UNITED MICROELECTRONICS CORP Form 20-F April 26, 2012 Table of Contents

## **UNITED STATES**

## **SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

## FORM 20-F

(Mark One)

" Registration statement pursuant to Section 12(b) or 12(g) of the Securities Exchange Act of 1934 or

x Annual report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 For the fiscal year ended December 31, 2011

or

" Transition report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 For the transition period from \_\_\_\_\_\_ to \_\_\_\_\_

or

" Shell company report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 Date of event requiring this shell company report \_\_\_\_\_ Commission file number 001-15128

## **United Microelectronics Corporation**

(Exact Name of Registrant as Specified in its Charter)

Taiwan, Republic of China

(Jurisdiction of Incorporation or Organization)

No. 3 Li-Hsin Road II, Hsinchu Science Park,

Hsinchu City, Taiwan, Republic of China

(Address of Principal Executive Offices)

Peter Courture, +1 (650) 968-8855, peter@courture.com,

978 Highlands Circle, Los Altos, CA 94024, USA

(Name, Telephone, E-mail and/or Facsimile number and Address of Company Contact Person)

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

Title of Each Class American Depositary Shares, as evidenced by American Depositary Receipts, each representing 5 Common Shares Name of Each Exchange on which Registered New York Stock Exchange

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

None

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

None

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

### 13,084,341,565 Common Shares of Registrant issued as of December 31, 2011 (including 457,934,400 treasury shares)

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes x No "

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934. Yes "No x

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Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes x No  $\ddot{}$ 

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes "No"

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

Large accelerated filer x Accelerated filer " Non-accelerated filer "

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

International Financial Reporting Standards as issued by the International Accounting Standards Board " Other x

Indicate by check mark which financial statement item the registrant has elected to follow. Item 17 " Item 18 x

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Securities Exchange Act of 1934). Yes "No x

## UNITED MICROELECTRONICS CORPORATION

## FORM 20-F ANNUAL REPORT

## FISCAL YEAR ENDED DECEMBER 31, 2011

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#### SUPPLEMENTAL INFORMATION

The references to United Microelectronics, we, us, our, our company and the Company in this annual report refer to United Microelectron Corporation and its consolidated subsidiaries, unless the context suggests otherwise. The references to Taiwan and R.O.C. refer to Taiwan, Republic of China. The references to shares and common shares refer to our common shares, par value NT\$10 per share, and ADSs refers to our American depositary shares, each representing five common shares. The ADSs are issued under the Deposit Agreement, dated as of October 21, 2009, as amended, supplemented or modified from time to time, among United Microelectronics, JPMorgan Chase Bank, N.A. and the holders and beneficial owners from time to time of American Depositary Receipts issued thereunder. R.O.C. GAAP means the generally accepted accounting principles in the Republic of China and U.S. GAAP means the generally accepted accounting principles in the United States. Any discrepancies in any table between totals and sums of the amounts listed are due to rounding.

We publish our financial statements in New Taiwan dollars, the lawful currency of the R.O.C. In this annual report, NT\$ and NT dollars mean New Taiwan dollars, \$, US\$ and U.S. dollars mean United States dollars, ¥ means Japanese Yen, and means EURO.

### FORWARD-LOOKING STATEMENTS IN THIS ANNUAL REPORT MAY NOT BE REALIZED

Our disclosure and analysis in this annual report contain or incorporate by reference some forward-looking statements. Our forward-looking statements contain information regarding, among other things, our financial condition, future expansion plans and business strategy. We have based these forward-looking statements on our current expectations and projections about future events. You can identify these statements by the fact that they do not relate strictly to historical or current facts. Although we believe that these expectations and projections are reasonable, such forward-looking statements are inherently subject to risks, uncertainties and assumptions about us, including, among other things:

our dependence on frequent introduction of new product services and technologies based on the latest developments;

the intensely competitive semiconductor, communications, consumer electronics and computer industries and markets;

risks associated with our international business activities;

our dependence on key personnel;

general economic and political conditions, including those related to the semiconductor, communications, consumer electronics and computer industries;

natural disasters, such as earthquakes and droughts, which are beyond our control;

possible disruptions in commercial activities caused by natural and human-induced disasters and outbreaks of contagious diseases;

fluctuations in foreign currency exchange rates;

additional disclosures we make in our previous and future Form 20-F annual reports and Form 6-K periodic reports to the U.S. Securities and Exchange Commission; and

those other risks identified in the Item 3. Key Information D. Risk Factors section of this annual report.

The words may, will, is/are likely to, anticipate, believe, estimate, expect, intend, plan and similar expressions are intended to id of these forward-looking statements. We do not and will not undertake the obligation to update or revise any forward-looking statements contained in this annual report whether as a result of new information, future events or otherwise. In light of these risks, uncertainties and assumptions, the forward-looking events discussed in this annual report might not occur and our actual results could differ materially from those anticipated in these forward-looking statements.

## GLOSSARY

ASIC	Application Specific Integrated Circuit. A custom-designed integrated circuit that performs specific functions which would otherwise require a number of off-the-shelf integrated circuits to perform.
Cell	Semiconductor structure in an electrical state which can store a bit of information, mainly used as the building block of memory array.
Die	A piece of a semiconductor wafer containing the circuitry of an unpackaged single chip.
DRAM	Dynamic Random Access Memory. A type of volatile memory product that is used in electronic systems to store data and program instructions. It is the most common type of RAM and must be refreshed with electricity hundreds of times per second or else it will fade away.
FPGA	Field Programmable Gate Array. A programmable integrated circuit.
Integrated Circuit	Entire electronic circuit built on a single piece of solid substrate and enclosed in a small package. The package is equipped with leads needed to electrically integrate the integrated circuit with a larger electronic system. Monolithic and hybrid integrated circuits are distinguished by the type of substrate used.
Interconnect	The conductive path made from copper or aluminum that is required to achieve connection from one circuit element to the other circuit elements within a circuit.
Mask	Photomask. A piece of glass on which an integrated circuit circuitry design is laid out.
Memory	A group of integrated circuits that a computer uses to store data and programs, such as ROM, RAM, DRAM and SRAM.
Micron	A unit of spatial measurement that is one-millionth of a meter.
Nanometer	A unit of spatial measurement that is one-billionth of a meter.
PC	Personal computer.
RAM	Random Access Memory. A type of volatile memory forming the main memory of a computer where applications and files are run.
ROM	Read-Only Memory. Memory that is programmed by the manufacturer and cannot be changed. Typically, ROM is used to provide start-up data when a computer is first turned on.
Scanner	A photolithography tool used in the production of semiconductor devices. This camera-like step-and-scan tool projects the image of a circuit from a master image onto a photosensitized silicon wafer.
Semiconductor	A material with electrical conducting properties in between those of metals and insulators. Essentially, semiconductors transmit electricity only under certain circumstances, such as when given a positive or negative electric charge. Therefore, a semiconductor s ability to conduct can be turned on or off by manipulating those charges and this allows the semiconductor to act as an electric switch. The most common semiconductor material is silicon, used as the base of most semiconductor chips today because it is relatively inexpensive and easy to create.

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SoC	System-on-Chip. A chip that incorporates functions currently performed by several chips on a cost effective basis.
SOI	Silicon-On-Insulator. Silicon wafer consisting of a thin layer of oxide, on top of which semiconductor devices are built.
SRAM	Static Random Access Memory. A type of volatile memory product that is used in electronic systems to store data and program instructions. Unlike the more common DRAM, it does not need to be refreshed.
Transistor	Tri-terminal semiconductor device in which input signal (voltage or current depending on the type of transistor) controls output current. An individual circuit that can amplify or switch electric current. This is the building block of all integrated circuits.
Volatile memory	Memory products which lose their data content when the power supply is switched off.
Wafer	Thin, round, flat piece of silicon that is the base of most integrated circuits.
8-inch wafer equivalents	Standard unit describing the equivalent amount of 8-inch wafers produced after conversion, used to quantify levels of wafer production for purposes of comparison. Figures of 8-inch wafer equivalents are derived by converting the number of wafers of all dimensions (e.g., 6-inch, 8-inch and 12-inch) into their equivalent figures for 8-inch wafers. 100 6-inch wafers are equivalent to 56.25 8-inch wafers. 100 12-inch wafers are equivalent to 225 8-inch wafers. <b>PART I</b>

## **ITEM 1. IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISERS** Not applicable.

**ITEM 2. OFFER STATISTICS AND EXPECTED TIMETABLE** Not applicable.

### ITEM 3. KEY INFORMATION

### A. Selected Financial Data

The selected balance sheet data as of December 31, 2010 and 2011 and the selected statements of income and cash flow data for the years ended December 31, 2009, 2010 and 2011 are derived from our audited consolidated financial statements included elsewhere in this annual report. The selected balance sheet data as of December 31, 2007, 2008 and 2009 and the selected statements of income and cash flow data for the years ended December 31, 2007 and 2008 are derived from our audited consolidated financial statements not included in this annual report.

Our financial statements have been prepared and presented in accordance with R.O.C. GAAP, which differs in many material respects from U.S. GAAP. For the discussion of these differences, see Note 35 to our audited consolidated financial statements included elsewhere in this annual report. Some of the items in the statements of income, cash flow and balance sheets have been reconciled to U.S. GAAP and are set forth below. The summary financial data set forth below should be read in conjunction with Item 5. Operating and Financial Review and Prospects and our financial statements and the notes to those statements included elsewhere in this annual report.

	2007 NT\$	2008 NT\$	Vear Ended D 2009 NT\$ except per sh	ecember 31, 2010 NT\$ aare and per A	2011 NT\$ ADS data)	l US\$
Consolidated Statement of Income Data:						
R.O.C. GAAP Net operating revenues	113,311	96,814	91,390	126.442	116,703	3,855
Cost of goods sold	(90,072)	(84,102)	(75,975)	(89,518)	(95,417)	(3,152)
e	(	(- , - ,	()	( ) )	()	(- / - /
Gross profit	23,239	12,712	15,415	36,924	21,286	703
Operating expenses:						
Sales and marketing	(4,069)	(3,483)	(2,800)	(2,566)	(3,369)	(111)
General and administrative	(3,724)	(3,055)	(2,724)	(3,598)	(3,342)	(111)
Research and development	(9,631)	(8,274)	(8,044)	(8,740)	(9,395)	(310)
Total operating expenses	(17,424)	(14,812)	(13,568)	(14,904)	(16,106)	(532)
Operating income (loss)	5,815	(2,100)	1,847	22,020	5,180	171
Net non-operating income (loss)	13,855	(19,886)	(174)	3,364	4,200	139
Income (Loss) before income tax and minority interests	19,670	(21,986)	1,673	25,384	9,380	310
Income tax expense	(2,809)	(997)	(651)	(1,606)	(913)	(30)
Extraordinary gain			649	68		
Net income (loss)	16,861	(22,983)	1,671	23,846	8,467	280
Attributable to:						
the Company	16,962	(22,320)	3,874	23,899	10,610	351
minority interests	(101)	(663)	(2,203)	(53)	(2,143)	(71)
Earnings (Losses) per share: <sup>(1)(2)</sup>						
Basic	1.03	(1.70)	0.31	1.91	0.84	0.03
Diluted <sup>(4)</sup>	1.00	(1.70)	0.30	1.87	0.81	0.03
Shares used in earnings (losses) per share calculation: <sup>(2)</sup>						
Basic	16,464	13,111	12,699	12,496	12,561	12,561
Diluted <sup>(4)</sup>	16,943	13,170	12,786	12,768	13,241	13,241
Earnings (Losses) per ADS: <sup>(2)</sup>						
Basic	5.15	(8.50)	1.55	9.55	4.20	0.15
Diluted <sup>(4)</sup>	5.00	(8.50)	1.50	9.35	4.05	0.15
U.S. GAAP						
Net operating revenues	113,311	96,814	91,390	126,442	116,703	3,855
Cost of goods sold	(92,012)	(85,923)	(76,209)	(89,929)	(95,594)	(3,158)
Operating income (loss)	(19,992)	(22,431)	(2,323)	21,394	2,573	85
Net income (loss)	(9,398)	(29,632)	364	23,544	6,605	218
Attributable to:	(0.0(1)	(00.055)	2.552	00 (1)	0.746	<b>2</b> 00
the Company	(9,264)	(28,955)	2,572	23,616	8,746	289
noncontrolling interests Other comprehensive income (loss) attributable to the Company	(134) (4,863)	(677) (25,239)	(2,208) 24,540	(72) (8,629)	(2,141) (9,551)	(71) (316)
Comprehensive income (loss) attributable to the Company	(14,127)	(23,239) (54,194)	24,340 27,112	(8,029) 14,987	(805)	(310)
	(= :,==;)	(= .,,)	,	,, 0,	(000)	(=.)
Earnings (Losses) per share: <sup>(1)(3)</sup>	(0.50)	(0.05)	0.01	1.01	0.71	0.02
Basic Diluted <sup>(4)</sup>	(0.63)	(2.25)	0.21	1.91	0.71	0.02
Diluted	(0.63)	(2.25)	0.20	1.90	0.68	0.02

Shares used in earnings (losses) per share calculation: <sup>(3)</sup>						
Basic	14,599	12,870	12,538	12,335	12,400	12,400
Diluted <sup>(4)</sup>	14,599	12,870	12,560	12,399	12,859	12,859
Earnings (Losses) per ADS: <sup>(3)</sup>						
Basic	(3.17)	(11.25)	1.03	9.57	3.53	0.12
Diluted <sup>(4)</sup>	(3.17)	(11.25)	1.02	9.52	3.40	0.11

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		Year Ended December 31,				
	2007	2008	2009	2010	2011	
	NT\$	NT\$	NT\$	NT\$	NT\$	US\$
		(in millions	, except per shar	e and per ADS	data)	
Consolidated Balance Sheet Data:						
R.O.C. GAAP	01 111	(0.000	100.000	02.7(0	04.050	0 777
Current assets	81,111	68,888	102,363	93,769	84,058	2,777
Long-term investment	69,813	32,441	55,227	47,179	38,574	1,274
Property, plant and equipment Total assets	137,219	108,410	89,596	132,762	149,324	4,933
Current liabilities	299,558	216,399	253,638	280,887	279,832 42,906	9,245
	45,357	13,033 8,130	35,246 767	45,445	,	1,417
Long-term debt (excluding current portion) Total liabilities	7,495 56,561		39,542	6,799	21,095 67,707	697 2,237
		24,740		55,751	,	
Stockholders equity U.S. GAAP	242,997	191,659	214,096	225,136	212,125	7,008
Cash and cash equivalents	47,678	40,017	54,413	51,034	49,062	1,621
Working capital <sup>(5)</sup>	35,111	55,525	67,162	48,322	41,109	1,358
Total assets	310,614	214,990	252,705	281,387	279,460	9,232
Total liabilities	56,795	24,099	39,465	56,264	68,820	2,273
Stockholders equity	253,819	190,891	213,240	225,123	210,640	6,959
		•	Year Ended Dec	ombor 31		
	2007	2008	2009	2010	2011	
	NT\$	NT\$	NT\$	NT\$	NT\$	US\$
		(in millions	, except per shar	e and per ADS	data)	
Other Consolidated Data:						
R.O.C. GAAP						
Cash flow:						
Capital expenditure	28,299	11,515	17,618	61,323	53,326	1,762
Cash provided by operating activities	48,124	45,251	32,422	53,495	41,654	1,376
Cash used in investing activities	(21,844)	(11,423)	(19,229)	(57,779)	(55,120)	(1,821)
Cash provided by (used in) financing activities	(72,694)	(34,380)	4,944	(10,174)	9,923	328
Net increase (decrease) in cash and cash equivalents	(46,175)	889	17,586	(14,882)	(2,201)	(73)
Gross profit margin	20.5%	13.1%	16.9%	29.2%	18.2%	18.2%
Operating profit (loss) margin	5.1%	(2.2)%	2.0%	17.4%	4.4%	4.4%
Net profit (loss) margin	15.0%	(23.0)%	4.2%	18.9%	9.1%	9.1%
Capacity utilization rate (on an actual basis)	81.9%	70.7%	69.4%	93.7%	78.6%	78.6%
Dividends declared per share <sup>(6)</sup>	0.7	1.2		0.5	1.11	0.04
U.S. GAAP						
Cash flow:						
Capital expenditure	28,299	11,515	17,618	61,323	53,326	1,762
Cash provided by operating activities	45,785	44,953	32,422	53,495	41,654	1,376
Cash provided by (used in) investing activities	10,360	(19,973)	(22,419)	(46,277)	(54,891)	(1,813)
Cash provided by (used in) financing activities	(70,354)	(34,081)	4,944	(10,174)	9,923	328
Net increase (decrease) in cash and cash equivalents	(13,971)	(7,661)	14,396	(3,379)	(1,971)	(65)
Gross profit margin	18.8%	11.3%	16.6%	28.9%	18.1%	18.1%
Operating profit (loss) margin	(17.6)%	(23.2)%	(2.5)%	16.9%	2.2%	2.2%
Net profit (loss) margin	(8.2)%	(29.9)%	2.8%	18.7%	7.5%	7.5%
	(0.21/0)	(29.91/0	2.0 /0	10.770	1.570	1.5%

(1) Earnings (Losses) per share is calculated by dividing net income (loss) by the weighted average number of shares outstanding during the year.

(2) Retroactively adjusted for all subsequent stock dividends; retroactively adjusted for employee stock bonus before 2008.

(3) Retroactively adjusted for the capital reduction completed in 2007 and all subsequent stock dividends.

(4) Diluted securities include convertible bonds and employee stock options, if any.

(5) Working capital equals current assets minus current liabilities.

(6) Dividends declared per share are in connection with earnings and accumulated additional paid-in capital.

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## **Currency Translations and Exchange Rates**

In portions of this annual report, we have translated New Taiwan dollar amounts into U.S. dollars for the convenience of readers. The rate we used for the translations was NT\$30.27 = US\$1.00, which was the noon buying rate as certified for customs purposes by the Federal Reserve Bank of New York on December 30, 2011. The translation does not mean that New Taiwan dollars could actually be converted into U.S. dollars at that rate. The following table shows the noon buying rates for New Taiwan dollars expressed in New Taiwan dollar per US\$1.00. On April 20, 2012, the noon buying rate was NT\$29.45 to US\$1.00.

	Average <sup>(1)</sup>	High	Low	At Period-End
2007	32.41	33.41	32.26	32.43
2008	31.51	33.58	29.99	32.76
2009	33.02	35.21	31.95	31.95
2010	31.50	32.43	29.14	29.14
2011	29.38	30.67	28.50	30.27
October	30.26	30.67	29.86	29.91
November	30.22	30.43	30.02	30.31
December	30.25	30.38	30.10	30.27
2012 (through April 20)	29.64	30.28	29.37	29.45
January	29.99	29.61	30.28	29.61
February	29.53	29.37	29.65	29.37
March	29.52	29.37	29.61	29.50
April (through 20)	29.49	29.55	29.45	29.45

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

(1) Determined by averaging the rates on the last business day of each month during the relevant period for annual periods and the rates on each business day for monthly periods.

### **B.** Capitalization and Indebtedness

Not applicable.

## C. Reasons for the Offer and Use of Proceeds

Not applicable.

## D. Risk Factors

Our business and operations are subject to various risks, many of which are beyond our control. If any of the risks described below actually occurs, our business, financial condition or results of operations could be seriously harmed.

## **Risks Related to Our Business and Financial Condition**

# A global recession and credit crisis may cause significant disruptions to our major customers businesses as well as to their ability to access sources of liquidity. Demand for our products has been, and will continue to be, adversely affected by overall macroeconomic conditions.

Although the worldwide economic outlook began to improve in 2009, there have still been concerns that many large economies, such as those in North America and Europe, may experience another recession in the near future. The sovereign debt crisis in Europe and political unrest in the Middle East and Asia could have a material adverse effect on the global macroeconomic situation. Should recession or disruption in these markets occur, the result may reverberate, triggering global recession and/or financial crisis. A global recession and credit crisis could have significant negative impact on our businesses. Our key markets and our targeted markets, including the United States and China, as well as other national economics, may enter a period of economic contraction or significantly slower economic growth in a global recession. In particular, a global economic crisis, weak consumer confidence, diminished consumer and business spending, and asset depreciation may contribute to a significant slowdown in the market demand for semiconductors and semiconductor-based end-products, which may lead to a decrease in demand for our services. The combined effects of a global recession may have a material adverse impact on our results of operations, cash flows and financial condition, which may cause the price of our ADSs to decline.

In addition, many of our customers may experience difficulty in obtaining credit in a deteriorating economic environment, and even if they are able to obtain credit, the cost of such financing may increase and/or the time necessary to arrange such financing may be substantially prolonged. This lack of and increase in the cost of financing could have a material adverse effect on the financial condition of our customers. A protracted disruption in the ability of our customers to access sources of liquidity could cause serious disruptions to or an overall deterioration in their businesses, which could lead to the inability or failure on their part to meet their payment obligations to us.

# The seasonality and cyclical nature of the semiconductor industry and periodic overcapacity make us particularly vulnerable to significant and sometimes prolonged economic downturns.

The semiconductor industry has historically been highly cyclical and, at various times, has experienced significant downturns. Since most of our customers operate in semiconductor-related industries, variations in order levels from our customers can result in volatility in our revenues and earnings. Because our business is, and will continue to be, largely dependent on the requirements of semiconductor companies for our services, downturns in the semiconductor industry will lead to reduced demand for our services.

Our net operating revenues are also typically affected by seasonal variations in market conditions that contribute to the fluctuation of the average selling prices of semiconductor services and products. The seasonal sales trends for semiconductor services and products closely mirror those for consumer electronics, communication and computer sales. We generally experience seasonal lows in the demand for semiconductor services and products during the first half of the year, primarily as a result of inventory correction by our customers. Any change in the general seasonal variations, which we cannot anticipate, may result in materially adverse effects on our revenues, operations and businesses.

### Our operating results fluctuate from quarter to quarter, which makes it difficult to predict our future performance.

Our revenues, expenses and results of operations have varied significantly in the past and may fluctuate significantly from quarter to quarter in the future due to a number of factors, many of which are beyond our control. Our business and operations have at times in the past been negatively affected by, and are expected to continue to be subject to the risk of, the following factors:

the seasonality and cyclical nature of both the semiconductor industry and the markets served by our customers;

our customers adjustments in their inventory;

the loss of a key customer or the postponement of orders from a key customer;

the rescheduling and cancellation of large orders;

our ability to obtain equipment, raw materials, electricity, water and other required utilities on a timely and economic basis;

outbreaks of contagious diseases, including severe acute respiratory syndrome, avian flu and swine flu;

environmental events, such as fires and earthquakes, or industrial accidents; and

#### technological changes.

Due to the factors noted above and other risks discussed in this section, many of which are beyond our control, you should not rely on quarter-to-quarter comparisons to predict our future performance. Unfavorable changes in any of the above factors may seriously harm our business, financial condition and results of operations. In addition, our operating results may be below the expectations of public market analysts and investors in some future periods. In this event, the price of the shares or ADSs may underperform or fall.

# A decrease in demand for or selling prices of communication devices, consumer electronics and computer goods may decrease the demand for our services and reduce our margins.

Our customers generally use the semiconductors produced in our fabs in a wide variety of applications. We derive a significant percentage of our operating revenues from customers who use our manufacturing services to make semiconductors for communication devices, consumer electronics, PCs and other computers. The semiconductor industry experienced several downturns due to recent major financial crises and natural disasters. These downturns resulted in a reduced demand for our services and hence decreased our revenues and earnings. Any significant decrease in the demand for communication devices, consumer electronics, PCs or other computers may further decrease the demand for our services. In addition, if the average selling prices of communication devices, consumer electronics, PCs or other computers decline significantly, we will be pressured to further reduce our selling prices, which may reduce our revenues and, therefore, reduce our margins significantly. As demonstrated by downturns in demand for high technology products in the past, market conditions can change rapidly, without apparent warning or advance notice. In such instances, our customers will experience inventory buildup and/or difficulties in selling their products and, in turn, will reduce or cancel orders for wafers from us. The timing, severity and recovery of these downturns cannot be predicted accurately or at all. When they occur, our business, profitability and price of the shares and ADSs are likely to suffer.

#### Overcapacity in the semiconductor industry may reduce our revenues, earnings and margins.

The prices that we can charge our customers for our services are significantly related to the overall worldwide supply of integrated circuits and semiconductor products. The overall supply of semiconductor products is based in part on the capacity of other companies, which is outside of our control. For example, in light of the current market conditions, some companies, including our largest competitors, have announced plans to increase capacity expenditures significantly. We believe such plans, if carried out as planned, will increase the industry-wide capacity and are likely to result in overcapacity in the future. In periods of overcapacity, if we are unable to offset the adverse effects of overcapacity through, among other things, our technology and product mix, we may have to lower the prices we charge our customers for our services and/or we may have to operate at significantly less than full capacity. Such actions could reduce our margin and weaken our financial condition and results of operations. We cannot give any assurance that an increase in the demand for foundry services in the future will not lead to overcapacity in the near future, which could materially adversely affect our revenues, earnings and margins.

### Any problem in the semiconductor outsourcing infrastructure can adversely affect our net operating revenues and profitability.

Many of our customers depend on third parties to provide mask tooling, assembly and test services. If these customers cannot timely obtain these services on reasonable terms, they may not order any foundry services from us. This may significantly reduce our net operating revenues and negatively affect our profitability.

#### We may be unable to implement new technology as it becomes available, which may result in our loss of customers and market share.

The semiconductor industry is developing rapidly and the related technology is constantly evolving. If we do not anticipate the technology evolution and rapidly adopt new and innovative technology, we may not be able to produce sufficiently advanced services at competitive prices. There is a risk that our competitors may adopt new technology before we do, resulting in our loss of market share. If we are unable to begin offering advanced services and processes on a competitive and timely basis, we may lose customers to our competitors providing similar technologies, which may cause our net operating revenues to decline unless we can replace lost customers with new customers.

### We may be unable to provide leading technology to our customers if we lose the support of our technology partners.

Enhancing our manufacturing process technologies is critical to our ability to provide services for our customers. We intend to continue to advance our process technologies through internal research and development and alliances with other companies. Although we have an internal research and development team focused on developing new and improved semiconductor manufacturing process technologies, we are also dependent on some of our technology partners to advance certain process technology portfolios. In addition, we currently have patent cross-licensing agreements with several companies, including LSI Logic Corporation, or LSI, and International Business Machines Corporation, or IBM. Some mask and equipment vendors also supply our technology development teams with masks and equipment needed to develop more advanced processing technologies. If we are unable to continue any of our joint development arrangements, patent cross-licensing agreements and other agreements, on mutually beneficial economic terms, if we re-evaluate the technological and economic benefits of such relationships, if we are unable to enter into new technology alliances and arrangements with other leading and specialty semiconductor companies, or if we fail to secure masks and equipment from our vendors in a timely manner sufficient to support our ongoing technology development, we may be unable to continue providing our customers with leading edge mass-producible process technologies and may, as a result, lose important customers, which would have a materially adverse effect on our businesses, results of operations and financial condition.

In addition, some of our customers rely upon third party vendors, or IP Vendors, for the intellectual property they embed into their designs. Although we work and collaborate with IP Vendors with respect to such matters, there can be no guarantee that we will be successful or that the vendors will deliver according to our requirements or the needs of our customers. Failures to meet the targets or to deliver on a timely basis could cause customers to cancel orders and/or shift capacity to other suppliers.

### Our business may suffer if we cannot compete successfully in our industry.

The worldwide semiconductor foundry industry is highly competitive. We compete with dedicated foundry service providers such as Taiwan Semiconductor Manufacturing Company Limited, Semiconductor Manufacturing International (Shanghai) Corporation and Globalfoundries Inc., as well as the foundry operation services of some integrated device manufacturers, such as IBM, Intel, Samsung Electronics, or Samsung, and Toshiba Corporation, or Toshiba. Integrated device manufacturers principally manufacture and sell their own proprietary semiconductor Manufacturing Corp., X-FAB Semiconductors Foundries AG and Silterra Malaysia Sdn. Bhd. have initiated efforts to expand and develop substantial additional foundry capacity. New entrants and consolidations in the foundry business, such as the acquisition of Chartered Semiconductor by Globalfoundries in 2009, are likely to initiate a trend of competitive pricing and create potential overcapacity in legacy technology. Some of our competitors have greater access to capital and substantially greater production, research and development, marketing and other resources than we do. As a result, these companies may be able to compete more aggressively over a longer period of time than we can.

The principal elements of competition in the wafer foundry market include:

technical competence;

time-to-volume production and cycle time;

time-to-market;

research and development quality;

available capacity;

manufacturing yields;

customer service and design support;

price;

management expertise; and

strategic alliances.

Our ability to compete successfully also depends on factors partially outside of our control, including product availability, intellectual property, or IP, including cell libraries that our customers embed in their product designs, and industry and general economic trends. If we cannot compete successfully in our industry, our business may suffer.

### We may not succeed in our efforts to acquire operations in China and Japan.

R.O.C. law prohibits Taiwan entities from investment in mainland China-based semiconductor manufacturers without government approval. In March 2005, the Chairman of Infoshine Technology Limited, or Infoshine, the holding company which owned 100% of Hejian Technology (Suzhou) Co., Ltd., or Hejian, a semiconductor manufacturer owning an 8-inch fab in Suzhou, China, offered us 15% interest in Infoshine. Immediately after we received the offer, we filed an application with the Investment Commission of the R.O.C. Ministry of Economic Affairs, or the R.O.C. MOEA, for its executive guidance and disclosed our receipt of this offer to the investors and the public.

On April 29, 2009, our Board of Directors approved a proposed acquisition at their 19th session of the board meeting. Pursuant to the merger agreement, we proposed to pay the foreign owner of Infoshine stocks at the purchase price through a combination of issuance of securities in our company or in cash. In June 2009, our stockholders approved our proposed acquisition of Infoshine at our stockholders meeting. Upon consummation of the acquisition: (i) our company would be the surviving corporation; (ii) Infoshine would cease its corporate existence; (iii) all the assets and liabilities of Infoshine, along with its rights and obligations, would be assumed by our company in accordance with applicable laws; and (iv) with the previous proposed acquisition of 15% interest in Infoshine, our company would have obtained full ownership of Hejian. Consummation of the acquisition and the realization of the 15% interest were however subject to the approval of the governmental authorities. Subsequent to our proposal, an investment regulation governing foreigners holdings of Taiwanese securities, along with restrictions from the amended Operating Rules of the Taiwan Stock Exchange Corporation for issuing new shares to acquire foreign unlisted companies, precluded

the issuance of common shares or ADR as exclusive payment options. Furthermore, Hejian s stockholders did not agree to accept cash-only payments. After considering contractual timeliness and changes of the overall environment after signing of the contract, our Board of Directors resolved at a meeting on November 18, 2010 to terminate the acquisition agreement and issued a termination notice in accordance with that agreement.

On March 16, 2011, our Board of Directors proposed an offer to the stockholders of Best Elite International Limited, a British Virgin Islands corporation, or Best Elite, which owns 100% of the shares of Infoshine, thereby to obtain additional 30% ownership of Hejian by share purchase. We received approval from the Investment Commission, Ministry of Economic Affairs, Executive Yuan to acquire the stake of Best Elite International Limited, the holding company of Hejian. The acquisition includes the 15.3% stake in trustee, plus an additional 20.4% through cash acquisition. As of March 31, 2012, we have acquired 35.03% of the shares in Best Elite.

To continue searching for further integration, on April 25, 2012, our Board of Directors proposed an offer to the stockholders of Best Elite, thereby to obtain 64.97% stake of Best Elite by share purchase, subject to approval by R.O.C. governmental authorities. However, we can not assure you that we will be able to successfully consummate the acquisition of Best Elite or Hejian.

In October 2009, our board of directors decided to obtain the common stock, preemptive rights and stock acquisition rights in UMC Japan, or UMCJ, through a tender offer to be made by our 100% owned subsidiary, Alpha Wisdom Limited, or AWL. After the tender offer which was held from October 29, 2009 to December 14, 2009, 403,368 shares of UMCJ were purchased, and we and AWL together held 94.79% of UMCJ shares. UMCJ then delisted from the Jasdaq Securities Exchange in accordance with its listing rules on March 19, 2010.

Since not all of the outstanding equity securities of UMCJ were acquired in the tender offer, we initiated certain squeeze-out procedures as provided in the Japanese Companies Act. Pursuant to such procedures, as of the end of 2010, we, together with AWL, owned 100% of UMCJ. On May 19, 2011, we acquired the remaining shares of UMCJ from AWL, and AWL filed for liquidation on August 30, 2011.

One of the former stockholders of UMCJ challenged the acquisition price and filed an action for appraisal rights under Japanese law. An action for appraisal rights would not enjoin or hinder the acquisition, as the shareholder would only be eligible to obtain additional compensation if the action is successful. On August 25, 2011, the Japanese courts finally denied the action for appraisal rights, thereby closing the case in favor of UMC and UMCJ.

We compete for business on a global basis, and we believe it is necessary to establish and develop operations in multiple strategic geographic regions. We cannot assure you that the mergers and acquisitions we have undertaken will be closed successfully or that they will be fully closed on the terms we proposed. The failure to close these transactions or the failure to close them on terms as favorable as we have entered into and announced may impair our ability to realize the benefits we intend to achieve and have a material and adverse effect on our operations and business.

### We may not be able to successfully integrate the operations to be acquired in Japan with our global activities.

Even after we successfully close the acquisition of UMCJ, we may not be able to integrate their operations with our current operations in accordance with the manners or the schedule or under the economic conditions we plan or target. In order to realize the benefits we expect from these transactions, we need to integrate the operations of the acquired facilities with our current facilities. Our ability to integrate the operations and facilities of UMCJ is dependent upon a number of factors, including:

technical competence of UMCJ;

management and engineering abilities of UMCJ;

our ability to adapt UMCJ to our processes, practices and management approaches;

our ability to optimize the process, equipment, capacity, customer and technology mix in our global operations;

communication and coordination between different locations; and

cultural compatibility.

Failure to successfully integrate the operations of UMCJ in the time frame we plan, or at all, will adversely affect the benefits we expect to enjoy and may have material adverse effects on our business and operations.

Our profit margin may substantially decline if we are unable to continuously improve our manufacturing yields, maintain high capacity utilization and optimize the technology mix of our silicon wafer production.

Our ability to maintain our profitability depends, in part, on our ability to:

maintain our capacity utilization, that is, the wafer-out quantity of 8-inch wafer equivalents divided by estimated total 8- inch equivalent capacity in a specified period. The estimated capacity numbers may differ depending upon equipment delivery schedules, pace of migration to more advanced process technologies and other factors affecting production ramp-ups;

maintain or improve our manufacturing yield, that is, the percentage of usable manufactured devices on a wafer; and

optimize the technology mix of our production, that is, the relative number of wafers manufactured utilizing different process technologies.

Our manufacturing yields directly affect our ability to attract and retain customers, as well as the price of our services. Our capacity utilization affects our operating results because a large percentage of our operating costs are fixed. Our technology mix affects utilization of our equipment and process technologies, as well as the prices we can charge, either of which can affect our margins. If we are unable to continuously improve our manufacturing yields, maintain high capacity utilization or optimize the technology mix of our wafer production, our profit margin may substantially decline.

## We may not be able to implement our planned growth if we are unable to obtain the financing necessary to fund the substantial capital expenditures we expect to incur.

Our business and the nature of our industry require us to make substantial capital expenditures leading to a high level of fixed costs. We expect to incur significant capital expenditures in connection with our growth plans. These capital expenditures will be made in advance of any additional sales to be generated by new or upgraded fabs as a result of these expenditures. Given the fixed-cost nature of our business, we have in the past incurred, and may in the future incur, operating losses if our revenues do not adequately offset our capital expenditures. Additionally, our actual expenditures may exceed our planned expenditures for a variety of reasons, including changes in:

our growth plan;

our process technology;

market conditions;

interest rates;

exchange rate fluctuations; and

prices of equipment.

We cannot assure you that additional financing will be available on satisfactory terms, if at all. If adequate funds are not available on satisfactory terms, we may be forced to curtail our expansion plans or delay the deployment of our services, which could result in a loss of customers and limit the growth of our business.

## We depend on a small number of customers for a significant portion of our net operating revenues and a loss of some of these customers would result in the loss of a significant portion of our net operating revenues.

We have been largely dependent on a small number of customers for a substantial portion of our business. In 2011, our top ten customers accounted for 60.3% of our net operating revenues. We expect that we will continue to be dependent upon a relatively limited number of customers for a significant portion of our net operating revenues. We cannot assure you that our net operating revenues generated from these customers, individually or in the aggregate, will reach or exceed historical levels in any future period. Loss or cancellation of business from significant changes in scheduled deliveries to, or decreases in the prices of services sold to, any of these customers could significantly reduce our net operating revenues.

## Our customers generally do not place purchase orders far in advance, which makes it difficult for us to predict our future revenues, adjust production costs and allocate capacity efficiently on a timely basis.

Our customers generally do not place purchase orders far in advance. In addition, due to the cyclical nature of the semiconductor industry, our customers purchase orders have varied significantly from period to period. As a result, we do not typically operate with any significant backlog, except in periods of extreme capacity shortage such as that experienced in late 2009 and early 2010. The lack of significant backlog and the unpredictable length and timing of semiconductor cycles make it difficult for us to forecast our revenues in future periods. Moreover, our expense levels are based in part on our expectations of future revenues and we may be unable to adjust costs in a timely manner to compensate for revenue shortfalls. We expect that in the future our net operating revenues in any quarter will continue to be substantially dependent upon purchase orders received in that quarter.

### Our inability to obtain, preserve and defend intellectual property rights could harm our competitive position.

Our ability to compete successfully and achieve future growth will depend, in part, on our ability to protect our proprietary technology and to secure critical processing technology that we do not own at commercially reasonable terms. We cannot assure you that in the future we will be able to independently develop, or secure from any third party, the technology required for upgrading our production facilities or for meeting our customer needs. Our failure to successfully obtain such technology may seriously harm our competitive position.

Our ability to compete successfully also depends on our ability to operate without infringing on the proprietary rights of others. We have no means of knowing what patent applications have been filed in the United States or in certain other countries until months after they are filed. The semiconductor industry, because of the complexity of the technology used and the multitude of patents, copyrights and other overlapping intellectual property rights, is characterized by frequent litigation regarding patent, trade secret and other intellectual property rights. It is common for patent owners to assert their patents against semiconductor manufacturers. We have received from time to time communications from third parties asserting patents that cover certain of our technologies and alleging infringement of intellectual property rights of others, and we expect to continue to receive such communications in the future. See Item 4. Information on the Company B. Business Overview Litigation for more details of our ongoing litigation. In the event any third party was to make a valid claim against us or against our customers, we could be required to:

seek to acquire licenses to the infringed technology which may not be available on commercially reasonable terms, if at all;

discontinue using certain process technologies, which could cause us to stop manufacturing certain semiconductors;

pay substantial monetary damages; and/or

#### seek to develop non-infringing technologies, which may not be feasible.

Any one of these developments could place substantial financial and administrative burdens on us and hinder our business. Litigation, which could result in substantial costs to us and diversion of our resources, may also be necessary to enforce our patents or other intellectual property rights or to defend us or our customers against claimed infringement of the rights of others. If we fail to obtain necessary licenses or if litigation relating to patent infringement or other intellectual property matters occurs, it could hurt our reputation as a technology leader in our industry and prevent us from manufacturing particular products or applying particular technologies, which could reduce opportunities to generate

revenues.

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## Our company was fined for violations of the Act Governing Relations Between Peoples of the Taiwan Area and the Mainland Area in connection with our alleged involvement in the operation of Hejian.

Hejian, a semiconductor manufacturer in Suzhou, China, was set up in December 2001. Soon after the establishment of Hejian, various rumors circulated that Hejian was set up by us. We immediately denied these rumors and clarified that we did not provide any capital nor did we transfer any technology to Hejian.

Our company was found by the R.O.C. MOEA to be in violation of the Act Governing Relations Between Peoples of the Taiwan Area and the Mainland Area and fined in the amount of NT\$5 million for an alleged illegal investment in Hejian. Our appeal to the R.O.C. MOEA in relation to such fines was denied in late 2006. We filed an administrative lawsuit in December 2006 with the Taipei Administrative High Court to challenge the R.O.C. MOEA fine. In July 2007, the Taipei Administrative High Court revoked the R.O.C. MOEA s decision and ruled in our favor. In August 2007, the R.O.C. MOEA filed an appeal with the Supreme Administrative Court. On December 10, 2009, the Supreme Administrative lawsuit. On July 21, 2010, the Taipei High Court ruled against us and we appealed to the Supreme Administrative Court on August 23, 2010. The Supreme Administrative Court rejected our appeal on December 19, 2011 and ruled against us. Since we already paid the fine on January 29, 2007, the case has been closed.

### Our operations and business will suffer if we lose one or more of our key personnel without adequate replacements.

Our future success to a large extent depends on the continued service of our Chairman and key executive officers. We do not carry key person insurance on any of our personnel. If we lose the services of any of our Chairman or key executive officers, it could be difficult to find and integrate replacement personnel in a short period of time, which could harm our operations and the growth of our business.

### We may have difficulty attracting and retaining skilled employees, who are critical to our future success.

The success of our business depends upon attracting and retaining experienced executives, engineers and other employees to implement our strategy. The competition for skilled employees is intense. We expect demand for personnel in Taiwan to increase in the future as new wafer fabrication facilities and other businesses are established in Taiwan. We also expect demand for experienced personnel in other locations to increase significantly as our competitors establish and expand their operations. Some of our competitors are willing to offer better compensation than that we do to our executives, engineers and other employees. We do not have long-term employment contracts with any of our employees. If we were unable to retain our existing personnel or attract, assimilate and recruit new experienced personnel in the future, it could seriously disrupt our operations and delay or restrict the growth of our business.

#### Our transactions with affiliates and stockholders may hurt our profitability and competitive position.

We have provided foundry services to several of our affiliates and stockholders. These transactions were conducted on an arm s- length basis. We currently do not provide any preferential treatment to any of these affiliates and stockholders. However, we may in the future reserve or allocate our production capacity to these companies if there is a shortage of foundry services in the market to enable these companies to maintain their operations and/or to protect our investments in them. This reservation or allocation may reduce our capacity available for our other customers, which may damage our relationships with other customers and discourage them from using our services. This may hurt our profitability and competitive position.

### The differences between R.O.C. and U.S. accounting standards affect the amount of our net income.

Our financial statements are prepared under R.O.C. GAAP, which differ in certain significant respects from U.S. GAAP. For a discussion of these differences, see Note 35 to our audited consolidated financial statements included elsewhere in this annual report. As a result, our net income attributable to us in 2009, 2010 and 2011 under U.S. GAAP was NT\$2,572 million, NT\$23,616 million and NT\$8,746 million (US\$289 million), respectively, as compared to net income attributable to us under R.O.C. GAAP of, NT\$3,874 million, NT\$23,899 million and NT\$10,610 million (US\$351 million) in 2009, 2010 and 2011, respectively.

## The trend of adopting protectionist measures in certain countries, including the United States, could have a material adverse impact on our results of operations and financial condition.

Governments in the United States, China and certain other countries have implemented fiscal and monetary programs to stimulate economic growth as a result of the recent economic downturn, and many of these programs include protectionist measures that encourage the use of domestic products and labor. Recent policy developments by the governments in China and elsewhere also suggest an increased unwillingness to allow international companies to invest in or acquire local businesses. Since many of our direct customers and other downstream customers in the supply chain are located in or have operations in the countries where protectionist measures were adopted, such protectionist measures may have a material adverse effect on demand for our manufacturing services.

# Any future outbreak of contagious diseases may materially and adversely affect our business and operations, as well as our financial condition and results of operations.

Any future outbreak of contagious diseases, such as avian or swine influenza or severe acute respiratory syndrome, may disrupt our ability to adequately staff our business and may generally disrupt our operations. If any of our employees is suspected of having contracted any contagious disease, we may under certain circumstances be required to quarantine such employees and the affected areas of our premises. Therefore, we may have to temporarily suspend part of or all of our operations. Furthermore, any future outbreak may restrict the level of economic activity in affected regions, including Taiwan, and affect the willingness and ability of our employees and customers to travel, which may also adversely affect our business and prospects. As a result, we cannot assure you that any future outbreak of contagious diseases would not have a material adverse effect on our financial condition and results of operations.

### **Risks Relating to Manufacturing**

# Our manufacturing processes are highly complex, costly and potentially vulnerable to impurities and other disruptions that can significantly increase our costs and delay product shipments to our customers.

Our manufacturing processes are highly complex, require advanced and costly equipment and are continuously being modified to improve manufacturing yields and product performance. Impurities or other difficulties in the manufacturing process or defects with respect to equipment or supporting facilities can lower manufacturing yields, interrupt production or result in losses of products in process. As system complexity has increased and process technology has become more advanced, manufacturing tolerances have been reduced and requirements for precision have become even more demanding. Although we have been enhancing our manufacturing capabilities and efficiency, from time to time we have experienced production difficulties that have caused delivery delays and quality control problems, as is common in the semiconductor industry. In the past we have encountered the following problems:

capacity constraints due to changes in product mix or the delayed delivery of equipment critical to our production, including scanners, steppers and chemical stations;

construction delays during expansions of our clean rooms and other facilities;

difficulties in upgrading or expanding existing facilities;

manufacturing execution system or automatic transportation system failure;

unexpected breakdowns in our manufacturing equipment and/or related facilities;

changing or upgrading our process technologies;

raw materials shortages and impurities; and

delays in delivery and shortages of spare parts and in maintenance for our equipment and tools Should these problems repeat, we may suffer delays in delivery and/or loss of business and revenues. In addition, we cannot guarantee that we will be able to increase our manufacturing capacity and efficiency in the future to the same extent as in the past.

## We may have difficulty in ramping up production in accordance with our schedule, which could cause delays in product deliveries and decreases in manufacturing yields.

As is common in the semiconductor industry, we have from time to time experienced difficulties in ramping up production at new or existing facilities or effecting transitions to new manufacturing processes. As a result, we have suffered delays in product deliveries or reduced manufacturing yields. We may encounter similar difficulties in connection with:

the migration to more advanced process technologies, such as 45/40 and 28 nanometer process technology;

the joint development with vendors for more powerful tools (both in production and inspection) needed in the future to meet advanced process technology requirements; and

## the adoption of new materials in our manufacturing processes.

We may face construction delays, interruptions, infrastructure failure and delays in upgrading or expanding existing facilities, or changing our process technologies, any of which might adversely affect our production schedule. Our failure to achieve our production schedule could delay the time required to recover our investments and seriously affect our profitability.

## Our production schedules could be delayed and we may lose customers if we are unable to obtain raw materials and equipment in a timely manner.

We depend on our suppliers for raw materials. To maintain competitive manufacturing operations, we must obtain from our suppliers, in a timely manner, sufficient quantities of quality materials at acceptable prices. Although we source our raw materials from several suppliers, a small number of these suppliers account for a substantial amount of our supply of raw materials because of the consistent quality of these suppliers goods. For example, in 2011, we purchased a majority of our silicon wafers from four makers, Shin-Etsu Handotai Corporation, or Shin-Etsu, Siltronic AG, MEMC Corporation and Sumco Group (including Sumco Corporation and Formosa Sumco Technology Corporation). We may have long-term contracts with most of our suppliers if necessary. From time to time, our suppliers have extended lead time or limited the supply of required materials to us because of capacity constraints. Consequently, from time to time, we have experienced difficulty in obtaining the quantities of raw materials we need on a timely basis.

In addition, from time to time we may reject materials that do not meet our specifications, resulting in declines in output or manufacturing yields. We cannot assure you that we will be able to obtain sufficient quantities of raw materials and other supplies in a timely manner. If the supply of materials is substantially diminished or if there are significant increases in the costs of raw materials, we may be forced to incur additional costs to acquire sufficient quantities of raw materials to sustain our operations, which may increase our marginal costs and reduce profitability.

We also depend on a limited number of manufacturers and vendors that make and maintain the complex equipment we use in our manufacturing processes. We also rely on these manufacturers and vendors to improve our technology to meet our customers demands as technology improves. In periods of unpredictable and highly diversified market demand, the lead time from order to delivery of this equipment can be as long as six to twelve months. If there are delays in the delivery of equipment or in the availability or performance of necessary maintenance, or if there are increases in the cost of equipment, it could cause us to delay our introduction of new manufacturing capacity or technologies and delay product deliveries, which may result in the loss of customers and revenues.

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## We may be subject to the risk of loss due to fire because the materials we use in our manufacturing processes are highly flammable.

We use highly flammable materials such as silane and hydrogen in our manufacturing processes and may therefore be subject to the risk of loss arising from fires. The risk of fire associated with these materials cannot be completely eliminated. We maintain insurance policies to reduce losses caused by fire, including business interruption insurance. While we believe that our insurance coverage for damage to our property and business interruption due to fire is consistent with semiconductor industry practice, our insurance coverage is subject to deductibles and self-insured retention and may not be sufficient to cover all of our potential losses. If any of our fabs were to be damaged or cease operations as a result of a fire, it would temporarily reduce manufacturing capacity and reduce revenues.

# We and many of our customers and suppliers are vulnerable to natural disasters and other events outside of our control, which may seriously disrupt our operations.

Most of our assets and many of our customers and suppliers are located in certain parts of Taiwan. Our operations and the operations of our customers and suppliers are vulnerable to earthquakes, floods, droughts, power losses and similar events that affect the locations of our operations. The occurrence of any of these events could interrupt our services and cause severe damages to wafers in process, or cause significant business interruptions. Although we maintain property damage and business interruption insurance for such risks, there is no guarantee that future damages or business loss from earthquakes will be covered by such insurance, that we will be able to collect from our insurance carriers, should we choose to claim under our insurance policies, or that such coverage will be sufficient. In addition, our manufacturing facilities have occasionally experienced insufficient power supplies, and our operations have been disrupted.

# Our operations may be delayed or interrupted and our business could suffer if we violate environmental, safety and health, or ESH, regulations.

The semiconductor manufacturing process requires the use of various gases, chemicals, hazardous materials and other substances such as solvents and sulfuric acid which may have an impact on the environment. We are always subject to ESH regulations, and a failure to manage the use, storage, transportation, emission, discharge, recycling or disposal of raw materials or to comply with these ESH regulations could result in (i) regulatory penalties, fines and other legal liabilities, (ii) suspension of production or delays in operation and capacity expansion, (iii) a decrease in our sales, (iv) an increase in pollution cleaning fees and other operation costs, or (v) damage to our public image, any of which could harm our business. In addition, as ESH regulations are becoming more comprehensive and stringent, we may incur a greater amount of capital expenditures in technology innovation and materials substitution in order to comply with such regulations, which may adversely affect our results of operations.

### Climate change may negatively affect our business.

There is increasing concern that climate change is occurring and may have dramatic effects on human activity without aggressive remediation steps. A modest change in temperature would result in increased coastal flooding, changing precipitation patterns and increasing risk of extinction for the world s species. Public expectations for reductions in greenhouse gas emissions could result in increased energy, transportation and raw material costs.

Scientific examination of, political attention to and rules and regulations on issues surrounding the existence and extent of climate change may result in an increase in the cost of production due to increase in the prices of energy and introduction of energy or carbon tax. Various regulatory developments have been introduced that focus on restricting or managing emissions of carbon dioxide, methane and other greenhouse gases. Enterprises may need to purchase at higher costs emission credits, new equipment or raw materials with lower carbon footprints. These developments and further legislation that is likely to be enacted could affect our operations negatively. Changes in environmental regulations, such those on the use of perfluorinated compounds, could increase our production costs, which could adversely affect our results of operation and financial condition.

In addition, more frequent droughts and floods, extreme weather conditions and rising sea levels could occur due to climate change. The impact of such changes could be significant as most of our factories are located in islands including Taiwan and Singapore. For example, transportation suspension caused by extreme weather conditions could harm the distribution of our products. Similarly, our operations depend upon adequate supplies of water, and extended or serious droughts may affect our ability to obtain adequate supplies of water and threaten our production. We cannot predict the economic impact, if any, of disasters or climate change.

### Disruptions in the international trading environment may seriously decrease our international sales.

A substantial portion of our net operating revenues is derived from sales to customers located in countries other than Taiwan, Singapore and Japan where our fabs are located, which accounted for 37.4%, 35.5%, and 40.2% in 2009, 2010 and 2011, respectively, of our net operating revenues. We expect sales to customers outside of Taiwan, Singapore and Japan to continue to represent a significant portion of our net operating revenues. The success and profitability of our international activities depend on certain factors beyond our control, such as general economic conditions, labor conditions, political stability, tax laws, import duties and foreign exchange controls of the countries in which we sell our products, and the political and economic relationships between Taiwan, Singapore, Japan and these countries. As a result, our manufacturing services will continue to be vulnerable to disruptions in the international trading environment, including adverse changes in foreign government regulations, political unrest and international economic downturns.

These disruptions in the international trading environment affect the demand for our manufacturing services and change the terms upon which we provide our manufacturing services overseas, which could seriously decrease our international sales.

### Political, Economic and Regulatory Risks

# We face substantial political risks associated with doing business in Taiwan, particularly due to the tense relationship between the R.O.C. and the People s Republic of China, or the PRC, that could negatively affect the value of your investment.

Our principal executive offices and most of our assets and operations are located in Taiwan. Accordingly, our business, financial condition and results of operations and the market price of our shares and the ADSs may be affected by changes in R.O.C. governmental policies, taxation, inflation or interest rates and by social instability and diplomatic and social developments in or affecting Taiwan which are outside of our control. Taiwan has a unique international political status. Since 1949, Taiwan and the Chinese mainland have been separately governed. The PRC claims that it is the sole government in China and that Taiwan is part of China. Although significant economic and cultural relations have been established between the R.O.C. and the PRC in the past few years, such as the adoption of the Economic Cooperation Framework Agreement and memorandum regarding cross-straight financial supervision, we cannot assure you that relations between the R.O.C. and PRC will not become strained again. For example, the PRC government has refused to renounce the use of military force to gain control over Taiwan move to gain independence from the PRC. Past developments in relations between the R.O.C. and the PRC as developments in relations between the R.O.C. and the PRC reunification efforts between the R.O.C. and the PRC. Relations between the R.O.C. and the PRC and other factors affecting military, political or economic conditions in Taiwan could materially and adversely affect our financial condition and results of operations, as well as the market price and the liquidity of our securities.

# Our business, financial condition and results of operations have been affected by the global financial and economic crisis and may be further affected.

We and our customers rely on the strength of the global economy and global financial markets. We face risks attendant to changes in customer demand in semiconductor industry, economic environments, changes in interest rates and instability in securities markets around the world, among other factors. The adverse economic conditions have affected and may continue to affect customer spending generally, which will result in decreases in demand for our manufacturing services and have an adverse affect on our results of operations. For example, beginning in 2008, the United States, Europe and international markets have experienced a significant decline in economic activity that has affected the semiconductor market. As a result, we were also severely affected by the financial and economic crisis. The crisis adversely affected our business and results of operations. In addition, the current European debt crisis and related financial restructuring efforts in Europe, including in Greece, Italy, Spain, Portugal and Ireland, are contributing to instability in global financial markets, which adversely affects consumer confidence, the cost of borrowing and economic activity. Similarly, disruptions from political instability in such regions as the Middle East and North Korea, could trigger instability in global financial markets with similar adverse effects. As our business is significantly dependent on economic growth, if global macroeconomic conditions remain uncertain or deteriorate further, our financial condition and results of operations could be materially adversely affected.

## Our business depends on the support of the R.O.C. government, and a decrease in this support may increase our labor costs and decrease our net income after tax.

The R.O.C. government has been very supportive of technology companies such as us. For instance, the R.O.C. s labor laws and regulations do not require employees of semiconductor companies, including our company, to be unionized, and permit these employees to work shifts of 10 hours each day on a two-days-on, two-days-off basis. We cannot assure you, however, that these labor laws and regulations will not be changed in the future. In the event that the R.O.C. government requires our employees to be unionized or decreases the number of hours our employees may work in a given day, our labor costs may increase significantly which could result in lower margins.

We, like many R.O.C. technology companies, have benefited from substantial tax incentives provided by the R.O.C. government. In 2011, such incentives resulted in a tax credit in the amount of NT\$279 million (US\$9 million). Among the incentives broadly enjoyed by R.O.C. technology companies, various tax benefits granted under Chapter 2 and Article 70-1 of the Statute for Upgrading Industries expired on December 31, 2009. Despite the fact that we can still enjoy the five-year tax holidays for the relevant investment plans approved by R.O.C. tax authority before the expiration of the Statute for Upgrading Industries, if more incentives are curtailed or eliminated, our net income after tax attributable to us may decrease.

### Our future tax obligations may adversely affect our profitability.

The R.O.C. government enacted the R.O.C. Income Basic Tax Act, also known as the Minimum Income Tax Statute , or the Statute, which became effective on January 1, 2006. This Statute imposes an alternative minimum tax, or AMT. The AMT is designed to remedy the current excessive tax incentives for individuals and businesses. The AMT imposed under the Statute is a supplemental tax which is payable if the income tax payable pursuant to the R.O.C. Income Tax Act is below the minimum amount prescribed under the Statute. For the purpose of calculating the AMT, the taxable income defined under the Statute includes most income that is exempted from income tax under various legislations, such as those providing tax holidays and investment tax credits. For businesses, the incomes which previously enjoyed tax-exemption privileges under relevant tax regulations, such as the Act for the Establishment and Administration of the Science Parks and the Statute for Upgrading Industries, will be subject to the new AMT system for the calculation of business taxpavers aggregate incomes. The AMT rate for business entities is 10%. Under the Statute, a company will be subject to a 10% AMT if its annual taxable income under the Statute exceeds NT\$2 million. However, the Statute grandfathered certain tax exemptions granted prior to the enactment of the AMT. For example, businesses already qualified for five-year tax holidays and having obtained the applicable permission issued by the competent authority before December 31, 2005 may continue to enjoy tax incentives, and the income exempted thereunder will not to be added to the taxable income for the purpose of calculating the AMT, so long as the construction of their investment projects breaks ground within one year from January 1, 2006 and is completed within three years commencing from the day immediately following their receipts of the applicable permission issued by the competent authority. As the tax exemption periods expire or in the event of an increase in other taxable income subject to the Statute, such 10% AMT may adversely impact our net income after tax.

# The trading price of the shares and ADSs may be adversely affected by the general activities of the Taiwan Stock Exchange and U.S. stock exchanges, the trading price of our shares, increases in interest rates and the economic performance of Taiwan.

Our shares are listed on the Taiwan Stock Exchange. The trading price of our ADSs may be affected by the trading price of our shares on the Taiwan Stock Exchange and the economic performance of Taiwan. The Taiwan Stock Exchange is smaller and, as a market, more volatile than the securities markets in the United States and a number of 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 is particularly volatile during times of political instability, such as when relations between Taiwan and the PRC are strained. Moreover, the Taiwan Stock Exchange has experienced problems such as market manipulation, insider trading and payment defaults, and the government of Taiwan has from time to time intervened in the stock market by purchasing stocks listed on the Taiwan Stock Exchange. The recurrence of these or similar problems could decrease the market price and liquidity of the shares and ADSs.

From September 19, 2000, the commencement date of the listing of our ADSs on the New York Stock Exchange, or the NYSE, to December 31, 2011, the daily reported closing prices of our ADSs ranged from US\$14.88 per ADS to US\$1.51 per ADS. The market price of the ADSs may also be affected by general trading activities on the U.S. stock exchanges, which recently have experienced significant price volatility with respect to shares of technology companies. Fluctuation in interest rates and other general economic conditions may also have an effect on the market price of the ADSs.

### Currency fluctuations could increase our costs relative to our revenues, which could adversely affect our profitability.

More than half of our net operating revenues are denominated in currencies other than New Taiwan dollars, primarily U.S. dollars and Japanese Yen. On the other hand, more than half of our costs of direct labor, raw materials and overhead are incurred in New Taiwan dollars. Although we hedge a portion of the resulting net foreign exchange position through the use of foreign currency forward contracts, we are still affected by fluctuations in exchange rates among the U.S. dollar, the Japanese Yen, the New Taiwan dollar and other currencies. For example, during the period from August 31, 2010 to February 15, 2011, the U.S. dollar depreciated 8.06% against the NT dollar. Any significant fluctuation in exchange rates may be harmful to our financial condition. In addition, fluctuations in the exchange rate between the U.S. dollar and the New Taiwan dollar will affect the U.S. dollar value of the ADSs and the U.S. dollar value of any cash dividends we pay, which could have a corresponding effect on the market price of the ADSs.

# Compliance with laws such as the US Conflict Minerals Law may affect our ability or the ability of our suppliers to purchase raw materials at an effective cost.

Many industries rely on materials which are subject to regulation concerning certain minerals sourced from the Democratic Republic of Congo or adjoining countries, including: Sudan; Uganda; Rwanda; Burundi; United Republic of Tanzania; Zambia; Angola; Congo; and Central African Republic. These minerals are commonly referred to as conflict minerals. Conflict minerals which may be used in our industry or by our suppliers include Columbite-tantalite (derivative of tantalum [Ta]), Cassiterite (derivative of tin [Sn]), gold [Au], Wolframite (derivative of tungsten [W]), and Cobalt [Co]. Under present U.S. regulations, we and our customers are required to survey and disclose whether our processes or products use or rely on conflict materials. The U.S. SEC proposed draft regulations that would require companies such as ours to disclose the use of conflict materials and to take certain steps to verify those disclosures with its vendors. The SEC has not yet promulgated the final rules and regulations. Although we expect that we and our vendors will be able to comply with the requirements of any new regulations promulgated by the SEC, there can be no guarantee that we will be able to gather all the information required. In addition, there is increasing public sentiment that companies should avoid using conflict materials from the DRC and adjoining countries. Although we believe our suppliers do not rely on such conflict materials, there can be no guarantee that we will continue to be able to obtain adequate supplies of materials needed in our production from supply chains outside the DRC and adjoining countries. A failure to obtain necessary information or to maintain adequate supplies of materials from supply chains outside the DRC and adjoining countries may delay our production, increasing the risk of losing customers and business.

Similarly, many countries are considering regulations concerning disclosure and enforcement of human rights within supply chains. Although our own operations comply with the employment and employee rights requirements under the laws of the countries where we have operations, such proposals extend to the operations of suppliers, wherever they may be located. While we believe our suppliers comply with applicable human rights requirements, there can be no guarantee that they will continue to do so, or that we will be able to obtain the necessary information on their activities to comply with whatever future requirements may be enacted.

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### Data security and data privacy considerations and regulations may adversely affect our operations.

Our operations depend upon reliable and uninterrupted information technology services, including the integrity of our web-based and electronic customer service systems. Although we have put in place what we believe are reasonable precautions to prevent accidental and/or malicious disruption of these services, there can be no assurance that our preventive measures will preclude failure of the information technology, web-based and electronic customer service systems upon which our business depends. Disruption of these systems could adversely affect our ability to manufacture and to serve our customers.

In addition, in the course of our operations, we receive confidential information from and about our customers, vendors, employees and partners. Although we take what we believe are reasonable precautions to protect such information from disclosure to or interruption, there are no guarantees our precautions will prevent accidental or malicious access to such information. In the event of such access, our reputation could be adversely affected, customers and others may hesitate to entrust us with their confidential information, which would negatively affect our operations, and we would incur costs to remedy the breach.

Moreover, many jurisdictions have proposed regulations concerning data privacy. Although we have taken measures to comply with existing law and regulations in this regard, future laws may impose requirements that make our operations more expensive and/or less efficient. In addition, should we experience a breakdown in our systems or failure in our precautions that results in a violation of such regulations, we may suffer adverse customer reaction and face governmental penalties.

### **Risks Related to the Shares and ADSs and Our Trading Markets**

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

The ability to deposit shares into our ADS program is restricted by R.O.C. law. Under current R.O.C. law, no person or entity, including you and us, may deposit shares into our ADS program without specific approval of the R.O.C. FSC except for the deposit of the shares into our ADS program and for the issuance of additional ADSs in connection with:

- (1) distribution of share dividends or free distribution of our shares;
- (2) exercise of the preemptive rights of ADS holders applicable to the shares evidenced by ADSs in the event of capital increases for cash; or
- (3) delivery of our shares which are purchased in the domestic market in Taiwan directly by the investor or through the depositary or are already in the possession of the investor to the custodian for deposit into our ADS program, subject to the following conditions: (a) the re-issuance is permitted under the deposit agreement and custody agreement, (b) the depositary may accept deposit of those shares and issue the corresponding number of ADSs with regard to such deposit only if the total number of ADSs outstanding after the issuance does not exceed the number of ADSs previously approved by the R.O.C. FSC, plus any ADSs issued pursuant to the events described in (1) and (2) above and (c) this deposit may only be made to the extent previously issued ADSs have been withdrawn.

As a result of the limited ability to deposit shares into our ADS program, the prevailing market price of our ADSs on the NYSE may differ from the prevailing market price of the equivalent number of our shares on the Taiwan Stock Exchange.

# Holders of our ADSs will not have the same proposal or voting rights as the holders of our shares, which may affect the value of your investment.

Except for treasury shares and shares held by our subsidiaries which meet certain criteria provided under the R.O.C. Company Act, each common share is generally entitled to one vote and no voting discount will be applied. However, except as described in this annual report and in the deposit agreement, holders of our ADSs will not be able to exercise voting rights attached to the shares evidenced by our ADSs on an individual basis. Holders of our ADSs will appoint the depositary or its nominee as their representative to exercise the voting rights attached to the shares represented by the ADSs. The voting rights attached to the shares evidenced by our ADSs must be exercised as to all matters brought to a vote of stockholders collectively in the same manner.

Moreover, holders of the ADSs do not have individual rights to propose any matter for stockholders votes at our stockholders meetings. However, holders of at least 51% of the ADS outstanding at the relevant record date may request the depositary to submit to us one proposal per year for consideration at our annual ordinary stockholders meeting, provided that such proposal meets certain submission criteria and limitations, including the language and the length of the proposal, the time of submission, the required certification or undertakings, and the attendance at the annual ordinary stockholders meeting. A qualified proposal so submitted by the depositary will still be subject to review by our board of directors and there is no assurance that the proposal will be accepted by our board of directors for inclusion in the agenda of our annual ordinary stockholders meeting. Furthermore, if we determine, at our discretion, that the proposal submitted by the depositary does not qualify, we have no obligation to notify the depositary or to allow the depositary to modify such proposal.

Furthermore, if holders of at least 51% of the ADSs outstanding at the relevant record date instruct the depositary to vote in the same manner regarding a resolution, including election of directors, the depositary will appoint our Chairman, or his designee, to represent the ADS holders at the stockholders meetings and to vote the shares represented by the ADSs outstanding in the manner so instructed. If by the relevant record date the depositary has not received instructions from holders of ADSs holding at least 51% of the ADSs to vote in the same manner for any resolution, then the holders will be deemed to have instructed the depositary to authorize and appoint our Chairman, or his designee, to vote all the shares represented by ADSs at his sole discretion, which may not be in your interest.

### The rights of holders of our ADSs to participate in our rights offerings may be limited, which may cause dilution to their holdings.

We may from time to time distribute rights to our stockholders, including rights to acquire our securities. Under the deposit agreement, the depositary will not offer those rights to ADS holders unless both the rights and the underlying securities to be distributed to ADS holders are either registered under the Securities Act or exempt from registration under the Securities Act. We are under no obligation to file a registration statement with respect to any such rights or underlying securities or to endeavor to cause such a registration statement to be declared effective. Accordingly, holders of our ADSs may be unable to participate in our rights offerings and may experience dilution in their holdings.

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

Your ability to convert proceeds received from your ownership of ADSs depends on existing and future exchange control regulations of the Republic of China. Under the current laws of the Republic of China, an ADS holder or the depositary, without obtaining further approvals from the R.O.C. Central Bank of China, or the CBC, or any other governmental authority or agency of the Republic of China, may convert NT dollars into other currencies, including U.S. dollars, in respect of:

the proceeds of the sale of shares represented by ADSs or received as share dividends with respect to the shares and deposited into the depositary receipt facility; and

any cash dividends or distributions received from the shares represented by ADSs.

In addition, the depositary may also convert into NT dollars incoming payments for purchases of shares for deposit in the depositary receipt facility against the creation of additional ADSs. If you withdraw the shares underlying your ADSs and become a holder of our shares, you may convert into NT dollars subscription payments for rights offerings. The depositary may be required to obtain foreign exchange approval from the CBC on a payment-by-payment basis for conversion from NT dollars into foreign currencies of the proceeds from the sale of subscription rights of new shares. Although it is expected that the CBC will grant approval as a routine matter, required approvals may not be obtained in a timely manner, or at all.

Under the Republic of China Foreign Exchange Control Law, the Executive Yuan of the Republic of China may, without prior notice but subject to subsequent legislative approval, impose foreign exchange controls or other restrictions in the event of, among other things, a material change in international economic conditions.

# Our public stockholders may have more difficulty protecting their interests than they would as stockholders of a U.S. corporation.

Our corporate affairs are governed by our articles of incorporation and by laws governing R.O.C. corporations. The rights of our stockholders to bring stockholders suits against us or our board of directors under R.O.C. law are much more limited than those of the stockholders of U.S. corporations. Therefore, our public stockholders may have more difficulty protecting their interests in connection with actions taken by our management, members of our board of directors or controlling stockholders than they would as stockholders of a U.S. corporation. Please refer to Item 10. Additional Information B. Memorandum and Articles of Association Rights to Bring Stockholders Suits included elsewhere in this annual report for a detailed discussion of the rights of our stockholders to bring legal actions against us or our directors under R.O.C. law.

# Holders of our ADSs will be required to appoint several local agents in Taiwan if they withdraw shares from our ADS program and become our stockholders, which may make ownership burdensome.

Non-R.O.C. persons wishing to withdraw shares represented by their ADSs from our ADS program and hold our shares represented by those ADSs are required to, among other things, appoint a local agent or representative with qualifications set forth by the R.O.C. FSC to open a securities trading account with a local brokerage firm, pay R.O.C. taxes, remit funds and exercise stockholders rights. In addition, the withdrawing holders are also required to appoint a custodian bank with qualifications set forth by the R.O.C. FSC to hold the securities in safekeeping, make confirmations, settle trades and report all relevant information. Without making this appointment and opening of the accounts, the withdrawing holders would not be able to subsequently sell our shares withdrawn from a depositary receipt facility on the Taiwan Stock Exchange. Under R.O.C. law and regulations, except under limited circumstances, PRC persons are not permitted to withdraw the shares underlying the ADSs or to register as a stockholder of our company. Under the Regulations Governing Securities Investment and Futures Trading in Taiwan by Mainland Area Investors promulgated by the R.O.C. Executive Yuan on April 30, 2009, as amended, only qualified domestic institutional investors, or QDIIs, are permitted to withdraw the shares underlying the ADSs, subject to compliance with the withdrawal relevant requirements, and only QDIIs, and limited entities or individuals who meet the qualification requirements set forth therein are permitted to own shares of an R.O.C. company listed for trading on the Taiwan Stock Exchange, provided that among other restrictions generally applicable to investments made by PRC persons, their shareholdings are subject to certain restrictions as set forth in the abovementioned regulations and that such mainland area investors shall apply for a separate approval if their investment, individually or in aggregate, amounts to or exceeds 10 percent of the shares of any R.O.C. company.

# You may not be able to enforce a judgment of a foreign court in the R.O.C.

We are a company limited by shares incorporated under the R.O.C. Company Act. Most of our assets and most of our directors and executive officers and experts named in the registration statement are located in Taiwan. As a result, it may be difficult for you to enforce judgments obtained outside Taiwan upon us or such persons in Taiwan. We have been advised by our R.O.C. counsel that any judgment obtained against us in any court outside the R.O.C. arising out of or relating to the ADSs will not be enforced by R.O.C. courts if any of the following situations shall apply to such final judgment:

the court rendering the judgment does not have jurisdiction over the subject matter according to R.O.C. law;

the judgment or the court procedure resulting in the judgment is contrary to the public order or good morals of the R.O.C.;

the judgment was rendered by default, except where the summons or order necessary for the commencement of the action was legally served on us within the jurisdiction of the court rendering the judgment within a reasonable period of time or with judicial assistance of the R.O.C.; or

judgments of R.O.C. courts are not recognized in the jurisdiction of the court rendering the judgment on a reciprocal basis. We may be considered a passive foreign investment company, which could result in adverse U.S. tax consequences for U.S. investors.

We do not believe that we were a passive foreign investment company, or PFIC, for 2011 and we do not expect to become one in the future, although there can be no assurance in this regard. Based upon the nature of our business activities, we may be classified as a passive foreign investment company for U.S. federal income tax purposes. Such characterization could result in adverse U.S. tax consequences to you if you are a U.S. investor.

For example, if we are a PFIC, our U.S. investors may become subject to increased tax liabilities under U.S. tax laws and regulations and will become subject to burdensome reporting requirements. The determination of whether or not we are a PFIC is made on an annual basis and will depend on the composition of our income and assets from time to time. Specifically, for any taxable year we will be classified as a PFIC for U.S. tax purposes if either (i) 75% or more of our gross income in a taxable year is passive income or (ii) the average percentage of our assets (which includes cash) by value in a taxable year which produce or are held for the production of passive income is at least 50%. The calculation of the value of our assets will be based, in part, on the quarterly market value of shares and ADSs, which is subject to change. In addition, the composition of our income and assets will be affected by how, and how quickly, we spend the cash we have raised in prior offerings. See

Taxation U.S. Federal Income Tax Considerations For U.S. Persons Passive Foreign Investment Company.

#### ITEM 4. INFORMATION ON THE COMPANY

#### History and Development of the Company Α.

Our legal and commercial name is United Microelectronics Corporation, commonly known as UMC . We were incorporated under the R.O.C. Company Law as a company limited by shares in May 1980 and our shares were listed on the Taiwan Stock Exchange in 1985. Our principal executive office is located at No. 3 Li-Hsin Road II, Hsinchu Science Park, Hsinchu, Taiwan, Republic of China, and our telephone number is 886-3-578-2258. Our Internet website address is www.umc.com. The information on our website does not form part of this annual report. Our ADSs have been listed on the NYSE under the symbol UMC since September 19, 2000.

We are one of the world s largest independent semiconductor foundries and a leader in semiconductor manufacturing process technologies. Our primary business is the manufacture, or fabrication, of semiconductors, sometimes called chips or integrated circuits, for others. Using our own proprietary processes and techniques, we make chips to the design specifications of our many customers. Our company maintains a diversified customer base across industries, including communication, consumer electronics, computer, memory and others, while continuing to focus on manufacturing for high growth, large volume applications, including networking, telecommunications, internet, multimedia, PCs and graphics. We sell and market mainly wafers which in turn are used in a number of different applications by our customers. Percentages of our net wafer sales derived from our products used in communication devices, consumer electronics, computer, memory and other applications were 54.1%, 27.9%, 15.0%, 1.1% and 1.9%, respectively, in 2011.

We focus on the development of leading mass-producible manufacturing process technologies. We were among the first in the foundry industry to go into commercial operation with such advanced capabilities as producing integrated circuits with line widths of 0.25, 0.18, 0.15, 0.13 micron and 90, 65 and 45/40 nanometer. Advanced technologies have enabled electronic products, especially in relation to computer, communication and consumer products, to integrate their functions in new and innovative methods. Networking capabilities have allowed electronic products such as computers, tablets, cell phones, televisions, PDAs, CD-ROMs and digital cameras to communicate with each other to exchange information. More powerful semiconductors are required to drive multimedia functions (e.g. processing visual data) and to resolve network bandwidth issues. At the same time, the trend toward personal electronic devices has resulted in products that are becoming physically smaller and consume less power. Process technology must also shrink the volumes of products aggressively to cater to this trend of integrating multiple functions, reducing the size of components needed for operation and lowering IC power consumption. Dedicated semiconductor foundries need to achieve this process improvement and at the same time develop multiple process technologies to satisfy the varying needs of computer, communication and consumer products. We believe our superior process technologies will enable us to continue to offer our customers significant performance benefits for their products, faster time-to-market production, cost savings and other competitive advantages.

We provide high quality service based on our performance. In today s marketplace, we believe it is important to make available not only the most manufacturable processes, but also the best solutions to enable customers to design integrated circuits that include entire systems on a chip. Through these efforts, we intend to be the foundry solution for SoC customer needs. To achieve this goal, we believe it is necessary to timely develop and offer the intellectual property and design support that customers need to ensure their specific design blocks work with the other design blocks of the integrated circuit system in the manner intended. Accordingly, we have a dedicated intellectual property and design support team which focuses on timely development of the intellectual property and process specific design blocks our customers need in order to develop products that operate and perform as intended. Our design service team actively cooperates with our customers and vendors of cell libraries and intellectual property offerings to identify, early in the product/market cycle, the offerings needed to ensure that these coordinated offerings are available to our customers in silicon verified form in a streamlined and easy-to-use manner. As a result, we are able to ensure the timely delivery of service offerings from the earliest time in the customer design cycle, resulting in a shorter time-to-volume production. We also provide our customers with real-time online access to their confidential production data, resulting in superior communication and efficiency. We further address our customers needs using our advanced technology and proven methodology to achieve fast cycle time, high yield, production flexibility and close customer communication. For example, we select and configure our clean rooms and equipment and develop our processes to maximize the flexibility in meeting and adapting to rapidly changing customer and industry needs. As a result, our cycle time, or the period from customer order to wafer delivery, and our responsiveness to customer request changes are among the fastest in the dedicated foundry industry. We also provide high quality service and engineering infrastructure.

Our production capacity is comparable to that of certain largest companies in the semiconductor industry, and we believe our leading edge and high volume capability is a major competitive advantage.

Our technology and service have attracted two principal types of foundry industry customers: fabless design companies and integrated device manufacturers. Fabless design companies design, develop and distribute proprietary semiconductor products but do not maintain internal manufacturing capacity. Instead, these companies depend on outside manufacturing sources. Integrated device manufacturers, in contrast, traditionally have integrated internally all functions manufacturing as well as design, development, sales and distribution.

Our primary customers, in terms of our sales revenues, include premier integrated device manufacturers, such as Texas Instruments, Infineon and STMicroelectronics, and leading fabless design companies, such as Xilinx, Broadcom, MediaTek, Realtek and Novatek. In 2011, our company s top ten customers accounted for 60.3% of our net operating revenues. We believe our success in attracting these customers is a direct result of our commitment to high quality service and our intense focus on customer needs and performance.

For the disclosure related to our acquisition of Hejian, the contents of the Form 6-K we furnished to the Commission on April 29, 2009 (File No. 001-15128) are hereby incorporated by reference. At our annual stockholders meeting in 2009, the stockholders approved our proposed acquisition of Infoshine, the holding company of Hejian, with the acquisition subject to our ability to obtain the approvals from the necessary authorities pursuant to relevant laws and regulations. Hejian is engaged in the

semiconductor foundry business and owns an 8- inch fab in Suzhou, China. Investment by an R.O.C. company in the PRC to engage in semiconductor foundry business is strictly regulated by the R.O.C. government. Traditionally, only manufacturing of semiconductor wafers of 8 inches or smaller sizes is permitted, and the number of total investment projects in the semiconductor foundry business undertaken by R.O.C. companies, taken as a whole, is subject to a quota. When our stockholders approved the acquisition, however, there was no quota available. In February 2010, the relevant restrictions were partially lifted, and the quota and the restriction on the size of semiconductor wafers produced are not applicable if (i) an investment is made through merger or acquisition; (ii) the rest of the applicable requirements, such as the processing technology gap between the R.O.C. company and its investment target, shall be satisfied; and (iii) the investment application is approved by the R.O.C. government, which approval is at the government s discretion. We plan to pursue approval of our acquisition of the holding company of Hejian, but there can be no guarantee that we will successfully obtain such approval. Moreover, an investment regulation governing foreigners holdings of Taiwanese securities, along with restrictions from the amended Operating Rules of the Taiwan Stock Exchange Corporation for issuing new shares to acquire foreign unlisted companies, presently precludes the issuance of common shares or ADR s as exclusive payment options for such an acquisition. Furthermore, Hejian s stockholders have not agreed to accept cash-only payments. On March 16, 2011, our Board of Directors proposed an offer to the stockholders of Best Elite International Limited, a British Virgin Islands corporation, or Best Elite, which owns 100% of the shares of Infoshine, thereby to obtain additional 30% ownership of Hejian by share purchase. We received approval from the Investment Commission, Ministry of Economic Affairs, Executive Yuan to acquire the stake of Best Elite International Limited, the holding company of Hejian. The acquisition includes the 15.3% stake in trustee, plus an additional 20.4% through cash acquisition. As of March 31, 2012, we have acquired 35.03% of the shares in Best Elite.

To continue searching for further integration, on April 25, 2012, our Board of Directors proposed an offer to the stockholders of Best Elite, thereby to obtain 64.97% stake of Best Elite by share purchase, subject to approval by R.O.C. governmental authorities. However, we can not assure you that we will be able to successfully consummate the acquisition of Best Elite or Hejian.

For the disclosure related to our tender offer of UMCJ, the contents of the Forms 6-K we furnished to the Commission on October 28, 2009 (File No. 001-15128) and December 21, 2009 (File No. 001-15128) are hereby incorporated by reference. After the tender offer which was held from October 29, 2009 to December 14, 2009, 403,368 shares of UMCJ were purchased, and we and AWL together held 94.79% of UMCJ shares. UMCJ then delisted from the Jasdaq Securities Exchange in accordance with its listing rules on March 19, 2010. Since not all of the outstanding equity securities of UMCJ were acquired, we initiated certain squeeze-out procedures as provided in the Japanese Companies Act. Pursuant to such procedures, as of the end of 2010, we, together with AWL, owned 100% of UMCJ. On May 19, 2011, we acquired the remaining shares of UMCJ from AWL, and AWL filed for liquidation on August 30, 2011.

By owning 100% of UMCJ and proceeding with integration, we expect UMCJ to reap the benefits of economies of scale and efficiency of operations through developing business on a global basis with our company. The reorganization and restructuring of UMCJ are also expected to increase the efficiency of our operation and to increase our overall corporate value. We also believe the integration will be beneficial to UMCJ s customers, as it is expected to enable UMCJ to offer more competitive globally-based services along with our company s broader range of technology and more competitive production capabilities.

Please refer to Item 5. Operating and Financial Review and Prospects B. Liquidity and Capital Resources for a discussion of our capital expenditures in the past three years and the plan for the current year.

# **Our Strategy**

To maintain and enhance our position as a market leader, we have adopted a business strategy with a focus on a partnership business model designed to accommodate our customers business needs and objectives and to promote their interests as our partners. We believe that our success and profitability are inseparable from the success of our customers. The goal in this business model is to create a network of partnerships or alliances among integrated device manufacturers, intellectual property and design houses, as well as foundry companies. We believe that we and our partners will benefit from the synergy generated through such long-term partnerships or alliances and the added value to be shared among the partners. The key elements of our strategy are:

*Operate as a Customer-Driven Foundry.* We plan to operate as a customer-driven foundry. The increasing complexity of 40- nanometer and more advanced technologies has impacted the entire chip industry, as ICs can now be designed with greater gate density and higher performance while incorporating the functions of an entire system. These advanced designs have created a new

proliferating market of advanced mobile digital devices such as smart phones, which have decreased in size but greatly increased in functionality. We collaborate closely with our customers as well as partners throughout the entire supply chain, including equipment, electronic design automation tool and intellectual property, or IP, vendors to work synergistically toward each customer s SoC solution. We also possess experience and know-how in system design and architecture to integrate customer designs with advanced process technologies and IP. We believe the result is a higher rate of first-pass silicon success for our SoC solutions. Our customer-driven foundry solutions begin with a common logic-based platform, where designers can choose the process technologies and transistor options that best fit their specific application. From there, technologies such as radio frequency complementary metal-oxide-semiconductor, or RF CMOS, and embedded Flash memories can be used to further fine-tune the process for customers individual needs. Furthermore, as IP has become critical resources for SoCs, our portfolio includes basic design building blocks as well as more complex IP of optimized portability and cost, developed both internally and by third-party partners. With advanced technology, a broad IP portfolio, system knowledge and advanced 300-millimeter manufacturing, we offer comprehensive solutions that help customers deliver successful results in a timely fashion.

**Build up Customer-focused Partnership Business Model.** We have focused on building partnership relationships with our customers, and we strive to help our customers achieve their objectives through close cooperation. Unlike the traditional buy-and-sell relationship between a foundry and its customers, we believe our partnership business model will help us understand our customers requirements and, accordingly, better accommodate our customers needs in a number of ways, such as customized processes and services that optimize the entire value chain (not just the foundry portion) and intellectual property-related support. We believe that this business model will enable us to deliver our products to our customers at the earliest time our customers require for their design cycle, resulting in shorter time-to-market and time-to-volume production. Furthermore, we believe we will render more cost-effective services by focusing our research and development expenditures on the specific requirements of our customers. We believe our partnership business model will help us not only survive a market downturn, but also achieve a better competitive position.

*Continue to Focus on High Growth Applications and Customers.* We believe one measure of a successful foundry company is the quality of its customers. We focus our sales and marketing on customers who are established or emerging leaders in industries with high growth potential. Our customers include industry leaders such as Advanced Micro Devices, or AMD, Broadcom, Marvell, Infineon, MediaTek, Novatek, Realtek, SanDisk, STMicroelectronics, Texas Instruments, Freescale and Xilinx. We seek to maintain and expand our relationships with these companies. We strive to demonstrate to these customers the superiority and flexibility of our manufacturing, technology and service capabilities and to provide them with production and design assistance. We are also making efforts to further diversify our customer portfolio in order to maintain a balanced exposure to different applications and different customers. We believe these efforts strengthen our relationships with our customers and enhance our reputation in the semiconductor industry as a leading foundry service provider.

*Maintain Our Leading Position in Mass-Producible Semiconductor Technology and Selectively Pursue Strategic Investments in New Technologies.* We believe that maintaining and enhancing our leadership in mass-producible semiconductor manufacturing technology is critical to attract and retain customers. Our reputation for technological excellence has attracted both established and emerging leaders in the semiconductor industries who work closely with us on technology development. In addition, we believe our superior processing expertise has enabled us to provide flexible production schedules to meet our customers particular needs. We plan to continue building internal research and development expertise, to focus on process development and to establish alliances with leading and specialty semiconductor companies to accelerate access to next-generation and specialized technologies. For example, we introduced our 28-nanometer technology to customers in 2011 to significantly increase the competitive advantages of our customers by providing better device performance in a smaller die size. In 2011, we achieved more than 10 customers and tapeouts for our 28-nanometer technology in 2011 and delivered pilot production on this generation to our lead customer. We believe our progress in developing more advanced process technologies has benefited our customers in the fields of computers, communications, consumer electronics and others with special preferences in certain aspects of the products, such as the ultimate performance, density and power consumption.

We also recognize that every company has limited resources and that the foundry industry is ever-evolving. Accordingly, we believe we should invest in new research and development technology intelligently and in a cost-effective manner to achieve the

ultimate output of the resulting technology. In doing so, we balance the rate of return of our research and development with the importance of developing a technology at the right time to enhance our competitive edge without unduly diluting our profitability. We intend to avoid investments in technologies that do not present a commercial potential for volume production. We believe that to develop the earliest and most advanced semiconductor technology without regard to its potential for near term volume production may prove costly to our operations and would not strengthen our competitive position. We perceive a benefit to defer investment in the premature equipment needed to claim the earliest advanced technology and instead to purchase a more advanced and less expensive version of equipment from vendors who design such equipment based on pre-production lessons learned from the earliest technology.

*Maintain Scale and Capacity Capabilities to Meet Customer Requirements, with a Focus on 12-inch Wafer Facilities for Future Expansion.* We believe that maintaining our foundry capacity with advanced technology and facilities is critical to the maintenance of our industry leadership. Our production capacity is currently among the largest of all semiconductor foundries in the world. We intend to increase our 12-inch wafer production capacity to meet the needs of our customers and to fully capitalize on the expected growth of our industry. Our future capacity expansion plans will focus on 12-inch wafer facilities in order to maintain our technology leadership. 12-inch wafers offer manufacturing advantages over 8-inch wafers due to, among other reasons, the greater number of chips on each wafer and the advantages only offered on newer 12-inch capable equipment. In addition, 12-inch wafer facilities present a more cost-effective solution in achieving an economic scale of production. We intend to carefully monitor current market conditions in order to optimize the timing of our capital spending.

# **B.** Business Overview Manufacturing Facilities

To maintain a leading position in the foundry business, we have placed great emphasis on achieving and maintaining a high standard of manufacturing quality. As a result, we seek to design and implement manufacturing processes that produce consistent, high manufacturing yields to enable our customers to estimate, with reasonable certainty, how many wafers they need to order from us. In addition, we continuously seek to enhance our production capacity and process technology, two important factors that characterize a foundry s manufacturing capability. Our large production capacity and advanced process technologies enable us to provide our customers with volume production and flexible and quick-to-market manufacturing services. All of our fabs operate 24 hours per day, seven days per week. Substantially all maintenance at each of the fabs is performed concurrently with production.

As a step in our continuing expansion of our manufacturing complex in the Tainan Science Park in southern Taiwan, we completed the construction of our second 300mm fab in Taiwan in May 2009, and moved the equipment into this fab in July 2010. Total investments for this fab was around US\$5 billion, with a maximum designed monthly production capacity of approximately 35,000 (300mm) wafers.

The following table sets forth operational data of each of our manufacturing facilities as of December 31, 2011.

	Fab 6A	Fab 8A	Fab 8C	Fab 8D	Fab 8E	Fab 8F	Fab 8S	Fab 12A	Fab 12i	UMCJ
Commencement of volume production	1989	1995	1998	2000	1998	2000	2000	2002	2004	1996
Estimated full capacity <sup>(1)(2)</sup>	45,000	68,000	30,000	31,000	39,200	32,500	27,300	46,862	44,782	20,000
	wafers									
	per									
	months									
Wafer size	6- inch	8-inch	8-inch	8-inch	8-inch	8-inch	8-inch	12-inch	12-inch	8-inch
	(150mm)	(200mm)	(200mm)	(200mm)	(200mm)	(200mm)	(200mm)	(300mm)	(300mm)	(200mm)

# (1) Measured in stated wafer size.

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(2) The capacity of a fab is determined based on the capacity ratings given by manufacturers of the equipment used in the fab, adjusted for, among other factors, actual output during uninterrupted trial runs, expected down time due to set up for production runs and maintenance and expected product mix.

The following table sets forth the size and primary use of our facilities and whether such facilities, including land and buildings, are owned or leased. Our land in the Hsinchu and Tainan Science Parks is leased from the R.O.C. government.

	Size			
Location	(Land/Building) (in square meters)	Primary Use	Land (Owned or Leased)	Building (Owned or Leased)
Fab 6A, 10 Innovation 1st Rd.,	27,898/34,609	6-inch wafer	Leased (expires in	Owned
Hsinchu Science Park,	6-inch wafer production	production	December 2026)	
Hsinchu, Taiwan 30076, R.O.C.	-			
Fab 8A, 3, 5 Li-Hsin 2nd Rd.,	43,468/83,699	8-inch wafer production	Leased (expires in March 2014)	Owned
Hsinchu Science Park,	8-inch wafer production			
Hsinchu, Taiwan 30078, R.O.C.				
Fab 8C, 6 Li-Hsin 3rd Rd.,	24,678/71,427	8-inch wafer production	Leased (expires in March 2016)	Owned
Hsinchu Science Park, Hsinchu,	8-inch wafer production			
Taiwan 30078, R.O.C.				
Fab 8D, 8 Li-Hsin 3rd Rd.,	8,036/29,181	8-inch wafer production	Leased (expires in March 2016)	Owned
Hsinchu Science Park,	8-inch wafer production			
Hsinchu, Taiwan 30078, R.O.C.				
Fab 8E, 17 Li-Hsin Rd.,	35,000/76,315	8-inch wafer production	Leased (expires in February 2016)	Owned
Hsinchu Science Park,	8-inch wafer production			
Hsinchu, Taiwan 30078, R.O.C.				
Fab 8F, 3 Li-Hsin 6th Rd.,	24,180/65,736	8-inch wafer production	Leased (expires in February 2018)	Owned
Hsinchu Science Park,	8-inch wafer production			
Hsinchu, Taiwan 30078, R.O.C.				
Fab 8S, 16 Creation 1st Rd.,	20,404/65,614	8-inch wafer production	Leased (expires in December 2023)	Owned
Hsinchu Science Park,	8-inch wafer production			
Hsinchu, Taiwan 30077, R.O.C.				
Fab 12A, 18, 20 Nan-Ke 2nd Rd.,	113,661/350,597	12-inch wafer production	Leased (expires in November 2030)	Owned
Tainan Science Park, Sinshih,	12-inch wafer production			
Tainan, Taiwan 74147, R.O.C.				

Tainan, Taiwan 74147, R.O.C.

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Fab 12i, 3 Pasir Ris Drive 12	85,737/142,169	12-inch wafer production	Leased (expires in March 2031)	Owned
Singapore 519528	12-inch wafer production			
UMCJ, 1580, Yamamoto,	387,551/60,923	8-inch wafer production	83% owned, 17% leased (expires in June 2049)	96% Owned, 4% Leased
Tateyama-City, Chiba, Japan	8-inch wafer production			
United Tower, 3 Li-Hsin 2nd Rd.,	8,818/85,224	Administration office	Leased (expires in March 2014)	Owned
Hsinchu Science Park,	Administration office			
Hsinchu, Taiwan 30078, R.O.C.				
Neihu Rd. office, 8F,68.Sec.	626/4,817	Administration office	Owned	Owned
1,Neihu Rd., Taipei Taiwan 11493,	Administration office			
R.O.C.				
Testing Building, 1, Chin-Shan, St.	10,762/41,318	Leased to several companies	Owned	Owned
7, Hsinchu, Taiwan 30080, R.O.C.	Leased to several companies			
R&D Building, 18 Nan-Ke 2nd Rd.,	42,000/47,501	Research and development	Leased (expires in December 2023)	Owned
Tainan Science Park, Sinshih,	Research and development			
Tainan, Taiwan 74147, R.O.C.				
Nexpower, No.2, Houke S.Rd., Houli District, Taichung, Taiwan 42152, R.O.C.	94,016/78,212	Sun power production	Leased (expires in December 2026)	Owned
	Sun power production			
Topcell, No. 1560, Sec. 1 Zhongshan Rd., Guanyin Township,Taoyuan, Taiwan 32852,	16,873/35,643	6-inch cell production	Leased (expires in March 2018)	Leased (expires in March 2018)
R.O.C.	6-inch cell production	-		

# **Process Technology**

Process technology is a set of specifications and parameters that we implement for manufacturing the critical dimensions of the patterned features of the circuitry of semiconductors. Our process technologies are currently among the most advanced in the foundry industry. These advanced technologies have enabled us to provide flexible production schedules to meet our customers particular needs.

The continued enhancement of our process technologies has enabled us to manufacture semiconductor devices with smaller geometries, allowing us to produce more dice on a given wafer. We pioneered the production of semiconductor products with 0.25 and 0.18 micron process technology in 1997 and 1999, respectively, and used copper interconnect metallurgic to allow better reliability and higher conductibility than traditional aluminum interconnects. We began volume production using 0.13-micron process technology in 2002. Our extensive experience in the 0.13-micron process technology has helped smooth our transition to 90- nanometer pilot production. Our 90-nanometer process marks further advance in our technology achievements, incorporating up to nine copper metal layers, triple gate oxide and other advanced features and using chrome-less phase-shift masks. This technology has been in volume production since the second quarter of 2004 after passing several product certifications. In 2005, our research and development teams continued to work closely with the manufacturing staff to finalize our 90-nanometer technology portfolio. These collaborative efforts, performed in our best-in-class 300mm facilities, contributed to the improvement of high density 6T-SRAM yield to the maturity level of more than 90%. Our accomplishments led to multiple design awards followed by first silicon success, including a PC graphic IC and the world s first 90-nanometer Wireless Local Area Network (WLAN) RF chip featuring a unique and specially developed inductor scheme. In addition, we were able to develop, within 6 months, several customized 90-nanometer processes tailored to our customers device specifications, and demonstrated product success by delivering record high yield for the first product lots. Our first fully-functional 65-nanometer wireless digital baseband customer IC was produced in July of 2005, after only a year since this research and development project began at this facility.

Since the third quarter of 2006, we have begun the mass production of a next-generation 65-nanometer FPGA product, which features a 65% logic capacity increase over previous generation of FPGAs with triple gate oxide and 11 copper metal layers. Our 65- nanometer development team is not only independently developing our technologies in-house but is also bringing up customized process technologies to match customer specific needs. Furthermore, our 45/40-nanometer process technologies, which are jointly developed by us and our strategic partners have been in production since the first half of 2009, significantly increasing the competitive advantages of our customers by providing better device performance in a smaller die size.

The table below sets forth our actual process technology range, categorized by line widths, or the minimum physical dimensions of the transistor gate of integrated circuits in production by each fab, in 2011, and the estimated annual full capacity of each fab, actual total annual output and capacity utilization rates in 2009, 2010 and 2011:

#### Year ended

#### December 31,

# 2011

		Range of		nded Decembe	er 31,
	Year of	Process) Technologies	2009	2010	2011
	Commencement		(in thous	ands of 8-inch	wafer
	of Operation	(in microns)	equivalent	s, except perc	entages)
Fab					
Fab 6A	1989	0.5	328	332	303
Fab 8A	1995	0.5 to 0.25	816	816	813
Fab 8C	1998	0.35 to 0.13	402	366	359
Fab 8D	2000	0.13 to 0.09	270	314	364
Fab 8E	1998	0.5 to 0.18	408	410	469
Fab 8F	2000	0.18 to 0.13	381	387	388
Fab 8S	2000	0.18 to 0.13	300	303	307
Fab 12A	2002	0.18 to 0.040	888	842	1,128
Fab 12i	2004	0.13 to 0.065	815	1,022	1,192
UMCJ	1996	0.35 to 0.15	240	240	240
Total estimated capacity			4,848	5,031	5,563
Total output (actual)			3,362	4,713	4,370
Average capacity utilization			69.4%	93.7%	78.6%

The table below sets forth a breakdown of number and percentage of wafer output by process technologies in 2009, 2010 and 2011.

	200 (in th	9	ear Ended D 201 201 inch wafer eo		201 ept percenta	
Technology				- · · ·		
40 nanometers and under	10	0.3%	65	1.3%	159	3.6%
65 nanometers	260	7.7	696	14.8	980	22.4
90 nanometers	605	18.0	584	12.4	333	7.6
0.13 micron	602	17.9	997	21.2	1,049	24.0
0.15 micron	269	8.0	367	7.8	134	3.1
0.18 micron	587	17.4	611	13.0	510	11.7
0.25 micron	76	2.3	144	3.0	165	3.8
0.35 micron	655	19.5	766	16.3	621	14.2
0.50 micron or higher	298	8.9	483	10.2	419	9.6
Total	3,362	100.0%	4,713	100.0%	4,370	100.0%

# **Capacity and Utilization**

The fabs in Taiwan that we own directly are named Fab 6A, Fab 8A, Fab 8C, Fab 8D, Fab 8E, Fab 8F and Fab 8S, all of which are located in the Hsinchu Science Park in Taiwan, and Fab 12A, which is located in the Tainan Science Park in Taiwan. The fab in Singapore is named Fab 12i. The fab in Japan is named UMCJ.

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Our average capacity utilization rate was 69.4% in 2009, 93.7% in 2010, and 78.6% in 2011.

# Equipment

Considering the performance and productivity of our manufacturing capability highly rely on the quality of our capital equipment, we generally purchase equipment that cannot only meet the demand of our existing process technology, but also has the capability to be upgraded to match our future needs. The principal equipment we use to manufacture semiconductor devices are scanners/steppers, cleaners and track equipment, inspection equipment, etchers, furnaces, wet stations, strippers, implanters, sputters, CVD equipment, probers, testers and so on. We own all of the production equipment except for a few demonstration tools.

2	1
5	1

Our policy is to purchase high-quality equipment that demonstrates stable performance from vendors with dominate market share to ensure our continued competitiveness in the semiconductor field.

Some of the equipment is available from a limited number of qualified vendors and/or is manufactured in relatively limited quantities, and some equipment has only recently been developed. We believe that our relationships with equipment suppliers are strong enough that we can leverage our position as a major purchaser to purchase equipment on better terms, including shorter lead time, than the terms received by several other foundries.

Although we face the challenge of procuring the right equipment in sufficient quantity necessary for ramp-up or expansion of our fabrication facilities under constraint of short lead times, we have not in the past experienced any material problems in procuring the latest generation equipment on a timely basis even in periods of unpredictably high market demand. We manage the risks in the procurement process through timely internal communications among different divisions, efficient market information collection, early reservation of appropriate delivery slots and constant communications with our suppliers as well as by utilizing our good relationships with the vendors.

#### **Raw Materials**

Our manufacturing processes use many raw materials, primarily silicon wafers, chemicals, gases and various types of precious sputtering targets. These raw materials are generally available from several suppliers. Our policy with respect to raw material purchases, similar to that for equipment purchases, is to select only a small number of qualified vendors who have demonstrated quality and reliability on delivery time of the raw materials. We may have any long-term supply contracts with our vendors if necessary.

Our general inventory policy is to maintain sufficient stock of each principal raw material for production and rolling forecasts of near-term requirements received from customers. In addition, we have agreements with several key material suppliers under which they hold similar levels of inventory in their warehouses for our use. However, we are not under any obligation to purchase raw material inventory that is held by our vendors for our benefit until we actually order it. We typically work with our vendors to plan our raw material requirements on a quarterly basis, with indicative pricing generally set on a quarterly basis. The actual purchase price is generally determined based on the prevailing market conditions. In the past, prices of our principal raw materials have not been volatile to a significant degree. Although we have not experienced any shortage of raw materials that had a material effect on our operations, and supplies of raw materials we use currently are adequate, shortages could occur in various critical materials due to interruption of supply or an increase in industry demand.

The most important raw material used in our production processes is silicon wafer, which is the basic raw material from which integrated circuits are made. The principal makers for our wafers are Shin-Etsu, Siltronic AG, MEMC Corporation and Sumco Group. We have in the past obtained and believe that we will continue to be able to obtain a sufficient supply of silicon wafers. We believe that we have close working relationships with our wafer suppliers. Based on such long-term relationships, we believe that these major suppliers will use their best efforts to accommodate our demand.

We use a large amount of water in our manufacturing process. We obtain water supplies from government-owned entities and recycle approximately 85% of the water that we use during the manufacturing process. We also use substantial amounts of dual loop electricity supplied by Taiwan Power Company in the manufacturing process. We maintain back-up generators that are capable of providing adequate amounts of electricity to maintain the required air pressure in our clean rooms in case of power interruptions. We believe our back-up devices are adequate in preventing business interruptions caused by power outages and emergency situations.

#### **Quality Management**

We believe that our advanced process technologies and reputation for high quality and reliable services and products have been important factors in attracting and retaining leading international and domestic semiconductor companies as customers.

We structure our quality management system in accordance with the latest international quality standards and our customers strict quality and reliability requirements. Our quality management system incorporates comprehensive quality control programs into the entire business flow of foundry operation including, among others, new process development management, production release control, incoming raw material inspection, statistical process control and methodology development, process change management, technical documentation control, product final inspection, metrology tool calibration and measurement system analysis, quality audit program, nonconformity management, customer complaint disposition, eight-discipline problem solving and customer satisfaction monitoring.

We set a high quality goal to ensure consistent high yielding and reliable product performance. Our quality program is continually enhanced through top-down annual Business Policy Management and bottom-up Total Quality Management activities. In addition, our efforts to observe best practices among fabs in the foundry industry have also contributed to the improvement of our overall quality management system.

Many of our customers perform physical production site qualification process in the early development phase and routine quality conformance audits in the volume production phase. These audits include both quality system review and physical fabrication area inspection for verification of conformity with the international quality standard and customers quality requirement. Our quality management system and quality control programs have been qualified and routinely audited by numerous customers who are recognized as world-class semiconductor companies with best-in-class quality standards.

Our Quality Assurance Division and Reliability Technology and Assurance Division collaborate to provide quality and reliability performance to customers. With our wafer processing quality and reliability conformance monitor program, we monitor the product quality and reliability at various stages of the entire manufacturing process before shipment to customers.

All our fabs are certified in compliance with ISO/TS 16949 and QC080000 IECQ HSPM standards. ISO/TS 16949 sets the criteria for developing a fundamental quality management system emphasizing on customer satisfaction in quality management, continual improvement, defect prevention and variation and waste reduction. QC080000 IECQ HSPM sets the criteria for developing a process management system for hazardous substances and focuses on developing environmentally friendly manufacturing processes. We are committed to continuously improve our quality management system and to deliver high quality product to our customers.

# Services and Products

We primarily engage in wafer fabrication for foundry customers. To optimize fabrication services for our customers, we work closely with them as they finalize circuit design and contract for the preparation of masks to be used in the manufacturing process. We also offer our customers turnkey services by providing subcontracted assembly and test services. We believe that this ability to deliver a variety of foundry services in addition to wafer fabrication enables us to accommodate the needs of a full array of integrated device manufacturers, system companies and fabless design customers with different in-house capabilities.

Wafer manufacturing requires many distinct and intricate steps. Each step in the manufacturing process must be completed with precision in order for finished semiconductor devices to work as intended. The processes require taking raw wafers and turning them into finished semiconductor devices generally through five steps: circuit design, mask tooling, wafer fabrication, assembly and test. The services we offer to our customers in each of these five steps are described below.

*Circuit Design.* At this initial design stage, our engineers generally work with our customers to ensure that their designs can be successfully and cost-effectively manufactured in our facilities. We have assisted an increasing number of our customers in the design process by providing them with access to our partners electronic design analysis tools, intellectual property and design services as well as by providing them with custom embedded memory macro-cells. In our Silicon Shuttle program, we offer customers and intellectual property providers early access to actual silicon samples with their desired intellectual property and content in order to enable early and rapid use of our advanced technologies. The Silicon Shuttle program is a multi-chip test wafer program that allows silicon verification of intellectual property and design elements. In the Silicon Shuttle program, several different vendors

can test their intellectual property using a single mask set, greatly reducing the cost of silicon verification for us and the participating vendors. The high cost of masks for advanced processes makes this program attractive to intellectual property vendors. ARM Limited, Faraday Technology Corp., or Faraday Technology, MIPS Technologies International, Virage Logic Corporation (acquired by Synopsys) and Synopsys Inc. have utilized our Silicon Shuttle program. In our Alliance Program, we coordinate with leading suppliers of intellectual property, design and ASIC services to ensure their offerings are available to our customers in an integrated, easy to use manner which matches customers need to our technologies. With a view to lowering customer design barriers, we expanded our design support functions from conventional design support to adding intellectual property development to complement third-party intellectual properties and to provide customers with the widest range of silicon-verified choices. Our offerings range from design libraries to basic analog mixed-mode intellectual properties which, together, have helped shorten our customer s design cycle time.

*Mask Tooling.* Our engineers generally assist our customers to design and/or obtain masks that are optimized for our advanced process technologies and equipment. Actual mask production is usually provided by independent third parties specializing in mask tooling.

*Wafer Fabrication.* As described above, our manufacturing service provides all aspects of the wafer fabrication process by utilizing a full range of advanced process technologies. During the wafer fabrication process, we perform procedures in which a photosensitive material is deposited on the wafer and exposed to light through the mask to form transistors and other circuit elements comprising a semiconductor. The unwanted material is then etched away, leaving only the desired circuit pattern on the wafer. As part of our wafer fabrication services, we also offer wafer probing services, which test, or probe, individual die on the processed wafers and identify dice that fail to meet required standards. We prefer to conduct wafer probing internally to obtain speedier and more accurate data on manufacturing yield rates.

*Assembly and Testing.* We offer our customers turnkey services by providing the option to purchase finished semiconductor products that have been assembled and tested. We outsource assembly and test services to leading assembly and test service providers, including Siliconware Precision Industries Co., Ltd., or Siliconware, and Advanced Semiconductor Engineering Inc. in Taiwan. After final testing, the semiconductors are shipped to our customers designated locations.

# **Customers and Markets**

Our primary customers, in terms of our sales revenues, include premier integrated device manufacturers, such as Texas Instruments, Infineon and STMicroelectronics, and leading fabless design companies, such as Xilinx, Broadcom, MediaTek, Realtek and Novatek. Although we are not dependent on any single customer, a significant portion of our net operating revenues have been generated from sales to a few customers. Our top ten customers accounted for approximately 60.3% of our net operating revenues in 2011. Set forth below is a geographic breakdown of our operating revenues in 2009, 2010 and 2011 by the location of our customers.

	Year Ended Decemb				
Region	2009	2010	2011		
Taiwan	35.8%	33.6%	33.1%		
Singapore	24.2	28.8	24.8		
China (include Hong kong)	2.6	3.4	4.2		
Japan	2.6	2.1	1.9		
USA	21.7	16.9	17.9		
Others	13.1	15.2	18.1		
Total	100.0%	100.0%	100.0%		

We believe our success in attracting these end customers is a direct result of our commitment to high quality service and our intense focus on customer needs and performance. Because we are an independent semiconductor foundry, most of our operating revenue is generated by our sales of wafers. For 2011, net wafer sales represents 91.0% of our net operating revenue, and excludes revenue from testing, mask and other services. The following table presents the percentages of our net wafer sales by types of customers during the last three years.

	Year Ended December 31,				
Customer Type	2009	2010	2011		
Fabless design companies	79.2%	78.1%	75.8%		
Integrated device manufacturers	20.8	21.9	24.2		
Total	100.0%	100.0%	100.0%		

We focus on providing a high level of customer service in order to attract customers and maintain their ongoing loyalty. Our culture emphasizes responsiveness to customer needs with a focus on flexibility, speed and accuracy throughout our manufacturing and delivery processes. Our customer-oriented approach is especially evident in two types of services: customer design development services and manufacturing services. We believe that our large production capacity and advanced process technology enable us to provide better customer service than many other foundries through shorter turn-around time, greater manufacturing flexibility and higher manufacturing yields.

We work closely with our customers throughout the design development and prototyping processes. Our design support team closely interacts with customers and intellectual property vendors to facilitate the design process and to identify their specific requirements for intellectual property offerings. We are responsive to our customers requirements in terms of overall turn-around time and production time-to-market by, for example, helping our customers streamline their IP offering processes and delivering prototypes in a timely and easy-to-use fashion. We also maintain flexibility and efficiency in our technical capability and respond quickly to our customers design changes.

For IP offerings, we work with several leading IP vendors from digital, memory and analog fields in the semiconductor industry, such as Faraday Technology Corp., Synopsys Inc., ARM Limited, Silicon Image Inc. Sidense Corp., and Kilopass Technology, to deliver quality IP blocks that have been silicon validated using our advanced processes. Our alliance programs with major electronic design automation vendors, such as Cadence, Magma, Mentor and Synopsys Inc., provide our customers with digital/analog reference design procedures and easy-to-use design solutions. By continuously enhancing our IP offerings, reference design procedures and design services through collaboration with major vendors, we aim to provide complete, accurate and user-friendly design solutions to our customers.

As a design moves into manufacturing production, we continue to provide ongoing customer support through all phases of the manufacturing process. The local account manager works with our customer service representative to ensure the quality of our services, drawing upon our marketing and customer engineering support teams as required.

We offer an online service, MyUMC , which gives our customers easy access to our foundry services by providing a total online supply chain solution. MyUMC offers 24-hour access to detailed account information such as manufacturing, engineering and design support documents through each customer s own customized start page. The features that are available to customers through MyUMC include (i) viewing the status of orders from the start of production to the final shipping stages; (ii) designing layouts to shorten customers tape out time; (iii) collecting customer engineering requests; (iv) gathering and downloading documents for design purposes and (v) and accessing online in real-time the same manufacturing data used by our fab engineers. In addition, we have a system-to-system connecting services to provide direct data exchange between our system and our customers to help reduce the cost of chip designs and reduce the time to market. In order to continue to improve our information security management, our Information Technology Division received the certification of ISO/IEC 27001:2005 in March 2008.

We price our products on a per die or per wafer basis, taking into account the complexity of the technology, the prevailing market conditions, the order size, the cycle time, the strength and history of our relationship with the customer and our capacity utilization. Our main sales office is located in Taiwan, which is in charge of our sales activities in Asia. United Microelectronics (Europe) BV, our wholly-owned subsidiary based in Amsterdam, assists our sales to customers in Europe. Our sales in North America are made through UMC Group (USA), our subsidiary located in Sunnyvale, California.

We typically designate a portion of our wafer manufacturing capacity to some of our customers primarily under two types of agreements: reciprocal commitment agreements and deposit agreements. Under a reciprocal commitment agreement, the customer agrees to pay for, and we agree to supply, a specified capacity at a specified time in the future. Under a deposit agreement, the customer makes in advance a cash deposit for an option on a specified capacity at our fabs for a stated period of time. Option deposits are credited to wafer purchase prices as shipments are made. If this customer does not use the specified capacity, it will forfeit the deposit but, in certain circumstances and with our permission, the customer may arrange for a substitute customer to utilize such capacity. In some cases, we also make available capacity to customers under other types of agreements, such as capacity commitment arrangements with technology partners.

We advertise in trade journals, organize technology seminars, hold a variety of regional and international sales conferences and attend a number of industry trade fairs to promote our products and services. We also publish a corporate newsletter for our customers.

# Competition

The worldwide semiconductor foundry industry is highly competitive, particularly during periods of overcapacity and inventory correction. We compete internationally and domestically with dedicated foundry service providers as well as with integrated device manufacturers and final product manufacturers which have in-house manufacturing capacity or foundry operations. Some of our competitors have substantially greater production, financial, research and development and marketing resources than we have. As a result, these companies may be able to compete more aggressively over a longer period of time than we can. In addition, several new dedicated foundries have commenced operations and compete directly with us. Any significant increase in competition may erode our profit margins and weaken our earnings.

We believe that our primary competitors in the foundry services market are Taiwan Semiconductor Manufacturing Company Limited, Semiconductor Manufacturing International (Shanghai) Corporation and Globalfoundries Inc., as well as the foundry operation services of some integrated device manufactures such as IBM, Samsung, Intel and Toshiba. Other competitors such as DongbuAnam Semiconductor, Grace Semiconductor Manufacturing Corp., X-FAB Semiconductors Foundries AG and Silterra Malaysia Sdn. Bhd. have initiated efforts to develop substantial new foundry capacity, although much of such capacity involves less cost-effective production than the 12-inch fabs for which we possess technical know-how. New entrants in the foundry business are likely to initiate a trend of competitive pricing and create potential overcapacity in legacy technology. The principal elements of competition in the semiconductor foundry industry include technical competence, production speed and cycle time, time-to-market, research and development quality, available capacity, manufacturing yields, customer service and price. We believe that we compete favorably with the new competitors on each of these elements, particularly our technical competence and research and development capabilities.

# **Intellectual Property**

Our success depends in part on our ability to obtain patents, licenses and other intellectual property rights covering our production processes and activities. To that end, we have acquired certain patents and patent licenses and intend to continue to seek patents on our production processes. As of December 31, 2011, we held 3,791 U.S. patents and 6,200 patents issued outside of the United States.

Our ability to compete also depends on our ability to operate without infringing on the proprietary rights of others. The semiconductor industry is generally characterized by frequent claims and litigation regarding patent and other intellectual property rights. As is the case with many companies in the semiconductor industry, we have from time to time received communications from third parties asserting patents that allegedly cover certain of our technologies and alleging infringement of certain intellectual property rights of others. We expect that we will receive similar communications in the future. Irrespective of the validity or the successful assertion of such claims, we could incur significant costs and devote significant management resources to the defense of these claims, which could seriously harm our company. See Item 3. Key Information D. Risk Factors Our inability to obtain, preserve and defend intellectual property rights could harm our competitive position.

In order to minimize our risks from claims based on our manufacture of semiconductor devices or end-use products whose designs infringe on others intellectual property rights, we in general accept orders only from companies that we believe enjoy satisfactory reputation and for products that are not identified as risky for potential infringement claims. Furthermore, we obtain indemnification rights from customers. We also generally obtain indemnification rights from equipment vendors to hold us harmless from any losses resulting from any suit or proceedings brought against our company involving allegation of infringement of intellectual property rights on account of our use of the equipment supplied by them.

We have entered into various patent cross-licenses with major technology companies, including a number of leading international semiconductor companies, such as IBM, Renesas (and formerly Hitachi), Freescale (and formerly Motorola) and LSI. Our cross licenses may have different terms and expiry dates. Depending upon our competitive position and strategy, we may or may not renew our cross licenses and further, we may enter into different and/or additional technology and/or intellectual property licenses in the future.

# **Research and Development**

We spent NT\$8,044 million, NT\$8,740 million, and NT\$9,395 million (US\$310 million) in 2009, 2010, and 2011, respectively, on research and development, which represented 8.8%, 6.9%, and 8.0%, respectively, of our net operating revenues for these periods. Our research and development efforts are mainly focused on delivering SoC foundry solutions that consist of the world s leading process technologies, customer support services and manufacturing techniques. These resources provide our foundry customers with improved opportunities to develop SoC products that supply the global market. Our commitment to research and development can be illustrated by our 2011 research and development expenditures, which reached approximately 8.0% of net operating revenues. In June 2007, we completed the construction of a research and development center for nanometer technologies in the Tainan Science Park. The research and development center allows for seamless application of advanced process technology in the research and development phase to the manufacturing phase.

As of March 31, 2012, we employed 988 professionals in our research and development activities. In addition, other management and operational personnel are also involved in research and development activities but are not separately identified as research and development professionals.

# **Our Investments**

Depending on the market conditions, we intend to gradually reduce our investments through exchangeable bond offerings and other measures available to our company.

In December 2009, We issued two tranches of zero coupon exchangeable bonds due 2014. The two exchangeable bond offerings consist of \$127.2 million bonds exchangeable into common shares of Unimicron Technology Corporation, or Unimicron, and \$80 million bonds exchangeable into common shares of Novatek Microelectronics Corp., Ltd., or Novatek. As of December 31, 2011, no bonds had been exchanged into common shares of Unimicron and Novatek, respectively.

In 2009, we sold 2 million common shares of MediaTek for NT\$809 million and did not have any common shares of MediaTek. In addition, we sold 12 million common shares of Unimicron Tech Corp. for NT\$462 million.

In 2010, we sold 96 million common shares of Mega Financial Holding Company for NT\$1,903 million.

In 2011, we sold 1 million, 1 million, 6 million, 5 million and 7 million common shares of Maxlinear, Inc., Alpha & Omega Semiconductor Ltd., Coretronic Corp., Epistar Corp., and Davicom Semiconductor , Inc. for NT\$330 million (US\$11 million), NT\$305 million (US\$10 million), NT\$292 million (US\$10 million), NT\$277 million (US\$9 million), and NT\$205 million (US\$7 million), respectively.

# **Environmental, Safety and Health Matters**

UMC implemented extensive ESH management systems since 1996. These systems enable our operations to identify applicable ESH regulations, assist in evaluating compliance status and timely establish loss preventive and control measures. The systems we implemented in all our fabs have been certified as meeting the ISO 14001 and OHSAS 18001 standards. ISO 14001 consists of a set of standards that provide guidance to the management of organizations to achieve an effective environmental management system. Procedures are established at manufacturing locations to ensure that all accidental spills and discharges are properly addressed. OHSAS 18001 is a recognizable occupational health and safety management system standard, which may be applied to assess and certify our management systems. Our goal in implementing ISO 14001 and OHSAS 18001 systems is to continually improve our ESH management, comply with ESH regulations and to be a sustainable green foundry. UMC s major ESH policies include:

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Environmental Protection Aspects:

To be an environmentally friendly enterprise characterized by continual improvement with a goal of pollution-free production;

# Edgar Filing: UNITED MICROELECTRONICS CORP - Form 20-F

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To incorporate our environmental management system into the general organizational management system;

To take initiatives to reduce waste production and prevent pollution by introducing and developing environmentally friendly technology for design, production and operation;

To conserve energy and recycle resources in order to be a model of environmental protection for the international community;

To fulfill corporate social responsibilities by playing an active role in public and community affairs to improve and protect the environment;

To educate employees about environmentally sound ethics and practices. Safety and Health Aspects :

To achieve a goal of zero accidents and comply with all applicable safety and regulatory requirements to ensure safety is the top priority for UMC s sustainable development.

To reinforce best safety and health management practice to reach international ESH and risk management standards.

To adopt risk control advanced ESH management and rescue technologies to enhance company s standards.

To provide safe work environment and operation through preventive management and audit.

To eliminate hazard factors and prevent incidents through each and every ownership of responsibilities in safety and health.

To encourage all employees to actively participate in safety and health training and promotional activities. As a member of the global community and a semiconductor industry leader, we have implemented measures to deal with environmental problems and mitigate climate change. We have introduced green concepts in our operations, including green commitment, management, procurement, production, products, recycling, office, education and marketing.

In order to conquer the green barrier formed by the RoHS (the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment) Directive, we established a cross-division HSPM (Hazardous Substances Process Management) committee to manage all development and implementation of related work. We completed the final system audit for QC 080000 ICEQ HSPM qualification, a certification for having a hazardous substance process management system that meets the RoHS Directive, on June 9, 2006 and became the first semiconductor manufacturer worldwide to achieve HSPM certification for all fabs. In 2009, we completed the report on the carbon footprint verification for integrated circuit wafers produced at our facilities, the first such report in the foundry industry. In 2010, UMC completed water footprint verification for our 200 mm and 300 mm wafers. These verifications provide scientific and reliable statistics on the carbon and water information of products manufactured in our fabs as well as self-reviews of environmental impact.

With respect to safety and health management, we realized that lowering the risks in equipment and processes can reduce accidents, but cannot guarantee the safety of all employees. In order to achieve the goal of zero-accident, we intend to promote the concept of safety is my responsibility. We have educated the employees with the concepts of be aware of your own safety well as the safety of others and safety is everyone s responsibility, and my personal accountability.

Furthermore, we have implemented the FMEA method to foster employees capabilities in risk analysis. Therefore, we established a channel for communication to encourage and ensure the employees to fully express their opinions for professional response and assistance. By doing so, we hope to establish a working attitude of Safety and health first to further improve the quality of our working environment, and eventually to become a good example of global safety and hygiene management.

The following list sets forth some of the important awards that we received in environmental protection, safety and health.

Selected as a member of Dow Jones Sustainability Indexes for 4 years since 2008

Awarded National Sustainable Development Award, by National Council for Sustainable Development in 2011

Awarded Industrial Sustainable Excellence Award, by Industrial Development Bureau, Ministry of Economic Affairs in 2011

Awarded Excellence Disclosure in CSR Report Award, by Taiwan Stock Exchange Corporation in 2011

Awarded Taiwan Corporate Sustainability Report Award by Taiwan Institute for Sustainable Energy. (2008-2011)

Awarded Enterprises Environmental Award of the Republic of China by the Environmental Protection Administration of Executive Yuan, R.O.C. (totally 12 times since 2001)

Awarded Excellent Performance in Waste Management and Resource Reduction, Recycle and Reuse by the Environmental Protection Administration of Executive Yuan, R.O.C.(2011)

Awarded Workplace Safety & Health Performance Awards- Silver Award by Ministry of Manpower. (2011)

Awarded Excellent Industrial Safety and Health Executive Organization of Hsinchu Science Park by The Science Park Administration. (2011)

Awarded Excellent Achievements in 2011 National Occupational Safety and Health Week by Council of Labor affairs. (2011)

# **Climate Change**

We hope to contribute to energy saving and carbon reduction through breakthroughs in green technology development and applications and establish our company as a leader in the green technology industry by injecting fresh enthusiasm for sustainable development.

We announced the climate change policy and carbon emission reduction plans on April 22, 2010. The new plans include a reduction of 33% for normalized perfluorinated compounds, or PFC, emissions and 3% for electricity usage by 2012 compared with the base year 2009. It is estimated that once the plan is completed, relative  $CO_2$  emissions will be reduced by another 170,000 tons each year, which is expected to bring the total relative  $CO_2$  emission reduction achieved through our carbon reduction measures to 43%, or approximately 1.1 million tons per year. Relative PFC emissions are expected to be reduced by as much as 75% with the new plan when combined with existing efforts. Our climate change policies during this post-Kyoto Protocol period includes: (i) achieving carbon neutral status via carbon management, (ii) becoming a comprehensive low-carbon solution provider, and (iii) leveraging corporate resources to cultivate a low-carbon economy.

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We are the leader in the foundry industry to complete the replacement of C F with C F of lower global warming potential in 2007. We estimate this replacement program helped reduce CO<sub>2</sub> emissions by 132,000 metric tons in 2011. Furthermore, our introduction of C<sub>4</sub>F<sub>8</sub> in 2008 further decreased the emission of CO<sub>2</sub> in our production process reducing CO<sub>2</sub> emissions by an estimated 250,000 metric tons in 2011.

We also support timely disclosure of carbon information and ensuring data quality. Since 2006, we have participated in the Carbon Disclosure Project formed by global institutional investors and disclosed our annual greenhouse gas emission volume, reduction goals and results. Moreover, we engage third-party verifiers to ensure the quality of the data. We completed verification on greenhouse gas emission and reduction records from 2000 to 2010 for all of our fabs in Taiwan. We plan to complete the 2011 GHG emissions data verification within this year.

In addition, our environmental efforts include the establishment of our New Business Development Center which will promote a low carbon economy by investing across the entire supply chain of the green technology industry, including renewable energy, solar energy, and new generation LED. The New Business Development Center will focus its primary investments on the LED and solar energy industries and such companies as LED lighting company Power Light Co. and photovoltaic engineering design company EverRich Energy Corporation.

# Litigation

Hejian, a semiconductor manufacturer in Suzhou, China, was set up in December 2001. Soon after the establishment of Hejian, various rumors circulated that Hejian was set up by us. We immediately denied these rumors: we did not provide any capital nor did we transfer any technology to Hejian. Our company was found by the R.O.C. MOEA to be in violation of the Act Governing Relations Between Peoples of the Taiwan Area and the Mainland Area and fined in the amount of NT\$5 million for our alleged investment in Hejian. Our appeal to the R.O.C. MOEA in relation to such fines was denied in late 2006. We filed an administrative lawsuit in December 2006 with the Taipei Administrative High Court to challenge the R.O.C. MOEA fine. In July 2007, the Taipei Administrative High Court revoked the R.O.C. MOEA s decision and ruled in our favor. In August 2007, the R.O.C. MOEA filed an appeal with the Supreme Administrative Court. On December 10, 2009, the Supreme Administrative lawsuit. On July 21, 2010, the Taipei High Court ruled against us and we appealed to the Supreme Administrative Court on August 23, 2010. The Supreme Administrative Court rejected our appeal on December 19, 2011 and ruled against us. Since we already paid the fine on January 29, 2007, this case has been closed.

In February 2006, Taiwan Power Company, or TPC, filed a civil litigation case in Taiwan Hsinchu District Court against us and other Taiwan companies, claiming that (1) we and the other defendants collectively should pay electrical fees of NT\$13.3 million with accrued interest to TPC, and (2) we pay electrical line fees of NT\$21.2 million to TPC. On March 11, 2009, the Hsinchu District Court denied TPC s claim and ruled in our favor. TPC filed an appeal with the Taiwan High Court on April 9, 2009. On July 13, 2010, the Taiwan High Court ruled against us and we filed an appeal to the Supreme Court on August 13, 2010. On December 30, 2010, the Supreme Court found our appeal to be legitimate, dismissed the Taiwan High Court s judgment against us and remanded the case back to the Taiwan High Court for retrial. The Taiwan High Court ruled against TPC on July 5, 2011, and TPC filed an appeal with the Supreme Court. On October 12, 2011 the Supreme Court denied TPC s appeal and ruled in our favor. This case has been closed in our favor.

# **Risk Management**

Risk and safety matters are administered by our Group s Risk Management and Environmental Safety Health Division, or the GRM & ESH, established in 1998. We are pursuing the goal of a highly protected risk status in the semiconductor industry through the implementation of strict engineering safety procedures, regular enforcement of safety codes and standards, and compliance of detailed industry safety guidelines.

Our hazards risk management slogans are set forth below:

Uniqueness in risk management

Maturity in property loss control

Continuous improvement in BCP

We have also adopted the Triple Star Ranking System of Chartis Insurance, a global leader in risk management and insurance, since 1999. All fabs have been ranked as top-class following Chartis s risk evaluation and risk improvement recommendations. The ranking system focuses on 20 items, including ten Physical Protection Elements and ten Human Elements. Our latest 12-inch lines, Fab 12A P1/2, 12A P3/4 and 12i, obtained triple-stars in all 20 elements in the very first Triple Star Audit.

We have also implemented proactive efforts in earthquake risk prevention. We believe our efforts contributed to our quick and exemplary recovery from two major earthquakes in Taiwan on September 21, 1999 and March 4, 2010, respectively. Our Hsinchu fabs and Fab 12A in Tainan sustained only minor impact to their operations from the earthquake without interruption to the power system or water service. Normal operations resumed shortly after the incidents.

Our continuous efforts in risk improvement and mitigation programs were recognized by the clean room risk identification and mitigation Gold Medal we received in the National Quality Control Circle competition held by the R.O.C. MOEA in 2005. In addition, we were awarded Outstanding Performance Award in Risk Management in 2006 by Chartis Insurance as a result of our outstanding risk management program.

#### Insurance

We maintain industrial all risk insurance for our buildings, facilities, equipment and inventories as well as third party properties. The insurance for fabs and their equipment covers losses from physical damage and business interruption up to their respective policy limits except for policy exclusions. We purchase directors and officers liability insurance for our board directors and executive officers, covering the liabilities incurred in relation to his/her/its operation of business and legally responsible for. We also maintain public liability insurance for losses to third parties arising from our business operations. We believe that our insurance arrangement is adequate to cover all major types of losses relevant to the semiconductor industry practice. However, significant damage to any of our production facilities, whether as a result of fire or other causes, could seriously harm our business.

#### C. Organizational Structure

The following list shows our corporate structure as of December 31, 2011:

	Jurisdiction of	Percentage of Ownership as of
Company	Incorporation	December 31, 2011
UMC Group (USA)	California, U.S.A.	100.00%
United Microelectronics (Europe) B.V.	The Netherlands	100.00%
UMC Capital Corp.	Cayman Islands	100.00%
TLC Capital Co., Ltd.	Taiwan, R.O.C.	100.00%
UMC New Business Investment Corp.	Taiwan, R.O.C.	100.00%
Green Earth Limited	Samoa	100.00%
Fortune Venture Capital Corp.	Taiwan, R.O.C.	100.00%
UMC Japan	Japan	100.00%
UMC Investment (Samoa) Limited	Samoa	100.00%

T' DOC	
Taiwan, R.O.C.	100.00%
California, U.S.A.	100.00%
British Virgin Islands	100.00%
Samoa	100.00%
China	100.00%
Taiwan, R.O.C.	100.00%
Samoa	100.00%
Samoa	100.00%
Taiwan, R.O.C.	57.33%
Taiwan, R.O.C.	72.16%
Taiwan, R.O.C.	55.25%
China	55.25%
Samoa	55.25%
China	55.25%
Taiwan, R.O.C.	90.61%
China	90.61%
China	90.61%
Taiwan, R.O.C.	72.83%
Taiwan, R.O.C.	70.09%
China	90.61%
China	90.61%
China	72.16%
Samoa	57.33%
Samoa	57.33%
China	57.33%
Samoa	57.33%
Samoa	57.33%
	British Virgin Islands Samoa China Taiwan, R.O.C. Samoa Samoa Taiwan, R.O.C. Taiwan, R.O.C. China Samoa China Taiwan, R.O.C. China China Taiwan, R.O.C. China China China China China China Samoa China Samoa China China China Samoa China

Note : On April 1, 2011, United Lighting Opto-Electronic Inc. merged with Power Light Tech Co., Ltd. After the merger, Power Light Tech Co., Ltd. was the surviving company and was renamed to United Lighting Opto-Electronic Inc.

# D. Property, Plants and Equipment

Please refer to B. Business Overview Manufacturing Facilities for a discussion of our property, plants and equipment.

# ITEM 4A. UNRESOLVED STAFF COMMENTS

Not applicable.

# ITEM 5. OPERATING AND FINANCIAL REVIEW AND PROSPECTS

Unless stated otherwise, the discussion and analysis of our financial condition and results of operations in this section apply to our financial information as prepared in accordance with R.O.C. GAAP. You should read the following discussion of our financial condition and results of operations together with the consolidated financial statements and the notes to such statements included in this annual report. This discussion may contain forward-looking statements based upon current expectations that involve risks and uncertainties. Our actual results may differ materially from those anticipated in these forward-looking statements as a result of various factors, including those set forth under Item 3. Key Information D. Risk Factors or in other parts of this annual report on Form 20-F. R.O.C. GAAP varies in certain significant respects from U.S. GAAP. These differences and their effects on our financial statements are described in Note 35 to our audited consolidated financial statements included in this annual report.

For the convenience of readers, NT dollar amounts used in this section for, and as of, the year ended December 31, 2011 have been translated into U.S. dollar amounts using US\$1.00 = NT\$30.27, the noon buying rate as certified for customs purposes by the Federal Reserve Bank of New York on December 30, 2011. The U.S. dollar translation appears in parentheses next to the relevant NT dollar amount.

# Overview

We are one of the world s leading independent semiconductor foundries, providing comprehensive wafer fabrication services and technologies to our customers based on their designs. We manage our business as two operating segments but measure our results of operations based on a single reportable segment because the other operating segment does not exceed the materiality threshold.

#### Cyclicality of the Semiconductor Industry

As the semiconductor industry is highly cyclical, revenues varied significantly over this period. It can take several years to plan and construct a fab and bring it to operations. Therefore, during periods of favorable market conditions, semiconductor manufacturers often begin building new fabs or acquiring existing fabs in response to anticipated demand growth for semiconductors. In addition, after commencement of commercial operations, fabs can increase production volumes rapidly. As a result, large amounts of semiconductor manufacturing capacity typically become available during the same time period. Absent a proportional growth in demand, this increase in supply often results in semiconductor manufacturing overcapacity, which has led to a sharp decline in semiconductor prices and significant capacity under-utilization. Our average capacity utilization rate was 69.4% in 2009, 93.7% in 2010 and 78.6% in 2011. We believe that our results in 2009, 2010 and 2011 reflect the ongoing uncertainty in the global economy, conservative corporate information technology spending and low visibility with respect to end market demand.

#### Pricing

We price our products on either a per die or a per wafer basis, taking into account the complexity of the technology, the prevailing market conditions, the order size, the cycle time, the strength and history of our relationship with the customer and our capacity utilization. Because semiconductor wafer prices tend to fluctuate frequently, we in general review our pricing on a quarterly basis. As a majority of our costs and expenses are fixed or semi-fixed, fluctuations in our products average selling prices historically have had a substantial impact on our margins. Our average selling price increased approximately 2.3% from 2010 to 2011, mainly due to a change in our product mix.

We believe that our current level of pricing is comparable to that of other leading foundries in each respective geometry. We believe that our ability to provide a wide range of advanced foundry services and process technologies as well as large manufacturing capacity will enable us to compete effectively with other leading foundries at a comparable price level.

# Capacity Utilization Rates

Our operating results are characterized by relatively high fixed costs. In 2009, 2010 and 2011, approximately 67.2%, 61.5%, and 63.8%, respectively, of our manufacturing costs consisted of depreciation, a portion of indirect material costs, amortization of license fees and indirect labor costs.

If our utilization rates increase, our costs would be allocated over a larger number of units, which generally leads to lower unit costs. As a result, our capacity utilization rates can significantly affect our margins. Our utilization rates have varied from period to period to reflect our production capacity and market demand. Our average capacity utilization rate was 69.4% in 2009, 93.7% in 2010 and 78.6% in 2011. Utilization rates were primarily affected by global macroeconomic factors. Other factors affecting utilization rates are efficiency in production facilities, product flow management, the complexity and mix of the wafers produced, overall industry conditions, the level of customer orders, mechanical failure, disruption of operations due to expansion of operations, relocation of equipment or disruption of power supply and fire or natural disaster.

Our production capacity is determined by us based on the capacity ratings given by manufacturers of the equipment used in the fab, adjusted for, among other factors, actual output during uninterrupted trial runs, expected down time due to set up for production runs and maintenance, expected product mix and research and development. Because these factors include subjective elements, our measurement of capacity utilization rates may not be comparable to those of our competitors.

# Change in Product Mix and Technology Migration

Because the price of wafers processed with different technologies varies significantly, the mix of wafers that we produce is among the primary factors that affect our revenues and profitability. The value of a wafer is determined principally by the complexity and performance of the processing technology used to produce the wafer, as well as by the yield and defect density. Production of devices with higher levels of functionality and performance, with better yields and lower defect density as well as with greater system-level integration requires better manufacturing expertise and generally commands higher wafer prices. The increase in price generally has more than offset associated increases in production cost once an appropriate economy of scale is reached.

Prices for wafers of a given level of technology generally decline over the processing technology life cycle. As a result, we have continuously been migrating to increasingly sophisticated technologies to maintain the same level of profitability. We began our volume production with 90 nanometer and 65 nanometer technologies in 2004 and 2006, respectively. We started 40-nanometer production in the first half of 2009. These types of technology migration require continuous capital and research and development investment. Because developing and acquiring advanced technologies involve substantial capital investment, we expect to continue to spend a substantial amount of capital on upgrading our technologies and capabilities. We introduced our 28-nanometer technology to customers in 2011 to significantly increase the competitive advantages of our customers by providing better device performance in a smaller die size.

# Manufacturing Yields

Manufacturing yield per wafer is measured by the number of functional dice on that wafer over the maximum number of dice that can be produced on that wafer. A small portion of our products is priced on a per die basis, and our high manufacturing yields have assisted us in achieving higher margins. In addition, with respect to products that are priced on a per wafer basis, we believe that our ability to deliver high manufacturing yields generally has allowed us to either charge higher prices per wafer or attract higher order volumes, resulting in higher margins.

We continually upgrade our process technologies. At the beginning of each technological upgrade, the manufacturing yield utilizing the new technology is generally lower, sometimes substantially lower, than the yield under the current technology. The yield is generally improved through the expertise and cooperation of our research and development personnel and process engineers, as well as equipment and at times raw material suppliers. Our policy is to offer customers new process technologies as soon as the new technologies have passed our internal reliability tests.

#### Investments

Most of our investments were made to improve our market position and for strategy considerations, a significant portion of which are in foundry-related companies including fabless design customers, raw material suppliers and intellectual property vendors. In addition, we also invest in non-foundry-related businesses, such as Cathay Financial Holding Co. Ltd. We have established the New Business Development Center to identify and make strategic investments in high growth industries such as solar, LED and semiconductor.

In recent years many developed and developing countries have listed energy saving and carbon reduction as primary administrative policies to tackle the challenge of potential energy shortages in future. Technologies for renewable energy and energy saving are expected to become a focus in future technology development and the growth of green energy related industries is predictable. On August 24, 2009, our Board of Directors approved the establishment of our New Business Development Center and its 100% owned subsidiary, UMC New Business Investment Corporation. We established the New Business Development Center to capitalize on high growth and high profit in potential industries such as solar, light-emitting diode, LED, and semiconductor through timely strategic investment. Although our revenues from the solar and LED section have been adversely affected by short-term market conditions, we believe that the long-term potential of solar and LED sectors still appears promising. As we believe that these two sectors have great potential for growth, we have invested an additional NT\$3 billion to our UMC New Business Investment Corporation in 2011 that will primarily be allocated to research and development and capital expenditures for the solar and LED sectors. As of December 31, 2011, the paid-in capital of the UMC New Business Investment Corporation is NT\$4.5 billion. As key proficiencies mature and resource integration is complete, the new energy business is expected to become one of our core businesses. We expect these measures will position us well for future growth.

We have from time to time disposed of investments for financial, strategic or other purposes in recent years. See Item 4. Information on the Company B. Business Overview Our Investments for a description of our investments.

# **Treasury Share Programs**

We have from time to time announced plans, none of which was binding on us, to buy back up to a fixed amount of our shares on the Taiwan Stock Exchange at the price range set forth in the plans. In 2009, 2010, and 2011, we purchased an aggregate of 300 million, 300 million, and nil, respectively, of our shares under these plans. From December 17, 2008 to February 16, 2009, we purchased 300 million of our shares at an average price of NT\$7.98 per share to transfer to employees. From February 3, 2010 to April 2, 2010, we purchased 300 million of our shares at an average price of NT\$16.15 per share to transfer to employees. Of the repurchased shares, 97 million, 78 million and 64 million shares were purchased by our employees in December 2007, December 2009, and December 2010, respectively; 556 million shares in aggregate were canceled in 2008.

#### **Critical Accounting Policies**

#### General

Our discussion and analysis of our financial condition and results of operations are based upon our consolidated financial statements included in the annual report, which have been prepared in accordance with R.O.C. GAAP. R.O.C. GAAP varies in certain respects from U.S. GAAP. These differences and their effects on our financial statements are described in Note 35 to our audited consolidated financial statements included elsewhere in this annual report. The preparation of our consolidated financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. We evaluate our estimates on an ongoing basis and base our estimates on historical experience and on various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

We believe the following critical accounting policies involve significant judgments and estimates used in the preparation of our consolidated financial statements.

#### Revenue Recognition

We recognize revenue when persuasive evidence of an arrangement exists, the product or service has been delivered, the seller s price to the buyer is fixed or determinable and collectability is reasonably assured. Most of our sales transactions have shipping terms of Free Carrier, or FCA, by which title and the risk of loss or damage for the shipment are transferred to the customer upon delivery of the product to a carrier approved by the customer.

Allowance for sales returns and discounts are estimated based on the information of customer complaints, historical experiences, management judgment and any other known factors that might significantly affect collectability. Such allowances are recorded in the same period in which sales are made. Shipping and handling costs are included in sales expenses.

#### Allowance for Doubtful Accounts

Prior to December 31, 2010, recognition of an allowance for doubtful accounts was based on historical experience in analyzing the aging and determining the collectability of notes, accounts and other receivables as of the balance sheet date. Effective January 1, 2011, we first assess as of balance sheet date whether objective evidence of impairment exists for notes, accounts and other receivables that are individually significant. If there is objective evidence that an impairment loss has occurred, the amount of impairment loss is assessed individually. For notes, accounts and other receivables other than those mentioned above, we group those assets with similar credit risk characteristics and collectively assess them for impairment. If, in a subsequent period, the amount of the impairment loss is reversed and recognized through profit or loss. The reversal shall not result in a carrying amount of notes, accounts and other receivables that exceeds what the amortized cost would have been had the impairment not been recognized at the date the impairment is reversed. Considerable judgment is required in assessing the ultimate realization of these receivables including the current credit worthiness and the past collection history of each customer. A deterioration of economic conditions either in the R.O.C. or in other major overseas markets may contribute to the deterioration of financial conditions of our customers, resulting in an impairment of their ability to make payments.

#### Inventory

Inventories are accounted for on a perpetual basis. Raw materials are recorded at actual purchase costs, while the work in process and finished goods are recorded at standard costs and subsequently adjusted to costs using the weighted-average method at the end of each month. Allocation of fixed production overheads to the costs of conversion is based on the normal capacity of the production facilities. Inventories are valued at the lower of cost and net realizable value item by item. Net realizable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale.

#### Income Taxes

Most of our existing tax benefits arise from investment tax credits, and others from net operating loss carry-forward and temporary differences. We recognize these tax benefits as deferred tax assets. Income tax expense or benefit is recognized when there is a net change in deferred tax assets and liabilities. A valuation allowance is recorded to reduce our deferred tax assets to the extent that we believe it is more likely than not that the tax benefits will not be realized. The assessment of the valuation allowance involves subjective assumptions and estimates as it principally depends on the estimation of future taxable income. If future taxable income is lower than expected due to future market conditions or other reasons or in the event we determine that we will not be able to realize all or part of our net deferred tax assets in the future, an adjustment to our deferred tax assets valuation allowance may be required with the adjusting amount charged to income in this period. Likewise, should future taxable income be higher than expected due to future market conditions or other reasons or in the event we determine that we would be able to realize our deferred tax assets in the future in excess of our net recorded amount, an adjustment to our deferred tax assets valuation allowance in this period.

#### Long-lived Assets Impairment

We review the long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying value of the long-lived assets might not be recoverable. Such review may include assessing whether there is a significant decrease in market values of long-lived assets or significant deterioration of market conditions to indicate the carrying value of such assets may not be recovered through future cash flows, any change in the use of long-lived assets to negatively affect their fair values, and any obsolescence issues that would lead to a lower fair value determination. If there is an indication that an asset might be impaired, we proceed with a further impairment test, which is performed for asset groups related to the lowest level of identifiable independent cash flows. We compare the carrying amount with the recoverable amount derived from discounted cash flow analysis to determine whether the asset is impaired and recognize impairment loss to the extent that its carrying amount exceeds its recoverable amount. If there is evidence that impairment losses recognized previously no longer exists, or has diminished, and the recoverable amount of the long-lived assets increases because of an increase in the asset s estimated service potential, the amount of loss may be reversed to the extent that the resulting carrying value should not exceed the carrying value had no impairment loss been recognized in prior years.

Due to our asset usage model and the interchangeable nature of our semiconductor manufacturing capacity, we must make subjective judgments and estimates in determining the independent cash flows that can be related to specific asset groups, including the service potential of long-lived assets through its estimated useful life, cashflow-generating capacity, physical output capacity, potential fluctuation of economic cycle in the semiconductor industry and our operating situation.

#### Goodwill Impairment

Goodwill is subject to impairment tests on an annual basis, or more frequently whenever events occur or circumstances change indicating that goodwill might be impaired. The assessment on impairment of goodwill is subject to significant judgment. Such judgment includes identifying the cash generating unit, or CGU, making assumptions for discounted cash flow analysis to derive the fair value of the CGU and properly assigning relevant assets, liabilities and goodwill to the CGU. Ultimately, we compare the fair value of goodwill to its carrying value and determine the impairment loss, if any. If the relevant assumptions and estimates change in the future, they will impact our goodwill impairment test.

#### Pension

Under the defined benefit pension plan of the Labor Standards Law, we have significant pension benefit costs and liabilities that are developed from actuarial valuations. Inherent in these valuations are key assumptions including discount rates and expected return on plan assets. We consider current market conditions, including changes in interest rates, in selecting these assumptions. In addition to changes resulting from fluctuations in our related headcount, changes in the related pension costs or liabilities may also occur in the future due to changes in assumptions. Under the defined contribution pension plan of the R.O.C. Labor Pension Act, we are required to make monthly contributions to employees individual pension accounts and recognize expenses in the periods in which the contributions become due.

Net pension costs of the defined benefit plan are recorded based on an independent actuarial valuation. Pension cost components such as service cost, interest cost, expected return on plan assets, the amortization of net obligation at transition, pension gain or loss, and prior service cost, are all taken into consideration. We recognize expenses from the defined contribution pension plan in the period in which the contribution becomes due.

# Investments in Debt and Equity Securities

In accordance with R.O.C. GAAP, equity securities over which we exercise no significant influence or control and with readily determinable fair values and debt securities are to be classified as financial assets at fair value through profit or loss, or FVTPL, available-for-sale or held-to-maturity securities. Debt securities that we have the intent and ability to hold to maturity are classified as held-to-maturity securities and reported at their amortized cost. Debt and equity securities that are bought and traded for short-term profit are classified as FVTPL and reported at fair value, with unrealized gains and losses included in earnings. Debt and equity securities not classified as either

held-to-maturity or FVTPL are classified as available-for-sale securities and reported at fair value, with unrealized gains and losses reported in other comprehensive income under stockholders equity. Unrealized losses that are deemed to be other than temporary are charged to earnings. For individual securities classified as either available-for-sale or held-to-maturity, we consider, among other factors, information concerning significant adverse changes in market conditions in which the investee operates and operating issues specific to the investee in determining whether a decline in value is temporary. In general, we consider a decline in market value below cost for a continuous period of six months to be other than temporary unless there is persuasive evidence to the contrary. If the decline in fair value is judged to be other than temporary, the cost basis of the individual security is written down to fair value with a charge against earnings.

#### Derivative Instruments

The embedded derivative features contained in exchangeable bonds are bifurcated and separately accounted for if the economic characteristics and risks of the embedded derivative instruments are not clearly and closely related to those of the host contracts. Those bifurcated embedded derivatives are fair valued at the end of each reporting period by using the option pricing model with the changes in fair value included in earnings. The valuation model uses the market-based observable inputs including share price, volatility, credit spread and swap rates.

We also hold certain freestanding derivative instruments such as interest rate swap and forward contracts, which are fair valued at each reporting period end. The fair values of these instruments are determined using market established valuation techniques, which involve certain key inputs such as the expected interest forward rate, expected volatility in interest rates, spot exchange rate and swap point. Any change in such key inputs could materially impact the determination of fair value of these derivative instruments.

# Employee Stock Options

Under R.O.C. GAAP, for stock options granted before January 1, 2008, we apply the intrinsic value method to recognize the difference between the market price of the stock at grant date and the exercise price of the employee stock option as compensation expense. For stock options granted on or after January 1, 2008, we recognize compensation cost using the Black-Scholes option- pricing model in accordance with R.O.C. SFAS No. 39 Accounting for Share-Based Payment , or R.O.C. SFAS 39. The Black-Scholes option-pricing model requires the use of input assumptions, including expected volatility, expected life, expected dividend rate and expected risk-free rate of return. We applied the historical realized volatility, which calculates volatility based on the historical stock price volatility over the time period equal to the expected term of the employee stock option, in estimating expected volatility because our shares have been publicly traded for a long time. We determined the expected term based on historical stock options. For entities based in jurisdictions outside the United States, the risk-free interest rate is the implied yield of zero-coupon government bonds currently available in the market in which the shares are primarily traded. Hence, we use the average yield of Taiwan Government Bond with the remaining term similar to the expected option term as the risk-free interest rate. We adjust employee stock option expenses on an annual basis for changes in expected forfeitures based on the examination of latest employee stock option forfeiture activity. The effect of adjusting the forfeiture rate used for expense amortization is recognized in the corresponding period in which the expected forfeiture rate is changed.

# A. Operating Results *Net Operating Revenues*

We generate our net operating revenues primarily from fabricating semiconductor devices. We also derive a small portion of our net operating revenues from wafer probe services that we perform internally as well as mask tooling services and assembly and test services that we subcontract out.

#### Cost of Goods Sold

Our costs of goods sold consist principally of:

overhead, including depreciation and maintenance of production equipment, indirect labor costs, indirect material costs, supplies, utilities and royalties;

wafer costs;

direct labor costs; and

service charges paid to subcontractors for mask tooling, assembly and test services. Our total depreciation expenses were NT\$33,530 million, NT\$29,951 million and NT\$31,915 million (US\$1,054 million) in 2009, 2010 and 2011, respectively.

#### **Operating Expenses**

Our operating expenses consist of the following:

Sales and marketing expenses. Sales and marketing expenses consist primarily of intellectual property development expenses, salaries and related personnel expenses, wafer sample expenses and related marketing expenses. Wafer samples are actual silicon samples of our customers early design ideas made with our most advanced processes and provided to those customers.

General and administrative expenses. General and administrative expenses consist primarily of salaries for our administrative, finance and human resource personnel, fees for professional services, and cost of computer and communication systems to support our operations.

Research and development expenses. Research and development expenses consist primarily of research testing related expenses, salaries and related personnel expenses and depreciation on the equipment used for our research and development. *Non-operating Income and Expenses* 

Our non-operating income principally consists of:

interest income, which has been primarily derived from time deposits;

investment income accounted for under the equity method, which has been primarily derived from the recognition of investee companies net income based on the percentage of their ownership we hold;

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gain on disposal of investments, which has been primarily derived from our disposal of long-term investments accounted for under the equity method, available-for-sale financial assets and financial assets measured at cost;

dividend income, which has been primarily derived from the financial instruments of financial assets at fair value through profit or loss, available-for-sale financial assets and financial assets measured at cost;

gain on valuation of financial assets and liabilities, which have been primarily derived from disposal of and changes in the values of financial assets and liabilities classified as FVTPL according to R.O.C. SFAS No. 34 Financial Instruments: Recognition and Measurement , or R.O.C. SFAS 34; and

other income, which has been primarily derived from our branch s grant income received from the government in Singapore and donation income from our equity investee.

Our non-operating expenses principally consist of:

loss on valuation of financial assets and liabilities, which have been primarily derived from disposal of and changes in the values of financial assets and liabilities classified as FVTPL according to R.O.C. SFAS 34;

investment loss accounted for under the equity method, which has been primarily derived from the recognition of investee companies net loss based on the percentage of their ownership we hold; and

#### Taxation

impairment loss, which have been primarily derived from the loss recognized in long-term investments and long-lived assets.

Based on our status as a company engaged in the semiconductor business in Taiwan, we have been granted exemptions from income taxes in Taiwan with respect to income attributable to capital increases for the purpose of purchasing equipment related to the semiconductor business for a period of four or five years following each such capital increase. This tax exemption resulted in tax savings of approximately NT\$766 million, NT\$990 million, and NT\$292 million (US\$10 million) in 2009, 2010 and 2011, respectively. Our tax rate was 17 % in 2011, the same rate applicable to companies outside the Hsinchu Science Park, and the statutory tax rate has been changed from 25% to 17% effective January 1, 2010.

We also benefit from other tax incentives generally available to technology companies in Taiwan, including tax credits applicable against corporate income tax that range from 30% to 50% of the amount of certain research and development and employee training expenses and 5% to 20% of the amount of investment in certain qualified equipment and technology. These tax incentives resulted in tax savings of approximately nil, NT\$947 million and NT\$301 million (US\$10 million) in 2009, 2010 and 2011, respectively.

After taking into account the tax exemptions and tax incentives discussed above, we recorded NT\$651 million, NT\$1,606 million and NT\$913 million (US\$30 million) of tax expense in 2009, 2010 and 2011, respectively. Our effective income tax rate in 2011 was 9.74%.

In 1997, the R.O.C. Income Tax Law was amended to integrate corporate income tax and stockholder dividend tax to eliminate the double taxation effect for resident stockholders of Taiwan companies. Under the amendment, all retained earnings generated from January 1, 1998 and not distributed to stockholders as dividends in the following year will be assessed a 10% retained earnings tax.

See Item 10. Additional Information E. R.O.C. Tax Considerations Dividends . As a result, if we do not distribute all of our annual retained earnings generated beginning January 1, 1998 as either cash and/or stock dividends in the following year, these earnings will be subject to the 10% retained earnings tax. In addition, the R.O.C. government enacted the R.O.C. Income Basic Tax Act, also known as the Minimum Income Tax Statute , or the Statute, which became effective on January 1, 2006 and imposes an alternative minimum tax, or AMT. The AMT imposed under the Statute is a supplemental tax which is payable if the income tax payable pursuant to the R.O.C. Income Tax Act is below the minimum amount prescribed under the Statute. In accordance with the Statute, a company will be subject to a 10% AMT if its annual taxable income under the Statute exceeds NT\$2 million.

# **Comparisons of Results of Operations**

The following table sets forth some of our results of operations data as a percentage of our net operating revenues for the periods indicated.

	Year En	Year Ended December 31,			
	2009	2010	2011		
Net operating revenues	100.0%	100.0%	100.0%		
Cost of goods sold	(83.1)	(70.8)	(81.8)		
Gross profit	16.9	29.2	18.2		

	Year En	Year Ended December 3	
	2009	2010	2011
Operating expenses:			
Sales and marketing	(3.1)	(2.0)	(2.9)
General and administrative	(3.0)	(2.9)	(2.9)
Research and development	(8.8)	(6.9)	(8.0)
Operating income	2.0	17.4	4.4
Net non-operating income (loss)	(0.2)	2.7	3.6
Income before income tax and minority interests	1.8	20.1	8.0
•			
Income tax expense	(0.7)	(1.3)	(0.7)
Extraordinary gain	0.7	0.1	
Net income	1.8	18.9	7.3
Attributable to:			
the Company	4.2	18.9	9.1
minority interests	(2.4)	(0.0)	(1.8)

Year Ended December 31, 2011 Compared to Year Ended December 31, 2010

*Net operating revenues.* Net operating revenues decreased by 7.7% from NT\$126,442 million in 2010 to NT\$116,703 million (US\$3,855 million) in 2011 primarily due to a decrease in volume of products shipped.

*Cost of goods sold.* Cost of goods sold increased by 6.6% from NT\$89,518 million in 2010 to NT\$95,417 million (US\$3,152 million) in 2011 primarily due to the decrease of the utilization rate from 93.7% in 2010 to 78.6% in 2011 as a result of decreased customer demand.

*Gross profit and gross margin.* Gross margin decreased from 29.2% in 2010 to 18.2% in 2011 primarily due to the lower utilization rate in 2011.

*Operating income and operating margin.* Operating income decreased from NT\$22,020 million in 2010 to NT\$5,180 million (US\$171 million) in 2011. Our operating margin decreased from 17.4% in 2010 to 4.4% in 2011. The decrease in operating margin is largely due to a decrease in gross margin. Operating expenses increased by 8.1% from NT\$14,904 million in 2010 to NT\$16,106 million (US\$532 million) in 2011.

*Sales and marketing expenses.* Our sales and marketing expenses increased by 31.3% from NT\$2,566 million in 2010 to NT\$3,369 million (US\$111 million) in 2011. The increase in sales and marketing expenses was mainly due to an increase in sample expenses and bad debt expenses. Our sales and marketing expenses as a percentage of our net operating revenues increased slightly from 2.0% in 2010 to 2.9% in 2011.

*General and administrative expenses.* Our general and administrative expenses decreased by 7.1% from NT\$3,598 million in 2010 to NT\$3,342 million (US\$111 million) in 2011 primarily as a result of a decrease in personnel expenses. Our general and administrative expenses as a percentage of our net operating revenues was equal to 2.9% in 2010 and 2011, respectively.

*Research and development expenses.* Our research and development expenses increased by 7.5% from NT\$8,740 million in 2010 to NT\$9,395 million (US\$310 million) in 2011. The increase in research and development expenses resulted primarily from an increase in research and development wafer expenses and mask expenses. Our research and development expenses as a percentage of our net operating revenues increased from 6.9% in 2010 to 8.0% in 2011.

*Net non-operating income.* Net non-operating income increased by 24.9% from income of NT\$3,364 million in 2010 to NT\$4,200 million (US\$139 million) in 2011, mainly due to an increase in gain on valuation of financial liabilities from loss of NT\$(665) million in 2010 to gain of NT\$1,341 million (US\$44 million) in 2011, an increase in other income from NT\$1,019 million in 2010 to NT\$2,055 million (US\$68 million) in 2011 and an increase in impairment loss from NT\$114 million in 2010 to NT\$2,246 million (US\$74 million) in 2011.

*Net income attributable to the Company.* Due to the factors described above, we incurred a net income of NT\$23,899 million in 2010, compared with a net income of NT\$10,610 million (US\$351 million) in 2011.

## Year Ended December 31, 2010 Compared to Year Ended December 31, 2009

*Net operating revenues.* Net operating revenues increased by 38.4% from NT\$91,390 million in 2009 to NT\$126,442 million (US\$4,339 million) in 2010, largely attributable to the global economic recovery steadily.

*Cost of goods sold.* Cost of goods sold increased by 17.8% from NT\$75,975 million in 2009 to NT\$89,518 million (US\$3,072 million) in 2010. Our cost of goods sold increased at a slower pace compared to the increase in our revenues as a result of our continued efforts to reduce costs, which included measures such as negotiating with suppliers for more favorable prices and streamlining the workforce. In addition, the increase in our utilization rate also lowered our cost per unit manufactured.

*Gross profit and gross margin.* Gross margin increased from 16.9% in 2009 to 29.2% in 2010, primarily due to the recovery of global economic and our improved operating efficiencies as a result of cost reduction.

*Operating income and operating margin.* Operating income increased substantially from NT\$1,847 million in 2009 to NT\$22,020 million in 2010. Our operating margin increased from 2.0% in 2009 to 17.4% in 2010. The increase in operating margin is largely due to an increase in gross margin. Operating expenses increased by 9.9% from NT\$13,568 million in 2009 to NT\$14,904 million in 2010.

*Sales and marketing expenses.* Our sales and marketing expenses decreased by 8.4% from NT\$2,800 million in 2009 to NT\$2,566 million in 2010. The decrease in sales and marketing expenses was mainly due to a decrease in IP royalty expenses. Our sales and marketing expenses as a percentage of our net operating revenues decreased slightly from 3.1% in 2009 to 2.0% in 2010.

*General and administrative expenses.* Our general and administrative expenses increased by 32.1% from NT\$2,724 million in 2009 to NT3,598 million in 2010 primarily as a result of an increase in personnel expenses. Our general and administrative expenses as a percentage of our net operating revenues decreased slightly from 3.0% in 2009 to 2.9% in 2010.

*Research and development expenses.* Our research and development expenses increased by 8.7% from NT\$8,044 million in 2009 to NT\$8,740 million in 2010. The increase in research and development expenses resulted primarily from an increase in personnel expenses. Our research and development expenses as a percentage of our net operating revenues decreased from 8.8% in 2009 to 6.9% in 2010.

*Net non-operating loss.* Net non-operating income (loss) increased by 2,027.9% from loss of NT\$(174) million in 2009 to income of NT\$3,364 million in 2010, mainly due to a decrease in impairment loss from NT\$4,007 million to NT\$114 million, a decrease in gain on valuation of financial assets from NT\$513 million to nil and an 42.8% increase in dividend income from NT\$941 million to NT\$1,344 million.

*Net income attributable to the Company.* Due to the factors described above, we incurred a net income of NT\$3,874 million in 2009, compared with a net income of NT\$23,899 million in 2010.

## B. Liquidity and Capital Resources

The foundry business is highly capital intensive. Our development over the past three years has required significant investments. Additional expansion for the future generally will continue to require significant cash for acquisition of plant and equipment to support increased capacities, particularly for the production of 12-inch wafers, although our expansion program will be adjusted from time to time to reflect market conditions. In addition, the semiconductor industry has historically experienced rapid changes in technology. To maintain competitiveness at the same capacity, we are required to make adequate investments in plant and equipment. In addition to our need for liquidity to support the large fixed costs of capacity expansion and the upgrading of our existing plants and equipment for new technologies, as we ramp up production of new plant capacity, we require significant working capital to support purchases of raw materials for our production and to cover variable operating costs such as salaries until production yields provide sufficiently positive margins for a fabrication facility to produce operating cash flows.

We have financed our capital expenditure requirements in recent years with cash flows from operations as well as from

bank borrowings, the issuance of bonds and equity-linked securities denominated in NT dollars and U.S. dollars. We incurred capital expenditures of NT\$17,618 million, NT\$61,323 million, and NT\$53,326 million (US\$1,762 million) in 2009, 2010 and 2011, respectively, requiring a significant amount of funding from financing activities. Once a fab is in operation at acceptable capacity and yield rates, it can provide significant cash flows. Cash flows significantly exceed operating income, reflecting the significant non-cash depreciation expense. We generated cash flows from operations of NT\$32,422 million, NT\$53,495 million and NT\$41,654 million (US\$1,376 million) in 2009, 2010 and 2011, respectively.

On May 24, 2011, we issued US\$500 million aggregate principal amount of currency linked zero coupon convertible bonds due 2016. Each bond, at the option of the holder, will be convertible into our ADS. The proceeds of this offering will be used for purchasing machinery and equipment. As of December 31, 2011, no bonds had been converted into our ADS, and we have repurchased and cancelled US\$64 million principal amount of these bonds in the open market transactions.

As of December 31, 2011, we had NT\$49,070 million (US\$1,621 million) of cash and cash equivalents and NT\$696 million (US\$23 million) of FVTPL, current. Cash equivalents included reverse repurchase agreements with banks in Taiwan for commercial paper, government bonds, or other highly secure assets for short-term liquidity management. These agreements bore interest rates ranging from 0.14% to 0.17%, 0.25% to 0.41% and 0.45% to 0.62% in 2009, 2010 and 2011, respectively. The terms of these agreements were typically less than two weeks. As of December 31, 2009, 2010, and 2011, we held reverse repurchase agreements in the amount of NT\$8,777 million, NT\$3,757 million and NT\$3,532 million (US\$117 million) million, respectively.

We believe that our working capital, cash flow from operations and unused lines of credit are sufficient for our present requirements.

At our 2010 annual general meeting, our stockholders authorized the Board to raise capital from private placement, through issuing instruments such as common shares, depositary receipts (including but not limited to ADS), or Euro/Domestic convertible bonds (including secured or unsecured corporate bonds), based on market conditions and our needs. The amount of shares issued or convertible is proposed to be no more than 10% of our total shares issued (i.e., no more than 1,298,791,231 shares). According to Item 6, Article 43-6 of the R.O.C. Security and Exchange Act, any private placement of our shares must be conducted separately within one year after approval at the annual general meeting of stockholders. The approval to conduct a private placement of our shares will expire on June 14, 2011. Considering changes in regulations and market conditions, the Board has resolved to terminate any plans for a private placement of our shares.

## **Operating Activities**

Our operating activities generated cash of NT\$41,654 million (US\$1,376 million) in 2011. Cash generated from our operating activities for 2011 significantly exceeded net income due to the add-back of non-cash items, such as depreciation and amortization in the amount of NT\$32,371 million (US\$1,069 million). Cash generated by operating activities decreased from NT\$53,495 million in 2010 to NT\$41,654 million (US\$1,376 million) in 2011, primarily due to a decrease in cash collected from our customers.

## Investment Activities

Net cash used in our investment activities was NT\$55,120 million (US\$1,821 million) in 2011. In 2011, we used cash of NT\$53,326 million (US\$1,762 million) to purchase equipment primarily used at our fabs. This was offset by the net cash provided by acquisition and disposal of available-for-sale financial assets of NT\$3,005 million (US\$99 million).

## Financing Activities

Net cash provided by our financing activities was NT\$9,923 million (US\$328 million) in 2011. We drew down bank loans of NT\$13,156 million (US\$435 million), issued convertible bonds of NT\$14,423 million (US\$476 million), paid cash dividends of NT\$14,016 million (US\$463 million) and repaid long-term loans of NT\$3,457 million (US\$114 million).

We had NT\$9,412 million (US\$311 million) outstanding short-term loans as of December 31, 2011. We had total availability under existing short-term lines of credit of NT\$19,609 million (US\$648 million) as of December 31, 2011.

We had bonds payable of NT\$17,405 million (US\$575 million) in the aggregate as of December 31, 2011.

As of December 31, 2011, our outstanding long-term debts primarily consisted of NT\$613 million unsecured and NT\$3,237 million secured long-term bank loans due in 2013, NT\$600 million secured long-term bank loans due in 2014, NT\$1,000 million unsecured and NT\$1,670 million secured long-term bank loans due in 2015, and NT\$2,000 million unsecured and NT\$2,581 million secured long-term bank loans due in 2016. The interest rates of our long-term bank loans range from 1.14% to 2.30%.

As of December 31, 2011, the current portion of bonds due within one year was NT\$5,420 million (US\$179 million), and the current portion of long-term bank loans due within one year was NT\$2,582 million (US\$85 million).

#### Capital Expenditures

We have entered into several construction contracts for the expansion of our factory space. As of December 31, 2011, these construction contracts amounted to NT\$4,255 million (US\$ 141 million) with an unaccrued portion of the contracts of NT\$1,067 million (US\$35 million).

In 2011, we spent approximately NT\$53,326 million (US\$1,762 million) primarily to purchase equipment for research and development and production purposes.

We continue to maintain high levels of capital expenditures as we believe there are promising opportunities for 28 - nanometer and 40 - nanometer technologies. We continue to devote most of our capital expenditure to improvement of advanced technology within 12-inch fabs. We will focus on our addressable markets (i.e., 40 & 28 - nanometer) and continue to build up our production capacity. We believe our 28 - nanometer technology progress will propel our advanced process growth, strengthen our future competitiveness, and enhance our portfolio of comprehensive foundry solutions available to our customers.

We believe that our existing cash and cash equivalents and short-term investments will be sufficient to meet our working capital and capital expenditure requirements at least through the end of 2012. We also expect to fund a portion of our capital requirements in 2012 through the cash provided by operating activities. Due to rapid changes in technology in the semiconductor industry, however, we have frequent demand for investment in new manufacturing technologies. We cannot assure you that we will be able to raise additional capital, should that become necessary, on terms acceptable to us, or at all. If financing is not available on terms acceptable to us, management intends to reduce expenditures so as to delay the need for additional financing. To the extent that we do not generate sufficient cash flows from our operations to meet our cash requirements, we may rely on external borrowings and securities offerings to finance our working capital needs or our future expansion plans. The sale of additional equity or equity-linked securities may result in additional dilution to our stockholders. Our ability to meet our working capital needs from cash flow from operations will be affected by the demand for our products and change in our product mix, which in turn may be adversely affected by several factors. Many of these factors are beyond our control, such as economic downturns and declines in the average selling prices of our products. The average selling prices of our products have been subjected to downward pressure in the past and are reasonably likely to be subject to further downward pressure in the future. 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 operations or expansion.

## **Transactions with Related Parties**

Our transactions with related parties have been conducted on arm s-length terms. See Item 7. Major Stockholders and Related Party Transactions B. Related Party Transactions and Note 26 to our audited consolidated financial statements included in this annual report.

## Inflation/Deflation

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

## **U.S. GAAP Reconciliation**

Our consolidated financial statements are prepared in accordance with R.O.C. GAAP, which differs in certain significant respects from U.S. GAAP. Such differences include methods for measuring the amounts shown in the financial statements and additional disclosures required by U.S. GAAP Note 35 to our audited financial statements, included in this annual report, provides a discussion and quantification of the differences between R.O.C. GAAP and U.S. GAAP as they related to us. We provide a summary of material differences included therein below.

The following table sets forth a comparison of our net income and stockholders equity in accordance with R.O.C. GAAP and U.S. GAAP for the periods indicated.

	Year Ended December 31, 2009 2010 2011 NT\$ NT\$ NT\$ (in millions)			US\$
Consolidated net income		(	<b>51</b> 5)	
Consolidated net income, R.O.C. GAAP	1,671	23,846	8,467	280
U.S. GAAP adjustments				
Compensation	(804)	(397)	(106)	(4)
Equity investees	(35)	(42)	(11)	
Investments in debt and equity securities	(830)	(234)	(210)	(7)
Convertible bond liabilities			21	1
Goodwill and Business Combinations		452	(1,308)	(44)
Treasury stock and related disposal		(81)	(179)	(6)
Inventory	362			
Tax effect of U.S. GAAP adjustments			(69)	(2)
Consolidated net income, U.S. GAAP	364	23,544	6,605	218
Stockholders equity				
Stockholders equity, R.O.C. GAAP	214,096	225,136	212,125	7,008
Compensation	65	32	4	
Equity investees	(150)	(142)	(261)	(9)
Investments in debt and equity securities	1,717	1,765	1,669	55
Convertible bond liabilities			(522)	(17)
Goodwill and Business Combinations	(8)	1,301	(8)	
Treasury stock and related disposal	(2,769)	(2,624)	(2,044)	(68)
Pension	289	(345)	(254)	(8)
Tax effect of U.S. GAAP adjustments			(69)	(2)
Stockholders equity, U.S. GAAP	213,240	225,123	210,640	6,959

The differences between R.O.C. GAAP and U.S. GAAP that have a material effect on our net income and stockholders equity under R.O.C. GAAP were described as follows:

## Compensation Expenses

Pursuant to our articles of incorporation, we are required, under certain circumstances, to distribute a certain percentage of unappropriated earnings as employee bonus and remuneration to directors. Please refer to Item 10. Additional Information B. Memorandum and Articles of Association Dividends and Distributions . Remuneration to directors is settled in cash. Our Articles of Incorporation specifies that employee bonus can be settled in cash or shares or a combination of both. Under both R.O.C. and U.S. GAAP, employee bonus is charged to compensation

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expense and accrued based on management s estimate. The employee bonus is initially accrued as at the year-end based on management s estimate according to our Article of Association with adjustment in the subsequent year after stockholders approval. Compensation expense relating to stock bonus is determined based on the fair market value of our common stock on the grant date. According to the R.O.C. ARDF

Interpretation 96-052, Accounting for Employee Bonus and Remunerations to Directors and Supervisors, compensation expense relating to stock bonus is determined based on the fair value of our common stock at the date before the stockholders meeting. Under U.S. GAAP, compensation expense relating to stock bonus is measured at the fair market value on the date of stock distribution.

Under R.O.C. GAAP, we apply the intrinsic value method to recognize compensation cost for employee stock options granted before January 1, 2008. For stock options granted on or after January 1, 2008, we adopted R.O.C. SFAS 39 to recognize compensation cost using the fair value method, which is consistent with U.S. GAAP. We amortized share-based compensation expense over the vesting period based on the grant-date fair value. The fair value of liability awards is re-measured at each reporting date with fair value changes charged to compensation expenses accordingly. Compensation expense is recognized on a graded-vesting basis over the requisite service period of the options.

#### Investments in Debt and Equity Securities

Under R.O.C. GAAP, investment in restricted stock, for which sale is restricted by governmental or contractual requirement is accounted for as an available-for-sale security, or a cost method investment and its fair value should be adjusted for the effect of restriction. Under U.S. GAAP, however, if the restricted investment does not meet the definition of an equity security with readily determinable fair value, it is accounted for as a cost method investment. Before 2011, our restricted investments were classified as cost method investments both under R.O.C. GAAP and U.S. GAAP. In 2011, these restricted investments are reclassified as available-for-sale securities under U.S. GAAP as the period of restriction terminates within one year from the reporting date.

When we lose our significant influence on an investment accounted for under the equity method and reclassify it as an available-for-sale security, the proportionate share of an investment accounted for other comprehensive income should remain as a part of the carrying amount of the investment under R.O.C. GAAP and the dividends received from the available-for-sale security which were declared from pre-acquisition profits are deducted from the cost of the security. However, under U.S. GAAP, all of the investme should be offset against the carrying amount of the investment at the time significant influence is lost, and the dividends received from the available-for-sale security are accounted for as dividend income.

Our ownership interest in a subsidiary or equity investee may change, for example, (1) when an equity investee or a subsidiary issues additional shares and we subscribe for these shares at a percentage higher or lower than its current ownership percentage in the equity investees or subsidiaries, (2)when the employees of our subsidiaries or equity investees exercise their stock options, or (3)when the convertible bondholders of our subsidiaries or equity investees exercise their stock options, or (3)when the convertible bondholders of our subsidiaries or equity investees exercise their conversion rights. Under R.O.C. GAAP, the change in tour proportionate share in the net assets of our equity investees or subsidiaries resulting from the issuance of additional shares of the investee stock, at the rate not proportionate to our existing equity ownership in such investees, is recorded to the additional paid-in capital and long-term investments account for an equity method investee, or noncontrolling interest for a subsidiary. Under U.S. GAAP, pursuant to ASC 810-10-45, *Noncontrolling Interests in a Subsidiary*, a change in our ownership interest in a subsidiary that does not result in a change of control shall be accounted for as equity transactions. Nevertheless, a dilution of ownership interest in an equity method investee is recognized as a gain or loss, while an increase of ownership interest is accounted for as additional acquisition interest in an equity method investee, with the difference between the total cost of the additional investment and the proportionate share of the fair value of net assets treated as equity method goodwill.

In December 2009 and June 2010, we acquired additional ownership interests in one of our subsidiaries. Under R.O.C. GAAP, the acquisition was accounted for using the purchase method of accounting. However, under U.S. GAAP, the acquisition was accounted for as an equity transaction. Under U.S. GAAP the difference between the fair value of the consideration paid and the book value of the noncontrolling interests is adjusted against stockholders equity.

In June 2010, a non-affiliated company invested for newly issued shares of one of our consolidated entities, which reduced our ownership interest from 100% to 50%. Due to this transaction, we jointly controlled the entity and accounted for the entity as a

joint venture. Under R.O.C. GAAP, the reduction of equity interest is adjusted against additional paid-in capital. However, under U.S. GAAP, we accounted for the transaction as a deconsolidation of a subsidiary and remeasured the remaining holding interests by recognizing a loss in net income attributable to us.

Under R.O.C. GAAP, when an investor company holds 20% or more of an investee company s outstanding voting securities but without the controlling power, unless it is evidenced that the investor company does not have significant influence over the investee company, the investor s investment in the investee company s equity securities, including preferred shares, shall be accounted for using the equity method. When an investor company invests in preferred stock of an investee company, equity method accounting is necessary if the investor has the ability to exercise its significant influence over the investee. Therefore, when determining the excess of cost of investment over underlying equity in net assets of the investee, and recognizing subsequent pick up of equity method gains or losses, we take these preferred shareholdings into consideration. In addition, excess of investment cost over the underlying net assets will be treated as equity-method goodwill as a component of the carrying value of the equity-method investment. If, however, there is excess of underlying net assets over the investment cost, the investee s non-current assets, as components of the equity-method investment balance, will be subject to pro rata reduction with the remaining unallocated bargain purchase recognized immediately as an extraordinary gain.

Under U.S. GAAP, however, equity-method accounting generally applies only to investments in common stock and in-substance common stock that give the investor the ability to exercise significant influence over operating and financial policies of an investee. U.S. GAAP may also require the Company s other forms of investments, including preferred equities, to pick up losses when the investment in common stock and in-substance common stock is reduced to zero. Pursuant to ASC 323-10-15-13, in-substance common stock is an investment in an entity that has risk and reward characteristics that are substantially similar to that entity s common stock. An investor must consider all of the characteristics of the securities: subordination, risk: and rewards of ownership and obligation to transfer value, when determining whether an investment in an entity is substantially similar to an investment in an entity s common stock.

In December 2011, after considering all the above mentioned characteristics, we conclude that our investment in an investee s preferred shares is not in-substance common stock. Therefore, under U.S. GAAP the investment of preferred shares was reclassified from long-term investment accounted for under the equity method to financial assets measured at cost. We also reversed the effects of the pro rata reduction for the bargain purchase recognized, and recognized an equity-method goodwill as a component of the equity-method investment balance for our investment in common stocks.

## Convertible Bond Liabilities

We issued convertible bonds in May 2011. Under R.O.C. GAAP, the bonds contain both a liability component and an equity component. The conversion right is classified in stockholders equity at its fair value at issuance. Under U.S. GAAP, the conversion right was determined to be a contract indexed to our own stock and, if it existed on a freestanding basis, would be classified in stockholders equity, meeting the scope exception described in ASC 815-10-15-74. As such, the conversion right is not considered to be a derivative instrument that is required to be bifurcated from the host contract.

In addition, under R.O.C. GAAP, the issuance costs are allocated proportionally to the equity and liability components. The amount allocated to the equity components is accounted for as a reduction of equity as well as the amount allocated to the liability component is accounted for as a bond discount. The issuance costs allocated to the liability component are amortized over the contractual life of the bonds using the effective interest rate method. Under U.S. GAAP, however, the entire issuance costs are reported as deferred charges and amortized over the contractual life of the bonds using the effective interest rate method.

Based on the above differences, we reclassified the equity component under R.O.C. GAAP to bonds payable under U.S. GAAP, and reclassified the issuance costs which are allocated to the liability and equity component under R.O.C. GAAP to deferred charges under U.S. GAAP. We also adjusted the differences resulting from the subsequent amortization of the bond discount and deferred charges as well as the subsequent redemption of the bonds.

## Goodwill and Business Combinations

In accordance with R.O.C. GAAP, goodwill is measured separately on each acquisition, and it excludes goodwill in non-controlling interest. In a step acquisition, the acquirer does not re-measure its previously held equity interest in the acquiree, therefore, the acquisition does not result in gains or losses from re-measurements. Goodwill is not amortized and is subject to annual impairment tests or whenever events and circumstances change indicating goodwill may be impaired. The assessment of impairment includes identifying the goodwill-allocated cash generating unit (CGU), determining the recoverable amount of CGU by using a discounted cash flow analysis, and ultimately comparing the recoverable amount with the carrying amount of CGU including goodwill. If the CGU s carrying amount is greater than its recoverable amount, an impairment loss is recognized. The impairment of goodwill cannot be reversed. When the fair value of identifiable net assets acquired exceeds the cost, the difference should be assigned to non-current assets acquired (except for financial assets not under equity method, assets to be disposed, deferred tax assets, prepaid pension or other retirement benefits cost) proportionate to their respective fair values. If these assets are all reduced to zero value, the remaining excess should be recognized as extraordinary gain.

Under U.S. GAAP, in a business combination achieved in stages, the acquirer shall re-measure its previously held equity interest in the acquiree at its acquisition-date fair value and recognize the resulting gain or loss. The acquirer shall recognize goodwill, or gain on bargain purchase, as of the acquisition date measured as the excess of (a) the aggregate of: (i) the consideration transferred, (ii) the fair value of any non-controlling interest in the acquiree, plus (iii) the fair value of any previously held equity interest in the acquiree; over (b) the fair value of identifiable assets acquired and the liabilities assumed on the acquisition date. Goodwill is not amortized and is subject to an annual impairment test or more frequently when events and circumstances indicate a possible impairment may exist. The first step of the impairment test is to compare the fair value of the reporting unit with its carrying value, including goodwill. If the carrying value of the reporting unit exceeds its fair value, the second step of the impairment test compares the implied fair value of the reporting unit goodwill with its carrying amount of goodwill exceeds its fair value, and impairment loss is recognized on the consolidated statements of income equal to the excess. Impairment of goodwill cannot be subsequently reversed. Any bargain purchase gain is immediately recognized in earnings.

On November 30, 2010, we acquired additional stocks issued by one of our equity investee, which increased our ownership interest from 45.79% to 57.67%. Prior to the acquisition date, we accounted for its 45.79% interest as an equity-method investment. As a result of the acquisition, we obtained control of the acquiree and the results of the acquiree s operations have been included in the consolidated financial statements since that date.

Under R.O.C. GAAP, a change in our proportionate share in the net assets of an equity investee resulting from our acquisition of additional stock issued by the equity investee at a rate not proportionate to our existing equity ownership is charged to the additional paid-in capital and long-term investments accounts. However, under U.S. GAAP, the acquisition of a controlling interest in acquiree is regarded as a business combination. Under U.S. GAAP, the sum of the fair value of the consideration transferred, non-controlling interests and equity interest previously held by us exceeding the fair value of identifiable net assets is recorded as goodwill.

In September 2011, as a result of lower than expected operating profits and cash flows due to the sharp deterioration in market condition since November 2010, the acquiree determined some of its long lived assets were impaired pursuant to ASC350. The impairment loss also served as an indicator that goodwill might also be impaired. Accordingly, we conducted a two-step process to identify and measure the amount of impairment loss, if any. As the carrying amount of the subsidiary exceeded its fair value which was estimated by using the expected present value of future cash flows, its goodwill was considered to be impaired. To calculate the implied fair value of goodwill, we allocated the fair value to each asset and liability account as described in Note 35(6) of our audited financial statements . The excess of the reporting unit s fair value over the total amounts allocated to each asset (except goodwill) and liability account would be the implied fair value of goodwill. As the carrying amount exceeded the implied fair value of the subsidiary s goodwill, we recognized a goodwill impairment loss of NT\$1,499 million (US\$50 million) in 2011 under U.S. GAAP. While the impairment assessment resulted in a full write down of goodwill under both R.O.C. GAAP and U.S. GAAP, the amount of the charge was different due to the difference in carrying values of goodwill under each GAAP.

## Treasury stock and related disposal

Some of our subsidiaries and equity method investees also hold our shares as investments. Under R.O.C. GAAP, reciprocal shareholdings held by subsidiaries, but not equity investees, are recorded as treasury stocks on our books. Under U.S. GAAP, however, reciprocal shareholdings, whether being held by subsidiaries or equity investees, are recorded as treasury stocks on our books. Accordingly, we recognized treasury stocks for reciprocal shareholdings held by equity-method investees and eliminated the related unrealized gain (loss) or investment gain (loss) as they are accounted for as treasury stock under U.S. GAAP.

#### Pension

Under R.O.C. GAAP, a minimum pension liability should be measured as the excess of accumulated benefit obligation over the fair value of the plan assets and allowed the unrecognized items, including prior service costs and credits, gains or losses, and transition obligations or assets to be reported in disclosure shown as a plan s funded status. Under U.S. GAAP, ASC 715-30, *Defined Benefit Plans-Pension*, requires an employer to recognize an asset for a plan s overfunded status or a liability for a plan s underfunded status with an offsetting adjustment to accumulated other comprehensive income.

## Inventory

Under U.S. GAAP, the allocation of fixed production overhead to inventory is based on the normal capacity of the production facilities. Unallocated overheads are recognized as an expense in the period in which they are incurred. Other items such as abnormal freight, handling costs and amounts of wasted materials are treated as current period charges rather than as a portion of the inventory cost pursuant to ASC 330, *Inventory*. R.O.C. GAAP does not provide definite guidance for such abnormal items and the use of normal capacity was not mandatory before the adoption of R.O.C. SFAS No. 10, Accounting for Inventory , or R.O.C. SFAS 10, on January 1, 2009.

Under R.O.C. GAAP, the write down of inventory for the lower of cost or net realizable value may be reversed in subsequent periods if market conditions improve. Under U.S. GAAP, the write down to lower of cost or market creates a new cost basis that subsequently cannot be marked up. Upon the sale of the related inventory, the difference between these two GAAPs is resolved.

#### Tax Effect of U.S. GAAP Adjustments

According to ASC 740-10, Income Tax, our uncertain tax positions are accounted for based on a two-step process. The first step is to evaluate the tax position for recognition by determining if it is more likely than not that the position will be sustained based on the technical merits. The second step requires us to estimate and measure the tax benefit as the largest amount that is more than 50% likely to be realized upon ultimate settlement. Although ASC 740-10 provides further clarification of the accounting for uncertainty in income taxes recognized in the financial statements, significant management judgment must be made and used in connection with the recognition threshold and measurement attribute. Determination of our uncertain tax positions involves the legal and factual interpretation with respect to the application of relevant tax laws and regulations, along with our assessment of other factors including changes in facts or circumstances, changes in tax law, and/or effectively settled issues under audit. As mentioned above, the application of tax laws and regulations is inherently subject to legal and factual interpretation, judgment and uncertainty. In addition, tax laws and regulations themselves are subject to change as a result of changes in fiscal policy, changes in legislation, the evolution of regulations and court rulings. Therefore, the final settlement of these uncertain tax positions might be materially different from our estimates, which could result in the need to record additional tax liabilities or potentially reverse previously recorded tax liabilities. Unlike ASC 740-10, R.O.C. SFAS 22 contained no guidance on uniform criteria for an enterprise to recognize and measure potential tax benefits associated with uncertain tax positions.

Under R.O.C. GAAP, the 10% tax on undistributed earnings is recorded as an expense at the time shareholders resolve that its earnings shall be retained. Under U.S. GAAP, 10% income tax impact is provided in the period the income is earned, assuming that no earnings are distributed.

#### **Recent Accounting Pronouncements**

In May 2011, the FASB issued ASU 2011-4 Fair Value Measurement (Topic 820) Amendments to Achieve Common Fair Value Measurement and Disclosure Requirements in U.S. GAAP and IFRSs. This ASU is not expected to have material impact on U.S. GAAP as the amendment represents the converged guidance of the FASB and the IASB on fair value measurement, and results in greater comparability of fair value measurements presented and disclosed in financial statements prepared in accordance with U.S. GAAP and IFRSs. The amendments in this Update are required to be applied prospectively, and are effective for interim and annual periods beginning after December 15, 2011, with earlier application not permitted. As the ASU does not require additional fair value measurements and is not intended to establish valuation standards or affect valuation practices outside of financial reporting, we do not expect this amendment to have a material impact on our consolidated financial statements.

In June 2011, the FASB issued ASU 2011-5 *Comprehensive Income* (Topic 220) Presentation of Comprehensive Income. The amendment changes how other comprehensive income (OCI) is presented including the presentation requirements for reclassification adjustments of items out of accumulated other comprehensive income which is superseded by ASU 2011-12. Instead of being included in the statement of owners equity, the items classified as OCI will be moved to the page in the financial statements that includes the income statement. This ASU does not change what would be classified as OCI but addresses how to present OCI either in a single continuous statement of comprehensive income or in two separate but consecutive statements. In both options, the entity will be required to present each component of net income along with total net income, each component of other comprehensive income along with a total for other comprehensive income, and a total amount for comprehensive income. The amendments in this Update should be applied retrospectively, and are effective for fiscal years and interim periods beginning after December 15, 2011. We are currently evaluating the potential impact, if any, that the adoption of ASU 2011-5 will have on our consolidated financial statements.

In September 2011, the FASB issued ASU 2011-8 *Intangibles Goodwill and Other* (Topic 350) Testing Goodwill for Impairment. The standard is intended to reduce the cost and complexity of the annual goodwill impairment test with the option of performing a qualitative assessment to determine whether further impairment testing is necessary. If entities determine, on the basis of qualitative factors, that the fair value of the reporting unit is more likely than not less than the carrying amount, the two-step impairment test would be required. The ASU does not change how goodwill is calculated or assigned to reporting units, nor does it revise the requirement to test goodwill annually for impairment. The amendments are effective for annual and interim goodwill impairment tests performed for fiscal years beginning after December 15, 2011. Early adoption is permitted, including for annual and

interim goodwill impairment tests performed as of a date before September 15, 2011, if an entity s financial statements for the most recent annual or interim period have not yet been issued or, for nonpublic entities, have not yet been made available for issuance. This standard is not expected to have a material impact on our consolidated financial statements in the near future.

In December 2011, the FASB issued ASU 2011-11 *Balance Sheet* (Topic 210) Disclosures about Offsetting Assets and Liabilities. The new requirement is about disclosure of the nature of an entity s rights of setoff and related arrangements associated with its financial instruments and derivative instruments. The Update are designed to make financial statements that are prepared under U.S. GAAP more comparable to those prepared under IFRSs. The ASU is effective for annual reporting periods beginning on or after January 1, 2013, and interim periods within those annual periods, with retrospective application required. This standard is not expected to have a material impact on our future consolidated financial statements.

## C. Research, Development, Patents and Licenses, Etc.

The semiconductor industry is characterized by rapid changes in technology, frequently resulting in obsolescence of process technologies and products. As a result, effective research and development is essential to our success. We invested approximately NT\$8,044 million, NT\$8,740 million and NT\$9,395 million (US\$310 million) in 2009, 2010 and 2011, respectively, in research and development, which represented 8.8%, 6.9% and 8.0%, respectively, of net operating revenues for such years. We believe that our continuous spending on research and development will help us maintain our position as a technological leader in the foundry industry. As of March 31, 2012, we employed 988 professionals in our research and development division.

Our current research and development activities seek to upgrade and integrate manufacturing technologies and processes, as well as to develop 28 nanometer technology, including HK/MG (high-K/metal gate), and advanced device technologies, including FinFET, 3D device and FD-SOI (fully depleted Silicon on Insulator). Although we emphasize firm-wide participation in the research and development process, we maintain central research and development teams primarily responsible for developing cost-effective technologies that can serve the manufacturing needs of our customers. Monetary incentives are provided to our employees if projects result in successful patents. We believe we have a strong foundation in research and development and intend to continue our efforts on technology developments. Our top management believes in the value of continued support of research and development efforts and intends to continue our foundry leadership position by providing customers with comprehensive technology and SoC solutions in the industry.

## D. Trend Information

Please refer to Item 5. Operating and Financial Review and Prospects Overview for a discussion of the most significant recent trends in our production, sales, costs and selling prices. In addition, please refer to discussions included in this Item for a discussion of known trends, uncertainties, demands, commitments and events that we believe are reasonably likely to have a material effect on our net operating revenues, income from continuing operations, profitability, liquidity or capital resources, or that would cause reported financial information not necessarily to be indicative of future operating results or financial condition.

#### E. Off-balance Sheet Arrangements

We do not generally provide letters of credit to, or guarantees for, or engage in any repurchase financing transactions with any entity other than our consolidated subsidiaries. We have, from time to time, entered into foreign currency forward contracts to hedge our existing assets and liabilities denominated in foreign currencies and identifiable foreign currency purchase commitments. We do not engage in any speculative activities using derivative instruments. See Item 11. Quantitative and Qualitative Disclosure about Market Risk .

## F. Tabular Disclosure of Contractual Obligations

The following table sets forth our contractual obligations and commitments with definitive payment terms on a consolidated basis which will require significant cash outlays in the future as of December 31, 2011.

		Paym	ents Due by Po	eriod	
		Less than			After
		1			5-
	Total	Year (consolid	1-3 Years ated) (in NT\$ 1	4-5 Years millions)	Years
Long-term debt <sup>(1)</sup>					
Unsecured bonds	18,546		6,125	12,421	
Long-term loans	11,701	2,582	5,469	3,650	
Operating lease obligations <sup>(2)</sup>	3,055	393	659	588	1,415
Purchase obligations <sup>(3)</sup>	411	107	304		
Other long-term obligations <sup>(4)</sup>	2,813	2,462	265		86
Total contractual cash obligations	36,526	5,544	12,822	16,659	1,501

- (1) Assuming the exchangeable bonds and convertible bonds are paid off upon maturity.
- (2) Represents our obligations to make lease payments to use machineries, equipments and land on which our fabs are located, primarily in the Hsinchu Science Park and the Tainan Science Park in Taiwan, Pasir Ris Wafer Fab Park in Singapore and UMCJ.
- (3) Represents commitments for purchase of raw materials. These commitments are not recorded on our balance sheet as of December 31, 2011.
- (4) Represents intellectual properties and royalties payable under our technology license agreements. The amounts of payments due under these agreements are determined based on fixed contract amounts.

## ITEM 6. DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES

## A. Directors and Senior Management

The following table sets forth the name, age, position, tenure and biography of each of our directors and executives as of March 31, 2012. There is no family relationship among any of these persons.

In the stockholders meeting held on June 10, 2009, our stockholders elected nine new directors, Stan Hung, Wen-Yang Chen, Ting-Yu Lin, Po-Wen Yen, Shih-Wei Sun, Paul S.C. Hsu, Chung-Laung Liu, Chun-Yen Chang and Cheng-Li Huang. The newly elected directors took their offices on June 10, 2009. The business address of our directors and executive officers is the same as our registered address.

Name	Age	Position	Years with Us
Stan Hung	51	Chairman and Director	20
Shih-Wei Sun	54	Director (Representative of Silicon Integrated Systems Corp.) and Chief	
		Executive Officer	17
Wen-Yang Chen	59	Director (Representative of Hsun Chieh Investment Co.) and Chief Operating	
		Officer	32
Po-Wen Yen	55	Director (Representative of Hsun Chieh Investment Co.) and Senior Vice	
		President	25
Ting-Yu Lin	51	Director	6
Paul S.C. Hsu <sup>(1)</sup>	76	Independent Director	8
Chung-Laung Liu <sup>(1)</sup>	78	Independent Director	6
Chun-Yen Chang <sup>(1)</sup>	75	Independent Director	6
Cheng-Li Huang <sup>(1)</sup>	63	Independent Director	3
Chitung Liu	46	Chief Financial Officer	11

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## (1) Member of the Audit Committee.

**Stan Hung** is a director and the Chairman of our company. Mr. Hung was our CFO & Senior Vice President from 2000 to 2007. He was also the Chairman of Epitech Technology Corporation in 2007 and ITE Technology Corporation for a portion of 2008, respectively. Prior to joining United Microelectronics Corporation in 1991, Mr. Hung was a financial manager at Optoelectronics Corporation. He is also the Chairman of Fortune Venture Capital Corporation, TLC Capital Co., Nexpower Technology Corporation, UMC New Business Investment Corporation, Crystalwise Technology Inc., and a Director of Epistar Corporation. Mr. Hung received a bachelor s degree in accounting from Tam Kang University in 1982.

**Shih-Wei Sun** is a director and the Chief Executive Officer of our company. Dr. Sun is a representative of Silicon Integrated Systems Corp. Dr. Sun joined us in 1995 and has been responsible for the operation of our Fabs 6A, 8A, 8D and 12A, along with Central Research & Development. Prior to joining us, Dr. Sun worked for Motorola in the Advanced Products Research and Development Laboratory for ten years. Dr. Sun is also a director of Fortune Venture Capital Corporation, TLC Capital Co., Nexpower Technology Corporation, UMC New Business Investment Corporation. Dr. Sun holds a Ph.D. degree in electronics materials from Northwestern University in 1986.

**Wen-Yang Chen** is a director of our company and currently serves as our Chief Operating Officer responsible for fab operations. Mr. Chen is a representative of Hsun Chieh Investment Co. Prior to us, Mr. Chen worked for companies including Digital Equipment Corporation and Vishay. Mr. Chen joined us in 1980 and is responsible for the operation of our 6A, 8A, 8E, 8D and 8F Fabs, specializing in development and integration of semiconductor processes and factory management. Mr. Chen is also a director of Fortune Venture Capital Corporation, TLC Capital Co., and UMC New Business Investment Corporation. Mr. Chen received Award of the Excellent Engineers from Chinese Institute of Engineers in 1994 and Manager Excellence Award in 2002.

**Po-Wen Yen** is a director of our company and currently serves as our senior vice president responsible for 12-inch operations. Mr. Yen is a representative of Hsun Chieh Investment Co. Mr. Yen joined us in 1986 and was responsible for the operation of Fabs 8A and 8C. He also served as the vice president for UMC-SG, our 300mm operation in Singapore. He is also a director of Fortune Venture Capital Corporation, TLC Capital Co., and UMC New Business Investment Corporation. In 2003, Mr. Yen received the National Manager Excellence Award from Chinese Professional Management Association. Mr. Yen earned a bachelor s degree in Chemical Engineering from National Tsing Hua University and his master s degree in chemical engineering from National Taiwan University.

**Ting-Yu Lin** is a director of our company. Mr. Lin is also the chairman of Sunrox International Inc. Mr. Lin received a master s degree in international finance from Meiji University in 1993.

**Paul S.C. Hsu** is an independent director of our company. Professor Hsu is a Chair Professor & University Professor of Yuan-Ze University, Taiwan, and the Chairman of Social Ethics Association. Professor Hsu is an independent director of Faraday Technology Corporation and Gintech Energy Corporation and a supervisor of Far Eastern International Bank. Professor Hsu received a Ph.D. degree in business administration from The University of Michigan in 1974.

**Chung-Laung Liu** is an independent director of our company. Professor Liu is the William M.W. Mong Honorary Chair Professor of National Tsing Hua University, Taiwan. Professor Liu is also the Chairman of Dramexchange Corporation, a supervisor of MediaTek Incorporation, an independent director of Mototech Inc., and Powerchip semiconductor Corp., as well as a director of Macronix International Co., Ltd. Professor Liu received a doctorate degree in science from Massachusetts Institute of Technology in 1962.

**Chun-Yen Chang** is an independent director of our company. Professor Chang is an academician of Academia Sinica and a chair professor and president of National Chiao Tung University, Taiwan. Professor Chang is also an independent director of Himax Technologies, Inc. and BizLink Holding Inc. Professor Chang received a Ph.D. degree in electrical engineering from National Chiao Tung University in 1970.

**Cheng-Li Huang** is an independent director of our company. Dr. Huang was a professor of Tamkang University and served as its Comptroller. He was also the chief executive of Tamkang Accounting Education Foundation and the publisher of Journal of Contemporary Accounting. Professor Huang is also a supervisor of Win Semiconductors Corp. Professor Huang received a Ph.D. degree in accounting from University of Warwick in 1999.

**Chitung Liu** is the Chief Financial Officer of our company. Prior to joining our company in 2001, Mr. Liu was a managing director of UBS. Mr. Liu is also a director of Novatek Microelectronics Corp., Unimicron Corporation, UMC New Business Investment Corporation as well as a supervisor of TLC Capital Co., Ltd. and Nexpower Technology Corp., Mr. Liu received an executive MBA degree from National Taiwan University in 2009.

## B. Compensation

The aggregate compensation paid and benefits in kind granted to our directors in 2011 were approximately NT\$12 million (US\$0.41 million). The remuneration was out of our 2011 earnings distribution plan, and the distribution percentage for directors is 0.1%. See Item 10. Additional Information B. Memorandum and Articles of Association Dividends and Distributions . Some of the remuneration was paid to the legal entities which some of our directors represent. The aggregate compensation paid and benefits in kind granted to our executive officers in 2011 were approximately NT\$161 million (US\$5.32 million), which include NT\$69 million as bonus. Certain of our directors who also served as executive officers held stock options to purchase 12.6 million shares as of March 31, 2012.

## C. Board Practices

All of our directors were elected in June 2009 for a term of three years. Neither we nor any of our subsidiaries has entered into a contract with any of our directors by which our directors are expected to receive benefits upon termination of their employment.

Our board of directors established an audit committee in March 2005. In the annual ordinary stockholders meeting held on June 13, 2008, we amended our articles of incorporation to introduce the mechanism of an R.O.C. Audit Committee. See Item 10. Additional Information B. Memorandum and Articles of Association Directors . After the re-election of directors in the stockholders meeting on June 10, 2009, our board of directors appointed Paul S.C. Hsu, Chung-Laung Liu, Chun-Yen Chang and Cheng-Li Huang to be the members of the audit committee. Each audit committee member is an independent director who is financially literate with accounting or related financial management expertise. The audit committee meets as often as it deems necessary to carry out its responsibilities. Pursuant to an audit committee charter, the audit committee has responsibility for, among other things, overseeing the qualifications, independence and performance of our internal audit function and independent auditors, and overseeing the accounting policies and financial reporting and disclosure practices of our company. The audit committee also has the authority to engage special legal, accounting or other consultants it deems necessary in the performance of its duties.

## **Remuneration Committee**

The R.O.C. Securities and Exchange Act, as amended on November 24, 2010, further introduced the mechanism of a Remuneration Committee , which requires all the publicly listed companies in the R.O.C., including our company, to adopt a remuneration committee. On March 18, 2011, R.O.C. FSC promulgated the Regulations Governing the Establishment and Exercise of Powers by Compensation Committees of Public Companies, according to which, listing companies of our size shall set up the compensation committee no later than September 30, 2011 and the remuneration committee shall be composed of no less than three members commissioned by the board of directors. In addition, for the company with independent directors, such as us, at least one of committee members shall be the independent director of such company. We established a remuneration committee are independent directors Chun-Yen Chang, Chung-Laung Liu, Paul S.C. Hsu, and Cheng-Li Huang, with Chun-Yen Chang serving as convener and chairperson. We amended our articles of incorporation to introduce the mechanism of our remuneration committee in the annual ordinary stockholders meeting held on June 15, 2011.

In November 2003, the Securities and Exchange Commission approved changes to the NYSE s listing standards related to the corporate governance practices of listed companies. Under these rules, listed foreign private issuers, like us, must disclose any significant ways in which their corporate governance practices differ from those followed by NYSE-listed U.S. domestic companies under the NYSE s listing standards. A copy of the significant differences between our corporate governance practices and NYSE corporate governance rules applicable to U.S. companies is available on our website <a href="http://www.umc.com/english/investors/Corp\_gov\_difference.asp">http://www.umc.com/english/investors/Corp\_gov\_difference.asp</a>.

## D. Employees

As of March 31, 2012, we had 13,326 employees, which included 7,523 engineers, 5,348 technicians and 455 administrative staffs performing administrative functions in Taiwan and our Singapore branch. We have in the past implemented, and may in the future evaluate the need to implement, labor redundancy plans based on the work performance of our employees.

	As of	As of December 31,		
Employees	2009	2010	2011	
Engineers	6,579	7,365	7,581	
Technicians	5,290	5,835	5,456	
Administrative Staff	465	471	462	

#### Total

12,334 13,671 13,499

Employee salaries are reviewed annually. Salaries are adjusted based on industry standards, inflation and individual performance. As an incentive, additional bonuses in cash may be paid at the discretion of management based on the performance of individuals. In addition, except under certain circumstances, R.O.C. law requires us to reserve from 10% to 15% of any offerings of our new shares for employees subscription.

Our employees participate in our profit distribution pursuant to our articles of incorporation. Employees are entitled to receive additional bonuses based on a certain percentage of our allocable surplus income. On March 14, 2012, the board of directors proposed an employee bonus in cash in the amount of NT\$1,618 million (US\$53 million) in relation to retained earnings in 2011.

In April 2009, we were fined NT\$18,000 by the Science Park Administration for violating the Labor Standard Act in connection with having female employees work (i) between 10:00 p.m. and 6:00 a.m. and (ii) shifted hours beyond the regular eight working hours per day without holding a proper labor-management conference in advance and failing to pay them overtime wages. Despite that the night shift schedule of our female employees and shifted working hours beyond the regular eight working hours per day had been approved by the Science Park Administration and included in our employment contracts, we failed to hold a labor-management meeting to approve such in accordance with the amended Labor Standard Act and the administrative ruling of the Council of Labor Affairs. In May 2009, we were also fined NT\$12,000 by the Southern Taiwan Science Park Administration for similar violations. We did not object to such fines and have held labor-management meetings for all of our fabs to approve the night shift schedule of our female employees and shifted working hours beyond the regular eight working hours per day in accordance with relevant labor regulations.

Our employees are not covered by any collective bargaining agreements. We believe we have a good relationship with our employees.

## E. Share Ownership

As of March 31, 2012, each of our directors and executive officers held shares and/or ADSs of United Microelectronics, either directly for their own account or indirectly as the representative of another legal entity on our board of directors, except for Chung-Laung Liu, Paul S.C. Hsu, Chun-Yen Chang and Cheng-Li Huang, our independent directors. As of March 31, 2012, none of our directors or executive officers held, for their own account, 0.1% or more of our outstanding shares. As of April 14, 2012, our most recent record date, Hsun Chieh Investment Co. held approximately 441 million of our shares, representing approximately 3.4% of our issued shares.

We have an Employee Stock Options Plan, pursuant to which options may be granted to our full-time regular employees, including those of our domestic and overseas subsidiaries. The exercise price for the options would be the closing price of our common shares on the Taiwan Stock Exchange on the day the options are granted, while the expiration date for such options is 6 years from the date of its issuance. In September 2004, December 2005, October 2007 and May 2009, we obtained approvals from relevant R.O.C. authorities for the grant of up to 150 million, 350 million and 500 million stock options, respectively, to acquire our common shares under our Employee Stock Options Plan. In April 2005, August 2005, September 2005, January 2006, May 2006, August 2006, December 2007 and June 2009, we granted 23 million, 54 million, 52 million, 39 million, 42 million, 28 million, 500 million and 300 million stock options, respectively, to our employees, with an exercise price of 22.37, 29.47, 26.89, 23.17, 25.19, 24.09, 18.03 and 10.40, respectively. The 23 million stock options with exercise price of 22.37 that we granted in April 2005, the 54 million stock options with exercise price of 29.47 that we granted in August 2005, the 52 million stock options with exercise price of 26.89 that we granted in September 2005, and the 39 million stock options with exercise price of 23.17 that we granted in January 2006, expired on April 28, 2011, August 15, 2011, September 28, 2011 and January 3, 2012, respectively.

According to our Employee Stock Options Plan, an option holder may exercise an increasing portion of his or her options starting two years after the grant of the options. According to the vesting schedule, 50%, 75% and 100% of such option holder s options shall vest two, three and four years after the grant of the options, respectively. Upon a voluntary termination or termination in accordance with the R.O.C. Labor Law, the option holder shall exercise his or her vested options within 30 days, subject to exceptions provided therein, and after the termination otherwise such options shall terminate. If termination was due to death, the heirs of such option holder have one year starting from the date of the death to exercise his or her vested options. If termination was due to retirement or occupational casualty, the option holder or his or her heirs may exercise all his or her options within a certain period as provided. The options are generally not transferable or pledgeable by the option holders. The total number of shares issuable upon exercise of option held by our directors and executive officers as of March 31, 2012 was 21.2 million. The units granted to each of our directors and executive officers as a percentage of our total shares as of March 31, 2012 were less than 1%.

## ITEM 7. MAJOR STOCKHOLDERS AND RELATED PARTY TRANSACTIONS

## A. Major Stockholders

The following table sets forth information known to us with respect to the beneficial ownership of our shares as of (i) April 14, 2012, our most recent record date and (ii) as of certain record dates in each of the preceding three years, for (1) the stockholders known by us to beneficially own more than 2% of our shares and (2) all directors and executive officers as a group. Beneficial ownership is determined in accordance with Securities and Exchange Commission rules.

	As of April 12, 2010	As of April 17, 2011		April 14, 012
	Percentage	Percentage	Percentage	Number
	of shares	of shares	of shares	of shares
	beneficially	beneficially	beneficially	beneficially
Name of Beneficial Owner	owned	owned	owned	owned
Hsun Chieh Investment Co., Ltd. <sup>(1)</sup>	3.4%	3.4%	3.4%	441,371,000
Silicon Integrated Systems Corp.	2.4%	2.4%	2.4%	315,380,424
Directors, supervisors and executive officers as a group	6.2%	6.22%	6.26%	809,808,031

(1) 36.5% owned by United Microelectronics Corp. as of March 31, 2012.

None of our major stockholders have different voting rights from those of our other stockholders. To the best of our knowledge, we are not directly or indirectly controlled by another corporation, by any foreign government or by any other natural or legal person severally or jointly.

For information regarding our shares held or beneficially owned by persons in the United States, see Item 9. The Offer and Listing A. Offer and Listing Details Market Price Information for Our American Depositary Shares in this annual report.

## **B.** Related Party Transactions

From time to time we have engaged in a variety of transactions with our affiliates. We generally conduct transactions with our affiliates on an arm s-length basis. The sales and purchase prices with related parties are determined through negotiation, generally based on market price.

The following table shows our aggregate ownership interest, on a consolidated basis, in major related fabless design companies that we enter into transactions from time to time as of December 31, 2011.

Name

AMIC Technology (Taiwan), Inc.	
Silicon Integrated Systems Corp.	

18.77 18.38

We provide foundry services to these fabless design companies on arm s-length prices and terms. We derived NT\$1,141 million, NT\$791 million and NT\$237 million (US\$8 million) of our net operating revenues in 2009, 2010 and 2011, from the provision of our foundry services to these fabless design companies.

## C. Interests of Experts and Counsel

Not applicable.

## ITEM 8. FINANCIAL INFORMATION

## A. Consolidated Statements and Other Financial Information

Please refer to Item 18 for a list of all financial statements filed as part of this annual report on Form 20-F.

Except as described in Item 4. Information on the Company B. Business Overview Litigation, we are not currently involved in material litigation or other proceedings that may have, or have had in the recent past, significant effects on our financial position or profitability.

As for our policy on dividend distributions, see Item 10. Additional Information B. Memorandum and Articles of Association Dividends and Distributions . On June 10, 2009, our stockholders approved not to distribute any stock or cash dividends for 2009. On June 15, 2010, our stockholders approved a cash dividend of NT\$0.5 per share for an aggregate of NT\$6,233,001,658. On June 15, 2011, our stockholders approved a cash dividend of NT\$1.12 per share for an aggregate of NT\$14,033,575,265. On July 8, 2011, the Board of Directors resolved to adjust cash dividend ratio of NTD\$1.11164840 per share, because the outstanding common shares had increased accordingly as a result of the exercise of employee stock options. On March 14, 2012, the board of directors proposed dividends of NT\$ 6,316,434,833 (approximately NT\$0.5 per share).

The following table sets forth the cash dividends per share and stock dividends per share as a percentage of shares outstanding paid during each of the years indicated in respect of shares outstanding at the end of each such year, except as otherwise noted.

			Total Number of Shares Issued	Number of Outstanding
	Cash Dividend per Share NT\$	Stock Dividend per Share NT\$	as Stock Dividend	Shares at Year End
1997		3.0	868,629,276	4,117,758,265
1998		2.9	1,199,052,940	5,480,221,725
1999		1.5	834,140,790	6,638,054,462
2000		2.0	1,809,853,716	11,439,016,900
2001		1.5	1,715,104,035	13,169,235,416
2002		1.5	1,968,018,212	15,238,578,646
2003		0.4	607,925,145	15,941,901,463
2004		0.8	1,288,558,185	17,550,800,859
2005	0.1029	1.029	1,758,736,435	18,856,632,324
2006	0.409141420	0.10228530	179,031,672	19,131,192,690
2007	0.7			13,214,494,883
2008	0.75	0.45	562,958,816	12,987,771,315
2009				12,987,771,315
2010	0.5			12,987,912,315
2011	1.11164840			13,084,341,565

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(1) We declare stock dividends in a NT dollar amount per share, but we pay the stock dividends to our stockholders in the form of shares. The amount of shares distributed to each stockholder is calculated by multiplying the dividend declared by the number of shares held by the given stockholder, divided by the par value of NT\$10 per share. Fractional shares are not issued but are paid in cash.

## B. Significant Changes

For the significant subsequent events following the close of the last financial year up to the date of this annual report on Form 20-F, please refer to Note 30 to the consolidated financial statements.

Our consolidated net operating revenues for the three months ended March 31, 2012 was NT\$26,269 million (US\$868 million). Our consolidated net operating revenues for the three months ended March 31, 2012 are not indicative of the results that may be expected for any subsequent period.

## ITEM 9. THE OFFER AND LISTING

## A. Offer and Listing Details

Market Price Information for Our Shares

Our shares have been listed on the Taiwan Stock Exchange since July 1985. There is no public market outside Taiwan for our shares. The table below shows, for the periods indicated, the high and low closing prices and the average daily volume of trading activity on the Taiwan Stock Exchange for our shares. The closing price for our shares on the Taiwan Stock Exchange on April 23, 2012 was NT\$15.05 per share.

	0	Closing Price Per Share <sup>(1)</sup>	
	High NT\$	Low NT\$	Volume (in thousands of shares)
2007	23.45	17.15	53,166.86
2008	20.30	6.80	37,521.00
2009	17.20	7.10	85,869.55
2010	18.6	12.95	53,660.37
First Quarter	18.6	15.45	61,199.41
Second Quarter	17.2	13.8	44,109.17
Third Quarter	14.85	12.95	41,111.93
Fourth Quarter	16.7	13.3	68,624.75
2011	18.10	10.45	44,048.44
First Quarter	18.10	14.10	70,662.07
Second Quarter	15.6	13.95	37,160.89
Third Quarter	14.45	10.45	43,958.27
Fourth Quarter	13.35	11.3	27,100.94
October	13.35	11.3	31,067.16
November	13.15	11.9	27,371.33
December	13.25	11.75	22,936.91
2012 (through April 23)	15.65	12.60	40,492.66
First Quarter	15.65	12.60	43,434.55
January	15.50	12.60	54,420.27
February	15.55	14.75	46,483.12
March	15.65	14.45	33,619.02
Second Quarter (through April 23)	15.05	13.85	29,117.34
April (through April 23)	15.05	13.85	29,117.34

Source: Taiwan Stock Exchange.

 Information has been adjusted to give effect to NT\$12,461,529,283 and NT\$2,324,119,405 issued as cash dividend and cash employee bonus, respectively, in August 2007; 562,958,816 Shares and 114,616,567 Shares issued as stock dividend and employee bonus, respectively, in August 2008.

## Market Price Information for Our American Depositary Shares

Our ADSs have been listed on the NYSE under the symbol UMC since September 19, 2000. The outstanding ADSs are identified by the CUSIP number 910873 40 5. The table below shows, for the periods indicated, the high and low closing prices and the average daily volume of trading activity on the NYSE for our ADSs. The closing price for our ADSs on the New York Stock Exchange on April 23, 2012 was US\$2.53 per ADS. Each of our ADSs represents the right to receive five shares.

	0	ng Price Per Average ADS Dail	
	High US\$	Low US\$	Trading Volume
2007	4.48	2.93	6,542,543
2008	3.71	1.51	5,780,890
2009	3.88	1.65	5,106,249
2010	4.22	2.55	3,932,515
First Quarter	4.22	3.34	5,847,433
Second Quarter	3.89	2.87	4,407,877
Third Quarter	3.21	2.55	2,944,113
Fourth Quarter	3.28	2.6	2,627,825
2011	3.46	1.79	3,454,527
First Quarter	3.46	2.50	4,156,134
Second Quarter	2.84	2.46	3,632,388
Third Quarter	2.56	1.79	3,540,807
Fourth Quarter	2.35	1.85	2,498,545
October	2.35	1.85	3,125,037
November	2.29	1.99	2,381,187
December	2.24	1.95	1,989,412
2012 (through April 23)	2.72	2.14	3,180,841
First Quarter	2.72	2.14	3,363,260
January	2.71	2.14	3,457,401
February	2.72	2.57	3,593,642
March	2.72	2.45	3,068,239
Second Quarter (through April 23)	2.53	2.43	2,426,844
April (through April 23)	2.53	2.43	2,426,844

## Sources: Bloomberg

As of March 31, 2012, there were a total of 229,568,376 ADSs listed on the NYSE. With certain limited exceptions, holders of shares that are not R.O.C. persons are required to hold these shares through a brokerage or custodial account in the R.O.C. As of March 31, 2012, 1,147,841,880 ordinary shares were registered in the name of a nominee of JPMorgan Chase & Co., the depositary under the deposit agreement. JPMorgan Chase & Co. has advised us that, as of March 31, 2012, 229,356,205 ADSs representing these 1,146,781,025 shares were held of record by Cede & Co., and 212,171 ADSs were held by U.S. registered stockholders. We have no further information as to shares held or beneficially owned by U.S. persons.

#### B. Plan of Distribution

Not applicable.

## C. Markets

The principal trading markets for our shares are the Taiwan Stock Exchange and the New York Stock Exchange, on which our shares trade in the form of ADSs.

## D. Selling Stockholders

Not applicable.

**E. Dilution** Not applicable.

F. Expenses of the Issue

Not applicable.

ITEM 10. ADDITIONAL INFORMATION

A. Share Capital

Not applicable.

## B. Memorandum and Articles of Association

The following statements summarize the material elements of our capital structure and the more important rights and privileges of stockholders conferred by R.O.C. law and our articles of incorporation.

#### **Objects and Purpose**

The scope of business of United Microelectronics as set forth in Article 2 of our articles of incorporation, includes (i) integrated circuits; (ii) semiconductor parts and components; (iii) parts and components of microcomputers, microprocessors, peripheral support and system products; (iv) parts and components of semiconductor memory systems products; (v) semiconductor parts and components for digital transceiver product and system products; (vi) semiconductor parts and components for telecom system and system products; (vii) testing and packaging of integrated circuits; (viii) mask production; (ix) research and development, design, production, sales, promotion and after-sale services related to our business; and (x) export/import trade related to our business.

## Directors

The R.O.C. Company Act and our articles of incorporation provide that our board of directors is elected by stockholders and is responsible for the management of our business. As of March 31, 2012, our board of directors consisted of nine directors, out of which four are independent directors. In the annual ordinary stockholders meeting held on June 11, 2007, we amended our articles of incorporation to abolish the managing director mechanism. In the annual ordinary stockholders meeting held on June 13, 2008, we amended our articles of incorporation to introduce the mechanism of an R.O.C. Audit Committee. The Chairman presides at all meetings of our board of directors, and also has the authority to represent our company. The term of office for our directors is three years, and our directors are elected by our stockholders by means of cumulative voting. The amendment to our articles of incorporation on June 11, 2007 also adopts a nomination system which provides that holders of one percent or more of the total issued and outstanding shares of our company would be entitled to submit a roster of candidates to be considered for nomination to our company s board of directors at a stockholders meeting involving the election of directors. Pursuant to the R.O.C. Company Act, a person may serve as our director in his or her personal capacity or as the representative of another legal entity. A legal entity that owns our shares may be elected as a director, in which case a natural person must be designated to act as the legal entity s representative. A legal entity that is our stockholder may designate its representative to be elected as our director on its behalf. In the event several representatives are designated by the same legal entity, any or all of them may be elected. A director who serves as the representative of a legal entity may be removed or replaced at any time at the discretion of such legal entity, and the replacement director may serve the remainder of the term of office of the replaced director. The R.O.C. FSC granted an exemption from this restriction if the terms of such representatives began prior to January 1, 2007. As of March 31, 2012, three of our nine directors are representatives of other legal entities, as shown in Item 6. Directors, Senior Management and Employees A. Directors and Senior Management .

According to the Company Act, a director who has a personal interest in a matter to be discussed at the meeting of the board of directors, the outcome of which may conflict with his interests, shall explain the essential contents of such personal interest in the meeting of the board of directors and then abstain from voting on such matter. Our articles of incorporation, as amended on June 13, 2008, provide that the board of directors is authorized, by taking into account of the extent of his/her/its involvement of our operation activities and the value of his/her/its contribution, to determine the compensation for each director at a comparable rate adopted by other companies of the same industry regardless of the profit received by our company. In addition, according to our articles of incorporation, we may distribute 0.1% of the balance of our earnings after deduction of payment of all taxes and dues, deduction of any past losses and allocation of 10% of our net income as a legal reserve as remuneration to directors. Our articles of incorporation do not impose a shareholding qualification for each director. According to our current internal Loan Procedures, as amended in our annual stockholders meeting held in June 15, 2010, we shall not extend any loan to our directors.

In order to strengthen corporate governance of companies in Taiwan, effective from January 1, 2007, the amended R.O.C. Securities and Exchange Act authorizes the R.O.C. FSC, after considering certain factors, including the scale, shareholding structure and business nature of a public company, to require that a public company, such as our company, meet certain criteria, including having at least two independent directors but not less than one fifth of the total number of directors. The amended R.O.C. Securities and Exchange Act grants those public companies a grace period until the expiry of the terms of the incumbent directors who took their office prior to January 1, 2007.

In addition, pursuant to the amended R.O.C. Securities and Exchange Act, a public company is required to either establish an audit committee, or R.O.C. Audit Committee, or retain supervisors, provided that the R.O.C. FSC may, after considering the scale and business nature of a public company and other necessary situation, require the company to establish an audit committee in place of its supervisors. Currently, the R.O.C. FSC has not promulgated such compulsory rules, and all public companies may, at their discretion, retain either an R.O.C. Audit Committee or supervisors. We amended our articles of incorporation in the annual ordinary stockholders meeting held on June 13, 2008, introducing the mechanism of an R.O.C. Audit Committee. According to our latest amended articles of incorporation, our R.O.C. Audit Committee is composed of all independent directors and performs the duties of supervisors provided under the R.O.C. Company Act. We held the election for all of the directors and independent directors in the annual ordinary stockholders meeting held in June 2009. As a company is not allowed to maintain both supervisors and a R.O.C. Audit Committee, immediately upon the inauguration of the first term of the R.O.C. Audit Committee, we no longer retain the supervisors.

According to our articles of incorporation, as amended on June 13, 2008, we may purchase directors and officers liability insurance for our directors, covering the liabilities incurred in relation to his/her/its operation of business and legally responsible for.

## Shares

As of December 31, 2011, our authorized share capital was NT\$260 billion, divided into 26 billion shares, of which 13,084,455,565 shares were issued and 13,084,455,565 shares were outstanding (including 114,000 shares of Capital collected in advance). All shares presently issued are fully paid and in registered form, and existing stockholders are not subject to any capital calls. We had US\$ 436 million convertible bonds outstanding as of March 31, 2012. As of March 31, 2012, we had neither warrant nor option on our shares, except for the options exercisable for 522.1 million common shares we granted to our employees under our Employee Stock Options Plan discussed below.

## **Employee Stock Option**

According to our Employee Stock Options Plan, options may be granted to our full-time regular employees, including those of our domestic and overseas subsidiaries. In October 2003, September 2004, December 2005, October 2007 and June 2009, we obtained approval by relevant R.O.C. authorities to grant up to 1 billion, 150 million, 150 million, 350 million, 500 million and 500 million stock options, respectively, to acquire our common shares under our Employee Stock Option Plan. According to the plan, an option holder may exercise an increasing portion of his or her options in time starting two years after the grant of the options. According to the vesting schedule, 50%, 75% and 100% of such option holder s options shall vest two, three and four years after the grant of the options, respectively.

The table below shows the number of options granted and outstanding and the month in which they were granted:

	April 2005	August 2005	September 2005	January 2006
		(in	millions)	
Number of Options Granted	23	54	52	39
Number of Options Outstanding as of March 31, 2012				
Shares available to option holders as of March 31, 2012				
	Mor	A		_
	May 2006	August 2006	December 2007 millions)	June 2009
Number of Ontions Granted	2006	2006 (in	2007 millions)	2009
Number of Options Granted Number of Options Outstanding as of March 31, 2012	•	2006	2007	

Note: The employee stock options granted prior to August 7, 2007, the effective date of capital reduction, were adjusted in accordance with capital reduction rate. Each option unit entitles an optionee to subscribe for about 0.7 share of the Company s common stock. The exercise price of the options was also adjusted according to the capital reduction rate. Each stock option unit granted after August 7, 2007 remains to be subscribed for one share of the Company s common stock.

#### **New Shares and Preemptive Rights**

New shares may only be issued with the prior approval of our board of directors. If our issuance of any new shares will result in any change in our authorized share capital, we are required under R.O.C. law to amend our articles of incorporation and obtain approval of our stockholders in a stockholders meeting. We must also obtain the approval of, or submit a registration with, the R.O.C. FSC and the Science Park Administration. According to the R.O.C. Company Act, when a company issues capital stock for cash, 10% to 15% of the issue must be offered to its employees. In addition, if a listed company intends to offer new shares for cash, at least 10% of the issue must also be offered to the public. This percentage can be increased by a resolution passed at a stockholders meeting, which will reduce the number of new shares in which existing stockholders of the company have a preemptive right. Unless the percentage of the shares offered to the public is increased by a resolution, existing stockholders of the Corporate Merger and Acquisition Act of the R.O.C., as effective on February 8, 2002, and amended on May 5, 2004, if new shares issued by our company are solely for the purpose of acquisition, share swap or spin-off, the above-mentioned restrictions, including the employee stock ownership plan, the preemptive rights of the existing stockholders and the publicity requirement of a listed company, to such issuance of new shares may not be applied.

## Stockholders

We only recognize persons registered in our register as our stockholders. We may set a record date and close our register of stockholders for specified periods to determine which stockholders are entitled to various rights pertaining to our shares.

## **Transfer of Shares**

Under the R.O.C. Company Act, a public company, such as our company, may issue individual share certificates, one master certificate or no certificate at all, to evidence common shares. Our articles of incorporation, as amended on June 13, 2008, provide that we may deliver shares in book-entry form instead of by means of issuing physical share certificates. We have issued our shares in uncertificated/scripless form since 2007. Therefore, the transfer of our shares is carried out on the book-entry system. The settlement of trading of our shares is normally carried out on the book-entry system maintained by the Taiwan Depositary and Clearing Corporation. Transferees must have their names and addresses registered on our register in order to assert stockholder s rights against us. Our stockholders are required to file their respective specimen seals with our share registrar, Horizon Securities Co., Ltd.

#### Stockholders Meetings

We are required to hold an annual ordinary stockholders meeting once every calendar year within six months from the end of each fiscal year. Our board of directors may convene an extraordinary meeting whenever the directors deem necessary, and they must do so if requested in writing by stockholders holding no less than 3% of our paid-in share capital who have held these shares for more than a year. At least 15 days advance written notice must be given of every extraordinary stockholders meeting and at least 30 days advance written notice must be given of every annual ordinary stockholders meeting. Unless otherwise required by law or by our articles of incorporation, voting for an ordinary resolution requires an affirmative vote of a simple majority of those present. A distribution of cash dividends would be an example of an ordinary resolution. The R.O.C. Company Act also provides that in order to approve certain major corporate actions, including any amendment of our articles of incorporation, dissolution, merger or spin-off, entering into, amendment, or termination of any contract for lease of the company s business in whole, or for entrusted business, or for joint operation with others on regular basis, the transfer of all or an essential part of the business or assets, accept all of the business or assets of any other company which would have a significant impact in our operations, removing directors or the distribution of dividend in stock form, a special resolution shall be adopted by the holders of the majority of our shares represented at a stockholders meeting at which holders of at least two-thirds of our issued and outstanding shares are present. However, in the case of a public company, such as our company, such resolution may be adopted by the holders of at least two-thirds of the shares represented at a stockholders meeting at which holders of at least a majority of our issued and outstanding shares are present. However, if we are the controlling company and hold no less than 90% of our subordinate company s outstanding shares, our merger with the subordinate company can be approved by a board resolution adopted by majority consent at a meeting with two-thirds of our directors present without stockholders approval. In addition, according to the Corporate Merger and Acquisition Act of the R.O.C., if a company intends to transfer all or an essential part of its business or assets to its wholly-owned subsidiary, subject to the qualifications set forth in the said act, such transaction only needs to be approved by majority board resolution rather than super majority vote by the stockholder s meeting as required by the R.O.C. Company Act.

## **Voting Rights**

Each common share is generally entitled to one vote and no voting discount will be applied. However, treasury shares and our common shares held by (i) an entity in which we own more than 50% of the voting shares or paid-in capital, or (ii) a third party in which we and an entity controlled by us jointly own, directly or indirectly, more than 50% of the voting shares or paid-in capital are not entitled to any vote. Except as otherwise provided by law or our articles of incorporation, a resolution can be adopted by the holders of a simple majority of the total issued and outstanding shares represented at a stockholders meeting. The quorum for a stockholders meeting to discuss the ordinary resolutions is a majority of the total issued and outstanding shares. Pursuant to R.O.C Company Act amended on December 28, 2011, the election of directors by our stockholders shall be conducted by means of cumulative voting rather than other voting mechanisms adopted in our articles of incorporation. In all other matters, a stockholder must cast all his or her votes in the same manner when voting on any of these matters.

Our stockholders may be represented at an ordinary or extraordinary stockholders meeting by proxy if a valid proxy form is delivered to us five days before the commencement of the ordinary or extraordinary stockholders meeting, unless such proxy has been revoked no later than two days before the date of the stockholders meeting. Voting rights attached to our shares exercised by our stockholders proxy are subject to the proxy regulation promulgated by the R.O.C. FSC.

Authorized by latest amendment of the R.O.C Company Act, the R.O.C. FSC has issued an administrative order in February 20, 2012 to require Taiwan Stock Exchange-listed companies, such as our company, and GreTai Securities Market-listed companies in the R.O.C. with NT\$10 billion or more of paid-in share capital and with 10,000 or more stockholders as of the first date of the close period applicable to the stockholders meeting to adopt an e-voting system for stockholders meeting. The e-voting system provides a new platform for stockholders to exercise their voting rights online. As a company that meets the foregoing criteria, we are required to adopt the e-voting system in this year s stockholders meeting.

Any stockholder who has a personal interest in a matter to be discussed at our stockholders meeting, the outcome of which may impair our interests, shall not vote or exercise voting rights on behalf of another stockholder on such matter.

According to the R.O.C. Company Act newly amended on January 4, 2012, a stockholder of a public company who holds shares for others, such as a depositary, may choose to exercise his/her/its voting power separately. On April 13, 2012, R.O.C. FSC promulgated the Regulations Governing the Split Voting of the Stockholders and Compliance Matters for Public Companies, the implementation rules of such split voting method, which stipulates that the depository of the overseas depositary receipts may exercise its voting power separately in accordance with the instructions of the respective holders of the ADS. Notwithstanding the foregoing, before any amendment to the currently effective Deposit Agreement is made, holders of our ADSs generally will not be able to exercise voting rights on the shares underlying their ADSs on an individual basis.

## **Dividends and Distributions**

We are not allowed under R.O.C. law to pay dividends on our treasury shares. We may distribute dividends on our issued and outstanding shares if we have earnings. Before distributing a dividend to stockholders, among other things, we must recover any past losses, pay all outstanding taxes and set aside a legal reserve equivalent to 10% of our net income until our legal reserve equals our paid-in capital.

At an annual ordinary stockholders meeting, our board of directors submits to the stockholders for their approval proposals for the distribution of dividends or the making of any other distribution to stockholders from our net income or reserves for the preceding fiscal year. Dividends are paid to stockholders proportionately. Dividends may be distributed either in cash or in shares or a combination of cash and shares, as determined by the stockholders at such meeting.

Our articles of incorporation provide that we may distribute as remuneration to directors 0.1% of the balance of our earnings deducted by:

payment of all taxes and dues;

deduction of any past losses; and

## allocation of 10% of our net income as a legal reserve.

The amount of no less than 5% of the residual amount after the deductions illustrated above, plus, at discretion, any undistributed earnings from previous years, shall be distributed as bonus to employees. Originally, the distribution of employee bonus were in the form of new shares; in the annual ordinary stockholders meeting held in June 2005, our stockholders approved an amendment of our articles of incorporation to enable the distribution of employee bonus in the form of cash or in shares. Employees eligible for such distribution may include certain qualified employees from our subordinate companies and the qualification of such employees is to be determined by our board of directors. The remaining amount may be distributed according to the distribution plan proposed by our board of directors based on our dividend policy, and submitted to the stockholders meeting for approval.

In the annual ordinary stockholders meeting held in June 2005, our stockholders approved a change of the percentage of stock dividend issued to our stockholders, if any, to no more than 80% and cash dividend, if any, to no less than 20%.

In addition to permitting dividends to be paid out of net income, we are permitted under the R.O.C. Company Act to make distributions to our stockholders of additional shares by capitalizing reserves, including the legal reserve and capital surplus of premiums from issuing stock and earnings from gifts received, or make such distributions by cash, if we do not have losses. However, where legal reserve is distributed by capitalization or in cash, only the portion of legal reserve which exceeds 25 percent of the paid-in capital may be distributed.

For information as to R.O.C. taxes on dividends and distributions, see E. R.O.C. Tax Considerations in this Item.

## Acquisition of Our Shares by Us

An R.O.C. company may not acquire its own common shares, except under certain exceptions provided in the R.O.C. Company Act or the R.O.C. Securities and Exchange Act. Under the amendments to the R.O.C. Company Act, which took effect on November 14, 2001, a company may purchase up to 5% of its issued common shares for transfer to employees in accordance with a resolution of its board of directors, passed by a majority vote, at a meeting with at least two-thirds of the directors present.

Under Article 28-2, an amendment to the R.O.C. Securities and Exchange Act, which took effect on July 21, 2000, we may, by a board resolution adopted by majority consent at a meeting with two-thirds of our directors present, purchase up to 10% of our issued shares on the Taiwan Stock Exchange or by a tender offer, in accordance with the procedures prescribed by the R.O.C. FSC, for the following purposes:

to transfer shares to our employees;

to transfer upon conversion of bonds with warrants, preferred shares with warrants, convertible bonds, convertible preferred shares or certificates of warrants issued by us; and

if necessary, to maintain our credit and our stockholders equity; provided that the shares so purchased shall be canceled thereafter.

We have from time to time announced plans, none of which was binding on us, to buy back up to a fixed amount of our shares on the Taiwan Stock Exchange at the price range set forth in the plans. In 2009 and 2010, we purchased an aggregate of 300 million and 300 million, respectively, of our shares under these plans. From December 17, 2008 to February 16, 2009, we purchased 300 million of our shares on the Taiwan Stock Exchange at an average price of \$7.98 per share to transfer to our employees. From February 3, 2010 to April 2, 2010, we purchased 300 million of our shares on the Taiwan Stock Exchange at an average price of \$7.98 per share to transfer to our employees. From February 3, 2010 to April 2, 2010, we purchased 300 million of our shares on the Taiwan Stock Exchange at an average price of NT\$16.15 per share to transfer to our employees. Of the repurchased shares, 137 million, 97 million, 78 million and 64 million shares were purchased by our employees in November 2003, December 2007, December 2009, and December 2010, respectively. On March 14, 2012, the board of directors approved the cancellation on treasury share of 157,934,400 shares which was bought from December 17, 2008 to February 16, 2009.

In addition, we may not spend more than the aggregate amount of the retained earnings, the premium from issuing stock and the realized portion of the capital reserve to purchase our shares.

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

In addition to the share purchase restriction, the Company Act provides that our subsidiaries may not acquire our shares or the shares of our majority-owned subsidiaries if the majority of the outstanding voting shares or paid-in capital of such subsidiary is directly or indirectly held by us.

## **Liquidation Rights**

In a liquidation, you will be entitled to participate in any surplus assets after payment of all debts, liquidation expenses and taxes proportionately.

#### Rights to Bring Stockholders Suits

Under the R.O.C. Company Act, a stockholder may bring suit against us in the following events:

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within 30 days from the date on which a stockholders resolution is adopted, a stockholder may file a lawsuit to annul a stockholders resolution if the procedure for convening a stockholders meeting or the method of resolution violates any law or regulation or our articles of incorporation. However, if the court is of the opinion that such violation is not material and does not affect the result of the resolution, the court may reject the stockholder s claim.

if the substance of a resolution adopted at a stockholders meeting contradicts any applicable law or regulation or our articles of incorporation, a stockholder may bring a suit to determine the validity of such resolution. Stockholders may bring suit against our directors under the following circumstances:

Stockholders who have continuously held 3% or more of our issued shares for a period of one year or longer may request in writing that the audit committee institute an action against a director on our behalf. In case the audit committee fails to institute an action within 30 days after receiving such request, the stockholders may institute an action on our behalf. In the event stockholders institute an action, a court may, upon the defendant s motion, order such stockholders to furnish appropriate security.

Stockholders who hold more than 3% or more of our total issued shares may institute an action with a court to remove a director of ours who has materially violated the applicable laws or our articles of incorporation or has materially damaged the interests of our company if a resolution for removal on such grounds has first been voted on and rejected by our stockholders and such suit is filed within 30 days of such stockholders vote.

In the event that any director, manager or stockholder holding more than 10% of our shares or any respective spouses or minor children and/or nominees of any of them sells shares within six months after acquisition of such shares, or repurchases the shares within six months after the sale, we may claim for recovery of any profits realized from the sale and purchase. If our board of directors or audit committee fail to claim for recovery, any stockholder may set forth a 30-day period for our board of directors or audit committee to exercise the right. In the event our directors or audit committee fail to claim such requesting stockholder shall have the right to claim such recovery on our behalf. Our directors shall be jointly and severally liable for damages suffered by us as a result of their failure to exercise the right of claim.

#### **Other Rights of Stockholders**

Under the R.O.C. Company Act and the Corporate Merger and Acquisition Act, dissenting stockholders are entitled to appraisal rights in the event of a spin-off or a merger and various other major corporate actions. Dissenting stockholders may request us to redeem all their shares at a then fair market price to be determined by mutual agreement. If no agreement can be reached, the valuation will be determined by a court. Subject to applicable law, dissenting stockholders may, among other things, exercise their appraisal rights by notifying us in writing before the related stockholders meeting and/or by raising and registering their dissent at the stockholders meeting and also waive their voting rights.

One or more stockholders who have held 3% or more of the issued and outstanding shares one year or longer may require our board of directors to call an extraordinary stockholders meeting by sending a written request to our board of directors.

Effective from June 24, 2005, the R.O.C. Company Law allows stockholder(s) holding 1% or more of the total issued shares of a company to, during the period of ten days or more prescribed by the company, submit one proposal in writing containing no more than three hundred words (in terms of Chinese characters) for discussion at the annual ordinary stockholders meeting.

#### **Financial Statements**

For a period of at least 10 days before our annual ordinary stockholders meeting, we must make available our annual financial statements at our principal offices in Hsinchu, Taiwan, and our share registrar in Taipei for our stockholders inspection.

#### **Transfer Restrictions**

Our directors, managers and stockholders holding more than 10% of our shares are required to report any changes in their shareholding to us on a monthly basis. In addition, the number of shares that they can sell or transfer on the Taiwan Stock Exchange on a daily basis is limited by R.O.C. law. Further, they may sell or transfer our shares on the Taiwan Stock Exchange only after reporting to the R.O.C. FSC at least three days before the transfer, provided that such reporting is not required if the number of shares transferred does not exceed 10,000 in one business day.

#### C. Material Contracts

# Cross License Agreement, dated as of January 1, 2006, between United Microelectronics Corporation and International Business Machine Corporation.

We entered into a five-year cross license agreement with IBM effective as of January 1, 2006, which provides for the cross license of certain semiconductor patents including process, topography and design. Under this agreement, IBM had granted to us and our subsidiaries, nonexclusive and non-transferable licenses, without the right to grant sublicenses, for making our and our subsidiaries licensed products in R.O.C., Japan and Singapore and selling, leasing, licensing, using and/or transferring our and our subsidiaries licensed products worldwide under IBM s patents filed prior to January 1, 2011; we granted IBM, royalty-free, worldwide and non-transferable licenses, without the right to grant sublicenses, for the term of the cross license for making, selling, leasing, licensing, using and/or transferring IBM s licensed products under our patents filed prior to January 1, 2011. We also agreed to pay IBM certain royalty fees under this agreement. This five-year cross license agreement with IBM that will be effective until June 30, 2029, the expiration date of the last-to-expire of the licensed patents thereunder. Under this agreement, IBM has granted to us and our subsidiaries, nonexclusive and non-transferable licenses, without the right to grant sublicenses, for making our and our subsidiaries licensed products in R.O.C., Japan, Singapore and PRC and selling, leasing, licensing, using and/or transferring our and our subsidiaries licensed products worldwide under IBM s patents filed effectively prior to July 1, 2009; we granted IBM, royalty-free, worldwide and non-transferable licenses, without the right to grant sublicenses, for making our and our subsidiaries licensed products under our patents filed effectively prior to July 1, 2009; we granted IBM, royalty-free, worldwide and non-transferable licenses, without the right to grant sublicenses, for the term of the cross license for making, selling, leasing, licensing, using and/or transferring our and our subsidiaries licensed products worldwide under IBM s pa

# Settlement and Cross License Agreement, dated as of April 1, 2009, between United Microelectronics Corporation and LSI Corporation (and its subsidiary Agere)

We entered into a multi-year cross license agreement with LSI effective as of May 10, 2007 through December 31, 2012, which provides for the cross license of certain semiconductor patents, including process and design patents. Under this agreement, LSI granted to us and our subsidiaries, nonexclusive and non-transferable licenses, without the right to grant sublicenses, for making, selling, importing or otherwise disposing of our and our subsidiaries licensed products under LSI s patents filed prior to April 1, 2009. We granted LSI, royalty-free, worldwide and non-transferable licenses, without the right to grant sublicenses, for making, selling, using or otherwise disposing of LSI licensed products under our patents filed prior to April 1, 2009. The parties further agreed not to assert patent claims against each other prior to December 31, 2012. We also agreed to pay LSI certain royalty fees under this agreement.

#### Major Long-term Supply and Marketing Agreements

We have entered into long-term distribution, sales, service and marketing agreements with the following companies: UMC Group (USA), an agreement effective from January 1, 2010 through December 3, 2012; United Microelectronics (Europe) B.V., an agreement effective from January 1, 2008 through December 3, 2012; UMCJ, an agreement effective as of January 1, 2008 through December 3, 2012; UMCJ, an agreement effective as of January 1, 2008 through December 3, 2012; UMCJ, an agreement effective as of January 1, 2008 through December 3, 2012; UMCJ, an agreement effective as of January 1, 2008 through December 3, 2012; UMCJ, an agreement effective as of January 1, 2008 through December 3, 2012. We also entered into a long-term supply agreement with Shin-Etsu Handotai Taiwan Co., Ltd., or Shin-Etsu Handotai, under which Shin-Etsu Handotai agrees to provide us with 150mm, 200mm and 300mm raw wafer materials for an indefinite period unless the agreement is otherwise terminated.

#### **Major Construction Agreements**

We entered into various major construction agreements with companies such as, M+W Group, Organo Technology Co., Ltd., Shifuh Enterprise Co., Ltd., Nova Technology Corp., Huengluei Process Industry Co., Ltd., and Wholetech System Hitech Limited for the expansion of our semiconductor facilities in the Tainan Science Park. These agreements are effective from April 22, 2011 to December 31, 2012, and the total contractual amount exceeds NT\$2.5 billion.

#### Major Long-term Loan Agreements

We entered into a long-term secured loan agreement effective from November 28, 2008 through November 28, 2018 with the Bank of Taiwan. We pledged the equipment at our semiconductor facilities in Tainan Science Park as collateral in an amount up to NT\$4.8 billion for the loan.

# D. Exchange Controls Foreign Investment and Exchange Controls in Taiwan

We have extracted from publicly available documents the information presented in this section. Please note that citizens of the People s Republic of China and entities organized in the People s Republic of China are subject to special R.O.C. laws, rules and regulations, which are not discussed in this section.

#### General

Historically, foreign investments in the securities market of Taiwan were restricted. However, commencing in 1983, the Taiwan government has from time to time enacted legislation and adopted regulations to make foreign investment in the Taiwan securities market possible. Initially, only overseas investment trust funds of authorized securities investment trust enterprises established in Taiwan were permitted to invest in the Taiwan securities market. Since January 1, 1991, qualified foreign institutional investors are allowed to make investments in the Taiwan public securities market. Since March 1, 1996, non-resident foreign institutional and individual investors, called general foreign investors , are permitted to make direct investments in the Taiwan public securities market. On September 30, 2003, the Executive Yuan amended the Regulations Governing Investment in Securities by Overseas Chinese and Foreign Nationals, or the Investment Regulations, under which the Qualified Foreign Institutional Investor , or QFII, designations have been abolished and the restrictions on foreign portfolio investors have been revised. According to the Investment Regulations, Foreign Institutional Investor , or FINI, means an entity which is incorporated under the laws of countries other than the R.O.C. or the branch of a foreign entity which is established within the territory of the R.O.C., and Foreign Individual Investor , or FIDI, means an overseas Chinese or a foreign natural person. In addition, the Investment Regulations also lifted some restrictions and simplified procedures of investment application.

On April 30, 2009, the R.O.C. FSC promulgated regulations allowing QDIIs under PRC regulations and certain other PRC persons to invest in the securities of R.O.C. companies. However, prior approval from the Investment Commission of the R.O.C. Ministry of Economic Affairs is required for QDIIs or certain other PRC persons to own 10% or more of the issued and outstanding shares of a listed R.O.C. company.

#### **Foreign Ownership Limitations**

Foreign ownership of the issued share capital in a Taiwan Stock Exchange-listed company or a GreTai Securities Market-listed company has been limited to 50% in the past. Since December 30, 2000, the 50% limit has been lifted. Foreign investors can now hold such investments without any foreign ownership percentage limitations, unless the law has imposed restrictions otherwise.

# **Foreign Investors**

Each FINI who wishes to invest directly in the R.O.C. securities market is required to register with the Taiwan Stock Exchange and obtain an investment identification number if the FINI is a non-resident and has no sub-investment accounts in the R.O.C. Except for some restrictions imposed by specific laws and regulations, the individual and aggregate foreign ownership of the issued share capital in a Taiwan Stock Exchange-listed company or a GreTai Securities Market-listed company is not restricted. An R.O.C. custodian for a non-resident FINI or FIDI is required to submit to the CBC, and the Taiwan Stock Exchange a report of trading activities, inward and outward remittance of capital and status of assets under custody and other matters every month. Foreign institutional investors are not subject to any ceiling for investment in the R.O.C. securities market.

Each FIDI who wishes to invest directly in the R.O.C. securities market is also required to register with the Taiwan Stock Exchange and obtain an investment identification number. The R.O.C. FSC has lifted the limitation on the amount of investment in the R.O.C. securities market for a non-resident FIDI.

# **Foreign Investment Approval**

Foreign investors (both institutional and individual) who wish to make direct investments in the shares of R.O.C. companies are required to submit a foreign investment approval application to the Investment Commission of the R.O.C. MOEA, or other government authority and enjoy benefits granted under the Statute for Foreigner's Investment and the Statute for Overseas Chinese's Investment. The Investment Commission of the R.O.C. MOEA or other government authority reviews each foreign investment approval application and approves or disapproves the application after consultation with other governmental agencies, if necessary. Any non-R.O.C. person possessing a foreign investment approval may repatriate annual net profits and interests attributable to an approved investment. Investment capital and capital gains attributable to the investment may be repatriated with approval of the Investment Commission of the R.O.C. MOEA or other government authority.

In addition to the general restrictions against direct investments by foreign investors in R.O.C. companies, foreign investors are currently prohibited from investing in certain prohibited industries in Taiwan under the Negative List . The prohibition on direct foreign investment in the prohibited industries in the Negative List is absolute in the absence of a specific exemption from the application of the Negative List. Under the Negative List, some other industries are restricted so that foreign investors may directly invest only up to a specified level and with the specific approval of the relevant authority responsible for enforcing the legislation which the Negative List is intended to implement. Our business is not a restricted industry under the Negative List.

In June of 2009, the R.O.C. MOEA further allowed PRC persons to make direct investments in Taiwan. However, such direct investment is still subject to various restrictions, such as that that only the industries listed in the Positive List, as promulgated by the Executive Yuan, are legally permitted targets and that all the PRC persons who wish to make direct investments in R.O.C. are required to submit an investment approval application to the Investment Commission of the R.O.C. MOEA.

# **Exchange Controls**

Taiwan s Foreign Exchange Control Statute and regulations provide that all foreign exchange transactions must be executed by banks designed to handle foreign exchange transactions by the Ministry of Finance and by the CBC. Current regulations favor trade-related foreign exchange transactions. Consequently, foreign currency earned from exports of merchandise and services may now be retained and used freely by exporters. All foreign currency needed for the importation of merchandise and services may be purchased from the designated foreign exchange banks.

Aside from trade-related foreign exchange transactions, R.O.C. companies and residents may remit to and from Taiwan foreign currencies of up to US\$50 million (or its equivalent) and US\$5 million, (or its equivalent) respectively in each calendar year. These limits apply to remittances involving a conversion between NT dollars and U.S. dollars or other foreign currencies. A requirement is also imposed on all private enterprises to register all medium and long-term foreign debt with the CBC.

In addition, foreign currency earned from or needed to be paid for direct investment or portfolio investments, which are approved by the competent authorities, may be retained or sold by the investors or purchased freely from the designated bank.

Aside from the transactions discussed above, a foreign person without an alien resident card (or who has relevant resident card with a validity of less than one year) or an unrecognized foreign entity may remit to and from Taiwan foreign currencies of up to US\$100,000 per remittance without obtaining prior approval or permit if required documentation is provided to Taiwan authorities. This limit applies to remittances involving a conversion between NT dollars and U.S. dollars or other foreign currencies.

# **Depositary Receipts**

In April 1992, the R.O.C. SFB (the predecessor of the R.O.C. FSC) began allowing R.O.C. companies listed on the Taiwan Stock Exchange to sponsor the issuance and sale of depositary receipts evidencing depositary shares. Notifications for these issuances are still required. In December 1994, the Ministry of Finance began allowing companies whose shares are traded on the GreTai Securities Market to sponsor the issuance and sale of depositary receipts evidencing depositary shares. On October 24, 2002, the R.O.C. SFB began allowing public companies that are not listed on the Taiwan Stock Exchange or the GreTai Securities Market to sponsor the issuance and sale of depositary receipts by way of private placements outside the R.O.C.

A holder of depositary shares wishing to withdraw common shares underlying depositary shares is required to appoint a local agent or representative with qualifications set forth by the R.O.C. FSC to, among other things, open a securities trading account with a local brokerage firm, pay R.O.C. taxes, remit funds, and exercise stockholders right. In addition, the withdrawing holder is also required to appoint a custodian bank with qualifications set forth by the R.O.C. FSC to hold the securities in safekeeping, make confirmations, settle trades and report all relevant information. Without making this appointment and the opening of accounts, the withdrawing holder would be unable to subsequently sell the common shares withdrawn from a depositary receipt facility on either the Taiwan Stock Exchange or the GreTai Securities Market.

After the issuance of a depositary share, a holder of the depositary share may immediately, comparing to a three-month waiting period restriction which was lifted in 2003, request the depositary issuing the depositary share to cause the underlying common shares to be sold in the R.O.C. or to withdraw the common shares represented by the depositary receipt and deliver the common shares to the holder. On April 30, 2009 and July 3, 2009, the R.O.C. Executive Yuan approved the Regulations Governing Securities Investment and Futures Trading in Taiwan by Mainland Area Investors and the Regulations Governing Investment in Taiwan by Mainland Area Persons, respectively, under which qualified PRC persons are permitted to invest in Taiwan companies under limited circumstances, including purchase of the depositary receipts issued by a Taiwan company. However, prior approval from the Investment Commission of the R.O.C. Ministry of Economic Affairs is required for a qualified PRC person s ownership of 10% or more of the issued and outstanding shares of a listed R.O.C. company or certain other manners of investment by a qualified PRC person.

No deposits of shares may be made in a depositary receipt facility and no depositary receipts may be issued against deposits without specific R.O.C. FSC approval, unless they are:

- (1) stock dividends;
- (2) free distributions of common shares;
- (3) due to the exercise by a holder of his or her preemptive rights in the event of capital increases for cash; or
- (4) permitted under the deposit agreement and the custody agreement, due to the direct purchase of shares or purchase through the depositary in the domestic market or the surrender of shares under the possession of investors and then delivery of such shares to the custodian for deposit in the depositary receipt facility, provided that the total number of depositary receipts outstanding after an issuance cannot exceed the number of issued depositary shares previously approved by the R.O.C. FSC in connection with the offering plus any depositary shares issued pursuant to the events described in (1), (2) and (3) above. These issuances may only be made to the extent previously issued depositary shares have been withdrawn.

A depositary may convert New Taiwan dollars from the proceeds of the sale of common shares or cash distributions received into other currencies, including U.S. dollars. A depositary may be required to obtain foreign exchange approval from the CBC on a payment-by-payment basis for conversion into New Taiwan dollars of subscription payments for rights offerings or conversion into foreign currencies from the proceeds from the sale of subscription rights for new common shares. It is expected that the CBC will grant this approval as a routine matter.

A holder of depositary shares may convert NT dollars into other currencies from proceeds from the sale of any underlying common shares. Proceeds from the sale of the underlying common shares withdrawn from the depositary receipt facility may be used for reinvestment in securities listed on both the Taiwan Stock Exchange and the GreTai Securities Market, provided that the investor designates a local securities firm or financial institution as agent to open an NT dollar bank account in advance.

#### E. Taxation R.O.C. Tax Considerations

The following summarizes the principal R.O.C. tax consequences of owning and disposing of the ADSs or shares to a holder of ADSs or shares that is not a resident of the R.O.C. An individual holder will be considered as not a resident of the R.O.C. for the purposes of this section if he or she is not physically present in Taiwan for 183 days or more during any calendar year, except if the individual holder has both R.O.C. and non-R.O.C. nationalities and has a registered address in the R.O.C. An entity holder will be considered as not a resident of the R.O.C. if it is organized under the laws of a jurisdiction other than Taiwan and has no fixed place of business or other permanent establishment or business agent in the R.O.C. Prospective purchasers of ADSs or shares should consult their own tax advisors concerning the tax consequences of owning ADSs or shares in the R.O.C. and any other relevant taxing jurisdiction to which they are subject.

#### Dividends

Dividends, whether in cash or shares, declared by us out of retained earnings and paid out to a holder that is not an R.O.C. resident in respect of shares represented by ADSs are subject to R.O.C. withholding tax at the time of distribution. Effective from January 1, 2010, the rate of withholding for non-resident individuals and non-resident entities is 20% of the amount of the distribution in the case of cash dividends or of the par value of the shares distributed in the case of stock dividends. Under current practice adopted by tax authorities, a 20% withholding rate is applied to a non-resident ADS holder without requiring the holder to apply for or obtain foreign investment approval. As discussed in the section

Tax Reform below, certain of our retained earnings will be subject to a 10% undistributed retained earnings tax. To the extent dividends are paid out of retained earnings which have been subject to the retained earnings tax, the amount of such tax will be used by us to offset a non-resident s withholding tax liability on such dividend. Consequently, the effective rate of withholding on dividends paid out of retained earnings previously subject to the retained earnings tax may be less than 20%. There is no withholding tax with respect to stock dividends declared out of our capital reserve.

#### Capital Gains

Under current R.O.C. law, gains realized on R.O.C. securities transactions are primarily exempt from income tax. However, subject to the AMT Act, gains realized from various securities transactions by an R.O.C.-resident entity and from some securities transactions by an R.O.C.-resident individual, such as securities not listed on the Taiwan Stock Exchange or the GreTai Securities Market, shall be calculated as taxable income for the purpose of the AMT and may further be subject to income tax. In addition, transfers of ADSs by non-resident holders are not regarded as sales of R.O.C. securities and, as a result, any gains derived therefrom are currently not subject to R.O.C. income tax.

#### Securities Transaction Tax

The R.O.C. government imposes a securities transaction tax that will apply to sales of shares, but not to sales of ADSs. The transaction tax, which is payable by the seller, is generally levied on sales of shares at the rate of 0.3% of the sales proceeds. Withdrawals of our shares from our depositary facility are not subject to the R.O.C. securities transaction tax.

#### Preemptive Rights

Distribution of statutory preemptive rights for shares in compliance with the R.O.C. Company Act is not subject to R.O.C. tax. Proceeds derived from sales of statutory preemptive rights evidenced by securities by a non-resident holder may be subject to the R.O.C. securities transaction tax, currently at the rate of 0.3% of the gross amount received. Proceeds derived from sales of statutory preemptive rights which are not evidenced by securities are subject to capital gains tax at the rate of 20% of the gains realized for non-R.O.C. entity holders and non-R.O.C. individual holders. Subject to compliance with the R.O.C. law, we have sole discretion to determine whether statutory preemptive rights are evidenced by securities or not.

#### Estate Taxation and Gift Tax

R.O.C. estate tax is payable on any property within the R.O.C. of a deceased individual who is a non-resident individual and R.O.C. gift tax is payable on any property located within the R.O.C. donated by any such person. Under the newly amended Articles 13 and 19 of the R.O.C. Estate and Gift Tax Act, which became effective on January 23, 2009, estate tax is currently payable at the rate of 10% and gift tax is payable at the rate of 10%. Under R.O.C. estate and gift tax laws, the shares will be deemed located in the R.O.C. irrespective of the location of the owner. It is unclear whether a holder of ADSs will be considered to own shares for this purpose.

#### **Tax Treaties**

The Republic of China does not have an income tax treaty with the United States. On the other hand, the Republic of China has income tax treaties with Indonesia, Singapore, South Africa, Australia, Vietnam, New Zealand, Malaysia, Macedonia, Swaziland, the Netherlands, the United Kingdom, Gambia, Senegal, Sweden, Belgium, Denmark, Israel, Paraguay, Hungary, France, India, Slovakia, and Switzerland which may limit the rate of Republic of China withholding tax on dividends paid with respect to common shares in Taiwan companies. It is unclear whether a non-R.O.C. holder of ADSs will be considered to own shares for the purposes of such treaties. Accordingly, a holder of ADSs who is otherwise entitled to the benefit of a treaty should consult its own tax advisors concerning eligibility for benefits under the treaty with respect to the ADSs.

#### Tax Reform

In order to increase Taiwan s competitiveness, an amendment to the R.O.C. Income Tax law was enacted on January 1, 1998, to integrate the corporate income tax and the stockholder dividend tax with the aim of eliminating the double taxation effect for resident stockholders of Taiwanese corporations.

Under this amendment, a 10% retained earnings tax will be imposed on a company for its after-tax earnings generated after January 1, 1998 which are not distributed in the following year. The retained earnings tax so paid will further reduce the retained earnings available for future distribution. When the company declares dividends out of those retained earnings, up to a maximum amount of 10% of the declared dividends will be credited against the 20% withholding tax imposed on the non-resident holders of its shares.

#### U.S. Federal Income Tax Considerations For U.S. Persons

The following is a summary of certain U.S. federal income tax consequences for beneficial owners of our shares or ADSs, that hold the shares or ADSs as capital assets and that are U.S. holders that are not citizens of the R.O.C., do not have a permanent establishment in the R.O.C. and are not physically present in the R.O.C. for 183 days or more within a calendar year. You are a U.S. holder if you are, for U.S. federal income tax purposes, any of the following:

an individual citizen or resident of the United States;

a corporation (or other entity treated as a corporation for U.S. federal income tax purposes) created or organized in or under the laws of the United States, any state thereof or the District of Columbia;

an estate the income of which is subject to U.S. federal income taxation regardless of its source;

a trust that is subject to the primary supervision of a court within the United States and that has one or more U.S. persons with the authority to control all substantial decisions of the trust; or

a trust that has a valid election in effect under applicable U.S. Treasury regulations to be treated as a U.S. person. This summary is based on the provisions of the Internal Revenue Code of 1986, as amended, or the Code, and regulations, rulings and judicial decisions thereunder as of the date hereof, and such authorities may be replaced, revoked or modified so as to result in U.S. federal income tax consequences different from those discussed below. It is for general purposes only and you should not consider it to be tax advice. In addition, it is 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. This summary does not represent a detailed description of all the U.S. federal income tax consequences to you in light of your particular circumstances and does not address the effects of any state, local or non-U.S. tax laws (or other U.S. federal tax consequences, such as U.S. federal estate or gift tax consequences). In addition, it does not represent a detailed description of the U.S. federal income tax laws, including if you are:

a dealer in securities or currencies;

a trader in securities if you elect to use a mark-to-market method of accounting for your securities holdings;

a financial institution or an insurance company;

a tax-exempt organization;

a regulated investment company;

a real estate investment trust;

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a person liable for alternative minimum tax;

a person holding shares or ADSs as part of a hedging, integrated or conversion transaction, constructive sale or straddle;

a partnership or other pass-through entity for U.S. federal income tax purposes;

a person owning, actually or constructively, 10% or more of our voting stock; or

a U.S. holder whose functional currency is not the U.S. dollar.

We cannot assure you that a later change in law will not alter significantly the tax considerations that we describe in this summary.

If a partnership holds our shares or ADSs, the tax treatment of a partner will generally depend upon the status of the partner and the activities of the partnership. If you are a partner of a partnership holding our shares or ADSs, you should consult your tax advisor.

# You should consult your own tax advisor concerning the particular U.S. federal income tax consequences to you of the ownership and disposition of the shares or ADSs, as well as the consequences to you arising under the laws of any other taxing jurisdiction.

In general, for U.S. federal income tax purposes, a U.S. person who is the beneficial owner of an ADS will be treated as the owner of the shares underlying its ADS. Accordingly, deposits or withdrawals of shares by U.S. holders for ADSs generally will not be subject to U.S. federal income tax. However, the U.S. Treasury has expressed concerns that intermediaries in the chain of ownership between the holder of an ADS and the issuer of the security underlying the ADS may be taking actions that are inconsistent with the claiming of foreign tax credits by the U.S. holders of ADSs. Such actions would also be inconsistent with the claiming of the reduced rate of tax, described below, applicable to dividends received by certain non-corporate holders. Accordingly, the analysis of the creditability of R.O.C. taxes and the availability of the reduced tax rate for dividends received by certain non-corporate holders, each described below could be affected by actions taken by intermediaries in the chain of ownership between the holder of an ADS and our company.

#### **Taxation of Dividends**

Except as discussed below with respect to the passive foreign investment company rules, the amount of distributions (including net amounts withheld in respect of R.O.C. withholding taxes) you receive on your shares or ADSs (other than certain pro rata distributions of shares to all stockholders) will generally be treated as dividend income to you if the distributions are made from our current and accumulated earnings and profits as calculated according to U.S. federal income tax principles. In determining the net amounts withheld in respect of R.O.C. taxes, any reduction in the amount withheld on account of an R.O.C. credit in respect of the 10% retained earnings tax imposed on us is not considered a withholding tax and will not be treated as distributed to you or creditable by you against your U.S. federal income tax. Such income will be includible in your gross income as ordinary income on the day you actually or constructively receive it, which in the case of an ADS will be the date actually or constructively received by the depositary. The amount of any distribution of property other than cash will be the fair market value of such property on the date it is distributed. You will not be entitled to claim a dividend received deduction with respect to distributions you receive from us.

With respect to non-corporate U.S. holders, certain dividends received from a qualified foreign corporation in taxable years beginning prior to January 1, 2013 may be subject to reduced rates of taxation. A foreign corporation is treated as a qualified foreign corporation with respect to dividends paid by that corporation on shares (or ADSs backed by such shares) that are readily tradable on an established securities market in the United States. U.S. Treasury Department guidance indicates that our ADSs (which are listed on the NYSE), but not our shares, are readily tradable on an established securities market in the United States. Thus, we do not believe that dividends we pay on our shares that are not backed by ADSs currently meet the conditions required for these reduced tax rates. Moreover, there can be no assurance that our ADSs will continue to be readily tradable on an established securities market in later years. Non-corporate U.S. holders that do not meet a minimum holding period requirement during which they are not protected from the risk of loss or that elect to treat the dividend income as investment income pursuant to Section 163(d)(4) of the Code will not be eligible for the reduced rates of taxation regardless of our status as a qualified foreign corporation. In addition, the rate reduction will not apply to dividends if the recipient of a dividend is obligated to make related payments with respect to positions in substantially similar or related property. This disallowance applies even if the minimum holding period has been met. Non-corporate U.S. holders will also not be eligible for the reduced rates of taxation on dividends if we are a passive foreign investment company in the taxable year in which such dividends are paid or in the preceding taxable year. Holders should consult their own tax advisors regarding the application of these rules given their particular circumstances.

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The amount of any dividend paid in NT dollars will equal the U.S. dollar value of the NT dollars you receive (calculated by reference to the exchange rate in effect on the date you actually or constructively receive the dividend, which in the case of an ADS will be the date actually or constructively received by the depositary), regardless of whether the NT dollars are actually converted into U.S. dollars. If the NT dollars received as a dividend are not converted into U.S. dollars on the date of receipt, you will have a basis in the NT dollars equal to their U.S. dollar value on the date of receipt. Any gain or loss you realize if you subsequently sell or otherwise dispose of the NT dollars will be ordinary income or loss from sources within the United States for foreign tax credit limitation purposes.

Subject to certain limitations under the Code, you may be entitled to a credit or deduction against your U.S. federal income taxes for the net amount of any R.O.C. taxes that are withheld from dividend distributions made to you. The election to receive a credit or deduction must be made annually, and applies to all foreign taxes for the applicable tax year. The limitation on foreign taxes eligible for credit is calculated separately with respect to specific classes of income. For this purpose, dividends we pay with respect to shares or ADS will generally be considered passive category income from sources outside the United States. Furthermore, you will not be allowed a foreign tax credit for foreign taxes imposed on dividends paid on shares or ADSs if you (1) have held the shares or ADSs for less than a specified minimum period during which you are not protected from risk of loss, or (2) are obligated to make payments related to the dividends. The rules governing the foreign tax credit are complex. We therefore urge you to consult your tax advisors regarding the availability of the foreign tax credit under your particular circumstances.

To the extent that the amount of any distribution you receive exceeds our current and accumulated earnings and profits for a taxable year, as determined under U.S. federal income tax principles, the distribution will first be treated as a tax-free return of capital, causing a reduction in your adjusted basis in the shares or ADSs and thereby increasing the amount of gain, or decreasing the amount of loss, you will recognize on a subsequent disposition of the shares or ADSs. The balance in excess of adjusted basis, if any, will be taxable to you as capital gain recognized on a sale or exchange. However, we do not expect to keep earnings and profits in accordance with U.S. federal income tax principles. Therefore, you should expect that a distribution will generally be treated as a dividend (as discussed above).

It is possible that pro rata distributions of shares or ADSs to all stockholders may be made in a manner that is not subject to U.S. federal income tax. In the event that such distributions are tax-free, the basis of any new shares or ADSs so received will generally be determined by allocating the U.S. holder s basis in the old shares or ADSs between the old shares or ADSs and the new shares or ADSs, based on their relative fair market values on the date of distribution. For U.S. tax purposes, any such tax-free share or ADS distribution generally would not result in foreign source income to you. Consequently, you may not be able to use the foreign tax credit associated with any R.O.C. withholding tax imposed on such distributions unless you can use the credit against U.S. tax due on other foreign source income in the appropriate category for foreign tax credit purposes. You should consult your own tax advisors regarding all aspects of the foreign tax credit.

# Taxation of Capital Gains

Except as discussed below with respect to the passive foreign investment company rules, when you sell or otherwise dispose of your shares or ADSs, you will generally recognize capital gain or loss in an amount equal to the difference between the U.S. dollar value of the amount realized for the shares or ADSs and your basis in the shares or ADSs, determined in U.S. dollars. If you are an individual, and the shares or ADSs being sold or otherwise disposed of our capital assets that you have held for more than one year, your gain recognized will be eligible for reduced rates of taxation. Your ability to deduct capital losses is subject to limitations. Any gain or loss you recognize will generally be treated as U.S. source gain or loss.

If you pay any R.O.C. securities transaction tax, such tax is not treated as an income tax for U.S. federal income tax purposes, and therefore will not be a creditable foreign tax for U.S. federal income tax purposes. However, subject to limitations under the Code, such tax may be deductible. You are urged to consult your tax advisors regarding the U.S. federal income tax consequences of these taxes.

# **Passive Foreign Investment Company**

Based on the current and projected composition of our income and valuation of our assets, including goodwill, we do not believe that we are currently (or that we were in 2011) a passive foreign investment company, or PFIC, and we do not expect to become one in the future, although there can be no assurance in this regard.

In general, a company is considered a PFIC for any taxable year if either:

at least 75% of its gross income is passive income, which generally includes income derived from certain dividends, interest, royalties and rents (other than royalties and rents derived in the active conduct of a trade or business and not derived from a related person), annuities or property transactions; or

at least 50% of the value of its assets is attributable to assets that produce or are held for the production of passive income. The 50% of value test is based on the average of the value of our assets for each quarter during the taxable year. If we own at least 25% by value of another company s stock, we will be treated, for purposes of the PFIC rules, as owning our proportionate share of the assets and receiving our proportionate share of the income of that company.

In determining that we do not expect to be a PFIC, we are relying on our projected capital expenditure plans and projected revenues for the current year and for future years. In addition, our determination is based on a current valuation of our assets, including goodwill. In calculating goodwill, we have valued our total assets based on our total market value, which is based on the market value of our shares and ADSs and is subject to change. In addition, we have made a number of assumptions regarding the allocation of goodwill to active and passive assets. We believe our valuation approach is reasonable. However, it is possible that the Internal Revenue Service will challenge the valuation or allocation of our goodwill, which may also result in us being classified as a PFIC.

In addition, the determination of whether we are a PFIC is made annually. Accordingly, it is possible that we may become a PFIC in the current or any future taxable year due to changes in our asset or income composition. Because we have valued our goodwill based on the market value of our shares, a decrease in the price of our shares may also result in our becoming a PFIC.

If we are a PFIC for any taxable year during which you hold shares or ADSs, you will be subject to special tax rules with respect to any excess distribution that you receive and any gain you realize from a sale or other disposition (including a pledge) of shares or ADSs. Distributions you receive in a taxable year that are greater than 125% of the average annual distributions you received during the shorter of the three preceding taxable years or your holding period for shares or ADSs will be treated as excess distributions. Under these special tax rules:

the excess distribution or gain will be allocated ratably over your holding period for shares or ADSs;

the amount allocated to the current taxable year, and any taxable year prior to the first taxable year in which we were a PFIC, will be treated as ordinary income; and

the amount allocated to each other year will be subject to tax at the highest tax rate in effect for that year and the interest charge generally applicable to underpayments of tax will be imposed on the resulting tax attributable to each such year. If you hold shares or ADSs in any year in which we are a PFIC, you are required to file Internal Revenue Service Form 8621.

If we are a PFIC for any taxable year and any of our non-U.S. subsidiaries is also a PFIC, a U.S. Holder would be treated as owning a proportionate amount (by value) of the shares of the lower-tier PFIC for purposes of the application of these rules. You are urged to consult your tax advisors about the application of the PFIC rules to any of our subsidiaries.

Under certain circumstances, a U.S. holder, in lieu of being subject to the PFIC rules discussed above, may make an election to include gain on the stock of a PFIC as ordinary income under a mark-to-market method provided that such stock is regularly traded on a qualified exchange. Under this method, any difference between the stock s fair market value and its adjusted basis at the end of the year is accounted for by either an inclusion in income or, subject to limitations, a deduction from income, as described below. Under current U.S. Treasury Department guidance, the mark-to-market election may be available to holders of ADSs because the ADSs are listed on the NYSE, which constitutes a qualified exchange, although there can be no assurance that the ADSs will be regularly traded for purposes of the mark-to-market election. You should also note that only the ADSs and not the shares are listed on the NYSE. Our shares are listed on the Taiwan Stock Exchange, which must meet certain trading, listing, financial disclosure and other requirements to be treated as a qualified exchange under applicable U.S. Treasury regulations for purposes of the mark-to-market election, and no assurance can be given that the shares will be regularly traded for purposes of the mark-to-market election.

If you make an effective mark-to-market election, you will include in income each year as ordinary income the excess of the fair market value of your shares or ADSs at the end of the year over your adjusted tax basis in the shares or ADSs. You will be entitled to deduct as an ordinary loss each year the excess of your adjusted tax basis in the shares or ADSs over their fair market value at the end of the year, but only to the extent of the net amount previously included in income as a result of the mark-to-market election. If you make an effective mark-to-market election, any gain you recognize upon the sale or other disposition of your shares or ADSs will be treated as ordinary income and any loss will be treated as ordinary loss, but only to the extent of the net amount of previously included income as a result of the mark-to-market election.

Your adjusted tax basis in shares or ADSs will be increased by the amount of any income inclusion and decreased by the amount of any deductions under the mark-to-market rules. If you make a mark-to-market election it will be effective for the taxable year for which the election is made and all subsequent taxable years unless the shares or ADSs are no longer regularly traded on a qualified exchange or the Internal Revenue Service consents to the revocation of the election. You should consult your tax advisors about the availability of the mark-to-market election, and whether making the election would be advisable under your particular circumstances.

Alternatively, a U.S. holder of shares or ADSs in a PFIC can sometimes avoid the rules described above by electing to treat the PFIC as a qualified electing fund under Section 1295 of the Code. This option is not available to you because we do not intend to comply with the requirements necessary to permit you to make this election.

Non-corporate U.S. holders will not be eligible for reduced rates of taxation on any dividends received from us in taxable years beginning prior to January 1, 2013, if we are a PFIC in the taxable year in which such dividends are paid or in the preceding taxable year. You should consult your own tax advisors concerning the U.S. federal income tax consequences of holding shares or ADSs if we are considered a PFIC in any taxable year.

#### Information Reporting and Backup Withholding

In general, unless you are an exempt recipient such as a corporation, information reporting will apply to dividends in respect of the shares or ADSs and to the proceeds from the sale, exchange or redemption of your shares or ADSs that are paid to you within the United States (and in some cases, outside of the United States). Additionally, if you fail to provide your taxpayer identification number, or fail either to report in full dividend and interest income or to make the necessary certifications of other exempt status, you may be subject to backup withholding.

Any amounts withheld under the backup withholding rules will be allowed as a refund or a credit against your U.S. federal income tax liability, provided you furnish the required information to the Internal Revenue Service.

**F. Dividends and Paying Agents** Not applicable.

#### G. Statement by Experts

Not applicable.

#### H. Documents on Display

We have filed this annual report on Form 20-F, including exhibits, with the Securities and Exchange Commission. As allowed by the Securities and Exchange Commission, in Item 19 of this annual report, we incorporate by reference certain information we filed with the Securities and Exchange Commission. This means that we can disclose important information to you by referring you to another document filed separately with the Securities and Exchange Commission. The information incorporated by reference is considered to be part of this annual report.

You may read and copy this annual report, including the exhibits incorporated by reference in this annual report, at the Securities and Exchange Commission s Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549 and at the Securities and Exchange Commission s regional offices in New York, New York and Chicago, Illinois. You can also request copies of this annual report, including the exhibits incorporated by reference in this annual report, upon payment of a duplicating fee, by writing information on the operation of the Securities and Exchange Commission s Public Reference Room.

The Securities and Exchange Commission also maintains a website at www.sec.gov that contains reports, proxy statements and other information regarding registrants that file electronically with the Securities and Exchange Commission. Our annual report and some of the other information submitted by us to the Securities and Exchange Commission may be accessed through this web site.

# I. Subsidiary Information

Not applicable.

# ITEM 11. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Market risk is the risk of loss related to adverse changes in market prices, including interest rates and foreign exchange rates, of financial instruments. We are exposed to various types of market risks, including changes in interest rates and foreign currency exchange rates, in the normal course of business.

We use financial instruments, including variable rate debt and swaps and forward contracts, to manage risks associated with our interest rate and foreign currency exposures through a controlled program of risk management in accordance with established policies. These policies are reviewed and approved by our board of directors and stockholders meeting. Our treasury operations are subject to internal audit on a regular basis. We do not hold or issue derivative financial instruments for speculatively purposes.

Since export sales are primarily conducted in U.S. dollars, we had U.S. dollar-denominated accounts receivables of US\$461 million as of December 31, 2011. As of the same date, we also had Japanese Yen-denominated accounts receivable of ¥833 million attributable to our Japanese operations and Europe-denominated accounts receivable of 3 million attributable to our Europe operations. We had U.S. dollar- and Japanese Yen-denominated accounts payables of US\$84 million and ¥2,004 million, respectively, as of December 31, 2011.

Our primary market risk exposures relate to interest rate movements on borrowings and exchange rate movements on foreign currency-denominated accounts receivables, capital expenditures relating to equipment used in manufacturing processes (including photo etching and chemical vapor deposition) and purchased primarily from Japan and the United States. The fair value of foreign currency forward contracts and interest rate swaps is determined based on valuation reports we receive from counterparties after we verify the reasonableness of such reports.

The following table provides information as of December 31, 2011 on our market risk sensitive financial instruments.

	As of December 31, 2011		
	Book Value (in NT\$		ir Value
Foreign exchange rate contracts: Non-Trading Purpose	\$	\$	115)
Time Deposits: Non-Trading Purpose	\$ 31,738	\$	31,738
Short-term Loans: Non-Trading Purpose	\$ 9,412	\$	9,412
Bonds: Non-Trading Purpose	\$ 17,405	\$	15,458
Long-term loans: Non-Trading Purpose	\$ 11,693	\$	11,693