

ADVANCED SEMICONDUCTOR ENGINEERING INC  
Form 20-F  
June 28, 2002

=====

SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

FORM 20-F

REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (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, 2001

OR

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

(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  
(8867) 361-7131  
(Address of Principal Executive Offices)

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

American Depositary Shares, each representing  
5 Common Shares of NT\$10 par value

Securities registered or to be registered pursuant to Section 12(g) of the Act: None

(As of the close of the period covered by the annual report)

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act: None

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report: 3,254,800,000 Common Shares

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.

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

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

	Page
INTRODUCTION.....	1
USE OF CERTAIN TERMS.....	1
SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS.....	1
PART I.....	2
Item 1. Identity of Directors, Senior Management and Advisers.....	2
Item 2. Offer Statistics and Expected Timetable.....	2
Item 3. Key Information.....	2
SELECTED FINANCIAL DATA.....	2
CAPITALIZATION AND INDEBTEDNESS.....	5
REASON FOR THE OFFER AND USE OF PROCEEDS.....	5
RISK FACTORS.....	5
Item 4. Information on the Company.....	16
HISTORY AND DEVELOPMENT OF THE COMPANY.....	16
BUSINESS OVERVIEW.....	18
ORGANIZATIONAL STRUCTURE.....	39
PROPERTIES.....	39
Item 5. Operating and Financial Review and Prospects.....	42
OPERATING RESULTS AND TREND INFORMATION.....	42
LIQUIDITY AND CAPITAL RESOURCES.....	52
RESEARCH AND DEVELOPMENT.....	55
Item 6. Directors, Senior Management and Employees.....	56
DIRECTORS AND SENIOR MANAGEMENT AND BOARD PRACTICE.....	56
EMPLOYEES.....	60
SHARE OWNERSHIP.....	60
Item 7. Major Shareholders.....	61
MAJOR SHAREHOLDERS.....	61
RELATED PARTY TRANSACTIONS.....	62
Item 8. Financial Information.....	63
CONSOLIDATED STATEMENTS AND OTHER FINANCIAL INFORMATION.....	63
LEGAL PROCEEDINGS.....	63
SIGNIFICANT CHANGES.....	64
Item 9. Listing Details.....	64
MARKET PRICE INFORMATION AND MARKETS.....	64
Item 10. Additional Information.....	66
ARTICLES OF INCORPORATION.....	66
MATERIAL CONTRACTS.....	70
EXCHANGE CONTROLS.....	73

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

TAXATION.....	73
DOCUMENTS ON DISPLAY.....	76
Item 11. Quantitative and Qualitative Disclosures About Market Risk.....	77
Item 12. Description of Securities Other Than Equity Securities.....	78
PART II.....	78
Item 13. Defaults, Dividend Arrearages and Delinquencies.....	78
Item 14. Material Modifications to the Rights of Security Holders and Use of Proceeds.....	78
MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS.....	78
PART III.....	79
Item 17. Financial Statements.....	79

i

Item 18. Financial Statements.....	79
Item 19. Exhibits.....	80

ii

### INTRODUCTION

#### 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 in 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 in the State

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

of California, (vi) "ASE Philippines" are to ASE Holdings Electronics (Philippines) Inc., a company incorporated in the Philippines, (vii) "Universal Scientific" are to Universal Scientific Industrial Co., Ltd., a company incorporated in the ROC, (viii) "ASE Material" are to ASE Material Inc., a company incorporated in 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 in the ROC and (xi) "Hung Ching" are to Hung Ching Development & Construction Co. Ltd.

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 (the "Noon Buying Rate") as of December 31, 2001, which was NT\$35.00=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.

### 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 and Section 21E of the Securities Exchange Act of 1934, including statements regarding our future results of operations and business prospects. Although these forward-looking statement, which may include statements regarding our future results of operations, financial condition or business prospect, 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. 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 the highly competitive nature of the semiconductor industry, our ability to introduce new packaging and testing technologies in order to remain competitive, our ability to successfully integrate future acquisitions, risks associated with international business activities, our business strategy, general economic and political conditions, possible disruptions in commercial activities caused by natural disasters or industrial accidents, our future expansion plans and capital expenditures, fluctuations in foreign currency exchange rates, and other factors. For a discussion of these risks and other factors, please see "Item 3. Key Information - Risk Factors."

1

### PART I

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

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

Not applicable.

Item 2. Offer Statistics and Expected Timetable.

Not applicable.

Item 3. Key Information.

## SELECTED FINANCIAL DATA

The following selected consolidated financial data have been derived from our consolidated financial statements. Our statements of income for the years ended December 31, 1999, 2000 and 2001 and our balance sheets as of December 31, 2000 and 2001 have been audited by T.N. Soong & Co., independent accountants. Our consolidated financial statements, and the report of T.N. Soong & Co. on those financial statements, are included in this annual report. The selected consolidated financial information for those periods and as of those dates are qualified by reference to those financial statements and that report, and should be read in conjunction with them and with "Item 5. Operating and Financial Review and Prospects". Effective April 22, 2002, T.N. Soong & Co. became an associate member firm of Deloitte Touche Tohmatsu. T.N. Soong & Co. was formerly a member firm of Andersen Worldwide SC. The selected consolidated statement of income data for the years ended December 31, 1997 and 1998 and selected consolidated balance sheet data as of December 31, 1997, 1998 and 1999 set forth below are derived from our audited consolidated financial statements not included in this annual report. These financial statements were also audited by T.N. Soong & Co. Our consolidated financial statements are 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 US GAAP. Notes 27 and 28 to our consolidated financial statements contain additional disclosures required under US GAAP and provide descriptions of the significant differences between ROC GAAP and US GAAP and reconciliations of net income to US GAAP for the years ended December 31, 1999, 2000 and 2001 and reconciliations of shareholders' equity to US GAAP as of December 31, 2000 and 2001.

	Year Ended and as of December			
	1997	1998	1999	2000
	NT\$	NT\$	NT\$	NT\$
	(in millions, except share, ADS and earnings per share)			
<b>Income Statement Data:</b>				
<b>ROC GAAP:</b>				
Net revenues.....	19,088.2	20,762.4	32,609.6	50,893.4
Cost of revenues.....	(13,758.5)	(15,468.1)	(23,959.6)	(35,567.3)
Gross profit.....	5,329.7	5,294.3	8,650.0	15,326.1
Operating expenses:				
Selling.....	(733.5)	(744.7)	(924.3)	(1,020.5)
General and administrative, excluding goodwill amortization(1).....	(648.7)	(909.4)	(1,655.0)	(2,606.2)
Goodwill amortization(2).....	(53.2)	(345.7)	(507.8)	(559.8)
Research and development.....	(372.9)	(453.6)	(714.3)	(1,262.5)
Operating income (loss).....	3,521.4	2,840.9	4,848.6	9,877.1
Net non-operating income (expense):				
Investment income (loss) on				

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

long-term investment-- net(1)(3)	114.2	54.6	329.9	195.7
Goodwill amortization(4).....	(155.1)	(155.1)	(279.3)	(363.0)
Gain (loss) on sale of investments-- net.....	4,870.9	606.9	5,544.2	91.7
Foreign exchange gain (loss)-- net	(133.8)	(935.5)	(538.4)	302.7
Interest income (expense)-- net(5)	(85.9)	(380.4)	(1,046.6)	(1,538.0)
Others-- net(6).....	11.0	(50.1)	204.0	(162.6)
Income (loss) before tax.....	8,142.7	1,981.3	9,062.4	8,403.6

2

	Year Ended and as of December			
	1997	1998	1999	2000
	NT\$	NT\$	NT\$	NT\$
	(in millions, except share, ADS and earnings per share)			
Income tax benefit (expense).....	(374.9)	150.8	(459.5)	(1,065.8)
Income (loss) before minority interest...	7,767.8	2,132.1	8,602.9	7,337.8
Income before acquisition.....	--	--	(65.1)	--
Extraordinary loss.....	--	--	--	--
Minority interest in net loss (income) of subsidiary.....	(364.3)	(528.1)	(743.1)	(1,500.6)
Net income (loss).....	7,403.5	1,604.0	7,794.7	5,837.2
Earnings per common share:				
Simple.....	N/A	N/A	N/A	N/A
Primary(7).....	2.33	0.49	2.46	1.82
Fully diluted(7).....	2.33	0.49	2.45	1.80
Dividends per common share(8).....	3.80	7.20	1.07	3.15
Earnings per pro forma equivalent ADS:				
Simple.....	N/A	N/A	N/A	N/A
Primary(7).....	11.65	2.43	12.28	9.12
Fully diluted(7).....	11.65	2.43	12.27	9.01
Number of common shares(9).....	3,135,196,466	3,135,196,466	3,135,196,466	3,166,809,827
Number of pro forma equivalent ADSs..	627,039,293	627,039,293	627,039,293	633,361,965
US GAAP:				
Net income.....		298.9	4,641.3	3,930.0
Earnings per common share:				
Basic.....		0.11	1.61	1.34
Diluted.....		0.09	1.58	1.29
Earnings per pro forma equivalent ADS:				
Basic.....		0.53	8.07	6.69
Diluted.....		0.46	7.91	6.47

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

Number of common shares(9).....		2,806,247,321	2,874,924,409	2,938,004,535
Number of pro forma equivalent ADSs..		561,249,464	574,984,882	587,600,907
Balance Sheet Data:				
ROC GAAP:				
Current assets:				
Cash and cash equivalents.....	10,869.8	8,173.9	11,809.1	14,166.5
Short-term investments.....	4,008.0	647.2	216.3	1,682.7
Notes and accounts receivable....	4,094.3	3,636.7	7,463.4	9,260.6
Inventories.....	2,059.0	1,744.8	2,449.7	3,246.3
Other.....	705.5	771.9	1,411.8	2,431.6
	-----	-----	-----	-----
Total.....	21,736.6	14,974.5	23,350.3	30,787.7
	=====	=====	=====	=====
Long-term investments.....	5,501.7	7,317.0	9,674.4	10,712.2
Properties.....	16,363.1	20,356.8	38,107.5	60,566.2
Other assets.....	1,557.7	4,363.2	6,198.6	6,275.1
	-----	-----	-----	-----
Total assets.....	45,159.1	47,011.5	77,330.8	108,341.2
	=====	=====	=====	=====
Short-term bank borrowings/loans....	5,946.0	6,810.2	9,868.2	13,768.0
Long-term bank borrowings/loans.....	11,872.9	12,235.0	24,551.5	25,976.9
Other liabilities and minority interest.....	6,306.5	6,091.5	12,854.1	24,927.1
	-----	-----	-----	-----
Total liabilities and minority interest.....	24,125.4	25,136.7	47,273.8	64,672.0
	=====	=====	=====	=====
Shareholders' equity.....	21,033.7	21,874.8	30,057.0	43,669.2
US GAAP:				
Shareholders' equity.....		17,675.2	26,569.7	40,729.1
Segment Data:				
ROC GAAP:				
Net revenues:				
Packaging.....	15,334.3	16,867.4	24,523.0	38,028.8
Testing.....	2,383.4	3,131.3	7,793.2	12,768.4
Other.....	1,370.5	763.7	293.4	96.2
Gross profit:				
Packaging.....	3,990.5	3,693.8	5,753.0	10,016.9
Testing.....	1,148.7	1,484.6	3,105.2	5,294.4
Other.....	190.5	115.9	(208.2)	14.8

3

Year Ended and as of December

	1997	1998	1999	2000
	-----	-----	-----	-----
	NT\$	NT\$	NT\$	NT\$
	(in millions, except share, ADS and earnings per			

Other Data:

ROC GAAP:

Net cash outflow from acquisition of fixed assets.....	(8,030.1)	(6,945.0)	(9,869.2)	(30,063.6)
Depreciation and amortization.....	2,301.6	3,237.2	5,554.4	8,593.8
Net cash inflow (outflow) from operations.....	2,185.3	5,194.2	7,017.2	17,618.3
Net cash inflow (outflow) from sale				

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

of investments.....	5,495.0	290.5	7,889.3	--
Net cash inflow (outflow) from				
investing activities(10).....	(5,067.7)	(8,558.3)	(11,782.7)	(33,550.4)
Net cash inflow (outflow) from				
financing activities(11).....	11,290.3	589.3	8,569.0	17,607.3

-----

- (1) Excludes goodwill amortization for purposes of this table only.
- (2) Included in general and administrative expenses in our consolidated financial statements.
- (3) Derived by netting "investment income under equity method" in non-operating income and "investment loss under equity method" in non-operating expenses in our consolidated financial statements.
- (4) Included in "investment loss under equity method" in non-operating expenses in our consolidated financial statements.
- (5) Derived by netting "interest" in non-operating income and "interest" in non-operating expenses in our consolidated financial statements.
- (6) Derived by netting "others" in non-operating income and "others" in non-operating expenses in our consolidated financial statements.
- (7) The numerator of both primary and fully diluted earnings per share is calculated with consideration of the adjustment of ASE Test's primary and fully diluted earnings per share. See note 20 to our consolidated financial statements.
- (8) Dividends per common share issued as a stock dividend.
- (9) Represents the weighted average number of shares after retroactive adjustments to give effect to stock dividends and employee stock bonuses.
- (10) Includes proceeds from the sale of common shares, including global depositary shares, by affiliates of ASE Inc. and proceeds from the sale of ordinary shares of ASE Test by ASE Inc.
- (11) Includes proceeds from primary offerings of common shares, including ADSs, and ordinary shares by ASE Inc. and ASE Test, respectively.

### 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 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.

The following table sets forth, for the fiscal years indicated, information concerning the amount 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

-----



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

	Average	High	Low	Period-End
	-----	-----	-----	-----
1997.....	NT\$29.06	NT\$33.25	NT\$27.34	NT\$32.80
1998.....	33.54	35.00	32.05	32.27
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
November.....	34.50	34.55	34.44	34.47
December.....	34.68	35.13	34.46	35.00
2002 (through June 27).....	34.74	35.11	33.50	33.50
First Quarter.....	35.04	35.11	34.94	35.00

4

NT Dollars per U.S. Dollar Noon Buying Rate				
	Average	High	Low	Period-End
	-----	-----	-----	-----
January.....	35.03	35.08	34.94	34.99
February.....	35.07	35.11	34.99	35.11
March.....	35.02	35.10	34.95	35.00
Second Quarter (through June 27)	34.45	35.01	33.50	33.50
April.....	34.92	35.01	34.72	34.72
May.....	34.45	34.72	34.05	34.05
June (through June 27).....	33.91	34.07	33.50	33.50

-----  
Source: Federal Reserve Board database.

On June 27, 2002, the noon buying rate was NT\$33.50 to US\$1.00.

We publish our financial statements in NT dollars, the lawful currency of the ROC. This annual report contains translations of NT dollar amounts into U.S. dollars at specific rates solely for the convenience of the reader. Unless otherwise noted, all translations from NT dollars to U.S. dollars and from U.S. dollars to NT 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, 2001, which was NT\$35.00 to US\$1.00 on that date. No representation is made that the NT dollar or U.S. dollar amounts referred to in this annual report 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.

CAPITALIZATION AND INDEBTEDNESS

Not applicable.

REASON FOR THE OFFER AND USE OF PROCEEDS

Not applicable.

RISK FACTORS

Since we are dependent on the highly cyclical semiconductor industry and

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

conditions in the markets for the end use applications of our products, our revenues and earnings 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 earnings. 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 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 commencing in the fourth quarter of 2000 that continued through 2001. 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. We expect this industry downturn 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

5

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 2001, approximately 71.5% of our net revenues were attributable to the packaging and testing of semiconductors used in personal computer and communications applications. Both industries are 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 earnings.

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 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

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

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 earnings 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 which offer turnkey packaging and testing services. We believe that the principal competitive factors in the markets for our products and services are:

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

We face increasing competition from other packaging and testing companies. In particular, most of our customers obtain packaging or testing services from more than one source. Furthermore, 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 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 earnings to decrease and have a material adverse effect on our financial condition and results of operations.

6

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 on a given service, and our overall profitability, may decrease over time.

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

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

Our operating results have varied significantly from period to period and may continue to vary in the future. Downward fluctuations in our operating results may result in decreases in the market price of our ADSs and common shares. 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 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 our ADSs and common shares, and thus the market value of your investment, may fall.

Due to our high percentage of fixed costs, we will be unable to maintain our profitability 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 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 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 due to relatively low growth in demand, which leads to reduced margins during that period. 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 led to 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 profitability levels if we cannot consistently achieve or maintain relatively high capacity utilization rates.

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;
- 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 the agreements governing our existing debt 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 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 may also trigger cross-defaults under our other agreements. In the event of default, we may not be able to cure the default or obtain a waiver on a timely basis, and our operations could be significantly disrupted or harmed. An event of default under any agreement governing our existing or future debt, if not cured or waived, could have a material adverse effect on our liquidity, financial condition and results of operations.

As a result of the reduced levels of operating cash flow due primarily to the recent downturn in the worldwide semiconductor industry, we had on occasion during 2001 failed to comply with certain financial covenants in some

8

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 particular, 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. 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 reasonable cost.

Criminal charges were brought in December 1998 by the district attorney for Taipei against Jason C.S. Chang, our Chairman, Richard H.P. Chang, our Vice Chairman and Chief Executive Officer, and Chang Yao Hung-ying, our director, and others for alleged breach of fiduciary duties owed to Hung Ching, an

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

affiliate of ASE Inc., in their capacity as directors and officer of Hung Ching relating to a sale of land. ASE Inc. is not a party to these proceedings and we do not expect that these charges will result in any liability to us. In January 2001, the District Court of Taipei rendered a judgment finding Jason C.S. Chang and Chang Yao Hung-ying guilty of forgery of corporate and other documents and breach of fiduciary duties and Richard H.P. Chang not guilty. In January 2002, the High Court of Taiwan, the Republic of China, or ROC, rendered a judgment relating to the appeal of the judgment by the District Court, and found Jason C.S. Chang and Chang Yao Hung-ying guilty and Richard H.P. Chang not guilty. In order to comply with the Singapore Companies Act, Jason C.S. Chang and Chang Yao Hung-ying have both resigned as directors of our subsidiary, ASE Test. Neither Jason C.S. Chang nor Chang Yao Hung-ying believes that he or she committed any offense in connection with such transactions, and they are appealing the decision to the Supreme Court of Taiwan, ROC. If the convictions are not overturned on appeal, they will be required under ROC law to resign as directors and Jason C.S. Chang will be required to resign as Chairman of ASE Inc. See "Item 4. Information on the Company--Business Overview--Legal Proceedings".

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 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 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 expect to continue making investments in our subsidiary ASE Material Inc., or ASE Material, which focuses on the design and production of interconnect materials. In particular, we intend to further develop our in-house interconnect materials capabilities with a view to sourcing a majority of our substrate requirements by value from ASE Material by the end

9

of 2002. 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 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 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 this 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, Schlumberger

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

Limited 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, including NT dollars, U.S. dollars, Malaysian ringgit, Korean won, Philippine pesos, Singapore dollars and Hong Kong dollars. 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.

The loss of a major customer or termination of our strategic alliance and 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 40%, 44% and 41% of our net revenues in 1999, 2000 and 2001, respectively. Other than Motorola, Inc. in 1999, and Motorola, Inc. and VIA Technologies, Inc. in 2000 and 2001, no other customer accounted for more than 10% of our net revenues in 1999, 2000 and 2001. 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 major customer may adversely affect our revenues 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 commercial arrangements, and our failure to enter into substantially similar alliances and commercial arrangements, may adversely affect our competitiveness and our revenues and profitability.

All of our key customers operate in the cyclical semiconductor business and have in the past, and may in the future, vary order levels significantly



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

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.

We depend on our agents for sales and customer service in North America and Europe. Any serious interruption 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 interruption 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. We established ASE Material in 1997 to partially reduce this risk. However, we do not expect ASE Material to be able to provide sufficient raw materials to meet all of our 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 earnings could decline if we were unable to obtain adequate supplies of high quality raw materials in a timely 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 process. 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 of, 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.

11

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 - 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 a ROC company and, because the rights of shareholders under ROC law differ from those under U.S. law, 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 Republic of China. 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. 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 U.S. corporation.

Any impairment charges required under US GAAP may have a material adverse effect on our net income on a US GAAP reconciled basis.

Under currently effective US GAAP, 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 can give no assurance that impairment charges will not be required in periods subsequent to December 31, 2001. Please see note 27 to our consolidated financial statements for a discussion of the criteria which, if met, may require impairment charges.

As a result of new standards under US GAAP that became effective on January 1, 2002, we are no longer permitted to amortize remaining goodwill. Total goodwill amortization expenses amounted to NT\$1,070.9 million (US\$70.6 million) under ROC GAAP for the year ended December 31, 2001. Starting from January 2002, all goodwill must be periodically tested for impairment. As of December 31, 2001, the goodwill under US GAAP amounted to NT\$6,882.7 million (US\$196.6 million). We currently are not able to estimate the extent and timing of any goodwill impairment charge for future years. Any goodwill impairment

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

charge required under US GAAP may have a material adverse effect on our net income for periods subsequent to December 31, 2001 on a US GAAP reconciled basis. Please see note 28h to our consolidated financial statements for a discussion of the new standards under US GAAP.

The determination of an impairment charge at any given time is based significantly on our expected results of operation 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.

### Risks Relating to Taiwan, Republic of China

Strained relations between the Republic of China and the People's Republic of China 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% of our net revenues in 2001 from packaging and testing services are derived from our operations

12

in Taiwan. The Republic of China has a unique international political status. The People's Republic of China asserts sovereignty over all of China, including Taiwan. The People's Republic of China government does not recognize the legitimacy of the Republic of China government. Although significant economic and cultural relations have been established in recent years between the Republic of China and the People's Republic of China, relations have often been strained and the government of the People's Republic of China has indicated that it may use military force to gain control over Taiwan in some circumstances, such as the declaration of independence by the Republic of China. Relations between the Republic of China and the People's Republic of China have been particularly strained in recent years. Past developments in relations between the Republic of China and the People's Republic of China have on occasion depressed the market price of the securities of ROC companies. Relations between the Republic of China and the People's Republic of China and other factors affecting the political or economic conditions in Taiwan could have a material adverse effect on our financial condition and results of operations, as well as the market price and the liquidity of our ADSs and common shares.

In July 2000, our shareholders approved a resolution which authorizes our board of directors to make investments in the People's Republic of China. However, the Republic of China government currently restricts certain investments by ROC companies in the People's Republic of China. We do not know when or if such laws and policies governing investment in the People's Republic of China will be amended, and we cannot assure you that any such amendments to the Republic of China investment laws and policies will permit us to make an investment that we consider beneficial to us in the People's Republic of China in the future. As a result, our growth prospects and profitability may be adversely affected if we are restricted from making investments in the People's Republic of China and are not able to fully capitalize on the growth of the semiconductor industry in the People's Republic of China.

As a substantial portion of our business and operations are located in Taiwan, we are vulnerable to earthquakes, drought and other natural disasters, which could severely disrupt the normal operation of our business and adversely affect our earnings.

Taiwan is susceptible to earthquakes and has experienced severe earthquakes which caused significant property damage and loss of life, particularly in the central and eastern parts of Taiwan. 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 outage caused by the earthquakes. In addition, many areas in Taiwan are experiencing a severe drought. As of May 3, 2002, the Taiwan authorities announced water rationing measures in the northern parts of Taiwan. If the drought continues and the authorities are unable to source water from alternative sources in sufficient quantities, we may be required to temporarily shut down or substantially reduce the operations of our facilities in the affected areas, which would seriously affect our operations.

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 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, 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.

13

#### Risks Relating to Ownership of ADSs

If an active market for our ADSs fails to be sustained, the price of our ADSs may fall.

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. 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 ADR 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.

As a holder of ADSs, your voting rights are limited by the terms of the deposit agreement. You will not be able to exercise your voting rights on an

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

individual basis.

As a holder of ADRs evidencing ADSs, you will not be able to exercise voting rights on an individual basis. You may exercise your voting rights with respect to the underlying common shares only in accordance with the provisions of the deposit agreement. In particular, for any resolution to be proposed at a shareholders meeting, only holders who (1) have provided voting instructions in a timely manner in accordance with the provisions of the deposit agreement, and (2) together own at least 51% of the outstanding ADSs voting in the same manner, will be able to vote the common shares representing their ADSs in the manner set forth in their voting instructions. In all other cases, holders will be deemed to have authorized and directed the depository to give a discretionary proxy to our Chairman or his designee to vote the common shares represented by their ADSs in any manner he or his designee may wish, which may not be in the interests of the holders.

You may not be able to participate in rights offerings and may experience dilution of your holdings.

We may, from time to time, distribute rights to our shareholders, including rights to acquire securities. Under the deposit agreement, the depository will not distribute rights to holders of ADSs unless the distribution and sale of rights and the securities to which these rights relate are either exempt from registration under the U.S. Securities Act of 1933, as amended, or the Securities Act, with respect to all holders of ADSs, or are registered under the provisions of the Securities Act. We can give no assurances that we can establish an exemption from registration under the Securities Act, and we are under no obligation to file a registration statement with respect to these rights or underlying securities or to endeavor to have a registration statement declared effective. Accordingly, holders of ADSs may be unable to participate in our rights offerings and may experience dilution of their holdings as a result.

If the depository 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 you will receive no value for these rights.

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

The ability to deposit our common shares into our ADR facility is restricted by ROC law. A significant number of withdrawals of our common shares underlying our ADSs would reduce the liquidity of our ADSs by reducing the number of ADRs 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 into our ADR facility without specific approval of the ROC Securities and Futures Commission except where:

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

14

- (3) you exercise preemptive rights in the event of a capital increase for cash; or

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

- (4) you purchase our common shares, directly or through the depositary, on the Taiwan Stock Exchange, and deliver our common shares to the custodian for deposit into our ADR facility. The depositary may issue ADSs against the deposit of our 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 additional ADSs issued pursuant to the events described in (1) through (3) above.

In addition, in the case of a deposit of common shares requested as described above, the depositary may refuse to accept our common shares for deposit if such deposit is not permitted under any restriction notified by us to the depositary from time to time. These restrictions may include blackout periods during which deposits may not be made and as well as limitations on the size and frequencies of deposits.

The value of your investment may be reduced by possible future sales of ADSs or common shares 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--Major Shareholders" for a description of our significant shareholders and affiliates that hold our common shares. We cannot predict the effect, if any, that future sales of ADSs or common shares, or the availability of ADSs or common shares for future sale, will have on the market price of ADSs or common shares prevailing from time to time. Sales of substantial amounts of ADSs or common shares in the public market, or the perception that such sales may occur, could depress the prevailing market prices of our ADSs or common shares.

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 further 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:

- o the proceeds of the sale of common shares represented by ADSs or received as stock dividends from the common shares; 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 ADR 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 a timely manner, or at all.

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

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

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

15

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 to 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 others, 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 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 other 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 28, 2002, the Taiwan Stock Exchange Index closed at 5,153.71. 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 our ADSs and common shares, in both the domestic and the international markets.

Purchasers of 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 from time to time bonuses 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 our board of directors and the ROC Securities and Futures Commission, establish an employee stock option plan. The issuance of these shares pursuant to stock bonuses or stock options may have a dilutive effect on your ADSs.

Item 4. Information on the Company.

### HISTORY AND DEVELOPMENT OF THE COMPANY

Our legal name is Advanced Semiconductor Engineering, Inc. and we are also known as "ASE". We were incorporated on March 23, 1984 under the laws of the Republic of China as a company limited by shares. Our principal place of

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

business is at 26 Chin Third Road, Nantze Export Processing Zone, Nantze, Kaohsiung, Taiwan, Republic of China and our phone number is 886-7-361-7131. Our agent for service of process in the U.S. is CT Corporation System, 111 Eighth Avenue, New York, New York 10011 and our agent's phone number is 212-894-8940.

We were established in 1984 as a packaging and testing company, with facilities in the Nantze Export Processing Zone. Our business grew and 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 also provides our customers with testing and packaging services. In 1996, we established ASE Philippines, which conducts testing and packaging services. In 1997, we established ASE Materials, which manufactures etched leadframes, and assists us in reducing our dependency on outsourced leadframes. In 1997, we constructed a new facility in Kaohsiung for packaging services and established a research and development laboratory.

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

16

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 payable over three years if sales volume targets were met. These targets were met for the first two years. The third year to determine such target will be complete on June 30, 2002. 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 for Motorola's Semiconductor Products Sector, and will continue to do so for at least three to five years following the completion of the acquisition under manufacturing services agreements with Motorola.

ISE Labs

In May 1999, we acquired 70.0% of the outstanding shares of ISE Labs, a semiconductor testing company with principal facilities located in Fremont and Santa Clara, California. The total purchase price for our 70.0% equity interest in ISE Labs was US\$98.0 million.

In April, July and November, 2000, we purchased additional shares of ISE Labs at an aggregate purchase price of US\$70.9 million. As a result of these purchases, we owned 80.4% of the outstanding shares of ISE Labs as of December 31, 2000. In January 2002, we purchased the remaining portion of the shares of ISE Labs for a purchase price of US\$50.1 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\$115.0 million), principally through open market purchases on the Taiwan Stock Exchange. We subsequently increased our holding to 23.3% following the open market purchase of additional shares in July and August of 2000. As of December 31, 2001, we held 23.0% 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.

17

#### BUSINESS OVERVIEW

We are one of the world's largest independent providers of semiconductor packaging services and, together with our subsidiary ASE Test, the world's largest independent provider of semiconductor testing services. Our services include semiconductor packaging, design and production of interconnect materials, front-end engineering testing, wafer probing and final testing services. We believe that 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 because of:

- o our ability to provide a broad range of advanced semiconductor packaging and testing services on a large scale turnkey basis;
- o our expertise in developing and providing advanced packaging and testing technologies and solutions;
- o our geographic presence in key centers of outsourced semiconductor and electronics manufacturing;
- 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; 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.

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.

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

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 requirements of our customers.

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

- o Advanced Micro Devices, Inc.
- o Altera Corporation
- o ATI Technologies Inc.
- o Cambridge Silicon Radio
- o Cirrus Logic, Inc.
- o Conexant Systems, Inc.
- o Koninklijke Philips Electronics N.V.

18

- o LSI Logic Corporation
- o Motorola, Inc.
- o NVIDIA Corporation
- o ON Semiconductor Corp.
- o Qualcomm Incorporated
- o Silicon Integrated Systems Corp.
- o ST Microelectronics N.V.
- 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 process and design technologies have led to smaller, more complex and more reliable semiconductors at a lower cost per function. These improvements have resulted in significant performance and price benefits to manufacturers of electronic 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 and industrial automation and control systems.

The semiconductor industry is characterized by strong long-term growth, with periodic and sometimes severe cyclical downturns. The Semiconductor Industry Association estimates that worldwide sales of semiconductors increased from approximately US\$50.5 billion in 1990 to US\$204.4 billion in 2000. The semiconductor industry experienced strong growth between 1992 and 1995 and between 1998 and 2000, with declines between 1996 and 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 stabilization in the fourth quarter of 2001, primarily as a result of the completion of inventory adjustment and introduction of new products. 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. Similarly, the availability of technologically advanced independent manufacturing services has encouraged "systems companies", which had traditionally outsourced the manufacturing of semiconductor components used in the assembly of their systems products to integrated device manufacturers, to increasingly outsource to independent semiconductor manufacturing companies.

19

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.

During the recent industry downturn in 2001, semiconductor companies 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.

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.

Growth of Fabless Semiconductor Companies. The substantial growth in the number and scale of fabless semiconductor companies that rely solely on independent companies to meet their manufacturing requirements will continue to drive growth in the market for independent foundry, packaging and testing services.

Gartner Dataquest forecasts that the total outsourced semiconductor packaging market will grow from US\$6.4 billion in 2001 to US\$17.0 billion in 2005. Gartner Dataquest also forecasts that the total outsourced semiconductor testing market will grow from US\$0.9 billion in 2001 to US\$3.0 billion in 2005.

#### 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 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 People's Republic of China 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 People's Republic of China 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:

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 wafer received from our customers are diced by means of diamond saws into separate dies, also called chips. Each die is attached to a leadframe or a laminate (plastic or tape)

21

substrate by epoxy resin. A leadframe is a miniature sheet of metal, generally made of copper and silver alloys, on which the pattern of input/output leads has been cut. On a laminate substrate, typically used in ball grid array 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 "wire 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 ball grid array 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 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

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

services 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 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 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, as a downstream service provider, to work with them as an integral and strategic partner in the upstream development of their products. We intend to enhance and expand our expertise in both the upstream and downstream semiconductor manufacturing processes in order to better serve our customers in providing our core services of packaging and testing. 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 technology, which has become increasingly critical for our customers both in terms of cost and production cycle time.

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

We intend to continue our focus on developing advanced process and product technologies in order to meet the advanced packaging and testing requirements of our customers. Our expertise in packaging technology has enabled us to develop advanced solutions such as fine pitch 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 through ASE Material. 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 process. As a result, we expect bumping and high density interconnect materials to be the core technology for the next generation of semiconductor packaging technology. By focusing on the design and production of interconnect materials, we plan to capture most of the value-added component of the packaging business and lead the migration in packaging technology. In 2001, ASE Material supplied approximately 34% of our substrate requirements by value. We intend to continue to make investments in ASE Material in order to further develop and enhance our existing capabilities in interconnect materials with a view to sourcing a majority of our substrate requirements by value from ASE Material by the end of 2002.

## 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 (that is, upstream and downstream) levels of integration: chip, module, board and systems. Our controlling interest in Universal Scientific has provided us with access to process and product technologies at the levels of module, board and systems 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, 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. Packaging and testing services for more advanced semiconductors 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.

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, 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 allowed us to expand our capacity and gain access to specialized packaging and testing technologies with a focus on wireless communications and automotive end-products.

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

We intend to continue leveraging our presence in key centers of semiconductor and electronics manufacturing to further grow our business. We have significant packaging 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

23

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 Malaysia and Singapore -- an emerging center for outsourced semiconductor manufacturing in Southeast Asia with a concentration of integrated device manufacturers;
- o Korea -- a center for the manufacturing of memory devices and semiconductors for communications applications with a concentration of integrated device manufacturers specializing in these products; and
- o Silicon Valley in California -- the preeminent center for semiconductor design with a concentration of fabless customers.

#### 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.

We are developing similar strategic relationships with other major foundries and providers of other complementary semiconductor manufacturing services in Taiwan and Southeast Asia with which we already have close business relationships.

#### 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

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

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, our packaging and testing revenues accounted for 75.3% and 24.7% 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 and thin quad flat package, and package types based on substrates, such as ball grid array. We believe that we are among the leaders in such advanced packaging process 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

24

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 difference 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.

Package Types	Number of Leads	Description	End Use
Quad Flat Package (QFP)/Thin Quad Flat Package (TQFP)	44-304	Designed for advanced processors and controllers, application specific integrated circuits and digital signal processors.	Multimedia and cellular computers, industrial disk drives, boards supporting integrated digital notebook

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

Plastic Leaded Chip Carrier (PLCC)	28-84	Designed for applications that do not require low profile package with high density of interconnects.	Personal com electroni monitors.
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 aud entertain cordless pagers, f printers, personal periphera parts, te products, optical d disk driv
Small Outline Plastic J-Bend Package (SOJ)	20-44	Package designed for memory and low pin-count applications.	DRAM memory microcont analog co audio/vid
Plastic Dual In-line Package (PDIP)	8-56	Package used in consumer electronic products.	Telephones, audio/vid and compu

Substrate-Based Packages. Substrate-based packages generally employ the ball grid array 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.

25

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

- 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 systems-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

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

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 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	119-1096	Designed for semiconductors which require the enhanced performance provided by plastic BGA, including personal computer chipsets, graphic controllers and microprocessors, application specific integrated circuits, digital signal processors and memory devices.	Wireless phones, systems, computers, video cam
Thin Film BGA	36-288	Designed for semiconductors such as memory, analog, and application specific integrated circuits requiring a smaller package.	Cellular and telecommu wireless positioni notebook personal assistant PDAs.
Film BGA	96-280	Substrate-based package that has higher performance and lower profile than plastic BGA.	Cellular pho wireless digital s and micro applicati performan

Package Types	Number of Leads	Description	End Use
---------------	-----------------	-------------	---------

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

Viper BGA	256-792	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 telecommu products, consumer disk driv computers boards.
Stacked-Die BGA	66-256	Combination of multiple dies in a single package enables package to have multiple functions within a small surface area.	Cellular pho networks, processor cameras a
Flip Chip BGA	16-1681	Using advanced interconnect technology, 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-perform and graph applicati
Systems-in-a-Package	256-972	Integrated combination of microprocessor, logic controller and memory chips assembled in one package.	Digital tele modems, p periphera players a
Land Grid Array	6-78	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 frequen circuits communica computer personal periphera
Bump Chip Carrier	8-96	Bump chip carrier packages use plating metal pads to connect with printed circuit boards, creating enhanced thermal and electrical performance.	Radio freque wireless products.
Tape Carrier Package	129-384	The light-weight tape carrier package uses a labor-saving reel-to-reel bonding technique to facilitate high input/output and frequency as well as flexible interconnections.	Liquid cryst printers, PDA and n

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

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

27

	Year Ended December 31,		
	1999	2000	2001
	(percentage of packaging revenues)		
Package Types:			
BGA.....	35.3%	44.2%	52.0%
TQFP.....	18.4	18.2	14.3
QFP.....	22.0	14.6	12.7
SOJ/SOP.....	9.8	9.9	6.7
PLCC.....	4.4	3.0	2.1
PDIP.....	4.9	3.0	3.0
Other.....	5.2	7.1	9.2
	-----	-----	-----
Total.....	100.0%	100.0%	100.0%
	=====	=====	=====

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 2001, ASE Material supplied approximately 23%, by value, of the leadframes and 34%, 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. Through ASE Material, 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 -- If we are not successful in developing and enhancing our in-house interconnect materials capabilities, our margins and profitability may be adversely affected".

### Testing

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.

28

- 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.
- 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 design validation or reliability testing processes, it is typically subjected to failure analysis to determine why it did not 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

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

of logic/mixed-signal semiconductors, with the number of leads ranging from the single digits to one thousand and operating frequencies of up to 800 MHz 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.

29

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

	Year Ended December 31,		
	1999	2000	2001
	-----	-----	-----
	(percentage of testing revenues)		
<b>Testing Services:</b>			
Front-end engineering test.....	2.2%	4.5%	8.7%
Wafer probe.....	7.8	9.9	9.0
Final test.....	90.0	85.6	82.3
	-----	-----	-----
Total.....	100.0%	100.0%	100.0%
	=====	=====	=====



## 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 1996 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 June 14, 2002, we held 50.52% of the outstanding shares of ASE Test. We are evaluating alternatives to increase our ownership of ASE Test to greater than 50%, including open market purchases of ASE Test shares.

ASE Test is a holding company incorporated in Singapore whose significant assets are its ownership interests in the following operating companies as of April 30, 2002:

- o 100% of ASE Test, Inc., also called ASE Test Taiwan;
- o 100% of ASE Test Malaysia;
- o 100% of ISE Labs;
- o 30% of ASE Chung Li (the remaining 70% of which is owned by ASE Inc.); and
- o 30% of ASE Korea (the remaining 70% of which is owned by ASE Inc.).

In 2001, ASE Test recorded net revenues of US\$298.5 million, operating loss of US\$24.1 million and net loss of US\$45.8 million.

#### ASE Material

ASE Material, which is a 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. See "-- Strategy -- Continue to Focus on Advanced Technological, Processing and Materials Capabilities". ASE Material currently supplies our packaging facilities in Kaohsiung, Taiwan with a substantial portion of our leadframe and substrate requirements. See "-- Raw Materials and Suppliers -- Packaging". As of December 31, 2001, we held 60.2% of the outstanding shares of ASE Material, comprising 56.2% 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. The supervisor and two of the five directors of ASE Material are representatives of ASE Inc. and one director is a representative of ASE Test Taiwan. The

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

remaining two directors of ASE Material are Jason C.S. Chang, our Chairman, and Richard H.P. Chang, our Vice Chairman and Chief Executive Officer, serving in their individual capacities.

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 2001, ASE Material recorded net revenues of NT\$2,458.4 million (US\$70.2 million), operating income of NT\$273.5 million (US\$7.8 million) and net income of NT\$181.6 million (US\$5.2 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.

### ASE Technologies

ASE Technologies, Inc., a ROC company, was involved in the design and assembly of notebook computers, set-top boxes and liquid crystal display monitors, and the assembly of board and sub-systems. As of December 31, 2001, we held 98.8% of the outstanding shares of ASE Technologies. ASE Technologies ceased operations in 2001, and had an operating loss of NT\$4.4 million (US\$0.1 million) and a net income of NT\$44.1 million (US\$1.3 million) in 2001. We intend to wind down the business of ASE Technologies upon approval from ASE Technologies' shareholders on June 28, 2002. We do not expect to incur any significant charges to our net income in connection with the winding down of ASE Technologies.

### Our Unconsolidated Affiliates

As of December 31, 2001, we held approximately 23.0% of the outstanding shares of Universal Scientific and 25.4% of the outstanding shares of Hung Ching.

### Universal Scientific

Universal Scientific, which is a 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.

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 2001, Universal Scientific recorded net revenues of NT\$28,866.6 million (US\$824.8 million), operating income of NT\$1,157.7 million (US\$33.1 million) and net loss of NT\$163.1 million (US\$4.7 million). The shares of Universal Scientific are listed on the Taiwan Stock Exchange. As of December 31, 2001, Universal Scientific had a market capitalization of NT\$17,694.5 million (US\$505.6 million).

### Hung Ching

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

Hung Ching, which is a ROC company, is 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 Richard H.P. Chang, our Vice Chairman and Chief Executive Officer, and is a director of ASE Inc. As of December 31, 2001, we held 25.4% of the outstanding shares of Hung Ching. Jason C.S. Chang,

31

Richard H.P. Chang, Chang Yao Hung-ying and other members of the Chang family are controlling shareholders of Hung Ching.

In 2001, Hung Ching recorded net revenues of NT\$1,784.1 million (US\$51.0 million), operating income of NT\$12.2 million (US\$0.3 million) and net loss of NT\$811.3 million (US\$23.2 million). The shares of Hung Ching are listed on the Taiwan Stock Exchange. As of December 31, 2001, Hung Ching had a market capitalization of NT\$1,479.8 million (US\$42.3 million).

### Sales and Marketing

#### Sales and Marketing Offices

We maintain sales and marketing offices in Taiwan, the United States, Europe and Malaysia. 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, France, 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 "-- 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 0.5% and 1.0% of our sales outside of Asia, payable monthly, depending on the amount of these sales. In 2001, we paid US\$5.9 million in commission to Gardex.

Under service agreements, each of ASE Inc., ASE Test Taiwan, ASE Korea, ASE Chung Li 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, we

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

paid US\$15.8 million 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, 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.

### Customers

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

- o Advanced Micro Devices, Inc.
- o Altera Corporation
- o ATI Technologies Inc.
- o Cambridge Silicon Radio
  
- o Cirrus Logic, Inc.
- o Conexant Systems, Inc.
- o Koninklijke Philips Electronics N.V.
- o LSI Logic Corporation
- o Motorola, Inc.
- o NVIDIA Corporation
- o ON Semiconductor Corp.
- o Qualcomm Incorporated
- o Silicon Integrated Systems Corp.
- o ST Microelectronics N.V.
- o VIA Technologies, Inc.

Our five largest customers together accounted for approximately 40%, 44% and 41% of our net revenues in 1999, 2000 and 2001, respectively. Other than Motorola, Inc. in 1999, and Motorola, Inc. and VIA Technologies, Inc. in 2000 and 2001, no customer accounted for more than 10% of our net revenues in 1999, 2000 or 2001.

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 in 2001 by the principal end use applications of the products which we packaged and tested.

Year Ended  
December 31, 2001

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

	(percentage of net revenues)
End Use Applications:	
Communications.....	36.0%
Personal computers.....	35.5
Consumer electronics/industrial/automotive.....	27.7
Other.....	0.8
	-----
Total.....	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 Industrial/Automot
-----	-----	-----
Advanced Micro Devices, Inc.	Advanced Micro Devices, Inc.	Altera Corporatio
Conexant Systems, Inc.	ATI Technologies, Inc.	ESS Technology, I
Koninklijke Philips Electronics N.V.	Cirrus Logic, Inc.	LSI Logic Corpora
Motorola, Inc.	IBM Corporation	Motorola, Inc.
Qualcomm Incorporated	NVIDIA Corporation	ST Microelectroni
ST Microelectronics N.V.	Silicon Integrated Systems Corp.	
	VIA Technologies, Inc.	
	Winbond Electronics Corporation	

33

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,		
	1999	2000	2001
	-----	-----	-----
North America.....	57.2%	65.0%	65.0%
Taiwan.....	28.9	24.8	26.7
Other Asia.....	11.3	6.4	4.4
Europe.....	2.6	3.8	3.9
	-----	-----	-----
Total.....	100.0%	100.0%	100.0%
	=====	=====	=====

In 2001, approximately 82% of the testing revenues of ASE Test Taiwan and 82% 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 2001, approximately 34% of our

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

packaging revenues in Kaohsiung, Taiwan and 67% 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 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. Prices are confirmed at the time firm orders are received from customers, which is typically four to eight weeks before delivery.

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.

### 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 59.2%, 19.0% and 9.1%, respectively, of our total cost of packaging materials in 2001.

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.

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

We do not maintain large inventories of leadframes, substrates, gold wire or molding compound, but generally maintain sufficient stock of each principal raw material for approximately one month's production based on blanket orders and rolling forecasts of near-term requirements received from customers. In addition, several of our principal suppliers dedicate portions of their inventories, typically in amounts equal to the average monthly amounts supplied to us, as reserves to meet our production requirements. However, shortages in the supply of materials experienced by the semiconductor industry have in the past resulted in occasional price adjustments and delivery delays. For example, in 1999 and 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 "-- Strategy -- Continue to Focus on Advanced Technological, Processing and Materials Capabilities".

### Testing

Apart from packaged semiconductors, no other raw materials are needed for the functional and burn-in testing of semiconductors. For the majority of our testing equipment, we often base our purchases on prior discussions with our customers about their forecast requirements. The balance consists of testing equipment on consignment from customers and which are dedicated exclusively to the testing of these customers' specific products.

### Equipment

#### Packaging

The most important equipment used in the semiconductor packaging process is the wire bonder. The number of wire bonders at a given facility is commonly used as a measure of the packaging capacity of the facility. The wire bonders connect the input/output terminals on the silicon die using extremely fine gold wire to leads on leadframes or substrates. Typically, wire bonders 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 December 31, 2001, we operated an aggregate of 3,780 wire bonders, of which 2,157 were fine pitch wire bonders and 29 were consigned by customers, respectively. In addition to wire bonders, we maintain a variety of other types of packaging equipment, such as wafer grind, wafer mount, wafer saw, die bonders, automated molding machines, laser markers, solder plate, pad printers, dejunkers, trimmers, formers, substrate saw 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 testing equipment from major international manufacturers, including Advantest Corporation, Agilent Technologies, Inc., Credence Systems Corporation, LTX Corporation, Schlumberger Limited and Teradyne, Inc. Upon acquisition of new testing equipment, we install, configure, calibrate, perform burn-in diagnostic tests on and establish parameters for the testing equipment based on the anticipated requirements of existing and potential customers and considerations relating to market trends. As of December 31, 2001, we operated an aggregate of 1,082 testers, 172 of which were consigned by customers. 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, re-formers 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

35

available test capabilities and thereby improve capacity utilization rates. In cases where a customer requires the testing of a semiconductor product that is not yet fully developed, the customer may provide personal computer workstations to us to test specific functions. In cases where a customer has specified testing equipment that was not widely applicable to other products which we test, we have required the customer to furnish the equipment on a consignment basis.

#### Intellectual Property

As of April 30, 2002, we held 158 Taiwan patents and 64 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 Tessera Inc., Fujitsu Limited, Flip Chip Technologies, Motorola, Inc. and LSI Logic Corporation. 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 bump chip carrier, flip chip packages and micro 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 Fujitsu Limited, Flip Chip Technologies, Motorola, Inc. and LSI Logic Corporation will expire on April 13, 2003, March 1, 2009, December 31, 2002, and January 1, 2010, respectively.

#### 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 environment 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. All of our facilities have been certified as meeting the ISO 9002 quality standards by the International Standards Organization, or ISO. In addition, our facilities in Taiwan (excluding Chung Li), Malaysia and the Philippines have been certified as meeting the ISO 14001 quality standards by the ISO. Our facilities in Taiwan, Korea, Malaysia and the Philippines have also been certified as meeting the Quality System 9000, also known as QS-9000, quality standards. The ISO 9002 and ISO 14001 certifications are required by many countries in connection with sales of industrial products in these countries. The QS-9000 quality standards provide for continuous improvement with an emphasis on the prevention of defects and reduction of variation and waste in the supply chain. Like the ISO 9002 certification, the QS-9000 certification is required by some semiconductor manufacturers as a threshold indicating a company's quality control standards. 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

36

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 as gaseous chemical, liquid and solid industrial wastes. We have installed various types of anti-pollution equipment for the treatment of liquid and gaseous chemical waste, generated at all of our semiconductor packaging facilities. We believe that we have adopted adequate anti-pollution measures for the effective maintenance of environmental protection standards that are consistent with the industry practice in the countries in which our facilities are located. In addition, we believe we are in compliance in all

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

material respects with present environmental laws and regulations applicable to our operations and facilities.

37

Insurance

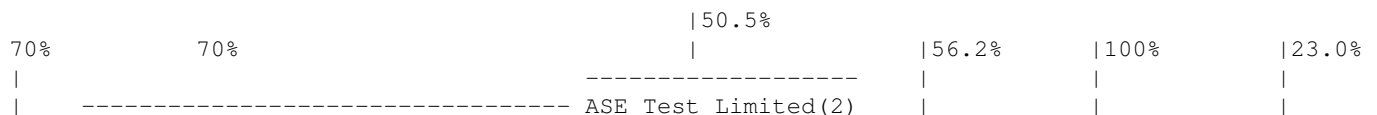
We have insurance policies covering property damage and damage to our production facilities, buildings and machinery, as well as business interruption losses, due to fire and flood. We are in the process of obtaining insurance policies for our Taiwan operations covering property damage and damage to our production facilities, buildings and machinery, as well as business interruption losses, due to typhoons. Significant damage to any of our production facilities, whether as a result of fire or other causes, would have a material adverse effect on our results of operations. We are not insured against the loss of key personnel.

38

ORGANIZATIONAL STRUCTURE

The following chart illustrates our corporate structure and effective ownership interest in each of our principal operating subsidiaries and affiliates as of June 14, 2002.

ADVANCED SEMICONDUCTOR ENGINEERING, INC. (1)



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

				-----		
	30%	30%	100%	100%	100%	
-----	-----	-----	-----	-----	-----	-----
ASE (Chung Li) Inc.	ASE (Korea) Inc.	ASE Electronics (M) Sdn. Bhd.	ISE Labs, Inc.	ASE Test, Inc.	ASE Holding Electronics (PhilippineS) Inc.	Universal Scientific Industrial Co., Ltd. (
-----	-----	-----	-----	-----	-----	-----
					4.0%	
				-----	-----	
				ASE Material Inc. (3)		
				-----	-----	

- 
- (1) The common shares of ASE Inc. and Universal Scientific are listed on the Taiwan Stock Exchange.
  - (2) The ordinary shares of ASE Test are quoted for trading on the Nasdaq National Market under the symbol "ASTSF".
  - (3) The remaining shares of ASE Materials are owned by management and employees of ASE Inc. and its affiliates.
  - (4) The common shares of Hung Ching Development & Construction Co. Ltd. are listed on the Taiwan Stock Exchange under the symbol "2527".
  - (5) The remaining shares of ASE Material Inc. are owned by the management and employees of ASE Material Inc., the management and employees of ASE Inc. and its affiliates, as well as a strategic investor.

PROPERTIES

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 and approximate floor space as of December 31, 2001.

39

Facility	Location	Commencement of Operation	Primary Use
-----	-----	-----	-----
ASE Inc.'s facility in Kaohsiung, Taiwan	Kaohsiung, Taiwan	March 1984	Our primary packaging facility. complete semiconductor manufacturing solutions in conjunction with

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

			Taiwan and foundries located in Focuses primarily on advanced flat packages for integrated device manufacturers, fabless design and communications systems comp
ASE Test, Inc.	Kaohsiung, Taiwan	December 1987	Our primary testing facility. Of complete semiconductor solution in conjunction with ASE Inc.'s fa Kaohsiung and foundries locate Taiwan. Focuses primarily on a logic/mixed signal testing for integrated device manufacturer design companies and communica systems companies.
ASE Material	Kaohsiung, Taiwan	December 1997	Design and production of interco materials such as leadframes a substrates used in packaging o semiconductors.
ASE Test Malaysia	Penang, Malaysia	February 1991	An integrated packaging and test which focuses primarily on the requirements of integrated dev manufacturers and communicatio companies.
ASE Chung Li(1)	Chung Li, Taiwan	April 1985	An integrated packaging and test which specializes in semicondu communications applications, particularly those incorporati Motorola's proprietary Map BGA technology.
ASE Korea(2)	Paju, Korea	March 1967	An integrated packaging and test which specializes in semicondu radio frequency, sensor and au applications.
ISE Labs(3)	Fremont, California Santa Clara, California Hong Kong Singapore	November 1983	Front-end engineering and final facilities located in northern in close proximity to several largest fabless design compani facilities located in close pr integrated device manufacturer fabless companies in Hong Kong Southeast Asia.
ASE Holding Electronics (Philippines) Inc., also called ASE Philippines	Cavite, Philippines	November 1995	Focuses primarily on the packagi commodity semiconductor produ integrated device manufacturer Philippines.

40

-----

(1) We acquired a 70.0% interest in ASE Chung Li and ASE Test acquired the remaining 30.0% interest in July 1999.

- (2) We acquired a 70.0% interest in ASE Korea and ASE Test acquired the remaining 30.0% interest in July 1999.
- (3) 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 shares of ISE Labs in 2000. In January 2002, we purchased the remaining outstanding shares of ISE Labs.

Item 5. Operating and Financial Review and Prospects.

OPERATING RESULTS AND TREND INFORMATION

The following discussion of our business, financial condition and results of operations should be read in conjunction with our consolidated financial statements, which are included elsewhere in this annual report. This discussion contains forward-looking statements that reflect our current views with respect to future events and financial performance. Our actual results may differ materially from those anticipated in these forward-looking statements as a result of any number of factors, such as those set forth under "Item 3. Key Information -- Risk Factors" and elsewhere in this annual report. See "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\$32,609.6 million in 1999 to NT\$50,893.4 million in 2000 primarily as a result of an upturn in the semiconductor industry that continued through the third quarter of 2000, but decreased to NT\$38,367.8 million (US\$1,096.2 million) in 2001 due to a severe downturn in the semiconductor

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

industry. The decrease in our net revenues during 2001 was across each of the principal end use applications for the products which we packaged and tested -- communications, personal computers and consumer electronics. In the fourth quarter of 2001, we experienced a gradual improvement in our net revenues compared to the preceding quarter. This improvement was generally concentrated in the packaging of more advanced package types and the testing of more complex, high-performance semiconductors.

### 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.

In 1999, 2000 and 2001, our packaging revenues accounted for 75.2%, 74.7% and 75.3% while testing revenues accounted for 23.9%, 25.1% and 24.7%, respectively, of our net revenues. The portion of the semiconductor testing market currently accounted for by independent testing service providers is smaller than that for packaging, which we believe will result in outsourced testing growing at a faster rate than outsourced packaging. In addition, the large capital expenditures needed for increasingly sophisticated testing equipment, as compared to less expensive packaging equipment, is leading to further outsourcing of testing services by integrated device manufacturers.

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 prices which resulted in our company incurring a net loss in 2001.

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 ball grid array, or BGA, and higher density packages with finer lead-to-lead spacing, or pitch, and testing of more complex, high-performance semiconductors have increased as a percentage of total revenues. We intend to continue developing and offering new technologies in packaging and testing services and expand our capacity to achieve economies of scale, as well as improving production efficiencies for older technology, in order to mitigate the effects of declining prices on our profitability.

### High Fixed Costs

Our operations are capital intensive and our primary capital requirements are for the purchase of packaging and testing equipment. As a result, fixed costs, primarily depreciation expense, are a major component of our cost of revenues. In particular, depreciation is the principal component of our cost of

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

testing revenues as testing requires minimal raw materials. Increases or decreases in capacity utilization rates can have a significant effect on gross profit margins, as the unit cost of packaging and testing services generally decreases as fixed costs, such as equipment depreciation expense, are allocated over a larger number of units. Our ability to maintain or improve our margins will continue to depend to a large extent on our ability to effectively manage capacity utilization levels.

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 1999, 2000 and 2001, our depreciation expense as a percentage of net revenues was 16.3%, 15.7% and 27.0%, respectively. The significant increase in depreciation expense as a percentage of net revenues in 2001 primarily reflected the significant decrease in net revenues during that year and full year effect of our capacity expansion in 2000. We begin depreciating our equipment when it is placed into service. There may sometimes be a time lag between when our equipment is placed into service and when it achieves high levels of utilization. In periods of depressed industry conditions such as 2001, we may experience lower than expected demand from customers and a sharp decline in average selling price, resulting in an increase in depreciation expense relative to net revenues.

### 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 1999, 2000 and 2001, raw material cost as a percentage of our net revenues was 30.0%, 28.7% and 30.7%, 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 through ASE Material in order to maintain and enhance our profitability, ensure an adequate supply of interconnect materials at competitive prices and reduce production time.

### Consolidation of ISE Labs, ASE Chung Li and ASE Korea

In 1999, we acquired Motorola, Inc.'s semiconductor packaging and testing operations in Chung Li, Taiwan and Paju, South Korea. The businesses are now operated by ASE (Chung Li) Inc., or ASE Chung Li, and ASE (Korea) Inc., or ASE Korea. In addition, in 1999 ASE Test acquired 70% of the outstanding shares of ISE Labs, Inc., or ISE Labs, an independent semiconductor testing company. Under the method of consolidation used by us to consolidate the statements of income of ISE Labs, ASE Chung Li and ASE Korea for the year ended December 31, 1999: (1) ISE Labs' full-year 1999 net revenues, cost of revenues and operating expenses are included in our consolidated financial statements, and the pre-acquisition income of ISE Labs for the year ended December 31, 1999 (from January 1 to May 4, 1999) is then subtracted from our net income for 1999; and (2) the net revenues, cost of revenues, operating expenses and net income of ASE Chung Li and ASE Korea are included in our consolidated financial statements since the date of acquisition. See notes 2 and 28f to our consolidated financial statements.

### Goodwill Amortization

Our operating and non-operating income in recent years have been affected by goodwill amortization charges in connection with acquisitions, 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 generated

on the purchases of shares of consolidated subsidiaries are recognized under general and administrative expense. Goodwill generated on the purchases of shares of companies accounted for using the equity method are recognized as a debit under investment income. In addition to the acquisitions of ASE Korea and ISE Labs, other transactions which created significant goodwill charges were (1) the open-market purchases of 22.6% of Universal Scientific Industrial Co., Ltd., or Universal Scientific, shares in 1999, (2) the purchase of additional ordinary shares of ASE Test in 2001 from two of our directors at the prevailing market price

43

and (3) the open market purchase of shares of Hung Ching between 1995 and 1996. No goodwill was recognized in connection with the acquisition of ASE Chung Li, which was structured as an asset purchase, due to the appreciation of the fixed assets purchased. See "Item 7. Major Shareholders -- Related Party Transactions" and note 10 to our consolidated financial statements.

#### Critical Accounting Policies and Estimates

Preparation of our consolidated financial statements requires us to make estimates and judgments that affect the amounts of our assets, liabilities, revenues and expenses. We continually evaluate 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. 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) persuasive evidence that the services provided exist, (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, 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.

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 of 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



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

for doubtful accounts equal to a percentage of their aggregate accounts receivable. Based on our prior experience, we currently maintain an allowance for the account receivables of these other customers of between 3% and 4% of 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.

**Useful Lives of Properties.** Our operations are capital intensive and we have significant investments in expensive packaging and testing equipment. Properties represented 56% and 57% of our total assets as of December 31, 2000 and 2001, 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 a property 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.

### Results of Operations

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

	Year Ended December 31,		
	1999	2000	2001
	(percentage of net revenues)		
ROC GAAP:			
Net revenues.....	100.0%	100.0%	100.0%
Packaging.....	75.2	74.7	75.3
Testing.....	23.9	25.1	24.7
Other.....	0.9	0.2	0.0
Cost of revenues.....	(73.5)	(69.9)	(85.9)
Gross profit.....	26.5	30.1	14.1
Operating expenses.....	(11.6)	(10.7)	(15.3)
Operating income (loss).....	14.9	19.4	(1.2)
Non-operating income (expenses).....	12.9	(2.9)	(6.6)
Income (loss) before income tax and minority interest.....	27.8	16.5	(7.8)
Income tax benefit (expense).....	(1.4)	(2.1)	0.5
Income (loss) before minority interest.....	26.4	14.4	(7.3)
Income before acquisition.....	(0.2)	--	--
Extraordinary loss.....	--	--	(0.4)
Minority interest in net loss (income) of subsidiary.....	(2.3)	(2.9)	2.1
Net income (loss).....	23.9%	11.5%	(5.6)%

## 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.

	Year Ended December 31,		
	1999	2000	2001
ROC GAAP:			
Gross margin			
Packaging.....	23.5%	26.3%	16.0%
Testing.....	39.8%	41.5%	8.3%
Total.....	26.5%	30.1%	14.1%

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

	Year Ended December 31,		
	1999	2000	2001
	(percentage of net revenues)		
ROC GAAP:			
Cost of revenues.....			
Raw materials.....	30.0%	28.7%	30.7%
Labor.....	13.0	12.9	14.6
Depreciation.....	16.3	15.7	27.0
Other.....	14.4	12.6	13.6
-----	----	----	----
Total cost of revenues.....	73.5%	69.9%	85.9%
=====	=====	=====	=====
Operating expenses			
Selling	2.8%	2.0%	2.3%
General and administrative(1).....	5.0	5.1	7.3
Goodwill amortization(2).....	1.6	1.1	1.8
Research and development.....	2.2	2.5	3.9
-----	----	----	----
Total operating expenses.....	11.6%	10.7%	15.3%
=====	=====	=====	=====

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

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

Year Ended December 31, 2001 Compared to Year Ended December 31, 2000

Net Revenues. Net revenues decreased 24.6% to NT\$38,367.8 million (US\$1,096.2 million) in 2001 from NT\$50,893.4 million in 2000. Packaging revenues decreased 24.0% to NT\$28,898.2 million (US\$825.7 million) in 2001 from

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

NT\$38,028.8 million in 2000. Testing revenues decreased 25.9% to NT\$9,459.3 million (US\$270.3 million) in 2001 from NT\$12,768.4 million in 2000. The decreases in packaging and testing revenues were primarily due to an industry downturn commencing in the fourth quarter of 2000, resulting in a decrease in the average selling prices and volumes for packaging and testing services. The decrease in the average selling prices reflects the general trend in the semiconductor industry of declining prices for each input/output lead on a semiconductor device, which was exacerbated by the sharp decline in demand resulting from the industry downturn. 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 complex high-performance semiconductors, which generally command higher prices.

**Gross Profit.** Gross profit decreased 64.7% to NT\$5,410.8 million (US\$154.6 million) in 2001 from NT\$15,326.1 million in 2000. Our gross margin, which is equal to gross profit divided by net revenues, decreased to 14.1% in 2001 from 30.1% in 2000, primarily as a result of increased depreciation expense and increased raw materials costs, all as a percentage of net revenues. Our gross margin for packaging decreased to 16.0% in 2001 from 26.3% in 2000. This decrease was primarily due to increases in depreciation expense and raw materials costs, all as a percentage of packaging revenues. Our gross margin for testing decreased to 8.3% in 2001 from 41.5% in 2000. This decrease was primarily due to increases in depreciation expense and plant and machine rental costs, all as a percentage of testing revenues. Raw material costs in 2001 were NT\$11,776.2 million (US\$336.5 million), or 30.7% of net revenues, compared to NT\$14,620.4 million, or 28.7% of net revenues, in 2000. The increase in raw material costs was largely a result of products with higher raw material costs, such as BGA packages, accounting for a larger proportion of our packaging services. Depreciation for 2001 was NT\$10,375.0 million (US\$296.4 million), compared to NT\$7,992.3 million in 2000. This increase was primarily due to the full year effect of our capacity expansion in 2000. As a percentage of net revenues, depreciation increased to 27.0% in 2001 from 15.7% in 2000, principally as a result of the significant decrease in our net revenues and higher depreciation in 2001.

**Operating Income (Loss).** We incurred an operating loss of NT\$462.1 million (US\$13.2 million) in 2001 compared to an operating income of NT\$9,877.1 million (US\$286.2 million) in 2000. Operating margin decreased to negative 1.2% in 2001 compared to 19.4% in 2000. Operating expenses increased 7.8% to NT\$5,872.9 million (US\$167.8 million) in 2001 compared to NT\$5,449.0 million in 2000. This was primarily due to higher general and administrative, goodwill amortization and research and development expenses, partially offset by lower selling expense. Selling expense decreased 14.0% to NT\$877.9 million (US\$25.1 million) in 2001 from NT\$1,020.5 million in 2000. This decrease reflected decreased sales in 2001. Selling expense represented 2.3% of our net revenues in 2001 compared to 2.0% in 2000. General and administrative expenses, excluding goodwill amortization, increased 7.3% to NT\$2,797.6 million (US\$79.9 million) in 2001 from NT\$2,606.2 million in 2000. This increase was primarily due to increases in cash bonuses and directors' compensation of our subsidiaries paid in 2001 with respect to the preceding fiscal year. General and administrative expense, excluding goodwill amortization, represented 7.3% of our net revenues in 2001 compared to 5.1% in 2000. Goodwill amortization expense increased 23.8% to NT\$692.9 million (US\$19.8 million) in 2001 from NT\$559.8 million in 2000. This increase was primarily due to additional goodwill amortization expense resulting from our purchase of additional shares of ASE Test in 2001. Goodwill amortization expense represented 1.8% of our net revenues in 2001 compared to 1.1% in 2000. Research and development expense increased 19.2% to NT\$1,504.5 million (US\$43.0 million) in 2001 from NT\$1,262.5 million in 2000. This increase was largely a result of an increase in the number of research and development employees as well as an increase in depreciation charges associated with testers and other equipment dedicated to research and development uses. Research and development

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

expense accounted for 3.9% of our net revenues in 2001 compared to 2.5% in 2000.

Net Non-Operating Income (Expense). We recorded a net non-operating loss of NT\$2,523.4 million (US\$72.1 million) in 2001 compared to a net non-operating loss of NT\$1,473.5 million in 2000. This was primarily a result of an increase in net interest expense, an increase in net investment loss on long-term investments and a decrease in net

46

foreign exchange gain. Net interest expense increased 13.1% to NT\$1,739.3 million (US\$49.7 million) in 2001 from NT\$1,538.0 million in 2000. This increase was primarily a result of increased debt financing incurred in 2001, which was partially offset by higher interest income resulting from higher cash balances resulting from our offering of ADSs in September 2000. We recorded a net investment loss of NT\$1,196.1 million (US\$34.2 million) in 2001 as compared to a net investment loss of NT\$75.6 million in 2000. The loss was principally a result of a one-time write down of NT\$475.6 (US\$13.6 million) million due to the prolonged weakness of Hung Ching's stock price, as well as the goodwill amortization associated with our purchase of the shares of, and the net investment losses incurred by, Hung Ching and Universal Scientific. We recorded a net foreign exchange gain of NT\$247.5 million (US\$7.1 million) in 2001 compared to net foreign exchange gain of NT\$302.7 million in 2000. These foreign exchange gains were primarily due to the Japanese yen's depreciation, which reduced the NT dollar value of our Japanese yen denominated liabilities.

Net Income (Loss). As a result of the foregoing, we recorded a net loss of NT\$2,142.2 million (US\$61.2 million) in 2001 compared to net income of NT\$5,837.2 million in 2000. The net loss per ADS was NT\$3.29 (US\$0.09) for 2001 compared with net income per ADS of NT\$9.01 for 2000. As a result of our net loss in 2001, we had an income tax benefit of NT\$247.3 million (US\$7.1 million) in 2001 compared to an income tax expense of NT\$1,065.8 million in 2000.

Year Ended December 31, 2000 Compared to Year Ended December 31, 1999

Net Revenues. Net revenues increased 56.1% to NT\$50,893.4 million in 2000 from NT\$32,609.6 million in 1999. Packaging revenues increased 55.1% to NT\$38,028.8 million in 2000 from NT\$24,523.0 million in 1999. Testing revenues increased 63.8% to NT\$12,768.4 million in 2000 from NT\$7,793.2 million in 1999. Increases in packaging and testing revenues resulted primarily from an increase in net revenues at our existing facilities, due to an upturn in the semiconductor industry which commenced in the second half of 1999 and continued through the third quarter of 2000. After eliminating the results of ISE Labs, ASE Chung Li and ASE Korea for comparative purposes, our net revenues for 2000 increased by 44.4% compared to 1999, reflecting a 43.5% increase in packaging revenues and a 57.2% increase in testing revenues.

Gross Profit. Gross profit increased 77.2% to NT\$15,326.1 million in 2000 from NT\$8,650.0 million in 1999. Our gross margin improved to 30.1% in 2000 compared to 26.5% in 1999, primarily as a result of a higher revenue contribution from testing operations and decreases in raw material costs and depreciation as a percentage of net revenues. Our testing operations historically have higher gross margins than our packaging operations, except during periods of lower-than-normal capacity utilization. Our gross margin for packaging increased to 26.3% in 2000 from 23.5% in 1999. This increase was primarily due to decreases in direct and indirect labor costs, raw material costs and depreciation as percentages of packaging revenues. Our gross margin for testing increased to 41.5% in 2000 from 39.8% in 1999. This increase was

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

principally a result of a decrease in repair and maintenance costs, which was partially offset by increases in depreciation as well as direct and indirect labor costs, all as percentages of testing revenues. Raw material costs in 2000 were NT\$14,620.4 million, or 28.7% of net revenues, compared to NT\$9,782.9 million, or 30.0% of net revenues, in 1999. This percentage decrease reflected a change in the revenue mix, as testing services, which incur very limited raw material costs, accounted for a greater portion of our net revenues, as well as a decrease in raw material prices. Depreciation increased to NT\$7,992.3 million in 2000 from NT\$5,325.8 million in 1999, due primarily to the full year effect of capacity expansion in 2000. As a percentage of net revenues, depreciation decreased to 15.7% in 2000 from 16.3% in 1999, primarily reflecting a higher capacity utilization rate in 2000 as a result of increased economies of scale realized through increased production.

Operating Income. Operating income increased 103.7% to NT\$9,877.1 million in 2000 from NT\$4,848.6 million in 1999. Operating margin increased to 19.4% in 2000 from 14.9% in 1999. Operating expenses increased 43.3% to NT\$5,449.0 million in 2000 compared to NT\$3,801.4 million in 1999. This was primarily due to higher general and administrative and research and development expenses in 2000. Selling expense increased 10.4% to NT\$1,020.5 million in 2000 from NT\$924.3 million in 1999. This increase reflected our increased sales in 2000. Selling expense accounted for 2.0% of our net revenues in 2000 compared to 2.8% in 1999. General and administrative expense, excluding goodwill amortization, increased 57.5% to NT\$2,606.2 million in 2000 from NT\$1,655.0 million in 1999. General and administrative expense, excluding goodwill amortization, represented 5.1% of our net revenues in 2000 compared to 5.0% in 1999. This was primarily due to an increase in the number of

47

employees responsible for general and administrative functions as a result of the acquisitions of ISE Labs, ASE Chung Li and ASE Korea. Goodwill amortization expense increased 10.2% to NT\$559.8 million in 2000 from NT\$507.8 million in 1999. This increase was primarily due to the full year effect of the higher goodwill amortization expense resulting from our acquisitions of ISE Labs and ASE Korea in 1999. Goodwill amortization expense represented 1.1% of our net revenues in 2000 compared to 1.6% in 1999. Research and development expense increased 76.7% to NT\$1,262.5 million in 2000 from NT\$714.3 million in 1999. This increase was largely a result of the full year effect of the increase in the number of research and development employees as well as additional depreciation charges associated with testers and other equipment dedicated to research and development uses attributable to our acquisitions of ISE Labs, ASE Chung Li and ASE Korea in 1999. Research and development expense accounted for 2.5% of our net revenues in 2000 compared to 2.2% in 1999.

Net Non-Operating Income (Loss). We recorded a net non-operating loss of NT\$1,473.5 million in 2000 compared with net non-operating income of NT\$4,213.8 million in 1999. This difference was primarily a result of a significant one-time gain on the sale of long-term investments in 1999. Net interest expense increased 47.0% to NT\$1,538.0 million in 2000 from NT\$1,046.6 million in 1999, primarily as a result of the full year effect of the interest expense from the convertible bonds issued by ASE Test in June 1999 and long-term debt incurred in 1999 to finance our acquisitions of our interests in Universal Scientific, ISE Labs, ASE Chung Li and ASE Korea. We recorded a net investment loss of NT\$75.6 million in 2000 compared to net investment income of NT\$5,594.8 million in 1999. The difference primarily resulted from a one-time capital gain of NT\$5,544.2 million in 1999 resulting from the sale of ASE Test ordinary shares by our subsidiary J&R Holding Limited through a public offering of Taiwan depositary receipts and the sale of ASE Inc. common shares by our

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

subsidiaries and affiliates in a private placement of global depository shares. Most of the ASE Inc. common shares underlying the global depository shares were acquired by our subsidiaries between March 1996 and April 1998 as part of a share repurchase program instituted in support of ROC government policies. We recorded a net foreign exchange gain of NT\$302.7 million in 2000, compared to a net loss of NT\$538.4 million in 1999, reflecting the unrealized foreign exchange gains on assets that are denominated in foreign currencies due to the year-end depreciation of the NT dollar.

Net Income. As a result of the foregoing, net income declined 25.1% to NT\$5,837.2 million in 2000 from NT\$7,794.7 million in 1999. Excluding the one-time capital gain of NT\$5,544.2 million in 1999, net income was NT\$2,250.5 million in 1999. The net income per ADS was NT\$9.01 for 2000 compared to NT\$12.27 for 1999. After eliminating the results of ISE Labs, ASE Chung Li and ASE Korea for comparative purposes, our net income declined 48.3% to NT\$3,673.6 million in 2000 compared to NT\$7,110.8 million in 1999. Our effective tax rate was 12.7% in 2000 compared to 5.1% in 1999. Our effective income tax rate was significantly lower in 1999 primarily as a result of substantial capital gain in 1999 that was not subject to ROC corporate tax.

### 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 our 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					
	Mar. 31, 2000	Jun. 30, 2000	Sept. 30, 2000	Dec. 31, 2000	Mar. 31, 2001	Jun. 30, 2001
	-----					
	(in millions)					
Consolidated Net Revenues:						
Packaging.....	NT\$8,378.4	NT\$9,347.1	NT\$10,458.9	NT\$9,844.4	NT\$8,142.4	NT\$6,273.5
Testing.....	2,776.2	3,013.3	3,440.1	3,538.8	3,105.5	2,204.3
Other.....	7.0	75.2	5.2	8.8	2.1	4.6
Total.....	NT\$11,161.6	NT\$12,435.6	NT\$13,904.2	NT\$13,392.0	NT\$11,250.0	NT\$8,482.4
	=====	=====	=====	=====	=====	=====
Consolidated Gross Profit:						
Packaging.....	NT\$2,320.1	NT\$2,568.2	NT\$2,688.7	NT\$2,439.9	NT\$1,506.6	NT\$779.0
	=====	=====	=====	=====	=====	=====

	Quarter Ended					
	Mar. 31, 2000	Jun. 30, 2000	Sept. 30, 2000	Dec. 31, 2000	Mar. 31, 2001	Jun. 30, 2001
	-----					

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

(in millions)

Consolidated Net						
Testing.....	1,208.7	1,285.8	1,433.9	1,366.0	875.9	103.5
Other.....	(39.0)	(23.3)	(45.1)	122.2	0.3	(0.1)
Total.....	NT\$3,489.8	NT\$3,830.7	NT\$4,077.5	NT\$3,928.1	NT\$2,382.8	NT\$882.4
Consolidated Gross Margin:						
Packaging.....	27.7%	27.5%	25.7%	24.8%	18.5%	12.4%
Testing.....	43.5%	42.7%	41.7%	38.6%	28.2%	4.7%
Total.....	31.3%	30.8%	29.3%	29.3%	21.2%	10.4%

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 2001. In the fourth quarter of 2001, we experienced an improvement in our net revenues compared to the preceding quarter. 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 -- Our operating results are subject to significant fluctuations, which could adversely affect the 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, our testing operations have experienced lower gross margins than our packaging operations.

#### Off-Balance Sheet Arrangements

We have, from time to time, entered into interest rate swap transactions to hedge our interest rate exposure. As of December 31, 2001, there were no outstanding interest rate swap transactions. In addition, we have entered into foreign currency option contracts to hedge our existing assets and liabilities denominated in foreign currencies and identifiable foreign currency purchase commitments. As of December 31, 2001, we had NT\$5,470.5 million (US\$156.3 million) outstanding in foreign currency option contracts. See "Item 11. Quantitative and Qualitative Disclosure About Market Risk".

#### Inflation

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

#### Taxation

The regular corporate income tax rate in the ROC applicable to us is 25%. We enjoy 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 enjoy a tax exemption on income derived from the packaging of BGA products which expires at the end of 2005. In addition, ASE Electronics (M) Sdn, Bhd., or 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 as "high-tech pioneer" and was granted a five-year tax exemption which expires on June 30, 2004. These tax

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

exemptions resulted in tax savings for us of approximately NT\$779.4 million, NT\$700.7 million and NT\$26.4 million (US\$0.8 million) in 1999, 2000 and 2001, respectively.

We also enjoy tax credits under the ROC Statute of Upgrading Industries. Under the previous tax credit rules, we enjoyed 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 cash infusion from our shareholders, including through rights offerings, if the proceeds of which are used to purchase eligible machinery

49

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 our 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 5.1%, 12.7% and 0% in 1999, 2000 and 2001, respectively. The effective tax rate was significantly lower in 2001 because we incurred a net loss, which resulted in income tax benefits of NT\$247.3 million (US\$7.1 million).

### US GAAP Reconciliation

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

	As of and for the Year Ended December 31,			
	1999	2000	2001	2001
	(in millions)			
Net income (loss) in accordance with:				
ROC GAAP.....	NT\$7,794.7	NT\$5,837.2	NT\$(2,142.2)	US\$ (61.1)
US GAAP.....	NT\$4,641.3	NT\$3,930.0	NT\$(4,046.6)	US\$ (115.1)
Shareholders' equity in accordance with:				
ROC GAAP.....	NT\$30,057.0	NT\$43,669.2	NT\$41,946.3	US\$1,198.1
US GAAP.....	NT\$26,569.7	NT\$40,729.1	NT\$37,960.3	US\$1,084.1

Note 27 to our consolidated financial statements provides a description of the principal differences between ROC GAAP and US GAAP as they relate to us, and a reconciliation to US GAAP of select items, including net income and



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

shareholders' equity. Differences between ROC GAAP and US GAAP which have a material effect on our net income as reported under ROC GAAP relate to gain from the sale of treasury stock and compensation expense pertaining to bonuses to employees, directors and supervisors.

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 US 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, 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 (US\$26.0 million) increase in ASE Inc.'s compensation expense. See "Item 7. Major Shareholders -- Related Party Transactions".

In 1999, three of our consolidated subsidiaries sold an aggregate of 32.5 million ASE Inc. common shares in open market sales. Under US GAAP, when a subsidiary holds its parent's common shares as investments, the common shares are treated as treasury stock and is 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 US GAAP, these investments in ASE Inc.'s common shares should be classified as treasury stock and the

50

capital gain is not recognized as income but is deducted from treasury stock under capital surplus. The accounting and financial statement presentation under ROC GAAP for shares of a parent company held by its subsidiary and any related capital gain or loss was, effective January 1, 2002, changed to conform to the accounting and financial presentation under US GAAP.

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 do not expect to pay any employee bonuses in 2002 because we incurred a net loss in 2001. We typically pay all or a portion of employee bonuses in the form of common shares. 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 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 income. Under US GAAP, however, we would be required to charge the market value of the employee bonus shares to employee compensation expense in the period to which they relate, correspondingly reduce our net income and

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

income per common share calculated in accordance with US GAAP. See "Item 6. Directors, Senior Management and Employees-- Directors and Senior Management and Board Practice -- ASE Inc. Employee Bonus Plan".

The amount and the form of the payment of this compensation is subject to approval at our shareholders' meeting. Under US 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 US 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. See note 27 to our consolidated financial statements. Net income and income per common share amounts calculated in accordance with ROC GAAP and US GAAP differ accordingly. The amount of the adjustment for market price for the purpose of US 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 which we require from employees who received the special stock bonus.

### Recent US GAAP Accounting Pronouncements

We are required by SEC Staff Accounting Bulletin No. 74 to disclose the impact that recently issued accounting standards will have on our financial statements when adopted in a future period, as well as make certain disclosure about recently issued accounting standards.

In June 2001, the U.S. Financial Accounting Standards Board issued SFAS No. 141, "Accounting for Business Combinations", and SFAS No. 142, "Goodwill and Other Intangible Assets". We were required to adopt these standards on January 1, 2002, which may affect accounting for business combinations consummated after June 30, 2001 and that for existing goodwill and other intangible assets upon adoption. The standards require, among other things, companies to review for possible impairment of goodwill existing at the date of adoption and perform subsequent impairment tests on an annual basis. In addition, existing goodwill and intangible assets must be reassessed and classified consistently in accordance with the criteria set forth in SFAS No. 141 and SFAS No. 142. Under the new standards, we will no longer amortize goodwill but intangible assets will continue to be amortized over their estimated useful lives, which, if supportable, may be a period that exceeds the current maximum period of 40 years. As of December 31, 2000 and 2001, we had unamortized goodwill of approximately NT\$7,652.7 million and NT\$6,900.7 million (US\$197.2 million), respectively. Total goodwill amortization expenses of goodwill under ROC GAAP incurred for the years ended December 31, 1999, 2000, and 2001 were NT\$507.8 million, NT\$559.8 million and NT\$692.9 million (US\$19.8 million), respectively. We have not yet completed our assessment of the impact that these new standards may have on the accompanying financial statements and cannot estimate whether the related impact would be material or not.

In June 2001, the U.S. Financial Accounting Standards Board issued SFAS No. 143, "Accounting for Asset Retirement Obligations". SFAS No. 143 requires, among other things, 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. SFAS No. 143 will be adopted by us on January 1, 2003 and is not expected

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

to have a material impact on our consolidated financial information relating to US GAAP.

In August 2001, the U.S. Financial Accounting Standards Board issued SFAS No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets", which addresses financial accounting and reporting for the impairment or disposal of long-lived assets. SFAS No. 144 supersedes SFAS No. 121, "Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to be Disposed of", and the accounting and reporting provisions of APB Opinion No. 30, "Reporting the Results of Operations -- Reporting the Effects of a Segment of a Business, and Extraordinary, Unusual and Infrequently Occurring Events and Transactions". SFAS No. 144 is effective for years beginning after December 15, 2001. The impact of adopting this accounting standard is not expected to have a material effect on our financial position and 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 -- Our operating results are subject to significant fluctuations, which would 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. Other than as described in "-- Off-Balance Sheet Arrangements", 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.

Our net cash provided by operating activities amounted to NT\$11,707.2 million (US\$334.5 million) for 2001, partly as a result of adjusting for non-cash depreciation and amortization of NT\$11,820.2 million (US\$337.7 million). Our net cash provided by operating activities amounted to NT\$17,618.3 million for 2000, partly as a result of adjusting for non-cash depreciation and amortization of NT\$9,153.6 million. The decline in net cash generated by operating activities was primarily a result of our net loss of NT\$2,142.2 million (US\$61.2 million) in 2001, compared to a net profit of NT\$5,837.2 million in 2000. Depreciation and amortization increased in 2001 compared to 2000 primarily due to the full year effect of our capacity expansion in 2000. In 1999, our net cash provided by operating activities amounted to NT\$7,017.2 million, partly as a result of adjusting for non-cash depreciation and amortization expenses of NT\$6,062.2 million. The increase in net cash generated by operating activities in 2000 compared to 1999 was primarily due to an increase in net income to NT\$5,837.2 million in 2000 from NT\$2,250.5 million (excluding the one-time capital gain of NT\$5,544.2 million) in 1999. The increase in depreciation and amortization in 2000 compared to 1999 was primarily due to increased capital investment for the expansion of our production capacity.

Net cash used in investing activities decreased to NT\$15,180.0 million (US\$433.7 million) from NT\$33,550.4 million in 2000. This decrease was primarily due to a significant decrease in the acquisition of machinery and

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

equipment for our packaging, testing and interconnect materials operations to NT\$8,024.9 million (US\$229.3 million) in 2001 from NT\$27,154.2 million in 2000. Net cash used in investing activities was NT\$11,782.7 million in 1999. The most significant components of this were the acquisition of ASE Chung Li, ASE Korea, ISE Labs and Universal Scientific and the acquisition of NT\$7,787.9 million of machinery and equipment in connection with our packaging and testing operations, partially offset by proceeds of NT\$7,889.3 million from the sale of shares in ASE Inc. and ASE Test by our subsidiaries.

Net cash provided by financing activities in 2001 amounted to NT\$603.5 million (US\$17.2 million). This amount primarily reflects proceeds from long-term debt of NT\$9,746.6 million (US\$278.5 million), partially offset by the payment of NT\$6,066.0 million (US\$173.3 million) for the early redemption of a portion of our US\$200 million zero coupon convertible bonds due 2002. Net cash provided by financing activities in 2000 amounted to NT\$17,607.3 million, primarily reflecting proceeds of NT\$4,151.3 million from our offering of ADSs in September

52

2000 and the increase of NT\$9,854.5 million in minority interest resulting from the equity offering by ASE Test in 2000. Net cash provided by financing activities in 1999 was NT\$8,569.0 million, primarily reflecting the proceeds from long-term debt of NT\$4,201.5 million and proceeds of NT\$3,460.1 million received from the issuance of convertible notes by ASE Test.

As of December 31, 2001, our primary source of liquidity was NT\$11,770.7 million (US\$336.3 million) of cash and cash equivalents and NT\$4,601.2 million (US\$131.5 million) of short-term investments. Our short-term investments primarily consisted of investments in fixed income mutual funds. As of December 31, 2001, we had total availability under existing short-term lines of credit of NT\$18,513.5 million (US\$529.0 million), of which we had borrowed NT\$6,900.5 million (US\$197.2 million). The interest rate for borrowings under these facilities ranged from 0.85% to 7.3% per year as of December 31, 2001, as compared to 0.975% to 11.5% per year as of December 31, 2000. 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. 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, 2001, we had working capital of NT\$8,380.7 million (US\$239.4 million).

Our long-term liabilities consist primarily of bank loans. As of December 31, 2001, we had outstanding long-term bank loans, less current portion, of NT\$23,075.2 million (US\$659.3 million). These long-term bank loans carried variable interest rates which ranged between 0.88% and 7.92% per year as of December 31, 2001, as compared to 1.1% to 10.5% per year as of December 31, 2000. We have pledged a substantial portion of our assets, with a carrying value of NT\$12,889.6 million (US\$368.3 million) as of December 31, 2001, to secure our obligations under our short-term and long-term facilities.

In November 1997, we issued US\$200 million in aggregate principal amount of zero coupon convertible bonds. These bonds have an implied interest rate of 6.372%, and are convertible into our shares. These bonds, which are scheduled to mature in November 2002, are convertible at the option of the holders from December 1997 through October 2002. As of March 31, 2002, these convertible bonds are convertible into our common shares at a conversion price of NT\$50.5 per common share. As of December 31, 2001, 355,086 shares were issued as a result of the conversion of these bonds. The bonds are redeemable, in whole or

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

in part, by us under certain circumstances beginning in November 2000. Between September and December 2001, we redeemed US\$131 million in aggregate principal amount of these bonds. As of December 31, 2001, US\$68 million in aggregate principal amount of the bonds remained outstanding. In addition, we were required to make payments to a sinking fund for the benefit of the outstanding amount of the bonds twelve months prior to the maturity date of the bonds. As of December 31, 2001, the balance of the sinking fund was NT\$1,568.1 million (US\$44.8 million).

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.

The reduced levels of operating cash flow as a result of the downturn in the semiconductor industry resulted in our failure on June 30, 2001 to comply with the interest coverage ratio under our NT\$5.2 billion three-year syndicated loan. We successfully obtained a waiver for the breach and an amendment to the interest coverage ratio from Citibank, N.A., as manager on behalf of the syndicate, in November 2001. If the downturn in the semiconductor industry and for our services continues, we cannot assure you that we will be able to remain in compliance with our financial covenants under this agreement or other 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 -- 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".

53

The following table sets forth the maturity of our long-term debt, capital lease obligations and operating leases as of December 31, 2001.

Contractual Obligations	Payments Due by Period (in millions)				
	Total	Under 1 Year	1 to 3 Years	4 to 5 Years	After 5
Long-term debt.....	NT\$34,039.2	NT\$6,185.7	NT\$26,220.9	NT\$1,562.8	NT\$
Capital lease obligations.....	NT\$106.5	NT\$80.5	NT\$26.0	NT\$ --	NT\$
Operating leases.....	NT\$1,990.1	NT\$314.0	NT\$554.3	NT\$534.1	NT\$5

In addition to the contractual obligations set forth above, as of December 31, 2001, we had made commitments to purchase approximately NT\$3,060.0 million (US\$87.4 million) of machinery and equipment, which may be canceled subject to the payment of certain penalties. We also have continuing obligations to make

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

cash royalty payments under our technology license agreements for the procurement of the manufacturing technology for certain products. Under these agreements, we are obligated to pay royalties equal to a specified percentage of quantities. The royalties we paid amounted to NT\$112.0 million, NT\$199.8 million and NT\$151.2 million (US\$4.3 million) in 1999, 2000 and 2001, respectively.

Our contingent obligations consist of guarantees provided by us to our subsidiaries. As of December 31, 2001, we have endorsed and guaranteed the promissory notes of our subsidiaries in the amount of NT\$8,082.7 (US\$230.9 million). Other than such guarantees, we have no other contingent obligations. See note 22 to our 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,			
	1999	2000	2001	
	NT\$	NT\$	NT\$	US\$
			(in millions)	
Machinery and equipment.....	7,787.9	27,154.2	8,024.9	229.3
Building and improvements.....	3,309.5	4,309.3	3,540.8	101.1

We have budgeted capital expenditures of approximately NT\$9,800.0 million (US\$280.0 million) for 2002, 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 cash flow from operations, the progress of our expansion plans and market conditions. 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 -- 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. We have contractual obligations of NT\$33,381.4 million (US\$953.8 million) due in the next three years. We intend to meet our payment obligations through the expected cash flow from operations, long-term debt 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 debt 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 People's Republic of China. When this type of investment is permitted by the ROC investment law and policy, and if suitable opportunities are available at that time, we intend to consider establishing semiconductor packaging, testing and interconnect materials operations in the People's Republic of China.

#### RESEARCH AND DEVELOPMENT

For 1999, 2000 and 2001, our research and development expenditures totaled approximately NT\$714.3 million, NT\$1,262.5 million and NT\$1,504.5 million (US\$43.0 million), respectively. These expenditures represented approximately 2.2%, 2.5% and 3.9% of net revenues in 1999, 2000 and 2001, respectively. We have historically expensed all research and development costs as incurred and none is currently capitalized. As of December 31, 2001, we employed 1,275 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 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 2001, ASE Material supplied approximately 34% of our substrate requirements by value.

##### 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 results. We are also continuing the development of interface designs to provide for high-frequency testing by minimizing electrical noise. We work closely with

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

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.

55

### Item 6. Directors, Senior Management and Employees.

#### DIRECTORS AND SENIOR MANAGEMENT AND BOARD PRACTICE

##### 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 July 11, 2000. The terms of the directors will expire on July 10, 2003. 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.

The following table sets forth the name of each of our directors, his or her position in ASE Inc., the year they were elected as director and other significant positions of our affiliates held by them.

Name	Position	Director Since	Age	Other Significant Po Held
Jason C.S. Chang(1).....	Director and Chairman	1984	58	Chairman of ASE Test
Richard H.P. Chang(1).....	Vice Chairman and Chief Executive Officer	1984	55	Chairman of ASE Test; Chairman of Universal Scientific
Leonard Y. Liu(2).....	Director and President	2000	60	Director and Chief Ex Officer of ASE Test; Executive Officer of Scientific
Joseph Tung(2).....	Director and Chief Financial Officer	1997	43	Supervisor of Univers Scientific; Director Test
Chang Yao Hung-ying(1)(2)..	Director	1984	79	Director of ASE Test
Chin Ko-Chien(2).....	Director and Executive Vice President	1997	56	Director of ASE Test
David Pan(2).....	Director	1997	57	Director and Presiden



- 
- (1) Chang Yao Hung-ying is the mother of both Jason C.S. Chang and Richard H.P. Chang.
  - (2) Representative of ASE Enterprises Limited, a company organized under the laws of Hong Kong, which held 19.5% of our outstanding common shares as of December 31, 2001. All of the outstanding shares of ASE Enterprises Limited are held by a company organized under the laws of the British Virgin Islands in trust for the benefit of Chang Yao Hung-ying, the mother of Jason C.S. Chang, our Chairman, and Richard H.P. Chang, our Vice Chairman and Chief Executive Officer. Jason C.S. Chang is the sole shareholder and director of that company.

Supervisors

We currently have five supervisors, each serving a three-year term. Supervisors are typically elected at the time that directors are elected. The current supervisors began serving on June 1, 2001, and their terms will expire on May 31, 2004. 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

56

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 the name of each of our supervisors, his or her position in ASE Inc., the year they were elected as supervisor and other significant positions of our affiliates held by them.

Name	Position	Supervisor Since	Age	Other Significant Positions
-----	-----	-----	---	-----
Feng Mei-Jean (1)...	Supervisor	1984	47	Supervisor of ASE Chung Li
Yen-Yi Tseng (2)....	Supervisor	2000	60	Vice Chairman of Hung Ching
Alan Cheng (2).....	Supervisor	1997	56	Director of ASE Test; Chairman of
John Ho (2).....	Supervisor	1998	47	Director of Universal Scientific
Raymond Lo (2).....	Supervisor	2000	48	President of ASE Test Taiwan

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

In accordance with ROC law, each of our directors and supervisors is elected either in the capacity as an individual shareholder or as an individual

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

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 Limited. The remaining directors and supervisors serve in their capacity as individual shareholders.

### Executive Officers

The following table sets forth information relating to our executive officers.

Name	Position	Years with the Company	Age
Jason C.S. Chang.....	Chairman	18.0	58
Richard H.P. Chang.....	Vice Chairman and Chief Executive Officer	18.0	55
Leonard Y. Liu.....	President, ASE Inc.	2.5	60
Chin Ko-Chien.....	Executive Vice President and General Manager, Kaohsiung packaging facility	18.0	56
David Pan.....	President, ASE Test	8.5	57
Raymond Lo.....	President, ASE Test Taiwan	16.0	48
Kanapathi A/L Kuppusamy.....	President, ASE Test Malaysia	3.0	50
Shih-Song Lee.....	President, ASE Chung Li	3.0	61
James Stilson.....	President, ASE Korea	3.0	55
Fu-Shing Chang.....	President, ASE Philippines	18.0	51
Gregory Lin.....	President, ASE Material	7.0	58
Joseph Tung.....	Chief Financial Officer	7.5	43

### Biographies of Directors, Supervisors and Executive Officers

Jason C.S. Chang has served as Chairman of ASE Inc. since its founding in March 1984. He holds a degree in electrical engineering from National Taiwan University and a masters degree from the Illinois Institute of Technology. He is the son of Chang Yao Hung-ying, a director of ASE Inc., and the brother of Richard H.P. Chang, our Vice Chairman and Chief Executive Officer.

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 was appointed Chief Executive Officer of ASE Inc. in July 2000. Mr. Chang is also the Chairman of ASE Test. He holds a degree in industrial engineering from Chung

Yuan Christian University of Taiwan. He is the son of Chang Yao Hung-ying, a director of ASE Inc., and the brother of Jason C.S. Chang, our Chairman.

Leonard Y. Liu has served as a director since July 2000 and President of ASE Inc. since November 1999. Mr. Liu is also the Chief Executive Officer and a director of ASE Test and the Chief Executive Officer of Universal Scientific. Before joining ASE Inc., he was Chairman and Chief Executive Officer of Walker Interactive System, Inc. Mr. Liu has held other top management positions at leading technology companies, including Chief Operating Officer of Cadence Design Systems, President of the Acer Group worldwide and General Manager of IBM Corporation's application enabling software business unit. He holds a

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

degree in electrical engineering from National Taiwan University and a doctorate degree in electrical engineering and computer science from Princeton University.

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 masters degree in business administration from the University of Southern California.

Chang Yao Hung-ying has served as a director of ASE Inc. since 1996. Before April 1997, she was the Chairman of Hung Ching. She holds a degree from Shanghai University. She is the mother of Jason C.S. Chang and Richard H.P. Chang, our Chairman and our Vice Chairman and Chief Executive Officer, respectively.

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 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 President and 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 masters and doctorate degrees in physics from the University of California at Berkeley.

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 Chief Executive Officer.

Yen-Yi Tseng has served as a supervisor of ASE Inc. since July 2000 and Vice Chairman of Hung Ching since 1999. 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 masters degree in system engineering from Asian Institute of Technology in Thailand. He was also a participant in the Program for Management Development at Harvard Business School.

Alan Cheng has served as a supervisor of ASE Inc. since April 1997. Mr. Cheng is also the Chairman of Hung Ching. 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 masters 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 Taiwan since December 1999, after serving as 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 masters degree in business

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

administration from the University of East Asia in Kuala Lumpur, Malaysia.

58

Shih-Song Lee has served as President of ASE Chung Li since July 1999. Before joining ASE Chung Li, Mr. Lee served as President of Motorola, Inc.'s Semiconductor Products Sector Businesses in Chung Li, Taiwan before we acquired the company. He holds a degree in electrical engineering from the Tatung Institute of Technology in Taiwan.

James Stilson has served as President of ASE Korea since July 1999. Before joining ASE Korea, Mr. Stilson served as President of Motorola, Inc.'s Semiconductor Products Sector Businesses in Paju, Korea before we acquired the company. He holds a degree in chemistry and a masters degree in business administration from the University of California.

Fu-Shing Chang has served as President of ASE Philippines since January 2000. Before joining ASE Philippines, Mr. Chang served as Vice President for Quality Assurance and Customer Service. He holds a degree in mechanical engineering from the National Cheng-kung University in Taiwan.

Gregory Lin has served as President of ASE Material since its inception in December 1997. Before joining ASE Material, Mr. Lin held research positions with Xerox Palo Alto Research Center. He holds a degree in chemistry from National Taiwan Chung Hsing University, and masters and doctorate degrees in chemistry from the University of Illinois.

### Compensation

In 2001, we paid to our directors, supervisors and executive officers approximately NT\$172.8 million (US\$4.9 million) in cash remuneration. In addition, an aggregate of 1,242,340 common shares of ASE Inc. were granted in 2001 to our directors, supervisors and executive officers. In 2001, we also set aside an aggregate of NT\$1.4 million (US\$0.04 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.

#### ASE Inc. Employee Bonus Plan

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 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 9,540,000 common shares, 47,833,062 common shares and 34,960,000 common shares in 1999, 2000 and 2001, respectively, as stock bonuses to employees of ASE Inc. and its affiliates with a fair market value at the date of grant of NT\$754.7 million, NT\$3,429.0 million and NT\$830.6 million (US\$23.7 million), respectively. We expect this practice to continue in future periods.

#### ASE Test Share Option Plans

ASE Test currently maintains six option plans which include an option plan adopted prior to the initial public offering, also known as the pre-IPO plan, and plans adopted in each year from 1996 to 2000. Under ASE Test's share option plans, its directors, employees, advisors and consultants and those of 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 to be in effect 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 and 2000 option plans, ten years. ASE Test's board of directors may amend or modify the plans at any time. As of December 31, 2001, an aggregate of 30,300,000 of ASE Test's shares had been reserved for issuance and 16,308,585 options to purchase its shares remained outstanding under its various option plans. An aggregate of 7,030,000 options had been granted to the directors and executive officers of ASE Test. Options granted under the various plans are exercisable at an exercise price ranging from US\$2.06 to US\$25.00 per share. Options granted under the pre-IPO, 1996, 1997 and 1998 option plans will expire five years from the date of grant, and in the case of the 1999 and 2000 plans, ten years from the date of grant.

59

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 -- Major Shareholders" and "-- Related Party Transactions". We conduct these transactions on an arms' length commercial basis.

EMPLOYEES

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

	As of December 31,		
	1999	2000	2001
Total.....	14,184	18,121	15,681
Function			
Direct labor.....	9,495	12,011	9,690
Indirect labor (manufacturing).....	2,995	3,577	3,366
Indirect labor (administration).....	1,067	1,370	1,350
Research and development.....	627	1,163	1,275
Location			
Taiwan.....	9,360	12,430	10,811
Korea.....	972	965	885
Malaysia.....	2,625	3,407	2,854
United States.....	472	523	438
Philippines.....	582	568	571
Singapore.....	36	104	68
Hong Kong.....	137	124	54

Eligible employees may participate in the ASE Inc. Employee Share Bonus Plan and the ASE Test Share Option Plans. See "-- Directors and Senior Management and Board Practice -- Compensation" and "-- Share Ownership".

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

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

The following table sets forth certain information with respect to our officers and directors as of April 30, 2002.

Executive Officer or Director -----	Number of ASE Inc. Common Shares Held -----	Percentage of Total of our Common Shares Issued and Outstanding -----
Jason C.S. Chang.....	20,254,843	0.62%
Richard H.P. Chang.....	37,379,794	1.15
Leonard Y. Liu.....	161,923	0.00
Joseph Tung.....	780,394	0.02
Chang Yao Hung-Ying.....	8,384,606	0.26
Chin Ko-Chien.....	534,530	0.02
David Pan.....	328,953	0.01
Feng Mei-Jean.....	57,819,663	1.78
Yen-Yi Tseng.....	1,100	0.00
Alan Cheng.....	287,697	0.01
John Ho.....	284,710	0.01
Raymond Lo.....	500,175	0.02
Kanapathi A/L Kuppusamy.....	--	--
Shih-Song Lee.....	231,400	0.01

60

Executive Officer or Director -----	Number of ASE Inc. Common Shares Held -----	Percentage of Total of our Common Shares Issued and Outstanding -----
James Stilson.....	--	--
Fu-Shing Chang.....	1,737	0.00
Gregory Lin.....	200,803	0.01

### Item 7. Major Shareholders.

#### MAJOR SHAREHOLDERS

The following table sets forth information known to us with respect to the beneficial ownership of our common shares, as of April 30, 2002, by (1) each shareholder known by us to own beneficially more than 5% of our common shares and (2) all directors, supervisors and executive officers as a group.

Name of shareholder or group	Common Shares Beneficially Owned Number -----	Percentage -----
ASE Enterprises Limited(1).....	634,595,834	19.5%
Directors, supervisors and executive officers as a group(2).....	761,878,893	23.4

- 
- (1) ASE Enterprises Limited is a company organized under the laws of Hong Kong. All of the outstanding shares of ASE Enterprises Limited are held by a company organized under the laws of the British Virgin Islands in trust for the benefit of Chang Yao Hung-ying, the mother of Jason C.S. Chang, our

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

Chairman, and Richard H.P. Chang, our Vice Chairman and Chief Executive Officer. Jason C.S. Chang is the sole shareholder and director of that company.

- (2) Includes shareholding of ASE Enterprises Limited.

The following table sets forth information relating to our common shares held by our consolidated subsidiaries and non-consolidated affiliates as of April 30, 2002.

Name of shareholder -----	Common Shares Beneficially Owned -----	
	Number -----	Percentage -----
ASE Capital(1).....	21,420,317	0.7%
ASE Investment(1)(2).....	142,368,827	4.4%
ASE Test Taiwan(3).....	652,713	0.0%
Hung Ching(4).....	39,535,822	1.2%

- 
- (1) ASE Capital and ASE Investment are our wholly-owned subsidiaries.
- (2) Of the 142,368,827 common shares owned by ASE Investment, 16,232,450 are currently represented by an aggregate of 3,246,490 ADSs.
- (3) ASE Test Taiwan is a subsidiary of ASE Test, our subsidiary.
- (4) As of April 30, 2002, we held 25.4% of the outstanding shares of Hung Ching. Our director Chang Yao Hung-ying, our Chairman Jason C.S. Chang, our Vice Chairman and Chief Executive Officer Richard H.P. Chang and other members of the Chang family are controlling shareholders of Hung Ching. See "Item 4. Information on the Company-- Business-- Unconsolidated Affiliates".

None of our major shareholders have different voting rights from those of our other shareholders. There has been no significant changes in the percentage ownership of any of our major shareholders in 1999, 2000 and 2001.

As of December 31, 2001, a total of 3,254,800,000 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 December 31, 2001, 234,897,292 common shares were registered in the name of a nominee of Citibank, N.A., the depository under our ADS deposit agreement. We believe that, of such shares, approximately 160 million were held in the United States in the form of ADSs by approximately 1,000 holders.

### 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 1,305,000 common shares in 1999, 13,510,250 common shares in 2000 and 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\$103.2 million, NT\$968.5

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

million and NT\$234.6 million (US\$6.7 million), respectively. ASE Inc. expects this practice to continue in future periods.

ASE Material sold interconnect materials in the aggregate amount of NT\$779.9 million, NT\$1,765.6 million and NT\$2,346.9 million (US\$67.1 million) to ASE Inc. in 1999, 2000 and 2001, respectively. In 2001, we purchased approximately 34% of our substrate requirements by value for our packaging facilities from ASE Material. We purchase, and plan to continue to purchase, materials from ASE Material at prevailing market prices.

ASE Test Taiwan has historically charged ASE Inc. fees 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 fees amounted to NT\$81.5 million, NT\$142.7 million and NT\$178.3 million (US\$5.1 million) in 1999, 2000 and 2001, respectively. ASE Inc. sold to ASE Test Taiwan at book value a building at an aggregate price of NT\$18.4 million in 2000.

ASE Test Malaysia and ASE Philippines have historically purchased a portion of the raw materials used in their packaging operations, principally leadframes, from ASE Inc. when they face 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 and ASE Philippines at book value. Purchases of raw materials by ASE Test Malaysia amounted to NT\$14.6 million, NT\$3.6 million and NT\$17.2 million (US\$0.5 million) in 1999, 2000 and 2001, respectively. Purchases of raw materials by ASE Philippines amounted to NT\$1.8 million, NT\$2.1 million and NT\$4.7 million (US\$0.1 million) in 1999, 2000 and 2001, respectively. In addition, ASE Inc. purchased raw materials, principally leadframes, from ASE Test Malaysia in an amount of NT\$4.3 million, NT\$11.9 million and NT\$12.8 million (US\$0.4 million) in 1999, 2000 and 2001, respectively.

In 2001, ASE Test Malaysia purchased raw materials, primarily lead frames and substrates, from ASE Material in the aggregate amount of NT\$79.3 million (US\$2.3 million). These types of raw materials are typically sold by ASE Material to ASE Test Malaysia at book value.

ASE Inc. has historically guaranteed the short-term borrowing of many of its subsidiaries. As of December 31, 2001, ASE Inc. has endorsed and guaranteed an aggregate amount of NT\$8,082.7 million (US\$230.9 million) of the outstanding promissory notes of its subsidiaries.

In 1999, 2000 and 2001, 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\$12.9 million, NT\$22.8 million and NT\$30.5 million (US\$0.9 million), respectively.

In January 2000, ASE Chung Li and Hung Ching, our affiliate, 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 building, is estimated at NT\$2.0 billion. The new building is expected to house ASE Chung Li's testing operations as well as part of the operations of other affiliates of ASE Inc.



ASE Chung Li entered into two leases with ASE Material and one lease with ASE Test Taiwan to lease floor space in a building located at 550-5, Section 1, Chung-hwa Road, Fu-hwa Li, Chung Li, Taiwan. An area of approximately 48,000 square feet per floor was leased, with two floors leased to ASE Material and one floor leased to ASE Test Taiwan. The leased area will be used 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 is required to make four cash payments to Swiss Bank Corporation in November 1998, 1999, 2000 and 2001. In return, J&R Holding has 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.

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 -- Related Party Transactions" of our annual report on Form 20-F for the fiscal year ended December 31, 2000.

Item 8. Financial Information.

#### CONSOLIDATED STATEMENTS AND OTHER FINANCIAL INFORMATION

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

#### 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, Richard H.P. Chang, Chang Yao Hung-ying and four others for alleged breach of fiduciary duties owed to Hung Ching, an affiliate of ASE Inc., in their capacity as directors and officer of Hung Ching in connection with a land sale transaction in 1992 valued at approximately NT\$1.7 billion. ASE Inc. is not a party to these proceedings and we do not expect that these charges will result in any liability to us. It was alleged that the transaction in which Jason C.S. Chang sold the land to Hung Ching unfairly benefited Jason C.S. Chang 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. In January 2001, the District Court of Taipei rendered a judgment finding Jason C.S. Chang and Chang Yao Hung-ying guilty of forgery of corporate and other documents and breach of fiduciary duties and Richard H.P. Chang not guilty. In January 2002, the High Court

63

of Taiwan, ROC rendered a judgment relating to the appeal of the judgment by the District Court, and found Jason C.S. Chang and Chang Yao Hung-ying guilty and Richard H.P. Chang not guilty, and reduced the sentences rendered by the District Court relating to Jason C.S. Chang and Chang Yao Hung-ying from six years to four years and three years, respectively. In order to comply with the particular requirements of the Singapore Companies Act, Jason C.S. Chang and Chang Yao Hung-ying have both resigned as directors of ASE Test.

Neither Jason C.S. Chang nor Chang Yao Hung-ying believes that he or she committed any offense in connection with such transactions, and they are appealing the decision to the Supreme Court of Taiwan, ROC. Counsel to Jason C.S. Chang and Chang Yao Hung-ying have advised that, as these proceedings may not be finally determined until the case has been considered by the Supreme Court, one or two years may elapse until the case is fully resolved. If the convictions are not overturned on appeal, Jason C.S. Chang and Chang Yao Hung-ying will be required under ROC law to resign as directors and Jason C.S. Chang will be required to resign as Chairman of ASE Inc.

#### SIGNIFICANT CHANGES

We have not experienced any significant changes since the date of the annual financial statements.

Item 9. Listing Details.

#### MARKET PRICE INFORMATION AND MARKETS

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 April 30, 2002, there were an aggregate of 3,254,800,000 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.

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

	Closing Price per Share		Adjusted Closing Price per Share (1)		Average Daily Trading Volume
	-----		-----		(in thousands of shares)
	High	Low	High	Low	
1997.....	158.00	52.00	53.94	12.86	109,038
1998.....	191.00	47.00	65.76	27.60	54,727
1999.....	117.00	51.00	72.80	29.94	43,438
2000.....	123.00	22.60	79.95	19.32	22,279
First Quarter.....	123.00	91.00	79.95	59.15	40,946
Second Quarter.....	119.50	89.50	77.67	58.17	18,974
Third Quarter.....	95.00	43.10	61.75	36.84	12,496
Fourth Quarter.....	43.00	22.60	36.84	19.32	18,282
2001.....	38.80	14.00	34.20	14.00	22,799
First Quarter.....	38.80	22.50	33.16	19.23	34,321
Second Quarter.....	29.60	21.00	25.30	17.95	16,275
Third Quarter.....	22.60	14.00	20.20	14.00	14,249
Fourth Quarter.....	34.20	14.40	34.20	14.40	27,237
October.....	18.20	14.40	18.20	14.40	12,788
November.....	24.90	17.60	24.90	17.60	24,901
December.....	34.20	23.70	34.20	23.70	43,145
2002 (through June 28).....	38.50	20.80	38.50	20.80	24,596
First Quarter.....	35.80	26.00	35.80	26.00	32,486
January.....	33.70	27.80	33.70	27.80	27,923
February.....	28.90	26.00	28.90	26.00	17,280
March.....	35.80	27.00	35.80	27.00	45,956
Second Quarter.....	38.50	20.80	38.50	20.80	17,708
April.....	38.50	33.00	38.50	33.00	23,511

64

	Closing Price per Share		Adjusted Closing Price per Share (1)		Average Daily Trading Volume
	-----		-----		(in thousands of shares)
	High	Low	High	Low	
May.....	34.10	27.70	34.10	27.70	14,529
June.....	28.30	20.80	28.30	20.80	15,126

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

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

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. Each ADS represents five common shares. As of April 30, 2002, a total of 43,022,558 ADSs were outstanding. The table below shows, 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 27, 2002 was US\$3.19 per ADS.

	Closing Price per ADS		Adjusted Closing Price per ADS(1)		Average Daily Trading Volume (In thousands of ADSs)
	High	Low	High	Low	
	US\$	US\$	US\$	US\$	
2000.....	6.75	3.06	5.77	2.62	28
Fourth Quarter.....	6.75	3.06	5.77	2.62	28
2001.....	6.05	1.75	5.17	1.75	97
First Quarter.....	6.05	3.06	5.17	2.62	90
Second Quarter.....	4.55	2.99	3.89	2.56	128
Third Quarter.....	3.25	1.75	3.00	1.75	47
Fourth Quarter.....	5.07	2.15	5.07	2.15	114
October.....	2.66	2.15	2.66	2.15	122
November.....	3.59	2.64	3.59	2.64	88
December.....	5.07	3.35	5.07	3.35	129
2002 (through June 27).....	5.54	3.05	5.54	3.05	121
First Quarter.....	5.35	3.75	5.35	3.75	122
January.....	4.97	3.92	4.97	3.92	99
February.....	4.15	3.75	4.15	3.75	49
March.....	5.35	4.15	5.35	4.15	216
Second Quarter (through June 27)	5.54	3.05	5.54	3.05	120
April.....	5.54	4.66	5.54	4.66	165
May.....	5.00	4.13	5.00	4.13	116
June (through June 27).....	4.13	3.05	4.13	3.05	69

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

65

Item 10. Additional Information.

### ARTICLES OF INCORPORATION

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.

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

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

1. The manufacture, assembly, processing, testing and export of various types of integrated circuitry;
2. The research, development, design and manufacture, assembly, processing, testing and export of various computers, electronics, communications, information products and their peripheral products; and
3. General import and export trading business (to the exclusion of certain approved businesses that require trading permits).

### Directors

Our Articles of Incorporation provide that we are to have from five to seven directors with tenures of three years who are elected from among the shareholders. 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 or managers, 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.

The 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.

### General

We were incorporated on March 23, 1984 as a company limited by shares under the ROC Company Law. Our authorized capital was NT\$41,500,000,000, divided into 4,150,000,000 common shares, 3,254,800,000 were issued in registered form and outstanding as of March 31, 2002. We do not have any equity in the form of preference shares or otherwise outstanding as of the date of this annual report.

We have 300,000,000 common shares reserved for issuance under our employee stock options and 300,000,000 common shares reserved in connection with conversions of convertible bonds. As of March 31, 2002, these convertible bonds were convertible into our common shares at a conversion price of NT\$50.5 per common share. The conversion price is subject to adjustment in the following circumstances:

- (1) the making of a free distribution or bonus issue of common shares;
- (2) subdivisions, consolidations or reclassifications of common shares;
- (3) the declaration of a dividend in common shares;

- (4) the grant, issue or offer to the holders of common shares or rights or warrants to subscribe for or purchase common shares at less than the current market price or to subscribe for or purchase any securities convertible into or exchangeable for common shares at less than the then current market price;

66

- (5) the distribution to the holders of common shares of evidences of indebtedness of ASE Inc. or of shares of capital stock of ASE Inc. (other than common shares) or of assets (other than regular periodic dividends in cash) or of rights or warrants to subscribe for or purchase shares or securities (other than those mentioned in (4) above);
- (6) the issue of securities (other than the bonds, the entitlement certificates to be issued on conversion of bonds and those securities mentioned in (4) above) convertible into or exchangeable for common shares at less than the then current market price or of rights or warrants (other than those securities mentioned in (4) above) to subscribe for or purchase common shares at less than the then current market price or to subscribe for or purchase securities convertible into or exchangeable for common shares at less than the then current market price;
- (7) the issue of common shares (other than common shares or the entitlement certificates issued on conversion of the bonds or in any of the circumstances described above, but including to employees under any employee bonus arrangements) at less than the current market price; and
- (8) any other event or circumstances which would have in our determination or in the determination of the trustee an analogous effect to any of the events in (1) to (7) above including, but not limited to, issues of receipts or certificates entitling holders to receive securities.

#### Certificates of Payment

Under current ROC law, whenever we issue common shares, we will deliver one or more certificates of payment evidencing the aggregate number of common shares purchased to the purchaser (or the holder, in the case of a distribution of common shares to existing holders, or the subscriber, in the case of a holder subscribing for additional common shares under a rights offering). Each certificate of payment will represent the irrevocable right to receive the relevant number of common shares after all required ROC share issuance procedures have been complied with. We are required under ROC law to file an amendment to our corporate registration within 15 days after we receive the proceeds of an offering.

#### 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 any gains on the disposal of fixed assets, 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 any gains on the disposal of fixed assets, 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 plan, 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.

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. In the event cash dividends are lower than NT\$0.1 per share, the Company will distribute stock dividends rather than cash dividends.

Whenever we make a distribution of common shares upon the common shares underlying the ADSs, we will notify the depositary of the ADSs and deposit the applicable number of shares with the custodian for the depositary. Upon receipt of notice of the deposit, the depositary will, subject to ROC law, either distribute to holders new ADSs representing the common shares deposited or modify the ratio of ADSs representing our common shares, in which case each ADS will represent rights and interests in the additional common shares so deposited.

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. Furthermore, the annual capitalized portion payable out of our capital reserve shall not exceed 10% of our paid-in capital.

For information as to ROC taxes on dividends and distributions, see "Taxation -- ROC Taxation -- Dividends".

#### Changes in Share Capital

Under ROC Company Law, any change in the authorized share capital of a company limited by shares requires an amendment to its Articles of Incorporation. In the case of a public company such as 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.

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

### Preemptive Rights

Under the ROC Company Law, when a 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.

The preemptive rights provisions do not apply to offerings by shareholders of outstanding shares. According to the amended ROC Securities and Exchange Law, which was passed by the Legislative Yuan on January 15, 2002 and became effective on February 8, 2002, the preemptive rights provisions will 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.

### Voting Rights

Under the ROC Company Law, a shareholder has one vote for each common share held. Our Articles of Incorporation provide that the election of our directors and supervisors at a shareholders' meeting is through cumulative voting.

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 whole or substantial part of its business or assets;
- o taking over of the whole of the business or assets of any other company, which would have a significant impact on our company's



operations;

68

- o distribution of any stock dividend; or
- o removal of directors or supervisors.

Alternatively, in the case of a public company, such as us, the above major corporate actions may be approved by at least two-thirds of the common shares represented at a shareholders meeting in which a quorum of at least a majority of all issued and outstanding common shares are represented.

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 will not have the right to exercise voting rights with respect to the underlying common shares, except as described in "Description of American Depositary Receipts -- Voting Rights".

#### Register of Shareholders and Record Dates

Our share registrar, President Securities Corp., maintains our register of shareholders at its offices in Taipei, Taiwan, and enters transfers of common shares in our register upon presentation of, among other documents, certificates representing the common shares transferred. 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;
- 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.

#### 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 bonds, 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 cancelled.

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.

69

These restrictions on acquiring our common shares do not apply to our subsidiaries or affiliates. According to the ROC Company Law amended on November 12, 2001, our subsidiaries or affiliates in which our shareholding exceeds 50% of each of their issued shares or capital may not purchase or take pledge of our shares. Shares obtained by such subsidiaries or affiliates prior to November 12, 2001 may be kept or sold by such subsidiaries or affiliates. See "Item 7. Major Shareholders-- Major Shareholders".

#### 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.

#### Substantial Shareholders and Transfer Restrictions

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 publicly listed 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 holding those common shares for more than a 180-day period 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.

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 2% of the outstanding shares of the company in the case of a company with no more than 30 million outstanding shares; or
- o 2% of 30 million shares plus 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.

70

#### MATERIAL CONTRACTS

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

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 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 Commission.

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

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 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 Commission.

BGA Immunity Agreement dated as of January 25, 1994 between ASE Inc. and Motorola, Inc.

Pursuant to this contract, Motorola released, acquitted and forever discharged us and our subsidiaries from any and all claims or liability for infringement or alleged infringement of any Motorola patents, as defined in the contract. Motorola granted us and our subsidiaries immunity from suit for Motorola patents involving BGA packages. We and our subsidiaries released, acquitted and forever discharged Motorola and its subsidiaries for any time prior to the date of the contract, from any and all claims or liability for infringement of any of our patents. We granted Motorola and its subsidiaries immunity from suit for our patents involving BGA packages. Remuneration to Motorola 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 Commission. The agreement terminates on December 31, 2002.

Service Agreement dated as of August 1, 2001 between ASE Electronics (M) Sdn. Bhd. and ASE (U.S.) Inc.

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

This contract established ASE (U.S.) as our subsidiary, ASE Test Malaysia's non-exclusive sales service and sales support agent in Europe and North America for its products and services. For such services, our subsidiary pays ASE (U.S.) 14% of their monthly incurred services associated costs and expenses plus 10% or US\$161,700, whichever is lower. ASE (U.S.) agreed to reimburse our subsidiary for expenses for any employee traveling to the U.S. or Europe if such travel was necessary to ASE (U.S.)'s services. This agreement will expire on July 31, 2002.

Service Agreement dated as of August 1, 2001 between ASE Test Inc. and ASE (U.S.) Inc.

This contract established ASE (U.S.) as our subsidiary, ASE Test Inc.'s non-exclusive sales service and sales support agent in Europe and North America for its products and services. For such services, our subsidiary pays ASE (U.S.) 17% of their monthly incurred services associated costs and expenses plus 5% or US\$196,350,

71

whichever is lower. ASE (U.S.) agreed to reimburse our subsidiary for expenses for any employee traveling to the U.S. or Europe if such travel was necessary to ASE (U.S.)'s services. This agreement will expire on July 31, 2002.

Service Agreement dated as of August 1, 2001 between ASE (Korea) Inc. and ASE (U.S.) Inc.

This contract established ASE (U.S.) as our subsidiary, ASE Korea's non-exclusive sales service and sales support agent in Europe and North America for its products and services. For such services, our subsidiary pays ASE (U.S.) 5.5% of their monthly incurred services associated costs and expenses plus 5% or US\$63,525, whichever is lower. ASE (U.S.) agreed to reimburse our subsidiary for expenses for any employee traveling to the U.S. or Europe if such travel was necessary to ASE (U.S.)'s services. This agreement will expire on July 31, 2002.

Service Agreement dated as of August 1, 2001 between ASE (Chung-Li) Inc. and ASE (U.S.) Inc.

This contract established ASE (U.S.) as our subsidiary, ASE Chung Li's non-exclusive sales service and sales support agent in Europe and North America for its products and services. For such services, our subsidiary pays ASE (U.S.) 11% of their monthly incurred services associated costs and expenses plus 5%, or US\$127,050, whichever is lower. ASE (U.S.) agreed to reimburse our subsidiary for expenses for any employee traveling to the U.S. or Europe if such travel was necessary to ASE (U.S.)'s services. This agreement will expire on July 31, 2002.

Service Agreement dated as of August 1, 2001 between ASE Inc. and ASE (U.S.) Inc.

This contract established ASE (U.S.) as our non-exclusive sales service and sales support agent in Europe and North America for our products and services. For such services, we pay ASE (U.S.) 52.5% of their monthly incurred services associated costs and expenses plus 5% or US\$606,375, whichever is lower. ASE (U.S.) agreed to reimburse us for expenses for any employee traveling to the U.S. or Europe if such travel was necessary to ASE (U.S.)'s services. This agreement will expire on July 31, 2002.

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

Commission Agreement dated as of August 1, 2001 between ASE Electronics (M) Sdn, Bhd. and Gardex International Limited

This contract established Gardex as our subsidiary, ASE Test Malaysia's non-exclusive worldwide sales agent for all its products and services. For such services, our subsidiary pays Gardex monthly, in respect of net export sales outside Malaysia, 0.56% of the sales amount for monthly sales. This agreement will expire on July 31, 2002.

Commission Agreement dated as of August 1, 2001 between ASE Test Inc. and Gardex International Limited

This contract established Gardex as our subsidiary, ASE Test Inc.'s non-exclusive worldwide sales agent for all its products and services. For such services, our subsidiary pays Gardex monthly, in respect of net export sales outside Taiwan, 0.56% of the sales amount for monthly sales. This agreement will expire on July 31, 2002.

Commission Agreement dated as of August 1, 2001 between ASE (Korea) Inc. and Gardex International Limited

This contract established Gardex as our subsidiary, ASE Korea's non-exclusive worldwide sales agent for all its products and services. For such services, our subsidiary pays Gardex monthly, in respect of net export sales outside Korea, 0.48% of the sales amount for monthly sales. This agreement will expire on July 31, 2002.

Commission Agreement dated as of August 1, 2001 between ASE (Chung Li) Inc. and Gardex International Limited

This contract established Gardex as our subsidiary, ASE Chung Li's non-exclusive worldwide sales agent for all its products and services. For such services, our subsidiary pays Gardex monthly, in respect of net export sales outside Taiwan, 0.56% of the sales amount for monthly sales. This agreement will expire on July 31, 2002.

Commission Agreement dated as of August 1, 2001 between ASE Inc. and Gardex International Limited

72

This contract established Gardex as our non-exclusive worldwide sales agent for all its products and services. For such services, we pay Gardex monthly, in respect of net export sales outside Taiwan, 0.8% of the sales amount for monthly sales. This agreement will expire on July 31, 2002.

### EXCHANGE CONTROLS

#### ROC Exchange Controls

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 Ministry of Finance or by the Central Bank of China. Current regulations favor trade-related foreign exchange transactions and Foreign Investment Approval investments. 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 outside the ROC foreign currency of up to US\$50,000,000 (or its equivalent) and US\$5,000,000 (or its equivalent) respectively in each calendar year. In addition, ROC companies and resident individuals may, without foreign exchange approval, remit into the ROC foreign currency of up to US\$50,000,000 (or its equivalent) and US\$5,000,000 (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 is the opinion of Lee and Li. The discussion describes the principal ROC tax consequences of the ownership and disposition of ADSs representing common shares to a non-resident individual or entity. It applies to you only if you are:

- o an individual who is not a ROC citizen, who owns ADSs and who is not physically present in the ROC for 183 days or more during any calendar year; or
- o a corporation or a non-corporate body that is organized under the laws of a jurisdiction other than the ROC for profit-making purposes and has no fixed place of business or other permanent establishment in the ROC.

You should also consult your tax advisors concerning the ROC tax consequences of owning ADSs.

##### Dividends

Dividends declared by us out of our retained earnings and distributed to you 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 common shares in the case of stock dividends. However, a 10% ROC retained earnings tax paid by us on our undistributed after-tax earnings, if any, would provide a credit up to 10% of the gross amount of any dividends declared out of such earnings that would reduce the 20% ROC tax imposed on these distributions.

Dividends paid by us out of our capital reserves are not subject to ROC withholding tax.

##### Capital Gains

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

Under ROC law, capital gains on share securities transactions are exempt from income tax.

### Subscription Rights

Distributions of statutory subscription rights for common shares in compliance with ROC law are not subject to any ROC tax. Proceeds derived from sales of statutory subscription rights evidenced by securities are exempted from income tax but are subject to securities transaction tax 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:

- o 35% of the realized gains received if you are a natural person; or
- o 25% of the realized gains received if you are an entity that is not a natural person.

Subject to compliance with ROC law, we, at our sole discretion, can determine whether statutory subscription rights shall be evidenced by issuance of securities.

### Securities Transaction Tax

A securities transaction tax, at the rate of 0.3% of the gross amount received, will be withheld upon a sale of common shares in the ROC. Transfers of ADSs are not subject to ROC securities transaction tax. Withdrawal of common shares from the deposit facility is not subject to ROC securities transaction tax.

### Estate and Gift Tax

ROC estate tax is payable on any property within the ROC of a deceased who is an individual, and ROC gift tax is payable on any property within the ROC donated by any such person. Estate tax is currently payable at rates ranging from 2% of the first NT\$600,000 to 50% of amounts over NT\$100,000,000. Gift tax is payable at rates ranging from 4% of the first NT\$600,000 to 50% of amounts over NT\$45,000,000. Under ROC estate and gift tax laws, common shares issued by ROC companies are deemed located in the ROC regardless of the location of the holder. It is unclear whether a holder of ADSs will be considered to hold common shares for this purpose since there is no authority directly indicating whether an ADR holder will be treated as owning the shares represented by the ADR. However, despite of this lack of direct authority, we are of the view that a holder of ADSs will not be subject to the ROC estate and gift tax because (1) the ADSs are not considered property within the ROC and (2) the transfer of ADSs is not deemed to be a transfer of the underlying common shares.

### Tax Treaty

The ROC does not have an income tax treaty with the United States. On the other hand, the ROC has income tax treaties with Indonesia, Singapore, South Africa, Australia, Vietnam, New Zealand, Malaysia, Macedonia, Swaziland, Gambia and the Netherlands, which may limit the rate of ROC withholding tax on dividends paid with respect to common shares of ROC companies. It is unclear whether if you hold ADSs, you will be considered to hold common shares for the purposes of these treaties. Accordingly, if you may otherwise be entitled to the benefits of the relevant income tax treaty, you should consult your tax advisors concerning your eligibility for the benefits with respect to the ADSs.

### United States Federal Income Taxation

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

The following discussion is the opinion of Davis Polk & Wardwell. The discussion describes the material U.S. federal income tax consequences of the acquisition, 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 common shares that, for U.S. federal income tax purposes, is:

- o a citizen or resident of the United States;

74

- 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 only applies to ADSs that you purchase through this offering and only if you hold the ADSs as capital assets.

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 persons who hold or will hold common shares as part of an integrated investment, including a straddle, hedging or conversion transaction, comprised of common shares 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, 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 depositary and assumes that each obligation under the deposit agreement and any related agreement will be performed in accordance with its terms.

For U.S. federal income tax purposes, a U.S. holder of ADSs 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



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

of foreign tax credits by the holders of ADSs. Accordingly, the analysis of the creditability of ROC taxes described below could be affected by future actions that may be taken by the U.S. Treasury.

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, 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., other than pro rata distributions of common shares to all shareholders including holders of ADSs, will constitute foreign source dividend income to the extent paid out of earnings and profits as calculated for U.S. federal income tax purposes. 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 depository receives the dividend. If you realize gain or loss on a sale or other disposition of NT dollars, it will be U.S. source ordinary income or loss. You will not be entitled to a dividends-received deduction for dividends you receive.

75

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 including, amongst others, "passive income", "financial services income" and "general limitation income". For this purpose, dividends paid with respect to the common shares will constitute "passive income" or, in the case of U.S. financial services providers, may be "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.

### 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.

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

### Passive Foreign Investment Company Rules

Based on management estimates and the available financial data, 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 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, as applicable, and on "excess distributions". 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.

### DOCUMENTS ON DISPLAY

We file annual reports on Form 20-F and periodic reports on Form 6-K with the SEC. You may read and copy this 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

76

of the SEC. Please call the SEC at 1-800-SEC-0330 for further information on the operation of the Public Reference Room. Our SEC filings are also available to the public from the SEC's website at <http://www.sec.gov>.

### 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 for hedging, and not for speculative, purposes.

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

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, primarily 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, 2001.

The following table provides information about our significant obligations that are sensitive to interest rate fluctuations.

	As of December 31, 2001						
	Expected Maturity Date						
	2002	2003	2004	2005	2006	2007 and Thereafter	To
Short-term debt:							
Variable rate (NT\$).....	800.0	--	--	--	--	--	
Average interest rate.....	4.33%	--	--	--	--	--	
Variable rate (US\$).....	55.8	--	--	--	--	--	
Average interest rate.....	3.87%	--	--	--	--	--	
Variable rate (JP (Y))...	545.6	--	--	--	--	--	
Average interest rate.....	1.10%	--	--	--	--	--	
Variable rate (KRW).....	12,830.4	--	--	--	--	--	12,
Average interest rate.....	5.73%	--	--	--	--	--	
Variable rate (MYR).....	20.5	--	--	--	--	--	
Average interest rate.....	3.36%	--	--	--	--	--	
Variable rate (DM).....	2.0	--	--	--	--	--	
Average interest rate.....	4.45%	--	--	--	--	--	
Long-term debt:							
Variable rate (NT\$).....	2,847.0	12,830.8	5,989.1	909.1	234.5	--	22,
Average interest rate.....	4.37%	5.19%	6.34%	6.53%	6.04%	--	
Fixed rate (US\$).....	89.4	0.2	136.6	--	--	--	
Average interest rate.....	6.40%	8.79%	7.28%	--	--	--	
Variable rate (US\$).....	8.4	31.6	9.0	7.9	4.1	2.0	
Average interest rate.....	6.32%	5.11%	7.80%	8.22%	8.49%	10.77%	
Variable rate (JP (Y))...	--	4,562.9	--	--	--	--	4,
Average interest rate.....	--	1.10%	--	--	--	--	

Foreign Currency Exchange Rate Risk. Our foreign currency exposures give 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

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

currencies, including U.S. dollars, NT dollars, Malaysian ringgit, Korean won, Philippine pesos, Singapore dollars and Hong Kong dollars. 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 1999, 2000 and 2001, the average exchange rate of the NT dollar to the U.S. dollar was 32.28, 31.37 and 33.91, respectively. In addition, a substantial portion of our capital

77

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.

Foreign currency denominated liabilities as of December 31, 2001 include U.S. dollar debt and Japanese yen debt. As of December 31, 2001, approximately 72.2% 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, 2001, approximately 70.2% 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.

The table below presents our outstanding foreign currency option contracts as of December 31, 2001.

Foreign Currency Option Contracts -----	Amount -----	Maturity -----
	(in millions)	
Contracts to sell US\$ call/NT\$ put.....	US\$114.5	Jan-Jul 2002
Contracts to buy US\$ put/NT\$ call.....	US\$2.0	Jan 2002
Contracts to buy US\$ put/JP (Y) call.....	US\$6.0	Jan-Mar 2002
Contracts to sell US\$ call/JP (Y) put.....	US\$9.0	Jan-Mar 2002
Contracts to sell US\$ call/JP (Y) put.....	US\$15.0	Jan-Mar 2002
Contracts to buy JP (Y) call/US\$ put.....	US\$9.8	Jan-Mar 2002

Item 12. Description of Securities Other Than Equity Securities.

Not applicable.

## PART II

Item 13. Defaults, Dividend Arrearages and Delinquencies.

Not applicable.

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

### MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS

In July 1995, we established with Citibank, N.A., as GDS depository, two depository receipts facilities, one for the purpose of facilitating the

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

issuance of GDSs sold under Rule 144A and the other for the purpose of facilitating the issuance of GDSs sold pursuant to Regulation S. Each GDS represented five of our common shares. In December 1999, some of our affiliates offered and sold additional GDSs. The GDSs sold under Rule 144A were designated as eligible for trading in the PORTAL System of the National Association of Securities Dealers, Inc. in the United States. The GDSs sold pursuant to Regulation S were listed on the Stock Exchange of Singapore and the Luxembourg Stock Exchange and quoted on SEAQ International.

Concurrently with our offering of ADSs on September 25, 2000, we arranged with our GDS depository and our ADS depository for the automatic conversion of each of our outstanding GDSs sold pursuant to Regulation S into one ADS. The ADSs issued upon conversion of our GDSs sold pursuant to Regulation S were identified by a new CUSIP number. We have listed these ADSs for trading on the NYSE under the symbol "ASX". We delisted these GDSs from the Stock Exchange of Singapore and the Luxembourg Stock Exchange and suspended quotation on SEAQ International.

Concurrently with our offering of ADSs of September 25, 2000, we offered to exchange one ADS for each of our outstanding GDSs sold under Rule 144A. The ADSs issued upon exchange of the GDSs sold under Rule 144A are identified by the same CUSIP number as that which identifies the ADSs issued upon conversion of the GDSs sold pursuant to Regulation S as described above, and all of those ADSs are fully fungible for trading on the NYSE.

78

Upon the completion of the exchange offer, we instructed the GDS depository to terminate the global depository receipt facility.

### PART III

#### Item 17. Financial Statements.

The Company has elected to provide financial statements for fiscal year 2001 and the related information pursuant to Item 18.

#### Item 18. Financial Statements.

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 May 17, 2002 (page F-1).
- (b) Consolidated Balance Sheets of the Company and subsidiaries as of December 31, 2000 and 2001 (page F-2).
- (c) Consolidated Statements of Income of the Company and subsidiaries for the years ended December 31, 1999, 2000 and 2001 (page F-4).
- (d) Consolidated Statements of Changes in Stockholders' Equity of the Company and subsidiaries for the years ended December 31, 1999, 2000 and 2001 (page F-6).
- (e) Consolidated Statements of Cash Flows of the Company and subsidiaries for the years ended December 31, 1999, 2000 and 2001 (page F-9).

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

- (f) Notes to Consolidated Financial Statements of the Company and subsidiaries (pages F-11).

79

### INDEPENDENT AUDITORS' REPORT

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 "Corporation") as of December 31, 2000 and 2001 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, 2001, all 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 Corporation'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 consolidated financial position of the Corporation as of December 31, 2000 and 2001, and the consolidated results of their operations and their cash flows for each of the years in the three year period ended December 31, 2001, 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. The application of the latter would have affected the determination of net income for each of the three years in the period ended December 31, 2001 and the determination of stockholders' equity and financial position at December 31, 2001 and 2000, to the extent summarized in Note 27.

T N Soong & Co  
An Associate Member Firm of Deloitte Touche Tohmatsu effective April 22, 2002  
Formerly A Member Firm of Andersen Worldwide, SC  
Taipei, Taiwan  
Republic of China

May 17, 2002

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

ADVANCED SEMICONDUCTOR ENGINEERING, INC. AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS  
(In Thousands)

	December 31,	
	2000	
	(NT\$)	(NT\$)
<b>ASSETS</b>		
<b>CURRENT ASSETS</b>		
Cash and cash equivalents (Note 2).....	14,166,495	11,770,729
Short-term investments (Notes 2 and 3).....	1,682,679	4,601,172
Notes receivable.....	219,641	105,185
Accounts receivable -- net (Notes 4).....	9,040,934	7,020,964
Inventories (Notes 2 and 5).....	3,246,327	2,768,436
Deferred income tax assets -- net (Notes 2 and 17).....	1,160,727	873,008
Prepayments and other (Note 21).....	1,270,859	942,110
Sinking fund (Note 13).....	--	1,568,057
<b>Total Current Assets.....</b>	<b>30,787,662</b>	<b>29,649,661</b>
<b>LONG-TERM INVESTMENTS</b>		
Shares of stock (Notes 2, 6, 10 and 21).....	10,485,459	9,530,398
Bonds (Notes 2 and 7).....	226,740	--
<b>Total Long-Term Investments.....</b>	<b>10,712,199</b>	<b>9,530,398</b>
<b>PROPERTIES (Notes 2, 8, 13 and 21)</b>		
<b>Cost</b>		
Land and land improvements.....	3,798,835	3,940,476
Buildings and improvements.....	9,390,206	14,640,855
Machinery and equipment.....	59,631,388	66,986,146
Transportation equipment.....	101,409	107,927
Furniture and fixtures.....	1,458,138	1,387,583
Leased assets and leasehold improvements.....	486,275	584,163
Long-term land leasehold rights.....	1,389	--
<b>Total cost.....</b>	<b>74,867,640</b>	<b>87,647,150</b>
Accumulated depreciation.....	(22,690,292)	(31,751,538)
Construction in progress.....	52,177,348	55,895,612
Machinery in transit and prepayments.....	3,438,426	1,728,587
	4,950,426	2,930,886
<b>Net Properties.....</b>	<b>60,566,200</b>	<b>60,555,085</b>
<b>OTHER ASSETS (Notes 2, 9 and 21).....</b>	<b>1,275,557</b>	<b>1,342,269</b>
<b>CONSOLIDATED DEBITS (Notes 2 and 10).....</b>	<b>4,999,546</b>	<b>5,248,919</b>
<b>TOTAL ASSETS.....</b>	<b>108,341,164</b>	<b>106,326,332</b>

	December 31,	
	2000	
	(NT\$)	(NT\$)
LIABILITIES AND SHAREHOLDERS' EQUITY		
CURRENT LIABILITIES		
Short-term borrowings (Notes 11 and 21).....	5,402,597	3,456,149
Commercial paper and bank acceptances payable (Note 12).....	4,281,805	3,444,314
Accounts payable.....	3,859,909	2,968,779
Payable for fixed assets (Note 8).....	4,179,324	1,928,469
Income tax payable.....	1,100,964	244,618
Current portion of long-term bonds payable (Note 13)....	--	3,090,345
Current portion of long-term debts (Notes 14 and 21)....	3,309,935	3,175,883
Current portion of long-term payable for investments (Note 26).....	773,616	816,433
Accrued expenses (Note 19).....	1,613,207	1,631,642
Other.....	1,352,002	512,295
Total Current Liabilities.....	25,873,359	21,268,927
LONG-TERM BONDS PAYABLE (Note 13).....	12,229,179	4,778,291
LONG-TERM DEBTS (Notes 14 and 21).....	10,329,851	23,101,135
LONG-TERM PAYABLE FOR INVESTMENTS (Note 26).....	3,417,912	2,794,861
ACCRUED PENSION COST (Notes 2 and 18).....	248,425	294,438
DEFERRED INCOME TAX LIABILITIES -- NET (Notes 2 and 17).....	511,462	--
Total Liabilities.....	52,610,188	52,237,652
COMMITMENTS AND CONTINGENCIES (Note 22) MINORITY		
INTEREST IN CONSOLIDATED SUBSIDIARIES.....	12,061,762	12,142,359
SHAREHOLDERS' EQUITY (Note 15)		
Capital stock -- NT\$10 par value.....	27,520,000	32,548,000
Authorized -- 3,200,000 thousand shares in 2000 and 4,150,000 thousand shares in 2001		
Issued -- 2,750,000 thousand shares in 2000 and 3,254,800 thousand shares in 2001		
Capital surplus		
Capital in excess of par value.....	3,171,933	3,171,933
Net gain on disposal of properties.....	23,109	23,109
Adjustment of equity in subsidiary due to change in percentage of ownership.....	4,075,783	3,656,472
Total capital surplus.....	7,270,825	6,851,514
Retained earnings.....	8,200,947	1,015,654
Unrealized loss on long-term investments in shares of stock.....	(546,829)	(442,246)
Cumulative translation adjustments.....	1,224,271	1,973,399
Total Shareholders' Equity.....	43,669,214	41,946,321
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY.....	108,341,164	106,326,332



=====

=====

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

F-3

ADVANCED SEMICONDUCTOR ENGINEERING, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF INCOME

(In Thousands, Except Earnings (Loss) Per Share and Equivalent ADS)

	Years Ended D	
	1999	2000
	-----	-----
	(NT\$)	(NT\$)
NET REVENUES (Note 25)		
Packaging.....	24,522,968	38,028,799
Testing.....	7,793,198	12,768,361
Other.....	293,395	96,217
	-----	-----
Subtotal.....	32,609,561	50,893,377
	-----	-----
COST OF REVENUES		
Packaging.....	18,769,995	28,011,934
Testing.....	4,687,939	7,473,964
Other.....	501,632	81,380
	-----	-----
Subtotal.....	23,959,566	35,567,278
	-----	-----
GROSS PROFIT	8,649,995	15,326,099
	-----	-----
OPERATING EXPENSES		
Selling.....	924,347	1,020,451
General and administrative (Note 10).....	2,162,765	3,166,006
Research and development.....	714,324	1,262,516
	-----	-----
Total Operating Expenses.....	3,801,436	5,448,973
	-----	-----
INCOME (LOSS) FROM OPERATIONS.....	4,848,559	9,877,126
	-----	-----
NON-OPERATING INCOME		
Interest (Notes 2 and 23).....	423,158	554,180
Gain on sales of investments (Notes 2 and 16).....	5,544,155	91,666
Investment income under equity method (Notes 2 and 6).....	81,466	69,915
Foreign exchange gain -- net (Notes 2 and 23).....	--	302,745
Other.....	314,549	198,518
	-----	-----
Total Non-Operating Income.....	6,363,328	1,217,024
	-----	-----
NON-OPERATING EXPENSES		
Interest (Notes 2 and 8).....	1,469,795	2,092,238
Investment loss under equity method (Notes 2 and 6).....	30,871	237,152
Foreign exchange loss -- net (Notes 2 and 23).....	538,368	--
Other.....	110,412	361,200
	-----	-----

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

Total Non-Operating Expenses.....	2,149,446	2,690,590
	-----	-----
INCOME (LOSS) BEFORE INCOME TAX AND MINORITY INTEREST AND ACQUISITION AND EXTRAORDINARY LOSS (continued).....	9,062,441	8,403,560
INCOME TAX BENEFIT (EXPENSE) (Notes 2 and 17).....	(459,543)	(1,065,768)
	-----	-----
INCOME (LOSS) BEFORE MINORITY INTEREST AND ACQUISITION AND EXTRAORDINARY LOSS.....	8,602,898	7,337,792
(Continued)INCOME BEFORE ACQUISITION (Note 2).....	(65,167)	--
EXTRAORDINARY LOSS (net of tax benefit \$48,188 (US\$1,377)) (Note 13).....	--	--
MINORITY INTEREST IN NET (INCOME) LOSS OF SUBSIDIARIES.....	(743,065)	(1,500,643)
	-----	-----
NET INCOME (LOSS).....	7,794,666	5,837,149
	=====	=====

F-4

	Years Ended D	
	1999	2000
	-----	-----
	(NT\$)	(NT\$)
EARNINGS (LOSS) PER SHARE (Notes 2 and 20) Based on weighted average number of outstanding shares of 3,254,800,000 in 2001 and 2,677,602,508 in 2000 and 1,980,000,000 in 1999		
Simple		
Income loss before extraordinary loss.....	3.93	2.18
Extraordinary loss.....	--	--
	-----	-----
Net loss.....	3.93	2.18
	=====	=====
Primary.....	3.89	2.13
	=====	=====
Fully diluted.....	3.89	2.13
	=====	=====
Based on weighted average number of outstanding shares after giving retroactive adjustment to 2000 and 2001 stock dividends		
Primary.....	2.46	1.82
	=====	=====
Fully diluted.....	2.45	1.80
	=====	=====
EARNINGS (LOSS) PER EQUIVALENT ADS (Note 2 and 20)		
Based on weighted average number of outstanding shares of 650,960,000 in 2001 and 535,520,502 in 2000 and 396,000,000 in 1999		
Simple		
Income Loss before extraordinary loss.....	19.68	10.90
Extraordinary loss.....	--	--
	-----	-----
Net loss.....	19.68	10.90
	=====	=====
Primary.....	19.45	10.65
	=====	=====
Fully diluted.....	19.43	10.65
	=====	=====
Based on weighted average number of outstanding shares after giving retroactive adjustment to 2000 and 2001 stock dividends		

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

Primary.....	12.28	9.12
	=====	=====
Fully diluted.....	12.27	9.01
	=====	=====

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

F-5

ADVANCED SEMICONDUCTOR ENGINEERING, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY  
(In Thousands, Except Share Data)

	Capital Stock (NT\$10 Par Value)			Capital Surplus	Legal Reser
	Authorized Shares	Issued and Outstanding Shares	Amount		
BALANCE, JANUARY 1, 1999 .	2,200,000,000	1,780,000,000	NT\$17,800,000	NT\$1,189,173	NT\$1,389
Increase in authorized capital, June 9, 1999 .	200,000,000	--	--	--	
Appropriations of 1998 earnings (Note 15)					
Legal reserve .....	--	--	--	--	160
Compensation to directors and supervisors .....	--	--	--	--	
Stock dividends -- 7.8% ..	--	138,840,000	1,388,400	--	
Bonus to employees -- stock .....	--	9,540,000	95,400	--	
Bonus to employees -- cash .....	--	--	--	--	
Stock dividends from capital surplus -- 2.9%	--	51,620,000	516,200	(516,200)	
Transfer of subsidiary's net gain on disposal of properties .....	--	--	--	4,931	
Transfer of net gain on disposal of properties	--	--	--	736	
Adjustment of equity in subsidiary due to change in percentage of ownership .....	--	--	--	5,034	
Net income in 1999 .....	--	--	--	--	
Reversal of unrealized loss on long-term investment in shares of stock .....	--	--	--	--	
Cumulative translation adjustments (Note 2) ..	--	--	--	--	
BALANCE, DECEMBER 31, 1999	2,400,000,000	1,980,000,000	19,800,000	683,674	1,549
Convertible bonds					

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

converted into common shares .....	--	355,086	3,551	32,102
Increase in authorized capital, July 11, 2000	800,000,000	--	--	--
Appropriations of 1999 earnings (Note 15)				
Legal reserve .....	--	--	--	--
Compensation to directors and supervisors .....	--	--	--	--
Bonus to employees -- cash .....	--	--	NT\$--	NT\$--
Bonus to employees -- stock .....	--	47,833,062	478,331	--
Stock dividends -- 31.5% .....	--	623,811,852	6,238,118	--
Capital increase in cash through the issuance of American Depositary Shares -- September 29 .....	--	100,000,000	1,000,000	3,137,910
Transfer of subsidiary's net gain on disposal of properties .....	--	--	--	9,470

	Unrealized Loss on Long-term Investment In Shares of Stock -----	Cumulative Translation Adjustments (Note 2) -----	Total Shareholders' Equity -----
BALANCE, JANUARY 1, 1999 .....	NT\$(703,865)	NT\$503,973	NT\$21,874,808
Increase in authorized capital, June 9, 1999 .....	--	--	--
Appropriations of 1998 earnings (Note 15)			
Legal reserve .....	--	--	--
Compensation to directors and supervisors .....	--	--	(28,800)
Stock dividends -- 7.8% .....	--	--	--
Bonus to employees-- stock .....	--	--	--
Bonus to employees-- cash .....	--	--	(5,500)
Stock dividends from capital surplus -- 2.9% .....	--	--	--
Transfer of subsidiary's net gain on disposal of properties .....	--	--	--
Transfer of net gain on disposal of properties .....	--	--	--
Adjustment of equity in subsidiary due to change in percentage of ownership .....	--	--	(108,046)
Net income in 1999 .....	--	--	7,794,666
Reversal of unrealized			

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

loss on long-term investment in shares of stock .....	703,865	--	703,865
Cumulative translation adjustments (Note 2) .....	--	(173,957)	(173,957)
<hr/>			
BALANCE, DECEMBER 31, 1999 .....	--	330,016	30,057,036
Convertible bonds converted into common shares .....	--	--	35,653
Increase in authorized capital, July 11, 2000 .....	--	--	--
Appropriations of 1999 earnings (Note 15) Legal reserve .....	--	--	--
Compensation to directors and supervisors .....	--	--	(139,200)
Bonus to employees-- cash .....	NT\$--	NT\$--	NT\$(12,669)
Bonus to employees-- stock .....	--	--	--
Stock dividends -- 31.5% .....	--	--	--
Capital increase in cash through the issuance of American Depositary Shares -- September 29 .....	--	--	4,137,910
Transfer of subsidiary's net gain on disposal of properties .....	--	--	--

F-6

Capital Stock (NT\$10 Par Value)				
<hr/>				
Issued and Outstanding				
<hr/>				
Authorized Shares	Shares	Amount	Capital Surplus	Legal Reser
<hr/>				
Adjustment of equity in subsidiary due to change in percentage of ownership .....	--	--	--	3,405,909
Unrealized loss on long-term investment in shares of stock .....	--	--	--	--
Net income in 2000 .....	--	--	--	--
Transfer of net gain on disposal of properties .....	--	--	--	1,760
Cumulative translation				

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

adjustments (Note 2) ..	--	--	--	--	--
BALANCE, DECEMBER 31, 2000 .....	3,200,000,000	2,752,000,000	27,520,000	7,270,825	2,329
Increase in authorized capital, April 6, 2001 .....	950,000,000	--	--	--	--
Appropriations of 2000 earnings (Note 15)					
Legal reserve .....	--	--	--	--	583
Compensation to directors and supervisors .....	--	--	--	--	--
Bonus to employees -- cash .....	--	--	--	--	--
Bonus to employees -- stock .....	--	34,960,000	349,600	--	--
Stock dividends -- 17% ..	--	467,840,000	4,678,400	--	--
Adjustment of equity in subsidiary due to change in percentage of ownership .....	--	--	NT\$--	NT\$(419,311)	N
Reversal of unrealized loss on long-term investment in shares of stock .....	--	--	--	--	--
Net loss in 2001 .....	--	--	--	--	--
Cumulative translation adjustments (Note 2) ..	--	--	--	--	--
	-----	-----	-----	-----	-----
BALANCE, DECEMBER 31, 2001 .....	4,150,000,000	3,254,800,000	NT\$32,548,000	NT\$6,851,514	NT\$2,912
	=====	=====	=====	=====	=====
BALANCE, JANUARY 1, 2001 .....	3,200,000,000	2,752,000,000	US\$786,285	US\$207,738	US\$66
Increase in authorized capital, April 6, 2001 .....	950,000,000	--	--	--	--
Appropriations of 2000 earnings (Note 15)					
Legal reserve .....	--	--	--	--	16
Compensation to directors and supervisors .....	--	--	--	--	--
Bonus to employees -- cash .....	--	--	--	--	--
Bonus to employees -- stock .....	--	34,960,000	9,989	--	--
Stock dividends -- 17% ...	--	467,840,000	133,669	--	--
Adjustment of equity in subsidiary due to change in percentage of ownership .....	--	--	--	(11,980)	--
		Unrealized			
		Loss on			
		Long-term	Cumulative	Total	
		Investment	Translation	Shareholders'	
		In Shares	Adjustments	Equity	
		of Stock	(Note 2)		

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

	-----	-----	-----
Adjustment of equity in subsidiary due to change in percentage of ownership .....	--	--	3,405,909
Unrealized loss on long-term investment in shares of stock .....	(546,829)	--	(546,829)
Net income in 2000 .....	--	--	5,837,149
Transfer of net gain on disposal of properties .....	--	--	--
Cumulative translation adjustments (Note 2) .....	--	894,255	894,255
BALANCE, DECEMBER 31, 2000 .....	(546,829)	1,224,271	43,669,214
Increase in authorized capital, April 6, 2001 .....	--	--	--
Appropriations of 2000 earnings (Note 15) Legal reserve .....	--	--	--
Compensation to directors and supervisors .....	--	--	(103,200)
Bonus to employees -- cash .....	--	--	(10,400)
Bonus to employees -- stock .....	--	--	--
Stock dividends -- 17% .....	--	--	--
Adjustment of equity in subsidiary due to change in percentage of ownership .....	NT\$--	NT\$--	NT\$(320,785)
Reversal of unrealized loss on long-term investment in shares of stock .....	104,583	--	104,583
Net loss in 2001 .....	--	--	(2,142,219)
Cumulative translation adjustments (Note 2) .....	--	749,128	749,128
	-----	-----	-----
BALANCE, DECEMBER 31, 2001 .....	NT\$(442,246)	NT\$1,973,399	NT\$41,946,321
	=====	=====	=====
BALANCE, JANUARY 1, 2001 .....	US\$(15,624)	US\$34,980	US\$1,247,692
Increase in authorized capital, April 6, 2001 .....	--	--	--
Appropriations of 2000 earnings (Note 15) Legal reserve .....	--	--	--
Compensation to directors and supervisors .....	--	--	(2,949)
Bonus to employees -- cash .....	--	--	(297)

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

Bonus to employees --			
stock .....	--	--	--
Stock dividends -- 17% .....	--	--	--
Adjustment of equity in subsidiary due to change in percentage of ownership .....	--	--	(9,165)

F-7

Capital Stock (NT\$10 Par Value)					
	Issued and Outstanding			Capital	Legal
	Authorized	Shares	Amount	Surplus	Reser
	Shares				
Reversal of unrealized loss on long-term investment in shares of stock .....	--	--	--	--	--
Net loss in 2001 .....	--	--	--	--	--
Cumulative translation adjustments (Note 2) ..	--	--	--	--	--
BALANCE, DECEMBER 31, 2001 .....	4,150,000,000	3,254,800,000	US\$929,943	US\$195,758	US\$83

	Unrealized Loss on Long-term Investment In Shares of Stock	Cumulative Translation Adjustments (Note 2)	Total Shareholders' Equity
	-----	-----	-----
Reversal of unrealized loss on long-term investment in shares of stock .....	2,988	--	2,988
Net loss in 2001 .....	--	--	(61,206)
Cumulative translation adjustments (Note 2) .....	--	21,403	21,403
BALANCE, DECEMBER 31, 2001 .....	US\$(12,636)	US\$56,383	US\$1,198,466

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

F-8



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

## ADVANCED SEMICONDUCTOR ENGINEERING, INC. AND SUBSIDIARIES

### CONSOLIDATED STATEMENTS OF CASH FLOWS

(In Thousands)

	Year End	
	1999	2000
	(NT\$)	(NT\$)
<b>CASH FLOWS FROM OPERATING ACTIVITIES</b>		
Net income (loss) .....	7,794,666	5,837,1
Adjustments to reconcile net income (loss) to net cash provided by operating activities:		
Minority interest in net income (loss) of subsidiaries .....	743,065	1,500,6
Depreciation .....	5,128,282	8,127,5
Amortization .....	426,085	466,2
Exchange (gain) loss on long-term foreign:		
Bonds payable .....	(191,895)	628,0
Debts .....	(3,927)	
Investment payable .....	--	170,3
Accrued interest on convertible bonds .....	615,805	812,9
Provision for doubtful accounts and sales allowance .....	109,263	155,4
Gain on sale of investments .....	(5,544,155)	(91,6
Loss on early redemption of foreign convertible bonds .....	--	
Investment (income) loss under equity method .....	(50,595)	167,2
Cash dividends received from long-term stock investments .....	--	
Gain (Loss) on disposal of properties .....	(20,903)	19,2
Provision for loss on long-term bonds investments .....	--	284,3
Loss from idle assets .....	--	
Amortization of consolidated debits .....	507,816	559,8
Deferred income taxes .....	(343,180)	(226,8
Other .....	345	(16,4
Changes in operating assets and liabilities, net of effects from purchases of Motorola SPS Businesses and ISE Labs, Inc. ....		
Notes receivable .....	189,530	(18,5
Accounts receivable .....	(2,722,498)	(1,933,9
Inventories .....	(444,885)	(796,6
Prepayments and other .....	(284,376)	(327,7
Notes payable .....	(214,858)	
Accounts payable .....	869,713	707,5
Income tax payable .....	238,982	642,5
Accrued expenses and other .....	598,025	1,574,0
Accrued pension cost .....	(551,421)	59,2
Effect of exchange rate changes .....	168,350	(682,1
<b>Net Cash Provided by Operating Activities .....</b>	<b>7,017,234</b>	<b>17,618,2</b>
<b>CASH FLOWS FROM INVESTING ACTIVITIES</b>		
Acquisition of Motorola SPS Businesses .....	(4,259,541)	
Acquisition of ISE Labs, Inc. ....	(3,014,427)	
Acquisition of fixed assets .....	(9,869,161)	(30,063,6
(Increase) decrease in short-term investments .....	569,099	(1,471,2

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

F-9

	Year En	
	1999	2000
	(NT\$)	(NT\$)
Payments for long-term stock investments .....	(3,538,728)	(2,026,0
Increase in other assets .....	(202,668)	(787,2
Proceeds from sales of:		
Properties .....	361,149	697,1
Shares of stock:		
ASE Inc. ....	3,170,957	
ASE Test Ltd. ....	4,718,324	
Bonds .....	282,306	
Others .....	--	100,6
Purchase of ASE Test Ltd. Shares .....	--	
Net Cash Used in Investing Activities .....	(11,782,690)	(33,550,3
<b>CASH FLOWS FROM FINANCING ACTIVITIES</b>		
Proceeds from (repayments of):		
Capital increase through the issuance of American		
Depository Shares .....	--	4,151,3
Issuance of foreign convertible bonds .....	3,460,050	
Long-term debts .....	4,201,517	1,013,7
Investment payable .....	--	(1,453,6
Commercial papers and bank acceptances payable .....	(517,031)	2,578,2
Proceeds from short-term borrowings .....	1,218,200	1,614,9
Decrease in payable for fixed assets .....	--	
Contribution to a sinking fund for convertible bonds .....	--	
Early redemption of foreign convertible bonds .....	--	
Increase in minority interest .....	235,081	9,854,5
Compensation to directors and supervisors and bonus to		
employees .....	(28,800)	(151,8
Net Cash Provided by Financing Activities .....	8,569,017	17,607,2
EFFECT OF EXCHANGE RATE CHANGES .....	(168,350)	682,1
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS .....	3,635,211	2,357,3
CASH AND CASH EQUIVALENTS, BEGINNING OF YEAR .....	8,173,901	11,809,1
CASH AND CASH EQUIVALENTS, END OF YEAR .....	11,809,112	14,166,4
<b>SUPPLEMENTAL INFORMATION</b>		
Interest paid (excluding capitalized interest) .....	787,106	1,217,0
Income tax paid .....	397,065	497,8
Cash paid for acquisition of fixed assets Acquisition		
of fixed assets .....	11,097,395	31,463,4
Increase in payable .....	(1,228,234)	(1,399,8
	9,869,161	30,063,6
Total assets acquired from acquisition of Motorola SPS		
Businesses .....	12,783,224	
Less: Liabilities assumed .....	1,627,383	

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

Payable amounts .....	11,155,841
Less: Payable balance at end of year .....	5,474,780
	-----
Cash paid .....	5,681,061
Less: Cash received at the date of acquisition .....	1,421,520
	-----
Net cash outflow .....	4,259,541
	=====
Total assets acquired from acquisition of ISE Labs, Inc. ....	4,671,849

F-10

	Year En	
	1999	2000
	(NT\$)	(NT\$)
	-----	-----
Less: Liabilities assumed .....	1,371,453	
	-----	
Cash paid .....	3,300,396	
Less: Cash received at the date of acquisition .....	285,969	
	-----	
Net cash outflow .....	3,014,427	
	=====	
Cash received from capital increase through the issuance of American Depositary Shares Net proceeds .....	--	4,137,9
Increase in payable .....	--	13,3
	-----	-----
Net cash inflow .....	--	4,151,3
	=====	=====

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

F-11

ADVANCED SEMICONDUCTOR ENGINEERING, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

December 31, 2000 and 2001

(Amounts In Thousands of Dollars, Unless Otherwise Stated)

1. General

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

ASE has six wholly-owned subsidiaries: a) ASE Holding Limited (incorporated in Bermuda in 1990) holds shares in ASE Group companies; b) ASE Marketing Services Ltd. (incorporated in Hong Kong in 1991) engages in trading;

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

c) ASE Investment Inc. (incorporated in the ROC in March 1996) holds shares in ASE Group companies; d) J&R Holding Limited (incorporated in Bermuda in May 1996) holds shares in ASE Group companies; e) ASE Capital Inc. (incorporated in ROC in November 1997) holds shares in ASE Group companies; and f) ASE Southwest, Inc. (incorporated in the USA in August 1999) engages in trading. As of December 31, 2001, ASE also had a 99% equity stake in ASE Technologies, Inc., a company incorporated in the ROC engaged in the research and development, manufacture and sales of computers and related accessories; a 90% equity stake in ASE Network Inc., a company incorporated in the ROC engaged in investing; and a 56% equity stake in ASE Material Inc. ("ASE Material"), a company incorporated in the ROC engaging in the design and production of leadframes and substrates used in the packaging of semiconductors. In addition, ASE Test, Inc. has a 4% equity stake in ASE Material.

In 1999, ASE (Chung Li) Inc. ("ASE Chung Li") and ASE Investment (Labuan) Inc., a holding company, were incorporated to acquire 100% interests in the Motorola Semiconductor Product Sector Businesses ("Motorola SPS Businesses") in Chung Li, Taiwan and Paju, Korea. The acquisitions of the Motorola SPS Business were completed on July 4, 1999. ASE and ASE Test Limited ("ASE Test") own 70% and 30% equity stakes in the two subsidiaries, respectively. ASE Investment (Labuan) Inc. owns 100% of the equity of ASE Korea Inc. ("ASE Korea"). The acquisitions were accounted for under purchase accounting and the purchase price was US\$350.1 million (see Note 26).

In June 2001, ASE Chung Li invested US\$6.8 million in Omniquest Industrial Limited, a wholly-owned subsidiary incorporated in the British Virgin Islands ("Omniquest"). Omniquest has a wholly-owned subsidiary in the People's of Republic of China ("PRC"), namely ASE (Hangzhou) Inc., with capital of US\$6.8 million as of December 31, 2001. ASE (Hangzhou) Inc. is currently in the preoperating stage, and will be engaged in the manufacture and sale of transistors, LED (Light-Emitting Diode) modules and LED displays.

ASE Holding Limited has the following wholly-owned subsidiaries: a) ASEP Realty Corporation (incorporated in the Philippines in December 1995) develops and invests in real estate; b) ASE Holding Electronics (Philippines) (incorporated in the Philippines in December 1995) manufactures electronic products, components and semiconductors; and c) ASE Holding (Singapore) Pte. Ltd. (incorporated in Singapore in December 1994) holds shares in ASE Group companies. A portion of the share capital of the Philippine subsidiaries are held by certain Filipino individuals due to legal limitations. ASE Holding (Singapore) Pte. Ltd. holds a 100% equity stake in ASE Electronics (M) Sdn, Bhd. ("ASE Test Malaysia") (incorporated in Malaysia in 1991), which provides packaging and testing services for integrated circuits. In April 1997, ASE Holding Limited transferred its shareholding in ASE Test Malaysia to ASE Test.

J&R Holding Limited has two subsidiaries: a) ASE Test (40.25%-owned, incorporated in Singapore in May 1996) holds shares in ASE Group companies; and b) J&R Industrial Inc. (100% owned, incorporated in the ROC in April 1999), which is mainly engaged in the leasing of substrate, packaging and testing equipment. In addition, ASE Holding Limited has a 10.71% 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.

F-12

ASE Test has four majority-owned subsidiaries: a) ASE Test, Inc., which is engaged in testing of semiconductors; b) ASE Test Malaysia, which is engaged in packaging and testing of semiconductors; c) ASE Test Holding, which mainly holds shares in ASE Group companies; and d) ASE Test Finance Limited (incorporated in Mauritius in June 1999) which is engaged in financing

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

activities.

ASE Test, Inc. has a wholly-owned subsidiary, ASE Test (USA) Inc., which is engaged in the after-sale service of tested semiconductors.

In May 1999, ASE Test acquired 70% of the outstanding shares of ISE Labs, Inc. ("ISE Labs"), which is engaged in front-end engineering testing, final testing and packaging of semiconductors. The purchase cost, including transaction costs, was US\$100.1 million (NT\$3,320.3 million). In 2001, ASE Test purchased additional shares of ISE Labs in connection with the capital increase of ISE Labs, and thereafter increased its ownership interest in ISE Labs. As of December 31, 2001, ASE Test has made total investments of US\$171 million and acquired 80% of the outstanding shares of ISE Labs. In January 2002, the minority shareholders of ISE Labs sold the remaining 20% of the outstanding shares of ISE Labs to ASE Test for US\$50 million. Consequently, ISE Labs has become a wholly-owned subsidiary of ASE Test.

ASE Technologies, Inc. originally had two subsidiaries: a) ASE Technologies (U.S.A.), Inc. (100% ownership), which was mainly engaged in research and development, manufacture and sales of computers and related accessories; and b) Transmonde Technologies, Inc. (83% ownership), which was mainly engaged in sales of computers and related accessories. In 2001, ASE Technologies, Inc. sold all of the shares in the two subsidiaries to a third party, and resulted in a gain of NT\$50,666.

### 2. Significant Accounting Policies

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

#### Presentation of Consolidated Financial Statements

ASE prepared its consolidated financial statements using ROC GAAP with reconciliation to US GAAP (Note 27). The accompanying consolidated balance sheets are presented for the two years ended as at December 31, 2000 and 2001, and the accompanying consolidated statements of income, changes in shareholders' equity and cash flows are presented for the three years ended December 31, 1999, 2000 and 2001.

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

#### Consolidation

The consolidated financial statements include the accounts of ASE and all of the aforementioned companies.

Under the consolidation method used by ASE to consolidate the statement of income of ISE Labs for the year ended December 31, 1999, ISE Labs' full year 1999 net revenues, cost of revenues and operating expenses are included in the Corporation's consolidated statements of income. The pre-acquisition income of ISE Labs for the period (from January 1, 1999 to May 4, 1999) is then subtracted from the Corporation's net income for 1999.

The statements of income for both ASE Chung Li and ASE Korea (representing the acquirees from acquisitions of Motorola SPS Businesses) are consolidated since the date of acquisitions due to the change of business type after acquisition in ASE Chung Li and ASE Korea for the accounting of silicon wafers from previous purchase and sale transaction to customers' consignments (see accounting policy for inventories).

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

In 1999, ASE and ASE Test Inc. owned 38% and 10% equity stake in ASE Material. However, the accounts of ASE Material for 1999 were consolidated because ASE effectively controls ASE Material. First, two of the five board members of ASE Material are appointed by ASE and one board member is appointed by ASE Test, Inc. Second, Mr. Jason Chang, the Chairman of ASE, also serves as the Chairman of ASE Material. Third, ASE appoints ASE Material's sole supervisor, whose duty under the ROC Company Law is to monitor ASE Material's business

F-13

and financial condition. Finally, Mr. Jason Chang has committed to vote his shares of ASE Material as of December 31, 1999, which represented an 11.4% ownership interest in ASE Material, in concert with ASE.

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 (debits) and are amortized on the straight-line method over ten years.

### Use of Estimates

The preparation of consolidated financial statements both in conformity with ROC GAAP and generally accepted accounting principles in the United States ("US GAAP") requires management to make estimates and judgments that affect the recorded amounts of assets, liabilities, revenues and expenses of the Corporation. The Corporation continually evaluate 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 Corporation bases its estimates on historical experience and other assumptions, which it believe to be reasonable under the circumstances. Actual results may differ from these estimates under different assumptions and conditions.

### Cash and Cash Equivalents

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

### Short-term Investments

These are carried at cost less allowance for decline in market value.

### Allowances for Doubtful Accounts

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

### Inventories

Inventories are stated at the lower of weighted average cost or market value. Unbilled processing charges incurred (included in finished goods and work in process) 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 Corporation owns at least 20% of the outstanding voting shares and where the Corporation 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 Corporation'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 costs over the Corporation'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 Corporation's ownership percentage of investees under the equity method are accounted for as adjustments to long-term investments and capital surplus. The writedown of carrying value of long-term investments has been taken on the basis of the discounted cash flows expected to be realized in the future.

F-14

Other long-term investments (including ASE common shares) in shares of stock are carried at cost. An allowance for the decline in value is made for any permanent impairment in the carrying value of the investments and such decline in value is charged against current income. Cash dividends are recognized as income on the declaration date. The sales of ASE shares in 1999 were reflected as gains from the sale of long-term investments in the statement of income.

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.

Long-term Investments in Bonds

Bond securities being held to maturity are stated at amortized cost. Allowances for loss in bond securities are provided based on the evaluation of recoverability of the carrying value of these securities.

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, 2 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

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

to have a continual useful life, the residual value is depreciated over the remaining life, not to exceed 2 years.

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 to 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; issuance costs of convertible bonds, 5 years; telecommunications, electrical and computer network systems, 5 years; and others, 2 to 5 years.

### Consolidated Debits

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

### Pension Cost

Pension cost is recorded based on actuarial calculations.

Provisions for pension costs are accrued based on actuarially determined amounts which include service costs, interests, amortisation of unrecognised net obligation and expected return on pension assets, in accordance with ROC SFAS No. 18, "Accounting for Pensions".

### 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

F-15

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 Corporation provides are recognized upon shipment. Revenues from semiconductor testing services that the Corporation provides are recognized upon completion of the services. The Corporation does not take ownership of: (i) bare semiconductor wafers received from customers that the Corporation packages into finished semiconductors, and (ii) packaged semiconductors received from customers that the Corporation 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 semiconductors materials is not included in the accompanying consolidated financial statements. Other criteria that the Corporation 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 Corporation 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 is recognized in the period the sale is recognized.



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

### 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. 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%) 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.

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

ASE 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.

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 hedge foreign currency assets or liabilities 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.

F-16

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.

### Earnings Per Share ("EPS") and Earnings Per Equivalent ADS

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

Common shares of ASE's convertible bonds are not considered in the calculation of primary and fully diluted EPS because they have an anti-dilutive effect. Common share equivalents attributable to the employees' stock options of ASE Test are included in the EPS calculation (see Note 20).

Earnings per equivalent ADS are calculated by multiplying earnings per share by five (each of the ADS represents five common shares).

### US Dollar Amount

ASE prepares its consolidated financial statements in NT dollars. Translations into US dollars for 2001 financial statements are included solely for the convenience of the readers, and are based on the US Federal Reserve Bank of New York noon buying rate of NT\$35.00 to US\$1.00 in effect as at December 31, 2001. 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 US dollars at this or any other rates.

### 3. Short-term Investments

	December 31	
	2000	
	NT\$	NT\$
Mutual funds.....	1,603,362	4,593,958
Stocks.....	63,978	5,337
Convertible bonds and government bonds.....	20,188	1,877
	1,687,528	4,601,172
Allowance for loss (Note 2).....	(4,849)	--
	1,682,679	4,601,172

### 4. Accounts Receivable -- Net

	December 31	
	2000	
	NT\$	NT\$
Accounts receivable.....	9,393,853	7,361,066
Allowance for doubtful accounts.....	(314,243)	(286,476)
Allowance for sales allowances.....	(38,676)	(53,626)
	9,040,934	7,020,964
	9,040,934	7,020,964

The movement of allowance for doubtful accounts and sales allowances are as follows:

Doubtful  
Accounts

S  
Allo

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

	NT\$	
Balance, beginning of 1999.....	84,708	5
Additions.....	109,263	
Deductions.....	(6,809)	(
Balance, end of 1999.....	187,162	4
Additions.....	148,834	

F-17

	Doubtful Accounts	S Allo
	NT\$	
Deductions.....	(21,753)	(1
Balance, end of 2000.....	314,243	3
Additions.....	15,619	6
Deductions.....	(43,386)	(5
Balance, end of 2001.....	286,476	5

F-18

	US\$	
Balance, beginning of 2001.....	8,979	1
Additions.....	446	1
Deductions.....	(1,240)	(1
Balance, end of 2001.....	8,185	1

5. Inventories

	December 31	
	2000	
	NT\$	NT\$
Raw materials.....	2,099,058	1,613,458
General supplies and spare parts.....	630,979	665,598
Work in process.....	337,320	348,933
Finished goods.....	246,812	297,355
Supplies in transit.....	87,219	63,640
Allowance for obsolescence.....	3,401,388 (155,061)	2,988,984 (220,548)
	3,246,327	2,768,436

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

The movement of allowance for obsolescence is as follows:

Balance, beginning of 1999.....
Additions.....
Deductions.....
Balance, end of 1999.....
Additions.....
Deductions.....
Balance, end of 2000.....
Additions.....
Deductions.....
Balance, end of 2001.....
Balance, beginning of 2001.....
Additions.....
Deductions.....
Balance, end of 2001.....

F-19

6. Long-term Investments -- Common Stocks

	December 31			
	2000		2001	
	NT\$	% of Direct Ownership	NT\$	
Equity method				
Common stock				
Hung Ching Development & Construction Co. ("HCDC") (Note 10).....	2,154,627	25.4	1,213,563	3
Hung Ching Kwan Co. ("HCKC").....	405,549	27.3	405,406	1
Universal Scientific Industrial Co., Ltd. ("USI") (Note 10).....	3,931,810	23.3	3,633,927	10
Universal Access Technology Inc. ("UAT").....	92,775	25.0	60,001	
Preferred stock				
Intergrated Programmable Communication, Inc. ("IPC").....	118,681	23.1	101,447	
Cost method				

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

ASE stock held by subsidiaries.....	2,919,411	4.9	3,017,964	8
InveStar Burgeon Venture Capital, Inc.....	153,035	13.0	161,749	
Taiwan Fixed Network Co., Ltd.....	1,500,000	1.6	1,500,000	4
Global Strategic Investment, Inc.....	--	--	69,980	
UC Fund II.....	--	--	34,990	
	11,275,888		10,199,027	29
Adjustment for decline in market value in ASE stock.....	(490,280)		(368,480)	(1
Unrealized gain on sale of land.....	(300,149)		(300,149)	(
	10,485,459		9,530,398	27

ASE 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, 2001, ASE has a 43.4% effective interest in HCKC, which consists of 27.3% interest directly owned by ASE, and 16.1% interest indirectly owned through Hung Ching Development & Construction Co. ("HCDC") (based on HCDC's 63.5% interest in HCKC).

ASE invested in Universal Access Technology Inc. ("UAT") in December 2000 and directly acquired its 25% equity interest. In addition, HCDC and Universal Scientific Industrial Co., Ltd. ("USI") have 10% and 25% equity interests in UAT, respectively. Accordingly, as of December 31, 2001, ASE has a 33.3% effective interest in UAT. UAT is engaged in the design of related computer products and software service.

In December 2000, ASE invested in convertible preferred stocks issued by Integrated Programmable Communication, Inc. ("IPC"). As of December 31, 2001, ASE has made total investments of US\$4.0 million, and owns a 23.1% stake in IPC. In addition, USI and UAT have 16% and 7% equity interests in IPC, respectively.

As of December 31, 2001, the accumulated deficit for HCDC was NT\$337,400 (US\$14,828), the undistributed earnings for HCKC and USI were NT\$54,460 (US\$1,556) and NT\$919,479 (US\$26,271), respectively. HCKC did not declare dividends in 2000 and 2001. USI declared stock and cash dividends in 2001 for NT\$1.3 and NT\$0.25 per share, respectively, and stock dividends for NT\$4.00 per share in 2000. HCDC declared stock and cash dividends in 2000 for NT\$0.8 and NT\$0.2 per share, respectively, but these dividends have not yet been distributed as of December 31, 2001.

ASE recorded net investment income of NT\$50,595 in 1999, net investment losses of NT\$167,237 in 2000 and NT\$1,246,836 (US\$35,624) in 2001 from its investments in the aforementioned equity investees.

F-20

### 7. Long-term Bond Investments

These represent long-term bond investments in APP Global Finance Ltd. ("APP") and the Federal National Mortgage Association. The investment cost was US\$9.5 million and US\$5.9 million, respectively. The bond investment in Federal Mortgage Association matured on May 2, 2001. The bond investment in APP had an original maturity on October 4, 2001, but was defaulted because APP incurred financial difficulties. ASE wrote off the gross bond investment in APP in 2001

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

due to a judgment of unrecoverability.

### 8. Properties

Accumulated depreciation consists of:

	December 31	
	2000	
	NT\$	NT\$
Buildings and improvements.....	1,335,682	2,021,886
Machinery and equipment.....	20,586,431	28,735,918
Transportation equipment.....	56,731	116,845
Furniture and fixtures.....	469,584	569,013
Leased assets and leasehold improvements.....	235,634	300,187
Long-term land leasehold rights.....	6,230	7,689
	22,690,292	31,751,538
	=====	=====

Interest capitalized and included as cost of properties amounted to NT\$123,347, NT\$163,916 and NT\$100,453 (US\$2,870) for the years ended December 31, 1999, 2000 and 2001, respectively.

ASE Chung Li and ASE Material entered into purchase agreements with HCDC in 2000 to purchase a building located in Chung Li for expansion purposes. The contract prices, which were based on appraisal, totaled NT\$1,044,341 and NT\$358,442, respectively. ASE and ASE Test, Inc. entered into purchase agreements with HCDC in 2001 to purchase a building located in Nantze Export Processing Zone for expansion purpose. The contract prices, which were based on appraisal, totaled NT\$1,027,034 (US\$29,344) and NT\$459,363 (US\$13,125), respectively. The buildings and improvements acquired under the purchase agreements described above have been included in the 2000 and 2001 consolidated balance sheets.

Machinery in transit and prepayments pertain to the purchase of packaging and testing equipment, which are associated with machinery purchased with title transferred but are not yet in ready-for-use condition, and down payments for machinery purchased with non-cancellable purchase orders.

Major components for machinery in transit and prepayments are as follows:

	December 31	
	2000	
	NT\$	NT\$
Bonders.....	405,595	22,855
Testers.....	1,063,911	1,099,240
Others.....	3,480,920	1,808,791
	4,950,426	2,930,886
	=====	=====

### 9. Other Assets

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

	December 31	
	-----	
	2000	
	-----	
	NT\$	NT\$
Deferred charges (Note 2)		
Tooling.....	124,468	48,479
Issuance costs of convertible bonds.....	139,244	68,761

F-21

	December 31	
	-----	
	2000	
	-----	
	NT\$	NT\$
Telecommunications, electrical and computer network systems.....	290,208	302,604
Other.....	346,130	302,857
	-----	-----
	900,050	722,701
Deferred income tax assets (Note 17).....	--	226,190
Guarantee deposits.....	204,112	185,162
Non-operating properties.....	147,686	155,703
Other.....	23,709	52,513
	-----	-----
	1,275,557	1,342,269
	=====	=====

10. Consolidated Debits

These represent goodwill arising from the purchases of:

	December 31	
	-----	
	2000	
	-----	
	NT\$	NT\$
ASE Test shares.....	2,554,869	2,992,676
ISE Labs shares (Note 26).....	2,008,793	1,870,915
Motorola SPS Businesses (Note 26).....	417,760	377,382
Other.....	18,124	7,946
	-----	-----
	4,999,546	5,248,919
	=====	=====

The above goodwill arising from the purchases of ASE Test shares included ASE Holding's purchase of 2,480,000 shares of ASE Test at the prevailing market price from ASE's directors in May 2001.

Amortization of the above-mentioned goodwill for consolidated subsidiaries

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

(as reflected in general and administrative expenses in the consolidated statement of income) were NT\$507,816, NT\$559,807 and NT\$692,919 (US\$19,798) for the years ended December 31, 1999, 2000 and 2001, respectively.

In addition, the carrying values of investments in HCDC and USI as discussed in Note 6 included unamortized goodwill, which is being amortized over ten years through April 2006 for HCDC and July 2010 for USI, resulting from the purchases of HCDC shares in 1995 and 1996, and USI shares in 1999 and 2000, as follows:

	December 31	
	2000	
	NT\$	NT\$
USI.....	1,872,342	1,651,742
HCDC.....	780,798	--
	2,653,140	1,651,742
	=====	=====

In 2001, ASE amortized the remaining balance of goodwill for HCDC as a result of the significant decline in the market value of HCDC shares.

### 11. Short-term Borrowings

	December 31			
	2000		2001	
	Interest Rate (%)	NT\$	Interest Rate (%)	NT\$
Letters of credit.....	0.975-7.5	1,733,626	0.85-6.75	803,000
Revolving.....	1.6-10	2,741,038	2.65-7.3	1,416,000
Promissory notes.....	8.1-8.7	927,933	3-6	1,236,000
		5,402,597		3,456,000
		=====		=====

F-22

As of December 31, 2001, unused credit lines for short-term borrowings and commercial paper and bank acceptances payable totaled approximately NT\$11,613,000 (US\$331,800).

### 12. Commercial Paper and Bank Acceptances Payable

Commercial paper and bank acceptances payable bore interest rates ranging from 5.2% to 11.5% in 2000 and 1.8% to 6.3% in 2001, respectively.

### 13. Long-term Bonds Payable

December 31



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

	2000	2001
	----- NT\$	----- NT\$
Foreign convertible bonds -- issued by ASE (US\$199 million outstanding in 2000 and US\$68 million outstanding in 2001) .....	6,597,845	2,379,320
Foreign convertible bonds -- issued by ASE Test Finance Limited (US\$109,890 thousand outstanding in 2000 and 2001) .....	3,637,908	3,845,051
Accrued interest .....	1,993,426	1,644,265
	12,229,179	7,868,636
Less: Current portion .....	--	3,090,345
	----- 12,229,179	----- 4,778,291
	=====	=====

Information on the long-term bonds payable is follows:

A. US\$200 Million -- Issued by ASE

In November 1997, ASE issued bonds, consisting of 200 units with face values of US\$1 million (NT\$30.8 million) each, with zero coupon, due November 2002. The bonds bear an implied interest rate of 6.372%.

Starting from December 1997 through October 2002, the bondholders may convert the bonds into common shares at the specified conversion price. The conversion rate was based on the current market price at the time of sale. As of December 31, 2001, 355,086 common shares were issued as a result of the conversion of such bonds, resulting in a capital surplus of NT\$32,102 (US\$917). In 2001, ASE redeemed and cancelled 131 units (US\$131,000 thousand) from the open market with payments of NT\$6,066,042 (US\$173,315), which had resulted in extraordinary losses of NT\$192,753 (US\$5,507). As of December 31, 2001, the outstanding convertible bonds aggregated US\$68 million (NT\$2,380 million). In addition, ASE was required to contribute to a sinking fund with the outstanding bonds at the date of twelve months prior to its maturity date. As of December 31, 2001, the balance of the sinking fund was NT\$1,568,057 (US\$44,802).

On or at any time after October 14, 2000, ASE may redeem the bonds at the redemption price if:

- a) (i) the closing price of the common shares for a period of 30 consecutive trading days is higher than 140% of the conversion price (NT\$50.5 per share as at December 31, 2001) in effect on each such trading day and (ii) the closing price of the common shares translated into US dollars at the prevailing rate for a period of 30 consecutive trading days is higher than 140% of the conversion price then in effect translated into US dollars at the exchange rate of NT\$28.62 (Y) US\$1.00; or

F-23

- b) at least 95% of the bonds have already been converted, redeemed, or purchased and cancelled.

In addition, ASE may, if the applicable tax law is unfavorably changed, redeem at any time all, but not some, of the bonds.

On September 5, 1997, ASE entered into a firm commitment subscription agreement with SBC Warburg Securities Pte. Ltd. ("SBC Warburg") for the sale by

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

ASE to SBC Warburg of US\$200 million Zero Coupon Convertible Bonds due 2002 (the "Convertible Bonds"). The closing of the sale of the Convertible Bonds was initially scheduled to occur on October 6, 1997. Due to the adverse market conditions prevailing during this period of time as a result of the Asian financial crisis, however, SBC Warburg requested that the closing date for the sale of the Convertible Bonds be extended.

During the extension period (the "Extension Period"), SBC Warburg decided to market the Convertible Bonds to potential investors as two separate instruments by repackaging them into: (1) a debt portion consisting of US\$200 million callable floating rate notes which are secured by the Convertible Bonds (the "FRNs") and (2) an equity portion consisting of options to purchase the Convertible Bonds (the "Call Options"). SBC Warburg was able to obtain commitments for the entire issue of the FRNs 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 ("SBC"), an affiliate of SBC Warburg, approached a number of large institutional investors, including J&R Holding Limited ("J&R Holding"), a consolidated subsidiary of ASE, with a proposal to sell a portion of the Call Options. Subsequently, J&R Holding entered into two agreements with SBC to purchase options on a portion of the Convertible Bonds.

Under the first agreement with SBC, J&R Holding is required to make four cash payments to SBC on November 4, 1998, 1999, 2000 and 2001 as long as the Call Options remain unexercised and outstanding. In return, J&R Holding has the right to call the Convertible Bonds at any time during the period from November 1998 through November 2002. The exercise price of the Call Options is equal to the accreted carrying value of the Convertible Bonds as shown on the Corporation's consolidated balance sheet at the date exercised. Pursuant to the second agreement, SBC paid US\$200,000 to J&R Holding. In return, SBC has 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. In any event, J&R Holding was required under the automatic exercise provision of this agreement to purchase the Call Options upon the expiration of the agreement on November 1, 1998. These options were terminated by an agreement on December 11, 2001.

The closing of the sale of the Convertible Bonds eventually took place on November 4, 1997. Upon the closing of the sale of the Convertible Bonds, SBC Warburg immediately resold the Convertible Bonds to a subsidiary of SBC Warburg. Such subsidiary in turn repackaged the Convertible Bonds into the FRNs and the Call Options for resale to the investors that had indicated an interest in purchasing the FRNs and/or the Call Options during the Extension Period. The closing of the sale of the FRNs and the Call Options took place on November 5, 1997.

SBC Warburg and its subsidiary have entered into a swap transaction, which stipulates that SBC Warburg will pay the interest on the FRN (aggregating to US\$80 million (NT\$2,654 million)) on the subsidiary's behalf. The subsidiary will repay the interest to SBC Warburg at the maturity date of the Convertible Bonds. ASE has contracted with certain banks to issue letters of credit for US\$53,783 (NT\$1,882,405) to SBC Warburg to guarantee the interest payment obligation of the subsidiary. Under the contract with these banks, ASE may not, among other things, change its scope of operations and is required to maintain certain financial ratios.

B. US\$110 Million of Foreign Convertible Notes -- Issued by ASE Test Finance Limited

In June 1999, ASE Test, in connection with the acquisitions of ISE Labs and Motorola SPS Businesses, issued US\$160 million (NT\$5,600 million) of 1% guaranteed convertible notes (the "Convertible Notes") due July 1, 2004 through its subsidiary, ASE Test Finance Limited (the "Issuer"). ASE subscribed to

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

US\$50 million (NT\$1,750 million) of the Convertible Notes and the current net balance of US\$109,890 thousand (NT\$3,846 million) is shown in the accompanying balance sheet.

F-24

The holders of the Convertible Notes are entitled to convert the Convertible Notes into ASE Test's ordinary shares at the specified conversion price (\$24.75 per share currently, subject to adjustment) at any time after December 29, 1999 and before or on July 1, 2004.

The Convertible Notes may be redeemed under the following circumstances:

a) Redemption for taxation reasons:

If the applicable tax law or treaty is unfavorably revised, the Issuer or ASE Test may redeem the Convertible Notes in whole at early redemption price, at any time upon giving written notice not less than 30 days and not more than 60 days to the bondholders.

b) Redemption at the option of the Issuer:

On or at any time after July 1, 2002, the Issuer may redeem all or a part of the Convertible Notes at the early redemption price.

### 14. Long-term Debts

Long-term debts consist of the following:

	December 31	
	2000	2001
	NT\$	NT\$
Mortgage bank loans for purchase of building and machinery.....	4,989,564	5,423,384
Acceptances payable to syndicate banks.....	6,678,815	7,507,825
Bank loans secured by assets.....	1,540,747	1,367,634
Revolving bank loans.....	250,708	3,773,000
Letters of credit loans for purchase of materials and machinery.....	--	2,098,650
Loans for specified use.....	--	6,000,000
Obligation under capital leases (Note 22).....	179,952	106,525
	13,639,786	26,277,018
Current portion.....	3,309,935	3,175,883
	10,329,851	23,101,135

#### A. Mortgage Bank Loans for Purchase of Building and Machinery

These represent various bank loans obtained by ASE, ASE Test, Inc., ASE Chung Li, and ASE Material. These mortgage bank loans are repayable in monthly, quarterly or semi-annually installments and bear interest at rates ranging from 1.1% to 8.12% in 2000 and 0.88% to 6.95% in 2001.

ASE Chung Li has a syndicated loan agreement with a total facility of

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

NT\$4,000,000, which will be repayable through May 2006. The agreement requires that, among other things, ASE Chung Li should maintain certain financial ratios. As of December 31, 2001, the unused facility of the syndicate loan aggregated NT\$2,700,000 (US\$77,143).

### B. Acceptances Payable to Syndicate Banks

	December 31	
	2000	
	NT\$	NT\$
Five-year revolving credit lines of NT\$9,710,000 US\$277,429) through May 2003 to June 2004, interest at 5.223%-6.378% in 2000 and 2.905%-5.745% in 2001.....	6,775,000	6,500,000
Revolving credit lines through March 2003 to September 2004, interest at 2.05%-3.65% in 2001.....	--	1,055,000
	6,775,000	7,555,000
Unamortized discounts.....	(96,185)	(47,175)
	6,678,815	7,507,825

F-25

The above acceptances payable to syndicate banks were covered by several bank acceptance agreements made by ASE and ASE Test, Inc. which stipulate, among other things, the following:

- 1) Without prior written consent from the majority of the banks, ASE can not pledge its assets or assume liabilities or change its operating items or merge with any other entity or dispose of more than 20% of total assets, or provide financing to other entity, or make such investment that will unfavorably affect its financial conditions.
- 2) ASE's tangible net worth (as defined in the loan agreements) should not be less than NT\$38 billion (US\$1,086 million).
- 3) ASE is required to maintain certain financial ratios.
- 4) ASE is required to pay an annual commitment fee of 0.15%-0.20% of the difference between the authorized and utilized credit line.

ASE Test provided a guaranty on the bank acceptance agreement entered into by ASE Test, Inc. Under the guaranty, ASE Test is required to maintain certain financial ratios and, without written consent of the majority banks, shall not:

- 1) Merge or consolidate with any other entity or take any action to dissolve, liquidate or reorganize.
- 2) Purchase or redeem its shares or reduce its share capital.
- 3) Reduce its ownership in ASE Test, Inc. to less than 51%.
- 4) Transfer, sell, lease or dispose of a substantial portion of its assets.

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

### C. Bank Loans Secured by Assets

These represent various bank loans obtained by ISE Labs and ASE Korea which are secured by its total assets, and buildings and improvements, respectively (Note 21). The loans will be repayable May 2009 and July 2007, respectively, and the loans bear interest ranging from 5.5% to 7.92% and 4.4% to 6.1%, respectively. These agreements contain certain covenant and default provisions that require ISE to maintain certain financial ratios, dividend and capital expenditure restrictions and maintenance of working capital requirements. ISE did not meet the minimum quick ratio requirement for one of these agreements for the year ended December 31, 2001 and obtained a waiver from the financial institution within the cure period.

### D. Revolving Bank Loans

These represent various revolving bank loans of Japanese Yen in 2000 and NT Dollars in 2001. The loans will be repayable through May 2003 to June 2004, with interest rates from 3.85% to 6.45%.

### E. Letters of Credit for Purchase of Materials and Machinery

This represents various bank loans, due from May 2003 through September 2003 with interest rates ranging from 0.88% to 4.8%.

F-26

### F. Loans for Specified Use

This represents the loan which specified for use in the redemption of ASE's convertible bonds in 2001 (see Note 13). The loan is repayable in semi-annual installments starting June 2003 to December 2004 and bears interest of 5.95%. The agreement requires that among other things, the following:

- 1) Without the prior written consent from the majority of the banks, ASE can not:
  - (a) pledge its assets or assume liabilities or change significantly its operating items or dispose material assets, or provide financing to other entity, or make lending to any other parties.
  - (b) merge or combine with any other entity or make investments or acquire major assets of other entity.
- 2) ASE's tangible net worth (as defined in a loan agreement) should not be less than NT\$38 billion (US\$1,086 million).
- 3) Maintenance by ASE of certain financial ratios.

According to the abovementioned bank loan contracts, the interest rates are variable subject to adjustments by banks or changes in prime rate.

As of December 31, 2001, unused long-term bank facilities approximated NT\$4,958,000 (US\$141,657).

As of December 31, 2000 and 2001, the future maturities of long-term debts (including long-term bonds payable) are as follows:

December 31

-----  
2000

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

	----- NT\$	----- NT\$
Within the following year.....	3,309,935	6,266,228
During the second year.....	12,484,848	15,163,030
During the third year.....	3,257,243	11,083,861
During the fourth year.....	4,939,819	1,186,263
During the fifth year and thereafter.....	1,877,120	446,272
	-----	-----
	25,868,965	34,145,654
	=====	=====

Long-term debts (including long-term bonds payable) by currencies are detailed as follows:

	2000		
	-----	-----	
New Taiwan Dollars.....	NT\$	12,128,557	NT
US Dollars.....	US\$	469,339	US
Deutsche Mark.....	DM	940	DM
Japanese Yen.....	(Y)	5,069,552	(Y)
Singapore Dollars.....	SGD	7	SG
British Pound.....	GBP	91	GB
European Currency Unit.....	EUR	4	EU

15. Shareholders' Equity

In July 1995, ASE issued 8,600,000 GDSs, representing 43,000,000 common shares. In September 2000, ASE issued 20,000,000 ADSs, representing 100,000,000 common shares. In connection with the ADS offering in 2000, ASE launched an exchange offer to exchange all outstanding GDSs for its New York Stock Exchange-listed ADS. A total of 7,536,000 GDSs, representing an aggregate of 37,677,000 common shares, were exchanged for ADSs pursuant to the exchange offer.

F-27

The ADS holders generally have the same rights and obligations as the shareholders, subject to the provision of relevant ROC laws. The exercise of such rights and obligations shall comply with the related regulations and the deposit agreement, which stipulate, among other things, that the ADS holders can, through Citicorp Financial Services Limited, as nominee holder: (a) exercise their voting rights; (b) sell their ADSs; and, (c) receive dividends declared and subscribe to the issuance of new shares.

As of December 31, 2001, the outstanding ADSs represented 6.95% of ASE's total outstanding common shares.

Under the ROC Company Law, capital surplus from the paid-in capital in excess of par value can be used to offset against deficit. In addition, such capital surplus may be transferred to capital and is subject to a specified limit under relevant regulations.

Capital surplus from prior years' gains on disposal of properties may be transferred to retained earnings upon approval by the shareholders at the annual general shareholders' meeting in 2002.

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

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.

ASE's Articles of Incorporation provide that the annual net income shall be appropriated as follows:

- a. gain on disposal of properties, less applicable income tax, as capital surplus;
- b. offset against deficit, if any;
- c. 10% of the remainder as legal reserve, until the accumulated amount equals paid-in capital;
- d. an amount (Note 6) equal to the income from long-term investments in shares of stock accounted for by equity method, excluding cash dividends, as special reserve;
- e. not more than 2% of the remainder, as compensation to directors and supervisors;
- f. between 5% to 7% of the remainder, as bonus to employees, of which 5% 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
- g. the remainder, as dividends to shareholders.

The aforementioned appropriations shall be approved by the shareholders in the following year and given effect in the consolidated 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% of capital, up to 50% thereof may be transferred to capital.

ASE is currently going through a growth phase. In order to meet the needs of operational expansion, both current and future, and to satisfy shareholders' need for cash inflow, the Corporation's dividend policy priority shall be stock dividends; cash dividends may also be paid. In principle, the percentage of cash dividends paid shall not exceed 20%. Cash dividends shall not be paid if the dividend per share is less than NT\$0.1; and the stock dividends shall be declared instead.

With respect to the percentage of cash dividends to be paid referred to in the previous paragraph, ASE may decide the most suitable dividend distribution in accordance with its current operational status, and taking into consideration the budget plan for the following year. The board of directors shall draw up a profit distribution plan, which shall be submitted to the shareholders' meeting for approval before implementation.

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 ASE on earnings generated in 1998 and onwards. An Imputation Credit Account ("ICA") is maintained by ASE 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

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

distribution of dividends.

As of December 31, 2001 the creditable taxes aggregated NT\$22,555 (US\$644). The actual percentage for the distribution of 2000 net income was 10.33%.

As of December 31, 2001, the unappropriated earnings prior to 1998 (the year that Integrated Income Tax System became effective) amounted to NT\$17,644 (US\$504).

16. Gain on Sales of Investments

This consists of the gross gain on sales of:

	Years Ended December		
	1999	2000	
	NT\$	NT\$	N
Sale of ASE Test's shares.....	4,007,674	--	
Sale of ASE's shares held by subsidiaries (Note 27)....	1,388,523	--	
Other.....	147,958	91,666	50
	5,544,155	91,666	50
	=====	=====	=====

The gain on sale of ASE Test's ordinary shares in 1999 was the result of the secondary offering of 2,500 thousand shares for issuances of TDRs.

The gain on sale of ASE's common shares in 1999 was the result of the 32,450 thousand shares sold through the re-issuance of GDSs.

17. Income Tax

a. Income tax expense (benefit) is determined as follows:

	Years E	
	1999	2000
	NT\$	NT\$
Current		
Tax (benefit) based on pre-tax accounting income		
(loss) at statutory rate .....	3,218,520	3,211,156
Add (less) tax effects of:		
Permanent differences		
Tax-exempt income		
-- Tax holiday .....	(779,437)	(700,749)
-- Gain from sales of securities .....	(384,079)	(51,415)
Investment income		
-- Sale of ASE Test shares .....	(1,001,919)	--
(Forward)		
Temporary differences		
Investment loss (income) .....	(398,886)	(523,941)
Unfunded pension cost .....	8,494	12,214
Unrealized foreign exchange loss (gain) .....	(38,701)	91,102
Bond interest payable .....	112,318	114,798



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

Other .....	248,765	158,786
	-----	-----
	985,075	2,311,951
Income taxes on undistributed earnings .....	44,539	147,379
Credits for investments and research and development .....	(401,525)	(1,231,247)
Net change in deferred income tax assets (liabilities)		
for the period .....	(155,437)	(152,138)
Adjustment of prior year's income tax .....	(13,109)	(10,177)
	-----	-----
Income tax (benefit) expense .....	459,543	1,065,768
	=====	=====

F-29

- b. The above-mentioned taxes on pre-tax accounting income (loss) at the statutory rates for domestic and foreign entities are shown below:

	Years Ended December		
	1999	2000	
	NT\$	NT\$	NT\$
Domestic entities in ROC (25% statutory rate) .....	2,717,796	2,542,888	(501,)
Foreign entities			
ASE Korea Inc. (30.8% statutory rate) .....	55,770	2,153	
ISE Labs, Inc. (federal tax rate 35% and state tax rate 6%) .....	163,240	439,169	(92,)
ASE Test Malaysia (30% statutory rate) .....	281,714	226,946	14,
	-----	-----	-----
	3,218,520	3,211,156	(579,)
	=====	=====	=====

- c. Deferred income tax assets and liabilities as of December 31, 2000 and 2001 are summarized as follows:

	December 31	
	2000	2001
	NT\$	NT\$
Current assets		
Unused tax credits .....	1,028,885	378,075
Provision for inventory obsolescence .....	29,060	41,502
Accrued interest on convertible bonds .....	--	163,289
Provision for doubtful accounts and sales allowance .....	73,766	68,432
Unrealized foreign exchange loss .....	7,626	108,721
Loss carryforward .....	--	214,013
Other .....	129,139	97,776
	-----	-----
	1,268,476	1,071,808
Valuation allowance .....	(85,057)	(161,800)
	-----	-----
	1,183,419	910,008
Deferred income tax liability -- unrealized foreign exchange gain .....	(22,692)	(37,000)

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

	-----	-----
	1,160,727	873,008
	=====	=====
Non-current assets (liabilities)		
Unused tax credits .....	754,914	1,648,956
Accrued pension costs .....	57,403	64,308
Accrued interest on convertible bonds .....	362,663	--
Loss carryforward .....	24,645	--
Others .....	83,382	97,472
	-----	-----
	1,283,007	1,810,736
Valuation allowance .....	(343,825)	(639,188)
	-----	-----
	939,182	1,171,548
	-----	-----
Deferred income tax liability		
Investment income .....	(1,159,500)	(636,815)
Unrealized foreign exchange gain .....	(7,500)	(7,185)
Goodwill amortization .....	(75,744)	(56,124)
Others .....	(207,900)	(245,234)
	-----	-----
	(1,450,644)	(945,358)
	-----	-----
	(511,462)	226,190
	=====	=====

F-30

In assessing the realizability of deferred tax assets, ASE considered its future taxable earnings and expected timing for the reversal of temporary differences. The valuation allowance is provided to reduce the gross deferred tax assets to an amount which ASE believes will more likely be realized. Deferred 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, 2001 approximated US\$5,087 thousand and US\$454 thousand with expiration in 2021 and 2006, respectively.

A portion of ASE'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 2000 and 2005, respectively. ASE Test Malaysia has been granted approval of "hi-tech pioneer" status for an additional five years and is expected to commence the tax holiday retroactively from July 1, 1999. The per share effect of tax holiday is NT\$0.4 in 1999, NT\$0.3 in 2000 and NT\$0.01 in 2001.

- d. As of December 31, 2001, unused tax credits of ROC subsidiaries which can be utilized to offset their future income tax are set forth below:

December 31, 2001					
Year of Expiry	ASE	ASE Chung Li	ASE Material	ASE Test, Inc.	Total
-----	-----	-----	-----	-----	-----
2002 .....	\$ 72,373	\$ --	\$ 47,901	\$ 151,752	\$ 272,026

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

2003 .....	225,750	13,246	27,252	241,966	508,214
2004 .....	301,720	104,754	14,982	299,974	721,430
2005 .....	278,040	--	175,865	71,456	525,361
	-----	-----	-----	-----	-----
	\$ 877,883	\$ 118,000	\$ 266,000	\$ 765,148	\$2,027,031
	=====	=====	=====	=====	=====

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 1999.

18. Pension Plans

The consolidated entities (including ASE) 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. Those entities make monthly contributions, at 2% 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. The changes in the retirement funds are summarized as follows:

	Years Ended December 31		
	1999	2000	2001
	-----	-----	-----
	NT\$	NT\$	NT\$
Balance, beginning of year .....	186,412	232,205	339,500
Contributions .....	34,410	92,211	89,615
Payments .....	(574)	(435)	(3,654)
Interest income .....	11,957	15,519	15,285
	-----	-----	-----
Balance, end of year .....	232,205	339,500	440,746
	=====	=====	=====

F-31

Pension costs for these entities consist of:

	Years Ended December 31		
	1999	2000	2001
	-----	-----	-----
	NT\$	NT\$	NT\$
Service costs .....	56,870	120,528	114,393
Interest .....	23,243	30,234	28,503
Projected return on pension assets .....	(12,543)	(14,575)	(21,611)
Amortization of prior period service cost, gain or loss on plan assets, etc .....	2,689	4,231	6,933
	-----	-----	-----
	70,259	140,418	128,218
	=====	=====	=====

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

Other pension information based on actuarial calculations of the plan are as follows:

	Years Ended December 31		
	1999	2000	2001
	NT\$	NT\$	NT\$
a. Benefit obligations			
Accumulated benefit obligation .....	209,543	347,107	434,131
Additional benefits based on future salaries .....	228,743	302,925	278,587
	-----	-----	-----
Projected benefit obligation .....	438,286	650,032	712,718
Fair value of assets .....	(211,576)	(311,758)	(412,192)
	-----	-----	-----
Funded status .....	226,710	338,274	300,526
Unrecognized net transition obligation .....	(114,468)	(114,550)	(101,984)
Unrecognized net actuarial gain (loss) .....	85,903	30,580	93,428
Portion in prepayments .....	--	--	5,561
Portion in other current liabilities .....	(8,956)	(5,879)	(3,093)
	-----	-----	-----
Accrued pension cost .....	189,189	248,425	294,438
	-----	-----	-----
b. Vested obligation .....	2,162	7,124	22,177
	=====	=====	=====
c. Actuarial assumption			
Discount rate.....	6.5%-7%	6%	5%
Increase in future salary level.....	4%-5.5%	4%-5%	3%-4%
Expected rate of return on plan assets.....	6.5%-7%	6%	5%

### 19. Stock Option Plans

ASE Test has six stock option plans, the 1996 Option Plan (the "Pre-IPO Plan"), 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 years until the options expire. Because the exercise price is equal to the market price of the shares on the date of grant, no compensation cost was recognized.

### 20. Earnings Per Share and ADS

Since ASE incurred loss from continuing operations for the year ended December 31, 2001, the simple net loss per share and per ADS are presented.

Primary and fully diluted earnings per share for the years ended December 31, 1999 and 2000 are calculated as follows:

F-32

The denominator is the weighted average number of outstanding shares of common stock of 1,980,000,000 and 2,677,602,000 shares in 1999 and 2000, respectively. The numerator is the net income with the primary and fully diluted EPS adjustment for the employee stock options of ASE Test.

The numerator with consideration of the adjustment of ASE Test's primary

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

EPS in 1999 and 2000 is calculated as follows:

	1999	
Net income .....	\$7,794,666	\$5,
Less: net income contributed from ASE Test .....	(1,184,670)	(1,
Add: ASE Test's primary EPS multiplied by the number of shares of ASE Test owned by ASE .....	1,092,952	1,
As adjusted .....	\$7,702,948	\$5,

The numerator with consideration of the adjustment of ASE Test's fully diluted EPS in 1999 and 2000 is calculated as follows:

	1999	
Net income .....	\$7,794,666	\$5,
Less: net income contributed from ASE Test .....	(1,184,670)	(1,
Add: ASE Test's fully diluted EPS multiplied by the number of shares of ASE Test owned by ASE .....	1,085,749	1,
As adjusted .....	\$7,695,745	\$5,

Primary and fully diluted earnings per ADS for the years ended December 31, 1999 and 2000 are calculated as follows:

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.

The number of shares to be potentially issued from convertible bonds is as follows:

	1999	2000	2001
Convertible bonds -- issued by ASE	70,666,667	95,400,000	38,537,82

### 21. Assets Pledged or Mortgaged

Except for those mentioned in Note 13, the assets pledged or mortgaged as first priority collateral for short-term and long-term debts, and recruitment of foreign laborers are summarized as follows:

December 31		
	2000	2001
	NT\$	NT\$      US\$

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

Buildings and improvements .....	710,327	2,077,487	59,357
Machinery and equipment .....	7,487,835	9,021,120	257,746
Long-term investments .....	1,266,164	1,790,961	51,170
Time deposits .....	297,079	140,949	4,027
Guarantee deposits -- time deposits .....	73,599	77,821	2,224
	-----	-----	-----
	9,835,004	13,108,338	374,524
	=====	=====	=====

In addition, the total assets of ISE Labs amounting to NT\$5,458,090 (US\$155,945) as of December 31, 2001, have been pledged as collaterals for its long-term and short-term debts.

\

F-33

22. Commitments and Contingencies as of December 31, 2001

a. ASE, 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, ASE and ASE Material and ISE Labs also lease equipment under non-cancellable capital lease agreements. The net book value as of December 31, 2000 and 2001 of the equipment acquired under the capital obligations amounted to NT\$200,429 and NT\$276,287 (US\$7,894), respectively. The future minimum lease payments under the above-mentioned operating leases are as follows:

Operating Leases	NT\$
-----	-----
2002.....	314,006
2003.....	280,148
2004.....	274,174
2005.....	271,953
Thereafter.....	849,772
	-----
Total minimum lease payments.....	1,990,053
	=====

The future minimum lease payments under above-mentioned capital leases as of December 31, 2001 are as follows:

	NT\$
	-----
Within the following year.....	86,316
Within the second year.....	25,752
Within the third year.....	897
	-----
Total minimum lease payments.....	112,965
Less: Imputed interest.....	6,440
	-----
Present value of future lease obligations.....	106,525

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

Capital lease obligation, current.....	80,550
	-----
Capital lease obligation, long-term.....	25,975
	=====

b. ASE, ASE Test, Inc., ASE Test Malaysia and ASE Chung Li (starting 1999) engage outside sales agencies. Commissions and service fees were paid based on monthly incurred services-related cost and expenses plus 10% in 1999 and 2000, and 5%-10% in 2001 (starting August 2001, there is limited amounts prescribed for cost and expenses incurred) or based on 1%-3% in 1999 and 2000, 0.48%-1% in 2001 of net export sales. Commissions and service fees paid in 1999, 2000 and 2001 approximated NT\$570,729, NT\$762,159 and NT\$729,300 (US\$20,837), respectively.

c. As of December 31, 2001, commitments to purchase machinery and equipment approximated NT\$3,059,996 (US\$87,428).

d. As of December 31, 2001, commitments for construction of buildings approximated NT\$379,668 (US\$10,848).

e. As of December 31, 2001, unused letters of credit of approximated NT\$782,667 (US\$22,362).

f. ASE entered into technology agreements with foreign companies which will expire in various dates through 2016 for the procurement of manufacturing technology of certain products. Based on the agreements, ASE shall pay royalties at a specified percentage of sales quantities. Such royalties in 1999, 2000 and 2001 were approximately NT\$112,025, NT\$199,836 and NT\$151,249 (US\$4,321), respectively.

F-34

g. As of December 31, 2001, ASE has endorsed and guaranteed the promissory notes of its subsidiaries as follows:

	NT\$
	-----
ASE (Labuan).....	2,794,861
ASE (Philippines).....	1,924,450
ASE Chung Li.....	1,166,322
ASE Material.....	1,017,295
ASE Holding.....	839,760
ASE Investment.....	300,000
ASE Technologies.....	40,000
	-----
	8,082,688
	=====

### 23. Derivative Financial Instruments

Information on derivative transactions are as follows:

#### a. Interest Rate Swap

ASE entered into two interest rate swap contracts with a foreign bank, which expired in January and December 1999. Under these contracts, ASE paid interest based on a notional principal amount of US\$20 million (NT\$663 million)

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

and floating interest at a rate of 4.85%-5.19% of LIBOR minus 0.21%-0.25%, whichever was higher. The foreign bank paid interest to ASE based on the same nominal principal and floating interest rate of 3 months' USD LIBOR. The interest settlement was made on net basis. The net interest income from such contracts amounted to NT\$842 in 1999. As of December 31, 2000 and 2001, there were no outstanding contracts.

### b. Forward Exchange Contracts

ASE Test Malaysia entered into forward contracts to hedge foreign exchange fluctuations associated with foreign currency liabilities which has expired in February 2001, and the net gain from such contracts amounted to NT\$31,803 (US\$909) in 2001. As of December 31, 2001, there were no open contracts.

### c. European Options

Because ASE and ASE Test, Inc. and ASE Material expect to receive US dollars from export sales and to pay Japanese yen or NT dollars for long-term debts or short-term borrowings, ASE and ASE Test, Inc. and ASE Material have entered into foreign currency option contracts to hedge risks of exchange rate fluctuations.

As of December 31, 2001, the outstanding contracts are as follows:

ASE

Contract	Amount	Strike Price US\$/NT\$	Maturity D
Buy US\$ Put/JPY Call	US\$2 million	US\$1:JPY120	January 29,
Buy US\$ Put/JPY Call	US\$2 million	US\$1:JPY120	February 26,
Buy US\$ Put/JPY Call	US\$2 million	US\$1:JPY120	March 26, 20
Sell US\$ Call/JPY Put	US\$3 million	US\$1:JPY120	January 29,
Sell US\$ Call/JPY Put	US\$3 million	US\$1:JPY120	February 26,
Sell US\$ Call/JPY Put	US\$3 million	US\$1:JPY120	March 26, 20
Sell US\$ Call/NT\$ Put	US\$36.5 million	US\$1:NT\$34	March 26, 20
Sell US\$ Call/NT\$ Put	US\$66 million	US\$1:NT\$36	July 15, 200

The loss arising from such contracts based on mark-to-market valuation as at December 31, 2001 approximated NT\$86,732 (US\$2,478).

F-35

ASE Test, Inc.

Contract	Amount	Strike Price US\$/NT\$	Maturity D
Sell US\$ Call/NT\$ Put	US\$4 million	US\$1:NT\$34.61	January 10,
Sell US\$ Call/NT\$ Put	US\$4 million	US\$1:NT\$34.61	February 15,
Sell US\$ Call/NT\$ Put	US\$4 million	US\$1:NT\$34.61	March 11, 20
Buy US\$ Put/NT\$ Call	US\$2 million	US\$1:NT\$34.50	January 29,

The loss arising from such contracts based on mark-to-market valuation as at December 31, 2001 approximated NT\$6,322 (US\$181).



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

## ASE Material

Contract	Amount	Strike Price US\$/NT\$	Maturity D
Sell US\$ Call/JPY Put	US\$5 million	US\$1:JPY120	January 29,
Sell US\$ Call/JPY Put	US\$5 million	US\$1:JPY120	February 26,
Sell US\$ Call/JPY Put	US\$5 million	US\$1:JPY120	March 26, 20
Buy JPY Call/US\$ Put	US\$3.25 million	US\$1:JPY112.5	January 29,
Buy JPY Call/US\$ Put	US\$3.25 million	US\$1:JPY112.5	February 26,
Buy JPY Call/US\$ Put	US\$3.25 million	US\$1:JPY112.5	March 26, 20

The loss arising from such contracts based on mark-to-market valuation as at December 31, 2001 approximated NT\$43,697 (US\$1,248).

### d. Cross Currency Swap Contract

Because ASE will repay US dollars for convertible bonds upon maturity, ASE entered into cross currency swap contract to hedge risks of exchange rate fluctuation which will expire in November 4, 2002. In December 2001, ASE early settled the contract, and resulted in a gain of NT\$69,978 (US\$1,999).

### e. Transaction Risk

#### 1) Credit Risk

ASE, ASE Test, Inc. and ASE Material are 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, ASE, ASE Test, Inc. and ASE Material transact only with financial institutions with good credit ratings. As a result, no material losses resulting from counter party defaults are anticipated.

#### 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) Liquidation Risk and Cash Flow Risk

ASE, ASE Test, Inc. and ASE Material entered into European option contracts to hedge its exposure to the effect of exchange rate fluctuations on net assets or net liabilities. At the maturity of the contracts, ASE, ASE Test, Inc. and ASE Material have sufficient operating capital to meet cash requirements, there are no funds raising risk. Therefore, ASE, ASE Test, Inc. and ASE Material believe there are no significant liquidation risk and cash flow risk.

F-36

## 24. Non-derivative and Derivative Financial Instruments

December 31

-----  
2000

-----  
2001

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

	Carrying Values	Fair Values	Carrying Values	Fair Values	Ca V
	NT\$	NT\$	NT\$	NT\$	
Non-derivative Financial Instruments					
Assets					
Cash and cash equivalents	14,166,495	14,166,495	11,770,729	11,770,729	
Short-term investments	1,682,679	1,717,617	4,601,172	4,642,062	
Notes receivable	219,641	219,641	105,185	105,185	
Accounts receivable -- net	9,040,934	9,040,934	7,020,964	7,020,964	
Long-term investments	10,712,199	10,303,014	9,530,398	11,026,363	
Guarantee deposit	297,079	297,079	140,949	140,949	
Sinking fund	--	--	1,568,057	1,568,057	
Liabilities					
Short-term borrowings	5,402,597	5,402,597	3,456,149	3,456,149	
C/P and B/A payable	4,281,805	4,281,805	3,444,314	3,444,314	
Accounts payable	3,859,909	3,859,909	2,968,779	2,968,779	
Long-term bonds payable (included current portion)	12,229,179	12,229,179	7,868,636	7,868,636	
Long-term debts (included current portion)	13,639,786	13,639,786	26,277,018	26,277,018	
Long-term payable for investments (included current portion)	4,191,528	4,191,528	3,611,294	3,611,294	
Derivative Financial Instruments					
Forward exchange contracts	2,046	(1,708)	--	--	
European options	--	(21,832)	--	(136,751)	
Cross currency swap contract	--	21,446	--	--	

The carrying values of cash and cash equivalent, notes receivable, accounts receivable, short-term borrowings, C/P and B/A payable, and 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 fair value for guarantee deposits and sinking fund is the book value. The fair values of long-term bonds and payables for investments are determined based on the estimated present value of future cash flows using the interest rates of similar long-term debt instruments which ASE is able to obtain as the discount rate. Fair value of long-term debts is carrying value because floating interest rates are applied. The fair values of derivative financial instruments are based on the information of mark-to-market valuation.

25. Segment and Geographical Information

a. Geographical Sales Information

1) Net Revenue:

Year Emded December 31				
1999		2000		
NT\$	% of Total Sales	NT\$	% of Total Sales	NT\$

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

America	18,645,953	57	33,089,214	65	24,930,
Domestic	9,427,343	29	12,639,373	25	10,222,
Europe	852,110	3	1,905,646	4	1,508,
Asia and other areas	3,684,155	11	3,259,144	6	1,705,
	-----		-----		-----
	32,609,561	100	50,893,377	100	38,367,
	=====		=====		=====

F-37

2) Long-lived Assets:

	Year Ended December 31				
	2000		2001		
	NT\$	% of Total Long-Lived Assets	NT\$	US\$	% of Total Long-Lived Assets
Domestic	43,309,343	72	43,724,466	1,249,270	72
Asia	14,271,843	23	13,482,411	385,212	22
America	2,985,014	5	3,348,228	95,663	6
	-----		-----	-----	-----
	60,566,200	100	60,555,085	1,730,145	100
	=====		=====	=====	=====

b. Major customers

Customers accounting by 10% or more of total revenues are shown below:

	Year Ended December 31				
	1999		2000		
	NT\$	% of Total Sales	NT\$	% of Total Sales	NT\$
Motorola, Inc	5,155,573	16	11,256,760	22	7,164,
VIA Technologies Inc	2,576,155	8	5,185,434	10	4,413,
	=====		=====	=====	=====

c. Reported Segment Information

ASE has three reportable segments: Packaging, Testing and Investing, each of which requires different development and production. The packaging division packages bare semiconductors into finished semiconductors with enhanced electrical and thermal characteristics. The testing division provides testing services, including front-end engineering testing, wafer probing and final testing services. The investing division is engaged in investing activities. The accounting policies of the segments are the same as those described in Note

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

2. Segment information for the years ended December 31, 1999, 2000 and 2001 is as follows:

	Packaging	Testing	Investing
1999			
Revenue from external customer .....	NT\$24,522,968	NT\$7,874,728	NT\$--
Inter-segment revenues .....	--	(81,530)	--
Interest revenue .....	25,219	227,616	84,567
Interest expense .....	714,780	264,939	137,515
Net interest revenue (expense) .....	(689,561)	(37,323)	(52,948)
Depreciation and amortization .....	2,994,302	2,418,278	140
Segment profit (loss) .....	3,131,508	2,224,801	4,642,002
Segment asset .....	35,318,472	16,203,198	11,840,510
Expenditures for segment assets .....	5,617,480	4,808,413	--
2000			
Revenue from external customer .....	NT\$38,028,799	NT\$12,911,073	NT\$--
Inter-segment revenues .....	--	(142,712)	--
Interest revenue .....	265,737	45,112	182,915
Interest expense .....	1,200,236	375,257	461,791
Net interest revenue (expense) .....	(934,499)	(330,145)	(278,876)
Depreciation and amortization .....	4,423,814	3,815,237	59,704
Segment profit (loss) .....	6,191,070	3,541,102	(1,125,536)
Segment asset .....	53,385,822	31,155,426	16,810,253
Expenditures for segment assets .....	12,412,225	14,720,913	--
2001			
Revenue from external customer .....	NT\$28,928,185	NT\$9,637,615	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 revenue (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	--
2001			
Revenue from external customer .....	US\$826,520	US\$275,360	US\$--
Inter-segment revenues .....	(857)	(5,095)	--
Interest revenue .....	8,107	1,033	4,939
Interest expense .....	36,022	8,873	16,145
Net interest revenue (expense) .....	(27,916)	(7,841)	(11,206)
Depreciation and amortization .....	148,174	156,184	700
Segment profit (loss) .....	(79,616)	(34,152)	22,865
Segment asset .....	1,468,496	941,966	328,829
Expenditures for segment assets .....	167,982	126,147	--

F-36

### 26. Acquisitions

In May 1999, ASE Test acquired 70% equity of ISE Labs, which is engaged in the testing and packaging of semiconductors. The purchase costs, including transaction costs, approximated US\$100.1 million (NT\$3,503.5 million), which was paid in May 1999. In 2001, ASE Test purchased additional shares of ISE Labs in connection with the capital increase of ISE Labs, and consequently, as of December 31, 2001, owned 80% equity of ISE Labs. Total investment cost of the ISE Labs shares was US\$171 million (NT\$5,985 million) as of December 31, 2001. In January 2002, ASE Test purchased the remaining 20% equity interest in ISE

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

Labs for US\$50 million (NT\$1,750 million), and thereafter owned 100% of ISE Labs.

In July 1999, ASE and ASE Test purchased 70% and 30%, respectively, of the equity interest of the Motorola SPS Businesses. The purchase cost approximated US\$350.1 million (NT\$12,253.5 million). As of December 31, 2001, US\$246.8 million (NT\$8,638 million) has been paid and the balance of US\$103.3 million (NT\$3,615.5 million), plus interest (commencing as of the acquisition date -- July 1999) is payable, US\$23.3 million (NT\$815.5) of which is subject to target sales volumes being met for the Motorola SPS Businesses in Chung Li, Taiwan, based on specified payment dates. ASE believes the contingent payments of US\$23.3 million (NT\$815.5) are determinable beyond a reasonable doubt. As of December 31, 2001, ASE has provided guaranteed letters of credit of US\$113,209 (NT\$3,962,315) to Motorola. Both acquirees are currently engaged in the packaging and testing of semiconductors. A portion of the purchase price was financed through a Convertible Notes offering completed on June 29, 2000 by ASE Test Finance Limited and fully and unconditionally guaranteed by ASE Test (see Note 13).

Future payments for investments in Motorola as of December 31, 2001 are as follows:

	NT\$	US\$
	-----	-----
Within the following year .....	816,433	23,327
Within the second year and after .....	2,794,861	79,853
	-----	-----
	3,611,294	103,180
	=====	=====

The acquisitions of the Motorola SPS Businesses and ISE Labs were accounted for by the purchase method. Assets acquired and liabilities assumed have been recorded at their estimated fair values as of the acquisition date. The purchase prices exceeded the fair value of the net tangible assets by approximately US\$81.9 million for Motorola SPS Businesses and US\$76.5 million for ISE Labs. The purchase cost in excess of fair value of net tangible assets was allocated to various tangible and intangible assets, which will be amortized on a straight-line basis over 3 to 38 years.

The purchase prices -- net book value and calculation of excess amount for those acquisitions described above are as follows (amounts in millions US dollars):

F-37

Acquirees	Purchase Cost	Net Book Value
	-----	-----
ISE Labs.....	US\$100.1	US\$23.6
Motorola SPS Businesses.....	US\$350.1	US\$268.2

The excess purchase price was allocated as follows (amount in millions of US dollars):

Item	ISE Labs	Motorola SPS Businesses
	-----	-----

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

Write-up of land.....	2.5	87.7
Write-up (write-down) in buildings.....	2.7	(11.5)
Write-up (write-down) in machinery.....	9.0	(8.4)
Deferred tax liability.....	(5.7)	--
Goodwill.....	68.0	14.1
	-----	-----
	76.5	81.9
	=====	=====

In the first quarter of 2000, ASE Test adjusted its allocation of purchase price by reducing the allocation to land by US\$0.2 million, buildings by US\$2.3 million, machinery by US\$2.3 million, deferred tax liabilities by US\$1.9 million and increasing the allocation to goodwill by US\$3.8 million because impairment loss incurred arising from the disposition of the packaging operation of ISE Labs, which was a preacquisition contingency at the date of acquisition.

The purchase prices for Motorola SPS Businesses and ISE Labs acquisitions, are respectively allocated as follows (amount in millions of US dollars):

	ISE Labs	Motorola SPS Businesses
	-----	-----
Cash.....	US\$4.3	US\$45.2
Accounts receivable.....	14.3	30.3
Other current assets.....	0.7	6.9
Fixed assets-- net.....	82.5	302.8
Other assets.....	3.5	2.6
Goodwill.....	68.0	14.1
Total liabilities.....	(59.4)	(51.8)
Minority interest.....	(13.8)	--
	-----	-----
	US\$100.1	US\$350.1
	=====	=====

### 27. Summary of Significant Differences Between Accounting Principles Followed by the Corporation and Generally Accepted Accounting Principles in the United States

The accompanying consolidated financial statements have been prepared in accordance with generally accepted accounting principles in the Republic of China ("ROC GAAP"), which differ in the following respects from generally accepted accounting principles in the United States ("US GAAP"):

#### a. Pension Benefits

US Financial Accounting Standards ("FAS") 87, "Accounting for Pensions", was effective no later than the beginning of the first period for which a US GAAP reconciliation is required. A portion of the unrecognized net transition obligation at the adoption date is to be allocated directly to equity. The adoption date of ASE for US FAS 87 is the beginning of 1987. ROC SFAS 18, which is substantially similar to US FAS 87, was effective in 1996 for listed companies in Taiwan. Therefore, pension expense due to different adoption dates is adjusted.

#### b. Short-term Investments

Under ROC GAAP, marketable equity securities are carried at the lower of

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

aggregate cost or market value, and debt securities at cost. Under US FAS 115, "Accounting for Certain Investments in Debt and Equity Securities",

F-38

except for debt securities classified as "held-to-maturity securities", investments in debt and equity securities, other than those recorded on the equity method, should be stated at fair value.

All of the Corporation's short-term investments are classified as trading securities under US GAAP, with gains and losses recognized currently in income. The unrealized holding gain included in earnings under US GAAP were NT\$22,354 in 2000 and NT\$5,952 (US\$170) in 2001. All of the Corporation's short-term investments in mutual funds, stock and convertible debt 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 ASE, 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 board of directors and resolved by the shareholders in the following year. Under US GAAP, such bonuses are charged to income currently in the year earned. Stock issued as part of these bonuses is recorded at fair market value. Since the amount and form of such bonuses are not finally determinable until the board of directors meeting in the subsequent year, the total amount of the aforementioned bonuses ("regular bonuses") is initially accrued based on the management's estimate regarding the amount to be paid based on ASE's Articles of Incorporation. Any difference between the initially accrued amount and the fair market value of the bonuses settled by the issuance of shares is recognized in the year of approval by the board of directors. The management estimates that the regular annual employee bonuses, including cash and stock, will approximate three to four months' salaries and wages.

Aside from the aforementioned regular bonus plan, ASE decided to grant a special stock bonus to employees amounting to NT\$1,536,396 in 1997 and NT\$2,506,617 in 2000 due to excellent profits for ASE in 1997 and 2000. Employees who received the special stock bonus are required to continue working for ASE for an additional three years. Accordingly, the amount of special stock bonuses is being allocated over three years as special compensation expenses in the statement of income under US GAAP.

### d. Treasury Stock

The shares of stock of ASE that are held by consolidated majority owned subsidiaries are, under US GAAP, reflected as treasury stock in the consolidated balance sheet. Also, under US 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 ASE. The mutual or reciprocal holdings had no material effect on the minority interest reported in the consolidated statements of income. In addition, under US GAAP, the denominator used in calculating the EPS is adjusted to reflect that the shares of ASE held by the subsidiary are not outstanding beginning on the date that the subsidiary acquired the shares of ASE. The adjustment on the denominator under US GAAP for purposes of EPS computation is 103,321,373 shares in 1999, 135,867,641 shares in 2000 and 164,441,865 shares in 2001,

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

respectively. The capital gain (loss) from sales of treasury stock is added to or deducted from the consolidated balance of capital surplus.

Under ROC GAAP, such treatment is not required and, as a result, the investment in ASE common shares is presented as a long-term investment in the consolidated balance sheets and capital gain (loss) from sale of treasury stock is recognized and included in the consolidated statements of income.

### e. Depreciation of Buildings

Under ROC GAAP, the estimated life of a building can be as long as 40 years based on ROC practices. For US GAAP purposes, an assessment for useful lives of buildings is estimated to be 25 years.

### f. Excess of Book Value on Transfer of Buildings Between Related Parties

ASE Test, Inc., a consolidated subsidiary, purchased buildings and facilitates from another consolidated subsidiary, ASE Technologies, in 1997. The actual costs purchased from ASE Technologies were based on market value. Such additional payment for the excess of book value of NT\$17,667 was capitalized by ASE Test, Inc. as

F-39

allowed under ROC GAAP. Under US GAAP, transfers of assets from related parties should not be recorded by the transferee at stepped-up values.

### 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 US GAAP mainly due to the differences in accounting for bonuses to employees, directors and supervisors.

### h. Effects of US GAAP Adjustments on Equity Long-term Investment

The carrying values of equity-basis investments and the investment income (loss) accounted for by the equity method in HCDC, HCKC and USI 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 US 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 and US GAAP in the investees' financial statements.

### i. Impairment of Long-lived Assets

Under US GAAP, impairment losses are recorded in current period earnings, create a new cost basis for related assets going forward and cannot be reversed subsequently. Under US GAAP, in accordance with US FAS 121, long-lived assets held and used by the Corporation 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. Under ROC GAAP, there is no requirement to provide for impairment of fixed assets. Based on an assessment by ASE and its subsidiaries of the potential impact of US FAS 121, there is no impairment loss as of December 31, 2001 for ASE except for the value decline relating to the long-term bond



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

investment in APP (see Note 7).

### j. Stock Dividends

Under ROC GAAP, stock dividends are recorded at par with a charge to retained earnings. Under US 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 1999 and 2001 stock dividends would be treated as an additional reduction to retained earnings and increase to capital surplus amounting to NT\$9,580 million and NT\$3,181 million, respectively.

### k. Stock Option Compensation

In May 2001, ASE Test's directors exercised their stock options for 2,480,000 shares at US\$3.5 per share under the 1996 option plan. ASE was concerned about potential dilution caused by the sales of these shares into the marketplace and 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 ASE. However, under US GAAP, in accordance to APB Opinion 25 and FIN 44, the purchase of shares from employees within six months after exercise of a vested option, compensation expense shall be measured for the difference between the market price of the share on the date of purchase and the market price on the date the options were issued. Consequently, a difference amounting to NT\$908,661 (US\$25,961) arising from the purchase by ASE of these shares was recorded by ASE Test as compensation expense.

### l. Derivative Financial Instruments

There are no specific rules under ROC GAAP related to accounting for derivative financial instruments other than foreign currency forward exchange contracts (the "forward contracts"). The accounting of forward contracts and other derivatives is disclosed in Note 2. The accounting and reporting standards for derivative financial instruments under US GAAP are established in FAS 133 and FAS 138; which were adopted by the Corporation

F-40

effective January 1, 2001. The adoption of US FAS 133 and US FAS 138 had no material impacts to the consolidated financial statements for all periods presented. Under US GAAP, the Corporation did not apply hedge accounting and derivatives have historically been, and continue to be, recorded on the balance sheets at fair value, with the changes in fair values recorded through current period earnings.

### m. Earnings Per Share (EPS)

In calculating the weighted average number of shares outstanding for EPS purposes under ROC GAAP, employee bonus shares are treated as outstanding for all periods. Under US GAAP, employee bonus shares are treated as outstanding only from the date when they are issued.

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 US GAAP, giving effect to adjustments for the differences listed above.

Years Ende

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

	1999	2000
	NT\$	NT\$
Net income (loss)		
Net income (loss) based on ROC GAAP .....	7,794,666	5,837,149
Adjustments:		
a. Pension benefits (cost) .....	(15,799)	5,635
b. Short -- term investments .....	12,584	22,354
c. Bonuses to employees, directors and supervisors:		
Accrued regular bonuses .....	(1,089,135)	(929,348)
Special stock bonuses .....	(577,500)	(929,901)
d. Gain from sale of treasury stock .....	(1,388,523)	--
e. Depreciation of building .....	(30,731)	(32,127)
f. Excess of book value of building transferred between related parties .....	432	432
g. Restate carrying value and related capital gain from sale of long-term investment .....	(5,180)	--
h. Effects for US GAAP adjustments on equity long-term investments .....	(154,218)	(51,825)
k. Stock option compensation .....	--	--
Effect of US GAAP adjustment on income tax .....	5,691	6,553
Effect of US GAAP adjustments on minority interest ....	89,014	1,074
Net decrease in net income .....	(3,153,365)	(1,907,153)
Net income (loss) based on US GAAP .....	4,641,301	3,929,996
Earnings (loss) per share		
Basic .....	1.61	1.34
Diluted .....	1.58	1.29
Earnings (loss) per ADS		
Basic .....	8.07	6.69
Diluted .....	7.91	6.47
Number of weighted average shares outstanding .....	2,874,924,409	2,938,004,535
Number of ADS .....	574,984,882	587,600,907
		Years Ended
	1999	2000
	NT\$	NT\$
Shareholders' equity		
Shareholders' equity based on ROC GAAP .....	30,057,036	43,669,214
Adjustments:		
a. Pension benefits .....	(47,794)	(42,159)
b. Restatement of short-term investments .....	12,584	34,938
c. Bonuses to employees, directors and supervisors .....	(217,827)	(113,600)

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

d. Treasury stocks		
d1. reversal of unrealized loss .....	--	487,752
d2. classification of treasury stock .....	(2,922,561)	(2,919,411)
e. Effect of US GAAP adjustments on useful life .....	(95,296)	(127,423)
f. Excess of book value of building transferred between related parties .....	(16,623)	(16,191)
g. Restate carrying value of subsidiaries' long-term investment .....	(47,621)	(47,621)
h. Effects of the above adjustments on equity investment .....	(187,048)	(238,873)
k. Stock option compensation .....	--	--
Effect of US GAAP adjustments on income tax .....	15,170	21,723
Effect on US GAAP adjustments on minority interest .....	19,667	20,741
Net decrease in shareholders' equity .....	(3,487,349)	(2,940,124)
Shareholders' equity based on US GAAP .....	26,569,687	40,729,090
Changes in shareholders' equity based on US GAAP		
Balance, beginning of year .....	17,675,199	26,569,687
Convertible bonds converted into common shares .....	--	35,653
Capital increase in cash through the Issuance of American Depositary shares .....	--	4,137,910
Net income (loss) for the year .....	4,641,301	3,929,996
Adjustment for common shares issued as bonuses to employees, directors and supervisors .....	1,448,808	1,811,607
Translation adjustment for subsidiaries .....	(173,957)	894,255
Adjustment from changes in ownership percentage of investees .....	(108,046)	3,405,909
Unrealized loss on long-term investment in shares of stock .....	--	(59,077)
Effect of change in exchange rate .....	--	3,150
Purchase of treasury stock .....	--	--
Sale of treasury stock .....	1,782,434	--
Capital gain from sale of treasury stock .....	1,303,948	--
Balance, end of year .....	26,569,687	40,729,090

A reconciliation of the significant balance sheet accounts under ROC GAAP to the amounts as determined under US GAAP is as follows:

	Years Ended December	
	2000	200
	NT\$	NT\$
Short-term investments		
As reported .....	1,682,679	4,601,172
US GAAP adjustments		
Restatement of investments to fair value .....	34,938	40,890
As adjusted .....	1,717,617	4,642,062
Long-term investments		
As reported .....	10,712,199	9,530,398
US GAAP adjustments		
Treasury stock .....	(2,429,131)	(2,649,484)
Equity investments .....	(238,837)	(272,658)

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

As adjusted .....	8,044,231	6,608,256
	=====	=====
Buildings and improvement		
As reported .....	9,390,206	14,640,855
US GAAP adjustments		
Effect of US GAAP adjustments on useful life .....	(127,423)	(176,226)
Excess of book value of building transferred Between related parties .....	(16,191)	(15,759)
	-----	-----
As adjusted .....	9,246,592	14,448,870
	=====	=====

F-41

	Years Ended December	
	2000	200
	-----	-----
	NT\$	NT\$
	-----	-----
Other assets		
As reported .....	1,275,557	1,342,269
US GAAP		
Effect of US GAAP adjustments on income tax .....	--	28,701
	-----	-----
As adjusted .....	1,275,557	1,370,970
	=====	=====
Deferred income tax liabilities -- net		
As reported .....	511,462	--
US GAAP		
Effect of US GAAP adjustments on income tax .....	(21,723)	--
	-----	-----
As adjusted .....	489,739	--
	=====	=====
Consolidated debits		
As reported .....	4,999,546	5,248,919
US GAAP adjustments		
Restated carrying value of subsidiaries' long-term investment .....	(47,621)	(8,619)
	-----	-----
As adjusted .....	4,951,925	5,240,300
	=====	=====
Current liabilities		
As reported .....	25,873,359	21,268,927
US GAAP adjustments-- bonuses to employees, directors and supervisors .....	113,600	--
	-----	-----
As adjusted .....	25,986,959	21,268,927
	=====	=====
Accrued pension cost		
As reported .....	248,425	294,438
US GAAP adjustments -- pension benefits .....	42,159	39,404
	-----	-----
As adjusted .....	290,584	333,842
	=====	=====

As a result of the adjustments presented above, the approximate amounts of

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

total assets based on US GAAP are NT\$105,516,899 and NT\$103,273,177 (US\$2,950,661) as of December 31, 2000 and 2001, respectively.

### 28. Additional Disclosures Required by US GAAP

#### a. Pension

Set forth below is pension information disclosed in accordance with US FAS 132:

	Years Ended Dec			
	1999	2000		2001
	NT\$	NT\$		NT\$
<b>Components of net periodic benefit cost</b>				
Service cost .....	81,240	120,528	111,000	
Interest cost .....	23,796	30,241	28,000	
Expected return on plan assets .....	(12,242)	(14,575)	(13,000)	
Amortization of prior service cost .....	642	8	(1,000)	
	93,436	136,202	125,000	
<b>Changes in benefit obligation</b>				
Benefit obligation at beginning of year	359,510	465,674	650,032	
Service cost .....	79,410	120,528	111,000	
Interest cost .....	23,369	30,241	28,000	
Actuarial (gain) loss .....	3,586	34,025	(6,000)	
Benefits paid .....	(201)	(436)	(1,000)	
	465,674	650,032	722,032	
<b>Change in plan assets</b>				
Fair value of plan assets at beginning of year	165,155	208,289	311,737	
Actual return on plan assets .....	10,790	12,408	13,000	
Employer contribution .....	32,545	91,476	91,000	
Benefits paid .....	(201)	(436)	(1,000)	
	208,289	311,737	416,737	
<b>Funded Status</b>				
Unrecognized actuarial gain (loss) .....	257,385	338,295	300,000	
	(16,549)	(45,795)	(2,000)	
	240,836	292,500	298,000	
	240,836	292,500	298,000	

F-42

#### Actuarial assumptions:

	1999 to 2001
Discount rate.....	5% to 7%
Rate of compensation increase.....	3% to 5.5%
Expected return on plan assets.....	5% to 7%

ASE has no other post-retirement or post-employment benefit plans.

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

b. Short-term investments

At December 31, 2000 and 2001, certain investments carried at cost under ROC GAAP were restated under US FAS 115:

	December 31					
	2000					
	Carrying Value	Fair Value	Unrealized Holding Gains	Carrying Value	Fair Value	Unrealized Holding Gains
	NT\$	NT\$	NT\$	NT\$	NT\$	NT\$
Short-term investments (Note 3) .....	1,682,679	1,717,617	34,938	4,601,172	4,642,062	40,890

c. Income taxes expense (benefit)

	Years Ended December		
	1999	2000	
	NT\$	NT\$	NT\$
Income tax currently payable (tax benefit) .....	583,550	1,080,704	(101,300)
Net change in deferred income tax assets (liabilities) for the period .....	(161,128)	(158,691)	(442,900)
Income tax on undistributed earnings .....	44,539	147,379	335,000
Adjustment of prior years' income taxes .....	(13,109)	(10,177)	17,000
	453,852	1,059,215	(192,100)
	=====	=====	=====

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 US GAAP is as follows:

F-43

	Years Ended December		
	1999	2000	
	NT\$	NT\$	NT\$
Tax (benefit) based on pre-tax accounting income (loss) at statutory rate .....	2,406,503	2,732,461	(1,056,300)
Add (less) tax effects of:			
Permanent differences			
Tax-exempt income			
-- Tax holiday .....	(1,163,516)	(700,749)	(26,400)
-- Gain from sale of securities .....	(653,493)	(51,415)	(31,700)

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

Bonus to employee and directors .....	416,659	464,812	468,0
Other .....	35,408	7,368	6,9
Tax credits			
Utilized .....	(401,525)	(1,231,247)	(253,2
Deferred .....	(217,614)	(299,217)	348,3
Income taxes (10%) on undistributed earnings .....	44,539	147,379	335,0
Adjustment of prior year's income tax .....	(13,109)	(10,177)	17,0
	-----	-----	-----
Income tax expense (benefit) .....	453,852	1,059,215	(192,1
	=====	=====	=====

The abovementioned taxes on pretax accounting income (loss) at the statutory rates for domestic and foreign entities are shown below:

	Years Ended December 31	
	2000	2001
	NT\$	NT\$
Domestic entities in ROC (25% statutory rate) .....	2,064,193	(978,223)
Foreign entities		
ASE Korea (30.8% statutory rate) .....	2,153	--
ISE Labs (33% statutory rate) .....	439,169	(92,487)
ASE Test Malaysia (30% statutory rate) .....	226,946	14,389
	-----	-----
	2,732,461	(1,056,321)
	=====	=====

d. Stock option plans

ASE Test has six stock option plans, the 1996 Option Plan (the "Pre-IPO Plan"), 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. The Pre-IPO Plan has expired as of December 31, 2001. 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, 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. The 1996, 1997 and 1998 Option Plans will expire after 5 years and the 1999 and 2000 Option Plan will expire after 10 years.

A summary of the transaction of shares under the six plans is presented below:

Number of Shares	Weighted Average Exercise Price Per Share	Weighted Average Grant Fair
-----	-----	-----

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

Beginning balance -- January 1, 1999 .....	11,585,128	\$5.97	
Option granted .....	2,742,500	20.00	\$1
Option exercised .....	(1,627,226)	5.47	==
Option forfeited .....	(76,028)	7.29	
	-----	-----	
Ending balance -- December 31, 1999 .....	12,624,374	9.07	
Option granted .....	412,000	25.00	\$1
Option exercised .....	(1,263,041)	6.31	==
Option forfeited .....	(287,184)	14.14	
	-----	-----	

F-44

	Number of Shares	Weighted Average Exercise Price Per Share	Weighted Average Grant Fair
	-----	-----	-----
Ending balance -- December 31, 2000 .....	11,486,149	9.82	
Option granted .....	10,158,650	8.94	\$
Option exercised .....	(5,221,508)	3.81	==
Option forfeited .....	(114,706)	17.11	
	-----	-----	
Ending balance -- December 31, 2001 .....	16,308,585	\$11.15	
	=====	=====	
Options exercisable at:			
December 31, 1999 .....	4,387,858	\$4.91	
December 31, 2000 .....	6,902,529	6.13	
December 31, 2001 .....	6,233,453	11.89	

Significant option groups outstanding at December 31, 2001 and the related weighted average exercise price and remaining contractual life information are as follows (in US dollars):

	Outstanding		Exercisable	
	Shares	Weighted Average Price	Shares	Weighted Average Pri
	-----	-----	-----	-----
Options with exercise price of:				
\$25.....	397,000	\$25.00	158,800	25.
\$13.4375-\$20.15625.....	2,640,706	19.69	1,449,886	19.
\$8.875-\$13.3125.....	12,728,479	9.18	4,082,367	9.
\$5-\$7.5.....	542,400	5.46	542,400	5.
	-----	-----	-----	-----
Options outstanding at December 31, 2001.....	16,308,585		6,233,453	
	=====		=====	

US 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 US FAS 123, ASE



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

Test has elected to continue using 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 statement had been adopted.

ASE Test has computed for pro forma disclosure purposes the fair value of each option grant, as defined by US FAS 123, using the Black-Scholes option pricing model with the following assumptions:

	1999	2000
Risk free interest rate.....	5.76-6.01%	6.61-6.75%
Expected dividend yield.....	0%	0%
Expected lives.....	3.4-5 years	3.4-5 years
Volatility.....	55.53%	55.53%

For purposes of pro forma disclosure, the estimated fair value of the options are amortized to expense over the option rights vesting periods. Had ASE Test recorded compensation costs based on the estimated grant date fair value, as defined by US FAS 123, ASE's net income (loss) under US GAAP would have been reduced to the pro forma amounts below.

	Years Ended December		
	1999	2000	
	NT\$	NT\$	NT\$
Net income (loss) based on US GAAP .....	4,641,301	3,929,996	(4,000,000)
Pro forma net income (loss) .....	4,479,803	3,682,196	(4,300,000)
Basic EPS			
As reported.....	1.61	1.34	
Pro forma.....	1.56	1.25	
Diluted EPS			
As reported.....	1.58	1.29	
Pro forma.....	1.53	1.21	
Basic EPS per ADS			
As reported .....	8.07	6.69	
Pro forma.....	7.79	6.27	
Diluted EPS per ADS			
As reported.....	7.91	6.47	
Pro forma.....	7.63	6.05	

The pro forma amounts reflect compensation expense related to 1996, 1997, 1998, 1999 and 2000 option plans granted and vested only. In future years, the annual compensation expense will increase relative to the fair value of the options granted and vested in those future years.

e. According to US FAS 130, the statement of comprehensive income (loss) for the years ended December 31, 2000 and 2001 are present below:

Years Ended December

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

	1999	2000	
	NT\$	NT\$	N
Net income (loss) based on US GAAP .....	4,641,301	3,929,996	(4,04
Translation adjustment on subsidiaries -- net of income tax benefit of NT\$43,489 in 1999, income tax expense of NT\$223,564 in 2000 and income tax expense of NT\$187,282 in 2001 .....	(130,468)	670,691	56
Comprehensive income (loss) .....	4,510,833	4,600,687	(3,48

f. Consolidation

The 1999 net revenues, cost of revenues and operating expense of ISE Labs before the date of acquisition in the amounts of NT\$736,765, NT\$475,250 and NT\$117,880, respectively, were consolidated in the 1999 consolidated financial statements. The net revenues for the pre-acquisition period only represented 2% of the ASE's consolidated net revenues in 1999 and such presentation has no impact on the 1999 consolidated net income and shareholders' equity under US GAAP. If the results of ISE Labs were consolidated from the date of acquisition, the net revenues, gross profit and income from operation of 1999 consolidated statement of income will be NT\$31,872,796, NT\$8,388,480 and NT\$4,704,924, respectively.

g. US GAAP cash flow information

The following represents the major caption of cash flow under US GAAP pursuant to US FAS 95:

	Years Ended Decem		
	1999	2000	
	NT\$	NT\$	
Cash flows			
Net cash provided by operating activities .....	6,988,434	17,466,420	1
Net cash used in investing activities .....	(14,953,647)	(33,550,389)	(1
Net cash provided by financing activities .....	11,768,774	17,759,155	
Net increase (decrease) in cash .....	3,803,561	1,675,186	(
Cash, beginning of year .....	8,173,901	11,809,112	1
Effect of exchange rate changes in cash .....	(168,350)	682,197	
	11,809,112	14,166,495	1

The significant reclassifications for US 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 US GAAP (as opposed to financing

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

activities under ROC GAAP)

- 3) proceeds from sales of treasury stock and purchases of treasury stock are shown in the financing activities under US GAAP (as opposed to investing activities under ROC GAAP).

F-45

### h. New accounting standards

ASE is required by SEC Staff Accounting Bulletin No. 74, to disclose the impact of recently issued accounting standards will have on its financial statements when adopted in a future period, as well as make certain disclosure about recently issued accounting standards.

In June 2001, the US Financial Accounting Standards Board issued US FAS 141, "Accounting for business combinations", and US FAS 142, "Goodwill and other intangible assets". ASE must adopt these standards on January 1, 2002, which may affect accounting for business combinations consummated after June 30, 2001 and that for existing goodwill and other intangible assets of ASE upon adoption. The standards require, among other provisions, companies to review for possible impairment of goodwill existing at the date of adoption and perform subsequent impairment tests on an annual basis. In addition, existing goodwill and intangible assets must be reassessed and classified consistently in accordance with the criteria set forth in US FAS 141 and US FAS 142. Under the new standards, ASE will no longer amortize goodwill while the other intangible assets will continue to be amortized over its estimated useful lives, which, if supportable, may be a period that exceeds the current maximum period of 40 years. As of December 31, 2000 and 2001, ASE has unamortized goodwill of approximately NT\$7,652,686 and NT\$6,900,661 (US\$197,162), respectively. Total amortization expenses of goodwill under ROC GAAP incurred for the years ended December 31, 1999, 2000, and 2001 are NT\$507,816, NT\$559,807 and NT\$692,919 (US\$19,798), respectively. ASE has not yet completed its assessment of the impact these new standards may have on the accompanying financial statements and cannot estimate whether related impact would be material or not.

In June 2001, the US Financial Accounting Standards Board issued US FAS 143, "Accounting for Asset Retirement Obligations". US FAS 143 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. US FAS 143 will be adopted by ASE on January 1, 2003 and is not expected to have a material impact on its consolidated financial information relating to US GAAP.

In August 2001, the US Financial Accounting Standards Board issued US FAS 144, "Accounting for the Impairment or Disposal of Long-lived Assets", which addresses financial accounting and reporting for the impairment or disposal of long-lived assets. US FAS 144 supersedes US FAS 121, "Accounting for the Impairment of Long-lived Assets and for Long-lived Assets to be Disposed of", and the accounting and reporting provisions of APB Opinion No. 30, "Reporting the Results of Operations for a disposal of a segment of a business". US FAS 144 is effective for years beginning after December 15, 2001, with earlier application encouraged. The impact of adopting this accounting standard is not expected to have a material effect on the ASE's consolidated financial position and results of operations.

### 29. Subsequent Event

During April 2002, ASE's ownership percentage in ASE Test fell below 50%

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

and as of May 17, 2002 is 49.77%. ASE continues to consolidate ASE Test because ASE effectively controls ASE Test. Mr. Richard Chang, the Vice Chairman of ASE also serves as the Chairman of ASE Test. Mr. Chang has committed to vote his shares of ASE Test as of April 30, 2002, which represented a 1.05% ownership interest in ASE Test, in concert with ASE.

F-46

### Item 19. Exhibits.

1. (a) Memorandum and Articles of Association of the Registrant (incorporating all amendments as of July 11, 2000) (incorporated by reference to Exhibit 3.1 to the Company's registration statement on Form F-1 (file no. 333-44622) (the "Form F-1")).
2. (a) Amended and Restated Deposit Agreement among ASE Inc., Citibank N.A., as depositary, and Holders and Beneficial Holders of American Depositary Shares evidenced by American Depositary Shares evidenced by American Depositary Receipts issued thereunder, including the form of American Depositary Receipt (incorporated by reference to Exhibit 4.1 to the Form F-1).  
  
(b) Form of Underwriting Agreement (incorporated by reference to Exhibit 1.1 to the Form F-1).
4. (a) Stock Purchase Agreement dated as of March 15, 1999 between ASE Test Limited and the Selling Shareholder relating to the purchase and sale of 12,250,000 shares of Common Stock of ISE Labs, Inc. (incorporated by reference to Exhibit 10.1 of ASE Test Limited's registration statement on Form F-3 (File No. 333-10892) which was declared effective by the SEC on December 22, 1999 (the "ASE Test 1999 Registration Statement")).  
  
(b) 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 the ASE Test 1999 Registration Statement).  
  
(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 Registration Statement).  
  
(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 the Form F-1).  
  
(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) Land Lease effective October 1, 1999 until September 30, 2009 between ASE Inc. and the Nantze Export Processing Zone (incorporated by reference to Exhibit 10.14 to the Form F-1).

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

- (h) Land Lease effective September 1, 1999 until August 30, 2009 between ASE Inc. and the Nantze Export Processing Zone (incorporated by reference to Exhibit 10.15 to the Form F-1).
- (i) Land Lease effective April 1, 1998 until March 31, 2008 between ASE Inc. and the Nantze Export Processing Zone (incorporated by reference to Exhibit 10.16 to the Form F-1).
- (j) Land Lease effective October 1, 1997 until September 30, 2007 between ASE Inc. and the Nantze Export Processing Zone (incorporated by reference to Exhibit 10.17 to the Form F-1).
- (k) Land Lease effective October 1, 1997 until September 30, 2007 between ASE Inc. and the Nantze Export Processing Zone (incorporated by reference to Exhibit 10.18 to the Form F-1).
- (l) Land Lease effective August 1, 1997 until July 31, 2007 between ASE Inc. and the Nantze Export Processing Zone (incorporated by reference to Exhibit 10.19 to the Form F-1).
- (m) Land Lease effective January 1, 1996 until December 31, 2005 between ASE Inc. and the Nantze Export Processing Zone (incorporated by reference to Exhibit 10.20 to the Form F-1).
  
- (n) Land Lease effective January 1, 1995 until October 31, 2005 between ASE Inc. and the Nantze Export Processing Zone (incorporated by reference to Exhibit 10.21 to the Form F-1).
- (o) Land Lease effective October 1, 1999 until September 30, 2009 between ASE Inc. and the Nantze Export Processing Zone (incorporated by reference to Exhibit 10.14 to the Form F-1).
- (p) Land Lease effective July 1, 1995 until June 30, 2005 between ASE Inc. and the Nantze Export Processing Zone (incorporated by reference to Exhibit 10.22 to the Form F-1).
- (q) Land Lease effective July 1, 1995 until June 30, 2005 between ASE Inc. and the Nantze Export Processing Zone (incorporated by reference to Exhibit 10.23 to the Form F-1).
- (r) Land Lease effective August 1, 1994 until July 31, 2004 between ASE Inc. and the Nantze Export Processing Zone (incorporated by reference to Exhibit 10.24 to the Form F-1).
- (s) Land Lease effective April 6, 1994 until April 5, 2004 between ASE Inc. and the Nantze Export Processing Zone (incorporated by reference to Exhibit 10.25 to the Form F-1).
- (t) Exchange Agency Agreement between ASE Inc. and Citibank, N.A., as exchange agent (incorporated by reference to Exhibit 10.26 to the Form F-1).
- (u) License Agreement dated as of January 16, 2001 between 1st Silicon (Malaysia) Sdn. Bhd. and ASE Electronics (M) Sdn. Bhd. (incorporated by reference to Exhibit 4(u) to the Annual Report on Form 20-F for the year 2000, filed June 28, 2001 (the "2000 20-F")).

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

- (v) Service Agreement dated as of July 1, 2000 between ASE Electronics (M) Sdn. Bhd. and ASE (U.S.) Inc. (incorporated by reference to Exhibit 4(v) to the 2000 20-F).
- (w) Service Agreement dated as of July 1, 2000 between ASE Test Inc. and ASE (U.S.) Inc. (incorporated by reference to Exhibit 4(w) to the 2000 20-F).
- (x) Service Agreement dated as of July 1, 2000 between ASE (Korea) Inc. and ASE (U.S.) Inc. (incorporated by reference to Exhibit 4(x) to the 2000 20-F).
- (y) Service Agreement dated as of July 1, 2001 between ASE (Chung-Li) Inc. and ASE (U.S.) Inc. (incorporated by reference to Exhibit 4(y) to the 2000 20-F).
- (z) Service Agreement dated as of July 1, 2001 between Advanced Semiconductor Engineering, Inc. and ASE (U.S.) Inc. (incorporated by reference to Exhibit 4(z) to the 2000 20-F).
- (aa) Commission Agreement dated as of July 1, 2000 between ASE Electronics (M) Sdn. Bhd. and Gardex International Limited. (incorporated by reference to Exhibit 4(aa) to the 2000 20-F).
- (bb) Commission Agreement dated as of July 1, 2000 between ASE Test Inc. and Gardex International Limited. (incorporated by reference to Exhibit 4(bb) to the 2000 20-F).
- (cc) Commission Agreement dated as of July 1, 2000 between ASE (Korea) Inc. and Gardex International Limited. (incorporated by reference to Exhibit 4(cc) to the 2000 20-F).
- (dd) Commission Agreement dated as of July 1, 2000 between ASE (Chung Li) Inc. and Gardex International Limited. (incorporated by reference to Exhibit 4(dd) to the 2000 20-F).
- (ee) Commission Agreement dated as of July 1, 2000 between Advanced Semiconductor Engineering, Inc. and Gardex International Limited. (incorporated by reference to Exhibit 4(ee) to the 2000 20-F).
- (ff) Land Lease effective July 1, 2000 until June 30, 2010 between ASE Inc. and the Nantze Export Processing Zone. (incorporated by reference to Exhibit 4(ff) to the 2000 20-F).
- (gg) Land Lease effective July 1, 2000 until June 30, 2010 between ASE Inc. and the Nantze Export Processing Zone. (incorporated by reference to Exhibit 4(ff) to the 2000 20-F).
- (hh) Land Lease effective October 1, 2000 until September 30, 2010 between ASE Inc. and the Nantze Export Processing Zone. (incorporated by reference to Exhibit 4(hh) to the 2000 20-F).
- (ii) Land Lease effective March 16, 2001 until March 15, 2011 between ASE Inc. and the Nantze Export Processing Zone. (incorporated by reference to Exhibit 4(ii) to the 2000 20-F).
- (jj) Land Lease effective March 1, 2001 until February 28, 2011 between ASE Inc. and the Nantze Export Processing Zone. (incorporated by reference to Exhibit 4(jj) to the 2000 20-F).

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

- (kk) First Amendment to Lease Agreement dated June 7, 2000 between ISE Labs, Inc. and RND Funding Company, Inc. (incorporated by reference to Exhibit 4(kk) to the 2000 20-F).
- (ll) Sub-lease Agreement dated October 3, 2000 between ISE Labs Singapore Pte Ltd and Wan Tien Realty (Pte) Ltd. (incorporated by reference to Exhibit 4(ll) to the 2000 20-F).
- (mm) Sub-lease Agreement dated June 3, 1999 between ISE Labs Singapore Pte Ltd and Wan Tien Realty (Pte) Ltd. (incorporated by reference to Exhibit 4(mm) to the 2000 20-F).
- (nn) Sublease Agreement dated June 2000 between ISE Labs, Inc. and Cirrus Logic, Inc. (incorporated by reference to Exhibit 4(nn) to the 2000 20-F).
- (oo) Sublease Agreement dated June 2000 between ISE Labs, Inc. and Cirrus Logic, Inc. (incorporated by reference to Exhibit 4(oo) to the 2000 20-F).
- (pp) Tenancy Agreement dated April 1, 1999 between ISE Labs (HK) Limited and Hing Seng Plastic Factory Limited. (incorporated by reference to Exhibit 4(pp) to the 2000 20-F).
- (qq) Lease dated September 28, 2000 between ISE Labs Hong Kong Limited and Shinano Kenshi (HK) Co., Ltd. (incorporated by reference to Exhibit 4(qq) to the 2000 20-F).
- (rr) Lease dated October 20, 2000 between ISE Labs Hong Kong and Bless Silver Development Limited. (incorporated by reference to Exhibit 4(rr) to the 2000 20-F).
- (ss) Lease Agreement between ASE Test Malaysia and Penang Development Corporation (incorporated by reference to Exhibit 2(c) to ASE Test Limited's annual report on Form 20-F for the year ended December 31, 1997). (incorporated by reference to Exhibit 4(ss) to the 2000 20-F).
- (tt) Sale and Purchase Agreement between Afasia Knitting Factory (Malaysia) Sdn. Bhd. and ASE Electronics (M) Sdn. Bhd. dated February 24, 1997. (incorporated by reference to Exhibit 4(tt) to the 2000 20-F).
- (uu) Office Building Lease Agreement between ISE Labs, Inc. and JER/BRE Austin Tech L.P. dated October 4, 2001. (incorporated by reference to Exhibit 10.46 to the Company's registration statement on Form F-3 filed on May 30, 2002 (the "Form F-3")).
- (vv) Plant Lease Agreement between ASE (Chung Li) Inc. and ASE Material Inc. dated October 31, 2001.
- (ww) Plant Lease Agreement between ASE (Chung Li) Inc. and ASE Material Inc. dated October 31, 2001.
- (xx) Plant Lease Agreement between ASE (Chung Li) Inc. and ASE Test Inc. dated October 5, 2001.
- (yy) Service Agreement dated as of August 1, 2001 between ASE Electronics (M) Sdn. Bhd. and ASE (U.S.) Inc. (incorporated by

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

reference to Exhibit 10.21 to the Form F-3).

- (zz) Service Agreement dated as of August 1, 2001 between ASE Test Inc. and ASE (U.S.) Inc. (incorporated by reference to Exhibit 10.22 to the Form F-3).
  - (aaa) Service Agreement dated as of August 1, 2001 between ASE (Korea) Inc. and ASE U.S.) Inc. (incorporated by reference to Exhibit 10.23 to the Form F-3).
  - (bbb) Service Agreement dated as of August 1, 2001 between ASE (Chung-Li) Inc. and ASE (U.S.) Inc. (incorporated by reference to Exhibit 10.24 to the Form F-3).
  - (ccc) Service Agreement dated as of August 1, 2001 between Advanced Semiconductor Engineering, Inc. and ASE (U.S.) Inc. (incorporated by reference to Exhibit 10.25 to the Form F-3).
  - (ddd) Commission Agreement dated as of August 1, 2001 between ASE Electronics (M) Sdn. Bhd. and Gardex International Limited. (incorporated by reference to Exhibit 10.26 to the Form F-3).
  - (eee) Commission Agreement dated as of August 1, 2001 between ASE Test Inc. and Gardex International Limited. (incorporated by reference to Exhibit 10.27 to the Form F-3).
  - (fff) Commission Agreement dated as of August 1, 2001 between ASE (Korea) Inc. and Gardex International Limited. (incorporated by reference to Exhibit 10.28 to the Form F-3).
  - (ggg) Commission Agreement dated as of August 1, 2001 between ASE (Chung Li) Inc. and Gardex International Limited. (incorporated by reference to Exhibit 10.29 to the Form F-3).
  - (hhh) Commission Agreement dated as of August 1, 2001 between Advanced Semiconductor Engineering, Inc. and Gardex International Limited. (incorporated by reference to Exhibit 10.30 to the Form F-3).
  - (iii) ASE Inc. Employee Bonus Plan.
8. List of Subsidiaries. (incorporated by reference to Exhibit 21.1 to the Form F-3).

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.

### SIGNATURES

Pursuant to the requirements of Section 12 of the Securities Exchange Act of 1934, the registrant certifies that it meets all of the requirements for filing on Form 20-F and has duly caused this annual report to be signed on its behalf by the undersigned, thereunto duly authorized.

ADVANCED SEMICONDUCTOR ENGINEERING, INC.

By: /s/ JOSEPH TUNG  
-----



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

Joseph Tung  
Chief Financial Officer

Date: June 28, 2002

EXHIBITS INDEX

Exhibit Number -----	Description -----
4(vv)	Plant Lease Agreement between ASE (Chung Li) Inc. and ASE Material Inc. dated October 31, 2001.
4(ww)	Plant Lease Agreement between ASE (Chung Li) Inc. and ASE Material Inc. dated October 31, 2001.
4(xx)	Plant Lease Agreement between ASE (Chung Li) Inc. and ASE Test Inc. dated October 5, 2001.
4(iii)	ASE Inc. Employee Bonus Plan.