficial owner of ADSs that, for U.S. federal income tax purposes, is:

- o a citizen or resident of the United States;
- o a corporation or other entity taxable as a corporation organized under the laws of the United States or of any political subdivision of the United States; or
- o an estate or trust the income of which is includable in gross income for U.S. federal income tax purposes regardless of its source.

This discussion assumes that ASE Inc. will not be considered a passive foreign investment company. Please see our discussion of passive foreign investment company rules below.

Please note that 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 purchasers subject to special rules, including:

- o persons subject to the alternative minimum tax;
- o insurance companies;
- o tax-exempt entities;
- o dealers or traders in securities;
- o financial institutions;
- o partnerships or other entities classified as partnerships for U.S. federal income tax purposes;
- o persons carrying on a trade or business in the ROC;
- o persons who hold or will hold common shares or ADSs as part of an integrated investment, including a straddle, hedging or conversion transaction, comprised of common shares or ADSs and one or more other positions for tax purposes;
- o persons whose functional currency is not the U.S. dollar; or
- o persons who own 10% or more of our voting stock.

This discussion is based on the Internal Revenue Code of 1986, as amended, Treasury Regulations, administrative announcements and judicial decisions currently in effect. These laws and regulations may change, possibly with retroactive effect. This discussion is also based in part on 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 of ADSs



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

should be treated as the holder of the common shares represented by the ADSs. However, the U.S. Treasury has expressed concerns that parties to whom depositary shares are pre-released may be taking actions that are inconsistent with the claiming of foreign tax credits by the holders of ADSs. 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, as described below. Accordingly, the analysis of the creditability of ROC taxes described below, and the availability of the reduced tax rate for dividends

86

received by certain noncorporate U.S. holders, could be affected by future actions that may be taken by parties to whom the ADSs are released.

Please consult your tax advisors with regard to the application of the U.S. federal income tax laws to ADSs as well as any tax consequences arising under the laws of any state, local or non-U.S. taxing jurisdictions.

### Dividends

Any dividends you receive on ADSs (other than 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 ASE Inc., will constitute foreign source dividend income to the extent paid out of current or accumulated earnings and profits as determined in accordance with U.S. federal income tax principles. 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 depositary receives the dividend. If you realize gain or loss on a sale or other disposition of NT dollars, it will generally 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. You will not be entitled to a dividends-received deduction for dividends you receive.

Subject to applicable limitations, dividends paid to noncorporate U.S. holders in taxable years beginning before January 1, 2009 will be taxable at a maximum tax rate of 15%. Noncorporate U.S. holders should consult their own tax advisers to determine the implications of the rules regarding this favourable rate in their particular circumstances.

Subject to applicable limitations and restrictions, the ROC taxes withheld from dividend distributions, reduced by any credit against the withholding tax on account of the 10% retained earnings tax, will be eligible for credit against your U.S. federal income tax liabilities. The limitation on foreign taxes eligible for credit is calculated separately with respect to specific classes of income. For this purpose, dividends paid with respect to the common shares will constitute "passive income" or, in the case of certain U.S. holders, "financial services income".

Pro rata distributions of common shares by a company to its shareholders, including holders of ADSs, will not be subject to U.S. federal income tax. Accordingly, these distributions will not give rise to U.S. federal income against which the ROC tax imposed on these distributions may be credited. Any ROC tax of this nature will only be creditable against a U.S. holder's U.S. federal income tax liability with respect to income in the "general limitation income" class and not "passive income" or "financial services income", subject to applicable limitations and restrictions.

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

### Capital Gains

You will recognize capital gain or loss for U.S. federal income tax purposes on the sale or exchange of ADSs in the same manner as you would on the sale or exchange of any other common shares held as capital assets. The gain or loss will be U.S. source income or loss. You should consult your own tax advisor 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.

Deposits and withdrawals of common shares by a U.S. holder in exchange for ADSs will not result in realization of gain or loss for U.S. federal income tax purposes.

### Passive Foreign Investment Company Rules

Based on management estimates, ASE Inc. does not expect to be a passive foreign investment company. In general, a foreign corporation is a passive foreign investment company for any taxable year in which (1) 75% or more of its gross income consists of passive income (such as dividends, interest, rents and royalties) or (2) 50% or more of the average quarterly value of its assets consists of assets that produce, or are held for the production of, passive income. The determination of whether ASE Inc. may be a passive foreign investment company will be based on the composition of its income and assets, as well as those of its subsidiaries and certain affiliates, from time to time. Since the composition of ASE Inc.'s income and assets will vary over time, there can be no assurance that

87

it will not be considered a passive foreign investment company for any fiscal year. If ASE Inc. is a passive foreign investment company at any time that you own ADSs:

- o You may be subject to additional taxes and interest charges on any gain realized on the disposition of the ADSs and on certain "excess distributions" on the ADSs. The additional taxes are assessed at the highest tax rate applicable for corporate or individual taxpayers for the relevant tax periods; and
- o You will be subject to additional U.S. tax filing requirements for each year that you hold ADSs.

Please consult your tax advisors about the possibility that ASE Inc. may be a passive foreign investment company and the rules that would apply to you if it were.

### Estate and Gift Tax

As discussed in "-- ROC Taxation", you might be required to pay ROC estate and gift tax. You should consult your tax advisor regarding the effect of these taxes.

### DIVIDENDS AND PAYING AGENTS

Not Applicable.

### STATEMENT BY EXPERTS

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

Not Applicable.

## DOCUMENTS ON DISPLAY

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

## SUBSIDIARY INFORMATION

Not Applicable.

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

### Market Risk

Our exposure to financial market risks relates primarily to changes in interest rates and foreign currency exchange rates. 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 currently do not enter into derivative transactions with regard to interest rates, but would consider engaging in currency interest rate swaps to lock in favorable currency and interest rate levels from time to time, if available, on terms considered attractive by us. No interest rate derivative contracts were outstanding as of December 31, 2003.

88

The following table provides information about our significant obligations that are sensitive to interest rate fluctuations as of December 31, 2003.

	Expected Maturity Date					
	2004	2005	2006	2007	2008	Thereafter
(in millions, except percentages)						
Short-term debt:						
Variable rate (NT\$) .....	1,655.8	--	--	--	--	--
Average interest rate ...	1.72%	--	--	--	--	--
Variable rate (US\$) .....	57.5	--	--	--	--	--
Average interest rate ...	3.75%	--	--	--	--	--
Variable rate (JP) .....	4,962.9	--	--	--	--	--
Average interest rate ...	1.15%	--	--	--	--	--
Variable rate (EUR) .....	2.4	--	--	--	--	--
Average interest rate ...	3.45%	--	--	--	--	--
Variable rate (KRW) .....	13,000.0	--	--	--	--	--
Average interest rate ...	5.02%	--	--	--	--	--

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

Variable rate (GBP) .....	0.1	--	--	--	--	
Average interest rate ...	7.19%	--	--	--	--	
Variable rate (RMB) .....	112.5	--	--	--	--	
Average interest rate ...	4.78%	--	--	--	--	
Long-term debt:						
Variable rate (NT\$) .....	4,584.6	6,492.6	2,711.1	1,661.0	1,779.1	1,0
Average interest rate ...	3.22%	3.30%	4.21%	3.79%	3.47%	
Fixed rate (NT\$) .....	2.7	1.2	0.8	0.9	0.7	
Average interest rate ...	5.07%	8.10%	11.00%	11.00%	11.00%	
Variable rate (US\$) .....	26.2	42.3	102.7	68.9	31.8	
Average interest rate ...	4.61%	5.38%	6.06%	6.62%	6.84%	
Fixed rate (US\$) .....	5.3	3.6	0.5	0.5	202.5	
Average interest rate ...	9.34%	9.26%	7.92%	7.92%	3.76%	
Variable rate (JP) .....	--	--	--	--	--	1,6
Average interest rate ...	--	--	--	--	--	

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 from packaging and testing services are denominated in U.S. dollars, with a portion denominated in NT dollars. Our costs of revenues and operating expenses associated with packaging and testing services are incurred in several currencies, primarily in NT dollars and U.S. dollars, as well as, to a lesser extent, Malaysian ringgit, Korean won and Japanese yen. 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 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. In 2001, 2002 and 2003, the average exchange rate of the NT dollar to the U.S. dollar was 33.91, 34.53 and 34.40, respectively.

Foreign currency denominated liabilities as of December 31, 2003 include U.S. dollar debt and Japanese yen debt. As of December 31, 2003, approximately 68.2% of our cash and accounts receivable were denominated in U.S. dollars, with a substantial portion of the remainder denominated in NT dollars. As of December 31, 2003, approximately 63.1% of our accounts payable and payable for fixed assets were denominated in currencies other than the NT dollar. To protect against reductions in value and the volatility of future cash flows caused by changes in foreign currency exchange rates, we may utilize currency forward 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, and the premiums are amortized on a straight-line basis over the life of the contract.

In October 2003, we entered into cross-currency swap contracts to hedge against reductions in value caused by changes in foreign currency exchange rates in connection with the proceeds received from our offering of US\$200 million unsecured zero coupon convertible bonds due 2008. The table below sets forth our outstanding cross currency swap contracts as of December 31, 2003.

89

### Cross-Currency Swap Contracts

Pay NT\$ Fixed/Receive US\$ Fixed  
Notional Amount

US\$157.0 million

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

	NT\$5,330.2 million
Fair Value	NT\$5,294.0 million
Contract Rate	33.95
Receive Rate	2.7%
Pay Rate	1.7%
Maturity	October 2007
Pay NT\$ Floating/Receive US\$ Floating	
Notional Amount	US\$43.0 million
	NT\$1,459.8 million
Fair Value	NT\$1,427.8 million
Contract Rate	33.95
	Percentage by which LIBOR
Receive Rate	is less than 2%
	Percentage by which LIBOR
Pay Rate	is greater than 2%
Maturity	September 2008

The table below sets forth our outstanding foreign currency option contracts in aggregate terms by type of contract as of December 31, 2003. These contracts all mature in 2004.

### Foreign Currency Options Contracts

Buy US\$ Put/Japanese Yen Call	
Notional Amount	US\$60 million
Weighted Average Strike Price	US\$111.24
Fair Value	US\$1.2 million
Buy US\$ Put/NT\$ Call	
Notional Amount	US\$159 million
Weighted Average Strike Price	US\$33.96
Fair Value	US\$2.1 million
Sell US\$ Call/ Japanese Yen Put	
Notional Amount	US\$120 million
Weighted Average Strike Price	US\$111.87
Fair Value	US\$(0.3) million
Sell US\$ Call/NT\$ Put	
Notional Amount	US\$14 million
Weighted Average Strike Price	US\$34.23
Fair Value	US\$(0.02) million
Sell US\$ Put/NT\$ Call	
Notional Amount	US\$157 million
Weighted Average Strike Price	US\$33.46
Fair Value	US\$(3.2) million

#### Item 12. Description of Securities Other Than Equity Securities

Not applicable.

### PART II

#### Item 13. Defaults, Dividend Arrearages and Delinquencies

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

Not applicable.

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

Not applicable.

### Item 15. Controls and Procedures

As of December 31, 2003, 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. Based on this evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures are effective for gathering, analyzing and disclosing the information we are required to disclose in the reports we file under the Exchange Act, within the time periods specified in the SEC's rules and forms. 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.

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 16A. Audit Committee Financial Expert

Under Rule 10A-3 of the Exchange Act and the rules of the New York Stock Exchange, we are required to have an audit committee that meets certain requirements by July 31, 2005. We are currently in the process of reviewing examples of audit committee charters and considering candidates for appointment as audit committee members with a view to fully complying with these new requirements in the specified time period, including the appointment of an audit committee financial expert, as defined under Item 16A of Form 20-F.

### Item 16B. Code of Ethics

We have not adopted a written code of ethics for our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions. Ethical oversight and actual or apparent conflicts of interest have historically been handled informally by senior management and the board of directors. We are currently reviewing examples of written codes of ethics and will address the adoption of such a code with the board of directors in the near future.

### Item 16C. Principal Accountant Fees And Services

#### Policy on Pre-Approval of Audit and Non-Audit Services of Independent Auditors

Until the establishment of our audit committee, the full board of directors is responsible for the oversight of our independent auditor's work. Our board of directors pre-approves all audit and non-audit services provided by our independent auditors, 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. All audit and non-audit services performed by Deloitte & Touche, our independent auditors, after May 6, 2003, the effective date of revised Rule 2-01(c) (7) of Regulation S-X entitled "Audit Committee Administration of the Engagement", were pre-approved by the board of directors.

#### Independent Auditor Fees

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

TN Soong & Co., independent public accountants, an associate member firm of Deloitte Touche Tohmatsu, combined with Deloitte & Touche (Taiwan) to establish Deloitte & Touche effective June 1, 2003, at which time

91

Deloitte & Touche became our principal independent auditor. Prior to June 1, 2003, TN Soong & Co. had served as our principal independent auditor for the periods indicated in the table below.

The following table sets forth the aggregate fees by categories specified below in connection with certain professional services rendered by Deloitte & Touche or TN Soong & Co., as applicable. We did not pay any other fees to our auditors during the periods indicated below.

	For the Year Ended December 31,			
	2001	2002	2003	
	NT\$	NT\$	NT\$	US\$
			(in thousands)	
Audit fees (1).....	14,710.0	23,421.0	26,582.3	782.1
Audit-related fees (2).....	310.0	10,430.0	14,898.3	438.3
Tax fees (3).....	829.1	105.0	813.5	23.9
Other fees (4).....	2,460.0	1,900.0	5,454.1	160.5

- 
- (1) Consists of fees for professional services in connection with the audit of our annual financial statements, reviews of interim financial statements and statutory and regulatory filings or engagements.
  - (2) Principally comprises fees associated with the issuance of agreed-upon procedure letters.
  - (3) Consists of fees for tax advice.
  - (4) Consists of risk management consulting fees.

### PART III

#### Item 17. Financial Statements

The Company has elected to provide financial statements for fiscal year 2003 and the related information pursuant to Item 18.

#### Item 18. Financial Statements

Reference is made to pages F-1 to F-63 of this annual report.

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

- (a) Report of Independent Auditors of the Company dated February 16, 2004 (page F-2).

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

- (b) Consolidated Balance Sheets of the Company and subsidiaries as of December 31, 2002 and 2003 (page F-4).
- (c) Consolidated Statements of Income of the Company and subsidiaries for the years ended December 31, 2001, 2002 and 2003 (page F-5).
- (d) Consolidated Statements of Changes in Shareholders' Equity of the Company and subsidiaries for the years ended December 31, 2001, 2002 and 2003 (page F-8).
- (e) Consolidated Statements of Cash Flows of the Company and subsidiaries for the years ended December 31, 2001, 2002 and 2003 (pages F-9 to F-10).
- (f) Notes to Consolidated Financial Statements of the Company and subsidiaries (pages F-11 to F-63).

92

### Item 19. Exhibits

- 1. Articles of Association of the Registrant (in Chinese with English translation) (incorporating all amendments as of June 15, 2004).
- 2. 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 4.1 to our registration statement on Form F-3 (File No. 333-87428) filed on March 31, 2003).
- 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% of the common stock of Motorola Korea Ltd. (incorporated by reference to Exhibit 10.3 to the ASE Test 1999 Form F-3).  
  
(d)+ Manufacturing Services Agreement dated as of July 3, 1999 among Motorola, Inc., ASE Inc. and ASE (Chung Li) Inc. (incorporated by reference to Exhibit 10.4 to our registration statement on Form F-1 (File No. 333-44622) filed on September 21, 2000 (the "Form F-1")).



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

- (e)+ Manufacturing Services Agreement dated as of July 3, 1999 among Motorola, Inc., ASE Inc. and ASE (Korea) Inc. (incorporated by reference to Exhibit 10.5 to the Form F-1).
- (f)+ 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).
- (g)++ Amendment dated March 18, 2003 renewing the BGA Immunity Agreement dated as of January 25, 1994 between ASE Inc. and Motorola, Inc.
- (h) Consent dated June 10, 2004 to the Assignment of the BGA Immunity Agreement between ASE Inc. and Motorola, Inc. dated January 25, 1994.
- (i) Service Agreement dated as of August 1, 2003 between ASE Electronics (M) Sdn. Bhd. and ASE (U.S.) Inc.
- (j) Service Agreement dated as of August 1, 2003 between ASE Test, Inc. and ASE (U.S.) Inc.
- (k) Service Agreement dated as of August 1, 2003 between ASE (Korea) Inc. and ASE (U.S.) Inc.
- (l) Service Agreement dated as of August 1, 2003 between ASE (Chung-Li) Inc. and ASE (U.S.) Inc.

93

- (m) Service Agreement dated as of August 1, 2003 between ISE Labs, Inc. and ASE (U.S.) Inc.
- (n) Service Agreement dated as of August 1, 2003 between Advanced Semiconductor Engineering, Inc. and ASE (U.S.) Inc.
- (o) Commission Agreement dated as of August 1, 2003 between ASE Electronics (M) Sdn. Bhd. and Gardex International Limited.
- (p) Commission Agreement dated as of August 1, 2003 between ASE Test, Inc. and Gardex International Limited.
- (q) Commission Agreement dated as of August 1, 2003 between ASE (Korea) Inc. and Gardex International Limited.
- (r) Commission Agreement dated as of August 1, 2003 between ASE (Chung Li) Inc. and Gardex International Limited.
- (s) Commission Agreement dated as of August 1, 2003 between Advanced Semiconductor Engineering, Inc. and Gardex International Limited.
- (t) Joint Venture Agreement dated as of October 28, 2003 by and between ASE Inc. and Compeq Manufacturing Co., Ltd. (in Chinese with English translation) (incorporated by reference to Exhibit 10.51 to our registration statement on Form F-3 (File No. 333-111172) filed on December 15, 2003 (the "December 2003 Form F-3"))).

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

- (u) Merger Agreement dated as of October 28, 2003 by and among ASE Inc., ASE Chung Li and ASE Material (in Chinese with English translation) (incorporated by reference to Exhibit 10.52 to the December 2003 Form F-3).
- (v) Share Sale and Purchase Agreement dated as of February 3, 2004 among NEC Electronics Corporation, NEC Yamagata Ltd., J&R Holding Ltd., and ASE Inc.

### 8. List of Subsidiaries.

- 12. (a) Certification of Jason C.S. Chang, Chief Executive Officer of Advanced Semiconductor Engineering, Inc. required by Rule 13a-14(a) of the Exchange Act.
- (b) Certification of Joseph Tung, Chief Financial Officer of Advanced Semiconductor Engineering, Inc. 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.
- 14. Land Leases with the Nantze Export Processing Zone (in Chinese with English translation summary).

-----

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

++ Does not contain portions for which confidential treatment has been requested.

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.

94

### INDEX TO FINANCIAL STATEMENTS

	Page
Consolidated Financial Statements of Advanced Semiconductor Engineering, Inc. and Subsidiaries	
Independent Auditors' Report.....	F-2
Consolidated Balance Sheets.....	F-4
Consolidated Statements of Income.....	F-5
Consolidated Statements of Changes in Shareholders' Equity.....	F-8
Consolidated Statements of Cash Flows.....	F-9
Notes to Consolidated Financial Statement.....	F-11

F-1

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

## INDEPENDENT AUDITORS' REPORT

February 6, 2004

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 consolidated subsidiaries (the "Company") as of December 31, 2002 and 2003, and the related consolidated statements of income, changes in shareholders' equity and cash flows for each of the years in the three year period ended December 31, 2003, which are required to be prepared in accordance with accounting principles generally accepted in the Republic of China and expressed in New Taiwan dollars. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with Regulations for Audit of Financial Statements by Certified Public Accountants and auditing standards generally accepted in the Republic of China and the United States of America. Those 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 financial position of the Company as of December 31, 2002 and 2003, and the results of their operations and their cash flows for each of the years in the three year period ended December 31, 2003, in conformity with accounting principles generally accepted in the Republic of China.

Accounting principles generally accepted in the Republic of China vary 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 25 to the consolidated financial statements.

F-2

As discussed in Note 26 to the consolidated financial statements, the Company changed its method in accounting for goodwill and other intangible assets to conform to U.S. Statement of Financial Accounting Standards No. 142, "Goodwill and Other Intangible Assets" effective January 1, 2002.

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. Such U.S. dollar amounts are presented solely for the convenience of the readers.

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

Deloitte & Touche  
 (TN Soong & Co and Deloitte & Touche (Taiwan)  
 Established Deloitte & Touche Effective June 1,2003)  
 Kaohsiung,Taiwan  
 The Republic of China

F-3

ADVANCED SEMICONDUCTOR ENGINEERING, INC. AND ITS SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS  
 (In Thousands, Except Par Value)

	2002
	NT\$
ASSETS	
CURRENT ASSETS	
Cash and cash equivalents (Note 2)	9,829,508
Short-term investments (Notes 2, 3 and 19)	2,590,436
Notes receivable	112,667
Accounts receivable (Note 4)	8,885,879
Other receivables	130,310
Inventories (Notes 2 and 5)	3,131,652
Deferred income tax assets (Notes 2 and 17)	1,084,441
Pledged time deposit (Note 19)	428,743
Prepayments and other	838,123
Total current assets	27,031,759
LONG-TERM INVESTMENTS (Notes 2, 6 and 8)	
Long-term stock investments--equity method	4,752,847
Long-term stock investment--cost method	1,813,887
Prepaid for long-term investments	--
Other long-term investments	--
Other financial assets--non-current	--
Total long-term investments	6,566,734
PROPERTIES (Notes 2, 7, 19 and 20)	
Cost	
Land	3,870,967
Buildings and improvements	16,656,394
Machinery and equipment	72,203,572
Transportation equipment	104,225
Furniture and fixtures	1,579,785
Leased assets and leasehold improvements	855,487
Long-term land leasehold rights	62,206
Total cost	95,332,636

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

Accumulated depreciation	(39,709,319)
	-----
Construction in progress	55,623,317
Machinery in transit and prepayments	1,683,387
	5,782,166
	-----
Net properties	63,088,870
	-----
OTHER ASSETS	
Guarantee deposits (Note 19)	170,064
Deferred charge (Notes 2 and 20)	1,055,339
Deferred income tax assets (Notes 2 and 17)	1,180,773
Other	269,669
	-----
Total other assets	2,675,845
	-----
CONSOLIDATED DEBITS (Notes 2 and 8)	5,541,808
	-----
TOTAL ASSETS	104,905,016
	=====
	-----
	2002
	-----
LIABILITIES AND SHAREHOLDERS' EQUITY	NT\$
	-----
CURRENT LIABILITIES	
Short-term borrowings (Notes 9 and 19)	3,903,994
Commercial papers and bank acceptances payable (Notes 9 and 10)	2,384,577
Notes and accounts payable	4,047,171
Payable for properties	4,494,828
Income tax payable (Note 17)	172,453
Current portion of long-term bank loans (Notes 12 and 19)	6,008,709
Current portion of obligation under capital leases (Note 20)	193,714
Current portion of long-term payable for investments	962,758
Accrued expenses (Note 13)	1,839,423
Other	382,349
	-----
Total current liabilities	24,389,976
	-----
LONG-TERM LIABILITIES	
Long-term bonds payable (Notes 2 and 11)	5,179,793
Long-term bank loans (Notes 12 and 19)	22,735,903
Obligation under capital leases (Note 20)	273,660
Long-term payable for investments	2,364,360
	-----
Total long-term liabilities	30,553,716
	-----
ACCRUED PENSION COST (Notes 2 and 13)	416,671
	-----
DEFERRED INCOME TAX LIABILITIES (Notes 2 and 17)	35,658
	-----
Total liabilities	55,396,021
	-----
COMMITMENTS AND CONTINGENCIES (Note 19)	
MINORITY INTEREST IN CONSOLIDATED SUBSIDIARIES	10,078,329

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

SHAREHOLDERS' EQUITY (Notes 2 and 14)		-----
Capital stock--NT\$10 par value		
Authorized--4,550,000,000 shares in 2002 and 5,150,000,000 shares in 2003		
Issued--3,254,800,000 shares in 2002 and 3,580,280,000 shares in 2003		32,548,000
		-----
Capital surplus		
Capital in excess of par value		3,171,933
Treasury stock transaction		--
Long-term investment		3,753,594
		-----
Total capital surplus		6,925,527
		-----
Retained earnings		1,173,564
		-----
Other equity adjustments		
Unrealized loss on long-term investments in shares of stock		(423,620)
Cumulative translation adjustments		1,847,021
Unrecognized pension cost		--
		-----
Total other equity adjustments		1,423,401
		-----
Treasury stock--164,441,857 shares in 2002 and 717,984 shares in 2003		(2,639,826)
		-----
Total shareholders' equity		39,430,666
		-----
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY		104,905,016
		=====

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

F-4

ADVANCED SEMICONDUCTOR ENGINEERING, INC. AND ITS SUBSIDIARIES

CONSOLIDATED STATEMENTS OF INCOME  
(In Thousands, Except Share Data)

	Year Ended December 31		
	-----	-----	-----
	2001	2002	2003
	-----	-----	-----
	NT\$	NT\$	NT\$
	-----	-----	-----
NET REVENUES (Notes 2 and 24)			
Packaging	28,898,185	35,515,397	45,026,866
Testing	9,459,275	10,060,635	12,142,399
Other	10,366	10,806	142,500
	-----	-----	-----
Total revenues	38,367,826	45,586,838	57,311,765
	-----	-----	-----
COST OF REVENUES (Note 16)			
Packaging	24,272,336	29,260,015	37,042,530

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

Testing	8,676,475	9,219,424	9,287,14
Other	8,203	12,831	136,77
	-----	-----	-----
Total cost of revenues	32,957,014	38,492,270	46,466,45
	-----	-----	-----
GROSS PROFIT	5,410,812	7,094,568	10,845,31
	-----	-----	-----
OPERATING EXPENSES (Notes 2, 7, 8, 16 and 20)			
Selling	877,858	909,440	1,204,91
General and administrative	3,490,507	4,821,384	4,015,85
Research and development	1,504,536	2,048,973	2,354,03
	-----	-----	-----
Total operating expenses	5,872,901	7,779,797	7,574,79
	-----	-----	-----
INCOME (LOSS) FROM OPERATIONS	(462,089)	(685,229)	3,270,52
	-----	-----	-----
NON-OPERATING INCOME			
Interest (Note 22)	503,603	392,593	114,62
Foreign exchange gain--net (Notes 2 and 22)	247,498	--	--
Gain on sale of investment	50,666	101,314	618,85
Other (Note 23)	466,787	481,526	336,54
	-----	-----	-----
Total non-operating income	1,268,554	975,433	1,070,03
	-----	-----	-----
NON-OPERATING EXPENSES			
Interest (Notes 2 and 7)	2,242,879	1,971,227	1,419,35
Investment loss under equity method (Notes 2 and 6)	1,246,836	410,348	240,65
Foreign exchange loss--net (Notes 2 and 22)	--	397,874	386,84
Realized loss on long-term investments (Note 14)	--	--	354,78
Other	302,249	220,460	451,18
	-----	-----	-----
Total non-operating expenses	3,791,964	2,999,909	2,852,82
	-----	-----	-----
INCOME (LOSS) BEFORE INCOME TAX AND MINORITY INTEREST AND EXTRAORDINARY LOSS	(2,985,499)	(2,709,705)	1,487,73
	-----	-----	-----
INCOME TAX BENEFIT (Notes 2 and 17)	199,160	1,140,324	1,278,14
	-----	-----	-----
INCOME (LOSS) BEFORE MINORITY INTEREST AND EXTRAORDINARY LOSS	(2,786,339)	(1,569,381)	2,765,87
	-----	-----	-----
EXTRAORDINARY LOSS (NET OF TAX BENEFIT NT\$48,188 in 2001 and NT\$11,538 (US\$339) in 2002) (Note 11)	(144,565)	(34,613)	(75,66
	-----	-----	-----
MINORITY INTEREST IN NET LOSS OF SUBSIDIARIES	788,685	1,733,029	52,58
	-----	-----	-----
NET INCOME (LOSS)	(2,142,219)	129,035	2,742,79
	=====	=====	=====

F-5

Year Ended December 31

-----  
2001                      2002                      2003  
-----

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

	----- NT\$ -----	----- NT\$ -----	----- NT\$ -----
EARNINGS (LOSS) PER SHARE (Note 18)			
Basic			
Based on weighted average number of outstanding shares of 3,254,800,000 in 2001, 3,090,678,225 in 2002 and 3,504,700,089 in 2003			
Before income tax			
Income (loss) before extraordinary loss	(0.71)	(0.26)	0.51
Extraordinary loss	(0.06)	(0.01)	(0.02)
	-----	-----	-----
Net income (loss)	(0.77)	(0.27)	0.49
	=====	=====	=====
After income tax			
Income (loss) before extraordinary loss	(0.61)	0.05	0.80
Extraordinary loss	(0.05)	(0.01)	(0.02)
	-----	-----	-----
Net income (loss)	(0.66)	0.04	0.78
	=====	=====	=====
Diluted			
Based on weighted average number of outstanding shares of 3,254,800,000 in 2001, 3,090,678,225 in 2002 and 3,537,048,918 in 2003			
Before income tax			
Income (loss) before extraordinary loss	(0.71)	(0.26)	0.50
Extraordinary loss	(0.06)	(0.01)	(0.02)
	-----	-----	-----
Net income (loss)	(0.77)	(0.27)	0.48
	=====	=====	=====
After income tax			
Income (loss) before extraordinary loss	(0.61)	0.05	0.80
Extraordinary loss	(0.05)	(0.01)	(0.02)
	-----	-----	-----
Net income (loss)	(0.66)	0.04	0.78
	=====	=====	=====
Based on weighted average number of outstanding shares After giving retroactive adjustment to 2003 stock dividends			
Basic			
Before income tax			
Loss before extraordinary loss	(0.64)	(0.24)	
Extraordinary loss	(0.05)	(0.01)	
	-----	-----	
Net loss	(0.69)	(0.25)	
	=====	=====	
After income tax			
Income (loss) before extraordinary loss	(0.56)	0.05	
Extraordinary loss	(0.04)	(0.01)	
	-----	-----	
Net income (loss)	(0.60)	0.04	
	=====	=====	
Diluted			
Before income tax			
Loss before extraordinary loss	(0.64)	(0.24)	
Extraordinary loss	(0.05)	(0.01)	
	-----	-----	
Net loss	(0.69)	(0.25)	
	=====	=====	
After income tax			
Income (loss) before extraordinary loss	(0.56)	0.05	



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

Extraordinary loss	(0.04)	(0.01)
	-----	-----
Net income (loss)	(0.60)	0.04
	=====	=====

EARNINGS (LOSS) PER EQUIVALENT ADS (Note 18)

Basic

Based on weighted average number of outstanding shares of 650,960,000 in 2001, 618,135,645 in 2002 and 700,940,018 in 2003

Before income tax			
Income (loss) before extraordinary loss	(3.54)	(1.29)	2.53
Extraordinary loss	(0.30)	(0.07)	(0.11)
	-----	-----	-----
Net income (loss)	(3.84)	(1.36)	2.42
	=====	=====	=====
After income tax			
Income (loss) before extraordinary loss	(3.07)	0.26	4.02
Extraordinary loss	(0.22)	(0.05)	(0.11)
	-----	-----	-----
Net income (loss)	(3.29)	0.21	3.91
	=====	=====	=====

(Con

F-6

Year Ended December 31

2001	2002	2003
-----	-----	-----
NT\$	NT\$	NT\$
-----	-----	-----

Diluted

Based on weighted average number of outstanding shares of 650,960,000 in 2001, 618,135,645 in 2002 and 707,409,784 shares in 2003

Before income tax			
Income (loss) before extraordinary loss	(3.54)	(1.29)	2.51
Extraordinary loss	(0.30)	(0.07)	(0.11)
	-----	-----	-----
Net income (loss)	(3.84)	(1.36)	2.40
	=====	=====	=====
After income tax			
Income (loss) before extraordinary loss	(3.07)	0.26	3.99
Extraordinary loss	(0.22)	(0.05)	(0.11)
	-----	-----	-----
Net income (loss)	(3.29)	0.21	3.88
	=====	=====	=====

Based on weighted average number of outstanding shares

After giving retroactive adjustment to 2003 stock dividends

Basic

Before income tax		
Loss before extraordinary loss	(3.22)	(1.17)
Extraordinary loss	(0.27)	(0.07)

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

Net loss	(3.49)	(1.24)
	=====	=====
After income tax		
Income (loss ) before extraordinary loss	(2.79)	0.24
Extraordinary loss	(0.20)	(0.05)
	-----	-----
Net income (loss)	(2.99)	0.19
	=====	=====
Diluted		
Before income tax		
Loss before extraordinary loss	(3.22)	(1.17)
Extraordinary loss	(0.27)	(0.07)
	-----	-----
Net loss	(3.49)	(1.24)
	=====	=====
After income tax		
Income (loss ) before extraordinary loss	(2.79)	0.24
Extraordinary loss	(0.20)	(0.05)
	-----	-----
Net income (loss)	(2.99)	0.19
	=====	=====

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

(Con

F-7

ADVANCED SEMICONDUCTOR ENGINEERING, INC. AND ITS SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY  
(In Thousands)

	Capital Stock	Capital in excess of par value	Treasury stock transaction	Gain dispos propert
	-----	-----	-----	-----
New Taiwan Dollars				
BALANCE, JANUARY 1, 2001	27,520,000	3,171,933	--	23
Appropriations of 2000 earnings				
Legal reserve	--	--	--	
Compensation to directors and supervisors	--	--	--	
Bonus to employees--cash	--	--	--	
Bonus to employees--stock	349,600	--	--	
Stock dividends--17%	4,678,400	--	--	
Adjustment of equity in subsidiary due to change in percentage of ownership	--		--	
Reversal of unrealized loss on long-term investment in shares of stock	--	--	--	
Consolidated net loss in 2001	--	--	--	
Cumulative translation adjustments	--	--	--	

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

BALANCE, DECEMBER 31, 2001	32,548,000	3,171,933	--	23
Transfer of ASE Inc. shares held by subsidiaries as treasury stock	--	--	--	
Reversal of prior years' gain on disposal of properties	--	--	--	(23)
Legal reserve offsets against deficit	--	--	--	
Reversal of unrealized loss on long-term investments in share of stock	--	--	--	
Adjustment of equity in subsidiary due to change in percentage of ownership	--	--	--	
Adjustment of equity in subsidiary due to reversal of prior years' gain on disposal of properties	--	--	--	
Consolidated net income in 2002	--	--	--	
Cumulative translation adjustments	--	--	--	
BALANCE, DECEMBER 31, 2002	32,548,000	3,171,933	--	
Appropriations of 2002 earnings				
Legal reserve	--	--	--	
Compensation to directors and supervisors	--	--	--	
Bonus to employees--cash	--	--	--	
Stock dividends--0.3%	97,644	--	--	
Capital surplus transfer to common stock--9.7%	3,157,156	(3,157,156)	--	
Sales of ASE Inc. shares held by subsidiaries	--	--	220,735	
Adjustment of equity in subsidiary due to change in percentage of ownership	--	--	--	
Adjustment of equity in subsidiary due to unrecognized pension cost	--	--	--	
Consolidated net income in 2003	--	--	--	
Cumulative translation adjustments	--	--	--	
BALANCE, DECEMBER 31, 2003	35,802,800	14,777	220,735	
U.S. Dollars				
BALANCE, JANUARY 1, 2003	957,575	93,320	--	
Appropriations of 2002 earnings				
Legal reserve	--	--	--	
Compensation to directors and supervisors	--	--	--	
Bonus to employees--cash	--	--	--	
Stock dividends--0.3%	2,873	--	--	
Capital surplus transfer to common stock--9.7%	92,885	(92,885)	--	
Sales of ASE Inc. shares held by subsidiaries	--	--	6,494	
Adjustment of equity in subsidiary due to change in percentage of ownership	--	--	--	
Adjustment of equity in subsidiary due to unrecognized loss on pension cost	--	--	--	
Consolidated net income in 2003	--	--	--	
Cumulative translation adjustments	--	--	--	
BALANCE, DECEMBER 31, 2003	1,053,333	435	6,494	

CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY

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

(continued)

	Retained Earnings		
	Legal reserve	Unappropriated earnings (accumulated losses)	Total
BALANCE, JANUARY 1, 2001	2,329,177	5,871,770	8,200,947
Appropriations of 2000 earnings			
Legal reserve	583,539	(583,539)	--
Compensation to directors and supervisors	--	(103,200)	(103,200)
Bonus to employees--cash	--	(10,400)	(10,400)
Bonus to employees--stock	--	(349,600)	(349,600)
Stock dividends--17%	--	(4,678,400)	(4,678,400)
Adjustment of equity in subsidiary due to change in percentage of ownership	--	98,526	98,526
Reversal of unrealized loss on long-term investment in shares of stock	--	--	--
Consolidated net loss in 2001	--	(2,142,219)	(2,142,219)
Cumulative translation adjustments	--	--	--
BALANCE, DECEMBER 31, 2001	2,912,716	(1,897,062)	1,015,654
Transfer of ASE Inc. shares held by subsidiaries as treasury stock	--	--	--
Reversal of prior years' gain on disposal of properties	2,310	20,799	23,109
Legal reserve offsets against deficit	(1,876,264)	1,876,264	--
Reversal of unrealized loss on long-term investments in share of stock	--	--	--
Adjustment of equity in subsidiary due to change in percentage of ownership	--	(1,586)	(1,586)
Adjustment of equity in subsidiary due to reversal of prior years' gain on disposal of properties	--	7,352	7,352
Consolidated net income in 2002	--	129,035	129,035
Cumulative translation adjustments	--	--	--
BALANCE, DECEMBER 31, 2002	1,038,762	134,802	1,173,564
Appropriations of 2002 earnings			
Legal reserve	12,903	(12,903)	--
Compensation to directors and supervisors	--	(2,280)	(2,280)
Bonus to employees--cash	--	(8,000)	(8,000)
Stock dividends--0.3%	--	(97,644)	(97,644)
Capital surplus transfer to common stock--9.7%	--	--	--
Sales of ASE Inc. shares held by subsidiaries	--	--	--
Adjustment of equity in subsidiary due to change in percentage of ownership	--	--	--
Adjustment of equity in subsidiary due to unrecognized pension cost	--	--	--
Consolidated net income in 2003	--	2,742,796	2,742,796
Cumulative translation adjustments	--	--	--
BALANCE, DECEMBER 31, 2003	1,051,665	2,756,771	3,808,436

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

U.S. Dollars

BALANCE, JANUARY 1, 2003	30,561	3,966	34,527
Appropriations of 2002 earnings			
Legal reserve	380	(380)	--
Compensation to directors and supervisors	--	(67)	(67)
Bonus to employees--cash	--	(235)	(235)
Stock dividends--0.3%	--	(2,873)	(2,873)
Capital surplus transfer to common stock--9.7%	--	--	--
Sales of ASE Inc. shares held by subsidiaries	--	--	--
Adjustment of equity in subsidiary due to change in percentage of ownership	--	--	--
Adjustment of equity in subsidiary due to unrecognized loss on pension cost	--	--	--
Consolidated net income in 2003	--	80,694	80,694
Cumulative translation adjustments	--	--	--
	-----	-----	-----
BALANCE, DECEMBER 31, 2003	30,941	81,105	112,046
	=====	=====	=====

CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY  
(continued)

	Cumulative Translation Adjustments	Unrecognized Pension Cost	Treasury Stock	Sha
	-----	-----	-----	-----
BALANCE, JANUARY 1, 2001	1,224,271	--	--	
Appropriations of 2000 earnings				
Legal reserve	--	--	--	
Compensation to directors and supervisors	--	--	--	
Bonus to employees--cash	--	--	--	
Bonus to employees--stock	--	--	--	
Stock dividends--17%	--	--	--	
Adjustment of equity in subsidiary due to change in percentage of ownership	--	--	--	
Reversal of unrealized loss on long-term investment in shares of stock	--	--	--	
Consolidated net loss in 2001	--	--	--	
Cumulative translation adjustments	749,128	--	--	
	-----	-----	-----	
BALANCE, DECEMBER 31, 2001	1,973,399	--	--	
Transfer of ASE Inc. shares held by subsidiaries as treasury stock	--	--	(2,639,826)	
Reversal of prior years' gain on disposal of properties	--	--	--	
Legal reserve offsets against deficit	--	--	--	
Reversal of unrealized loss on long-term investments in share of stock	--	--	--	
Adjustment of equity in subsidiary due to change in percentage of ownership	--	--	--	
Adjustment of equity in subsidiary due to reversal of prior years' gain on disposal of properties	--	--	--	
Consolidated net income in 2002	--	--	--	

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

Cumulative translation adjustments	(126,378)	--	--
	-----	-----	-----
BALANCE, DECEMBER 31, 2002	1,847,021	--	(2,639,826)
Appropriations of 2002 earnings			
Legal reserve	--	--	--
Compensation to directors and supervisors	--	--	--
Bonus to employees--cash	--	--	--
Stock dividends--0.3%	--	--	--
Capital surplus transfer to common stock--9.7%	--	--	--
Sales of ASE Inc. shares held by subsidiaries	--	--	2,629,789
Adjustment of equity in subsidiary due to change in percentage of ownership	--	--	--
Adjustment of equity in subsidiary due to unrecognized pension cost	--	(16,137)	--
Consolidated net income in 2003	--	--	--
Cumulative translation adjustments	(287,422)	--	--
	-----	-----	-----
BALANCE, DECEMBER 31, 2003	1,559,599	(16,137)	(10,037)
	=====	=====	=====
U.S. Dollars			
BALANCE, JANUARY 1, 2003	54,340	--	(77,664)
Appropriations of 2002 earnings			
Legal reserve	--	--	--
Compensation to directors and supervisors	--	--	--
Bonus to employees--cash	--	--	--
Stock dividends--0.3%	--	--	--
Capital surplus transfer to common stock--9.7%	--	--	--
Sales of ASE Inc. shares held by subsidiaries	--	--	77,369
Adjustment of equity in subsidiary due to change in percentage of ownership	--	--	--
Adjustment of equity in subsidiary due to unrecognized loss on pension cost	--	(475)	--
Consolidated net income in 2003	--	--	--
Cumulative translation adjustments	(8,456)	--	--
	-----	-----	-----
BALANCE, DECEMBER 31, 2003	45,884	(475)	(295)
	=====	=====	=====

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

F-8

ADVANCED SEMICONDUCTOR ENGINEERING, INC. AND ITS SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS  
(In Thousands)

	Year Ended Decem	
	2001	2002
	NT\$	NT\$
-----	-----	-----

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

<b>CASH FLOWS FROM OPERATING ACTIVITIES</b>			
Net income (loss)	(2,142,219)	129,035	2,
Adjustments to reconcile net income (loss) to net cash provided by operating activities:			
Minority interest in net loss of subsidiaries	(788,685)	(1,733,029)	
Depreciation	10,633,197	11,841,331	12,
Amortization	494,088	444,995	
Exchange (gain) loss on:			
Long-term foreign bonds payable	640,171	(69,321)	(
Long-term foreign investment payable	223,599	(34,926)	
Accrued interest on convertible bonds	872,575	576,437	
Provision for doubtful accounts and sales allowance	80,629	85,823	
Gain on sale of investments	(50,666)	(101,314)	(
Loss on early redemption of foreign convertible bonds	144,565	46,151	
Loss from sale of treasury stock	--	--	
Investment loss under equity method	1,246,836	410,348	
Cash dividends received from long-term investment	33,196	--	
Reversal of accrued interest from long-term investment payable	--	(145,238)	
Impairment loss on fixed assets	--	1,225,555	
Loss on disposal of properties	26,884	15,668	
Provision for loss on long-term bonds investments	29,822	--	
Loss from idle assets	111,109	78,120	
Amortization of consolidated debits	692,919	815,573	
Deferred income taxes	(401,745)	(1,130,358)	(1,
Accrued pension cost	46,013	122,233	
Other	(3,251)	--	
Changes in operating assets and liabilities			
Notes receivable	114,456	(7,482)	
Accounts receivable	1,939,341	(1,950,738)	(4,
Inventories	477,891	(363,216)	(1,
Prepayments and other	199,912	(231,154)	
Notes and accounts payable	(891,130)	1,078,392	2,
Income tax payable	(856,346)	(72,165)	
Accrued expenses and other	(821,272)	217,222	
Effect of exchange rate changes	(473,515)	65,858	
Net cash provided by operating activities	11,578,374	11,313,800	13,
<b>CASH FLOWS FROM INVESTING ACTIVITIES</b>			
Acquisition of properties	(13,816,544)	(12,657,920)	(17,
(Increase) decrease in short-term investments	(2,913,644)	2,112,050	(
Decrease (increase) in pledged time deposits	128,837	(287,794)	
Payments for long-term stock investments	(216,444)	(49,716)	(
Increase in other assets	(214,772)	(831,279)	(1,
Proceeds from sales of:			
Properties	685,776	77,142	
Bonds	195,320	--	
Others	51,639	--	
Purchase of ASE Material Inc. shares	--	(10,000)	
Purchase of ASE Test Ltd. shares	(1,202,185)	(317,004)	
Purchase of ISE Labs, Inc. shares	--	(1,755,133)	
Net cash provided by (used in) investing activities	(17,302,017)	(13,719,654)	(18,

	Year Ended Decem		
	2001	2002	
	NT\$	NT\$	
<b>CASH FLOWS FROM FINANCING ACTIVITIES</b>			
Proceeds from (repayments of):			
The issuance of foreign convertible bonds payable	--	--	6,
Long-term debts	9,746,636	1,161,489	(
Investment payable	(803,833)	(249,250)	(
Commercial papers and bank acceptances payable	(837,491)	(1,739,263)	(
Proceeds from sales ASE Inc. shares	--	--	2,
Proceeds from short-term borrowings	944,148	2,375,322	1,
Contribution to a sinking fund for convertible bonds	(1,568,057)	--	
Early redemption of foreign convertible bonds	(6,066,042)	(1,674,053)	(4,
Increase in minority interest	1,552,601	656,246	
Compensation to directors and supervisors and bonus to employees	(113,600)	--	
Net cash provided by financing activities	2,854,362	530,491	4,
EFFECT OF EXCHANGE RATE CHANGES	473,515	(65,858)	(
NET DECREASE IN CASH AND CASH EQUIVALENTS	(2,395,766)	(1,941,221)	(1,
CASH AND CASH EQUIVALENTS, BEGINNING OF YEAR	14,166,495	11,770,729	9,
CASH AND CASH EQUIVALENTS, END OF YEAR	11,770,729	9,829,508	8,
<b>SUPPLEMENTAL INFORMATION</b>			
Interest paid (excluding capitalized interest)	1,557,887	1,248,726	1,
Income tax paid	1,024,286	88,884	
Cash paid for acquisition of properties			
Acquisition of properties	11,565,689	15,749,807	17,
(Increase) decrease in payable	2,250,855	(2,566,359)	
(Increase) decrease in obligation under capital leases	--	(525,528)	
	13,816,544	12,657,920	17,
Cash received from capital increase through the issuance of American Depositary Shares			
Net proceeds	--	--	6,
Issuance expense	--	--	(
Increase in payable	--	--	
Net cash inflow	--	--	6,
Cash paid for redemption of foreign convertible bonds			
Redemption price for foreign convertible bonds	6,066,042	3,242,110	4,
Cash paid from sinking fund	--	(1,568,057)	



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

	6,066,042	1,674,053	4,
	=====	=====	=====
NON-CASH FLOWS FROM INVESTING AND FINANCING			
ACTIVITIES			
Reclassification of the ASE Inc. shares which are held by consolidated subsidiaries from long-term investment to treasury stock	--	2,639,826	
Reversal of treasury stock due to sale of ASE Inc.'s shares which are held by consolidated subsidiaries	--	--	1,

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

F-10

## ADVANCED SEMICONDUCTOR ENGINEERING, INC. AND ITS SUBSIDIARIES

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

DECEMBER 31, 2001, 2002 AND 2003

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

#### 1. HISTORY AND ORGANIZATION

##### Overview

Advanced Semiconductor Engineering, Inc. (the "Company"), a corporation incorporated under the laws of Republic of China (the "ROC") is an independent provider of semiconductor packaging and testing services. The Company's common shares are traded on the Taiwan Stock Exchange under the symbol "2311". Since September 2000, the Company's common shares in the form of American depository shares ("ADS") have been traded on the New York Stock Exchange under the symbol "ASX". The Company and its consolidated subsidiaries and affiliates are together referred to as the "ASE Group".

On July 17, 2002, the Board of Directors of the Company passed a resolution whereby ASE Investment Inc. and ASE Capital Inc. (a wholly-owned subsidiary of the Company), would be merged into the Company. Upon the completion of the merger, all of the assets and liabilities of ASE Investment Inc. and ASE Capital Inc. were assumed by the Company. The merger was effective on July 1, 2003.

As of December 31, 2002 and 2003, the Company and subsidiaries had approximately 24,443 and 20,401 employees, respectively.

Set forth is a brief overview of the Company's organization structure and its equity stakes in its consolidated subsidiaries.

The Company has four wholly-owned subsidiaries:

- a. ASE Holding Limited (incorporated in Bermuda in April 1990), which holds shares in ASE Group companies;
- b. ASE Marketing Services Ltd. (incorporated in Hong Kong in February 1991), which engages in trading;
- c. J&R Holding Limited (incorporated in Bermuda in May 1996), which holds shares in ASE Group companies;

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

- d. ASE Japan Co. (incorporated in Japan in Yokohama, December 2003), which engages in marketing and provides sales services relating to packaging and testing.

As of December 31, 2003, the Company also held:

- a. 98.8% equity stake in ASE Technologies, Inc. (incorporated in the ROC in June 1991), which is engaged in the research and development, manufacture and sales of computers and related accessories;
- b. 90.0% equity stake in ASE Network Inc. (incorporated in the ROC in January 2000), which is engaged in investing in Taiwan Fixed Network Co., Ltd.;
- c. 72.4% equity stake in ASE (Chung Li) Inc. ("ASE Chung Li") (incorporated in the ROC in April 1999), which is engaged in the packaging and testing of semiconductors. In addition, ASE Test Limited has a 27.6% equity stake in ASE Chung Li; and

F-11

- d. 57.4% equity stake in ASE Material Inc. ("ASE Material") (incorporated in the ROC in December 1997), which is engaged in the design and production of leadframes and substrates used in the packaging of semiconductors. In addition, ASE Test, Inc. has a 4.0% equity stake in ASE Material.

ASE Holding Limited has the following wholly-owned or majority-owned subsidiaries:

- a. ASEP Realty Corporation (incorporated in the Philippines in December 1995), which holds real estate of ASE Holding Electronics (Philippines);
- b. ASE Holding Electronics (Philippines) (incorporated in the Philippines in December 1995), which manufactures electronic products, components and semiconductors. However, the board of ASE Holding Electronics (Philippines) had decided to close the facilities and discontinued operation in December 2003; and
- c. 70.0% equity stake in ASE Investment (Labuan) Inc. (incorporated in Malaysia in June 1999), which holds shares of ASE Korea Inc. In addition, ASE Test Limited has a 30.0% equity stake in ASE Investment (Labuan) Inc.

A portion of the share capital of the Company's subsidiaries incorporated in Philippines is held by certain Filipino individuals due to local requirements.

J&R Holding Limited has three subsidiaries:

- a. 100.0% equity stake of J&R Industrial Inc. (incorporated in the ROC in April 1999), which is mainly engaged in the leasing of substrate, packaging and testing equipment; and
- b. 100.0% equity stake of Grand Innovation Co., Ltd. (incorporated in the British Virgin Islands in March 2001), which holds 6.9% convertible preferred stock of Integrated Programmable Communication,

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

Inc.

- c. 39.1% equity stake of ASE Test Limited ("ASE Test") (incorporated in Singapore in May 1996), which holds shares in ASE Group companies.

In addition, as of December 31, 2003, ASE Holding Limited held an 11.2% equity stake in ASE Test. The shares of ASE Test have been listed on the NASDAQ National Market in the United States since June 1996.

ASE Test has four wholly-owned subsidiaries:

- a. ASE Test, Inc. (incorporated in the ROC in December 1987), which is engaged in the testing of semiconductors;
- b. ASE Holding (Singapore) Pte. Ltd. (incorporated in Singapore in December 1994), which holds shares in ASE Group companies;
- c. ASE Test Holdings, Limited ("ASE Test Holdings") (incorporated in Cayman Islands in April 1999), which mainly holds shares in ASE Group companies; and
- d. ASE Test Finance Limited ("ASE Test Finance") (incorporation in Mauritius in June 1999), which is engaged in financing activities.

ASE Test, Inc. has a wholly-owned subsidiary, ASE Test (USA) Inc. (incorporated in the United States in October 1995), which is currently being liquidated.

ASE Holding (Singapore) Pte. Ltd. has a wholly-owned subsidiary, ASE Electronics (M) Sdn., Bhd. ("ASE Test Malaysia") (incorporated in Malaysia in February 1991), which is engaged in the packaging and testing of semiconductors.

F-12

ASE Test Holdings has a wholly-owned subsidiary, ISE Labs, Inc. ("ISE Labs") (incorporated in California, U.S.A. in November 1983), which is engaged in the front-end engineering testing and final testing of semiconductors.

ASE Chung Li has a wholly-owned subsidiary, Omniquest Industrial Limited ("Omniquest") (incorporated in the British Virgin Islands in June 2001), which holds shares in ASE (Shanghai) Inc.

Omniquest has a wholly-owned subsidiary, ASE (Shanghai) Inc. (incorporated in the People's Republic of China in 2002), which is currently in the pre-operating phase.

ASE Investment (Labuan) Inc. has a wholly-owned subsidiary, ASE Korea Inc. ("ASE Korea") (incorporated in the Republic of Korea in 1999), which is engaged in the packaging and testing of semiconductors.

## 2. SIGNIFICANT ACCOUNTING POLICIES

The accompanying consolidated financial statements have been prepared in conformity with generally accepted accounting principles in the ROC ("ROC GAAP"). Significant accounting policies are summarized as follows:

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

### Presentation of Consolidated Financial Statements

The Company prepares its consolidated financial statements in accordance with ROC GAAP and prepares a reconciliation to generally accepted accounting principles of the United States ("U.S. GAAP") (see Note 26). The accompanying consolidated balance sheets are presented for the two years ended as of December 31, 2002 and 2003, and the accompanying consolidated statements of income, changes in shareholders' equity and cash flows are presented for the three years ended December 31, 2001, 2002 and 2003.

Unless otherwise stated, amounts presented are in thousands of New Taiwan dollars (NT\$).

### Consolidation

The consolidated financial statements include the accounts of the Company and all of the aforementioned subsidiaries.

All intercompany accounts and transactions have been eliminated and minority shareholders' interests in the equity and earnings of the subsidiaries are presented separately in the consolidated financial statements. The differences between the costs of investments and the proportionate equity in each subsidiary when the stocks were acquired are recorded as consolidated credits or debits and are amortized on the straight-line method over ten years.

### Use of Estimates

The preparation of consolidated financial statements in conformity with ROC GAAP requires management to make estimates and judgments that affect the recorded amounts of assets, liabilities, revenues and expenses of the Company. The Company continually evaluates these estimates, including those related to allowances for doubtful accounts, inventories, useful lives of properties, consolidated debits, income tax valuation allowances, pension plans and the fair value of financial instruments. The Company bases its estimates on historical experience and other assumptions, which it believes to be reasonable under the circumstances. Actual results may differ from these estimates under different assumptions and conditions.

F-13

### Assets and Liabilities Classified as Current and Non-current

Current assets include cash or cash equivalent and other assets that are reasonably expected to be realized in cash, or to be consumed within one year from the balance sheet date; otherwise are classified as non-current assets.

Current liabilities are liabilities which are reasonably expected to be liquidated within one year. All other liabilities are classified as non-current.

### Cash and Cash Equivalents

The Company considers all highly liquid investments within an original maturity from date of purchase of three months or less to be cash equivalents.

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

### Short-term Investments

Short-term investments are carried at cost less allowance for decline in market value.

### Allowance for Doubtful Accounts

Allowance for doubtful accounts is provided based on evaluation of the collectibility of receivables.

The total amount of the provision is determined based on the identification of customers that the Company determines to have a higher credit risk based on overdue accounts, past collection difficulties or their overall financial condition. An estimation is made based on the extent to which the customer will be able to meet its financial obligations to the Company and a provision is recorded to reduce the accounts receivable balance to the amount the Company reasonably believes will be collected. For all other customers, an allowance is equal to a percentage of the aggregate accounts receivable based on history of collection. An allowance for these other customers ranges between 3% and 4%, on a consolidated basis, of the Company's accounts receivable.

### Inventories

Inventories are stated at the lower of the first-in, first-out or weighted average cost or market value. Unbilled processing charges incurred are included in finished goods and work in process and are stated at actual cost. Market value represents net realizable value for finished goods and work in process, and replacement costs for raw materials, supplies and spare parts.

Materials received from customers for processing, mainly semiconductor wafers, are excluded from inventories as title and risk of loss remains with the customers.

### Long-term Investments in Shares of Stock

Long-term investments of which the Company owns at least 20% of the outstanding voting shares and where the Company exercises significant influence over the investee company's operations are accounted for by the equity method. Under the equity method, the investments are initially carried at cost and subsequently adjusted for the Company's proportionate share in the net earnings or losses of the investee companies. Such proportionate share in the earnings or losses are recognized as investment income or losses while any cash dividends declared are reflected as a reduction in the carrying value of the investments. The goodwill representing the excess of the investment cost over the Company's proportionate equity in the fair value of the net assets of the investees at the time of investments or at the time the equity method of accounting is first applied to a particular investment, is amortized on the straight-line method over ten years. Changes in the Company's ownership percentage of investees under the equity method are accounted for as adjustments to long-term investments and capital surplus.

F-14

Other long-term investments in shares of stock are carried at cost or lower of cost or market value. Allowances for decline in market value and unrealized loss on long-term investments in shares of stock (a deduction

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

account in shareholders' equity) are made when the market value of an investment is lower than its carrying value. If decline in value of the stock investment is determined to be other than temporary, such decline in value is charged against current income. Cash dividends are recognized as income on the declaration date.

Unrealized profits or losses arising from transactions with equity investees or between equity investees are offset against investment income or loss from long-term investments, based on the percentage of ownership.

### Properties

Properties, except for leased equipment, are stated at cost. Equipment held under capital leases are recorded as an asset and an obligation at an amount equal to the lower of: (i) the present value at the beginning of the lease term of the minimum lease payments during the lease term (including the payment called for under any bargain purchase option); or (ii) fair value of the leased equipment at the inception of the lease. Machinery in transit, construction in progress and prepayments under construction are stated at cost. These include the cost of machinery, construction, down payments and other direct costs plus interest charges attributable to the borrowings used to finance the acquisitions of these assets. Major renewals and improvements are capitalized, while maintenance and repairs are expensed currently.

Depreciation is computed using the straight-line method over estimated service lives which range as follows: long-term land leasehold rights, 60 years (lease period); buildings and improvements, 3 to 55 years; machinery and equipment, 3 to 8 years; furniture and fixtures, 1 to 15 years; transportation equipment, 3 to 8 years; and leased assets and leasehold improvements, 3 to 5 years. In the event that an asset depreciated to its residual value is deemed to have a continual useful life, the residual value is depreciated over the remaining life, not to exceed 2 years.

The Company reviews properties for impairment and determines whether an event or change in facts and circumstances indicated that their carrying amount may not be recoverable. Impairment losses on properties are recorded as an operating expense and included in general and administrative expenses.

When properties are retired or disposed of, their costs and accumulated depreciation are removed from the accounts and any gain or loss is credited or charged to income. Prior the January 1, 2001 the gain, after deducting applicable income tax, was reclassified to capital surplus at the end of the year.

### Deferred Charges

Deferred charges are amortized using the straight-line method as follows: tools, 2 years; license fees, 2 years; telecommunications, electrical, computer network systems, 5 years; bond issuance cost, 4 years; and others, 2 to 5 years.

### Consolidated Debits

The consolidated debits as shown in the balance sheet represent goodwill arising from acquisitions or investments in the consolidated subsidiaries and are amortized on the straight-line method over 10 years.

### Pension Cost

Pension cost is recorded based on actuarial calculations. Provisions for

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

pension costs are accrued based on actuarially determined amounts which include service costs, interest, amortization of unrecognized net obligation and expected return on pension assets.

F-15

An additional accrued pension cost must be recognized if the accumulated benefit obligation exceeds the fair value of plan assets. The debit is either to an other asset-deferred pension cost or to a contra account to shareholders' equity entitled unrecognized pension cost. If the debit is less than unamortized balances of transition obligation, it is reported as an intangible asset. If the debit is greater than unamortized balances of transition obligation, the excess debit is reported as contra account to shareholders' equity.

### Convertible Bonds

Conversion of convertible bonds into common shares is accounted for by the book value method. Under this method, unamortized bond issuance cost, accrued interest no longer payable and the carrying value of the bond are written off. In addition, common shares are recorded at the par value of the shares issued and the excess is recorded as capital surplus.

### Revenue Recognition

Revenues from semiconductor packaging services that the Company provides are recognized upon shipment. Revenues from semiconductor testing services that the Company provides are recognized upon completion of the services. 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 remains with the customer for those bare semiconductors and/or packaged semiconductors. Accordingly, the cost of customer-supplied semiconductor materials is not included in the accompanying consolidated financial statements. Other criteria that the Company uses to determine when to recognize revenue are: (i) existence of persuasive evidence of the services provided, (ii) the selling price is fixed or determinable and (iii) collectibility is reasonably assured. The Company does not provide warranties to its customers except only in cases of defects in the packaging services provided and deficiencies in testing services provided. An appropriate sales allowance, based on historical experience, is recognized in the period the sale is recognized.

### Income Tax

Tax effects of deductible temporary differences, unused tax credits and operating loss carryforwards are recognized as deferred income tax assets, while those taxable temporary differences are recognized as deferred income tax liabilities. A valuation allowance is provided for deferred income tax assets based on the estimated realizability.

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

Income taxes on undistributed earnings (10%) as determined by tax authority generated in 1998 and onwards for consolidated entities in the ROC are recorded as expense in the following year when the shareholders have resolved that the earnings shall be retained.

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

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

The Company and its subsidiaries maintain their accounts in the currency of their respective countries of incorporation (local currencies) and functional currencies.

Foreign currency transactions, other than foreign currency forward exchange contracts, are recorded in the local currencies at the rates of exchange in effect when the transactions occur.

Gains or losses resulting from the application of different foreign exchange rates when foreign-currency assets and liabilities are settled, are credited or charged to income in the year of settlement. Year-end balances of foreign currency assets and liabilities are restated based on prevailing exchange rates and the resulting differences are credited or charged to income.

F-16

The financial statements of the foreign subsidiaries are translated into NT dollars at the following rates: Assets and liabilities, current rate; and income and expenses, average exchange rate during the year. The net resulting translation adjustment is reported as a separate component of shareholders' equity.

### Derivative Financial Instruments

Premiums or discounts on foreign currency forward exchange contracts which have been acquired to manage the risk associated with assets and liabilities denominated in foreign currencies arising from the difference between the forward rate and the spot rate at the date of each contract are deferred and amortized over the contract period. At year end, the balances of the forward exchange receivables or payables are restated based on prevailing exchange rates and the resulting gain or loss is credited or charged to income. Any exchange gain or loss when the contract is settled is also credited or charged to income. The difference between receivable and payable balances arising from forward exchange contracts is accounted for as either current asset or current liability.

Written option contracts to purchase foreign currencies and cross currency swap contracts entered into for hedging purposes are not recorded as assets or liabilities on the contract dates. Gains or losses upon settlement are credited or charged to income. Amounts received or paid are amortized over each contract period. At year end, the outstanding written option contracts and cross currency swap contracts are marked to market with charges to current income.

Interest rate swap contracts to limit the impact of the variable interest rate of certain long-term debt are not recorded as assets or liabilities on the contract date. The differential between fixed and variable rates to be paid or received on swaps is accrued as interest rates change in accordance with the contracts and is included in current interest income or expense.

### U.S. Dollar Amount

The Company prepares its consolidated financial statements in NT dollars.



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

Translations into U.S. dollars for 2003 financial statements are included solely for the convenience of the reader, and are based on the U.S. Federal Reserve Bank of New York noon buying rate of NT\$33.99 to US\$1.00 in effect at December 31, 2003. The convenience translations should not be construed as representations that the NT 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.

### 3. SHORT-TERM INVESTMENTS

	December 31		
	2002	2003	
	NT\$	NT\$	US\$
Mutual funds	2,025,957	3,012,264	88,622
Stocks	5,305	5,895	173
Commercial paper	552,416	--	--
Convertible bonds	10,000	391	12
	2,593,678	3,018,550	88,807
Allowance for loss	(3,242)	(771)	(23)
	2,590,436	3,017,779	88,784

F-17

### 4. ACCOUNTS RECEIVABLE

	December 31		
	2002	2003	
	NT\$	NT\$	US\$
Accounts receivable	9,229,641	13,180,553	387,778
Allowance for doubtful accounts (Note 2)	(300,713)	(337,311)	(9,924)
Allowance for sales allowances (Note 2)	(43,049)	(45,107)	(1,327)
	8,885,879	12,798,135	376,527

The change in allowance for doubtful accounts and sales allowances are as follows:

	Doubtful Accounts	Sales Allowances
	NT\$	NT\$
Balance, beginning of 2001	314,243	38,676
Additions	15,619	65,010
Deductions	(43,386)	(50,060)

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

Balance, end of 2001	286,476	53,626
Additions	67,567	18,256
Deductions	(53,330)	(28,833)
Balance, end of 2002	300,713	43,049
Additions	95,853	111,165
Deductions	(59,255)	(109,107)
Balance, end of 2003	337,311	45,107
	=====	=====
	US\$	US\$
	-----	-----
Balance, beginning of 2003	8,847	1,266
Additions	2,820	3,271
Deductions	(1,743)	(3,210)
Balance, end of 2003	9,924	1,327
	=====	=====

5. INVENTORIES

	December 31		
	2002	2003	
	NT\$	NT\$	US\$
	-----	-----	-----
Raw materials	1,999,267	3,365,079	99,002
General supplies and spare parts	508,736	573,240	16,865
Work in process	436,872	637,692	18,761
Finished goods	333,427	399,699	11,759
Supplies in transit	66,107	29,620	872
	-----	-----	-----
	3,344,409	5,005,330	147,259
Allowance for obsolescence	(212,757)	(313,559)	(9,225)
	-----	-----	-----
	3,131,652	4,691,771	138,034
	=====	=====	=====

F-18

The movement of allowance for obsolescence is as follows:

	NT\$
	-----
Balance, beginning of 2001	155,061
Additions	131,197
Deductions	(65,710)
Balance, end of 2001	220,548
Additions	34,379
Deductions	(42,170)
Balance, end of 2002	212,757

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

Additions	240,844
Deductions	(140,042)
	-----
Balance, end of 2003	313,559
	=====
	US\$
	-----
Balance, beginning of 2003	6,259
Additions	7,086
Deductions	(4,120)
	-----
Balance, end of 2003	9,225
	=====

6. LONG-TERM INVESTMENTS

	December 31			
	2002		2001	
	NT\$	% of Direct Owner- ship	NT\$	
	-----	-----	-----	-----
Equity method				
Common stock				
Universal Scientific Industrial Co., Ltd. (Note 8)	3,422,186	23.5	3,342,455	9
Hung Ching Development & Construction Co.	1,140,427	26.4	1,012,399	2
Hung Ching Kwan Co.	404,513	27.3	406,131	1
Inprocomm, Inc.	--	--	7,678	
Universal Access Technology Inc.	--	25.0	--	
Preferred stock				
Intergrated Programmable Communication, Inc.	85,870	30.0	52,599	
	-----		-----	
	5,052,996		4,821,262	14
Unrealized gain on sale of land	(300,149)		(300,149)	(
	-----		-----	
	4,752,847		4,521,113	13
	-----		-----	
Cost method				
Taiwan Fixed Network Co., Ltd.	1,500,000	1.6	1,500,000	4
InveStar Burgeon Venture Capital, Inc.	160,732	13.0	83,228	
Global Strategic Investment, Inc.	69,540	2.5	67,940	
Digital Communications International Inc.	40,000	12.0	50,167	
UC Fund II	34,770	--	33,970	
Crimson@Velocity Fund, L.P.	8,845	--	21,237	
	-----		-----	
	1,813,887		1,756,542	5
	-----		-----	
Prepaid for long-term investments--ASE-Compeq Technologies, Inc.	--	--	12,000	
	-----		-----	
Other long-term investment--Asset Backed Security	--	--	50,000	
	-----		-----	

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

Other financial assets	--	--	3,140	
	-----		-----	---
	6,566,734		6,342,795	18
	=====		=====	===

F-19

From February 1999 to April 2000, the Company acquired shares of Universal Scientific Industrial Co., Ltd. ("USI") from the stock market. As of December 31, 2003, the Company has an accumulated total investment cost of NT\$3,838,368 (US\$112,926). USI is engaged in the manufacturing, processing and sales of computer peripherals, integrated circuits, electrical parts, personal computers and related accessories. USI declared stock and cash dividends in 2001 for NT\$1.30 and NT\$0.25 per share, respectively. As of December 31, 2003, the undistributed earnings of USI are NT\$776,285 (US\$22,839).

From March 1995 to February 1999, the Company acquired shares of Hung Ching Development & Construction Co. ("HCDC") from the stock market. As of December 31, 2003, the Company has an accumulated total investment cost of NT\$2,845,912 (US\$83,728). HCDC is engaged in the development and management of commercial, residential and industrial real estate properties in Taiwan. As of December 31, 2003, the accumulated loss of HCDC is NT\$887,085 (US\$26,098).

The Company acquired its 27.3% equity interest in Hung Ching Kwan Co. ("HCKC") in 1992 by transferring to HCKC a parcel of land as an investment in HCKC at an agreed value of NT\$390,470. The resulting gain of NT\$300,149, 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, 2003, the Company has a 44.1% effective interest in HCKC, which consists of 27.3% interest directly owned by the Company, and 16.8% interest indirectly owned through HCDC (based on HCDC's 63.5% interest in HCKC). HCKC did not declare dividends in 2002 and 2003. As of December 31, 2003, the undistributed earnings of HCKC are NT\$51,592 (US\$1,518).

The Company invested in Inprocomm, Inc. ("Inprocomm") in May 2003 with capital of NT\$52,000 (US\$1,530) and directly acquired its 32.1% equity interest. In addition, USI, Integrated Programmable Communication, Inc. ("IPC") and Global Strategic Investment, Inc. have 17.3%, 0.6% and 8.6% equity interests in Inprocomm, respectively. Inprocomm is engaged in the design of semiconductors for wireless communication applications. As of December 31, 2003, the accumulated loss of Inprocomm is NT\$138,081 (US\$4,062).

The Company invested in Universal Access Technology Inc. ("UAT") in December 2000 and directly acquired its 25.0% equity interest. In addition, HCDC and USI have 10.0% and 25.0% equity interest in UAT, respectively. Accordingly, as of December 31, 2003, the Company has a 33.3% effective interest in UAT. UAT had a negative net worth as of December 31, 2002 and accordingly, the carrying value of this investment had been written off.

In December 2000, the Company invested in convertible preferred stock issued by IPC. As of December 31, 2003, the Company and its subsidiary, J&R Holding, has made total investments of US\$5.2 million, and own a 30.0% stake in IPC. In addition, USI has 16.1% equity interest in IPC. IPC is

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

engaged in the design of semiconductors for wireless communication applications.

On October 27, 2003, the Company entered into a joint venture agreement with Compeg to establish ASE-Compeg Technologies, Inc. ("ASE-Compeg"), which will initially focus on the design and production of interconnect materials for packing semiconductors. Pursuant to the joint venture agreement, the Company will own 60% of the equity interest. As of December 31, 2003, the Company has made total investments of NT\$12,000 (US\$353) as prepayments. ASE-Compeg is currently in the pre-operating phase.

The Company recorded net investment losses of NT\$1,246,836 in 2001, NT\$410,348 in 2002 and NT\$240,656 (US\$7,080) in 2003, respectively, from its investments in the aforementioned equity-method investees.

F-20

### 7. PROPERTIES

Accumulated depreciation consists of:

	December 31		
	2002	2003	
	NT\$	NT\$	US\$
Buildings and improvements	2,844,317	3,734,503	109,871
Machinery and equipment	35,399,098	42,959,968	1,263,900
Transportation equipment	71,622	66,463	1,955
Furniture and fixtures	842,146	1,044,699	30,736
Leased assets and leasehold improvements	543,397	466,688	13,730
Long-term land leasehold rights	8,739	9,614	283
	-----	-----	-----
	39,709,319	48,281,935	1,420,475
	=====	=====	=====

Certain machinery and equipment related to the testing business of ASE Test and ISE Labs were impaired during 2002. As a result, an impairment loss of NT\$1,225,555 (US\$36,056) was recognized and included in general and administrative expenses in 2002.

Interest capitalized and included as cost of properties amounted to NT\$100,453, NT\$145,985 and NT\$149,051 (US\$4,385) for the years ended December 31, 2001, 2002 and 2003, respectively.

Machinery in transit pertains to the purchase of packaging, testing and substrate equipment that has been received but is not ready for use. Prepayments are payments made to purchase machinery with non-cancellable purchase orders.

Machinery in transit and prepayments consist of the following:

December 31

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

	December 31		
	2002	2003	
	NT\$	NT\$	US\$
Bonders	649,783	457,944	13,473
Testers	845,585	2,726,211	80,206
Bumping	664,897	833,639	24,526
Flip Chip	355,220	503,225	14,805
Substrate	1,218,039	19,640	578
Others	2,048,642	1,652,954	48,630
	5,782,166	6,193,613	182,218

8. CONSOLIDATED DEBITS

These represent goodwill arising from the purchases of:

	December 31		
	2002	2003	
	NT\$	NT\$	US\$
ASE Test shares	2,701,189	2,212,135	65,082
ISE Labs shares	2,514,629	2,113,500	62,180
ASE Korea shares	325,990	270,599	7,961
	5,541,808	4,596,234	135,223

F-21

Amortization of goodwill is reflected in general and administrative expenses in the consolidated statement of income and was NT\$692,919, NT\$815,573 and NT\$819,253 (US\$24,103) for the years ended December 31, 2001, 2002 and 2003, respectively.

As of December 31, 2002 and 2003, unamortized goodwill for USI was NT\$1,431,142 and NT\$1,210,542 (US\$35,615), respectively.

9. SHORT-TERM BORROWINGS

	December 31				
	2002		2003		
	Interest Rate (%)	NT\$	Interest Rate (%)	NT\$	US\$
Letters of credit	0.88-5.45	1,748,209	0.86-3.60	2,967,178	87,296
Revolving	2.00-7.00	2,155,785	1.32-6.00	2,081,052	61,225

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

-----	-----	-----
3,903,994	5,048,230	148,521
=====	=====	=====

As of December 31, 2003, unused credit lines for short-term borrowings, including commercial paper and bank acceptances, totaled approximately NT\$7,654,000 (US\$225,184).

10. COMMERCIAL PAPER AND BANK ACCEPTANCES PAYABLE

Commercial paper and bank acceptances payable bore interest rates ranging from 1.55% to 3.65% in 2002 and 1.10% to 2.35% in 2003, respectively.

11. LONG-TERM BONDS PAYABLE

	December 31		
	2002	2003	
	NT\$	NT\$	US\$
Foreign convertible bonds--issued by ASE	--	6,794,000	199,882
Foreign convertible notes--issued by ASE Test Finance	3,820,875	--	--
Accrued interest	1,358,918	67,232	1,978
	-----	-----	-----
	5,179,793	6,861,232	201,860
	=====	=====	=====

Information on the long-term bonds payable is follows:

Foreign Convertible Bonds--Issued by the Company

In September 2003, the Company issued US\$200,000 (NT\$6,798,000) of unsecured zero coupon convertible bonds due September 2008, consisting of 200,000 units with face values of US\$1 each. The bonds have an implied interest rate of 3.75%.

From the date 30 days after issuance through the date 10 days before the due date, the bondholders have the right to convert the bonds into the Company's common shares or ADS at the specified conversion price. The conversion rate was based on the current market price at the time of sale.

The Company may redeem the bonds at the redemption price if:

F-22

- a. on or at any time after September 2007, the closing price of the common shares for a period of 20 consecutive trading days is higher than 130% of the conversion price (NT\$37.716 per share at December 31, 2003) in effect on each such trading day and
- b. at least 90% of the bonds have already been converted, redeemed, or purchased and cancelled.

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

- c. if the applicable tax law is unfavorably changed, redeem at any time all, but not some, of the bonds.

In November 1997, the Company issued US\$200.0 million of zero coupon convertible bonds due November 2002. Except for US\$1.0 million aggregate principal amount of convertible bonds that were converted into 355,086 common shares during 2001, the remaining US\$199.0 million aggregate principal amount of the outstanding bonds were repurchased from the open market and cancelled in 2001 and 2002. During 2001, the Company repurchased US\$131.0 million in aggregate principal amount of the outstanding bonds from the open market with payments of NT\$6,066,042, which resulted in an extraordinary loss of NT\$144,565 (net of income tax benefit of NT\$48,188). During 2002, the Company repurchased US\$68.0 million in aggregate principal amount of the outstanding bonds from the open market with payments of NT\$3,242,110, which resulted in an extraordinary loss of NT\$34,613 (net of income tax benefit of NT\$11,538).

### Foreign Convertible Notes--Issued by ASE Test Finance

In June 1999, ASE Test, in connection with the acquisitions of ISE Labs and Motorola SPS Businesses, issued US\$160.0 million of 1% guaranteed convertible bonds due July 1, 2004 through its subsidiary, ASE Test Finance. The Company subscribed US\$50.0 million of the convertible bonds and, accordingly, the net balance of US\$110,111 (NT\$3,742,673) is recorded in the accompanying balance sheet as of December 31, 2002. On August 19, 2003, ASE Test Finance redeemed and cancelled the total outstanding, convertible notes with payments of NT\$4,908,389 (US\$144,407), which resulted in an extraordinary loss of NT\$75,668 (US\$2,226).

Under ROC GAAP, the loss incurred of NT\$75,668 (US\$2,226), as a result of the early redemption and cancellation of the convertible notes was recorded as an extraordinary loss. Under US GAAP, the loss would not qualify as extraordinary and would have been included in other expenses.

## 12. LONG-TERM DEBTS

Long-term debts consist of the following:

	December 31	
	2002	2003
	NT\$	NT\$      US\$
Mortgage bank loans for purchase of building and machinery	7,281,200	6,266,559      184,365
Revolving bank loans and acceptances payable	11,019,162	14,314,818      421,148
Bank loans secured by assets	1,724,760	2,025,672      59,596
Letters of credit loans for purchase of materials and machinery	2,719,490	1,662,152      48,901
Loans for redemption of convertible bond	6,000,000	5,095,500      149,912
	28,744,612	29,364,701      863,922
Current portion	6,008,709	5,491,389      161,559
	22,735,903	23,873,312      702,363
	=====	=====      =====



Mortgage Bank Loans for Purchase of  
Building and Machinery

Mortgage bank loans obtained by the Company, ASE Test, Inc., ASE Chung Li, and ASE Material are repayable in monthly, quarterly or semi-annually installments. The loans bear interest at rates ranging from 3.00% to 7.92% in 2002 and 1.82% to 7.92% in 2003, respectively.

ASE Chung Li has a syndicated loan agreement with a total facility of NT\$4,000,000, which will be repayable through May 2006. As of December 31, 2002, NT\$1,600,000 (US\$47,073) of the total facility had been drawn. The remaining NT\$2,400,000 (US\$70,609) available under the facility had not been drawn and, under the terms of the agreement, expired in November 2002. The agreement requires that, among other things, ASE Chung Li maintains certain financial ratios. As of December 31, 2003, ASE Chung Li was in compliance with the required covenants.

Revolving Bank Loans and Acceptance Payables

	December 31		US
	2002	2003	
	NT\$	NT\$	
Syndicated bank loans--interest at 2.14%-5.90% in 2002 and 2.15%-2.53% in 2003			
ASE	5,200,000	8,050,000	236,
ASE Test, Inc.	300,000	--	
Revolving credit lines due April 2004 to June 2008--interest at 1.85%-4.88% in 2002 and 1.03%-5.05% in 2003			
ASE	4,920,030	4,388,760	129,
Others	606,341	1,876,260	55,
	11,026,371	14,315,020	421,
Unamortized discounts	(7,209)	(202)	
	11,019,162	14,314,818	421,

The five-year syndicated bank loan of NT\$5.2 billion of the Company due in June 2004 was repaid in January 2003, with proceeds the Company obtained from a new long-term credit line of NT\$7.0 billion.

The January 2003 syndicated bank loan of NT\$7.0 billion is repayable in three semi-annual installments from December 2004 to December 2005, but the Company made an early payment in the amount of NT\$3.35 billion in October 2003.

The remaining NT\$3.65 billion will be repayable upon the original payment schedule. The other syndicated bank loan of NT\$7.0 billion obtained in

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

2003 by the Company is repayable in seven semi-annually installments from September 2005 to September 2008. As of December 31, 2003, NT\$4.4 billion of the total facility had been drawn.

The agreement requires, among other things, the following:

- a. Without the prior written consent from the majority of the banks, ASE may not:
  - 1) Pledge its assets or assume liabilities or change the scope of its operations or dispose material assets; or
  - 2) Merge or combine with any other entity or make investments or acquire major assets of any other entity over 25 billion.

F-24

- b. The Company's tangible net worth (as defined in a loan agreement) should not be less than NT\$38.0 billion (US\$1,118 million).
- c. Maintenance by the Company of certain financial ratios.

### Bank Loans Secured by Assets

These include various bank loans obtained by ISE Labs which are secured by ISE Labs' total assets (see Note 19). The loans are repayable in May 2009, and bear interest from 5.50% to 7.92% in 2001 and 4.75% to 7.75% in 2002, respectively. These agreements contain certain covenant and default provisions that require ISE Labs to maintain certain financial ratios, dividend and capital expenditure restrictions and maintenance of working capital requirements. ISE Labs was in violation of covenants under a US\$10.0 million bank loan agreement to maintain certain monthly and quarterly financial ratios for the months from October 2002 through February 2003. These breaches constituted events of default and, as a result, the bank declared all of ISE Labs' obligations under the agreement immediately due and payable. Accordingly, the long-term debt portion of US\$10.0 million was included in the current portion of long-term debt at December 31, 2002. ISE Labs subsequently obtained a waiver of the aforementioned breaches from the bank, repaid all of the amounts owed under the loan and terminated the loan agreement.

These also include various bank loans obtained by ASE Korea which are secured by ASE Korea's land, buildings and improvements, and machinery and equipment (see Note 19). The loans are repayable in July 2009 and bear interest from 3.70% to 4.30% in 2002 and 3.15% to 3.87% in 2003, respectively.

### Letters of Credit Loans for Purchase of Materials and Machinery

These represent various bank loans obtained by the Company with original terms of one year or less, due from March 2004 through July 2004 with interest rates ranging from 0.86% to 5.45% in 2002, 0.83% to 1.61% in 2003. The Company and ASE Material have received permission from the relevant banks to refinance some of these loans on the same terms.

### Loans for Redemption of Convertible Bonds

December 31

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

	2002		2003	
	NT\$		NT\$	US\$
ASE	6,000,000	--	--	--
ASE Test Finance	--	5,095,500	149,912	
	6,000,000	5,095,500	149,912	

The loan obtained in 2001 by the Company which was specified for use in the redemption of the Company's convertible bonds (Note 11) was repayable in semi-annual installments starting June 2003 to December 2004. The Company had repaid all of the amounts owed under the loan at October 2003. The interest rate on the loans was 5.79% in 2002 and 2003.

The loan obtained in 2003 by ASE Test Finance which specified for use in the redemption of its convertible bonds issued in 1999 (Note 11) is repayable in semi-annual installments starting June 2005 to June 2008 and bears interest is 2.24%. The funds were drawn in June 2003 and shown as restricted bank deposit on consolidated balance sheets as of June 30, 2003. The Company, ASE Test and ASE Test, Inc. provided guarantees for ASE Test Finance's payment obligations under the facility. Under the guaranty, ASE Test is required to maintain certain financial ratios and the tangible net worth of ASE Test shall not be less than US\$400 million at any time.

F-25

The abovementioned bank loan contracts have variable interest rates and are subject to adjustments by banks or changes in prime rate. In addition, several of the loan agreements have default provisions, whereby a default under one debt agreement may also trigger cross-defaults under other debt agreements.

As of December 31, 2003, unused long-term bank facilities approximated NT\$3,622,149 (US\$106,565).

As of December 31, 2003, the maturities of long-term bonds payable, long-term bank loans and obligation under capital leases are as follows:

	Amount	
	NT\$	US\$
Within the following year	5,656,001	166,402
During the second year	8,052,538	236,909
During the third year	6,220,416	183,007
During the fourth year	4,019,570	118,257
During the fifth year and thereafter	12,547,537	369,154
	36,496,062	1,073,729

Long-term bonds payable, long-term bank loans and obligation under capital leases by currencies are detailed as follows:

December 31

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

	----- 2002 -----	----- 2003 -----
New Taiwan dollars	NT\$ 24,122,910	NT\$ 18,322,350
U.S. dollars	US\$ 246,194	US\$ 519,805
Japanese yen	JPY 5,460,363	JPY 1,622,970
European currency unit	EUR 2,986	EUR --

13. PENSION PLANS

The Company and its consolidated subsidiaries in the ROC have pension plans for their regular employees. Retirement benefits are based on the length of service and average salaries or wages of the last six months before retirement. ISE Labs 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 Internal Revenue Code Section 401k. ASE Test Malaysia also has a defined contribution plan. In addition, ASE Korea has a pension plan where 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 rate of pay at the time of termination. The consolidated entities in the ROC make monthly contributions, at a specified percentage of salaries and wages, to pension funds which are in the name of, and are administered by, the employee pension plan committee of the respective entities and are deposited in the Central Trust of China (the "CTC"), a government agency. CTC may invest the assets of the plan assets in stocks, bonds and other securities. The changes in the retirement funds during the periods indicated are summarized as follows:

	Year Ended December 31			
	----- 2001 -----	----- 2002 -----	----- 2003 -----	
	NT\$	NT\$	NT\$	US\$
Balance, beginning of year	339,500	440,746	535,412	15,752
Contributions	89,615	83,996	113,077	3,327
Payments	(3,654)	(145)	(8,803)	(259)
Interest income	15,285	10,815	9,349	275
	-----	-----	-----	-----
Balance, end of year	440,746	535,412	649,035	19,095
	=====	=====	=====	=====

F-26

The plan assets deposited in the CTC allocations at December 31, 2003, by category, are as follows:

Type of Investment	Allocation(%)
-----	-----
Cash	45
Government Loan	12
Equity	27
Notes	15

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

Bond	1
	-----
	100
	=====

Pension costs for these entities consist of:

	Year Ended December 31			
	2001	2002	2003	
	NT\$	NT\$	NT\$	US\$
Service costs	114,393	191,707	238,560	7,0
Interest	28,503	36,102	43,312	1,2
Projected return on pension assets	(21,611)	(23,003)	(19,413)	(5
Amortization of prior period service cost, gain or loss on plan assets, etc	6,933	4,176	11,161	3
	-----	-----	-----	-----
	128,218	208,982	273,620	8,0
	=====	=====	=====	=====

Other pension information based on actuarial calculations of the plan during the periods indicated are as follows:

	Year Ended December 31		
	2002	2003	
	NT\$	NT\$	US\$
a. Benefit obligations			
Vested benefit obligation	21,347	63,229	1,860
Non-vested benefit obligation	738,300	971,450	28,581
	-----	-----	-----
Accumulated benefit obligation	759,647	1,034,679	30,441
Additional benefits based on future salaries	486,056	642,098	18,891
	-----	-----	-----
Projected benefit obligation	1,245,703	1,676,777	49,332
Fair value of assets	(507,098)	(619,260)	(18,219)
	-----	-----	-----
Funded status	738,605	1,057,517	31,113
Unrecognized net transition obligation	(104,105)	(96,979)	(2,853)
Unrecognized prior service cost	--	(15,247)	(449)
Unrecognized net actuarial loss	(210,955)	(368,778)	(10,850)
Additional pension cost	--	31,873	938
Portion in other current liabilities	(6,874)	(21,100)	(621)
	-----	-----	-----
Accrued pension cost	416,671	587,286	17,278
	=====	=====	=====
b. Vested obligation	23,858	71,436	2,102
	=====	=====	=====
c. Actuarial assumption			
Discount rate	3.50%	3.25%	
Increase in future salary level	3.00%	3.00%	

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

Expected rate of return on plan assets	3.50%	3.25%
--	-------	-------

F-27

- d. The consolidated entities in the ROC expect to make contributions of \$ 110,268 to pension funds in 2004.
- e. Expected benefit payments:

### Year of Payments

2004	\$4,705
2005	6,851
2006	14,829
2007	15,601
2008	33,176
2009 to 2053	8,983,570

Plan assets and obligations reflected herein were measured as of December 31, 2003.

The Company has no other post-retirement or post-employment benefit plans.

## 14. SHAREHOLDERS' EQUITY

### American Depositary Shares

In July 1995, the Company issued 8,600,000 GDSs, representing 43,000,000 common shares. In September 2000, the Company issued 20,000,000 ADSs, representing 100,000,000 common shares. In connection with the ADS offering in 2000, the Company offered to exchange all outstanding GDSs for ADSs listed on the New York Stock Exchange.

As of December 31, 2003, a portion of the outstanding ADSs were cancelled in exchange for approximately 340,440 thousand common shares of the Company, which represented 9.51% of the Company's total outstanding common shares (including treasury stock). As of December 31, 2003, the outstanding ADSs represented 2.50% of the Company's total outstanding common shares (including treasury stock).

### Capital Surplus

Under the ROC Company Law, capital surplus from the paid-in capital in excess of par value can be used to offset a deficit. In addition, such capital surplus may be transferred to capital and is subject to a specified limit under relevant regulations.

Capital surplus from long-term investments in shares of stock which are accounted for by the equity method may not be used for any purpose.

### Appropriation of Retained Earnings

The Company's Articles of Incorporation provide that the annual net income shall be appropriated as follows:

- a. offset against deficit, if any;

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

- b. 10.0% of the remainder as legal reserve, until the accumulated amount equals paid-in capital;
- c. an amount equal to the income from long-term investments in shares of stock accounted for by the equity method, excluding cash dividends, as special reserve;
- d. not more than 2.0% of the remainder, as compensation to directors and supervisors;

F-28

- e. between 5.0% to 7.0% of the remainder, as bonus to employees, of which 5.0% will be distributed in accordance with the employee bonus plan and the excess to be distributed to specific employees as decided by the board of directors; and
- f. the remainder, as dividends to shareholders.

The aforementioned appropriations shall be approved by the shareholders in the following year and given effect in the financial statements of such year.

Under the ROC Company Law, the aforementioned legal reserve may be used to offset a deficit. Also, when the reserve has reached 50.0% of capital, up to 50.0% thereof may be transferred to capital.

The appropriation of 2002 earnings, resolved by the Company's annual shareholders' meeting, was as follows:

	Amount	
	NT\$	US\$
Legal reserve	12,903	380
Compensations to directors and supervisors	2,280	67
Bonus to employees--cash	8,000	235
Stock dividends--NT\$0.03 per share	97,644	2,873
	-----	-----
	120,827	3,555
	=====	=====

The information related to appropriation of 2003 earnings may be accessed through the website of the Taiwan Stock Exchange.

### Dividend Policy

In order to meet the needs of the Company's present and future capital expenditures, the Company's dividend distribution shall be primarily in the form of stock dividends. Cash dividends may also be distributed in certain circumstances. However, the percentage of cash dividends generally shall not exceed 20.0% in any dividend distribution, provided further that cash dividends shall not be paid if the dividend per share is less than NT\$0.1.

With respect to the percentage of cash dividends to be paid referred to in the preceding paragraph, the Company may decide the most suitable dividend distribution in accordance with its current operational status, and taking

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

into consideration the budget plan for the following year. The board of directors shall propose a profit distribution plan, which shall be submitted to the shareholders' meeting for approval before implementation.

### Imputation Tax System

Under the Integrated Income Tax System which became effective on January 1, 1998, non-corporate resident shareholders are allowed a tax credit for the income tax paid or payable by the Company on earnings generated in 1998 and onwards. An Imputation Credit Account ("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.

As of December 31, 2003, the creditable taxes aggregated NT\$89,586 (US\$2,636). The actual percentage for the distribution of 2002 earnings and estimate percentage for the distribution of 2003 earnings were 20.35% and 4.40%.

F-29

### Treasury Stock

Effective January 1, 2002, the Company reclassified the shares held by its subsidiaries with book value of NT\$2,639,826, representing 164,441,857 shares, from long-term investment to treasury stock.

In June 2003, the 163,789,144 of the above-mentioned shares were sold at NT\$2,850,524 (US\$83,864). The excess of NT\$220,735 (US\$6,494) over the book value of NT\$2,629,789 (US\$77,369) was recorded as capital surplus, while subsidiaries recorded the excess as investment income. As of December 31, 2003, the book value of treasury stock accounted for by the Company's shareholdings is NT\$10,037 (US\$295) (represents 717,984 shares) and the related market value is NT\$21,278 (US\$626). This transaction resulted in the increase in capital surplus of NT\$220,735 (US\$6,494), the decrease in treasury stock of NT\$2,629,789 (US\$77,369) and the increase in realized loss on long-term investment of NT\$354,787 (US\$10,438) as of December 31, 2003.

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

## 15. EMPLOYEE STOCK OPTION PLANS

In order to attract, retain and incentivize employees, the Company adopted an employee stock option plan, which became effective on August 28, 2002. Under this plan, each option entitles the holder to purchase one common share of the Company at a price equal to the closing market price on the date of the option grant. 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 10th year following its issue date. A total of 159,968,000 options have been issued, 145,989,000 of which were issued at an exercise price of NT\$18.90 (adjusted) per share and 13,979,000 of which were issued at an initial exercise price of NT\$24.60.



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

The exercise price was equal to the closing price of the Company's common shares listed on the Taiwan Stock Exchange on the date of grant.

ASE Test has five stock option plans, the 1996 Executive Management Option Plan (the "1996 Plan"), and the 1997, 1998, 1999 and 2000 Option Plans. Stock options granted under these plans are exercisable for ASE Test ordinary shares based on a vesting schedule over five to ten years until the options expire. The Company applies U.S. GAAP to the accounting for stock options granted under these plans (See Note 26e).

### 16. PERSONNEL EXPENDITURE, DEPRECIATION AND AMORTIZATION

	Year Ended December 31, 2002			Year Ended	
	Cost of	Operating	Total	Cost of	Operatin
	Revenues	Expense		Revenues	Expense
	NT\$	NT\$	NT\$	NT\$	NT\$
Personnel					
Salary	5,598,134	1,727,156	7,325,290	7,206,380	2,024,2
Pension cost	204,531	61,220	265,751	246,172	79,8
Meal allowance	196,162	30,750	226,912	228,783	36,9
Welfare	13,738	3,636	17,374	25,300	7,1
Labor and health insurance	362,116	126,383	488,499	476,816	153,4
Others	329,096	204,684	533,780	371,245	246,5
	6,703,777	2,153,829	8,857,606	8,554,696	2,548,2
Depreciation	11,366,882	474,449	11,841,331	11,516,968	693,9
Amortization	160,291	284,704	444,995	377,623	178,0

F-30

### 17. INCOME TAX

a. Income tax benefit is summarized as follows:

	Year Ended December 31		
	2001	2002	2003
	NT\$	NT\$	NT\$
Tax (benefit) based on pre-tax accounting income (loss) at statutory rate	(579,651)	(950,597)	604,102
Add (less) tax effects of:			
Permanent differences			
Tax-exempt income			
Tax holiday	(26,413)	(52,126)	(481,214)
Gain from sales of securities	(31,711)	(16,798)	(10,357)

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

Temporary differences			
Investment loss	814,148	793,812	131,560
Unfunded pension cost	7,842	24,239	86,255
Bond interest payable	(189,164)	(163,289)	16,776
Other	156,866	629,545	(184,453)
	-----	-----	-----
	151,917	264,786	162,669
Income taxes on undistributed earnings	335,065	54,598	170,281
Credits for investments and research and development	(253,227)	(331,255)	(439,457)
Net change in deferred income tax for the period	(449,933)	(1,130,358)	(1,190,500)
Adjustment of prior year's income tax	17,018	1,905	18,859
	-----	-----	-----
	(199,160)	(1,140,324)	(1,278,148)
	=====	=====	=====

- b. The above-mentioned taxes on pre-tax accounting income (loss) at the statutory rates for domestic and foreign entities are shown below:

	Year Ended December 31		
	2001	2002	2003
	NT\$	NT\$	NT\$
Domestic entities in ROC (25% statutory rate)	(501,553)	(173,787)	750,348
Foreign entities			
ASE Korea (30.8% statutory rate)	--	--	74,806
ISE Labs (federal tax rate 35% and state tax rate 6%)	(92,487)	(725,744)	(209,911)
ASE Test Malaysia (30% statutory rate)	14,389	(51,066)	(11,141)
	-----	-----	-----
	(579,651)	(950,597)	604,102
	=====	=====	=====

F-31

- c. Deferred income tax assets and liabilities are summarized as follows:

	December 31	
	2002	2003
	NT\$	NT\$
Current deferred income tax assets		
Unused tax credits	966,689	1,054,370
Provision for inventory obsolescence	38,212	50,475
Provision for doubtful accounts and sales allowance	23,305	33,754
Unrealized foreign exchange loss	49,351	65,118
Other	29,884	29,752

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

	-----	-----	-----
	1,107,441	1,233,469	
Valuation allowance	(23,000)	(8,968)	
	-----	-----	-----
Net current deferred income tax assets	1,084,441	1,224,501	
	=====	=====	=====
Non-current deferred income tax assets			
Unused tax credits	2,324,529	3,101,039	
Accrued pension costs	498,087	153,924	
Loss carryforward	455,589	483,538	
Investment income	(206,500)	(144,000)	
Others	(125,072)	120,387	
	-----	-----	-----
Valuation allowance	2,946,633	3,714,888	1
	(1,765,860)	(1,484,659)	(
	-----	-----	-----
Net non-current deferred income tax assets	1,180,773	2,230,229	
	=====	=====	=====
Non-current liabilities			
Goodwill amortization	(35,658)	(34,674)	
	=====	=====	=====

In assessing the realizability of deferred income tax assets, the Company considers its future taxable earnings and expected timing for the reversal of temporary differences. In addition, in the event future taxable earnings do not materialize, 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 U.S. Federal and California State net operating loss carryforward of ISE Labs as of December 31, 2003 approximated US\$11.6 million and US\$22.1 million with expiration period in 2023 and 2013, respectively.

A portion of the Company's and ASE Test, Inc.'s income from the manufacturing, processing and testing of semiconductors is exempt from income tax for five years ending December 2005 and 2007. ASE Test Malaysia has been granted pioneer status by Ministry of International Trade and Industry in Malaysia for five from July 1, 1999 to June 30, 2004. The per share effect of this tax holiday is NT\$0.01 in 2001, NT\$0.02 in 2002 and NT\$0.14 in 2003, respectively.

- d. As of December 31, 2003, unused tax credits of ROC subsidiaries which can be utilized to offset their future income tax are set forth below:

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

December 31, 2003

Year of Expiry	December 31, 2003					Total	
	ASE	ASE Chung-Li	ASE Material	ASE Test, Inc.			
	NT\$	NT\$	NT\$	NT\$	NT\$	US\$	
2004	296,870	122,824	230,676	308,056	958,426	28,198	
2005	624,305	640	151,399	98,020	874,364	25,724	
2006	523,654	106,391	200,806	233,824	1,064,675	31,323	
2007	794,500	72,717	76,227	314,500	1,257,944	37,009	
	2,239,329	302,572	659,108	954,400	4,155,409	122,254	

In the ROC, the tax credits may be utilized to reduce up to 50% of income tax payable each year. In the expiring year, any remainder of unused tax credits can be used entirely.

Income tax returns of ASE and all its subsidiaries in Taiwan has been examined by the ROC tax authorities through 2000.

18. EARNINGS PER SHARE

Since the Company incurred a loss from continuing operations for the two years ended December 31, 2001 and 2002, and the Company's common share equivalents attributable to the employees' stock options had no dilutive effect in 2002, only the basic earnings (loss) per share and per ADS are presented.

The Company's common share equivalents attributable to the employee's stock options had dilutive effect in 2003.

The denominator is the weighted average number of outstanding shares of common stock of 3,537,048,918 shares in 2003, after giving effect to the ASE stock options.

The denominator is the above-mentioned weighted average outstanding shares divided by five (one ADS represents five common shares). The numerator is the same as mentioned in the above EPS calculation.

19. ASSETS PLEDGED OR MORTGAGED

The assets pledged or mortgaged as first priority collateral are summarized as follows:

	December 31		
	2002	2003	
	NT\$	NT\$	US\$
Buildings and improvements	2,762,585	3,293,451	96,895
Machinery and equipment	8,629,757	8,832,549	259,857
Pledged time deposits	428,743	167,426	4,926

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

Guarantee deposit--time deposits	118,445	102,720	3,022
Short-term investment	260,120	90,000	2,648
Cash equivalents--commercial paper	552,416	--	--
	-----	-----	-----
	12,752,066	12,486,146	367,348
	=====	=====	=====

F-33

20. COMMITMENTS AND CONTINGENCIES  
AS OF DECEMBER 31, 2003

- a. The Company, ASE Test, Inc., and ASE Material lease the land on which their buildings are situated under various operating lease agreements with the government expiring on various dates through September 2009 to 2012. The agreements grant these entities option to renew the leases and reserve the right for the lessor to adjust the lease charges upon an increase in the assessed value of the land and to terminate the leases under certain conditions. In addition, the Company, ASE Test, Inc., ASE Material and ISE Labs also lease equipment under non-cancellable capital lease agreements. The net book value as of December 31, 2002 and 2003 of the equipment acquired under the capital obligations amounted to NT\$506,637 and NT\$559,615 (US\$16,464), respectively. ASE Test, Inc., ASE Chung Li and ASE Test Malaysia lease machinery and equipment under non-cancelable operating lease. ISE Labs also leases office building and equipment under non-cancellable operating lease agreements expiring in December 2010. The rental expenses for the years ended December 31, 2001, 2002 and 2003 were \$10,656, \$9,936 and \$10,427, respectively. The future minimum lease payments under the above-mentioned operating leases are as follows:

Operating Leases	NT\$	US\$
-----	-----	-----
2004	998,410	29,374
2005	964,743	28,383
2006	760,860	22,385
2007	223,795	6,584
Thereafter	371,037	10,916
	-----	-----
Total minimum lease payments	3,318,845	97,642
	=====	=====

The future minimum lease payments under the above-mentioned capital leases as of December 31, 2003 are as follows:

	NT\$	US\$
	-----	-----
Within the following year	182,201	5,360
Within the second year	107,165	3,153
Within the third year	1,043	31
Within the fourth year	1,009	30
Within the fifth year	688	20
	-----	-----
Total minimum lease payments	292,106	8,594
Less: Imputed interest	21,977	647

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

Present value of future lease obligations	270,129	7,947
Capital lease obligation, current	164,612	4,843
Capital lease obligation, long-term	105,517	3,104

- b. The Company, ASE Test, Inc., ISE, ASE Test Malaysia, ASE Korea and ASE Chung Li engage outside sales agencies. Commissions and service fees were paid based on monthly incurred service-related costs and expenses plus certain percentage (there is limited amounts prescribed for costs and expenses incurred) or based on certain percentage of net export sales. Commissions and service fees paid in 2001, 2002 and 2003 were approximately NT\$729,300, NT\$734,322 and NT\$973,031 (US\$28,627), respectively.
- c. As of December 31, 2003, commitments to purchase machinery and equipment were approximately NT\$8,231,000 (US\$242,159).
- d. As of December 31, 2003, commitments for construction of buildings were approximately NT\$625,000 (US\$18,387).

F-34

- e. As of December 31, 2003, unused letters of credit were approximately NT\$1,692,000 (US\$49,779).
- f. The Company entered into technology license agreements with foreign companies which will expire on various dates through 2010 for the licensing of technology used in the packaging of certain products. Pursuant to such agreements, the Company shall pay royalties at a specified percentage of sales quantities. Such royalties in 2001, 2002 and 2003 were approximately NT\$151,249, NT\$176,711 and NT\$200,132 (US\$5,888), respectively. As of December 31, 2003, the Company had an accumulated total payments of US\$6,150.
- g. On October 28, 2003, the Company entered into a merger agreement with ASE Chung Li and ASE Material, pursuant to which ASE Chung Li and ASE Material will be merged with and into the Company with as the surviving corporation. Upon the completion of the merger, all of the assets and liabilities of ASE Chung Li and ASE Material will be owned and assumed by the Company, and the operations of ASE Chung Li and ASE Material will be integrated with the operations of the Company. The merger is to be consummated by means of a share exchange pursuant to which the respective shareholders (other than the Company) of ASE Chung Li and ASE Material will receive common shares of the Company in exchange for the common shares of each of ASE Chung Li and ASE Material. The Company expected to issue 282,315,437 common shares, or approximately 7.9% of outstanding shares as of October 28, 2003, in connection with the merger.

The merger agreement has been approved by the board of directors of each the Company, ASE Chung Li and ASE Material and by the shareholders of ASE Chung Li and ASE Material. Assuming receipt of all necessary approvals and consents, the Company expects that the merger will be completed by July 1, 2004.

- h. As of December 31, 2003, the Company has endorsed and guaranteed the

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

promissory notes of its subsidiaries and its as follows:

	NT\$	US\$
	-----	-----
ASE Test Finance Ltd.	5,095,500	149,912
ASE Material	2,440,860	71,811
ASE investment (Labuan)	2,038,200	59,965
HCDC	960,000	28,243
ASE Holding Electronics (Philippines), Incorporated	764,325	22,487
Omniquest Industrial Ltd.	339,700	9,994
ASE Chung Li	475,580	13,992
	-----	-----
	12,114,165	356,404
	=====	=====

### 21. SUBSEQUENT EVENTS

On February 3, 2004, the Company and J&R entered into a Shares Purchase Agreement with NEC Electronics Corporation and NEC Yamagata, Ltd. NEC Yamagata Ltd. will establish a new company and transfer all of its operating assets of its semiconductor business this new company, and then, J&R will purchase a 100% equity interest of this new company. In addition, the Company is in the process of negotiating a contract with NEC Electronics Corporation for the provision of packaging and testing services, to be provided by this new company.

F-35

### 22. DERIVATIVE FINANCIAL INSTRUMENTS

Information on derivative transactions is as follows:

#### a. Foreign currency option contracts

Because the Company, ASE Test, Inc. and ASE Material expect to receive U.S. dollars from export sales and to pay Japanese yen or NT dollars to settle payables or long-term or short-term borrowings, these companies occasionally enter into foreign currency option contracts to manage their exposure to exchange rate fluctuations.

The outstanding contracts as of December 31, 2003 are shown in Schedule I:

The loss arising from such outstanding contracts based on mark-to-market valuation as of December 31, 2003 was approximately NT\$7,162 (US\$211).

#### b. Forward exchange contracts

The Company entered into forward contracts to manage its exposure to foreign exchange rate fluctuations associated with its long-term debt and payables. As of December 31, 2003, there were no outstanding contracts. The gain or loss arising from such contracts for the year ended December 31, 2002 and 2003 was immaterial.

#### c. Cross currency swap contract

In October 2003, the Company entered into two cross currency swap contracts with a foreign bank to manage its exposure to interest rates and the effect of exchange rate fluctuations associated with its long-term bonds payable. These contracts will expire in April 2007 and September 2008, respectively. The term of these contracts, provide for a semi-annual exchange of interest payments, by two arranged interest rates, arising from an underlying nominal amount of US\$200,000.

The Company has net interest income of NT\$11,056 (US\$325) from these contracts in 2003, and which was offset against the bonds interest.

The loss arising from such contracts was approximately NT\$68,110 (US\$2,004) based on prevailing exchange rate at December 31, 2003.

d. Interest rate swap

In June 2002, the Company entered into two interest rate swap contracts with a foreign bank to manage exposures to interest rate fluctuations. These contracts would have expired in December 2004. In September 30, 2002, the Company settled these contracts and recorded net interest income of NT\$107,910.

e. Transaction risk

1) Credit risk

The Company is exposed to credit risk in the event of non-performance of the counter parties to forward contracts on maturity. In order to manage this risk, the Company transacts only with financial institutions with good credit ratings. As a result, no material losses resulting from counter party defaults are anticipated.

F-36

2) Market risk

Market risk is the exposure created by potential exposures to changes of foreign exchange rate related to its foreign-currency denominated assets and/or liabilities and changes on interest rates related to its obligations.

3) Liquidity risk and cash flow risk

The Company entered into European option contracts and forward exchange contracts to manage its exposure to the effect of exchange rate fluctuations on net assets or net liabilities. As the Company has sufficient operating capital to meet cash requirements upon the maturity of these contracts, the Company believes there are no significant liquidity or cash flow risks.

23. NON-DERIVATIVE AND DERIVATIVE  
FINANCIAL INSTRUMENTS



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

	2002			V
	Carrying Values	Fair Values	Carrying Values	
	NT\$	NT\$	NT\$	
Non-derivative financial instruments				
Assets				
Cash and cash equivalents	9,829,508	9,829,508	8,562,425	8,
Short-term investments	2,590,436	2,592,482	3,017,779	3,
Notes receivable	112,667	112,667	111,596	
Accounts receivable	8,885,879	8,885,879	12,798,135	12,
Long-term investments	6,566,734	4,297,778	6,339,655	4,
Pledged time deposit	428,743	428,743	167,426	
Guarantee deposit	170,064	170,064	359,908	
Liabilities				
Short-term borrowings	3,903,994	3,903,994	5,048,230	5,
C/P and B/A payable	2,384,577	2,384,577	1,075,965	1,
Notes and Accounts payable	4,047,171	4,047,171	6,488,989	6,
Accrued expense	1,839,423	1,839,423	1,839,276	1,
Payables for properties	4,494,828	4,494,828	4,392,340	4,
Long-term bonds payable	5,179,793	4,646,184	6,861,232	7,
Long-term bank loan (included current portion)	28,744,612	28,744,612	29,364,701	29,
Capital lease obligation (included current portion)	467,374	467,374	270,129	
Long-term payable for investments (included current portion)	3,327,118	3,327,118	2,309,960	2,
Derivative financial instruments				
Forward exchange contracts	(5,781)	(5,781)	--	
European options	39,141	39,141	(7,162)	
Cross currency swap contract	--	--	(68,110)	

The carrying values of cash and cash equivalents, notes receivable, accounts receivable, short-term borrowings, commercial paper and bank acceptance payables, notes and accounts payable approximate fair values because of the short maturity of these instruments. The fair values of short-term and long-term investments are determined based on market values or net equity values. The recorded or book value of pledged time deposit and guarantee deposits represents their fair value. The fair values of long-term bonds capital lease obligation and payables for investments are determined based on the market value or the estimated present value of future cash flows using the interest rates of similar debt instruments which the Company is able to obtain as the discount rate. Fair value of long-term bank loan is carrying value because floating interest rates are applied. The derivative financial instruments are recorded at their fair market values.

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

a. Geographical sales information

1) Net revenue:

	Year Ended December 31				
	2001		2002		
	NT\$	% of Total Revenues	NT\$	% of Total Revenues	NT\$
America	24,930,813	65	26,922,752	59	34,480,470
Taiwan	10,222,723	27	11,342,210	25	15,498,114
Europe	1,508,919	4	2,766,981	6	4,741,725
Asia and other areas	1,705,371	4	4,554,895	10	2,591,461
	38,367,826	100	45,586,838	100	57,311,770

2) Long-lived assets:

	December 31				
	2002		2003		
	NT\$	% of Total Long-lived Assets	NT\$	US\$	% of Total Long-lived Assets
Taiwan	47,958,294	76	52,020,556	1,530,466	77
Asia	13,288,531	21	14,442,830	424,914	22
America	1,842,045	3	876,561	25,789	1
	63,088,870	100	67,339,947	1,981,169	100

b. Major customers

Customers that account for 10% or more of total revenues are shown below:

	Year Ended December 31					
	2001		2002		2003	
	NT\$	% of Total Revenues	NT\$	% of Total Revenues	NT\$	US\$
Customer A	7,164,415	19	7,703,767	17	5,815,933	169,614
Customer B	4,413,854	12	3,837,476	8	4,405,356	129,578

c. Reported segment information

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

The Company has three reportable segments: Packaging, Testing and Investing. 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 investing activities. The accounting policies of the segments are the same as those described in Note 2. Segment information for the years ended December 31, 2001, 2002 and 2003 is as follows:

F-38

	Packaging -----	Testing -----	Investing -----	
2001				
Revenue from external customer	NT\$ 28,928,185	NT\$ 9,637,615	NT\$ --	NT
Inter-segment revenues	(30,000)	(178,340)	--	
Interest revenue	283,733	36,138	172,866	
Interest expense	1,260,786	310,571	565,071	
Net interest expense	(977,053)	(274,433)	(392,205)	
Depreciation and amortization	5,186,067	5,466,435	24,489	
Segment profit(loss)	(2,786,577)	(1,195,344)	800,266	
Segment asset	51,397,373	32,968,822	11,508,993	
Expenditures for segment assets	5,879,357	4,415,168	--	
2002				
Revenue from external customer	NT\$ 35,814,644	NT\$ 10,060,635	NT\$ --	N
Inter-segment revenues	(14,291)	(276,628)	--	
Interest revenue	277,096	12,619	90,127	
Interest expense	1,109,241	183,967	639,896	
Net interest expense	(832,145)	(171,348)	(549,769)	
Depreciation and amortization	5,743,420	5,679,224	738	
Segment profit(loss)	1,304,013	(2,797,405)	(654,314)	
Segment asset	53,667,786	31,338,672	8,099,495	
Expenditures for segment assets	9,054,519	4,393,023	--	
2003				
Revenue from external customer	NT\$ 45,117,444	NT\$ 12,245,645	NT\$ --	NT
Inter-segment revenues	(90,576)	(103,249)	--	
Interest revenue	53,678	7,593	47,621	
Interest expense	734,312	147,975	429,750	
Net interest revenue (expense)	(680,634)	(140,382)	(382,129)	
Depreciation and amortization	6,527,475	5,251,832	1,890	
Segment profit (loss)	2,692,936	124,234	(706,384)	
Segment asset	61,923,742	33,343,057	6,578,117	
Expenditures for segment assets	9,084,929	6,027,521	--	
2003				
Revenue from external customer	US\$ 1,327,374	US\$ 360,272	US\$ --	US
Inter-segment revenues	(2,665)	(3,038)	--	
Interest revenue	1,579	223	1,401	
Interest expense	21,604	4,354	12,643	
Net interest revenue (expense)	(20,025)	(4,131)	(11,242)	

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

Depreciation and amortization	192,041	154,511	56
Segment profit (loss)	79,227	3,655	(20,782)
Segment asset	1,821,822	980,967	193,531
Expenditures for segment assets	267,283	177,332	--

25. SUMMARY OF SIGNIFICANT DIFFERENCES BETWEEN ACCOUNTING PRINCIPLES FOLLOWED BY THE CORPORATION AND GENERALLY ACCEPTED ACCOUNTING PRINCIPLES IN THE UNITED STATES

The Company's consolidated financial statements have been prepared in accordance with ROC GAAP, which differ in the following respects from U.S. GAAP:

a. Pension benefits

The Company adopted U.S. Statement of Financial Accounting Standards ("U.S. SFAS") No. 87, "Accounting for Pensions", on January 1, 1987. A portion of the unrecognized net transition obligation at the adoption date is to be allocated directly to equity. ROC SFAS No. 18, which is substantially similar in many aspects to U.S. SFAS No. 87, was effective in 1996 for listed companies in Taiwan. Therefore, pension expense due to different adoption dates is adjusted.

F-39

b. Short-term investments

Under ROC GAAP, marketable equity securities are carried at the lower of aggregate cost or market, and debt securities are carried at cost, with only unrealized losses recognized. Under U.S. SFAS No. 115, "Accounting for Certain Investments in Debt and Equity Securities", debt and equity securities that have readily determinable fair values are to be classified as either trading, available-for-sale or held-to-maturity securities. Debt securities that the Company has the positive intent and ability to hold to maturity are classified as held-to-maturity securities and reported at amortized cost. Debt and equity securities that are bought and traded for short-term profit are classified as trading securities and reported at fair value, with unrealized gains and losses included in earnings. Debt and equity securities not classified as either held-to-maturity or trading are classified as available-for-sale securities and reported at fair value, with unrealized gains and losses excluded from earnings and reported as a separate component of shareholders' equity.

All of the Company's short-term investments are classified as trading securities under U.S. GAAP, with gains and losses recognized currently in income. The unrealized gain included in earnings under U.S. GAAP for the three years ended December 31, 2001, 2002 and 2003 were as follows:

Year Ended December 31,			
2001	2002	2003	
NT\$	NT\$	NT\$	US\$

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

Unrealized gain (loss)	5,952	(38,844)	3,151	93
	-----	-----	-----	-----

All of the Company's short-term investments in mutual funds, stocks, commercial papers and convertible bonds are held principally for the purpose of selling them in the near term.

c. Bonuses to employees, directors and supervisors

According to ROC regulations and the Articles of Incorporation of the Company, a portion of distributable earnings should 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. All of these appropriations, including stock bonuses which are valued at par value of NT\$10, are charged against retained earnings under ROC GAAP after such appropriations are formally approved by the shareholders in the following year. Under U.S. GAAP, such bonuses are charged against income currently in the year earned. Shares issued as part of these bonuses are recorded at fair market value. Since the amount and form of such bonuses are not usually determinable until the shareholders' board of directors meeting in the subsequent year, the total amount of the aforementioned bonuses is initially accrued based on the management's estimate regarding the amount to be paid based on the Company's Articles of Incorporation. Any difference between the initially accrued amount and the fair market value of the bonuses upon the issuance of shares is recognized in the year of approval by the shareholder.

Aside from the aforementioned bonus plan, the Company granted a special stock bonus to employees amounting to NT\$1,536,396 in 1997 and NT\$2,506,617 in 2000. Employees who received the special stock bonus are required to continue working for the Company for an additional three years. Accordingly, the amount of special stock bonuses is being allocated over three years as additional compensation expense in the consolidated statement of income under U.S. GAAP.

d. Treasury stock

The common shares of the Company that are held by consolidated subsidiaries are, under U.S. GAAP, reflected as treasury stock in the consolidated balance sheet. Also, under U.S. GAAP, the minority interest reflected in the statements of income is adjusted to reflect the equity of the minority shareholders on the subsidiary's equity in the net income of the Company. The mutual or reciprocal holdings had no material effect on the minority interest reported in the consolidated statements

F-40

of income. In addition, under U.S. GAAP, the denominator used in calculating EPS is reduced by the number of the Company's common shares held by the subsidiary as of the date the subsidiary acquired the shares. The adjustment to the denominator is 164,441,865 shares in 2001. The capital gain (loss) from sales of treasury stock is deducted from or added to the consolidated balance of capital surplus.

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

Beginning January 1, 2002, the Company adopted ROC SFAS No. 30, "Accounting for Treasury Stock", which requires shares of parent stock held by subsidiaries to be recorded as treasury stock. The effect is similar to U.S. GAAP except the reduction of the minority share of treasury stock is required under ROC GAAP. Prior to 2002, common shares of the Company held by subsidiaries were presented as a long-term investment in the consolidated balance sheets with the gain or loss on the sale of the treasury stock reflected in the consolidated statements of income.

Prospectively, any unrealized losses that have accumulated prior to the effective date of the new standard will be recorded to the income statement when the corresponding shares are sold under ROC GAAP.

e. Depreciation of buildings

Under ROC GAAP, the estimated life of a building can be up to 55 years based on ROC practices. For U.S. GAAP purposes, the useful lives of buildings are estimated to be 25 years.

f. Excess of book value on transfer of buildings between consolidated subsidiaries

ASE Test, Inc., a consolidated subsidiary, purchased buildings and facilities from another consolidated subsidiary, ASE Technologies, in 1997. The purchase price from ASE Technologies was based on market value. Such additional payment for the excess of book value of NT\$17,667 was capitalized by ASE Test, Inc. as allowed under ROC GAAP. Under U.S. GAAP, transfers of assets between entities under common control are accounted for using their historic cost.

g. 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 mainly due to the differences in accounting for bonuses to employees, directors and supervisors.

h. Effects of U.S. GAAP adjustments on equity-method investments

The carrying values of equity-method investments and the investment income (loss) accounted for by the equity method in HCDC, HCKC, USI and Inprocomm are reflected in the consolidated financial statements under ROC GAAP. The financial statements of these equity investees prepared under ROC GAAP are different from the financial statements of such equity investees prepared under U.S. GAAP mainly due to the differences in accounting for bonuses to employees, directors and supervisors and 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.

i. Impairment of long-lived assets

Under U.S. GAAP, in accordance with U.S. SFAS No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets", long-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. 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 net book value of the assets. If the recoverability test indicates that an impairment has occurred, the

impairment loss is the amount of the asset's net book value in excess of the related fair value. As there are no requirements related to the evaluation of recoverability of impairment of long-lived assets under ROC GAAP, the Company has selected the same accounting for impairment of long-lived assets as U.S.

F-41

SFAS No. 144 for both ROC GAAP and U.S. GAAP reporting.

j. Stock dividends

Under ROC GAAP, stock dividends are recorded at par 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 2001 and 2003 stock dividends would be treated as an additional reduction to retained earnings and increase to capital surplus amounting to NT\$3,181 million and NT\$143 million (US\$4 million), respectively.

k. Stock option compensation

For U.S. GAAP reporting, the Company has elected to follow Accounting Principles Board ("APB") Opinion No. 25, "Accounting for Stock Issued to Employees", which measures compensation expense based on the difference, if any, between the market price of the underlying common shares and the exercise price of the stock option on the date of the grant. The Company is required under U.S. SFAS No. 123, "Accounting for Stock-based Compensation", to disclose the pro forma information regarding option grants to its employees computed as if the fair value method had been applied.

In May 2001, ASE Test's directors exercised their stock options for 2,480,000 shares at US\$3.50 per share under the 1996 option plan. The Company decided, based on resolution of its Board of Directors, to purchase these shares from the directors at the prevailing market price of US\$14.27 per share on the same day the options were exercised. Under ROC GAAP, such a share purchase is accounted for as additional investments of ASE Test's shares by the Company. However, under U.S. GAAP, the purchase of shares from employees within six months after exercise of a vested option creates a compensation expense equal to the difference between the market price of the share on the date of exercise and the market price on the date the options were granted. Consequently, compensation expense of NT\$908,661 was recorded by ASE Test.

l. Derivative financial instruments

There are no specific accounting standards under ROC GAAP which address measurement for derivative instruments, except for foreign currency forward contracts. Under ROC GAAP, foreign-currency forward contracts are accounted for in a manner similar to that required under U.S. SFAS No. 52. Under U.S. GAAP, accounting for derivative instruments is covered under U.S. SFAS No. 133, as amended by U.S. SFAS No. 138, which requires that all entities recognize derivative instruments as assets and liabilities in the statement of financial position at fair value. If certain conditions are met, entities may elect to designate a derivative instrument as a hedge. Under U.S.

GAAP, the Company does not apply hedge accounting, and derivatives have historically been, and continue to be, recorded on the consolidated balance sheet at fair value, with the changes in fair values recorded through current period earnings.

m. Goodwill

Under ROC GAAP, the Company amortizes goodwill arising from acquisitions over five to 20 years. Under U.S. GAAP, the Company adopted the provisions of U.S. SFAS No. 142 on January 1, 2002. U.S. SFAS No. 142 requires the Company to review for possible impairment of goodwill existing at the date of adoption and perform subsequent impairment tests on at least an annual basis. In addition, existing goodwill and intangible assets must be reassessed and classified consistently in accordance with the criteria set forth in U.S. SFAS No. 141 and U.S. SFAS No. 142. As a result, the Company will no longer amortize goodwill. Definite lived intangible assets will continue to be amortized over their estimated useful lives. The Company completed its transitional impairment test on January 1, 2002 and found no impairment. The Company performed its annual impairment test during the fourth quarter and determined the goodwill related to the acquisition of ASE Test was impaired and recorded a charge of NT\$2,213,045. Total amortization expenses of goodwill under ROC GAAP in 2001, 2002 and 2003 are NT\$692,919, NT\$815,573 and NT\$819,253 (US\$24,103), respectively.

F-42

n. Undistributed earnings tax

Undistributed earnings generated after 1997 are subject to a 10% tax in compliance with the Income Tax Law of the ROC. Under ROC GAAP, the 10% tax on undistributed earnings is recorded as an expense at the time shareholders resolve that the Company's earnings shall be retained. Under U.S. GAAP, the Company measured its income tax expense, including the tax effects of temporary differences, using the rate that includes the tax on undistributed earnings.

o. Impairment of long-term 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 may be other than temporary. The criteria for determination 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 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 market price is deemed to be a result of an inactive market, another measure of fair value may be used. As such, the Company determined an other-than-temporary impairment occurred in one of its long-term investments in an equity-method investee at December 31, 2002. The amount recorded for ROC GAAP was based on the difference between the carrying value and the net-asset value of the investee with adjustments made to significant assets of the investee as determined using appraised values and other appropriate information. The amount recorded for U.S. GAAP was based on the market price of the stock of the investee



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

at December 31, 2002. The difference resulted in an additional impairment charge for 2002 under U.S. GAAP of NT\$883.6 million. No impairment charge was incurred under U.S. GAAP in 2003 as a result of the increase of the market price of the stock of investee companies.

The following reconciles net income (loss) and shareholders' equity under ROC GAAP as reported in the consolidated financial statements to the approximate net income (loss) and shareholders' equity amounts as determined under U.S. GAAP, giving effect to adjustments for the differences listed above.

	Year Ended D	
	2001	2002
	NT\$	NT\$
Net income (loss)		
Net income (loss) based on ROC GAAP	(2,142,219)	129,035
Adjustments:		
a. Pension benefits	2,755	2,619
b. Short-term investments	5,952	(38,844)
c. Bonuses to employees, directors and supervisors:		
Accrued regular bonuses	--	--
Special stock bonuses	(963,572)	(835,539)
d. Loss from sale of treasury stock	--	--
e. Depreciation of building	(48,803)	(99,981)
f. Excess of book value of building transferred between consolidated subsidiaries	432	432
g. Restate carrying value and related capital gain from sale of long-term investment	39,002	--
h. Effects for U.S. GAAP adjustments on equity-method investees	(33,785)	198,839
k. Stock option compensation	(908,661)	--
m. Goodwill		
Amortization	--	815,573
Impairment loss	--	(2,213,045)
o. Impairment loss on equity-method investee	--	(883,620)
Effect of U.S. GAAP adjustment on income tax	6,978	10,783
Effect of U.S. GAAP adjustments on minority interest	(4,682)	(160,517)
Net decrease in net income	(1,904,384)	(3,203,300)

F-43

	Year Ended D	
	2001	2002
	NT\$	NT\$

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

Net income (loss) based on U.S. GAAP	(4,046,603)	(3,074,265)
Earnings (loss) per share		
Basic	(1.32)	(0.99)
Diluted	(1.32)	(0.99)
Earnings (loss) per ADS		
Basic	(6.59)	(4.97)
Diluted	(6.59)	(4.97)
Number of weighted average shares outstanding		
Basic	3,071,234,458	3,090,678,225
Diluted	3,071,234,458	3,090,678,225
Number of ADS		
Basic	614,246,892	618,135,645
Diluted	614,246,892	618,135,645
Shareholders' equity		
Shareholders' equity based on ROC GAAP	41,946,321	39,430,666
Adjustments:		
a. Pension benefits	(39,404)	(36,785)
b. Restatement of short-term investments	40,890	2,046
c. Bonuses to employees, directors and supervisors	--	--
d. Treasury stocks		
Reversal of unrealized loss	367,662	367,662
Classification of treasury stock	(3,017,964)	(378,138)
e. Effect of U.S. GAAP adjustments on useful life	(176,226)	(276,207)
f. Excess of book value of building transferred between related parties	(15,759)	(15,327)
g. Restate carrying value of subsidiaries' long-term investment	(8,619)	(8,619)
h. Effects of the above adjustments on equity-method investments	(272,658)	(73,819)
k. Stock option compensation	(908,661)	(908,661)
m. Goodwill		
Amortization	--	815,573
Impairment loss	--	(2,213,045)
o. Impairment loss on equity-method investments	--	(883,620)
Effect of U.S. GAAP adjustments on income tax	28,701	39,484
Effect on U.S. GAAP adjustments on minority interest	16,059	(144,458)
Net decrease in shareholders' equity	(3,985,979)	(3,713,914)
Shareholders' equity based on U.S. GAAP	37,960,342	35,716,752
Changes in shareholders' equity based on U.S. GAAP:		
Balance, beginning of year	40,729,090	37,960,342
Net income (loss) for the year	(4,046,603)	(3,074,265)
Adjustment for common shares issued as bonuses to employees, directors and supervisors	963,572	835,539
Adjustment for stock option compensation	--	--
Translation adjustment for subsidiaries	749,128	(126,378)
Adjustment from changes in ownership percentage of		

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

investees	(320,785)	102,888
Unrealized loss on long-term investment in shares of stock	(15,508)	18,626
Sale (purchase) of treasury stock	(98,552)	--
Unrecognized pension cost	--	--
	-----	-----
Balance, end of year	37,960,342	35,716,752
	=====	=====

A reconciliation of the significant balance sheet accounts to the approximate amounts as determined under U.S. GAAP is as follows:

F-44

	December 31		
	2002	2003	
	NT\$	NT\$	US\$
	-----	-----	-----
Short-term investments			
As reported	2,590,436	3,017,779	88,784
U.S. GAAP adjustments			
Restatement of investments to fair value	2,046	5,197	153
As adjusted	2,592,482	3,022,976	88,937
	=====	=====	=====
Long-term investments			
As reported	6,566,734	6,342,795	186,608
U.S. GAAP adjustments			
Equity investments	(73,819)	112,236	3,302
Impairment loss	(883,620)	(883,620)	(25,996)
As adjusted	5,609,295	5,571,411	163,914
	=====	=====	=====
Buildings and improvement			
As reported	16,656,394	18,391,271	541,079
U.S. GAAP adjustments			
Effect of U.S. GAAP adjustments on useful life	(276,207)	(377,449)	(11,105)
Excess of book value of building transferred between related parties	(15,327)	(14,895)	(438)
As adjusted	16,364,860	17,998,927	529,536
	=====	=====	=====
Other assets			
As reported	2,675,845	4,587,365	134,962

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

U.S. GAAP			
Effect of U.S. GAAP adjustments on			
income tax	39,484	50,437	1,484
	-----	-----	-----
As adjusted	2,715,329	4,637,802	136,446
	=====	=====	=====
Consolidated debits			
As reported	5,541,808	4,596,234	135,223
U.S. GAAP adjustments			
Restated carrying value of			
subsidiaries' long-term investment	(917,280)	(917,280)	(26,986)
Goodwill amortization	815,573	1,634,826	48,097
Goodwill impairment loss	(2,213,045)	(2,213,045)	(65,109)
	-----	-----	-----
As adjusted	3,227,056	3,100,735	91,225
	=====	=====	=====
Current liabilities			
As reported	24,389,976	27,662,045	813,829
U.S. GAAP adjustments--bonuses to			
employees, directors and supervisors	--	124,424	3,661
	-----	-----	-----
As adjusted	24,389,976	27,786,469	817,490
	=====	=====	=====
Accrued pension cost			
As reported	416,671	587,286	17,278
U.S. GAAP adjustments--pension benefits			
	36,785	33,613	989
	-----	-----	-----
As adjusted	453,456	620,899	18,267
	=====	=====	=====

F-45

As a result of the adjustments presented above, the approximate amounts of total assets based on U.S. GAAP are NT\$101,382,821 and NT\$111,720,650 (US\$3,286,868) as of December 31, 2002 and 2003, respectively. Total liabilities based on U.S. GAAP were NT\$55,432,806 and NT\$59,282,103 (US\$1,744,104) as of December 31, 2002 and 2003, respectively.

### 26. ADDITIONAL DISCLOSURES REQUIRED BY U.S. GAAP

#### a. Recent accounting pronouncements

In June 2001, the FASB issued U.S. SFAS No. 143, "Accounting for Asset Retirement Obligations". The statement requires, among other provisions, retirement obligations to be recognized when they are incurred and displayed as liabilities, with a corresponding amount capitalized as part of the related long-lived asset. The capitalized element is required to be expensed using a systematic and rational method over its useful life. The Company adopted U.S. SFAS No. 143 on January 1, 2003, which did not have a material impact on the

Company's U.S. GAAP financial information.

In June 2002, the FASB issued U.S. SFAS No. 146, "Accounting for Costs Associated with Exit or Disposal Activities", which requires companies costs associated with exit or disposal activities when they are incurred rather than at the date of a commitment to an exit or disposal plan. Such costs covered by the statement include lease termination costs and certain employee severance costs that are associated with a restructuring, discontinued operations, plant closing, or other exit or disposal activity. SFAS No. 146 replaces the previous accounting guidance provided by the Emerging Issues Task Force Issue No. 94-3, "Liability Recognition for Certain Employee Termination Benefits and Other Costs to Exit an Activity (including Certain Costs Incurred in a Restructuring)." SFAS No. 146 is to be applied prospectively to exit or disposal activities initiated after December 31, 2002 and adoption of this statement did not have a material impact on the Company's financial position, results of operations or cash flows.

In November 2002, the FASB issued Interpretation Number ("FIN") No. 45, "Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Other". This interpretation requires certain disclosures to be made by a guarantor in its interim and annual financial statements about its obligations under certain guarantees that it has issued. It also requires a guarantor to recognize, at the inception of a guarantee, a liability for the fair value of the obligation undertaken in issuing the guarantee. The disclosure requirements of FIN No. 45 are effective for interim and annual periods ending after December 15, 2002 and have been adopted in the financial statements. The initial recognition and initial measurement requirements of FIN No. 45 are effective prospectively for guarantees issued or modified after December 31, 2002. The adoption of the recognition and initial measurement requirements of FIN No. 45 did not have a material impact on the Company's financial position, cash flows or results of operations.

In January 2003, the FASB issued FASB Interpretation No. 46, "Consolidation of Variable Interest Entities" ("FIN 46"). FIN 46 clarifies the application of Accounting Research Bulletin No. 51, "Consolidated Financial Statements" and provides guidance on the identification of entities for which control is achieved through means other than voting rights ("variable interest entities" or "VIEs") and how to determine when and which business enterprise should consolidate the VIEs. This new model for consolidation applies to an entity in which either: (1) the equity investors (if any) lack one or more characteristics deemed essential to a controlling financial interest or (2) the equity investment at risk is insufficient to finance that entity's activities without receiving additional subordinated financial support from other parties. FIN 46 was applicable for periods ending December 15, 2003. In December 2003 the FASB issued FIN 46R which defers the implementation date to the end of the first reporting period after March 15, 2004 unless the Company has a special purpose entity in which case the provisions must be applied for fiscal years ending December 31, 2003. The Company does not have a special purpose entity therefore they will adopt the provisions in December 2004.

In November 2002, the FASB Emerging Issues Task Force ("EITF") reached a consensus on EITF 00-21, "Revenue Arrangements with Multiple Deliverables," related to the timing of revenue recognition for arrangements in which goods or services or both are delivered separately in a bundled sales arrangement. The EITF requires that when the deliverables included in this type of arrangement meet certain criteria they should be accounted for separately as separate units of accounting. This may result in a difference in the timing of revenue recognition but will not result in a change in the total amount of revenue recognized in a bundled sales arrangement. The allocation of revenue to the separate deliverables is based on the relative fair value of each item. If the fair value is not available for the delivered items then the residual method must be used. This method requires that the amount allocated to the undelivered items in the arrangement is their full fair value. This would result in the discount, if any, being allocated to the delivered items. This consensus is effective prospectively for arrangements entered into in fiscal periods beginning after June 15, 2003. The adoption of this consensus did not have a material impact on the Company's financial position, cash flows or results of operations.

In May 2003, the FASB issued SFAS No. 150, "Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity." The Statement establishes standards for how an issuer classifies and measures certain financial instruments. This Statement is effective for financial instruments entered into or modified after May 31, 2003, and otherwise is effective at the beginning of the first interim period beginning after June 15, 2003. The Statement requires that certain financial instruments that, under previous guidance, issuers could account for as equity be classified as liabilities (or assets in some circumstances) in statement of positions or consolidated balance sheets, as appropriate. The financial instruments within the scope of this Statement are: (i) mandatorily redeemable shares those that an issuer is obligated to buy back in exchange for cash or other assets; (ii) financial instruments that do or may require the issuer to buy back some of its shares in exchange for cash or other assets; and (iii) financial instruments that embodies obligation that can be settled with shares, the monetary value of which is fixed, tied solely or predominantly to a variable such as a market index, or varies inversely with the value of the issuer's shares (excluding certain financial instruments indexed partly to the issuer's equity shares and partly, but not predominantly, to something else). This Statement does not apply to features embedded in a financial instrument that is not a derivative in its entirety. The Statement also requires disclosures about alternative ways of settling the instruments and the capital structure of entities, all of whose shares are mandatorily redeemable. The adoption of SFAS No. 150 did not have a material impact on the Company's financial position, cash flows or results of operations.

b. Pension

Set forth below is pension information disclosed in accordance with U.S. FAS 132:

Year Ended December 31		
2001	2002	2003
-----	-----	-----

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

	NT\$	NT\$	NT\$	U
	-----	-----	-----	-----
Components of net periodic benefit cost				
Service cost	116,657	191,707	238,560	
Interest cost	28,968	36,102	43,312	
Expected return on plan assets	(21,630)	(23,003)	(19,413)	
Amortization of prior service cost	1,468	1,557	7,989	
	-----	-----	-----	-----
Net periodic benefit cost	125,463	206,363	270,448	=====
	=====	=====	=====	=====
Changes in benefit obligation				
Benefit obligation at beginning of year	650,032	722,024	1,238,129	
Service cost	116,657	191,707	238,560	
Interest cost	28,968	36,102	43,312	
Plan amendments	--	--	15,247	

(Cont)

F-47

	Year Ended December		
	2001	2002	2003
	-----	-----	-----
	NT\$	NT\$	NT\$
	-----	-----	-----
Actuarial (gain) loss	(69,978)	288,441	150,000
Benefits paid	(3,655)	(145)	(8,000)
	-----	-----	-----
Benefit obligation at end of year	722,024	1,238,129	1,676,000
	=====	=====	=====
Change in plan assets			
Fair value of plan assets at beginning of year	311,737	412,036	507,000
Actual return on plan assets	13,324	10,157	7,000
Employer contribution	90,468	85,050	113,000
Benefits paid	(3,493)	(145)	(8,000)
	-----	-----	-----
	412,036	507,098	619,000
	-----	-----	-----
Funded status	309,988	731,031	1,057,000
Unrecognized actuarial gain (loss)	26,947	(270,641)	(461,000)
Additional pension cost	--	--	28,000
	-----	-----	-----
Net amount recognized (recognized as accrued pension cost)	336,935	460,390	624,000
	=====	=====	=====

Actuarial assumptions:

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

Discount rate  
 Rate of compensation increase  
 Expected return on plan assets

The Company has no other post-retirement or post-employment benefit plans.

c. Short-term investments

At December 31, 2002 and 2003, certain investments carried at cost under ROC GAAP were restated under U.S. FAS 115:

	December 31					
	2002			2003		
	Carrying Value	Fair Value	Unrealized Holding Gains	Carrying Value	Fair Value	Unrealized Holding Gains
	NT\$	NT\$	NT\$	NT\$	NT\$	NT\$
Short-term investments	2,590,436	2,592,482	2,046	3,017,779	3,022,976	5,1

F-48

d. Income taxes benefit

##

	Year Ended December 31		
	2001	2002	2003
	NT\$	NT\$	NT\$
Tax benefit	(101,310)	(66,469)	(276,788)
Net change in deferred income tax assets (liabilities) for the period	(456,911)	(1,261,021)	(1,201,453)
Income tax on undistributed earnings	335,065	174,478	170,281
Adjustment of prior years' income taxes	17,018	1,905	18,859
	(206,138)	(1,151,107)	(1,289,101)
	=====	=====	=====

Reconciliation between the income tax calculated on pretax financial statement income based on the statutory tax rate and the income tax expense (benefit) which conforms to U.S. GAAP is as follows:

	Year Ended December 31		
	2001	2002	2003



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

	NT\$ -----	NT\$ -----	NT\$ -----
Tax (benefit) based on pre-tax accounting income (loss) at statutory rate	(830,326)	(1,064,135)	527,790
Add (less) tax effects of:			
Permanent differences			
Tax-exempt income			
Tax holiday	(26,413)	(52,126)	(481,214)
Gain from sale of securities	(31,711)	(16,798)	(10,357)
Bonus to employee and directors	240,893	52,221	96,519
Other	--	65,259	7,691
Tax credits			
Utilized	(253,227)	(331,255)	(439,457)
Deferred	342,563	139,224	(1,179,213)
Income taxes (10%) on undistributed earnings	335,065	54,598	170,281
Adjustment of prior year's income tax	17,018	1,905	18,859
	-----	-----	-----
Income tax expense (benefit)	(206,138)	(1,151,107)	(1,289,101)
	=====	=====	=====

The abovementioned taxes on pretax accounting income (loss) at the statutory rates for domestic and foreign entities are shown below:

	Year Ended December 31		
	2001	2002	2003
	-----	-----	-----
	NT\$	NT\$	NT\$
	-----	-----	-----
Domestic entities in ROC (25% statutory rate)	(752,228)	(282,713)	674,036
Foreign entities			
ASE Korea Inc. (30.8% statutory rate)	--	--	74,806
ISE Labs, Inc. (33% statutory rate)	(92,487)	(725,744)	(209,911)
ASE Test Malaysia (30% statutory rate)	14,389	(55,678)	(11,141)
	-----	-----	-----
	(830,326)	(1,064,135)	527,790
	=====	=====	=====

F-49

Deferred income tax assets and liabilities as of December 31, 2001, 2002 and 2003 are summarized as follows:

	December 31		
	2002	2003	
	-----	-----	-----
	NT\$	NT\$	US\$
	-----	-----	-----

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

Current deferred income tax assets			
Unused tax credits	966,689	1,054,370	31,020
Provision for inventory obsolescence	38,212	50,475	1,485
Provision for doubtful accounts and sales allowance	23,305	33,754	993
Unrealized foreign exchange loss	49,351	65,118	1,916
Other	29,884	29,752	875
	1,107,441	1,233,469	36,289
Valuation allowance	(23,000)	(8,968)	(264)
	1,084,441	1,224,501	36,025
Non-current deferred income tax assets (liabilities)			
Unused tax credits	2,324,529	3,101,039	91,234
Accrued pension costs	498,087	153,924	4,529
Loss carryforward	455,589	483,538	14,226
Investment income	(206,500)	(144,000)	(4,237)
Others	(85,588)	170,824	5,026
	2,986,117	3,765,325	110,778
Valuation allowance	(1,765,860)	(1,484,659)	(43,679)
	1,220,257	2,280,666	67,099
Non-current deferred income tax liabilities			
Goodwill amortization	(35,658)	(34,674)	(1,021)

e. Employee stock option plans

ASE Option Plan

Information regarding the Company's employee stock option plan is as follows:

	Option Rights Available	Outstanding Option Rights	
		Number of Option	Weighted Average Exercise
	(In Thousands)	(In Thousands)	NT\$
Option rights authorized	160,000	--	
Options granted	(159,968)	159,968	19.40
Options cancelled	(32)	--	
Balance, December 31, 2003	--	159,968	

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

ASE Test Option Plan  
-----

ASE Test currently maintains five stock option plans, the 1996 Executive Management Option Plan (the "1996 Plan"), the 1997 Option Plan, the 1998 Option Plan, the 1999 Option Plan and the 2000 Option Plan. Up to 10,000,000 shares, 3,200,000 shares, 1,600,000 shares, 2,000,000 shares and 12,000,000 shares have been reserved for issuance under the 1996, 1997, 1998, 1999 and 2000 Option Plans,

F-50

respectively.

The 1996, 1997, 1998, 1999 and 2000 Option Plans granted the following stock options to purchase the ASE Test shares which are exercisable based on a vesting schedule over a period of five years until the expiration of options, to directors, officers and key employees. If any granted shares are forfeited, the shares may be granted again, to the extent of any such forfeiture.

Each aforementioned option exercise price was equal to the stock's market price on the date of grant. Options granted under the 1996, 1997 and 1998 Option Plans expire 5 years after grant. Options granted under the 1999 and 2000 Option Plan expire 10 years after grant.

Information regarding the option plans of ASE Test is presented below:

	Number of Shares	Weighted Average Exercise Price Per Share (US\$)	Weighted Average Grant Date Fair Values (US\$)
	-----	-----	-----
Beginning balance--January 1, 2001	11,486,149	9.82	
Option granted	10,158,650	8.94	4.24
			=====
Option exercised	(5,221,508)	3.81	
Option forfeited	(114,706)	17.11	
	-----		
Ending balance--December 31, 2001	16,308,585	11.15	
Option granted	414,500	7.36	10.46
			=====
Option exercised	(2,420,591)	8.62	
Option forfeited	(882,051)	9.88	
Option expired	(89,080)	13.84	
	-----		
Ending balance--December 31, 2002	13,331,363	11.55	
Option granted	2,000,000	12.95	12.95
			=====
Option exercised	(478,426)	8.99	
Option forfeited	(568,860)	13.72	
Option expired	(982,659)	11.08	
	-----		

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

Ending balance--December 31, 2003	13,301,418 =====	11.80 =====
Options exercisable at:		
December 31, 2001	6,233,453	11.89
December 31, 2002	5,199,349	13.50
December 31, 2003	6,132,503	13.68

Option outstanding at December 31, 2003 and the related weighted average exercise price and remaining contractual life information are as follows (in U.S. dollars):

ASE Test -----	Outstanding -----		Exercisable -----	
	Shares -----	Weighted Average Price ----- (US\$)	Shares -----	Weighted Average Price -----
Options which exercise price of:				
US\$20.00-US\$25.00	2,591,740	20.76	2,268,420	20.61
US\$11.00-US\$16.50	2,242,400	12.81	97,150	11.58
US\$6.10-US\$9.15	8,467,278	8.79	3,766,933	8.84
	-----		-----	
Options outstanding at December 31, 2003	13,301,418 =====		6,132,503 =====	

F-51

U.S. FAS 123, "Stock-Based Compensation" effective in 1996, establishes accounting and disclosure requirements using a fair value-based method of accounting for stock-based employee compensation plans. Under U.S. FAS 123, the Company and ASE Test have elected to use the intrinsic value-based method and provide pro forma disclosures of net income and earnings per share as if the fair value accounting provisions of this statements had been adopted.

ASE Test has computed for pro forma disclosure purposes the fair value of each option grant, as defined by U.S. SFAS No. 123, using the Black-Scholes option pricing model with the following assumptions:

ASE Test -----	2001 -----	2002 -----	2003 -----
Risk free interest rate	3.62-4.66%	2.58-4.48%	3.38%
Expected dividend yield	0%	0%	0%
Expected lives	3.4 years	5.0 years	5.0years
Volatility	62.14%	62.14%	65.07%

For purposes of pro forma disclosure, the estimated fair value of the options are amortized to expense over the option rights vesting

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

periods. Had ASE Test recorded compensation costs based on the estimated grant date fair value, as defined by U.S. SFAS No. 123, the Company's net income (loss) under U.S. GAAP would have been reduced to the pro forma amounts below.

	Ended December	
	2001	2002
	NT\$	NT\$
Net income (loss) based on U.S. GAAP	(4,046,603)	(3,074,265)
Stock--based compensation expense (net of related tax effects)	(305,085)	(331,872)
Pro forma net income (loss)	(4,351,688)	(3,406,137)
Report EPS --Basic	(1.32)	(0.99)
--Diluted	(1.32)	(0.99)
Pro forma EPS --Basic	(1.42)	(1.10)
--Diluted	(1.42)	(1.10)
Reported EPS per ADS --Basic	(6.59)	(4.97)
--Diluted	(6.59)	(4.97)
Pro forma EPS per ADS --Basic	(7.08)	(5.51)
--Diluted	(7.08)	(5.51)

The pro forma amounts reflect compensation expense related to ASE TEST 1996, 1997, 1998, 1999 and 2000 option plans granted and vested only. In future years, the annual compensation expense may increase relative to the fair value of the options granted and vested in those future years.

F-52

- f. In accordance with U.S. FAS 130, the statement of comprehensive income (loss) for the years ended December 31, 2001, 2002 and 2003 are presented below:

	Year Ended December 31		
	2001	2002	
	NT\$	NT\$	NT\$
Net income (loss) based on U.S. GAAP	(4,046,603)	(3,074,265)	2,352,011
Translation adjustment on subsidiaries--			

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

net of income tax expense of NT\$187,282 in 2001, and income tax benefit of NT\$31,595 and NT\$71,856 in 2002 and 2003, respectively	561,846	(94,783)	(215,566)
Unrecognized pension cost	--	--	(16,137)
	-----	-----	-----
Comprehensive income (loss)	(3,484,757)	(3,169,048)	2,120,308
	=====	=====	=====

g. U.S. GAAP cash flow information

The following represents the major caption of cash flow under U.S. GAAP pursuant to U.S. FAS 95:

	Year Ended December 3		
	2001	2002	
	NT\$	NT\$	NT\$
	-----	-----	-----
Cash flows			
Net cash provided by operating activities	10,595,115	11,313,800	13,295,
Net cash used in investing activities	(14,082,951)	(13,719,654)	(18,572,
Net cash provided by financing activities	618,555	530,491	4,221,
	-----	-----	-----
Net decrease in cash	(2,869,281)	(1,875,363)	(1,055,
Cash, beginning of year	14,166,495	11,770,729	9,829,
Effect of exchange rate changes in cash	473,515	(65,858)	(211,
	-----	-----	-----
	11,770,729	9,829,508	8,562,
	=====	=====	=====

The significant reclassifications for U.S. GAAP cash flow statements pertain to the following:

- 1) The effect of exchange rate changes on cash is shown in the reconciliation of the beginning balance and ending balance of cash (as opposed to operating activities under ROC GAAP).
- 2) Compensation to directors and supervisors and bonuses to employees is shown in the operating activity under U.S. GAAP (as opposed to financing activities under ROC GAAP).
- 3) Sales of treasury stock is shown in the financing activities under U.S. GAAP (as opposed to investing activities under ROC GAAP).

h. Goodwill

As of January 1, 2002, the Company adopted U.S. SFAS No. 142, "Goodwill and Other Intangible Assets", which requires that goodwill no longer be amortized, and instead, be tested for impairment on a periodic basis. In conjunction with the implementation of U.S. SFAS No. 142, the Company completed a goodwill impairment review as of January 1, 2002 using a fair-value based approach in accordance with the provision of the standard and found no impairment.

F-53

Based on acquisitions completed as of June 30, 2001, application of the goodwill non-amortization provisions resulted in a decrease in amortization of approximately NT\$815.6 million for 2002. The Company completed its annual goodwill impairment test at December 31, 2002 and determined impairment of NT\$2,213.0 million of the remaining goodwill associated with its acquisition of ASE Test. As of December 31, 2003, the Company had goodwill of NT\$3,227.1 million (US\$94.9 million), which was primarily in the reporting units of the testing operations.

The following pro forma information reconciles the net income (loss) and earnings (loss) per share reported for 2000 and 2001 to adjusted net income (loss) and earnings (loss) per share, which reflect the adoption of U.S. SFAS No. 142 and compares the adjusted information to the current year results:

	Year Ended December 31		
	2001	2002	
	NT\$	NT\$	NT\$
Net income (loss) based on U.S. GAAP	(4,046,603)	(3,074,265)	2,352,01
Goodwill amortization	653,917	--	--
Net income (loss), as adjusted	(3,392,686)	(3,074,265)	2,352,01
Earnings (loss) per share			
Basic earnings (loss) per share, as reported	(1.32)	(0.99)	0.6
Goodwill amortization	0.21	--	--
Basic earnings (loss) per share, as adjusted	(1.11)	(0.99)	0.6
Diluted earnings (loss) per share, as reported	(1.32)	(0.99)	0.6
Goodwill amortization	0.21	--	--
Diluted earnings (loss) per share, as adjusted	(1.11)	(0.99)	0.6
Earnings (loss) per ADS			
Basic earnings (loss) per share, as reported	(6.59)	(4.97)	3.3
Goodwill amortization	1.06	--	--
Basic earnings (loss) per share, as adjusted	(5.53)	(4.97)	3.3
Diluted earnings (loss) per share, as reported	(6.59)	(4.97)	3.3
Goodwill amortization	1.06	--	--
Diluted earnings (loss) per share, as			

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

adjusted	(5.53)	(4.97)	3.3
	=====	=====	=====

F-54

Changes in the carrying amount of goodwill for the years ended December 31, 2002 and 2003, by reportable segment, are as follows:

	Packaging	Testing	Total
	NT\$	NT\$	NT\$
	-----	-----	-----
Balance as of January 1, 2002	509,613	3,814,080	4,323,693
Goodwill acquired during the period	24,169	1,140,009	1,164,178
Goodwill impairment	(354,280)	(1,858,765)	(2,213,045)
Translation adjustment	(7,461)	(40,309)	(47,770)
	-----	-----	-----
Balance as of December 31, 2002	172,041	3,055,015	3,227,056
Translation adjustment	(6,734)	(119,587)	(126,321)
	-----	-----	-----
Balance as of December 31, 2003	65,307	2,935,428	3,100,735
	=====	=====	=====

i. Earnings per share

The following table represents the computation of basic and diluted earnings (loss) per share for each of the years ended at December 31:

	2001	2002	2003
	NT\$	NT\$	NT\$
	-----	-----	-----
Net income (loss)	(4,046,603)	(3,074,265)	2,352,011
	=====	=====	=====
Weighted average shares outstanding			
Basic	3,071,234,458	3,090,678,225	3,504,700,089
Effect of dilution securities	--	--	32,348,829
	-----	-----	-----
Diluted	3,071,234,458	3,090,678,225	3,537,048,918
	=====	=====	=====

Diluted earnings per share for the year ended December 31, 2003 are calculated as follows:

The denominator is the weighted average number of outstanding shares of common share of 3,537,048,918 shares in 2003 with consideration of the adjustment of ASE stock options in 2003.



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

The denominator of earnings (loss) per ADS is the above-mentioned weighted average outstanding shares divided by five (one ADS represents five common shares). The numerator is the same as mentioned in the above EPS calculation.

F-55

Schedule I

Contract	Amount (in millions)	Strike Price	Maturity Date
ASE			
---			
Sell US\$ Call/JPY Put	US\$ 3.0	US\$1:JPY\$111.6	January 14. 2004
Buy US\$ Put/JPY Call	US\$ 3.0	US\$1:JPY\$111.6	January 15. 2004
Buy NT\$ Call/US\$ Put	US\$ 157.0	US\$1:NTD\$33.95	April 16. 2004
Sell NT\$ Call/US\$ Put	US\$ 157.0	US\$1:NTD\$33.46	October 18. 2004
Sell US\$ Call/JPY Put	US\$ 10.0	Note 1	January 13. 2004
Buy US\$ Put/JPY Call	US\$ 5.0	Note 2	January 13. 2004
Buy US\$ Put/JPY Call	US\$ 5.0	Note 3	January 13. 2004
Buy US\$ Put/JPY Call	US\$ 5.0	Note 4	January 13. 2004
Buy US\$ Put/JPY Call	US\$ 5.0	Note 5	January 13. 2004
Sell US\$ Call/JPY Put	US\$ 10.0	Note 1	February 12. 2004
Buy US\$ Put/JPY Call	US\$ 5.0	Note 2	February 12. 2004
Buy US\$ Put/JPY Call	US\$ 5.0	Note 3	February 12. 2004
Buy US\$ Put/JPY Call	US\$ 5.0	Note 4	February 12. 2004
Buy US\$ Put/JPY Call	US\$ 5.0	Note 5	February 12. 2004
Sell US\$ Call/JPY Put	US\$ 10.0	Note 1	March 10. 2004
Buy US\$ Put/JPY Call	US\$ 5.0	Note 2	March 10. 2004
Buy US\$ Put/JPY Call	US\$ 5.0	Note 3	March 10. 2004
Buy US\$ Put/JPY Call	US\$ 5.0	Note 4	March 10. 2004
Buy US\$ Put/JPY Call	US\$ 5.0	Note 5	March 10. 2004
Sell US\$ Call/JPY Put	US\$ 10.0	Note 1	April 12. 2004
Buy US\$ Put/JPY Call	US\$ 5.0	Note 2	April 12. 2004
Buy US\$ Put/JPY Call	US\$ 5.0	Note 3	April 12. 2004
Buy US\$ Put/JPY Call	US\$ 5.0	Note 4	April 12. 2004
Buy US\$ Put/JPY Call	US\$ 5.0	Note 5	April 12. 2004

Note 1: If USD/JPY>111.6, strike price =111.6.

Note 2: If 109