

UNITED MICROELECTRONICS CORP  
Form 20-F/A  
February 13, 2006  
Table of Contents

---

**UNITED STATES**  
**SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

---

**FORM 20-F/A**

---

(Mark One)

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

or

Annual report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

For the fiscal year ended December 31, 2004.

or

Transition report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

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 1-15128

---

# 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, ROC

(Address of Principal Executive Offices)

---

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

<u>Title of Each Class</u>	<u>Name of Each Exchange on which Registered</u>
Common Shares, par value NT\$10 per share	New York Stock Exchange

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

None

(Title of Class)

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

None

(Title of Class)

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

**17,791,981,859 Common Shares of Registrant issued as of December 31, 2004 (including 241,181,000 treasury shares)**

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

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

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

---

**Table of Contents**Overview

This annual report on Form 20-F/A is filed for the purpose of amending parts of our annual report on Form 20-F for the year ended December 31, 2004 that was filed with the U.S. Securities and Exchange Commission ( US SEC ) on June 29, 2005. Subsequent to the filing of the original annual report and through the process of addressing financial statement comments raised by the US SEC, we noted that certain items in our US GAAP reconciliation footnotes for the years ended December 31, 2002, 2003 and 2004 were miscalculated. Accordingly, we restated the following items pursuant to US GAAP:

- i) an understatement of goodwill impairment charge of NT\$8,075 million for the year ended December 31, 2004 due to a miscalculation of the fair value of certain equity method investees and certain liabilities in the reporting unit.
- ii) embedded derivatives instruments which were fair valued inappropriately resulting in an understatement (overstatement) to net income of NT\$(516) million, NT\$1,855 million and NT\$(1,202) million for the year ended December 31, 2002, 2003 and 2004, respectively.
- iii) an understatement of compensation expense amounting to NT\$211 million relating to employee bonuses for the year ended December 31, 2004.

The restatements have no effect on our cash flows. Except as otherwise expressly stated herein, this amended annual report on Form 20-F/A is not purposed to provide an update or discussion of any developments subsequent to the original filing date of the original Form 20-F on June 29, 2005.

The effects arising from the restatements to the consolidated financial statements under US GAAP are summarized as follows:

(In million NT dollars, except per share amounts)	For the year ended December 31, 2002		
	As reported	Restatement	As restated
Net Income	294	(516)	(222)
Basic earning per share (in dollars)	0.02	(0.03)	(0.01)
Diluted earning per share (in dollars)	0.02	(0.03)	(0.01)

  

(In million NT dollars)	As of December 31, 2002		
	As reported	Restatement	As restated
Total Assets	442,645		442,645
Total Liabilities	92,596	516	93,112
Shareholders' equity	334,025	(516)	333,509

  

	For the year ended December 31, 2003		
	As reported	Restatement	As restated

Edgar Filing: UNITED MICROELECTRONICS CORP - Form 20-F/A

(In million NT dollars, except per share amounts)

	<u>As reported</u>	<u>Restatement</u>	<u>As restated</u>
Net Income	10,476	1,855	12,331
Basic earning per share (in dollars)	0.63	0.12	0.75
Diluted earning per share (in dollars)	0.62	0.11	0.73

**As of December 31, 2003**

(In million NT dollars)

	<u>As reported</u>	<u>Restatement</u>	<u>As restated</u>
Total Assets	486,360	(53)	486,307
Total Liabilities	108,925	(1,392)	107,533
Shareholders' equity	362,396	1,340	363,736

**For the year ended December 31, 2004**

(In million NT dollars, except per share amounts)

	<u>As reported</u>	<u>Restatement</u>	<u>As restated</u>
Net Loss	(4,749)	(9,488)	(14,237)
Basic loss per share (in dollars)	(0.28)	(0.57)	(0.85)
Diluted loss per share (in dollars)	(0.28)	(0.57)	(0.85)

**Table of Contents**

(In million NT dollars)	As of December 31, 2004		
	As reported	Restatement	As restated
Total Assets	460,322	(8,108)	452,214
Total Liabilities	101,354	(171)	101,183
Shareholders' equity	350,358	(7,938)	342,420

**Related Information**

For information relating to the amendment in the annual report on Form 20-F/A for the year ended December 31, 2004, see the following items:

**Part I:**

Item 3 KEY INFORMATION

Item 5 OPERATING AND FINANCIAL REVIEW AND PROSPECTS

**Part II:**

Item 15 CONTROLS AND PROCEDURES

Item 18 FINANCIAL STATEMENTS (NOTE 33)

**Table of Contents**

**UNITED MICROELECTRONICS CORPORATION**

**FORM 20-F/A ANNUAL REPORT**

**FISCAL YEAR ENDED DECEMBER 31, 2004**

**Table of Contents**

	<b>Page</b>
<b><u>SUPPLEMENTAL INFORMATION</u></b>	1
<b><u>FORWARD-LOOKING STATEMENTS IN THIS ANNUAL REPORT MAY NOT BE REALIZED</u></b>	1
<b><u>GLOSSARY</u></b>	3
<b><u>PART I</u></b>	6
ITEM 1. <b><u>IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISERS</u></b>	6
ITEM 2. <b><u>OFFER STATISTICS AND EXPECTED TIMETABLE</u></b>	6
ITEM 3. <b><u>KEY INFORMATION</u></b>	6
ITEM 4. <b><u>INFORMATION ON THE COMPANY</u></b>	23
ITEM 5. <b><u>OPERATING AND FINANCIAL REVIEW AND PROSPECTS</u></b>	41
ITEM 6. <b><u>DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES</u></b>	61
ITEM 7. <b><u>MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS</u></b>	66
ITEM 8. <b><u>FINANCIAL INFORMATION</u></b>	68
ITEM 9. <b><u>THE OFFER AND LISTING</u></b>	69
ITEM 10. <b><u>ADDITIONAL INFORMATION</u></b>	71
ITEM 11. <b><u>QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK</u></b>	87
ITEM 12. <b><u>DESCRIPTION OF SECURITIES OTHER THAN EQUITY SECURITIES</u></b>	89
<b><u>PART II</u></b>	90
ITEM 13. <b><u>DEFAULTS, DIVIDEND ARREARAGES AND DELINQUENCIES</u></b>	90
ITEM 14. <b><u>MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS AND USE OF PROCEEDS</u></b>	90
ITEM 15. <b><u>CONTROLS AND PROCEDURES</u></b>	90
ITEM 16A. <b><u>AUDIT COMMITTEE FINANCIAL EXPERT</u></b>	90
ITEM 16B. <b><u>CODE OF ETHICS</u></b>	90

**Table of Contents**

ITEM 16C.	<u>PRINCIPAL ACCOUNTANT FEES AND SERVICES</u>	91
ITEM 16D.	<u>EXEMPTIONS FROM THE LISTING STANDARDS FOR AUDIT COMMITTEES</u>	91
ITEM 16E.	<u>PURCHASE OF EQUITY SECURITIES BY THE ISSUER AND AFFILIATED PURCHASERS</u>	91
<b><u>PART III</u></b>		92
ITEM 17.	<u>FINANCIAL STATEMENTS</u>	92
ITEM 18.	<u>FINANCIAL STATEMENTS</u>	92
ITEM 19.	<u>EXHIBITS</u>	93



---

**Table of Contents**

**SUPPLEMENTAL INFORMATION**

The references to United Microelectronics, we, us, our and our company in this annual report refer to United Microelectronics Corporation and its consolidated subsidiaries, unless the context suggests otherwise. The references to United Semiconductor, United Silicon, United Integrated Circuits, UTEK Semiconductor, UMCJ and UMCi are to United Semiconductor Corporation, United Silicon Incorporated, United Integrated Circuits Corporation, UTEK Semiconductor Corporation (formerly Holtek Semiconductor), UMC JAPAN (formerly Nippon Foundry Inc.) and UMCi Ltd. (formerly UMCi Pte Ltd), respectively. The references to Taiwan and ROC 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 September 21, 2000, as amended, supplemented or modified from time to time, among United Microelectronics, Citibank N.A. and the holders and beneficial owners from time to time of American Depositary Receipts issued thereunder. ROC GAAP means the generally accepted accounting principles of the ROC and US GAAP means the generally accepted accounting principles of 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 ROC. In this annual report, NT\$ and NT dollars mean New Taiwan dollars, \$, US\$ and U.S. dollars mean United States dollars, ¥ means Japanese Yen, S\$ means Singapore dollars and mean

**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 services and technologies based on the latest developments;

the intensely competitive semiconductor, PC and communication industries and markets;

risks associated with international global business activities;

our dependence on key personnel;

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

general economic and political conditions, including those related to the semiconductor, PC and communication industries;

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

possible disruptions in commercial activities caused by natural and human-induced disasters, including terrorist activity, that may reduce end-user purchases relative to expectations and orders;

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

**Table of Contents**

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

The words anticipate, believe, estimate, expect, intend, plan and similar expressions, as they relate to us, are intended to identify a number of risks associated with these forward-looking statements. We undertake no obligation to update or revise any forward-looking statements 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.

**Table of Contents**

**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.
BICMOS	Bipolar CMOS. An integrated circuit fabrication technology that produces both bipolar transistors and CMOS transistors and combines them on one chip.
Cell	Semiconductor structure in an electrical state which can store a bit of information, mainly used as the building block of memory array.
CMOS	Complementary Metal Oxide Silicon, which includes both N-channel and P-channel metal oxide silicon transistors (which are NMOS and PMOS, respectively). Currently the most common used integrated circuit component.
Deep Trench DRAM	Capacitor of DRAM built into a trench etched in the semiconductor substrate. By using a trench configuration, the capacitor can be expanded, increasing its capacity without increasing the portion of the wafer surface needed for the embedded capacitor.
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.
Digital signal processor	A type of integrated circuit that processes and manipulates digital information after it has been converted from an analog source.
Flash memory	A type of non-volatile memory that is erasable and reprogrammable. It can be erased and reprogrammed in the electronic system into which the flash memory chip has been incorporated.
FSG	Fluoridated Silicon Glass. Fluorine is added to SiO <sub>2</sub> , reducing the dielectric constant of a glass from 3.9 to about 3.5.
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.
Logic device	A device that contains digital integrated circuits that process, rather than store, information.

**Table of Contents**

Low-k dielectric insulation	Insulating material used to separate interconnect wiring layers. A low dielectric constant $k$ is desired in the insulator in order to minimize parasitic capacitance, which acts as a drag on system performance, or clock speed.
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.
Nonvolatile memory	Memory products which retain their data content without the need for constant power supply.
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.
SiGe refill process	A technique used to grow Silicon (Si) with Germanium (Ge) doping to increase the compressive strain in PMOS device channel to improve performance.
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.

**Table of Contents**

Stepper	A machine used in the photolithography process in making wafers. With a stepper, a small portion of the wafer is aligned with the mask upon which the circuitry design is laid out and is then exposed to the light source. The machine then steps to the next area repeating the process until the entire wafer has been done.
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, 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.

**Table of Contents****PART I****ITEM 1. IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISERS**

Not applicable.

**ITEM 2. OFFER STATISTICS AND EXPECTED TIMETABLE**

Not applicable.

**ITEM 3. KEY INFORMATION****A. Selected Financial Data**

The selected balance sheet data as of December 31, 2003 and 2004 and the selected statements of income and cash flow data for the years ended December 31, 2002, 2003 and 2004 are derived from our restated audited consolidated financial statements included elsewhere in this annual report. Certain financial data prepared in accordance with generally accepted accounting principles in the United States, or US GAAP, have been restated. The selected balance sheet data as of December 31, 2000, 2001 and 2002 and the selected statements of income and cash flow data for the year ended December 31, 2000 and 2001 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 generally accepted accounting principles in the ROC, or ROC GAAP, which differs in many material respects from US GAAP. For a discussion of these differences, see Note 33 to our restated audited consolidated financial statements included elsewhere in this annual report. Some of the statements of income, cash flow and balance sheet data items have been reconciled to US 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.

Year Ended December 31,					
2000	2001	2002	2003	2004	
NT\$	NT\$	NT\$	NT\$	NT\$	US\$
(in millions, except per share and per ADS data)					

**Consolidated Statement of Income Data:**

Edgar Filing: UNITED MICROELECTRONICS CORP - Form 20-F/A

**ROC GAAP**

Net operating revenues	115,609	69,817	75,425	95,704	129,191	4,070
Costs of goods sold	57,411	60,568	62,887	73,938	92,393	2,911
<b>Gross profit</b>	<b>58,198</b>	<b>9,249</b>	<b>12,538</b>	<b>21,766</b>	<b>36,798</b>	<b>1,159</b>
<b>Operating expenses:</b>						
Sales and marketing	1,153	2,276	1,527	2,171	2,775	87
General and administrative	3,196	4,425	3,531	3,996	4,853	153
Research and development	6,306	8,960	7,368	5,859	7,364	232
<b>Total operating expenses</b>	<b>10,655</b>	<b>15,661</b>	<b>12,426</b>	<b>12,026</b>	<b>14,992</b>	<b>472</b>
Operating income (loss)	47,543	(6,412)	112	9,740	21,806	687
Net non-operating income (expenses)	4,786	(154)	6,904	4,956	9,938	313
Income (loss) before income tax and minority interest	52,329	(6,566)	7,016	14,696	31,744	1,000
Income tax (expense) benefit	91	3,040	(271)	(980)	(374)	(12)
Minority interest (income) loss	(1,640)	369	327	304	473	15
<b>Net income (loss)</b>	<b>50,780</b>	<b>(3,157)</b>	<b>7,072</b>	<b>14,020</b>	<b>31,843</b>	<b>1,003</b>
<b>Earnings (loss) per share:(1)</b>						
Basic	3.07	(0.18)	0.42	0.84	1.89	0.06
Diluted(2)	3.07	(0.18)	0.42	0.83	1.86	0.06
<b>Shares used in earnings (loss) per share calculation:</b>						
Basic	16,506	16,931	16,741	16,644	16,828	16,828
Diluted(2)	16,506	16,931	16,958	17,025	17,095	17,095
<b>Earnings (loss) per ADS:</b>						
Basic	15.35	(0.90)	2.10	4.20	9.45	0.30
Diluted(2)	15.35	(0.90)	2.10	4.15	9.30	0.29
<b>US GAAP</b>						
Net operating revenues	115,616	69,816	75,425	95,704	129,191	4,070
Costs of goods sold	(64,633)	(65,668)	(69,258)	(77,473)	(96,895)	(3,053)
Operating income (loss)	28,275	(24,223)	(8,306)	5,632	(24,681)	(778)
Net income (loss)	27,134	(23,247)	(222)	12,331	(14,237)	(449)
<b>Earnings (loss) per share:(1)</b>						
Basic	1.70	(1.41)	(0.01)	0.75	(0.85)	(0.03)
Diluted(2)	1.70	(1.41)	(0.01)	0.73	(0.85)	(0.03)
<b>Shares used in earnings (loss) per share calculation:</b>						
Basic	15,928	16,481	16,499	16,530	16,812	16,812
Diluted(2)	15,928	16,481	16,499	16,826	16,812	16,812
<b>Earnings (loss) per ADS:</b>						
Basic	8.50	(7.05)	(0.05)	3.75	(4.25)	(0.15)
Diluted(2)	8.50	(7.05)	(0.05)	3.65	(4.25)	(0.15)



**Table of Contents**

As of December 31,

2000	2001	2002	2003	2004	
NT\$	NT\$	NT\$	NT\$	NT\$	US\$

(in millions)

**Consolidated Balance Sheet****Data:****ROC GAAP**

Current assets	96,760	100,787	110,922	154,322	132,936	4,188
Long-term investment	39,515	40,757	37,800	38,859	32,712	1,031
Property, plant and equipment	163,415	169,121	167,077	149,557	192,024	6,050
Total assets	309,789	320,694	327,029	354,514	376,305	11,856
Current liabilities	42,107	34,524	29,147	44,140	36,598	1,153
Long-term debt (excluding current portion)	35,534	54,695	62,321	60,334	61,288	1,931
Total liabilities	80,687	91,778	93,581	107,203	101,202	3,188
Stockholders equity	219,948	213,322	217,424	232,233	266,374	8,392
<b>US GAAP</b>			<b>[Restated (5)]</b>	<b>[Restated (5)]</b>	<b>[Restated (5)]</b>	<b>[Restated (5)]</b>
Cash and cash equivalents	60,350	57,826	54,219	89,196	55,558	1,750
Working capital(3)	51,212	66,837	73,268	108,539	96,306	3,034
Total assets	421,738	456,879	442,645	486,307	452,214	14,247
Total liabilities	85,575	91,792	93,112	107,533	101,183	3,188
Stockholders equity	326,985	349,492	333,509	363,736	342,420	10,788

As of December 31,

2000	2001	2002	2003	2004	
NT\$	NT\$	NT\$	NT\$	NT\$	US\$

(in millions, except percentages and per share data)

**Other Consolidated Data:****ROC GAAP**

<b>Cash flow:</b>						
Capital expenditure	83,483	43,051	35,978	24,820	81,110	2,555
Cash provided by operating activities.	68,077	40,187	30,527	49,625	73,938	2,329
Cash used in investing activities	(73,683)	(43,257)	(36,439)	(24,114)	(83,132)	(2,619)
Cash provided by financing activities	41,411	18,184	3,162	17,581	(6,832)	(215)
Net increase (decrease) in cash and cash equivalents	35,668	14,434	(2,002)	43,869	(17,390)	(548)
Gross profit margin	50.3%	13.2%	16.6%	22.7%	28.5%	28.5%
Operating profit (loss) margin	41.1%	(9.2)%	0.1%	10.2%	16.9%	16.9%
Net profit (loss) margin	43.9%	(4.5)%	9.4%	14.6%	24.6%	24.6%
Capacity utilization rate (on an actual basis)	100.0%	46.6%	65.2%	84.8%	90.8%	90.8%
Dividends declared per share(4)	2.0	1.5	1.5	0.4	0.8	0.025
<b>US GAAP</b>			<b>[Restated (5)]</b>	<b>[Restated (5)]</b>	<b>[Restated (5)]</b>	<b>[Restated (5)]</b>
<b>Cash flow:</b>						
Capital expenditure	83,501	43,054	36,008	24,827	81,127	2,556

Edgar Filing: UNITED MICROELECTRONICS CORP - Form 20-F/A

Cash provided by operating activities	67,977	39,785	30,506	49,543	73,760	2,324
Cash used in investing activities	(73,516)	(60,259)	(38,035)	(32,923)	(99,155)	(3,124)
Cash provided by financing activities	41,388	18,617	3,162	17,587	(6,819)	(215)
Net increase (decrease) in cash and cash equivalents	35,622	(2,524)	(3,607)	34,977	(33,639)	(1,060)
Gross profit margin	44.1%	5.9%	8.2%	19.0%	25.0%	25.0%
Operating (loss) profit margin	24.5%	(34.7)%	(11.0)%	5.9%	(19.1)%	(19.1)%
Net (loss) profit margin	23.5%	(33.3)%	(0.3)%	12.9%	(11.0)%	(11.0)%

- (1) Earnings (loss) per share is calculated by dividing net income by the weighted average number of shares outstanding during the year.
- (2) Diluted securities include convertible bonds and employee stock options.
- (3) Working capital equals current assets minus current liabilities.
- (4) Dividends declared per share are in connection with earnings and accumulated capital reserve.
- (5) Refer to Note 33 to the audited consolidated financial statements included elsewhere in this annual report.

**Table of Contents****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\$31.74 = US\$1.00, which was the noon buying rate announced by the Federal Reserve Bank of New York on December 31, 2004. 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.

	<u>Average(1)</u>	<u>High</u>	<u>Low</u>	<u>At Period-End</u>
2000	31.37	33.25	30.35	33.17
2001	33.91	35.13	32.23	35.00
2002	34.53	35.16	32.85	34.70
2003	34.40	34.98	33.72	33.99
2004	33.27	34.16	31.74	31.74
December	32.17	32.49	31.74	31.74
2005				
January	31.85	32.22	31.65	31.71
February	31.50	31.79	31.06	31.06
March	31.11	31.73	30.65	31.46
April	31.48	31.70	31.23	31.23
May	31.27	31.47	30.98	31.13
June (through June 15)	31.31	31.48	31.15	31.37

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**

*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. For example, the semiconductor industry experienced a period of economic downturn beginning in the fourth quarter of 2000 until early 2003, due to a number of factors including a slowdown in the global economy, overcapacity in the semiconductor industry and a

## **Table of Contents**

worldwide inventory adjustment. As a result of the downturn, our net operating revenues for 2001 decreased 39.6% from 2000, our net operating revenues for 2002 increased only slightly by 8.0% from 2001. We incurred a net income of NT\$7,072 million for 2002 and a net loss of NT\$3,157 million for 2001 compared to a net income of NT\$50,780 million for 2000. Although the semiconductor industry is generally recovering from the downturn since early 2003 and our net operating revenues for 2003 and 2004 were NT\$95,704 million and NT\$129,191 million (US\$4,070 million), respectively, we cannot give any assurance that the recovery will continue or that any future downturn will not affect our results of operations.

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 and computer sales. We generally experience seasonal lows in the demand for semiconductor services and products during the second quarter and the beginning of the third quarter of the year, primarily as a result of decreased worldwide production and sales of consumer electronics and computers during such periods, due to decreased demand for consumer electronics and computers. On the other hand, we generally experience seasonal peaks during the latter part of the third quarter and the fourth quarter of the year, primarily as a result of increased worldwide production and sales of consumer electronics and computers during such periods due to increased demand for computers from holiday sales. However, we cannot give any assurance that seasonal variations will meet our expectations. 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;
- environmental events, such as fires and earthquakes, or industrial accidents; and
- technological changes.

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

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.

## **Table of Contents**

*A decrease in demand for or selling prices of communication devices, consumer electronics and PCs 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 and PCs. Percentages of our net operating revenues derived from our products used in communication devices, consumer electronics, PC, memory and other applications were 45.9%, 27.7%, 22.0%, 2.5% and 1.9%, respectively, in 2004. The communications and PC markets experienced a sudden and substantial market downturn and inventory correction beginning in the fourth quarter of 2000 until early 2003. This downturn 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 or PCs may further decrease the demand for our services. In addition, if the average selling prices of communication devices, consumer electronics or PCs 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 the downturn in demand for high technology products, 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. While these downturns are to be expected in the semiconductor business, their timing, severity and recovery 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. Historically, companies in the semiconductor industry have expanded aggressively during periods of increased demand such as was the case in early 2000. As a result, periods of overcapacity in the semiconductor industry have frequently followed periods of increased demand. In a period 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. Due to the decreased demand for semiconductors in 2001 and 2002, our average capacity utilization rate decreased from 100% in 2000 to 46.6% in 2001 and to 65.2% in 2002. With a general recovery in the worldwide semiconductor industry, we experienced continued growth in 2003 and 2004 with average capacity utilization rates of 84.8% and 90.8%, respectively. However, we cannot give any assurance that the increase in the demand for foundry services will not lead to overcapacity again 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 products at competitive prices. There is a risk that our competitors may adopt new technology before we do, resulting in our loss of market share. For example, in 2003, we

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

were one of the first foundries to deliver working customer products using advanced 90-nanometer copper technology. This technology has been in volume production since the second quarter of 2004. We are currently actively developing 65-nanometer and 45-nanometer process technologies to significantly increase the competitive advantages of our customers. If we are unable on a timely basis to begin offering these products on a competitive basis, we may lose to our competitors providing similar technologies to customers, which may cause our net operating revenues to decline unless we can replace lost customers with new customers.



## **Table of Contents**

*If we lose the support of our technology partners, we may be unable to provide leading technology to our customers.*

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 certain customers developing new semiconductor manufacturing process technologies, we are dependent on our technology partners to advance our portfolio of process technologies. We currently have patent cross-licensing agreements with several companies, including Agere Systems Inc., or Agere, International Business Machines Corporation, or IBM, and Texas Instruments Incorporated, or Texas Instruments. We also depend upon mask and equipment vendors to supply our technology development teams with the masks and equipment needed to continuously develop more advanced processing technologies. If we are unable to continue any of our joint development arrangements, patent cross-licensing agreements, research and development alliances 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 with other leading semiconductor suppliers, 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 lose important customers because we are unable to continue providing our customers with leading edge mass-producible process technologies.

*If we cannot compete successfully in our industry, our business may suffer.*

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 Chartered Semiconductor Manufacturing Ltd., as well as the foundry operation services of some integrated device manufacturers such as IBM and Toshiba Corporation, or Toshiba. Integrated device manufacturers principally manufacture and sell their own proprietary semiconductor products, but may also offer foundry service. Other competitors such as DongbuAnam Semiconductor, Grace Semiconductor Manufacturing Corp., Silterra Malaysia Sdn. Bhd. and 1st Silicon (Malaysia) Sdn. Bhd. have initiated efforts to develop substantial new foundry capacity. New entrants in the foundry business 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;

price;

**Table of Contents**

management expertise; and

strategic alliances.

Our ability to compete successfully also depends on factors partially outside of our control, including product availability and industry and general economic trends. If we cannot compete successfully in our industry, our business may suffer.

*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 profit margin may substantially decline.*

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. With the general recovery of the worldwide semiconductor industry, we experienced continued growth in 2003 and 2004. Our technology mix affects utilization of our equipment and process technologies, 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.

*If we are unable to obtain the financing necessary to fund the substantial capital expenditures we expect to incur, we may not be able to implement our planned growth.*

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.

## **Table of Contents**

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. For 2004, our top ten end customers accounted for 55.1% of our net operating revenues. Our top two customers each accounted for 11% and 10% of our net operating revenues in 2004. 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 (usually two months before shipment). 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. The lack of significant backlog makes 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.

*We face significant risks, and incur substantial costs, in connection with the operation of our new fab in Singapore.*

In March 2001, we entered into a foundry venture agreement with EDB Investments Pte Ltd., or EDB Investments, and Infineon Technologies AG, or Infineon, relating to the formation of UMCi to construct and operate a 12-inch wafer fab in Singapore's Pasir Ris Wafer Fab Park. Under the sale and transfer agreements entered in August 2003 and March 2004, we purchased all of the shares of UMCi held by Infineon and EDB Investments. Through subsequent purchases, UMCi became our wholly owned subsidiary in December 2004. The facilities of UMCi employ advanced process technology of 0.13-micron and 90-nanometer processes. UMCi began volume production in the first quarter of 2004 and currently has a monthly capacity of 12,000 12-inch wafers, which is equivalent to a monthly capacity of 27,000 8-inch wafers. For operational purposes, all of UMCi's operations and assets were transferred to our Singapore branch Fab 12i on April 1, 2005.

Doing business in Singapore involves risks related to infrastructure, changes in local laws and economic and political conditions. We have chosen Singapore as the location of the 12-inch fab described above in part to take advantage of economic incentives provided under the laws and policies of Singapore. Any change in these or other laws or policies or in the political or economic conditions in Singapore or the surrounding region may have an adverse effect on Fab 12i's business. In addition, due to the high cost of raw materials, labor and equipment in operating this new fab, we expect that our operations in Singapore could incur significant cash outflows over the next few years. Once a fab is in operation at acceptable capacity and yield rates, it can provide significant cash inflows. However, prior to such time, it may incur significant losses due largely to significant depreciation and amortization expenses, which are not expected to be offset by a significant amount of revenues. If Fab 12i fails to achieve sufficient volumes of production at or above acceptable yield rates, or if the cost of production exceeds expectation,

Fab 12i could result in substantial loss which may negatively affect our income or loss.

## **Table of Contents**

### ***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. 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 until they are granted. 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. We do not believe that we are currently infringing on any patent rights. In the event any third party were to make a valid claim against us or 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; 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.

### ***Our management is being investigated for violations of ROC securities laws and a breach of fiduciary duty in connection with our alleged involvement in the operation of Hejian Technology (Suzhou) Co., Ltd., a semiconductor manufacturer in China.***

Hejian Technology (Suzhou) Co., Ltd., Hejian, a semiconductor manufacturer in Suzhou, China, was set up in December 2001. Soon after the establishment of Hejian, there were various rumors that Hejian was set up by us, which we denied immediately because we did not inject any capital into nor did we transfer any technology to Hejian. Our denials were widely reported in the local press. In addition, in April 2002, the Investment Commission of the Ministry of Economic Affairs of the Republic of China, which is the government authority in charge of approving investments and technology transfers by Taiwan companies to entities located in China, made inquiries on us regarding Hejian but did not find any violations of laws or regulations by us to that effect.

On February 15, 2005, the Hsinchu District Prosecutor's Office conducted a search of our facilities. We were informed verbally by the prosecutor's office at the time of the search (but without any written notice) that such search was necessary for the prosecutor's office's investigation regarding certain allegations of criminal offenses. The materials taken away by the prosecutor from the search revealed that the prosecutor was focusing on the alleged relationship between Hejian and us. We later learned that the major defendants named by the prosecutor include our Vice Chairman, and the person responsible for the management of Hejian, who is a former employee of our company. The prosecutor alleged that the defendants breached their fiduciary duty owed to us and violated ROC securities laws. Because this incident was widely reported by local news media, several of our shareholders filed a complaint against our Chairman with the Hsinchu District Prosecutor's Office.



## **Table of Contents**

We were only able to confirm that at least 25 defendants in total, including our Chairman and Vice Chairman, were investigated by the prosecutor after the prosecutor commenced interrogation in March 2005. The allegation made by the prosecutor is that these defendants collectively moved our company's funds, technology, equipment, customers' orders and labor resources to Hejian without regulatory approval. Although we believe that no such acts were committed by any person, our Chairman and Vice Chairman had been informed in an interrogation in June 2005 by the prosecutor that they were being investigated for alleged violations of ROC securities laws and a breach of fiduciary duty, asserting that our management has acted against our shareholders' interests by offering technical assistance to Hejian.

As of the date of this annual report, no charge had been filed by the prosecutor against any member of our management, including our Chairman or Vice Chairman. If our Chairman or Vice Chairman were to be found guilty as charged by the court, he will be required by ROC law to resign from our board, which would have a material adverse effect on our business and operations.

After the prosecutor instituted his investigation, the ROC Financial Supervisory Commission, or FSC, a regulatory authority that supervises securities, banking, futures, and insurance activities in Taiwan, began their investigation into any violation of ROC securities laws by us. In April 2005, our Chairman was fined with (1) in the amount of NT\$2.4 million by the FSC for our delay in making public disclosure timely (within two days) regarding the information relating to Hejian which was resolved in our board meeting on March 4, 2005, and (2) in the amount of NT\$0.6 million for our failure to disclose the information regarding Hejian's verbal promise of a fair return to us in connection with our assistance we had provided to Hejian. As a result of the imposition of the fines by the FSC, our company was also fined in the amount of NT\$30,000 by the Taiwan Stock Exchange for a delay in making public disclosure relating to the same information relating to Hejian that was resolved in our board meeting on March 4, 2005. Although our Chairman and we have respectively appealed, we cannot assure you that either our Chairman or we would prevail on appeal.

*We have been offered a 15% interest in a holding company that owns Hejian, but such investment may not materialize.*

ROC law prohibits investment in China by Taiwanese makers of semiconductors without government approval. In March 2005, upon our request for a fair return in connection with our assistance to Hejian in the past, the Chairman of the holding company of Hejian offered us a 15% interest in the holding company of Hejian. Immediately after we received the offer, we filed an application with the Investment Commission for their executive guidance and disclosed our receipt of such offer to investors and the public. As of the date of this annual report, we have not entered into any agreement to formalize the terms and conditions in connection with the transfer of the 15% interest. Pending ROC regulatory approval, we will endeavor to include this 15% interest in our assets, which will then be reflected on our financial statements. We cannot assure you at present that the ROC government will approve our acceptance of this 15% interest, or if such acceptance is approved by the ROC government, the agreement that formalizes the terms and conditions will be on the terms that are favorable to us.

*If we lose one or more of our key personnel without adequate replacements, our operations and business will suffer.*

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.

## **Table of Contents**

*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 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 shareholders may hurt our profitability and competitive position.*

We have provided foundry services to several of our affiliates and shareholders. These transactions were conducted on an arm's-length basis. Other than capacity commitments to our former foundry venture partners, we currently do not provide any preferential treatment to any of these affiliates and shareholders. 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.

*Investor confidence in us may be adversely impacted if we or our independent registered public accountants are unable to attest to the effectiveness of our internal control over financial reporting as of December 31, 2006 as required by Section 404 of the Sarbanes-Oxley Act of 2002.*

We are subject to the reporting requirements of the Securities and Exchange Commission. The Securities and Exchange Commission, as directed by Section 404 of the U.S. Sarbanes-Oxley Act of 2002, adopted rules requiring U.S. public companies to include a report of management on the company's internal control over financial reporting in its annual report on Form 10-K or Form 20-F, as the case may be, that contains an assessment by management of the effectiveness of the company's internal control over financial reporting. In addition, the company's independent registered public accountants must attest to and report on management's assessment of the effectiveness of the company's internal control over financial reporting. These requirements will first apply to our annual report on Form 20-F for the fiscal year ending on December 31, 2006. Our management may not conclude that our internal controls over financial reporting are effective. Moreover, even if our management does conclude that our internal controls over financial reporting are effective, if the independent accountants are not satisfied with our internal controls, the level at which our controls are documented, designed, operated or reviewed, or if the independent accountants interpret the requirements, rules or regulations differently from us, they may decline to attest to our management's assessment or may issue a report that is qualified. Any of these possible outcomes could result in a loss of investor confidence in the reliability of our financial statements, which could negatively impact the market price of our ADSs.

*The differences between ROC and U.S. accounting standards affect the amount of our net income.*

Our financial statements are prepared under ROC GAAP, which differ in certain significant respects from US GAAP. For example, ROC GAAP does not require the recognition of the market value of our shares distributed as bonuses to our employees in the calculation of net income. In addition, we have performed impairment test under US GAAP, which was not required to apply to financial statements prior to 2005 under ROC GAAP. As a result, our net income (loss) in 2002, 2003 and 2004 under US GAAP was NT\$(222) million, NT\$12,331 million and NT\$(14,237) million (US\$(449) million), respectively, as compared to net income under ROC GAAP of NT\$7,072 million, NT\$14,020 million and NT\$31,843 million (US\$1,003 million) in 2002, 2003 and 2004, respectively. For a discussion of these differences, see Note 33 to our restated

audited consolidated financial statements included elsewhere in this annual report.

## **Table of Contents**

*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 severe acute respiratory syndrome or avian influenza, 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. As a result, 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, 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 increasing production at new and existing facilities;

difficulties in upgrading or expanding existing facilities;

manufacturing execution system or automatic transportation system failure;

changing or upgrading our process technologies; and

raw materials shortages and impurities.

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.

In addition, the Taiwan government is currently building a high-speed railway system, which would pass near the Tainan Science Park where our new 12-inch fab, Fab 12A, is located. Trains on this system are expected to begin running as early as late 2005. Once these trains begin running, they would emit microvibrations that some experts predict could interfere with the operation of lithography equipment used for wafer production in Fab 12A, which is close to the affected area. Although we do not believe that such microvibrations may cause serious direct harm to our operations, they could cause our yield rates at this fab to decline and our costs of producing 12-inch wafers to increase, which could negatively affect our results of operations.

## **Table of Contents**

*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 65- and 45-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.

Because we are one of the earliest semiconductor manufacturers in the world to construct 12-inch fabs, we may be subject to risks relating to the construction, ramping up and operation of these facilities. In addition, we cannot assure you that Pasir Ris Wafer Fab Park, the site of Fab 12i (formerly UMCi), will be able to provide infrastructure, engineering and other supporting staff and raw material supply comparable to that of the Hsinchu Science Park, where most of our existing fabs are located. In the future, we might 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 follow our production schedule could delay the time required to recover our investments and seriously affect our profitability.

*If we are unable to obtain raw materials and equipment in a timely manner, our production schedules could be delayed and we may lose customers.*

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' wafers. For example, in 2004, we purchased a majority of our silicon wafers from three suppliers, Shin-Etsu Handotai Corporation, or Shin-Etsu, MEMC Electronic Materials, Inc. and Formosa Komatsu Silicon Corporation. We do not have long-term contracts with most of our suppliers. 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 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.

## **Table of Contents**

*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 the Hsinchu Science Park. We and these customers and suppliers are dependent on the infrastructure supporting the Park. Our operations and the operations of our customers and suppliers are vulnerable to earthquakes, floods, droughts, power losses and similar events that affect the Hsinchu Science Park. The occurrence of any of these events could interrupt our services and cause severe damages to wafers in process. For instance, our operations stopped completely for five days in September 1999 largely because of a power outage caused by a severe earthquake. After the stoppage, we spent several days to ramp up to full operations. Most recently, in November 2004, Taiwan experienced significant earthquakes registering up to 6.7 on the Richter scale. We did not experience any significant damage as a result of these earthquakes. We cannot guarantee that future earthquakes will not cause material damage to our facilities or property, including work in progress, or cause significant business interruptions. Although we maintain property 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, shortages or suspension of power supplies to the Hsinchu Science Park have occasionally occurred, and have disrupted our operations. In addition, the Hsinchu area experienced a severe drought in 2001 and is likely to experience other droughts in the future. While the semiconductor manufacturing process uses large amounts of water, if a drought does occur and the authorities are unable to source water from alternative sources in sufficient quantity, we may be required to temporarily shut down or substantially reduce the operations of our fabs located in the Hsinchu Science Park, which would seriously affect our operations.

*If we violate environmental regulations, our operations may be delayed or interrupted and our business could suffer.*

We are always subject to environmental regulations and a failure or a claim that we have failed to comply with these environmental regulations could cause delays in our production and capacity expansion and affect our public image, either of which could harm our business. In addition, as environmental 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.

## **Political, Economic and Regulatory Risks**

*We face substantial political risks associated with doing business in Taiwan, particularly due to the tense relationship between the ROC and the PRC that could negatively affect the value of your investment.*



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

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 common shares and the ADSs may be affected by changes in ROC 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 during recent years between the ROC and the

## **Table of Contents**

PRC, relations have often been strained. The PRC government has refused to renounce the use of military force to gain control over Taiwan. Furthermore, the PRC government passed an Anti-Secession Law in March 2005, which authorizes non-peaceful means and other necessary measures should Taiwan move to gain independence from the PRC. Past developments in relations between the ROC and the PRC have on occasion depressed the market prices of the securities of companies in the ROC. Relations between the ROC 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 depends on the support of the ROC government, and a decrease in this support may increase our labor costs and decrease our net income after tax.***

The ROC government has been very supportive of technology companies such as us. For instance, the ROC'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 change in the future. In the event that the ROC 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 ROC technology companies, have benefited from substantial tax incentives provided by the ROC government. In 2004, such incentives resulted in a tax credit in the amount of NT\$4,388 million (US\$138 million). If these incentives are curtailed or eliminated, our net income after tax may decrease substantially.

***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. In the past 15 years, the Taiwan Stock Exchange Index peaked at 10,393.59 in February 2000 and subsequently fell to a low of 3,411.68 in September 2001. During 2004, the Taiwan Stock Exchange Index peaked at 7,034.10 on March 4, 2004 and reached a low of 5,316.87 on August 4, 2004. On May 31, 2005, the Taiwan Stock Exchange Index closed at 6,011.56, and the daily closing value of our shares was NT\$21.20 per share. 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 NYSE, to May 31, 2005, daily reported closing prices of our ADSs ranged from US\$10.07 per ADS to US\$2.65 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 forward exchange 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. 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.

## **Table of Contents**

### **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 ROC law. Under current ROC law, no person or entity, including you and us, may deposit shares into our ADS program without specific approval of the ROC Securities and Futures Bureau, or ROC SFB, except for the deposit of the shares into our ADS program and for the issuance of additional ADSs in connection with:

distribution of share dividends or free distribution of our shares;

exercise of the preemptive rights of ADS holders applicable to the shares evidenced by ADSs in the event of capital increases for cash; or

if permitted under the deposit agreement and the custody agreement, purchases of our shares in the domestic market in Taiwan by the investor directly or through the depositary or the surrender of shares under the possession of investors and then delivery of such shares to the custodian for deposit into our ADS program, subject to the following conditions: (a) 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 deposit does not exceed the number of ADSs previously approved by ROC SFB, plus any ADSs issued pursuant to the events described above; and (b) 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 voting rights as the holders of our shares, which may affect the value of your investment.*

Due to the amendment to the Company Act and the amendment made to our articles of incorporation accordingly, except for treasury shares, 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 attaching 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 attaching to the shares represented by the ADSs. The voting rights attaching to the shares evidenced by our ADSs must be exercised as to all matters brought to a vote of shareholders collectively in the same manner.

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 and/or supervisors, the depositary will appoint our Chairman, or his designee, to represent the ADS holders at the shareholders' 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.



## **Table of Contents**

*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 shareholders, 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.

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

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

Non-ROC 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 ROC SFB to open a securities trading account with a local brokerage firm, pay ROC taxes, remit funds and exercise shareholders' rights. In addition, the withdrawing holders are also required to appoint a custodian bank with qualifications set forth by the Ministry of Finance 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 ROC law and regulations, citizens of the PRC are not permitted to hold our shares or withdraw shares represented by ADSs from our ADS program unless they obtain the approval from the competent authority. Due to the absence of relevant rules or guidelines, PRC persons are currently not able to conduct investments in the ROC.

*You may not be able to enforce a judgment of a foreign court in the ROC*

We are a company limited by shares incorporated under the ROC Company Act. Most of our assets and most of our directors, supervisors 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 ROC counsel that any judgment obtained against us in any court outside the ROC arising out of or relating to the ADSs will not be enforced by ROC 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 ROC law;

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

the judgment is contrary to the public order or good morals of the ROC;

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 ROC; or

judgments of ROC courts are not recognized and enforceable in the jurisdiction of the court rendering the judgment on a reciprocal basis.

## **Table of Contents**

### **ITEM 4. INFORMATION ON THE COMPANY**

#### **A. History and Development of the Company**

Our legal and commercial name is United Microelectronics Corporation, commonly known as UMC. We were incorporated under the ROC 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](http://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 devices, consumer electronics, computer and memory, 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 operating revenues derived from our products used in communication devices, consumer electronics, PC, memory and other applications were 45.9%, 27.7%, 22.0%, 2.5% and 1.9%, respectively, in 2004.

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 and 0.13 micron. Moreover, we have developed our own 90-nanometer copper technology with both FSG and low-k dielectric insulation as well as copper metal wiring layers. In 2003, we were one of the first foundries to deliver working customer products using advanced 90-nanometer copper technology. This technology has been in volume production since the second quarter of 2004 after passing several full-product certifications, including various reliability, burn-in and packaging criteria. Our 0.18 micron and more advanced technologies have contributed to approximately 54.2% of our total net operating revenues in 2004, compared to 41.1% in 2003. We believe such technologies will better serve the needs of advanced customer chip designs with high performance and low power consumption. Our research and development team currently focuses on the development of 65-nanometer process technology and has dedicated resources to the research of 45-nanometer process technology. Areas of research topics include strained silicon devices, 3-dimensional transistors, SOI, advanced modules such as high-k dielectric insulation and metal gate, raised source and drain, SiGe refill process, nickel silicide, advanced metal interconnect schemes and advanced optical proximity correction. 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, reasonable cost and other competitive advantages.

We provide high quality service based on our performance. We 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 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. Our design service team actively cooperates with the customers and vendors of cell libraries and intellectual property offerings to identify early in the product cycle the offerings needed by our customers and to ensure that these coordinated offerings are available to our customers in silicon verified form in a streamlined and easy to utilize manner. This enables a timely delivery of service offerings from the earliest time in the customer design cycle, resulting in shorter time-to-volume production. We also provide high quality service and engineering infrastructure. We provide our customers with real-time Internet access to their confidential production data, resulting in superior communication and efficiency.





## Table of Contents

Our production capacity is comparable to that of the largest companies in the semiconductor industry, and we believe our leading edge and high volume capability is a major competitive advantage. We have expanded our operations in Taiwan over the past several years. In 2002, we began volume production of 12-inch wafers at Fab 12A, our new 12-inch fab in Taiwan. As of March 31, 2005, Fab 12A had a monthly capacity of 22,000 12-inch wafers, equivalent to a monthly capacity of 49,500 8-inch wafers. We also have a controlling interest in UMCJ, formerly known as Nippon Foundry Inc., the first dedicated foundry in Japan, which owns one 8-inch fab in Japan. Our interest in UMCJ gives our company proximity to some of the largest integrated device manufacturers in the world, such as Sony Corporation, or Sony, and allows our company to offer them local outsourcing of semiconductor production. In December 2004, UMCi, which operates a 12-inch fab in Singapore's Pasir Ris Wafer Fab Park, became our wholly-owned subsidiary. The facilities of UMCi employ advanced process technologies including 0.13-micron and 90-nanometer processes. UMCi began volume production in the first quarter of 2004 and currently has a monthly capacity of 12,000 12-inch wafers, which is equivalent to a monthly capacity of 27,000 8-inch wafers. For operational purposes, all of UMCi's operations and assets were transferred to our Singapore branch Fab 12i on April 1, 2005.

Our technology and service have attracted three dominant types of foundry industry customers: fabless design companies, integrated device manufacturers and system companies. 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 integrated all functions—manufacturing as well as design, development, sales and distribution. System companies design and develop integrated circuits to be components within their end or intermediate products and generally do not maintain internal manufacturing capacity. For example, system companies market and sell cellular telephones and/or Internet appliances into which they incorporate semiconductor products.

Our primary end customers, in terms of our sales revenues, include premier integrated device manufacturers, such as Advanced Micro Devices, Inc., or AMD, Infineon, LSI Logic Corp., Philips Semiconductors, or Philips, Sony, STMicroelectronics Inc., or STMicroelectronics, and Texas Instruments, and leading fabless design companies, such as ATI Technologies Inc., or ATI, Conexant Systems Inc., or Conexant Systems, MediaTek Corp., or MediaTek, Novatek Microelectronics Corp. Ltd., or Novatek, Qualcomm Incorporated, or Qualcomm, Realtek Semiconductor Corp., or Realtek, and Xilinx. For 2004, our company's top ten end-customers accounted for 55.1% of our net operating revenues. 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.

Please refer to Item 5. Operating and Financial Review and Prospectus—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 objectives and needs 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 system and integrated device manufacturers, intellectual property and design houses, as well as foundry companies. We believe that our partners and we 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:

***Build up Customer-focused Partnership Business Model.*** We focus on building partnership relationships with our customers, and we strive to help our customers achieve their objectives through intimate cooperation. Unlike the traditional buy-and-sell relationship between a foundry and its customer, 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 processing 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.

## **Table of Contents**

***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 AMD, ATI, Infineon, MediaTek, Oki, Qualcomm, Realtek, SanDisk Corporation, or SanDisk, Sharp Microelectronics of the Americans, or Sharp, Sony, STMicroelectronics, Texas Instruments 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 by actively pursuing customers in the PC-related area in order to maintain a balanced exposure to different applications. 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-Produced Semiconductor Technology and Selectively Pursue Strategic Investments in New Technologies.*** We believe that maintaining and enhancing our leadership in mass-producible semiconductor manufacturing technologies 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 semiconductor companies to accelerate access to next-generation technologies. We pioneered the use of copper interconnect metallurgies for the dedicated foundry industry. These copper interconnect metallurgies allow higher conductivity and lower power consumption than traditional aluminum interconnects. In 2002, we began volume production using our advanced 0.13-micron technology. Our extensive experience in the 0.13-micron process technology has helped smooth our transition to 90-nanometer production. Many of the materials and techniques, including copper interconnects and low-k dielectric materials, that were first used in connection with the 0.13-micron process technology also apply to the 90-nanometer copper technology. Our 90-nanometer copper technology marks further advance in our technology achievements, incorporating up to nine copper metal layers, triple gate oxide and other advanced features. In 2003, we were one of the first foundries to deliver working customer products using advanced 90-nanometer copper technology. This technology has been in volume production since the second quarter of 2004. We believe our progress in the development of 90-nanometer copper technology will benefit 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 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 because of the greater number of chips on each wafer. 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. In 2002, we began volume production at Fab 12A, in Tainan, Taiwan. In addition, UMCi, which operates a 12-inch fab in Singapore's Pasir Ris Wafer Fab Park, began its volume production in the first quarter of 2004, employing advanced process technologies including 0.13-micron and 90-nanometer processes. We are currently evaluating opportunities to expand our wafer fabrication business into the PRC. Our initial budget for purchases of semiconductor manufacturing equipment for 2005 is approximately US\$1 to 1.5 billion. Our efforts in increasing our production capacity raised our total production capacity from approximately 257,000 8-inch wafer equivalents per month in December 2002 to approximately 355,000 8-inch wafer equivalents per month in December 2004. Our annual total

production capacity reached 3,528,000 8-inch wafer equivalents in 2004.

**Table of Contents**

**Operate as a SoC Solution Foundry.** We plan to operate as a SoC solution foundry. This plan involves collaborating closely with customers as well as partners throughout the entire SoC technology supply chain, including equipment, Electronic Design Automation tool and IP vendors, to work synergistically towards SoC solutions for each customer. Our implementation of the plan has resulted in a broad range of options available to SoC designers, including silicon-validated reference flows, in-depth IP portfolio and know-how and extensive libraries of IPs, to better provide value to their customers. Capitalizing on our advanced process technology, extensive package and test capabilities and state-of-art 300mm manufacturing facilities, we believe we are in a better position to deliver integrated SoC solutions for customers than most of our competitors.

**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.

The following table sets forth operational data of each of our manufacturing facilities as of December 31, 2004.

	<b>Fab 6A</b>	<b>Fab 8AB</b>	<b>Fab 8C</b>	<b>Fab 8D</b>	<b>Fab 8E</b>	<b>Fab 8F</b>	<b>Fab 8S(5)</b>	<b>Fab 12A</b>	<b>UMCJ</b>	<b>UMCi(6)</b>
Commencement of volume production	1989	1995 for the module formerly named Fab 8A; 1996 for the module formerly named Fab 8B	1998	2000	1998	2000	2000	2002	1996	2004
Estimated full capacity(1)(2)	29,000 wafers per month	70,000 wafers per month	35,000 wafers per month	25,000 wafers per month	34,000 wafers per month	32,000 wafers per month	24,000 wafers per month	47,000 wafers per month	32,000 wafers per month	27,000 wafers per month
Wafer size	6-inch (150mm)	8-inch (200mm)	8-inch (200mm)	8-inch (200mm)	8-inch (200mm)	8-inch (200mm)	8-inch (200mm)	12-inch (300mm)	8-inch (200mm)	12-inch (300mm)
Clean room area (3)	4,986 sq. meters	25,029 sq. meters	19,764 sq. meters	16,589 sq. meters	21,576 sq. meters	13,812 sq. meters	8,400 sq. meters	20,377 sq. meters	8,800 sq. meters	17,892 sq. meters
Type of clean rooms (4)	Class-10	Class-0.1	Class-0.1	Class100	Class100	Class 100	Class 100	Class 100	Class-0.1	Class 100

@0.1um, clean tunnel	@0.1um, clean tunnel	@0.1um, clean tunnel	@0.3um, SMIF/mini- environment	@0.3um, SMIF/mini- environment	@0.3um, SMIF/mini- environment	@0.3um, SMIF/mini- environment	@0.3um, SMIF/mini- environment	@0.1um, clean tunnel	@0.3um, SMIF/mini- environment
-------------------------	-------------------------	-------------------------	--------------------------------------	--------------------------------------	--------------------------------------	--------------------------------------	--------------------------------------	-------------------------	--------------------------------------

(1) Measured in 8-inch wafer equivalents.

**Table of Contents**

- (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.
- (3) Area represents the total area of clean rooms within a fab.
- (4) Class represents the cleanliness of clean rooms in the fab. Class-10@0.1um means a standard of air purity under which the amount of dust is limited to fewer than 10 particles of contaminants of 0.1 micron or greater per one cubic foot per minute of air flow. Class-0.1@0.1um means a standard of air purity under which the amount of dust is limited to fewer than one particle of contaminant of 0.1 micron or greater per 10 cubic feet per minute of air flow. Class-100@0.3um means a standard of air purity under which the amount of dust is limited to fewer than 100 particles of contaminants of 0.3 micron or greater per one cubic foot per minute of air flow. The general production environment may be organized into clean tunnels or mini environments. In a clean tunnel environment, the clean room is divided into many tunnels with partitions. A higher level of cleanliness is kept inside the tunnel for production. Mini-environments within a clean room use Standard Mechanical Interface technology, or SMIF, which employs input/output devices designed to protect products from contamination while providing a standard mechanical interface to wafer production tools. Mini-environment is generally a preferred approach because it reduces building structural costs and operating costs, allows flexibility in equipment layout and facilitates the ramping-up process during capacity expansion.
- (5) Formerly SiS Microelectronics Corporation, or SiSMC, which we acquired in July 2004.
- (6) All of UMCi's operations and assets were transferred to our Singapore branch Fab 12i on April 1, 2005.

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 ROC government.

Location	Size (Land/Building)  (in square meters)	Primary Use	Owned or Leased (Land/Building)
Fab 6A, 10 Innovation 1st Rd., Hsinchu Science Park, Hsinchu, Taiwan 308, ROC	27,898/34,981	6-inch wafer production	Leased (expires in February 2007)/Owned
Fab 8AB, 3 Li-Hsin 2nd Rd., Hsinchu Science Park, Hsinchu, Taiwan 300, ROC.	62,114/81,751	8-inch wafer production	Leased (expires in March 2014)/Owned
Fab 8C, 6 Li-Hsin 3rd Rd., Hsinchu Science Park, Hsinchu, Taiwan 300, ROC	9,007/28,984	8-inch wafer production	Leased (expires in March 2016)/Owned
Fab 8D, 8 Li-Hsin 3rd Rd., Hsinchu Science Park, Hsinchu, Taiwan 300, ROC	9,089/29,181	8-inch wafer production	Leased (expires in March 2016)/Owned
Fab 8E, 17 Li-Hsin Rd., Hsinchu Science Park, Hsinchu, Taiwan 300, ROC	35,000/74,067	8-inch wafer production	Leased (expires in February 2016)/Owned
Fab 8F, 3 Li-Hsin 6th Rd., Hsinchu Science Park, Hsinchu, Taiwan 300, ROC.	24,180/65,744	8-inch wafer production	Leased (expires in February 2018)/Owned
Fab 8S(1), 16 Creation 1st Rd., Hsinchu Science Park, Hsinchu, Taiwan 308, ROC.	20,404,/65,614	8-inch wafer production	Leased (expires in December 2023)/Owned
Fab 12A, 18 Nan-Ke 2nd Rd., Tainan Science Park, Sinshih, Tainan, Taiwan 744, ROC.	56,000/165,607	12-inch wafer production	Leased (expires in October 2017)/Owned
UMCJ, 1580, Yamamoto, Tateyama-City, Chiba, Japan	388,402/21,420	8-inch wafer production	Mostly leased (expires in June 2049)/Owned
UMCi(2), 3 Pasir Ris Drive 12 Singapore 519528	84,372/141,787	12-inch wafer production	Leased (expires in March 2031)/Owned



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

United Tower, 3 Li-Hsin 2nd Rd., Hsinchu Science Park, Hsinchu, Taiwan 300, ROC.	5,737/85,224	Administration office	Leased (expires in March 2014)/Owned
Tunhwa South Rd. Office, 3F, 76, Sec. 2, Tunhwa S. Rd., Taipei, Taiwan 106, ROC	166/2,221	Administration office	Owned/Owned
Testing Building, 1, Chin-Shan, St. 7, Hsinchu, Taiwan 300, ROC.	10,762/41,318	Leased to several companies	Owned/Owned

- (1) Formerly SiSMC, which we acquired in July 2004.
- (2) All of UMCi's operations and assets were transferred to our Singapore branch Fab 12i on April 1, 2005.

### 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.

**Table of Contents**

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. For example, in 1997 we became one of the first foundries to produce semiconductor products using 0.25-micron process technology, and in 1999 we were among the first foundries to offer 0.18-micron process services. In addition, we pioneered the use of copper interconnect metallurgies for the dedicated foundry industry. These copper interconnect metallurgies allow better reliability and higher conductivity 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. Many of the materials and techniques, including copper interconnects and low-k dielectric materials, that were first used in connection with the 0.13-micron process technology also apply to the 90-nanometer copper technology. 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 chrom-less phase-shift masks. In 2003, we were one of the first foundries to deliver working customer products using advanced 90-nanometer copper technology. This technology has been in volume production since the second quarter of 2004 after passing several product certifications. We believe our progress in the development of 90-nanometer copper technology continues to benefit 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.

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, for 2004, and the estimated annual full capacity of each fab, actual total annual output and capacity utilization rates for 2002, 2003 and 2004:

**Table of Contents**

	Year Ended	Year Ended December 31,		
	December 31, 2004			
	Range of Process Technologies	2002	2003	2004
	(in microns)	(in thousands of 8-inch wafer equivalents, except percentages)		
<b>Fab</b>				
6A	0.5	349	352	346
8AB	0.5 to 0.25	853	801	796
8C	0.35 to 0.15	355	325	386
8D	0.25 to 0.09	214	238	256
8E	0.5 to 0.18	376	354	401
8F	0.25 to 0.15	312	341	349
8S(1)	0.35 to 0.15			131
12A	0.18 to 0.065	119	234	392
UMCJ	0.35 to 0.15	400	360	370
UMCi(2)	0.13 to 0.09			101
Total estimated capacity		2,978	3,005	3,528
Total output (actual)		1,941	2,549	3,205
Capacity utilization		65.2%	84.8%	90.8%

- (1) Formerly SiSMC, which we acquired in July 2004.
- (2) Began volume production in the first quarter of 2004. All of UMCi's operations and assets were transferred to our Singapore branch Fab 12i on April 1, 2005.

The table below sets forth a breakdown of number and percentage of wafer output by process technologies for 2002, 2003 and 2004. We began commercial operation of our 0.13-micron and 90-nanometer process technologies in the first quarter of 2002 and the second quarter of 2003, respectively.

	Year Ended December 31,					
	2002		2003		2004	
	(in thousands of 8-inch wafer equivalents, except percentages)					
<b>Technology</b>						
90 nanometers			1	0.0%	39	1.2%
0.13 micron	27	1.4%	130	5.1	313	9.8
0.15 micron	75	3.9	124	4.9	327	10.2
0.18 micron	247	12.7	489	19.2	627	19.6
0.25 micron	429	22.1	547	21.5	508	15.9
0.35 micron	735	37.9	855	33.5	944	29.4
0.50 micron or higher	428	22.0	403	15.8	447	13.9
Total	1,941	100.0%	2,549	100.0%	3,205	100.0%

## **Table of Contents**

We primarily manufacture semiconductors using CMOS process. CMOS is the most widely used process technology because it requires lower power than other technologies and allows dense placement of components onto a single semiconductor. The low power consumption and high density characteristics of the CMOS process allow the continued development of high performance semiconductors that are smaller and faster. We also manufacture semiconductors using BICMOS technology, which combines bipolar's attribute of high speed with the high density and lower power consumption of CMOS.

In response to the growing trend in the market for SoC products, we have also developed system integration technologies such as embedded memory macro, radio frequency and mixed-signal processes, in order to accommodate the need of SoC designers. We have also developed high yield 0.13-micron Deep Trench DRAM, 1T-SRAM, 6T-SRAM and embedded flash memories. We are the only foundry company that can provide low-, medium- and high-density embedded memory solutions for leading-edge SoC designs.

## **Capacity and Utilization**

The fabs in Taiwan we own directly are named Fab 6A, Fab 8AB, 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. Fab 8AB consists of two modules. Fab 6A commenced production in 1989, and Fab 8A (currently part of Fab 8AB) commenced production in 1995. In 1995, we established three foundry ventures with 11 leading fabless design companies, including Xilinx, Trident and Alliance Semiconductor Corp. to establish state-of-the-art 8-inch fabs. We owned an approximately 40% equity interest in each of these foundry ventures. Assisted by capital contributions made by our partners, we were able to expand our capacity quickly while reducing our capital risk. Three of our fabs, a fab formerly named Fab 8B (currently part of Fab 8AB), Fab 8C and Fab 8D, were established under these foundry ventures and began commercial production in 1996, 1998 and 2000, respectively. The commencement of commercial operations of Fab 8D was delayed because of a fire in 1997 that substantially damaged the fab. In 1998, we obtained management control over UTEK Semiconductor, a publicly listed company in Taiwan, which operated an 8-inch fab that was later renamed Fab 8E, to further increase our capacity. Our capacity increased further in the first quarter of 1999 when we acquired an approximate 52.3% in equity interest and management control of UMCJ, which owns an 8-inch fab in Japan. In the fourth quarter of 2000, we completed construction of Fab 12A, a 12-inch fab in Tainan, Taiwan. We began volume production of 12-inch wafers at Fab 12A in 2002. Fab 12A currently has a capacity of 22,000 12-inch wafers per month, equivalent to 49,500 8-inch wafers per month. In addition, in March 2001, we entered into a foundry venture agreement with EDB Investments and Infineon to form UMCi to construct and operate a 12-inch fab in Singapore's Pasir Ris Wafer Fab Park. Pursuant to the sale and transfer agreements entered in August 2003 and March 2004, we purchased all of the UMCi shares held by Infineon and EDB Investments. Through subsequent purchases, UMCi became our wholly owned subsidiary in December 2004. The facilities of UMCi, including its 12-inch fab, employ advanced process technologies including 0.13-micron and 90-nanometer processes. UMCi began volume production in the first quarter of 2004 and currently has a monthly capacity of 12,000 12-inch wafers, which is equivalent to a monthly capacity of 27,000 8-inch wafers. For operational purposes, all of UMCi's operations and assets were transferred to our Singapore branch Fab 12i on April 1, 2005.

Furthermore, at the end of 2003, our capacity utilization rate reached 100%, making it impossible for us to meet the demand of our global customers. In view of the timing and resources required in building a new fab, we believed that an acquisition of SiS Microelectronics Corporation, or SiSMC, an 8-inch wafer fab, was the most effective method to quickly relieve the production bottleneck and maximize growth in response to the strong recovery in the semiconductor industry. Consequently, we acquired SiSMC through a share swap in July 2004 and renamed it as Fab 8S. Fab 8S operates an 8-inch wafer fab with a current capacity by 24,000 wafers per month.

Historically, the downturn we experienced from the beginning of the fourth quarter of 2000 until early 2003 had a material adverse effect on industry-wide utilization rates including ours. Due to the decreased demand for semiconductors in 2001 and 2002, our average capacity utilization rate decreased from 100% in 2000 to 46.6% in 2001 and to 65.2% in 2002. With a general recovery in the worldwide semiconductor industry, our average capacity utilization rate increased to 84.8% in 2003 and 90.8% in 2004.



## **Table of Contents**

### **Equipment**

Because the effectiveness and efficiency of our manufacturing processes greatly depend on the quality and technology of our equipment, we generally purchase equipment that complements our existing process technology and anticipated advanced process technology. 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 and testers. Other than an immaterial amount of equipment we lease for the use of our fabs in Taiwan, we own all of our equipment.

Our policy on equipment purchases is to purchase from a small number of qualified vendors to ensure consistency. Due to this policy, our equipment is mostly of consistent quality and capable of delivering similar performance.

In implementing our capacity expansion and technology advancement plans, we expect to make significant purchases of equipment required for our foundry services. Some of the equipment is available from a limited number of 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 good and that we can leverage our position as a major purchaser of semiconductor manufacturing equipment to purchase equipment on better terms, including shorter lead time, than the terms received by several other foundries.

Although we have not in the past experienced any material problems in procuring the latest generation equipment on a timely basis, the expansion of our fabrication facilities and facilities of other semiconductor companies may put additional pressure on the supply of advanced equipment and maintenance services for such equipment. In periods of unpredictably high market demand, the lead time from order to delivery of such equipment can be as long as six to 12 months. We seek to manage this process through 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, with the exception of wafers, 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 generally do not have any long-term supply contracts with our vendors.

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.

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

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 suppliers for our wafers are Shin-Etsu, MEMC Electronic Materials, Inc. and Formosa Komatsu Silicon Corporation. 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.

## **Table of Contents**

### **Quality Control**

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.

Our process technologies and fabrication facilities have been qualified by our customers after satisfying certain stringent quality inspections. Generally our customers, in addition to conducting their own product qualifications, will perform on-site fab audits. These audits normally address quality management, documentation control, procurement and material incoming inspection, product final inspection, calibration and certification training systems. These audits include both data/record review and physical fabrication area tours for verification of conformity to specifications and procedures. If the audit findings are satisfactory, then the fab facility is termed qualified for proceeding with further product qualification and later volume production. Most of our established customers, including AMD, ATI, Conexant Systems, Infineon, Kawasaki Microelectronics, Inc., LSI, MediaTek, Motorola, Novatek, Philips, Qualcomm, Sharp, Sony, STMicroelectronics, Texas Instruments, Trident, Xilinx and 3Com, have audited our fabrication facilities and our fabs have successfully passed their qualification requirements.

Our policy is to implement quality control measures to ensure the delivery of consistent high yield production with reliable performance for our customers. We test and monitor the quality of raw materials, process and products at various stages in the manufacturing process before shipment to customers. Reliability assurance also includes in-process wafer level reliability monitoring as well as packaged level reliability compliance. Our quality control is also continually enhanced through our top down annual Policy Management and bottom up Total Quality Management ( TQM ) activities, involving various independent quality control teams from our various foundries: Quality Control Circle, Quality Improvement and Innovation Team, Employee Suggestion System and Project Management Team. We also have a Quality and Reliability Assurance Division, which consists of more than 367 engineers, technicians and other staff as of March 31, 2005. This Division is responsible for incoming materials quality inspection, in process quality audit, outgoing product quality inspection, quality system and standards maintenance, reliability assurance, reliability engineering and customer queries. In addition, our efforts to observe benchmark and best practices among fabs in the industry have also contributed to the improvement of our overall quality control procedures.

All our Taiwan-based fabs are ISO/TS 16949:2002 certified and also registered under the Year 2000 version of ISO9001. ISO/TS 16949:2002 sets the criteria for developing a fundamental quality management system. It focuses on continual improvement, defect prevention and the reduction of variation and waste. The Year 2000 version of ISO9001 emphasizes customer satisfaction and resource management.

### **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 them with 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.





## **Table of Contents**

**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 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, Artisan Components (which merged with ARM Limited in December 2004), Faraday Technology Corp., or Faraday Technology, MIPS Technologies International, Virage Logic Corporation and Virtual Silicon Technology have utilized our Silicon Shuttle program. In our ASIC Plus 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.

**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, including 0.15-micron and 0.13-micron processes and copper interconnection technology. We have also made significant progress in developing the advanced 90-nanometer copper technology and the SoC process technology. We have been shipping products based on our 90-nanometer copper technology to our customers since late March 2003. 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 local 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 end customers consist of fabless design companies, integrated device manufacturers and system companies. Fabless design companies, including leading firms such as ATI, Conexant Systems, MediaTek, Novatek, Qualcomm, Realtek, and Xilinx, have historically accounted for a majority of our revenues. We also provide our services to integrated device manufacturers, such as AMD, Infineon, LSI, Philips, Sony, STMicroelectronics and Texas Instruments. The following table presents the percentages of our net operating revenues by types of customers during the last three years:

<u>Customer Type</u>	<u>Year Ended December 31,</u>		
	<u>2002</u>	<u>2003</u>	<u>2004</u>

Edgar Filing: UNITED MICROELECTRONICS CORP - Form 20-F/A

Fabless design companies	74.0%	66.5%	64.8%
Integrated device manufacturers	25.6	33.5	35.2
System companies	0.4	0.0	0.0
	<u>        </u>	<u>        </u>	<u>        </u>
Total	100.0%	100.0%	100.0%
	<u>        </u>	<u>        </u>	<u>        </u>

**Table of Contents**

We categorize sales geographically based on the country or region in which the end customer is headquartered, which may differ from our revenues from the countries to which we actually sell or ship our products. The following table presents a geographic breakdown of our net operating revenues during the last three years:

<b>Region</b>	<b>Year Ended December 31,</b>		
	<b>2002</b>	<b>2003</b>	<b>2004</b>
North America	35.1%	36.1%	41.5%
Asia (excluding Japan)	43.2	36.4	32.5
Europe	14.1	14.9	15.9
Japan	7.6	12.6	10.1
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

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 10 end-customers accounted for approximately 55.1% of our net operating revenues in 2004. Our top two customers each accounted for 11% and 10% of our net operating revenues in 2004. 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.

We sell and market mainly wafers which in turn are used in a number of different applications by our customers. Percentages of our net operating revenues derived from our products used in communication devices, consumer electronics, PC, memory and other applications were 45.9%, 27.7%, 22.0%, 2.5% and 1.9%, respectively, in 2004.

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 ARM Limited, Artisan Components (which merged with ARM Limited in December 2004), Faraday Technology, Virage Logic Corporation, Rambus and Virtual Silicon Technology to deliver quality IP blocks that have been silicon validated using our advanced processes for our customers. Our alliance programs with major electronic design automation vendors, such as Cadence, Magma, Mentor and Synopsys, provide our customers with seamless digital/analog reference design procedures and easy-to-use design solutions. For design services, partners such as Faraday Technology are able to provide turnkey solutions from design to production. 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 SoC 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.

## **Table of Contents**

In 1996, we introduced our original on line service, through which we provided our customers secure access via the Internet to critical manufacturing data, including process step location, start date, estimated ship-out date and quantity as their products move through our fabs. In October 2000, we officially launched our web-based customer information service system, known as My UMC, which gives our customers easy access to our foundry services by providing a total online supply chain solution. My UMC offers 24-hour access to detailed account information such as manufacturing, engineering and design information through each customer's own customized start page. Some of the features available to customers through My UMC include:

viewing the status of orders from the start of production to the final shipping stages;

viewing design layouts to shorten customers' tape out time;

collecting customer engineering requests;

gathering and downloading data for design purposes; and

accessing online and in real time the same manufacturing data used by our fab engineers.

My UMC provides our customers with a level of information previously enjoyed only by integrated device manufacturers that conducted each step of the manufacturing and material procurement processes internally.

To enhance our ability to provide online services to our customers, we are currently in various stages of implementing a business project that provides customers with design support through our help desk and IP/Library information and responses to their mask tooling requests. Moreover, we continuously enrich the content of UMC customers' services website and provide customers direct-to-system links over the Internet (B2B) with proprietary technology to efficiently meet our customers' requests.

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. Our sales in Europe are currently made through United Microelectronics (Europe) BV, our wholly-owned subsidiary based in Amsterdam. Our sales in North America are made through UMC Group (USA), our subsidiary located in Sunnyvale, California.

We 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 similar 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. We are also obligated in some cases to make available capacity to customers under other types of agreements, such as our capacity commitment arrangement with our venture 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 bi-monthly 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.

## **Table of Contents**

We believe that our primary competitors in the foundry services market are Taiwan Semiconductor Manufacturing Company Limited, Semiconductor Manufacturing International (Shanghai) Corporation and Chartered Semiconductor Manufacturing Ltd., as well as the foundry operation services of some integrated device manufacturers such as IBM and Toshiba. Other competitors such as DongbuAnam Semiconductor, Grace Semiconductor Manufacturing Corp., Silterra Malaysia Sdn. Bhd. and 1st Silicon (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 other foundries 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 March 31, 2005, we held 2,827 U.S. patents and 4,901 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 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 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.

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 Agere, IBM and Texas Instruments. We may choose to renew our present licenses or to obtain additional technology licenses in the future.

## **Research Development**

We spent NT\$7,368 million, NT\$5,859 million and NT\$7,364 million (US\$232 million) in 2002, 2003 and 2004, respectively, on research and development, which represented 9.8%, 6.1% and 5.7%, respectively, of our net operating revenues for these periods. We plan to continue to invest significant amounts on research and development in 2005 with the goal of maintaining a leading position in the development of advanced process technologies. Our research and development efforts have recently allowed us to provide our customers access to certain advanced process technology, such as 90-nanometer copper technology for volume production and 65- and 45-nanometer process technology for early



engineering prototypes, prior to the implementation of those advanced process technologies by most integrated device manufacturers and our competitors. We intend to sustain our commitment to these efforts.

## **Table of Contents**

Our research and development efforts have focused primarily on improving the efficiency and production yields of our manufacturing services. From time to time, we jointly develop new technology with universities and research institutions. The primary target of our research and development efforts in the next few years will be focused on the volume production of 65-nanometer, 45-nanometer and new and improved SoC foundry processes. As of March 31, 2005, we employed 565 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. We also have created in-house inventions and know-how. We were issued a substantial number of patents in 2002, 2003 and 2004, most of which are semiconductor-related.

## **Our Investments**

Pursuant to our investment guidelines, we plan to maintain our shareholdings in Unimicron Technology Corp. or Unimicron Technology, Faraday Technology and Silicon Integrated Systems Corporation, or SiS, because of these companies' strategic importance to our future operations and expansion.

Unimicron Technology, formerly known as World Wiser Electronics Incorporated, a Taiwan-based manufacturer of printed circuit boards and high density interconnections, was established in January 1980. We held a 37.95% stake in Unimicron Technology as of September 30, 2001. Unimicron Technology, Bestmult Industry Co. and UniMicron Technology Co. completed the merger of the three companies on October 31, 2001. Unimicron Technology was the surviving corporate entity and is expected to be one of the top three printed circuit board manufacturing companies in Taiwan. We were a founding investor in Faraday Technology, a company that offers advanced intellectual property and libraries to our foundry customers. As of March 31, 2005, we held 32.44% and 23.88% in Unimicron Technology and Faraday Technology, respectively.

In connection with the settlement of our litigations with SiS, we and SiS agreed in late 2002 to enter into a broad scope of cooperation, including, among other things, exchange of process patents, production support and our board representation in SiS. Under the settlement, SiS also agreed to engage us as its sole external provider of foundry services for its integrated circuits designed with 0.18 micron or smaller processors. To further strengthen our relationship with SiS, we decided to invest in SiS. As of March 31, 2005, we held 16.16% of SiS's outstanding share capital. In addition, our representatives currently hold four out of seven board seats of SiS, and John Hsuan, our vice chairman, is the chairman of SiS. In July 2004, we acquired SiSMC, a wafer foundry company spun off from SiS in 2003.

Depending on the market conditions, we intend to gradually reduce our other investments through secondary equity offerings, exchangeable bond offerings and other measures available to our company. We sold 105 million, 49 million and 84 million common shares of AU Optronics Corp., or AU Optronics, in 2002, 2003 and 2004. We issued US\$235 million Exchangeable Bonds due 2007 in May 2002 and US\$206 million Exchangeable Bonds due 2008 in July 2003, which are exchangeable, at the option of the bondholders, into common shares or American depositary shares, or ADSs, and common shares of AU Optronics, respectively. As of December 31, 2004, all bondholders of the Exchangeable Bonds due 2008 have exercised their rights to exchange their bonds into shares of AU Optronics. As of March 31, 2005, we held 1.44% in AU Optronics.

In addition, on April 2, 2002, we transferred to Hitachi Ltd., or Hitachi, all of our interest in Trecenti Technologies, Inc., or Trecenti, a joint venture with Hitachi to build and operate a 12-inch fab in Japan. In October 2003, we sold 17 million common shares of Novatek for NT\$1,626 million. In November 2003, we sold all of our interest in Teco Electric & Machinery Co., Ltd., or Teco, consisting of 77 million common shares, for NT\$886 million. In 2003, we sold 9 million common shares of MediaTek for NT\$3,243 million. In 2004, we sold 6 million common shares of Novatek for NT\$513 million (US\$16 million) and 7 million common shares of MediaTek for NT\$1,612 million (US\$51 million). As of March 31, 2005, we held 16.56% and 8.76% in Novatek and MediaTek, respectively.



## **Table of Contents**

### **Environmental Matters**

The semiconductor production process generates gaseous wastes, liquid wastes, waste water and other industrial wastes in various stages of the manufacturing process. We have installed various types of anti-pollution equipment in our fabrication facilities to reduce, treat and, where feasible, recycle the wastes generated in our manufacturing process. We receive assistance with disposal of industrial waste from the Science Park Administration and Southern Taiwan Science Park Administration. Our operations are subject to regulation and periodic monitoring by Taiwan's Environmental Protection Administration and local environmental protection authorities.

We believe that we have adopted anti-pollution measures for the effective maintenance of environmental protection standards consistent with the practice of the semiconductor industry in Taiwan. In 2004, we spent approximately NT\$350 million (US\$11 million) for pollution control equipment. Our monthly waste disposal fees were approximately NT\$4 million (US\$0.1 million), and our annual cost for environmental monitoring was approximately NT\$3 million (US\$0.1 million). We also believe that we are in compliance in all material respects with applicable environmental laws and regulations.

### **Environmental, Safety and Health Management Systems**

We have implemented extensive environmental, safety and health management systems. These systems enable our operations to identify applicable environmental, safety and health regulations, assist in evaluating compliance status and timely establish loss preventive and control measures. The systems we implemented in all our fabs in Taiwan 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. Programs 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 environmental, health and safety management.

### **Litigation**

As is the case with many companies in the semiconductor industry, we have from time to time received notices alleging infringement of intellectual property rights of others and breach of warranties. We investigate and evaluate each of these notices. Except as described below, we are not currently involved in material litigation or other proceedings.

Hejian, a semiconductor manufacturer in Suzhou, China, was set up in December 2001. Soon after the establishment of Hejian, there were various rumors that Hejian was set up by us, which we denied immediately because we did not inject any capital into nor did we transfer any technology to Hejian. Our denials were widely reported in the local press. In addition, in April 2002, the Investment Commission of the Ministry of Economic Affairs of the Republic of China, which is the government authority in charge of approving investments and technology transfers by Taiwan companies to entities located in China, made inquiries on us regarding Hejian but did not find any violations of laws or regulations by us to that effect.

On February 15, 2005, the Hsinchu District Prosecutor's Office conducted a search of our facilities. We were informed verbally by the prosecutor's office at the time of the search (but without any written notice) that such search was necessary for the prosecutor's office's

investigation regarding certain allegations of criminal offenses. The materials taken away by the prosecutor from the search revealed that the prosecutor was focusing on the alleged relationship between Hejian and us. We later learned that the major defendants named by the prosecutor include our Vice Chairman, and the person responsible for the management of Hejian, who is a former employee of our company. The prosecutor alleged that the defendants breached their fiduciary duty owed to us and violated ROC securities laws. Because this incident was widely reported by local news media, several of our shareholders filed a complaint against our Chairman with the Hsinchu District Prosecutor's Office.

## **Table of Contents**

We were only able to confirm that at least 25 defendants in total, including our Chairman and Vice Chairman, were investigated by the prosecutor after the prosecutor commenced interrogation in March 2005. The allegation made by the prosecutor is that these defendants collectively moved our company's funds, technology, equipment, customers' orders and labor resources to Hejian without regulatory approval. Although we believe that no such acts were committed by any person, our Chairman and Vice Chairman had been informed in an interrogation in June 2005 by the prosecutor that they were being investigated for alleged violations of ROC securities laws and a breach of fiduciary duty, asserting that our management has acted against our shareholders' interests by offering technical assistance to Hejian.

As of the date of this annual report, no charge had been filed by the prosecutor against any member of our management, including our Chairman or Vice Chairman. If our Chairman or Vice Chairman were to be found guilty as charged by the court, he will be required by ROC law to resign from our board, which would have a material adverse effect on our business and operations.

After the prosecutor instituted his investigation, the ROC FSC, a regulatory authority that supervises securities, banking, futures, and insurance activities in Taiwan, began their investigation into any violation of ROC securities laws by us. In April 2005, our Chairman was fined with (1) in the amount of NT\$2.4 million by the FSC for our delay in making public disclosure timely (within two days) regarding the information relating to Hejian which was resolved in our board meeting on March 4, 2005, and (2) in the amount of NT\$0.6 million for our failure to disclose the information regarding Hejian's verbal promise of a fair return to us in connection with our assistance we had provided to Hejian. As a result of the imposition of the fines by the FSC, our company was also fined in the amount of NT\$30,000 by the Taiwan Stock Exchange for a delay in making public disclosure relating to the same information relating to Hejian that was resolved in our board meeting on March 4, 2005. Although our Chairman and we have respectively appealed, we cannot assure you that either our Chairman or we would prevail on appeal.

In 1997, Oak Technology Inc., or Oak Technology, filed a lawsuit against us in the U.S. District Court for the Northern District of California, and initiated a companion administrative law proceeding before the International Trade Commission, or ITC. Both actions claim patent infringement regarding certain types of CD-ROM controllers, and the District Court case also claims that we breached a settlement we entered into with Oak Technology in connection with the same technology. The District Court case was stayed pending an outcome in the ITC case. The ITC Administrative Law Judge found there was no infringement by us, and in September 1999, the ITC affirmed this finding. Oak Technology appealed the ITC's order on non-infringement to the Court of Appeals for the Federal Circuit, which then unanimously affirmed the ITC's order in May 2001. Based on the Federal Circuit's opinion and on a covenant not to sue filed by Oak, the declaratory judgment patent counterclaims were dismissed from the district court case. However, in connection with its breach of contract and other claims, Oak Technology seeks damages in excess of US\$750 million. The District Court has set dates for dispositive motions in the second quarter of 2005 and the trial date to begin after December 5, 2005. We believe that Oak's claims are without merit and intend to vigorously defend the suit and to pursue our counterclaims. As with all litigations, we cannot predict the outcome with certainty.

In November 2002, Library Technologies, Inc., or LTI, filed suit against Virtual Silicon Technology, Silicon Metrics Corporation, our subsidiary UMC Group (USA) and us in U.S. District Court in San Francisco, California. LTI alleges in this case that we infringed on LTI's copyrights, committed unfair competition, trade secret misappropriation, and tortious interference with contract in connection with the allegedly unauthorized copying and use of LTI's software related to library characterization tools. On January 21, 2004, the District Court entered a dismissal on all claims against us. As a result, these matters are resolved.

## **Risk Management**

As our management believes that management of risks involved in our manufacturing processes is an integral part of our management process and essential to our smooth and safe operation and production, we have endeavored to implement risk management strategies that are pioneering in the semiconductor industry. In 1998, we established our risk management division to comprehensively plan for and respond to emergencies and disasters. This division is now managed by a team of experienced risk management personnel.



## **Table of Contents**

We have been working closely with internationally renowned risk consultants in various fields to identify, analyze, and evaluate the risks commonly found in the semiconductor industry. These consultants include EQE International Inc. and VEC International Corp. in the area of seismic protection, Environmental and Occupational Risk Management, Inc. in the area of equipment safety management, and American International Underwriters, Ltd. or Marsh Risk Consulting in the area of loss control audit. We believe our risk evaluation process will enable us to avoid or mitigate potential losses and accordingly protect our company values. In 2001, based on the recommendation of EQE International Inc. and Vibration Engineering Consultants, we completed our seismic protection improvement projects.

In 2004, we achieved a number of risk management goals, aiming to improve our emergency response, communication and business recovery during times of crisis. We developed a Risk Identification & Quantification Program for identification and evaluation of risks associated with our equipment and facilities in accordance with international and local standards. We perform such evaluations twice a year. We established a Power Supply Reliability Study & Improvement Project to examine and improve the adequacy and reliability of the power supply to all our facilities. We upgraded our emergency response capabilities and increased the number of our internal fire fighters from 53 to 73 in 2004, of which 10 are full-time professionals. We also established an Emergency Response Auditing Program to implement training exercises to improve the responsiveness of our workforce during emergency situations. Under this program, all fab personnel must go through a test to evaluate their responsiveness and performance during an emergency such as fire, chemical leaks or chemical spills. Finally, we implemented the SARS and Bird Flu Business Continuity Plan to evaluate the potential impact of the diseases.

## **Insurance**

We maintain industrial all risk insurance for our buildings, facilities, equipment and inventories. The insurance for fabs and their equipment covers physical damage and business interruption losses up to their respective policy limits except for exclusions as defined in the policy. We also maintain public liability insurance for losses to third parties arising from our business operations. We believe that our insurance coverage 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**

In January 2000, we completed a merger in which United Integrated Circuits, a subsidiary, and UTEK Semiconductor, United Silicon and United Semiconductor, our affiliates, were merged into United Microelectronics. Immediately prior to the merger, United Microelectronics and its consolidated subsidiaries owned approximately 61.6%, 12.5%, 38.8% and 42.5% of these entities, respectively, and had management control over each of them. As a result of the merger, United Microelectronics has been consolidating the business and operations of these companies for financial reporting purposes since January 3, 2000, except for United Integrated Circuits, which has been consolidated since January 1, 1999.

In March 2001, we entered into a foundry venture agreement with EDB Investments and Infineon relating to the formation of UMCi to construct and operate a 12-inch wafer fab in Singapore Pasir Ris Wafer Fab Park. Pursuant to the sale and transfer agreements entered in August 2003 and March 2004, we purchased all of the shares of UMCi held by Infineon and EDB Investments. Through subsequent purchases, UMCi became our wholly-owned subsidiary in December 2004. For operational purposes, all of UMCi's operations and assets were transferred to our Singapore branch Fab 12i on April 1, 2005.

We acquired SiSMC through a share swap in July 2004 and renamed it as Fab 8S. Fab 8S operates an 8-inch wafer fab with a current capacity by 24,000 wafers per month.



On April 1, 2005, United Foundry Service, Inc. transferred all of its operations and assets to UMC Group (USA). Following the transfer, we have obtained the shareholders' approval to liquidate United Foundry Service, Inc.

**Table of Contents**

The following diagram shows our corporate structure immediately prior to our consolidation:

The following diagram shows our corporate structure as of March 31, 2005:

**D. Property, Plants and Equipment**

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

**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 ROC 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. ROC GAAP varies in certain significant respects from US GAAP. These differences and their effects on our financial statements are described in Note 33 to our restated audited consolidated financial statements included in this annual report.*

## **Table of Contents**

*For the convenience of readers, NT dollar amounts used in this section for, and as of, the year ended December 31, 2004 have been translated into U.S. dollar amounts using US\$1.00 = NT\$31.74, the noon buying rate of the Federal Reserve Bank of New York on December 31, 2004. 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 and measure our results of operations based on a single industry segment.

We have expanded our production capacity over the past several years, increasing our monthly capacity from 175,000 8-inch wafer equivalents in December 1999 on a combined basis to approximately 355,000 8-inch wafer equivalents in December 2004 on an actual basis. Our annual total production capacity reached 3,528,000 8-inch wafer equivalents in 2004. As a result of this increase in capacity, we have benefited from larger economies of scale. The larger economies of scale when capacity utilization rate is high have better enabled us to reduce our per unit production cost, which improves margins. However, when capacity utilization rate is low, this increased capacity has led to higher per unit production cost and decreased margins.

On January 3, 2000, United Microelectronics completed a merger in which each of UTEK Semiconductor, United Semiconductor, United Silicon and United Integrated Circuits was merged into United Microelectronics. The total purchase price of the merger was valued at approximately NT\$42,543 million. In this section, we refer to these transactions as the merger and, unless otherwise specified, the historical financial data discussed herein refer to United Microelectronics' consolidated financial data.

We acquired SiSMC through a share swap in July 2004 and renamed it as Fab 8S. Fab 8S operates an 8-inch wafer fab with a current capacity of 24,000 wafers per month. Under the sale and transfer agreement entered in August 2003 and March 2004, we purchased all of UMCi shares held by Infineon and EDB Investments. Through subsequent purchases, UMCi became our wholly-owned subsidiary in December 2004.

### *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 underutilization.

Between 1999 and 2000, as global semiconductor demand experienced substantial growth, our average selling price of semiconductor wafers and devices during that period increased. In connection with this increase in demand and selling price, several semiconductor manufacturers, including our company, announced plans to significantly expand production capacities. However, the semiconductor industry experienced a downturn beginning in the fourth quarter of 2000 until early 2003, which resulted in overcapacity, excess inventory and reduced demand. Such industry downturn had substantially slowed down those expansion plans. Due to the decreased demand for semiconductors in 2001 and 2002, our average capacity utilization rate decreased from 100% in 2000 to 46.6% in 2001 and to 65.2% in 2002. With a general recovery in the

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

worldwide semiconductor industry, our average capacity utilization rate increased to 84.8% in 2003 and 90.8% in 2004. We believe that our results in 2002, 2003 and 2004 reflect the ongoing uncertainty in the global economy, conservative corporate information technology spending and low visibility with respect to end market demand.

## **Table of Contents**

### *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 12.2% from 2003 to 2004, mainly due to our shift towards higher-priced product mix using more advanced technology.

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 2002, 2003 and 2004, approximately 74.3%, 71.7% and 70.1%, respectively, of our manufacturing costs consisted of depreciation, a portion of indirect material costs, amortization of license fees and indirect labor costs. Starting in 2003, a portion of our indirect material costs, such as material costs of chemicals, spare parts and quartz, that was included in our fixed costs prior to 2003, has been accounted for in our variable costs. For comparison purposes, the percentages of fixed costs discussed above are calculated based on the new definition of manufacturing costs. Our fixed costs decreased while our variable costs increased in 2004 due to (i) the increase of direct material costs from NT\$5,349 million in 2003 to NT\$6,922 million (US\$218 million) in 2004 due to the addition of Fab 8S (formerly SiSMC) and UMCi and the ramp up of capacity and output of Fab 12A, and (ii) the increase of costs of spare parts in Fab 12A from NT\$630 million in 2003 to NT\$1,238 million (US\$39 million) in 2004.

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. Due to the decreased demand for semiconductors in 2001 and 2002, our average capacity utilization rate decreased from 100% in 2000 to 46.6% in 2001 and to 65.2% in 2002. With a general recovery in the worldwide semiconductor industry, our average capacity utilization rate increased to 84.8% in 2003 and 90.8% in 2004. Utilization rates can also be affected by efficiency in production facility and product flow management. Other factors affecting utilization rates are 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 and expected product mix. 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 of the processing technology used to produce the wafer. Production of devices with higher levels of functionality and greater system-level integration requires more manufacturing steps 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.

## **Table of Contents**

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. For instance, we are among the first foundries to produce chips using 0.13-micron technology. In 2003, we were one of the first foundries to deliver working customer products using advanced 90-nanometer copper technology. This technology has been in volume production since the second quarter of 2004. 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.

### *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*

In addition to making investments to enhance our capacity, technology and service, we have also made a significant number of strategic investments in other entities. See Item 4. Information on this Company Our Investments. Most of these investments were made to improve our market position and for strategy considerations. A significant portion of these investments is currently held by Hsun Chieh, an investment company that was 99.97% owned by United Microelectronics as of March 31, 2005.

Substantially all of our investments are long-term investments, 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 Mega Financial Holding Co. Ltd., or Mega Financial. In recent years, we have from time to time disposed of our long-term investments for financial, strategic or other purposes. However, we plan to maintain our shareholdings in Unimicron Technology, Faraday Technology and SiS because of strategic considerations.

See Item 4. Information on the Company B. Business Overview Our Investments for a description of our investments.

### **Treasury Share Programs**

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

Prior to 2004, we announced several plans, none of which was binding on us, to buy back up to an aggregate of 1,551 million of our shares on the Taiwan Stock Exchange at the price range set forth in the plans. As of December 31, 2003, we purchased an aggregate of 335 million of our shares under these plans. On March 23, 2004, we announced a plan which was not binding on us, to buy back up to 360 million of our shares on the Taiwan Stock Exchange at a price range of NT\$19.6 to NT\$47.5 per share between March 24, 2004 and May 23, 2004. Under the plan, we purchased 192 million of our shares at an average purchase price of NT\$27.06 per share. Of the repurchased shares, 137 million shares were transferred to our employees and 199 million shares were cancelled as of May 31, 2005. In addition, on May 13, 2005, we announced a plan, which was not binding on us, to buy back up to 500 million of our shares on the Taiwan Stock Exchange at a price range of NT\$13.75 to NT\$28.45 per share between May 16, 2005 and July 15, 2005.



## **Table of Contents**

### **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 ROC GAAP. ROC GAAP varies in certain respects from US GAAP. These differences and their effects on our financial statements are described in Note 33 to our restated audited consolidated financial statements included 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*

Revenue is recognized when title and liability for risk of loss or damage to the products have been transferred to customers, usually upon shipment, as most of our sales are made in terms of Free on Board (FOB) or Free Carrier (FCA) shipment, for which the title and liability for risk of loss or damage pass to the customer upon our tender of delivery to a carrier approved by the customer. Sales returns and discounts taking into consideration customer complaints and past experiences are accrued in the same year as such sales are made.

#### *Accounts Receivable and Allowance for Doubtful Accounts*

The allowance for doubtful accounts is provided based on the evaluation of collectibility and aging analysis of accounts and on management's judgment. In circumstances where the ability of a specific customer to meet its financial obligations is in doubt, a specific allowance will be provided. 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. If the financial conditions of our customers were to worsen, additional allowances would be required. A deterioration of economic conditions either in the ROC 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.

The allowances for doubtful accounts accounted for 1.0% and 0.7% of our accounts receivables as of December 31, 2003 and 2004, respectively. If we were to change our estimated rate on allowance for doubtful receivables either upward or downward by 10%, our income from operations would have been increased or decreased by NT\$8 million for 2004.

#### *Inventory*

Inventories are recorded at cost when acquired and stated at the lower of aggregate cost, based on the weighted average method, or market value at the balance sheet date. The market values of raw materials and supplies are determined on the basis of replacement cost while net realizable values determined by the average selling price of the most recent periods are used as market values of work-in-process and finished goods. In addition, allowances for obsolete and slow-moving inventories are determined by analyzing the age of inventories and estimated future sales, among other things.

Under ROC GAAP, as of December 31, 2004, if the market prices of our products had been 10% lower, there would have been an adjustment to inventory valuation allowances of approximately NT\$245 million.

## **Table of Contents**

### *Deferred 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 amount that we believe will more likely than 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 and ongoing prudent and feasible tax planning strategies. 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 would increase income in this period.

### *Goodwill Impairment*

Under US GAAP, we have performed the required goodwill impairment test during the year as required by Statement of Financial Accounting Standard (SFAS) No. 142, Goodwill and Other Intangible Assets. In assessing the recoverability of our goodwill, we have to make assumptions to allocate the total fair value of our reporting unit to its individual assets and liabilities. For example, we estimated that the fair values of current assets and current liabilities approximate the carrying values due to their short term maturities. Estimates of the fair values of our long-term investments and long-term debts are based on the quoted market value, if available, or based on other available financial information in the circumstances. In addition, the fair values of our property, plant and equipment are determined by assessing the market price trend, their physical condition, or the manner in which those assets are being used and the impact on their fair value caused by the business environment. If these estimates and the related assumptions change the fair value of these assets and liabilities in the future, they will have an impact on our goodwill impairment test. Goodwill impairment tests will be performed on at least an annual basis. However, if events occur or circumstances change between annual tests that cause us to believe that our goodwill has been impaired, such as a significant adverse change in the business environment or an unanticipated competition, we will perform additional interim tests and impairment loss will be recorded when required.

### *Impairment of Long-lived Assets*

Under US GAAP, as required by SFAS 144, Accounting for the Impairment or Disposal of Long-Lived Assets, we review our long-lived assets that are held and used for impairment whenever events or changes in circumstances indicate that the carrying amount of the long-lived assets might not be recoverable. In other words, we will assess the need for any impairment write-down if information indicates that an impairment might exist. Such information may include a significant decrease in the market values of long-lived assets or a significant deterioration of market conditions such that the carrying value of long-lived assets may not be recovered through future cash flows. For example, we assessed whether there was any change in the use or expected use of such assets that would negatively affect their fair value. We also assessed the physical condition of our assets and our repair and maintenance schedule to determine if there were any obsolescence issues that would lead to a lower fair value determination. Having considered the above factors and other factors pertinent to the use of those assets, we determined that there was no impairment indicator of our long-lived assets for the year. However, if future information indicates a potential impairment and we determine that the estimated future undiscounted cash flows are less than the carrying value of the assets, an impairment loss will be recognized based on the difference between the carrying value and the fair value of the assets. The estimates of future cash flows will be based on the estimated useful life, cash flow generating capacity, physical output capacity and other assumptions relating to the use of our long-lived assets.

### *Pensions*

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. Changes in the related pension costs or liabilities may occur in the future in addition to changes resulting from fluctuations in our related headcount due to changes in assumptions.

**Table of Contents***Investments in Debt and Equity Securities*

Under ROC GAAP, marketable securities other than those over which we exercise significant influence or control, are accounted for as short-term or long-term investments based on our intention and ability to hold these securities over a long-term period. Marketable securities are recorded at the lower of cost or market value. Unrealized appreciation in market value above original cost is not recognized until realized. For short-term securities, the decline in market value below cost is recognized as unrealized loss in earnings while for long-term investments, it is charged to stockholders' equity unless such decline is not expected to be recovered in the future, in which case it is charged as a loss to the statement of income. Unrealized gains are recognized only to the extent of previously recorded losses. On assessing whether a decline is expected to be recovered in the future, our practice has been to consider all available information concerning the future prospects of our investments including the investees' financial statements, analyst reports and industry specific publications, and observe whether the investees have significant adverse changes in the general market condition where they operate, significant deteriorations in their earnings performance, credit rating, or business prospects and any significant going concerns issues.

Pursuant to US GAAP, SFAS 115 requires equity investments, other than those over which we exercise significant influence or control, and that have readily determinable fair values to be classified as either trading or available-for-sale securities and for debt investments to be classified as either trading, available-for-sale or held-to-maturity securities. Debt securities where we have the positive intent and ability to hold to maturity are classified as held-to-maturity securities and reported at amortized cost. Held-to-maturity securities are also assessed for declines in fair value below their amortized cost. If such a decline is deemed to be other than temporary then the decline in value is charged as a loss to the statement of income. Debt and equity securities that are bought and traded for short-term profit are classified as trading securities and reported at fair value, with unrealized gains and losses included in earnings. Debt and equity securities not classified as either held-to-maturity or trading securities are classified as available-for-sale securities and reported at fair value, with unrealized gains and losses reported in a separate component of stockholders' equity except for unrealized losses that are deemed to be other than temporary which are charged to the statement of income. In determining whether a loss is other than temporary, pursuant to guidance provided in SFAS 115, SAB 59 and EITF 03-1, we consider various factors including the duration of the decline in fair value, the magnitude of the decline, our intention and ability to hold the investment to allow for a possible recovery and market or company specific information, such as near term financial prospects and performance that would support the likelihood of recovery. We assess our available-for-sale securities for declines in value on at least a quarterly basis. Our policy is to treat a decline in value to be other than temporary if there is a sustained decline below cost over six consecutive months unless there is sufficient and objectively verifiable evidence to refute this presumption.

*Derivative Instruments*

The Group has issued several convertible and exchangeable bonds since 2001. These debt instruments contain exchange or conversion option, which give the bondholders the right to convert or exchange the debt into the underlying common stock at the strike price. The conversion or exchange term may contain a fixed foreign exchange rate feature to determine how the debt will convert into common stock denominated in local currency. These debt instruments may also contain call features, which give the issuer the right to redeem the bonds at the early redemption price under certain conditions before maturity. Under US GAAP, the derivative instruments embedded in our exchangeable bonds and convertible bonds, respectively, are subject to the provisions of SFAS 133, Accounting for Derivative Instruments and Hedging Activities. If these derivative features warrant separate accounting as derivative instruments under SFAS 133, they were bifurcated from the debt contracts and accounted for separately as derivative instruments with the changes in fair value included in earnings. The fair value of the compound embedded derivative, containing more than one embedded derivative feature, is measured using the option pricing model, which requires us to make various assumptions including expected volatility of the stock over the option's life and expected life of the option, among other things. In determining these input assumptions, we consider historical trends in conjunction with the exercise of management's professional judgment. Because the model is sensitive to change in the input assumptions, different assessment of the required inputs may result in different fair value estimates of the options.

## **Table of Contents**

We also held assets in the form of credit-linked deposits and these deposits are credit-linked to debt securities issued by other entities ( Reference Entities Securities ). Under US GAAP, these credit-linked deposits, which are linked to the credit worthiness of the Reference Entities Securities, contain an embedded derivative that should be bifurcated pursuant to SFAS 133 from the underlying deposits and measured at fair value with any change in fair value recorded in earnings. The derivative instrument is initially fair valued based on the difference in the present value of the additional interest amount earned using the coupon rate and a risk-free interest rate, and an offsetting asset is recognized to represent the additional interest payments that will be earned by us over the term of the credit-linked deposit. If the credit-worthiness of the Reference Entities Securities has materially changed, the fair value of the derivative would be recalculated with the impact charged to earnings. If not, the change in the derivatives' fair value would reflect only a change in their time value.

We entered into interest rate swap agreements and designated them as cash flow hedges that effectively convert the floating-rate to fixed-rate domestic bonds according to SFAS 133. For derivative instruments that are designated and qualified as cash flow hedges to hedge the exposure to variability in expected future cash flows, the effective portion of the gain or loss on the derivative instrument is reported as other comprehensive income and reclassified into earnings in the same period or periods during which the hedged transaction affects earnings.

### *Employee Stock Options*

Under ROC GAAP, we apply the intrinsic value method to recognize the difference between the market share price and the exercise price of our employee stock options as compensation expense. From January 1, 2004, we also disclose pro forma net income and earnings per share under the fair value method only for the options granted after January 1, 2004.

We have issued employee stock options since 2002. The pro forma information regarding net income and earnings per share is required by SFAS 123, Accounting for Stock-Based Compensation to account for the employee stock options. The pro forma net income is determined as if the fair value of our employee stock options was recognized as compensation expense for the year. In estimating the fair value of the stock options, the Black-Scholes option pricing model is used. As discussed in the preceding paragraph, the valuation model requires the input of subjective assumptions and historical records, such as past dividend yields and historical volatility. Because it is unpredictable when our employees will exercise their options, we use the mid-point between the vesting date and the expiration date as the estimation of the expected life of options. As discussed above, different assumptions of the input may lead to different fair value estimates, which in turn may affect our pro forma net income disclosed as the compensation expense varies.

## **A. Operating Results**

### *Consolidation*

Unlike US GAAP, ROC GAAP does not require us to consolidate subsidiaries whose assets and operating revenues are less than 10% of our non-consolidated assets and operating revenues, respectively. See Note 2 to our restated audited consolidated financial statements. As a result, our consolidated financial statements prepared under ROC GAAP do not include the financial results of Fortune Venture Capital Corporation, United Foundry Services Inc., UMC Capital Corporation (including its subsidiary, UMC Capital (USA)) and United Microelectronics Corp. (Samoa) for 2002 and 2003, and Fortune Venture Capital Corporation, Unitruth Investment Corp., UMC Capital Corporation (including its subsidiary, UMC Capital (USA)), United Microelectronics Corp. (Samoa), and United Foundry Service Inc. for 2004, each of which is a consolidated subsidiary under US GAAP. In the aggregate, these subsidiaries had net operating revenues equal to approximately nil of our consolidated revenues for each of the years ended December 31, 2002, 2003 and 2004.

*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.

## **Table of Contents**

### ***Costs 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.

Due to the increasing expenditures related to the purchase of equipment and the construction of new fabs, our total depreciation expenses have increased from NT\$36,568 million in 2002 to NT\$39,233 million in 2003 and to NT\$45,590 million (US\$1,436 million) in 2004.

### ***Operating Expenses***

Our operating expenses consist of the following:

*Sales and marketing expenses.* Sales and marketing expenses consist primarily of salaries and related personnel expenses, wafer sample expenses, intellectual property development 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 salaries and related costs for process and technology research and development and depreciation on the equipment used related to 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;

dividend income, which has been primarily derived from marketable securities and long-term investments;

gain on disposal of investments, which has been primarily derived from our disposal of long-term investments; and

exchange gain, net.

Our non-operating expenses principally consist of:

interest expenses, which have been primarily derived from long-term debt;

exchange loss, net;

**Table of Contents**

loss on decline in market value and obsolescence of inventories, which has been primarily derived from the loss due to the decline in market value and write-off of our inventories; and

other loss, which has been primarily derived from impairment of idle assets.

**Taxation**

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 years following each such capital increase. This tax exemption resulted in tax savings of approximately nil, NT\$886 million and NT\$3,306 million (US\$104 million) in 2002, 2003 and 2004, respectively. As of January 30, 2001, the administrative regulations of the Hsinchu Science Park revoked the preferential tax rate of 20%. Our current tax rate is 25%, the same rate applicable to companies outside the Hsinchu Science Park.

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 25% 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\$1,719 million and NT\$4,383 million (US\$138 million) in 2002, 2003 and 2004, respectively.

After taking into account the tax exemptions and tax incentives discussed above, we recorded NT\$271 million, NT\$979 million and NT\$374 million (US\$12 million) of tax expense in 2002, 2003 and 2004, respectively. Our effective income tax rate in 2004 was 1.18%.

In 1997, the ROC Income Tax Law was amended to integrate corporate income tax and shareholder dividend tax to eliminate the double taxation effect for resident shareholders of Taiwan companies. Under the amendment, all retained earnings generated from January 1, 1998 and not distributed to shareholders as dividends in the following year will be assessed a 10% retained earnings tax. See Item 10. Additional Information E. Taxation ROC 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.

**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 Ended December 31,		
	2002	2003	2004
Net operating revenues	100.0%	100.0%	100.0%

Edgar Filing: UNITED MICROELECTRONICS CORP - Form 20-F/A

Costs of goods sold	83.4	77.3	71.5
Gross profit	16.6	22.7	28.5
Operating expenses:			
Sales and marketing	2.0	2.3	2.1
General and administrative	4.7	4.1	3.8
Research and development	9.8	6.1	5.7
Operating income (loss)	0.1	10.2	16.9
Net non-operating income (expense)	9.2	5.1	7.7
Income (loss) before income tax and minority interest	9.3	15.3	24.6
Income tax (expense) benefit	(0.3)	(1.0)	(0.3)
Minority interest (income) loss	0.4	0.3	0.3
Net income (loss)	9.4	14.6	24.6

---

**Table of Contents****2003 Compared with 2004**

**Net operating revenues.** Net operating revenues increased by 35.0% from NT\$95,704 million for 2003 to NT\$129,191 million (US\$4,070 million) for 2004, largely attributable to an increase in customer demand, which resulted in a 19.1% increase in wafers sold, from 2,619 thousand wafers in 2003 to 3,119 thousand wafers in 2004. The increase in our net operating revenues was partially attributable to an increase in average selling price. Our average selling price in 2004 increased by 12.2% as compared to 2003 as a result of a rise in market pricing and a shift towards higher-priced product mix using more advanced technology. Our 0.18micron and more advanced technologies had contributed approximately 54.2% of our net operating revenues in 2004, as compared to 41.1% in 2003.

**Cost of goods sold.** Cost of goods sold increased by 25.0% from NT\$73,938 million for 2003 to NT\$92,393 million (US\$2,911 million) for 2004, largely resulted from a 19.1% increase in wafers sold in 2004, from 2,619 thousand wafers in 2003 to 3,119 thousand wafers in 2004. The increase in cost of goods sold was partially resulted from a shift towards higher-cost product mix using more advanced technology. Our 0.18micron and more advanced technologies had contributed to approximately 54.2% of our net operating revenues in 2004, compared to 41.1% in 2003.

**Gross profit and gross margin.** Our gross margin fluctuation depends on the level of manufacturing capacity, wafer shipments and product mix. Gross margin increased from 22.7% for 2003 to 28.5% for 2004. As our utilization rates increased, our costs were allocated over a larger number of units, which led to lower unit costs. Higher wafer shipment, price increases and the improvement in overall product mix also improve our gross margin.

**Operating income and operating margin.** Operating income increased substantially from NT\$9,740 million for 2003 to NT\$21,806 million (US\$687 million) for 2004. Our operating margin increased from 10.2% for 2003 to 16.9% for 2004. The increase in operating margin is largely due to an increase in gross margin. Operating expenses increased by 24.7% from NT\$12,026 million for 2003 to NT\$14,992 million (US\$472 million) for 2004.

**Sales and marketing expenses.** Our sales and marketing expenses increased by 27.8% from NT\$2,171 million for 2003 to NT\$2,775 million (US\$87 million) for 2004. The increase in sales and marketing expenses was mainly due to an increase in purchasing intellectual properties from third parties to help our customers to develop SoC. Our sales and marketing expenses as a percentage of our net operating revenues decreased slightly from 2.3% for 2003 to 2.1% for 2004.

**General and administrative expenses.** Our general and administrative expenses increased by 21.4% from NT\$3,996 million for 2003 to NT\$4,853 million (US\$153 million) for 2004 largely due to increases in amortization of goodwill from our investment in UMCi amounting to NT\$321 million (US\$10 million). In addition, the increase in our general and administrative expenses was also attributable to an increase in personnel expenses, since we accrued more incentives to our employees due to significant growth in our net operating income from NT\$95,704 million for 2003 to NT\$129,191 million (US\$4,070 million) for 2004. Our general and administrative expenses as a percentage of our net operating revenues decreased slightly from 4.1% for 2003 to 3.8% for 2004.

**Research and development expenses.** Our research and development expenses increased by 25.7% from NT\$5,859 million for 2003 to NT\$7,364 million (US\$232 million) for 2004. The increase in research and development expenses resulted primarily from our continued development of 90-nanometer and 65-nanometer process technologies. Our research and development expenses as a percentage of our net operating revenues decreased slightly from 6.1% for 2003 to 5.7% for 2004.



---

**Table of Contents**

**Net non-operating income.** Net non-operating income substantially increased by 100% from NT\$4,956 million for 2003 to NT\$9,938 million (US\$313 million) for 2004 mainly due to gain on disposal of investments, offset by net exchange and other losses. Gain on disposal of investments increased substantially from NT\$6,885 million for 2003 to NT\$12,869 million (US\$405 million) for 2004 mainly due to the conversion of our exchangeable bonds into shares of AU Optronics and the sale of our investments in AU Optronics. The gain on the conversion of our exchangeable bonds into shares of AU Optronics and sale of shares of AU Optronics was NT\$7,806 million (US\$246 million) and NT\$2,483 million (US\$78 million), respectively. Due to the appreciation of exchange rate of New Taiwan dollars to US dollars from NT\$33.99 on December 31, 2003 to NT\$31.74 on December 31, 2004, we had a net exchange loss of NT\$929 million (US\$29 million) in 2004. Other losses increased from NT\$263 million in 2003 to NT\$1,112 million (US\$35 million) in 2004 mainly due to impairment of idle assets.

**Net income.** Due to the factors described above, we incurred a net income of NT\$31,843 million (US\$1,003 million) for 2004, compared to a net income of NT\$14,020 million for 2003.

**2002 Compared with 2003**

**Net operating revenues.** Net operating revenues increased by 26.9% from NT\$75,425 million for 2002 to NT\$95,704 million for 2003, largely attributable to an increase in customer demand, which resulted in a 39.9% increase in wafers sold from 1,872 thousand wafers in 2002 to 2,619 thousand wafers in 2003. The increase in net operating revenues was partially offset by a 3.1% decrease in the average selling price of our wafers in US dollar terms for 2003. The decrease in the average selling price of our wafers in US dollar terms was primarily the result of a decline in market pricing, partially offset by a more favorable product mix as we experienced a shift in product mix toward higher priced products using more advanced technologies. Our 0.18micron and more advanced technologies had contributed to approximately 41.1% of our net operating revenues in 2003, as compared to 26.7% in 2002.

**Cost of goods sold.** Cost of goods sold increased by 17.6% from NT\$62,887 million for 2002 to NT\$73,938 million for 2003, largely resulted in a 39.9% increase in wafers sold from 1,872 thousand wafers in 2002 to 2,619 thousand wafers in 2003. The increase in cost of goods sold was partially offset by an increase in the capacity utilization. Our capacity utilization increased from 65.2% in 2002 to 84.8% in 2003. As our utilization rates increased, our costs were allocated over a larger number of units, which led to lower unit costs.

**Gross profit and gross margin.** Our gross margin fluctuation depends primarily on the level of manufacturing capacity, wafer shipments and product mix, among other factors. Gross margin increased from 16.6% for 2002 to 22.7 % for 2003. The improvement in gross margin was primarily driven by higher capacity utilization, as our capacity utilization increased from 65.2% in 2002 to 84.8% in 2003. Due to the increase in our utilization rates, our costs were allocated over a larger number of units, which led to lower unit costs. Higher wafer shipment and the improvement in overall product mix also improve our gross margin.

**Operating income and operating margin.** Operating income increased substantially from NT\$112 million for 2002 to NT\$9,740 million for 2003. Our operating margin increased from 0.1% for 2002 to 10.2% for 2003. Operating expenses decreased by 3.2% from NT\$12,426 million for 2002 to NT\$12,026 million for 2003.

**Sales and marketing expenses.** Our sales and marketing expenses increased by 42.2% from NT\$1,527 million for 2002 to NT\$2,171 million for 2003. The increase in sales and marketing expenses was largely attributable to our increased business activities. Due mainly to an increase in purchasing intellectual properties from third parties to help our customers to develop SoC and wafer sample expenses. Our sales and marketing expenses as a percentage of our net operating revenues increased from 2.0% for 2002 to 2.3% for 2003.

**General and administrative expenses.** Our general and administrative expenses increased by 13.2% from NT\$3,531 million for 2002 to NT\$3,996 million for 2003. The increase partially reflected the effect of UMCi start-up costs in 2003. UMCi start-up cost was classified as general and administrative expense before it began volume production in the first quarter of 2004. UMCi start-up cost was NT\$1,330 million in 2003 compared with NT\$514 million in 2002. Our general and administrative expenses as a percentage of our net operating revenues decreased from 4.7% for 2002 to 4.1% for 2003.

**Research and development expenses.** Our research and development expenses decreased by 20.5% from NT\$7,368 million for 2002 to NT\$5,859 million for 2003. The decrease in research and development expenses resulted primarily from the completion of a joint development program with IBM and Infineon. Our research and development expenses as a percentage of our net operating revenues decreased from 9.8% for 2002 to 6.1% for 2003.

## **Table of Contents**

The increase in operating margin is largely due to an increase in gross margin, and a decrease in operation expenses.

**Net non-operating income.** Net non-operating income decreased from NT\$6,904 million for 2002 to NT\$4,956 million for 2003 mainly due to a decrease in interest income, a decrease in gain on disposal of investments and an increase in other investment loss. Interest income decreased from NT\$1,644 million for 2002 to NT\$1,141 million for 2003, mainly due to a decrease in interest income from our time deposits, which resulted from general market interest rate decline. Gain on disposal of investments decreased from NT\$8,473 million for 2002 to NT\$6,885 million for 2003 mainly due to a decrease in the gain on disposal of investments in AU Optronics. Moreover, we disposed of all shares of Trecenti and recognized a gain on disposal of investments in Trecenti in 2002. Other investment loss increased from NT\$1,419 million for 2002 to NT\$1,866 million for 2003 mainly due to write-offs of our investments in Vialta and LightCross.

**Net income.** Due to the factors described above, we incurred a net income of NT\$14,020 million for 2003, compared to a net income of NT\$7,072 million for 2002.

## **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 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 and the proceeds from our ADS offering in September 2000. We incurred capital expenditures of NT\$35,978 million, NT\$24,820 million and NT\$81,110 million (US\$2,555 million) in 2002, 2003 and 2004, 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\$30,527 million, NT\$49,625 million and NT\$73,938 million (US\$2,329 million) in 2002, 2003 and 2004, respectively.

As of December 31, 2004, we had NT\$101,382 million (US\$3,194 million) of cash and cash equivalents and NT\$3,144 million (US\$99 million) of marketable securities.

### *Operating Activities*

Our operating activities generated cash of NT\$73,938 million (US\$2,329 million) for 2004. Cash generated from our operating activities for 2004 was primarily attributable to add-back of non-cash items, such as depreciation and amortization in the amount of NT\$47,172 million



(US\$1,486 million).

**Table of Contents***Investment Activities*

Net cash used in our investment activities was NT\$83,132 million (US\$2,619 million) for 2004. In 2004, we used cash of NT\$81,110 million (US\$2,555 million) to purchase equipment primarily used at our fabs.

We held several credit-linked deposits and repackage bonds with a total amount of approximately NT\$2,942 million (US\$93 million) as of December 31, 2004. The repayment in full, including any accrued interest, of these deposits is subject to the non-occurrence of one or more credit events, which are referenced to the entities' fulfillment of their own obligations as well as repayment of their corporate bonds. Upon the occurrence of one or more of such credit events, we may receive nil or less than the full amount of these deposits and any payment received may be delayed due to the occurrence of certain events. The underlying reference entities are summarized as follows:

<u>Reference Entities</u>	<u>Principal Amount in Original Currency</u>	<u>Due Date</u>
Siliconwave Precision Industries Co., Ltd., European Convertible Bonds and Loans	NT\$ 400 million	February 5, 2007
Siliconwave Precision Industries Co., Ltd., European Convertible Bonds and Loans	NT\$ 200 million	February 5, 2007
Chi Feng Blinds Industry Co., Ltd., European Convertible Bonds	US\$ 2 million	December 19, 2005
HannStar Display Corporation, European Convertible Bonds	US\$ 5 million	October 19, 2005
UMC Japan, European Convertible Bonds	¥ 640 million	March 28, 2007
UMC Japan, European Convertible Bonds	¥ 600 million	November 29, 2007
UMC Japan, European Convertible Bonds	¥ 400 million	November 29, 2007
Cathay Financial Holding Co., Ltd., European Convertible Bonds	US\$ 3 million	May 23, 2005
Cathay Financial Holding Co., Ltd., European Convertible Bonds	US\$ 2 million	May 23, 2005
Advanced Semiconductor Engineering Inc., European Convertible Bonds and Loans	NT\$ 200 million	September 25, 2007
UMC Japan, European Convertible Bonds	¥ 1,000 million	March 29, 2007
UMC Japan, European Convertible Bonds	¥ 2,000 million	November 28, 2007
UMC Japan, European Convertible Bonds	¥ 1,100 million	March 29, 2007

*Financing Activities*

Net cash used in our financing activities was NT\$6,832 million (US\$215 million) for 2004. For financing activities for 2004, we received cash of NT\$23,076 million (US\$727 million) mainly from long-term loans. We also repaid long-term loans and bonds of NT\$9,366 million (US\$295 million) and NT\$16,337 million (US\$515 million), respectively, in cash in 2004.

Our outstanding short-term loans were NT\$2,987 million (US\$94 million) as of December 31, 2004. We had total availability under existing short-term lines of credit, which can be drawn in NT dollars, U.S. dollars, Japanese Yen, Singapore dollars and/or Euros at our discretion, of NT\$8,129 million (US\$256 million) as of December 31, 2004. All of our short-term loans are revolving facilities with terms of six months or one year, which may be extended for terms of six months or one year each with lender consent. The weighted average annual effective interest rate under these facilities ranged between 0.86% and 2.89% as of December 31, 2004. Our obligations under our short-term loans are unsecured.



**Table of Contents**

We had long-term loans of NT\$23,711 million (US\$747 million) in the aggregate as of December 31, 2004. The interest rates of these long-term borrowings are variable rates and ranged between 0.81% and 3.55% per year as of December 31, 2004.

We had bonds payable of NT\$45,839 million (US\$1,444 million) in the aggregate as of December 31, 2004.

We have pledged a substantial portion of our assets with a carrying value of NT\$30,059 million (US\$947 million) as of December 31, 2004 to secure our obligations under the long-term loans and bonds.

As of December 31, 2004, our outstanding long-term liabilities primarily consisted of:

US\$600 million secured long-term loan due March 25, 2008;

JPY¥15,000 million unsecured long-term loan;

NT\$570 million 5.6% secured domestic bonds due April 27, 2005; these bonds are repayable in seven equal semi-annual installments from April 27, 2002;

NT\$12.75 billion unsecured domestic bonds consisting of two tranches: NT\$5.25 billion 5.185% unsecured bonds due April 2006 and NT\$7.5 billion 5.285% unsecured bonds due April 2008;

NT\$5 billion 3.520% unsecured domestic bonds due October 2006;

NT\$15 billion unsecured domestic bonds, consisting of two tranches: NT\$7.5 billion five-year unsecured bonds with interest rates of 4.0% minus 12-month U.S. dollar LIBOR but at the minimum of 0%, and NT\$7.5 billion seven-year unsecured bonds with interest rates of 4.3% minus 12-month U.S. dollar LIBOR but at the minimum of 0%;

US\$98 million Zero Coupon Exchangeable Bonds due 2007;

In May 2002, we issued US\$235 million Zero Coupon Exchangeable Bonds due 2007. The proceeds of this offering have been used to purchase equipment for Fab 8D. These bonds, which are scheduled to mature on May 10, 2007, are exchangeable, at the option of the bondholders, into common shares or ADSs of AU Optronics at an initial exchange price of NT\$59.34 per common share of AU Optronics at any time on or after June 19, 2002, and are redeemable by us under certain circumstances on or any time after August 10, 2002 and prior to May 10, 2007. As of May 31, 2005, US\$137 million of Zero Coupon Exchangeable Bonds due 2007 were exchanged into 87 million common shares of AU Optronics. The current exchange price is NT\$51.3 per common share of AU Optronics.

¥8,630 million Zero Coupon Convertible Bonds due 2007; and

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

In March 2002, UMCJ issued ¥17,000 million Zero Coupon Convertible Bonds due 2007 at an issue price of 101.75% of the principal amount. The proceeds of this offering have been used to finance capital expenditures and repay certain loans. The initial conversion price was set at ¥400,000 per share, subject to adjustments upon the occurrence of certain events set forth in the indenture. The current conversion price is ¥400,000 per share. The bonds are redeemable by UMCJ under certain circumstances at any time on or after March 25, 2005 and prior to March 26, 2007. As of December 31, 2004, UMCJ repurchased ¥8,370 million of the bonds from the open market of which ¥7,650 million were cancelled.

¥21,500 million Zero Coupon Convertible Bonds due 2013.

## **Table of Contents**

In November 2003, UMCJ issued ¥21,500 million Zero Coupon Convertible Bonds due 2013 at an issue price of 101.25% of the principal amount. The proceeds of this offering have been used to finance capital investments and our investments in UMCi. The conversion price was set at ¥187,500 per share, subject to adjustments upon the occurrence of certain events set forth in the indenture. The bonds are redeemable by UMCJ under certain circumstances at any time on or after November 27, 2006 and prior to November 25, 2013.

The current portion of long-term loans and bonds due within one year were NT\$5,441 million (US\$171 million) and NT\$2,820 million (US\$89 million), respectively.

### *Capital Expenditures*

We have entered into several construction contracts for the expansion of our factory space. As of December 31, 2004, these construction contracts amounted to NT\$550 million (US\$17 million) with an unaccrued portion of the contracts of NT\$420 million (US\$13 million).

In 2004, we spent approximately NT\$81,110 million (US\$2,555 million) primarily to purchase 8-inch and 12-inch wafer-processing equipment and other equipment for research and development and production purposes. Our initial budget for purchases of semiconductor manufacturing equipment for 2005 is approximately US\$1 to 1.5 billion. We may adjust the amount of our capital expenditures upward or downward based on the progress of our capital projects, market conditions and our anticipation of future business outlook.

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 2005. We also expect to fund a portion of our capital requirements in 2005 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 shareholders. 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 outside of 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 Shareholders and Related Party Transactions B. Related Party Transactions and Note 25 to our restated audited consolidated financial statements included in this annual report.

### **Inflation/Deflation**

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

#### **US GAAP Reconciliation**

Our consolidated financial statements are prepared in accordance with ROC GAAP, which differs in certain material respects from US GAAP. Such differences include methods of consolidation and methods for measuring the amounts shown in the financial statements, as well as additional disclosures required by US GAAP. Note 33 to our restated audited financial statements, included in this annual report, provide a discussion and quantification of the material differences between ROC GAAP and US GAAP as they related to us. We provide a discussion of some of the material differences included therein below.

**Table of Contents**

The following table sets forth a comparison of our net income and stockholders' equity in accordance with ROC GAAP and US GAAP for the periods indicated.

	Year Ended December 31,			
	2002	2003	2004	
	NT\$	NT\$	NT\$	US\$
	Restated (1)	Restated (1)	Restated (1)	Restated (1)
<b>Net income (loss)</b>				
Net income (loss), ROC GAAP	7,072	14,020	31,843	1,003
US GAAP adjustments:				
Compensation	(7,349)	(2,915)	(3,751)	(118)
Investment in debt and equity securities	130	2,168	(2,710)	(85)
Equity investments:				
Compensation	(471)	(421)	(371)	(12)
Net income variance between US GAAP and ROC GAAP	(126)	(111)	(400)	(13)
Interest expense of the convertible / exchangeable bonds issued	(270)	(305)	(88)	(3)
Change in fair value of the embedded derivatives in convertible / exchangeable bonds issued	815	(347)	520	16
Impairment loss on goodwill			(39,795)	(1,254)
Consolidated goodwill amortization			21	1
Income tax effect	(23)	242	494	16
<b>Net income (loss), US GAAP</b>	<b>(222)</b>	<b>12,331</b>	<b>(14,237)</b>	<b>(449)</b>

	As of December 31,			
	2002	2003	2004	
	NT\$	NT\$	NT\$	US\$
	Restated (1)	Restated (1)	Restated (1)	Restated (1)
<b>Stockholders' equity</b>				
Total stockholders' equity, ROC GAAP	217,424	232,233	266,374	8,392
Compensation	67	129	154	5
Equity investments				
Net income variance between US GAAP and ROC GAAP	(592)	(477)	394	12
Stockholders' equity variance between US GAAP and ROC GAAP	1,560	951	1,068	34
Investment in debts and equity securities	16,568	32,842	16,477	519
Treasury stock	(8)	(3)	(2)	(0)
Derivatives instruments	815	449	572	18
Convertible/Exchangeable bonds	(270)	(575)	(663)	(21)
Unamortized goodwill due to acquisition	98,268	98,268	98,268	3,096
Difference arising from merger			(840)	(26)
Impairment loss on goodwill			(39,795)	(1,254)
Income tax effect	(323)	(81)	413	13



Edgar Filing: UNITED MICROELECTRONICS CORP - Form 20-F/A

Stockholders' equity, US GAAP	333,509	363,736	342,420	10,788
-------------------------------	---------	---------	---------	--------

(1) Refer to Note 33 to our restated audited financial statements included elsewhere in this annual report .

## **Table of Contents**

Difference between ROC GAAP and US GAAP that have a material effect on our net income and stockholders' equity under ROC GAAP include compensation expenses pertaining to stock bonuses to employees, derivative instruments, investments in debt and equity securities and consolidated goodwill.

### *Compensation Expenses*

Pursuant to our Articles of Incorporation, we are required, under certain circumstances, to distribute a certain percentage of unappropriated earnings to employee bonuses and remuneration to directors and supervisors. See Item 10. Additional Information B. Memorandum and Articles of Association Dividends and Distributions. The remuneration to directors and supervisors is settled in cash while the employee bonuses for 2001, 2002 and 2003 were settled in the form of shares and for future periods such bonuses will be settled in cash or shares at the Group's discretion. The number of shares granted as employee bonuses is determined by dividing the total nominal NT dollar amount of the bonuses to be settled in shares by the par value of the shares, i.e. NT\$10 per share, rather than their market value, which has generally been substantially higher than par value. Under ROC GAAP, the distribution of employee bonuses and remuneration to directors and supervisors are treated as appropriation of retained earnings, and we are not required to, and do not, charge them to earnings. Under US GAAP, however, we are required to charge the market value of the shares for employee bonuses and the cash amount of remuneration as compensation expenses in the related service period, correspondingly reducing our net income and earnings per share calculated in accordance with US GAAP. When services are rendered, the fair value of the minimum bonuses is recognized as the compensation expense based on the provisions of our Articles of Incorporation which mandates a minimum percentage of our undistributed earnings, after certain adjustments, to be retained as bonuses and remuneration. The minimum bonuses in shares are fair valued by using the closing price at the balance sheet date because the shareholders' approval obtained in the subsequent year is reasonably assured. When bonuses are approved by the shareholders in the subsequent year, which normally occurs during the second fiscal quarter, an additional compensation expense is recorded for the difference between the minimum amount initially accrued and the fair market value of the shares actually granted to employees. Accordingly, net income and earnings per share calculated under ROC GAAP and US GAAP will be different. See Note 33 to our restated audited consolidated financial statements.

### *Derivative Instruments*

Under US GAAP, as prescribed by SFAS 133, Accounting for Derivative Instruments and Hedging Activities, the embedded derivative features contained in our exchangeable bonds, convertible bonds and credit-linked deposits are bifurcated and separately accounted for, if the economic characteristics and risks of the embedded derivative instruments and the host contracts are not clearly and closely related. Those bifurcated embedded derivatives are accounted for at fair value with the changes in fair value included in earnings of the year. As for the freestanding derivative such as interest rate swap agreements, which are designated and qualified as cash flow hedging instruments for floating-rate domestic bonds, the effective portion of the gain or loss on the hedging instruments is reported as other comprehensive income and reclassified into earnings in the same period or periods during which the hedged transaction affects earnings. Under ROC GAAP, those derivative instruments are neither bifurcated nor required to be accounted for as a hedging instrument. See Note 33 to our restated audited consolidated financial statements.

### *Investments in Debt and Equity Securities*

Under ROC GAAP, marketable securities are classified as either short-term or long-term investments and carried at the lower of aggregate cost or market value. The determination of whether an investment is short-term or long-term takes into consideration the Company's ability and intention to hold those securities, whether the securities have quoted market prices and whether the securities are actively bought and sold by the Company. All unrealized losses for short term investments are recognized in the statement of income and to the extent unrealized gains represent recoveries of previously recorded losses, they are recognized in the statement of income. Unrealized gains in excess of original cost are not recognized until realized. For long term investments, a decline in market value below cost is charged to stockholders' equity unless this decline is

not expected to be recovered in the future in which case, the decline is charged as a loss to the statement of income. Unrealized appreciation in market value above original cost is not recognized until realized. Under US GAAP, according to SFAS 115, equity securities, over which the Group exercises no significant influence or control and with readily determinable fair values, and debt securities are to be classified as either trading, available-for-sale or held-to-maturity securities. Debt securities that the Group has the positive intent and ability to hold to maturity are classified as held-to-maturity securities and reported at amortized cost. Debt and equity securities that are bought and traded for short-term profit are classified as trading securities and reported at fair value, with unrealized gains and losses included in earnings. Debt and equity securities not classified as either held-to-maturity or trading securities are classified as available-for-sale securities and reported at fair value, with unrealized gains and losses excluded from earnings and reported in other comprehensive income except for unrealized losses that are deemed to be other than temporary which are charged to earnings. See Note 33 to our restated audited consolidated financial statements.

**Table of Contents***Consolidated Goodwill*

Under ROC GAAP, the fair value of the net assets received is deemed to be the value of the consideration for the acquisition of the remaining interests in United Semiconductor, United Silicon, UTEK Semiconductor and United Integrated Circuits in January 2000. Under ROC GAAP, the acquisition cost of merger with SiSMC was determined using the average market price of the shares exchanged over one month before the effective date, which represented the reasonable market price of the net assets merged from SiSMC. Under US GAAP, EITF No. 99-12 requires that the securities exchanged should be valued based on the market prices a few days before and after the date when the terms of the acquisition are agreed to and announced. Under US GAAP, the acquisition was accounted for using the purchase method of accounting and the purchase price was determined using the market value of the shares exchanged. The difference between the fair value of the shares exchanged and the fair value of the net assets acquired created goodwill. Upon the adoption of SFAS 141 & 142 on January 1, 2002 by us, goodwill ceased to be amortized and is subject to an annual impairment test or when events and circumstances indicate a possible impairment may exist. The Company has determined that it has one reporting unit whose fair value is best determined by its quoted market prices on the New York Stock Exchange (for its ADS securities) and on the Taiwan Stock Exchange (for its common stock). Goodwill is assigned to the one reporting unit and tested, pursuant to SFAS 142, annually on December 31, as determined by the Company's accounting policy. In the past, the quoted market prices on these stock exchanges have been very volatile which the Company believes is reflective of the cyclical nature of its business and industry. In fiscal years 2002 and 2003, its stock price at year end supported its conclusion that no goodwill impairment loss existed. During 2004, the Company experienced a gradual and continual decline in its stock price commencing in the second quarter of 2004. The Company believes the decline was primarily driven by lower investor confidence in the short-term prospects of the Taiwan semiconductor industry which also had the same impact on the stock prices of other semiconductor companies in Taiwan. As such, the Company recognized a goodwill impairment charge of NT\$39,795 million as of December 31, 2004 (2003 NT\$nil; 2002 NT\$nil).

*Recent Accounting Pronouncements*

In December 2004, the FASB issued SFAS Statement No. 123 (revised 2004), Share-Based Payment, which is a revision of FASB Statement No. 123 Accounting for Stock-Based Compensation. The revised Statement requires all share-based payments to employees, including grants of employee stock options, to be recognized in the financial statements based on their fair values. It is effective for public companies at the beginning of the annual period beginning after June 15, 2005. We do not expect a material impact on our financial statements resulting from the adoption of SFAS Statement No. 123(R).

In November 2004, SFAS Statement No. 151 amended the guidance in ARB No. 43, Chapter 4, Inventory Pricing, to clarify the accounting for abnormal amounts of idle facility expense, freight, handling costs and waste material (spoilage) should be recognized as current-period charges and requires the allocation of fixed production overhead to inventory based on the normal capacity of the production facilities. The guidance is effective for inventory costs incurred during fiscal years beginning after June 15, 2005. The adoption of SFAS No. 151 is not expected to have a material effect on our earnings or financial position.

**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\$7,368 million, NT\$5,859 million and NT\$7,364 million (US\$232 million) in 2002, 2003 and 2004, respectively, in research and development, which represented 9.8%, 6.1% and 5.7%, respectively, of net operating revenues for such periods. 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, 2005, we employed 565 professionals in our research and development division, 14% of whom hold Ph.D. degrees.



## **Table of Contents**

Our current research and development activities seek to upgrade and integrate manufacturing technologies and processes, as well as to develop embedded memory technologies, including DRAM, SRAM, 1T-SRAM, 6T-SRAM and nonvolatile memories, and advanced device technologies, including SOI and strained silicon. Although we emphasize firm-wide participation in the research and development process, we maintain a central research and development team 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. A substantial portion of our research and development activities are undertaken in cooperation with our customers and equipment vendors.

### **D. Trend Information**

Please refer to [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 interest rate swaps to manage our interest rate risks on our floating rate debt instruments and 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 trading activities. 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, 2004.

**Table of Contents**

Contractual Obligations	Payments Due by Period				
	Total	Less Than 1 Year	1-3 Years	4-5 Years	After 5 Years
	(consolidated)				
	(in NT\$ millions)				
Long-term debt(1)					
Secured long-term loans	19,044	5,441	10,882	2,721	
Unsecured long-term loans	4,667		4,667		
Secured bonds	570	570			
Unsecured bonds	45,248	2,250	18,309	10,500	14,189
Capital lease obligations(2)					
Operating leases(3)	3,187	211	395	374	2,207
Other long-term obligations(4)	6,631	3,267	2,943	421	
<b>Total contractual cash obligations</b>	<b>79,347</b>	<b>11,739</b>	<b>37,196</b>	<b>14,016</b>	<b>16,396</b>

- (1) Assuming the convertible bonds and exchangeable bonds are both paid off upon maturity.
- (2) Represents our obligations to make lease payments for equipment.
- (3) Represents our obligations to make lease payments to use the land on which our fabs are located, primarily in the Hsinchu Science Park and the Tainan Science Park in Taiwan and Pasir Ris Wafer Fab Park in Singapore.
- (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 and tenure of each of our directors, supervisors and executive officers as of March 31, 2005. The biography of each of our directors, supervisors and executive officers is as of December 31, 2004. There is no family relationship among any of these persons. The business address of our directors, supervisors and executive officers is the same as our registered address.

Tzong-Yeong Lin, who served in the capacity of the representative of Chiao Tung Bank, resigned as one of our supervisors on May 25, 2005. In the shareholders' meeting held on June 13, 2005, Hong-Jen Wu, who served in the capacity of the representative of Chuin Tsie Investment Co., resigned from our board of directors and SiS was elected as a new director on our board.

Name	Age	Position	Years with Us
Robert H.C. Tsao	58	Chairman and managing director	24
John Hsuan	53	Vice Chairman and managing director	23
Peter Chang	59	Vice Chairman and managing director (Representative of Hsun Chieh Investment Co.)	13
Jackson Hu	56	Director (Representative of Chuin Li Investment Co.) and Chief Executive Officer	2

Edgar Filing: UNITED MICROELECTRONICS CORP - Form 20-F/A

Hong-Jen Wu(1)	53	Director (Representative of Chuin Tsie Investment Co.) and President	25
Ching-Chang Wen	55	Director (Representative of Shieh Li Investment Co.) and Business Group President	7
Jack K.C. Wang(2)	58	Director	10
Mao-Chung Lin(2)	73	Director	16
Paul S.C. Hsu(2)	69	Director	1



**Table of Contents**

<u>Name</u>	<u>Age</u>	<u>Position</u>	<u>Years with Us</u>
Tzong-Yeong Lin(3)	54	Supervisor (Representative of Chiao Tung Bank Co., Ltd.)	1
Tzzy-Jang Tseng	55	Supervisor (Representative of Hsun Chieh Investment Co., Ltd.)	4
Tsing-Yuan Hwang	56	Supervisor (Representative of Chuin Tsie Investment Co.)	10
Chris Chi	54	Business Group President	8
Fu-Tai Liou	52	Business Group President	8
Shih-Wei Sun	48	Senior Vice President	10
Stan Hung	45	Chief Financial Officer	14

- (1) Resigned on June 13, 2005.  
(2) Member of the Audit Committee.  
(3) Resigned on May 25, 2005.

**Robert H.C. Tsao** is the Chairman and a managing director of our company. Mr. Tsao was also our Chairman from 1991 to April 2000. Mr. Tsao received a Master's degree in Management Science from the National Chiao-Tung University in 1972. Before joining United Microelectronics in 1981, Mr. Tsao was the Vice Chairman of Electronics Research & Service Organization from 1979 to 1981. Mr. Tsao is also a director of Mega Financial, Unimicron Technology Corp., and United Microdisplay Optronics Corporation and the Chairman of Faraday Technology Corp., UMC Japan, Fortune Venture Capital Corporation, UMCi and Hsun Chieh Investment Co., Ltd.

**John Hsuan** is a Vice Chairman and a managing director of our company. Mr. Hsuan was our Chairman from April 2000 to May 2001. Mr. Hsuan received a Bachelor's degree in Electronics Engineering from the National Chiao-Tung University in 1973. Before joining us in 1982, Mr. Hsuan was a manager of Electronics Research & Service Organization from 1977 to 1982. Mr. Hsuan is a director of Unimicron Technology Corp., Faraday Technology Corp., Fortune Venture Capital Corporation, UMC Japan, and Hsun Chieh Investment Co., Ltd. and the Chairman of SiS and United Microdisplay Optronics Corporation.

**Peter Chang** is a Vice Chairman and a managing director of our company. Mr. Chang is a representative of Hsun Chieh Investment Co. Mr. Chang holds a Master's degree in Electrical Engineering from the University of Texas at Austin in 1971. Prior to becoming a director and the CEO of our company in 1999, Mr. Chang served as the president of United Semiconductor from 1996 to 1999. Mr. Chang is also a director of UMCi.

**Jackson Hu** is a director and the Chief Executive Officer of our company. Mr. Hu is a representative of Chuin Li Investment Co. Dr. Hu earned his Bachelor's degree in electrical engineering from National Taiwan University in 1971 and Master's and Ph.D. degrees in Computer Science from the University of Illinois at Urbana-Champaign. He also obtained an MBA from Santa Clara University. Dr. Hu joined us at the beginning of 2003 as the president of our New Business Development Group and head of the Design Support Division. Prior to joining us, Dr. Hu served as the president and chief executive officer of SiRF Technology Inc. from 1996 to 2002 and the senior vice president and general manager of S3 from 1994 to 1996. Mr. Hu is also a director of UMCi and Compal Communications, Inc.

**Hong-Jen Wu** was a director of our company and, serving in the capacity of the representative of Chuin Tsie Investment Co., resigned from our board on June 13, 2005. Mr. Wu is the president of our company. Mr. Wu holds both Bachelor's and Master's degrees in Chemical Engineering from the National Taiwan University in 1976. Prior to joining United Microelectronics in 1980, Mr. Wu was a senior engineer at Taiwan General Equipment Corp. Mr. Wu is also a director and the president of UMCJ, and the Chairman of DuPont Photomasks Taiwan Ltd.

Edgar Filing: UNITED MICROELECTRONICS CORP - Form 20-F/A

**Ching-Chang Wen** is a director and a business group president of our company. Dr. Wen is a representative of Shieh Li Investment Co. He received a Ph.D. degree in Electrical Engineering from the University of Pennsylvania in 1979. Prior to joining United Microelectronics in 1996, Dr. Wen served as a vice president of Winbond Electronics Corp. Mr. Wen is also a director of DuPont Photomasks Taiwan Ltd.

**Table of Contents**

**Jack K. C. Wang** is a director of our company. Mr. Wang was a supervisor of our company from May 2001 to May 2004. Mr. Wang received a Bachelor's degree in Chinese Literature from the Culture University in Taiwan in 1955. Mr. Wang is also the Chairman of Sen Dah Investment Co., Ltd.

**Mao-Chung Lin** is a director of our company. Mr. Lin was a supervisor of our company from May 2001 to May 2004. Mr. Lin received a Bachelor's degree in Business Administration from the National Taiwan University in 1955. Mr. Lin is also the president of Sunrox International, Inc.

**Paul S.C. Hsu** is a director of our company. Professor Hsu received a Ph.D. degree in Business Administration from The University of Michigan in 1974. Professor Hsu is Far East Group Chair Professor of Management, Yuan-Ze University, Taiwan, and the Chairman of Chinese Management Association. Mr. Hsu is a director of Faraday Technology Corporation, Firich Enterprise Co., Ltd. and Taiwan Chi Cheng Enterprise Co. and a supervisor of Far Eastern International Bank.

**Tzong-Yeong Lin** was a supervisor of our company and, serving in the capacity of the representative of Chiao Tung Bank, resigned on May 25, 2005. Mr. Lin holds a Master's degree in Law from National Taiwan University. Mr. Lin is the president of Mega Financial, the Chairman of The International Commercial Bank of China, Parawin Venture Capital Corp., Risklink Venture Capital Corp. and International Investment Trust Co., Ltd. and a supervisor of Taian Technologies Corporation and National Credit Card Center of the ROC.

**Tzyy Jang Tseng** is a supervisor of our company. Mr. Tseng is a representative of Hsun Chieh Investment Co. Mr. Tseng received a Master's degree in Physics from the National Tsing Hua University of Taiwan. Mr. Tseng is also the Chairman of Unimicron Technology and Subtron Technology Co., Ltd., and a supervisor of Fortune Venture Capital Corporation and a director of Premier Image Technology Corporation.

**Tsing-Yuan Hwang** is a supervisor of our company and a representative of Chuin Tsie Investment Co. Mr. Hwang was a director of our company from May 1998 to June 2004. Mr. Hwang received an MBA from the Nihon University in 1982. Mr. Hwang is also an executive officer of Daiwa Securities SMBC Co., Ltd. and a director of President Chain Store Corp. and Hon Hai Precision Industry Co., Ltd.

**Chris Chi** is the business group president of our company. Mr. Chi was a director of our company from May 2001 to May 2004. Mr. Chi received a Master's degree in Material Engineering from the University of California at Los Angeles. Prior to joining United Microelectronics in 1997, Mr. Chi was a senior vice president of Chartered Semiconductor Manufacturing Ltd. Mr. Chi is also a director and the president of UMCi and a director of UMCJ.

**Fu-Tai Liou** is a business group president of our company. Dr. Liou was a director of our company from May 2001 to May 2004. Dr. Liou received a Ph.D. degree in Material Science and Engineering from the State University of New York at Stony Brook in 1979. Prior to joining United Microelectronics in 1997, Dr. Liou was a vice president of SGS-Thompson.

**Shih-Wei Sun** is a senior vice president of our company and is in charge of our Research and Development Department. Mr. Sun holds a Ph.D. degree in Electronics Materials from Northwestern University.

**Stan Hung** is the Chief Financial Officer of our company. Mr. Hung was a director of our company from May 2001 to May 2004. Mr. Hung received a Bachelor's degree in Accounting from TamKang University in 1982. Prior to joining United Microelectronics in 1991, Mr. Hung was a manager at Unipac Optoelectronics Corporation. Mr. Hung is also a supervisor of SpringSoft Co., Ltd. and Novatek Microelectronics Corp., and a director of UMCJ, Hsun Chieh Investment Co., Ltd., Harvatek Corp., Mega Financial Holding Company, United Microdisplay Optronics Corporation and Fortune Venture Capital Corporation.

## **B. Compensation**

The aggregate compensation paid and benefits in kind granted to our directors and supervisors in 2004 were approximately NT\$27 million (US\$0.85 million). Some of the remuneration were paid to the legal entities for which such directors or supervisors represent. The aggregate compensation paid and benefits in kind granted to our executive officers in 2004 were approximately NT\$120 million, which include 2,800,000 shares as employee bonus and NT\$15 million for housing and transportation expenses. The number of shares distributed to our executive officers as employee bonus was calculated at the market value of NT\$29.3 per share, which is the average market price in the last month of 2003, in accordance with ROC SFB's disclosure requirement for annual report.

**Table of Contents**

The following table sets forth total compensation paid to each of our directors and supervisors in their respective capacities in 2004.

Name	Capacity	Total Compensation (in NT\$ thousands)
Robert H.C. Tsao	Chairman and managing director	2,250
John Hsuan	Vice Chairman and managing director	2,250
Peter Chang	Vice Chairman and managing director (Representative of Hsun Chieh Investment Co.)	2,250(1)
Jackson Hu	Director (Representative of Chuin Li Investment Co.)	2,250(1)
Hong-Jen Wu	Director (Representative of Chuin Tsie Investment Co.)	2,250(1)
Ching-Chang Wen	Director (Representative of Shieh Li Investment Co.)	2,250(1)
Jack K.C. Wang	Director	2,250
Mao-Chung Lin	Director	2,250
Paul S.C. Hsu	Director	2,250
Tzong-Yeong Lin	Supervisor (Representative of Chaio Tung Bank Co., Ltd.)	2,250(1)
Tzyy Jang Tseng	Supervisor (Representative of Hsun Chieh Investment Co.)	2,250(1)
Tsing-Yuan Hwang	Supervisor (Representative of Chuin Tsie Investment Co.)	2,250(1)

(1) Paid to legal entity for which individual served as representative.

**C. Board Practices**

All of our directors and supervisors were elected in June 2004 for a term of three years, except for SiS which was elected on June 13, 2005 for a term of two years. Neither we nor any of our subsidiaries has entered into a contract with any of our directors and supervisors by which our directors or supervisors are expected to receive benefits upon termination of their employment.

Our board of directors established an audit committee in March 2005. The audit committee is appointed by the board of directors and currently consists of Jack K.C.Wang, Mao-Chung Lin, and Paul S.C. Hsu. 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 the Company's internal audit function and independent auditors, and overseeing the accounting policies and financial reporting and disclosure practices of the 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.

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 [http://www.umc.com/english/investors/Corp\\_gov\\_difference.asp](http://www.umc.com/english/investors/Corp_gov_difference.asp).

**Table of Contents****D. Employees**

As of March 31, 2005, we had 10,493 employees, which included 4,904 engineers, 5,073 technicians and 516 clerical workers performing administrative functions at our plants in Taiwan. 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.

<b>Employees</b>	<b>As of December 31,</b>		
	<b>2002</b>	<b>2003</b>	<b>2004</b>
Engineers	4,113	3,918	4,892
Technicians	4,478	4,469	5,230
Administrative Staff	543	510	520
<b>Total</b>	<b>9,134</b>	<b>8,897</b>	<b>10,642</b>

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, ROC 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. The amount allocated for employees in 2004 in relation to retained earnings in 2003 totaled NT\$1,111 million (US\$35 million), all of which were paid in the form of shares. The number of shares issued as employee share bonus is calculated by valuing the shares at their par value, or NT\$10 per share, rather than their fair market value. Accordingly, the value of the shares received by employees is significantly more than the cash amount employees would receive if the employee share bonus was paid in cash. See Item 5. Operating and Financial Review and Prospects B. Liquidity and Capital Resources US GAAP Reconciliation.

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

**E. Share Ownership**

Each of our directors, supervisors and executive officers holds 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. As of March 31, 2005, none of our directors, supervisors or executive officers held, for their own account, 1% or more of our outstanding shares. As of April 15, 2005, our most recent record date, Hsun Chieh Investment Co. held approximately 544 million of our shares, representing approximately 3.05% 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

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

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 2002, October 2003 and September 2004, we obtained approvals from relevant ROC authorities for the grant of up to 1,000 million, 150 million and 150 million stock options, respectively, to acquire our common shares under our Employee Stock Options Plan. In October 2002, January 2003, November 2003, March 2004, July 2004 and October 2004, we granted 939 million, 61 million, 57 million, 33 million, 57 million and 20 million stock options, respectively, to our employees.

**Table of Contents**

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 ROC 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 following table sets forth the stock options held by each of our directors, supervisors and executive officers as of March 31, 2005.

<u>Name</u>	<u>Number of Shares Issuable upon Exercise of Option</u>	<u>Per Share Exercise Price</u>	<u>Unit Granted/Total Outstanding Shares</u>	<u>Expiration Date</u>
Robert H.C. Tsao				
John Hsuan	10,000,000	17.7	0.06%	October 7, 2008
Peter Chang	10,000,000	17.7	0.06%	October 7, 2008
Jackson Hu	5,000,000/15,000,000	19.9/27.8	0.11%	January 3, 2009/ November 26, 2009
Hong-Jen Wu	10,000,000	17.7	0.06%	October 7, 2008
Ching-Chang Wen	10,000,000	17.7	0.06%	October 7, 2008
Jack K.C. Wang				
Mao-Chung Lin				
Paul S.C. Hsu				
Tzong-Yeong Lin				
Tzzy-Jang Tseng				
Tsing-Yuan Hwang				
Chris Chi	10,000,000	17.7	0.06%	October 7, 2008
Fu-Tai Liou	10,000,000	17.7	0.06%	October 7, 2008
Shih-Wei Sun	8,000,000	17.7	0.04%	October 7, 2008
Stan Hung	10,000,000	17.7	0.06%	October 7, 2008

**ITEM 7. MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS****A. Major Shareholders**

The following table sets forth information known to us with respect to the beneficial ownership of our shares as of (i) April 15, 2005, our most recent record date and (ii) as of certain record dates in each of the preceding three years, for (1) the shareholders known by us to beneficially own more than 2% of our shares and (2) all directors, supervisors and executive officers as a group. Beneficial ownership is determined in accordance with Securities and Exchange Commission rules.



**Table of Contents**

Name of Beneficial Owner	As of April 15, 2005		As of April 3, 2004	As of April 11, 2003	As of April 5, 2002
	Number of shares beneficially owned	Percentage of shares beneficially owned	Percentage of shares beneficially owned	Percentage of shares beneficially owned	Percentage of shares beneficially owned
Hsun Chieh Investment Co., Ltd.(1)	543,732,129	3.05%	3.12%	3.13%	3.16%
Xilinx, Inc.	396,153,283	2.22%	2.27%	2.28%	2.30%
Directors, supervisors and executive officers as a group	1,132,452,750	6.44%	6.02%	6.10%	6.11%

(1) 99.97% owned by United Microelectronics as of March 31, 2005.

None of our major shareholders have different voting rights from those of our other shareholders. 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 prices of acquisition or disposal of buildings and facilities with related parties are determined by fair market value, endorsed by an independent professional appraisal company.

In connection with the settlement of our litigations with SiS, we and SiS agreed in late 2002 to enter into a broad scope of cooperation, including, among other things, exchange of process patents, production support and our board representation in SiS. Under the settlement, SiS also agreed to engage us as its sole external provider of foundry services for its integrated circuits designed with 0.18 micron or smaller processors. To further strengthen our relationship with SiS, we decided to invest in SiS. As of March 31, 2005, we held 16.16% of SiS outstanding share capital. In addition, our representatives currently hold four out of seven board seats of SiS, and John Hsuan, our vice chairman, is the chairman of SiS. In July 2004, we acquired SiSMC, a wafer foundry company spun off from SiS in 2003.

In 1997, United Microelectronics made initial investments as a founding shareholder in several fabless design companies, including AMIC Technology Inc., AMIC Technology (Taiwan) Inc., Broadmedia Inc. (which has been merged into C-Com Corporation in August 2003), DAVICOM Semiconductor (Taiwan), Inc., Integrated Telecom Express Inc. (which was liquidated in May 2003), Integrated Technology Express Inc., MediaTek and Novatek, and received a majority interest in AMIC Technology Inc. and minority interests in the other companies. After the establishment of these companies, United Microelectronics sold in 1997 its semiconductor design equipment and related assets to these companies at the fair market value of these assets. In December 2000, United Microelectronics sold all of its shares of AMIC Technology Inc. to AMIC Technology (Taiwan), Inc. In October 2003, we sold 17 million shares of our equity interest in Novatek, and in 2003, we sold 9 million shares of our equity interest in MediaTek. In 2004, we sold 6 million shares of Novatek and 7 million shares of Mediatek. As of March 31, 2005, we held 16.56% and 8.76% in Novatek and MediaTek, respectively.



**Table of Contents**

The following table shows our aggregate ownership interest in related fabless design companies that we enter into transactions from time to time as of March 31, 2005.

<u>Name</u>	<u>Ownership%</u>
AMIC Technology (Taiwan), Inc.	28.93
ITE Tech. Inc.	22.23
Davicom Semiconductor, Inc.	21.56
Novatek Microelectronics Corp.	16.56
Silicon Integrated Systems Corp.	16.16
MediaTek Inc.	8.76
Holtek Semiconductor Inc.	25.23

We provide foundry services to these fabless design companies on arm s-length prices and terms. We derived NT\$14,650 million, NT\$15,278 million and NT\$16,212 million (US\$511 million) of our net operating revenues in 2002, 2003 and 2004, from the provision of our foundry services to these fabless design companies.

We purchased silicon wafers on arm s-length prices and terms from Shin-Etsu in the amount of NT\$2,273 million, NT\$2,699 million and NT\$3,952 million (US\$125 million) in 2002, 2003 and 2004. Currently, Fortune Venture Capital Corporation has one seat on the board of director of Shin-Etsu.

Chiao Tung Bank became a wholly-owned subsidiary of Mega Financial in 2002. As of March 31, 2005, we had a 1.36% aggregate equity interest in Mega Financial, including the 0.52% equity interest held through Hsun Chieh. We have appointed Robert H.C. Tsao, one of our directors, to serve on the board of directors of Mega Financial and Stan Hung, our Chief Financial Officer, to serve as a supervisor of Mega Financial. In addition, Tzong-Yeong Lin, who served in the capacity of the representative of Chiao Tung Bank as one of our supervisors, resigned on May 25, 2005. In 2004, we paid off all of the loans in the amount of NT\$283 million extended by Chiao Tung Bank.

**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.

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

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. 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. On June 13, 2005, our shareholders approved a stock dividend of NT\$1 per share for an aggregate of 1,758,736,435 shares and a cash dividend of NT\$0.1 per share for an aggregate of NT\$1,758,736,435.

	<u>Cash Dividend per Share</u>	<u>Stock Dividend per Share(1)</u>	<u>Total Number of Shares Issued as Stock Dividend</u>	<u>Number of Outstanding Shares at Year End</u>
	NT\$	NT\$		
1995	0.5	5.0	417,459,806	1,343,478,004
1996		9.3	1,237,236,274	2,752,551,663
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

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

**Table of Contents****B. Significant Changes**

There has been no significant subsequent events following the close of the last financial year up to the date of this annual report on Form 20-F that are known to us and require disclosure in this annual report for which disclosure was not made in this annual report.

Our unconsolidated net operating revenues for the three months ended March 31, 2005 was NT\$20,286 million (US\$639 million). Our unconsolidated net operating revenues for the three months ended March 31, 2005 is 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 May 31, 2005 was NT\$21.20 per share.

	Closing Price Per Share(1)		Average Daily Trading Volume
	High	Low	
	NT\$	NT\$	(in thousands of shares)
2000	70.12	29.48	98,343.40
2001	40.64	18.11	82,638.91
2002	44.12	17.80	85,641.45
2003	29.81	17.09	109,409.47
First Quarter	21.19	17.09	82,213.65
Second Quarter	21.99	17.18	101,792.10
Third Quarter	28.70	20.56	169,120.26
Fourth Quarter	29.81	25.65	80,511.93
2004	31.57	19.40	91,555.80
First Quarter	31.57	25.83	110,902.58
Second Quarter	31.48	21.20	118,943.21
Third Quarter	23.90	20.50	74,446.71
Fourth Quarter	21.70	19.40	63,909.12
December	20.50	19.80	54,039.15
2005 (through June 15)	23.50	17.85	71,170.73
First Quarter	21.00	18.60	78,363.66

Edgar Filing: UNITED MICROELECTRONICS CORP - Form 20-F/A

January	20.40	18.90	58,527.14
February	21.00	19.90	144,867.43
March	20.50	18.60	58,886.17
Second Quarter (through June 15)	23.50	17.85	75,270.42
April	19.15	17.85	42,618.65
May	21.60	18.40	78,839.56
June (through June 15)	23.50	21.15	127,823.46

*Source: Bloomberg; Taiwan Stock Exchange.*

- (1) Information has been adjusted to give effect to 1,809,853,716 shares and 78,689,291 shares issued as stock dividend and employee bonus, respectively, in June 2000; 1,715,104,035 shares and 149,139,481 shares issued as stock dividend and employee bonus, respectively, in August 2001; 1,968,018,212 shares and 171,132,018 shares issued as stock dividend and employee bonus, respectively, in August 2002; 607,925,145 shares and 57,972,672 shares issued as stock dividend and employee bonus, respectively, in July 2003; 1,288,558,185 shares and 111,127,354 shares issued as stock dividend and employee bonus, respectively, in July 2004.

**Table of Contents****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 20 7. 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 May 31, 2005 was US\$3.74 per ADS. Each of our ADSs represents the right to receive five shares.

	Closing Price per ADS(1)		Average ADS Daily Trading
	High	Low	Volume
	US\$	US\$	
2000 (from September 19)	10.07	5.04	2,385,428
2001	8.34	3.50	3,025,946
2002	8.88	2.67	4,055,687
2003	5.26	2.65	4,207,149
First Quarter	3.45	2.65	3,393,434
Second Quarter	3.85	2.78	4,669,908
Third Quarter	5.11	3.39	4,696,963
Fourth Quarter	5.26	4.33	4,037,379
2004	5.70	3.25	3,328,227
First Quarter	5.51	4.56	3,837,980
Second Quarter	5.70	3.64	3,419,102
Third Quarter	4.08	3.34	2,893,315
Fourth Quarter	3.86	3.25	3,176,540
December	3.64	3.34	2,707,615
2005 (through June 15)	4.15	3.10	3,686,583
First Quarter	3.78	3.16	4,269,221
January	3.53	3.16	5,585,085
February	3.78	3.51	3,837,763
March	3.73	3.18	3,445,605
Second Quarter (through June 15)	4.15	3.10	3,016,000
April	3.35	3.10	2,073,005
May	3.76	3.28	2,679,548
June (through June 15)	4.15	3.79	5,458,582

Sources: Bloomberg

- (1) Information has been adjusted to give effect to 1,715,104,035 shares and 149,139,481 shares issued as stock dividend and employee bonus, respectively, in August 2001; 1,968,018,212 shares and 171,132,018 shares issued as stock dividend and employee bonus, respectively, in August 2002; 607,925,145 shares and 57,972,672 shares issued as stock dividend and employee bonus, respectively, in July 2003; 1,288,558,185 shares and 111,127,354 shares issued as stock dividend and employee bonus, respectively, in July 2004.

As of March 31, 2005, a total of 250,987,238 ADSs and 17,587,364,359 of our shares were outstanding. With certain limited exceptions, holders of shares that are not ROC persons are required to hold these shares through a brokerage or custodial account in the ROC. As of March 31, 2005, 250,987,238 shares were registered in the name of a nominee of Citibank, N.A., the depository under the deposit agreement. Citibank, N.A. has advised us that, as of March 31, 2005, 250,987,238 ADSs, representing these 1,254,936,190 shares, were held of record by Cede & Co. and 39,452 other U.S. persons. We have no further information as to shares held, or beneficially owned, by U.S. persons.





**Table of Contents**

**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 Shareholders**

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 shareholders conferred by ROC 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 ROC Company Act and our articles of incorporation provide that our board of directors is elected by shareholders and is responsible for the management of our business. As of March 31, 2005, our board of directors consisted of 9 directors. In the annual ordinary shareholders meeting held in June 2004, we approved the reduction of the number of managing directors from four to three by amending our articles of incorporation. Our current three managing directors are elected by our directors, and the Chairman of our board is elected by our managing directors. The Chairman presides at all meetings of our board of directors, and also has the authority to represent our company.

## **Table of Contents**

The term of office for our directors is three years, and our directors are elected by our shareholders by means of cumulative voting. The election for all of the directors and supervisors was held in June 2004. In addition, our articles of incorporation provide that our shareholders also elect three supervisors whose duties include, among other things, investigating our business and financial condition, inspecting our corporate records, calling our shareholders' meetings under certain circumstances, representing us in negotiations with our directors and notifying, when appropriate, our board of directors to cease acting in contravention of applicable law or regulation or in contravention of our articles of incorporation. The supervisors cannot concurrently serve as our directors or officers or employees. Pursuant to the ROC Company Act, a person may serve as our director or supervisor 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 or supervisor, in which case a natural person must be designated to act as the legal entity's representative. A legal entity that is our shareholder may designate its representative to be elected as our director or supervisor 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 or supervisor 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 or supervisor may serve the remainder of the term of office of the replaced director or supervisor. Currently, four of our directors and three of our supervisors 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 abstain from voting on such matter. Our articles of incorporation also provide that the compensation for all directors and supervisors shall be determined at a shareholders' meeting and 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 may allocate 10% of our net income as a legal reserve as remuneration to directors and supervisors. Our articles of incorporation do not impose a mandatory retirement age limit for our directors. Furthermore, our articles of incorporation do not impose a shareholding qualification for each director; however, our articles of incorporation require that our directors and supervisors in the aggregate shall own no less than 5% and 0.5%, respectively, of our issued shares. According to our current internal Loan Procedures, as amended in our annual shareholders' meeting held in June 2005, we shall not extend any loan to our directors or our supervisors.

## **Shares**

As of December 31, 2004, our authorized share capital was NT\$220 billion, divided into 22 billion shares, of which 17,791,981,859 shares were issued and 17,550,800,859 shares were outstanding. All shares presently issued are fully paid and in registered form, and existing shareholders are not subject to any capital calls. As of March 31, 2005, we had no outstanding convertible bonds, warrants or options on our shares, except for 930 million options we granted to our employees under our Employee Stock Options Plan as 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 September 2002, October 2003 and September 2004, we obtained approval by relevant ROC authorities to grant up to 1 billion, 150 million and 150 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.

**Table of Contents**

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

	<u>October 2002</u>	<u>January 2003</u>	<u>November 2003</u>	<u>March 2004</u>	<u>July 2004</u>	<u>October 2004</u>
			(in millions)			
Number of Options Granted	939	61	57	33	57	20
Number of Options Outstanding as of March 31, 2005	734	50	50	28	50	18

**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 ROC law to amend our articles of incorporation and obtain approval of our shareholders in a shareholders' meeting. We must also obtain the approval of, or submit a registration with, the ROC SFB and the Science Park Administration. According to the ROC 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 shareholders' meeting, which will reduce the number of new shares in which existing shareholders may have preemptive rights. Unless the percentage of the shares offered to the public is increased by a resolution, existing shareholders of the company have a preemptive right to acquire the remaining 75% to 80% of the issue in proportion to their existing shareholdings. According to the Corporate Merger and Acquisition Act of the ROC, as effective on February 8, 2002, if new shares issued by our company are solely for the purpose of acquisition or spin-off, the above-mentioned restrictions, including the employee stock ownership plan, the preemptive rights of the existing shareholders and the publicity requirement of a listed company, to such issuance of new shares may not be applied.

**Shareholders**

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

**Transfer of Shares**

Shares in registered form are transferred in book-entry form or by endorsement and delivery of the related share certificates. Transferees must have their names and addresses registered on our register in order to assert shareholder's rights against us. Our shareholders are required to file their respective specimen seals with our share registrar, SinoPac Securities Corp. Under the current ROC 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, 2005, provide that we, upon acceptance of the application from the Taiwan Securities Central Depository Co., Ltd., or TSCDC, may issue a large face value share certificate in exchange for every thousand shares in the custody of TSCDC, or issue one master certificate for all newly issued shares. If our shares are issued in one master certificate, the shares will be deposited for the custody of TSCDC, and the transfer of these shares will be carried out through the book-entry system maintained by TSCDC.

## **Table of Contents**

### **Shareholders Meetings**

We are required to hold an annual ordinary shareholders 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 shareholders holding no less than 3% of our paid-in share capital who have held these shares for more than a year. In addition, any of our supervisors may convene a shareholders meeting if our board of directors does not or cannot convene a shareholders meeting and when such a meeting is necessary for the benefit of the shareholders. At least 15 days advance written notice must be given of every extraordinary shareholders meeting and at least 30 days advance written notice must be given of every annual ordinary shareholders 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 ROC 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, 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 may be adopted by the holders of at least two-thirds of our shares represented at a meeting of shareholders 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 shareholders approval. In addition, according to the Corporate Merger and Acquisition Act of the ROC, 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 shareholder's meeting as required by the ROC Company Act.

### **Voting Rights**

Due to the amendment to the Company Act and the amendment made to our articles of incorporation accordingly, except for treasury shares, each common share is generally entitled to one vote and no voting discount will be applied. 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 shareholders meeting. The quorum for a shareholders meeting to discuss the ordinary resolutions is a majority of the total issued and outstanding shares. The election of directors and supervisors by our shareholders may be conducted by means of cumulative voting or other voting mechanisms adopted in our articles of incorporation. In all other matters, a shareholder must cast all his or her votes in the same manner when voting on any of these matters.

Our shareholders may be represented at an ordinary or extraordinary shareholders meeting by proxy if a valid proxy form is delivered to us five days before the commencement of the ordinary or extraordinary shareholders meeting. Voting rights attached to our shares exercised by our shareholders proxy are subject to the proxy regulation promulgated by the ROC SFB.

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

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

## **Table of Contents**

Our articles of incorporation provide that we may distribute 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

as remuneration to directors and supervisors.

The amount of no less than 5% of the residual amount after the distribution of the items illustrated above, plus any undistributed earnings from previous years, shall be distributed as bonus to employees in the form of new shares. In the annual ordinary shareholders meeting held in June 2005, our shareholders 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 shareholders meeting for approval.

In the annual ordinary shareholders meeting held in June 2005, our shareholders approved a change of the percentage of stock dividend issued to our shareholders, 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 ROC Company Act to make distributions to our shareholders of additional shares by capitalizing reserves, including the legal reserve and capital surplus of premiums from issuing stock and earnings from gifts received if we do not have losses. However, the capitalized portion payable out of our legal reserve is limited to 50% of the total accumulated legal reserve, and is payable only if and to the extent the accumulated legal reserve exceeds 50% of our paid-in capital.

For information as to ROC taxes on dividends and distributions, see E. Taxation ROC Tax Considerations.

## **Acquisition of Our Shares by Us**

An ROC company may not acquire its own common shares, except under certain exceptions provided in the ROC Company Act or the ROC Securities and Exchange Law. Under the new amendments to the ROC 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 Securities and Exchange Law, 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

Edgar Filing: UNITED MICROELECTRONICS CORP - Form 20-F/A

Exchange or by a tender offer, in accordance with the procedures prescribed by the ROC SFB, 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 shareholders' equity; provided that the shares so purchased shall be cancelled thereafter.



## **Table of Contents**

Prior to 2004, we announced several plans, none of which were binding on us, to buy back up to an aggregate of 1,551 million of our shares on the Taiwan Stock Exchange at the price range set forth in the plans. As of December 31, 2003, we purchased an aggregate of 335 million of our shares under these plans, 186 million of which were repurchased for transfer to our employees as permitted by the ROC Company Act and 149 million of which were repurchased for the conversion of the convertible bonds. On March 23, 2004, we announced a plan, which was not binding on us, to buy back up to 360 million of our shares on the Taiwan Stock Exchange at a price range of NT\$19.6 to NT\$47.5 per share between March 24, 2004 and May 23, 2004. As of May 23, 2004, we purchased 192 million of our shares under the 2004 plan at an average purchase price of NT\$27.06 per share. Of the repurchased shares, 137 million shares were transferred to our employees and 199 million shares were cancelled as of May 31, 2005. In addition, on May 13, 2005, we announced a plan which was not binding on us, to buy back up to 500 million of our shares on the Taiwan Stock Exchange at a price range of NT\$13.75 to NT\$28.45 per share between May 16, 2005 and July 15, 2005.

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 shareholders' rights attaching to such shares. In the event that we purchase our shares on the Taiwan Stock Exchange, our affiliates, directors, supervisors, managers and their respective spouses and minor children and/or nominees are prohibited from selling any of our shares during the period in which we 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.

## **Rights to Bring Shareholders' Suits**

Under the ROC Company Act, a shareholder may bring suit against us in the following events:

within 30 days from the date on which a shareholders' resolution is adopted, a shareholder may file a lawsuit to annul a shareholders' resolution if the procedure for convening a shareholders' 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 shareholder's claim.

if the substance of a resolution adopted at a shareholders' meeting contradicts any applicable law or regulation or our articles of incorporation, a shareholder may bring a suit to determine the validity of such resolution.

Shareholders may bring suit against our directors and supervisors under the following circumstances:

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

Shareholders 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 shareholders and such suit is filed within 30 days of such shareholders' vote.

## **Table of Contents**

In the event that any director, supervisor, manager or shareholder 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 our supervisors fail to claim for recovery, any shareholder may set forth a 30-day period for our board of directors or our supervisors to exercise the right. In the event our directors or our supervisors fail to exercise the right during such 30-day period, such requesting shareholder shall have the right to claim such recovery on our behalf. Our directors and supervisors 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 Shareholders**

Under the ROC Company Act and the Corporate Merger and Acquisition Act, dissenting shareholders are entitled to appraisal rights in the event of a spin-off or a merger and various other major corporate actions. Dissenting shareholders 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 shareholders may, among other things, exercise their appraisal rights by notifying us before the related shareholders meeting or by raising and registering their dissent at the shareholders meeting and also waive their voting rights.

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

## **Financial Statements**

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

## **Transfer Restrictions**

Our directors, supervisors, managers and shareholders 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 ROC law. Further, they may sell or transfer our shares on the Taiwan Stock Exchange only after reporting to the ROC SFB 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.

## **C. Material Contracts**

### **Lease Agreements**

For a summary of our material leases, see Item 4. Information on the Company B. Business Overview Manufacturing Facilities.

**Merger Agreement, dated as of February 26, 2004, between United Microelectronics Corporation and SiS Microelectronics Corporation**

On February 26, 2004, we signed a merger agreement with SiSMC in connection with our proposed acquisition of SiSMC through a share swap. Under the terms of the merger agreement, we issued 357 million new shares in exchange for 100% of SiSMC shares, at the ratio of one of our shares to 2.24 SiSMC shares, valuing the acquisition at NT\$10.7 billion. The acquisition is subject to a number of conditions, including obtaining approvals from Taiwan regulatory authorities, and was completed in July 2004.

## **Table of Contents**

### **Cross License Agreement, dated as of January 1, 2004, between United Microelectronics Corporation and Agere Systems Inc.**

We entered into a five-year cross license agreement with Agere effective as of January 1, 2004, which provides for the cross license of certain processes and topography. Under this agreement, Agere has granted to UMC and UMC's subsidiaries, nonexclusive, worldwide and non-transfereable licenses for manufacturing inventions of certain semiconductive devices under Agere's patents filed prior to January 1, 2009, and UMC has granted Agere, royalty-free, worldwide and non-transferable licenses for manufacturing inventions of certain semiconductive devices under UMC's patents filed prior to January 1, 2009.

### **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 ROC 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 under which the Qualified Foreign Institutional Investors, or QFII, designations have been abolished and the restrictions on foreign portfolio investors have been revised. According to the new rules, Foreign Institutional Investor, or FINI, means an entity which is incorporated under the laws of countries other than the ROC or the branch of a foreign entity which is established within the territory of the ROC, and Foreign Individual Investor ( FIDI ) means an overseas Chinese or a foreign natural person. In addition, the new rules also lifted some restrictions and simplified procedures of investment application.

#### **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.

Capital remitted into Taiwan under the foreign investment guidelines may be repatriated at any time without the approval of the ROC SFB. Capital gains and income on investments may also be repatriated at any time.

### **Foreign Investors**

Each FINI who wishes to invest directly in the ROC 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 ROC. 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 ROC custodian for a non-resident FINI is required to submit to the Central Bank of China, or 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.

## **Table of Contents**

Each FIDI who wishes to invest directly in the ROC securities market is also required to register with the Taiwan Stock Exchange and obtain an investment identification number. Any non-resident FIDI who invests in the ROC securities market is subject to the limitations on investment amount as jointly determined by the ROC SFB and CBC.

### **Foreign Investment Approval**

Foreign investors (both institutional and individual) who wish to make direct investments in the shares of ROC companies are required to submit a foreign investment approval application to the Investment Commission of the Ministry of Economic Affairs of the ROC 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 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-ROC 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 or other government authority.

In addition to the general restrictions against direct investments by foreign investors in ROC companies, foreign investors are currently prohibited from investing in certain prohibited industries in Taiwan under the Negative List. The prohibition of the Negative List is absolute in the absence of a specific exemption from the application of the Negative List. The prohibition on direct foreign investment in the prohibited industries 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.

### **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 Central Bank of China. Current regulations favor trade-related foreign exchange transactions. Consequently, foreign currency earned from exports of merchandise and services may now be retained and used freely by exporters. 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, ROC 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 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 only to remittances involving a conversion between NT dollars and U.S. dollars or other foreign currencies.

### **Depository Receipts**

In April 1992, the ROC SFB began allowing ROC companies listed on the Taiwan Stock Exchange to sponsor the issuance and sale of depository receipts evidencing depository shares. Approvals 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 depository receipts evidencing depository shares. On October 24, 2002, the ROC 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 depository receipts by way of private placements outside the ROC.



## Table of Contents

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 ROC SFB to, among other things, open a securities trading account with a local brokerage firm, pay ROC taxes, remit funds, and exercise shareholders' right. In addition, the withdrawing holder is also required to appoint a custodian bank with qualifications set forth by the Ministry of Finance 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 ROC or to withdraw the common shares represented by the depositary receipt and deliver the common shares to the holder. Citizens of the PRC are not permitted to withdraw and hold our common shares unless they obtain the approval from the competent authority. Due to the absence of relevant rules or guidelines, PRC persons are not currently able to conduct investments in the ROC.

No deposits of shares may be made in a depositary receipt facility and no depositary receipts may be issued against deposits without specific ROC SFB 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 withdrawn by and 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 ROC SFB 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 must obtain foreign exchange approval from the Central Bank of China 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 Central Bank of China 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.

## **Table of Contents**

### **E. Taxation**

#### **ROC Tax Considerations**

The following summarizes the principal ROC tax consequences of owning and disposing of the ADSs and shares to a holder of ADSs or shares that is not a resident of the ROC. An individual holder will be considered as not a resident of the ROC 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 ROC and non-ROC nationalities and has a registered address in the ROC. An entity holder will be considered as not a resident of the ROC if it is organized under the laws of a jurisdiction other than Taiwan and has no fixed place of business or other permanent establishment in the ROC. Prospective purchasers of ADSs should consult their own tax advisors concerning the tax consequences of owning ADSs or shares in the ROC 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 ROC resident in respect of shares represented by ADSs are subject to ROC withholding tax at the time of distribution. The current rate of withholding for non-residents is 30% for a non-resident individual and 25% for a non-resident entity 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. However, the rate of withholding is 20% if the non-resident holder obtains foreign investment approval pursuant to the Statute for Foreigner's Investment or the Statute for Overseas Chinese's Investment. 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 ROC law, gains realized on ROC securities transactions are exempt from income tax. In addition, transfers of ADSs by non-resident holders are not regarded as sales of ROC securities and, as a result, any gains derived therefrom are currently not subject to ROC income tax.

#### ***Securities Transaction Tax***

The ROC 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 ROC security transaction tax.

*Preemptive Rights*

Distribution of statutory preemptive rights for shares in compliance with the ROC Company Act is not subject to ROC tax. Proceeds derived from sales of statutory preemptive rights evidenced by securities by a non-resident holder may be subject to the ROC 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 (1) 25% of the gains realized for non-ROC entity holders and (2) 35% of the gains realized for non-ROC individual holders. Subject to compliance with the ROC law, we have sole discretion to determine whether statutory preemptive rights are evidenced by securities or not.

## **Table of Contents**

### ***Estate Taxation and Gift Tax***

ROC estate tax is payable on any property within the ROC of a deceased individual who is a non-resident individual and ROC gift tax is payable on any property located within the ROC donated by any such person. Estate tax is currently payable at rates ranging from 2% of the first NT\$600,000 to 50% of amounts over NT\$100,000,000. Gift tax is payable at rates ranging from 4% of the first NT\$600,000 to 50% of amounts over NT\$45,000,000. Under ROC estate and gift tax laws, the shares will be deemed located in the ROC 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***

At present, Taiwan has income tax treaties with Indonesia, Singapore, Australia, New Zealand, Gambia, Swaziland, Malaysia, Vietnam, Macedonia, the Netherlands, South Africa, the United Kingdom, Senegal and Sweden. It is unclear whether a non-ROC holder 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 ROC Income Tax law was enacted on January 1, 1998, to integrate the corporate income tax and the shareholder dividend tax with the aim of eliminating the double taxation effect for resident shareholders 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 the material 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 ROC, do not have a permanent establishment in the ROC and are not physically present in the ROC for 183 days or more within a calendar year. You are a U.S. holder if you are:

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) or partnership created or organized in or under the laws of the United States or any political subdivision thereof;

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 one or more U.S. persons have 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.

**Table of Contents**

This summary is based on current law, which is subject to change, perhaps retroactively. 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 depository and assumes that each obligation under the deposit agreement and any related agreement will be performed in accordance with their 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. In addition, it does not represent a detailed description of the U.S. federal income tax consequences applicable to you if you are subject to special treatment under 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;

a person liable for alternative minimum tax;

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

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

a U.S. holder whose functional currency is not the United States 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.**

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

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 parties involved in transactions in which ADSs are pre-released 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 ROC taxes described below could be affected by future actions that may be taken by the U.S. Treasury. Deposits or withdrawals of shares by U.S. holders for ADSs generally will not be subject to U.S. federal income tax.

---

**Table of Contents*****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 ROC withholding taxes) you receive on your shares or ADSs (other than certain pro rata distributions of shares to all shareholders) 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 ROC taxes, any reduction in the amount withheld on account of an ROC 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 depository. 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, 2009 may be subject to reduced rates of taxation. A foreign corporation is 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 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. 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 Internal Revenue Code of 1986, as amended (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. Holders should consult their own tax advisors regarding the application of these rules given their particular circumstances.

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 depository, 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 ROC 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 income or, for certain holders, financial services income. You may be subject to special rules if your foreign source income during the taxable year consists entirely of qualified passive income and if you have US\$300 or less, or US\$600 or less if you file a joint return, of creditable foreign taxes which you have paid or accrued during the taxable year. 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 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 advisor 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, 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.

## **Table of Contents**

It is possible that pro rata distributions of shares to all shareholders 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 so received will be determined by allocating the U.S. holder's basis in the old shares between the old shares and the new shares, based on their relative fair market values on the date of distribution. For U.S. tax purposes, any such tax-free share distribution and any distributions in excess of current and accumulated earnings and profits and distributions of shares 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 ROC 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 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 are capital assets that you have held for more than one year, your gain recognized will be taxed at a maximum rate of 15%. 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 ROC 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 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 2004) a passive foreign investment company ( 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 is income derived from certain dividends, interest, royalties, rents, 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.

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

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 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 result in our becoming a PFIC.

## Table of Contents

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.

In 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 a deduction from income. Under current law, the mark-to-market election may be available to holders of ADSs because the ADSs will be listed on the NYSE, which constitutes a qualified exchange as designated in the Internal Revenue Code, 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 it is intended that only the ADSs and not the shares will be 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 PFIC shares or ADSs at the end of the year over your adjusted tax basis in the shares. 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.

Your adjusted tax basis in PFIC 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 cease to be PFIC stock that is regularly traded on a qualified exchange or the Internal Revenue Service consents to the revocation of the election. You should consult your tax advisor about the availability of the mark-to-market election, and whether making the election would be advisable in 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 company as a qualified electing fund under section 1295 of the Internal Revenue 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.

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

U.S. holders who are individuals will not be eligible for reduced rates of taxation on any dividends received from us in taxable years beginning prior to January 1, 2009, 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.

## **Table of Contents**

### ***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 of your shares or ADSs paid 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, you will 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.

### ***Inheritance and Gift Tax***

The ROC imposes an estate tax on a decedent who owns shares, and possibly ADSs, even if the decedent was not a citizen or resident of the ROC. See ROC Tax Considerations. The amount of any inheritance tax paid to the ROC may be eligible for credit against the amount of U.S. federal estate tax imposed on your estate or heirs. You should consult your personal tax advisors to determine whether and to what extent you may be entitled to such credit.

The ROC also imposes a gift tax on the donation of any property located within the ROC. Under present law, a comparable U.S. tax credit for foreign gift taxes (such as those imposed by the ROC) is not available.

### **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 450 Fifth Street, N.W., 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.

#### **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.

**Table of Contents**

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. Our treasury operations are subject to internal audit on a regular basis. We do not hold or issue derivative financial instruments for trading purposes.

Since export sales are primarily conducted in U.S. dollars, we had U.S. dollar-denominated accounts receivables of US\$385 million as of December 31, 2004. As of the same date, we also had Japanese Yen-denominated accounts receivable of ¥7,052 million attributable to our Japanese operations. We had U.S. dollar- and Japanese Yen-denominated accounts payables of US\$151 million and ¥11,090 million.

As of December 31, 2004, we had U.S. dollar-, Japanese Yen-, NT dollar-, HK dollar- and Euro-denominated savings accounts of US\$29 million, ¥6,864 million, NT\$305 million, HK\$1 million and 1 million, respectively. We also had time deposits denominated in U.S. dollars, Japanese Yen, NT dollars and Euros of US\$48 million, ¥42,929 million, NT\$71,300 million and 6 million, respectively.

Our primary market risk exposures relate to interest rate movements on borrowings and exchange rate movements on foreign currency-denominated 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 forward exchange contracts and interest rate swaps has been determined by obtaining the estimated amount from our bankers that would be received/(paid) to terminate the contracts.

The following table provides information as of December 31, 2004 on our derivative financial instruments.

	<b>As of December 31, 2004</b>	
	<b>Book</b>	
	<b>Value</b>	<b>Fair Value</b>
	<b>(in NT\$ thousands)</b>	
Credit-linked Deposits and Repackage Bonds	2,942,434	2,942,434
Interest Rate Swaps	35,532	(416,149)
Forward Contracts	38,633	38,633

**Interest Rate Risk**

Our major market risk exposure is changing interest rates. Our exposure to market risk for changes in interest rates relates primarily to our long-term debt obligations. We primarily enter into debt obligations to support general corporate purposes including capital expenditures and working capital needs. We use interest rate swaps from time to time to modify our exposure to interest rate movements and reduce borrowing costs. Interest rate swaps limit the risks of fluctuating interest rates by allowing us to convert a portion of the interest on our borrowings from a variable rate to a fixed rate. As of December 31, 2004, we had the following interest rate swaps in effect:

<u>Notional Amount</u>	<u>Contract Period</u>	<u>Interest Rate Received</u>	<u>Interest Rate Paid</u>
------------------------	------------------------	-------------------------------	---------------------------



Edgar Filing: UNITED MICROELECTRONICS CORP - Form 20-F/A

NT\$7,500 millions	May 20, 2003 to May 20, 2008	4.0% minus USD 12-month LIBOR	1.52%
NT\$7,500 millions	May 20, 2003 to May 20, 2010	4.3% minus USD 12-month LIBOR	1.48%

The table below provides information as of December 31, 2004 about our financial instruments that are sensitive to changes in interest rates, including debt obligations and certain assets. For debt obligations, the table presents principal cash flows and related weighted average interest rates by expected maturity dates. The information is presented in the currencies in which the instruments are denominated.

**Table of Contents****Expected Maturity Dates**

	2005	2006	2007	2008	2009 and thereafter	Total	Fair Value
(in millions, except percentages)							
<b>Time Deposit:</b>							
Fixed Rate (US\$)	48					48	48
Average Interest Rate	0.85-2.30%					0.85-2.30%	0.85-2.30%
Fixed Rate (¥)	42,929					42,929	42,929
Average Interest Rate	0.04-0.05%					0.04-0.05%	0.04-0.05%
Fixed Rate (NT\$)	71,300					71,300	71,300
Average Interest Rate	0.85-1.40%					0.85-1.40%	0.85-1.40%
Fixed Rate ( )	6					6	6
Average Interest Rate	2.00%					2.00%	2.00%
<b>Unsecured Short-term Loans:</b>							
Variable Rate (US\$)	91					91	91
Average Interest Rate	2.69-2.89%					2.69-2.89%	2.69-2.89%
Variable Rate (¥)	24					24	24
Average Interest Rate	0.86%					0.86%	0.86%
Variable Rate (NT\$)	70					70	70
Average Interest Rate	1.65-1.7%					1.65-1.7%	1.65-1.7%
<b>Bonds:</b>							
Unsecured (NT\$)	2,250	10,250	2,250	10,500	7,500	32,750	33,954
Fixed Rate	5.1195-5.185%	3.4896-5.285%	5.217-5.285%	1.52-5.285%	1.48%	1.48%-1.5285%	1.48%-0.5285%
Unsecured Exchangeable (US\$)			98			98	110
Fixed Rate			0%			0%	0%
Unsecured (JP¥)			8,630		21,500	30,130	28,235
Fixed rate			0%		0%	0%	0%
Secured (NT\$)	570					570	570
Fixed Rate	5.6%					5.6%	5.6%
<b>Secured Long-term Loans:</b>							
Variable Rate (US\$)	171	171	171	87		600	600
Average Interest Rate	2.20-3.55%	2.20-3.55%	2.20-3.55%	2.20-3.55%		2.20-3.55%	2.20-3.55%
<b>Unsecured Long-term Loans:</b>							
Variable Rate (JP¥)		7,500	7,500			15,000	15,000
Average Interest Rate		0.81-0.86%	0.81-0.86%			0.81-0.86%	0.81-0.86%

**Foreign Currency Risk**

Although the majority of our transactions are in NT dollars, some transactions are based in other currencies. The primary currencies to which we are exposed are the U.S. dollar and the Japanese Yen. We have in the past, and may in the future, enter into short-term, forward exchange contracts to hedge the impact of foreign currency fluctuations on certain underlying assets, liabilities, and firm commitments for operating expenses and capital expenditures denominated in U.S. dollars. The purpose of entering into these hedges is to minimize the impact of foreign currency fluctuations on the results of operations. Gains and losses on foreign currency contracts and foreign currency-denominated liabilities are recorded in the period of the exchange rate changes. The contracts have maturity dates that do not exceed three months.

As of December 31, 2004, we had US\$87 million outstanding of foreign currency forward contracts.

**ITEM 12. DESCRIPTION OF SECURITIES OTHER THAN EQUITY SECURITIES**

Not applicable.

**Table of Contents**

**PART II**

**ITEM 13. DEFAULTS, DIVIDEND ARREARAGES AND DELINQUENCIES**

None of these events occurred in any of 2002, 2003 or 2004.

**ITEM 14. MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS AND USE OF PROCEEDS**

None.

**ITEM 15. CONTROLS AND PROCEDURES**

An evaluation of the effectiveness of our disclosure controls and procedures was carried out under the supervision and with the participation of our management as at the reporting date prior to the filing of our 2004 Annual Report on Form 20-F.

Following such evaluation, we have continued the process of documenting and testing our internal control procedures in preparation of our becoming subject to the requirements of Section 404 of the Sarbanes-Oxley Act of 2002 (the Act). Beginning with our Annual Report on Form 20-F for the year ending December 31, 2006, we will be required under Section 404 of the Act to provide annual management assessments of the effectiveness of our internal controls over financial reporting and a report by our independent registered public accounting firm addressing these assessments.

Subsequent to the filing of our initial annual report on Form 20-F for the year ended December 31, 2004, and in the process of addressing comments received from the US SEC on our original annual report, we discovered that certain US GAAP financial information was miscalculated and resulted in the restatements of our consolidated financial statements for the years ended December 31, 2002, 2003 and 2004 with respect to certain US GAAP financial information as disclosed in Note 33 to our financial statements. The restatements related to non-cash charges and adjustments to goodwill, derivative instruments, and employee stock bonuses.

During the period covered by this report, there were no significant changes in our internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting. As a result of discovering the miscalculation noted above, we have taken a series of steps to strengthen our internal control over financial reporting in light of the above material weakness and ineffectiveness of controls and procedures at the reporting date, including increasing our internal resources to address US GAAP matters and increasing the level of management review and oversight of our financial statement close process.

**ITEM 16A. AUDIT COMMITTEE FINANCIAL EXPERT**

Our Board of Directors has determined that Jack K.C.Wang, Mao-Chung Lin, and Paul S.C. Hsu qualify as audit committee financial experts as defined in Item 16A of the instruction to Form 20-F.

**ITEM 16B. CODE OF ETHICS**

In March, 2005 we adopted the Code of Ethics for Directors, Supervisors and Officers and the Employee Code of Conduct. The Employee Code of Conduct, which is applicable to all employees, replaced the code of ethics filed with the Securities and Exchange Commission in our 2003 annual report on Form 20-F. We have also created a separate code of ethics applicable to our directors, supervisors and officers. A copy of each of the Code of Ethics for Directors, Supervisors and Officers and the Employee Code of Conduct are displayed on our website at [http://www.umc.com/english/pdf/Code\\_of\\_Ethics.pdf](http://www.umc.com/english/pdf/Code_of_Ethics.pdf) and [http://www.umc.com/english/pdf/Code\\_of\\_Conduct.pdf](http://www.umc.com/english/pdf/Code_of_Conduct.pdf), respectively.

**Table of Contents****ITEM 16C. PRINCIPAL ACCOUNTANT FEES AND SERVICES**

The following table sets forth the aggregate fees by categories specified below in connection with certain professional services rendered by Diwan, Ernst & Young, our principal external auditors, for the years indicated.

	<b>For the year ended December 31,</b>		
	<b>2003</b>	<b>2004</b>	
	<b>NT\$</b>	<b>NT\$</b>	<b>US\$</b>
	<b>(in thousands)</b>		
Audit Fees <sup>(1)</sup>	30,311	31,882	1,004
Audit-related Fees <sup>(2)</sup>	2,665	820	26
Tax Fees <sup>(3)</sup>	4,117	3,820	120
All Other Fees <sup>(4)</sup>	48		
<b>Total</b>	<b>37,141</b>	<b>36,522</b>	<b>1,150</b>

- (1) Audit fees consist of fees associated with the annual audit, review of our quarterly financial statements and statutory audits. They also include fees billed for those services that are normally provided by the independent accountants in connection with statutory and regulatory filings.
- (2) Audit-related fees consist of fees billed for assurance and related services that are reasonably related to the performance of the audit or review of our financial statements but not described in footnote (1) above. These services include consultations concerning financial accounting and reporting standards and review of capitalization of retained earnings, employee stock option application, treasury share buy-back programs and certification of UMCi to Singapore authorities.
- (3) Tax fees include fees billed for professional services rendered by Diwan, Ernst & Young, primarily in connection with our tax compliance activities.
- (4) All other fees comprise fees for all other services provided by Diwan, Ernst & Young, other than those services covered in footnotes (1) to (3) above.

Prior to forming an audit committee, our board of directors is responsible for the oversight of our independent accountants' work. The policy of our board of directors is to pre-approve all audit and non-audit services provided by Diwan, Ernst & Young, including audit services, audit-related services, tax services and other services, as described above. After our audit committee was established in March 2005, all audit and non-audit services provided by Diwan, Ernst & Young were pre-approved by our audit committee.

**ITEM 16D. EXEMPTIONS FROM THE LISTING STANDARDS FOR AUDIT COMMITTEES**

None.

**ITEM 16E. PURCHASE OF EQUITY SECURITIES BY THE ISSUER AND AFFILIATED PURCHASERS**

Edgar Filing: UNITED MICROELECTRONICS CORP - Form 20-F/A

On March 23, 2004, we announced a plan which was not binding on us, to buy back up to 360 million of our shares on the Taiwan Stock Exchange at a price range of NT\$19.6 to NT\$47.5 per share between March 24, 2004 and May 23, 2004.

<b>Period</b>	<b>Total Number of Common Shares Purchased</b>	<b>Average Price Paid per Common Share (NT\$)</b>	<b>Total Number of Common Shares Purchased as Part of Publicly Announced Plans or Programs</b>	<b>Maximum Number of Common Shares that May Yet be Purchased Under the Plans or Programs</b>
March (from March 24, 2004)				360,000,000
April				360,000,000
May (to May 23, 2004)	192,067,000	27.06	192,067,000	
<b>Total</b>	<b>192,067,000</b>	<b>27.06</b>	<b>192,067,000</b>	

For information relating to our recently announced share buy-back plan, see Item 5. Operating and Financial Review and Prospects Treasury Share Programs.

**Table of Contents**

**PART III**

**ITEM 17. FINANCIAL STATEMENTS**

The Registrant has elected to provide the financial statements and related information specified in Item 18.

**ITEM 18. FINANCIAL STATEMENTS**

*The following is a list of the restated audited consolidated financial statements and report of independent registered public accounting firm included in this annual report beginning on page F-1.*

	<b>Page</b>
Consolidated Financial Statements of United Microelectronics Corporation and Subsidiaries	
<u>Report of Independent Registered Public Accounting Firm.</u>	F-2
<u>Consolidated Balance Sheets at December 31, 2003 and 2004.</u>	F-3
<u>Consolidated Statements of Operations for each of the three years ended December 31, 2002, 2003 and 2004.</u>	F-4
<u>Consolidated Statements of Changes in Stockholders' Equity for each of the three years ended December 31, 2002, 2003 and 2004.</u>	F-5
<u>Consolidated Statements of Cash Flows for each of the three years ended December 31, 2002, 2003 and 2004.</u>	F-8
<u>Notes to the Consolidated Financial Statements.</u>	F-10



**Table of Contents****ITEM 19. EXHIBITS****Exhibit**

<b>Number</b>	<b>Description of Exhibits</b>
*1.1	Articles of Incorporation of the Company as last amended on June 13, 2005 (English Translation)
2.1	Form of Deposit Agreement among the Company, and Holders and Beneficial Owners of American Depositary Shares issued thereunder, including the form of American Depositary Shares (1)
4.1	Lease Agreement with Hsinchu Science Park Administration in relation to government-owned land located at Hsinchu Science Park, Ko-Kuan Section, No. 20-22, Hsinchu, Taiwan, ROC, the site of Fab 6A (in Chinese with English summary translation) (2)
4.2	Lease Agreement with Hsinchu Science Park Administration in relation to government-owned land located at Hsinchu Science Park, third section of first phase, Hsinchu, Taiwan, ROC, the site of Fab 8AB and United Tower (in Chinese with English summary translation) (3)
4.3	Lease Agreement with Hsinchu Science Park Administration in relation to government-owned land located at Hsinchu Science Park, third section of first phase, Hsinchu, Taiwan, ROC, the site of Fab 8C (in Chinese with English summary translation) (4)
4.4	Lease Agreement with Hsinchu Science Park Administration in relation to government-owned land located at Hsinchu Science Park, third section of first phase, Hsinchu, Taiwan, ROC, the site of Fab 8D (in Chinese with English summary translation) (5)
4.5	Lease Agreement with Hsinchu Science Park Administration in relation to government-owned land located at Hsinchu Science Park, third section of second phase, Hsinchu, Taiwan, ROC, the site of Fab 8E (in Chinese with English summary translation) (6)
4.6	Lease Agreement with Hsinchu Science Park Administration in relation to government-owned land located at Hsinchu Science Park, Gin-Shan section, Hsinchu, Taiwan, ROC, the site of Fab 8F (in Chinese with English summary translation) (7)
4.7	Lease Agreement with Southern Taiwan Science Park Administration in relation to government-owned land located at Tainan Science Park, Tainan, Taiwan, ROC, the site of Fab 12A (in Chinese with English summary translation) (8)
4.8	Merger Agreement, entered into as of February 26, 2004, between United Microelectronics Corporation and SiS Microelectronics Corporation (English Translation) (9)
*8.1	List of Significant Subsidiaries of United Microelectronics Corporation
11.1	Code of Ethics for Directors, Supervisors and Officers (10)
11.2	Employee Code of Conduct (11)
*12.1	Certification of our Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
*12.2	Certification of our Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
*13.1	Certification of our Chief Executive Officer pursuant to 18 U.S.C. § 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
*13.2	Certification of our Chief Financial Officer pursuant to 18 U.S.C. § 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
*15.1	Consent of Independent Registered Public Accounting Firm

\* filed herewith.

- (1) Incorporated by reference to Exhibit (a) to the Registrant's Registration Statement on Form F-6 (File No. 333-13796) filed with the Commission on August 6, 2001.
- (2) Incorporated by reference to Exhibit 10.6 to the Registrant's Registration Statement on Form F-1 (File No. 333-12444) filed with the Commission on August 28, 2000, as amended.
- (3) Incorporated by reference to Exhibit 10.7 to the Registrant's Registration Statement on Form F-1 (File No. 333-12444) filed with the Commission on August 28, 2000, as amended.
- (4) Incorporated by reference to Exhibit 10.8 to the Registrant's Registration Statement on Form F-1 (File No. 333-12444) filed with the Commission on August 28, 2000, as amended.

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

- (5) Incorporated by reference to Exhibit 10.9 to the Registrant's Registration Statement on Form F-1 (File No. 333-12444) filed with the Commission on August 28, 2000, as amended.
- (6) Incorporated by reference to Exhibit 10.10 to the Registrant's Registration Statement on Form F-1 (File No. 333-12444) filed with the Commission on August 28, 2000, as amended.
- (7) Incorporated by reference to Exhibit 10.11 to the Registrant's Registration Statement on Form F-1 (File No. 333-12444) filed with the Commission on August 28, 2000, as amended.
- (8) Incorporated by reference to Exhibit 10.12 to the Registrant's Registration Statement on Form F-1 (File No. 333-12444) filed with the Commission on August 28, 2000, as amended.
- (9) Incorporated by reference to Exhibit 4.8 to the Registrant's Annual Report on Form 20-F for the fiscal year ended December 31, 2003 (File No. 1-15128) filed with the Commission on June 17, 2004.
- (10) Incorporated by reference to Exhibit 99.1 to the Form 6-K filed with the Commission on March 25, 2005.
- (11) Incorporated by reference to Exhibit 99.2 to the Form 6-K filed with the Commission on March 25, 2005.

**Table of Contents**

**SIGNATURES**

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F/A and that it has duly caused and authorized the undersigned to sign this annual report on its behalf.

United Microelectronics Corporation

By:           /s/ Chitung Liu          

Name: Chitung Liu

Title: Chief Financial Officer

Date: February 13, 2006

**Table of Contents**

**United Microelectronics Corporation and Subsidiaries**

**Consolidated Financial Statements as of December 31, 2002, 2003 and 2004**

**Together with Report of Independent Registered Public Accounting Firm**

**F-1**

**Table of Contents**

**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

To the Board of Directors and Shareholders of

United Microelectronics Corporation

We have audited the accompanying consolidated balance sheets of United Microelectronics Corporation and subsidiaries as of December 31, 2003 and 2004, and the related consolidated statements of operations, changes in stockholders' equity and cash flows for the years ended December 31, 2002, 2003 and 2004. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the Republic of China and the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. We were not engaged to perform an audit of the Company's internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of United Microelectronics Corporation and subsidiaries as of December 31, 2003 and 2004, and the consolidated results of their operations and their cash flows for the years ended December 31, 2002, 2003 and 2004, in conformity with the Guidelines Governing the Preparation of Financial Reports by Securities Issuers and accounting principles generally accepted in the Republic of China, which differ in certain respects from accounting principles generally accepted in the United States of America (see note 33 to the consolidated financial statements).

As more fully described in note 33, the consolidated financial statements for the years ending December 31, 2002, 2003 and 2004 have been restated.

/s/ Diwan, Ernst & Young

DIWAN, ERNST & YOUNG

CERTIFIED PUBLIC ACCOUNTANTS

Taipei, Taiwan

Republic of China

June 10, 2005 except for note 33 as to which the date is February 9, 2006



**Table of Contents****UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES****CONSOLIDATED BALANCE SHEETS**

(Expressed in thousands)

	Notes	As of December 31,		
		2003	2004	
		NT\$	NT\$	US\$
<b>Assets</b>				
Current assets				
Cash and cash equivalents	2, 4	118,771,773	101,381,973	3,194,139
Marketable securities, net	2, 5	1,820,328	3,143,697	99,045
Notes receivable	6	8,756	2,040	64
Notes receivable - related parties	25	101,753	39,034	1,230
Accounts receivable, net	2, 7	15,079,068	11,267,614	354,997
Accounts receivable - related parties, net	2, 25	3,285,371	2,036,788	64,171
Other receivables	2	708,946	661,623	20,845
Other financial assets, current	2, 8, 31	2,446,603	453,845	14,299
Inventories, net	2, 9	8,370,165	10,012,998	315,470
Prepaid expenses		752,697	327,810	10,328
Deferred income tax assets, current	2, 22	2,953,378	3,608,968	113,704
Restricted bank balances	26	21,875		
Other current assets		1,089		
<b>Total current assets</b>		<b>154,321,802</b>	<b>132,936,390</b>	<b>4,188,292</b>
Funds and long-term investments	2, 10			
Long-term investments accounted for under the equity method		21,905,026	21,395,116	674,074
Long-term investments accounted for under the cost method		16,964,768	11,538,899	363,545
Prepaid long-term investments		52,343	16,630	524
Less: Allowance for loss on decline in market value		(62,888)	(238,367)	(7,510)
<b>Total funds and long-term investments</b>		<b>38,859,249</b>	<b>32,712,278</b>	<b>1,030,633</b>
Other financial assets, noncurrent	2, 8, 31	1,848,530	2,562,754	80,742
Property, plant and equipment	2, 11, 25, 26, 27			
Land		1,560,237	1,320,095	41,591
Buildings		17,721,538	21,237,012	669,093
Machinery and equipment		273,066,176	358,501,761	11,294,951
Furniture and fixtures		2,521,756	2,638,541	83,130
Leasehold improvements		40,848	38,620	1,217
<b>Total cost</b>		<b>294,910,555</b>	<b>383,736,029</b>	<b>12,089,982</b>
Less : Accumulated depreciation		(168,200,915)	(223,457,030)	(7,040,234)
Add : Construction in progress and prepayments		22,846,921	31,745,156	1,000,162
<b>Property, plant and equipment, net</b>		<b>149,556,561</b>	<b>192,024,155</b>	<b>6,049,910</b>
Goodwill	2, 24	9,978	4,497,726	141,705
Deferred charges	2	3,038,689	2,864,368	90,245

Edgar Filing: UNITED MICROELECTRONICS CORP - Form 20-F/A

Deferred income tax assets, noncurrent	2, 22	4,485,003	3,790,903	119,436
Other assets	2, 12, 26	2,393,991	4,916,309	154,893
		<u>                    </u>	<u>                    </u>	<u>                    </u>
Total assets		354,513,803	376,304,883	11,855,856
		<u>                    </u>	<u>                    </u>	<u>                    </u>
<b>Liabilities and Stockholders Equity</b>				
Current liabilities				
Short-term loans	13	1,884,899	2,986,919	94,106
Notes payable		153,892	189,497	5,970
Accounts payable		5,787,440	4,724,287	148,843
Accounts payable - related parties	25	812,849	682,048	21,489
Income tax payable	2	224,930	241,449	7,607
Accrued expenses		5,213,758	9,204,536	289,998
Payable to equipment suppliers		7,370,809	8,071,379	254,297
Current portion of long-term interest-bearing liabilities	14, 15, 25, 26	20,923,327	8,261,146	260,275
Current portion of capacity deposits	27	1,767,910	2,237,086	70,482
		<u>                    </u>	<u>                    </u>	<u>                    </u>
Total current liabilities		44,139,814	36,598,347	1,153,067
Long-term liabilities				
Bonds payable	2, 10, 14	58,213,913	43,018,761	1,355,348
Long-term loans	15, 25, 26	2,120,533	18,269,357	575,595
Accrued pension liabilities	2,16	2,309,892	2,713,408	85,489
Deposits-in		5,255	19,301	608
Other long-term liabilities		413,326	582,956	18,366
		<u>                    </u>	<u>                    </u>	<u>                    </u>
Total long-term liabilities		63,062,919	64,603,783	2,035,406
		<u>                    </u>	<u>                    </u>	<u>                    </u>
Total liabilities		107,202,733	101,202,130	3,188,473
		<u>                    </u>	<u>                    </u>	<u>                    </u>
Minority interests		15,078,024	8,728,877	275,012
Stockholders equity				
Capital stock	2, 17, 18, 24	161,407,435	177,923,859	5,605,667
Capital reserve	2, 18, 24	80,074,184	84,933,195	2,675,904
Retained earnings	20	26,794,291	42,401,701	1,335,907
Unrealized loss on long-term investments	2	(90,864)	(424,713)	(13,381)
Cumulative translation adjustment	2	913,877	(1,319,452)	(41,571)
Treasury stock	2, 19	(36,865,877)	(37,140,714)	(1,170,155)
		<u>                    </u>	<u>                    </u>	<u>                    </u>
Total stockholders equity		232,233,046	266,373,876	8,392,371
		<u>                    </u>	<u>                    </u>	<u>                    </u>
Total liabilities and stockholders equity		354,513,803	376,304,883	11,855,856
		<u>                    </u>	<u>                    </u>	<u>                    </u>

The accompanying notes are an integral part of these consolidated financial statements



**Table of Contents****UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES****CONSOLIDATED STATEMENTS OF INCOME****(Expressed in thousands, except per share data)**

	Notes	For the year ended December 31,			
		2002	2003	2004	
		NT\$	NT\$	NT\$	US\$
Net operating revenues	2, 25	75,425,356	95,703,732	129,190,740	4,070,282
Cost of goods sold	21, 25	(62,887,302)	(73,937,813)	(92,392,315)	(2,910,911)
<b>Gross profit</b>		<b>12,538,054</b>	<b>21,765,919</b>	<b>36,798,425</b>	<b>1,159,371</b>
Operating expenses	21				
Sales and marketing expenses		(1,526,907)	(2,170,897)	(2,775,289)	(87,438)
General and administrative expenses		(3,530,756)	(3,996,466)	(4,853,119)	(152,903)
Research and development expenses		(7,368,133)	(5,858,629)	(7,363,620)	(231,998)
		(12,425,796)	(12,025,992)	(14,992,028)	(472,339)
<b>Operating income</b>		<b>112,258</b>	<b>9,739,927</b>	<b>21,806,397</b>	<b>687,032</b>
Non-operating income					
Interest revenue		1,644,100	1,141,264	1,040,652	32,787
Investment income accounted for under the equity method, net	2, 10	230,600	300,724	551,779	17,385
Dividend income		256,543	837,696	1,163,438	36,655
Gain on disposal of property, plant and equipment	2	66,236	216,992	139,951	4,409
Gain on disposal of investments, net	2, 14	8,473,213	6,885,374	12,868,569	405,437
Exchange gain, net	2		256,452		
Recovery on decline in market value of marketable securities	2		10,806		
Other income	2, 14	702,287	764,190	635,092	20,009
		11,372,979	10,413,498	16,399,481	516,682
Non-operating expenses					
Interest expense	11, 25	(1,455,374)	(1,326,155)	(1,434,823)	(45,205)
Other investment loss	2	(1,419,371)	(1,866,454)	(473,529)	(14,919)
Loss on disposal of property, plant and equipment	2	(45,814)	(170,576)	(230,609)	(7,266)
Exchange loss, net	2, 31	(103,703)		(928,891)	(29,266)
Loss on decline in market value and obsolescence of inventories	2	(955,074)	(1,443,565)	(1,884,466)	(59,372)
Financial expenses		(426,560)	(387,916)	(396,909)	(12,505)
Other losses	2, 14	(63,093)	(263,054)	(1,112,082)	(35,037)
		(4,468,989)	(5,457,720)	(6,461,309)	(203,570)
<b>Income before income tax and minority interests</b>		<b>7,016,248</b>	<b>14,695,705</b>	<b>31,744,569</b>	<b>1,000,144</b>
Income tax expense	2, 22	(270,731)	(979,469)	(373,800)	(11,777)

Edgar Filing: UNITED MICROELECTRONICS CORP - Form 20-F/A

Minority interests		326,515	304,021	472,612	14,890
Net income		7,072,032	14,020,257	31,843,381	1,003,257
Earnings per share - basic (in dollars)	2, 23	0.42	0.84	1.89	
Shares used in per share calculation - basic		16,740,780	16,644,032	16,828,205	
Earnings per share - diluted (in dollars)	2, 23	0.42	0.83	1.86	
Shares used in per share calculation - diluted		16,957,878	17,025,359	17,094,848	
Pro forma information on earnings as if unconsolidated subsidiaries investment in the Company is not treated as treasury stock					
Net income			14,020,257	31,843,381	
Earnings per share - basic (in dollars)	2, 23		0.84	1.89	
Earnings per share - diluted (in dollars)	2, 23		0.83	1.86	

The accompanying notes are an integral part of these consolidated financial statements

Table of Contents

**UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS EQUITY**

(Expressed in thousands)

	Capital Stock		Retained Earnings				Unrealized Loss on Long-term Investments	Cumulative Translation Adjustment	Treasury Stock	Total
	Common Stock	Shares	Capital Reserve	Special Reserve	Legal Reserve	Unappropriated Earnings				
	NT\$		NT\$	NT\$	NT\$	NT\$				
Balance at January 1, 2002	133,356,954	13,335,695	82,115,682	2,242,284	10,686,225	21,223,870	(470,931)	(160,470)	(35,671,361)	213,322,253
Appropriation of 2001 retained earnings										
Special reserve				(1,610,302)		1,610,302				
Stock dividends	19,680,182	1,968,018				(19,680,182)				
Employees bonus	1,711,320	171,132				(1,711,320)				
Purchase of treasury stock									(2,739,918)	(2,739,918)
Treasury stock held by unconsolidated subsidiaries									(171,840)	(171,840)
Net income in 2002						7,072,032				7,072,032
Transfer of capital reserve arising from gain on disposal of property, plant and equipment to retained earnings			(170,473)			170,473				
Transfer of capital reserve arising from gain on disposal of property, plant and equipment of investees to retained earnings			(672)			672				
Adjustment of capital reserve accounted for			(69,046)							(69,046)

under the equity method											
Changes in unrealized loss on long-term investments of investees							(878,317)				(878,317)
Changes in cumulative translation adjustment								889,321			889,321
Balance at December 31, 2002	154,748,456	15,474,845	81,875,491	631,982	10,686,225	8,685,847	(1,349,248)	728,851	(38,583,119)		217,424,485

The accompanying notes are an integral part of these consolidated financial statements

F-5

**Table of Contents****UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES****CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS EQUITY (Continued)**

(Expressed in thousands)

	Capital Stock		Retained Earnings					Unrealized Loss on Long-term Investments	Cumulative Translation Adjustment	Treasury Stock	Total
	Common Stock	Shares	Capital Reserve	Special Reserve	Legal Reserve	Unappropriated Earnings					
	NT\$		NT\$	NT\$	NT\$	NT\$					
Balance at January 1, 2003	154,748,456	15,474,845	81,875,491	631,982	10,686,225	8,685,847	(1,349,248)	728,851	(38,583,119)	217,424,485	
Appropriation of 2002 retained earnings											
Legal reserve					724,250	(724,250)					
Special reserve				715,012		(715,012)					
Stock dividends	6,079,252	607,926				(6,079,252)					
Directors and supervisors remuneration							(5,650)			(5,650)	
Employees bonus	579,727	57,973				(579,727)					
Purchase of treasury stock									(2,056,064)	(2,056,064)	
Treasury stock transferred to employees							(565,716)		3,773,306	3,207,590	
Net income in 2003						14,020,257				14,020,257	
Transfer of capital reserve arising from gain on disposal of property, plant and equipment of investees to retained earnings				(325)		325					
Adjustment of capital reserve accounted for under the equity method				(1,800,982)						(1,800,982)	
Changes in unrealized							1,258,384			1,258,384	

loss on long-term investments of investees										
Changes in cumulative translation adjustment								185,026		185,026
Balance at December 31, 2003	161,407,435	16,140,744	80,074,184	1,346,994	11,410,475	14,036,822	(90,864)	913,877	(36,865,877)	232,233,046

The accompanying notes are an integral part of these consolidated financial statements

**Table of Contents****UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES****CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS EQUITY (Continued)**

(Expressed in thousands)

	Capital Stock			Retained Earnings			Unrealized Loss on Long-term Investments	Cumulative Translation Adjustment	Treasury Stock	Total	
	Common Stock	Shares	Capital Collected in Advance	Capital Reserve	Special Reserve	Legal Reserve					Unappropriated Earnings
	NT\$		NT\$	NT\$	NT\$	NT\$					NT\$
Balance at January 1, 2004	161,407,435	16,140,744		80,074,184	1,346,994	11,410,475	14,036,822	(90,864)	913,877	(36,865,877)	232,233,041
Appropriation 2003 Retained Earnings											
Legal reserve						1,402,026	(1,402,026)				
Special Reserve					(1,256,123)		1,256,123				
Stock Dividends	12,224,284	1,222,428					(12,224,284)				
Directors and Supervisors Remuneration							(12,618)				(12,618)
Employees Bonus	1,111,273	111,127					(1,111,273)				
Transfer of Capital Reserve Common Stock	661,298	66,130		(661,298)							
Stock issued for merger	3,571,429	357,143		6,100,571							9,672,000
Purchase of Treasury Stock										(5,198,020)	(5,198,020)
Cancellation of Treasury Stock	(1,497,280)	(149,728)		(538,107)			(2,887,796)			4,923,183	
Exercise of Employees Stock Options	441,380	44,138	4,040	342,973							788,391
Net income in 2004							31,843,381				31,843,381
Adjustment of Capital Reserve accounted for under the Equity method				(385,128)							(385,128)
Changes in Unrealized Loss on Long-term								(333,849)			(333,849)

Investments of vestees											
Changes in cumulative translation adjustment								(2,233,329)			(2,233,329)
Balance at December 31, 2004 (in NT\$)	177,919,819	17,791,982	4,040	84,933,195	90,871	12,812,501	29,498,329	(424,713)	(1,319,452)	(37,140,714)	266,373,871
Balance at December 31, 2004 (in US\$)	5,605,540		127	2,675,904	2,863	403,670	929,374	(13,381)	(41,571)	(1,170,155)	8,392,371

The accompanying notes are an integral part of these consolidated financial statements



**Table of Contents****UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES****CONSOLIDATED STATEMENTS OF CASH FLOWS**

(Expressed in thousands)

	For the year ended December 31,			
	2002	2003	2004	
	NT\$	NT\$	NT\$	US\$
<b>Cash flows from operating activities:</b>				
Net income	7,072,032	14,020,257	31,843,381	1,003,257
Adjustments to reconcile net income to net cash provided by (used in) operating activities:				
Minority interests	(326,515)	(304,021)	(472,612)	(14,890)
Depreciation	36,567,535	39,233,479	45,589,891	1,436,354
Amortization	1,699,766	1,629,854	1,582,524	49,859
Loss (recovery) on decline in market value of marketable securities	10,806	(10,806)	58,853	1,854
Bad debt expenses (Reversal on allowance for doubtful accounts)	(66,512)	80,249	103,259	3,253
Loss on decline in market value and obsolescence of inventories	955,074	1,443,565	1,884,466	59,372
Investment income accounted for under the equity method	(230,600)	(300,724)	(551,779)	(17,384)
Cash dividends received under the equity method	156,820	273,762	564,897	17,798
Impairment loss on long-term investments	1,408,565	1,866,454	414,676	13,065
Write-off of deferred charges			269,325	8,485
Gain on disposal of investments	(8,473,213)	(6,885,374)	(12,868,569)	(405,437)
Loss (gain) on disposal of property, plant and equipment	30,532	(23,832)	97,009	3,056
(Gain) loss on reacquisition of bonds	(256,204)	(145,019)	59	2
Amortization of bond premiums		(19,386)	(10,050)	(317)
Gain on settlement of exchangeable bonds	(145,671)	(519,544)	(356,521)	(11,233)
Changes in assets and liabilities:				
Notes receivable	217,922	(25,138)	69,435	2,188
Accounts receivable	(3,380,836)	(6,919,470)	976,727	30,773
Other receivables	(55,869)	2,719,915	121,313	3,822
Inventories	(3,638,525)	(1,331,056)	(2,832,846)	(89,252)
Prepaid expenses	(1,605)	124,294	836,340	26,350
Deferred income tax assets	125,072	853,864	280,824	8,848
Other current assets		(139)	1,268,347	39,960
Notes payable	245	(245)	35,605	1,122
Accounts payable	443,884	1,971,892	2,504,155	78,896
Income tax payable	283,728	(64,417)	(182,728)	(5,757)
Accrued expenses	(1,373,026)	1,162,050	3,812,541	120,118
Other current liabilities	2,674	352,182	316,746	9,979
Compensation interest payable	78,977	67,938	(126,111)	(3,973)
Accrued pension liabilities	450,060	299,270	435,909	13,734
Capacity deposits	(1,028,162)	74,820	(1,725,822)	(54,374)
Other long-term liabilities		313	(1,314)	(41)
<b>Net cash provided by operating activities</b>	<b>30,526,954</b>	<b>49,624,987</b>	<b>73,937,930</b>	<b>2,329,487</b>
<b>Cash flows from investing activities:</b>				
(Increase) decrease in marketable securities, net	(839,551)	723,834	(569,735)	(17,950)

Edgar Filing: UNITED MICROELECTRONICS CORP - Form 20-F/A

(Increase) decrease in other financial assets, net	(6,853,960)	2,665,117	1,503,980	47,384
Acquisition of long-term investments	(3,754,478)	(9,849,367)	(5,560,766)	(175,197)
Proceeds from disposal of long-term investments	12,385,637	11,041,934	8,254,496	260,066
Withdrawal of prepayments for long-term investments			70,383	2,217
Acquisition of minority interests		(4,168,706)	(6,814,323)	(214,692)
Acquisition of property, plant and equipment	(35,977,747)	(24,819,683)	(81,110,208)	(2,555,457)
Proceeds from disposal of property, plant and equipment	333,180	840,760	718,470	22,636
Increase in deferred charges	(1,695,110)	(675,460)	(978,741)	(30,836)
Decrease in other assets, net	29,293	127,139	1,354,137	42,664
Acquisition of subsidiaries	(65,988)			
	<u>                    </u>	<u>                    </u>	<u>                    </u>	<u>                    </u>
Net cash used in investing activities	(36,438,724)	(24,114,432)	(83,132,307)	(2,619,165)
	<u>                    </u>	<u>                    </u>	<u>                    </u>	<u>                    </u>

The accompanying notes are an integral part of these consolidated financial statements

F-8

**Table of Contents****UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES****CONSOLIDATED STATEMENTS OF CASH FLOWS (Continued)**

(Expressed in thousands)

	For the year ended December 31,			
	2002	2003	2004	
	NT\$	NT\$	NT\$	US\$
<b>Cash flows from financing activities:</b>				
Increase in short-term loans, net	388,100	615,040	655,873	20,664
Proceeds from long-term loans	4,425,000	680,400	23,075,700	727,023
Repayment of long-term loans	(10,047,079)	(14,269,647)	(9,366,412)	(295,098)
Proceeds from bonds issued	13,097,062	29,095,410		
Redemption of bonds	(1,140,000)	(2,209,104)	(16,336,953)	(514,712)
Reacquisition of bonds	(879,100)	(2,156,908)	(41,392)	(1,304)
Remuneration paid to directors and supervisors		(5,650)	(12,618)	(398)
Increase in deposits-in, net	1,152	5,147	5,513	174
Purchase of treasury stock	(2,877,190)	(2,262,897)	(5,758,968)	(181,442)
Exercise of employee stock options		42,934	788,393	24,839
Treasury stock transferred to employees		3,207,590		
Proceeds from minority shareholders on stock issuance of subsidiaries	194,341	4,838,835	158,608	4,997
Net cash provided by (used in) financing activities	3,162,286	17,581,150	(6,832,256)	(215,257)
Effect of exchange rate changes on cash and cash equivalents	747,864	777,620	(1,363,167)	(42,948)
Net increase (decrease) in cash and cash equivalents	(2,001,620)	43,869,325	(17,389,800)	(547,883)
<b>Cash and cash equivalents at beginning of year</b>	<b>76,904,068</b>	<b>74,902,448</b>	<b>118,771,773</b>	<b>3,742,022</b>
<b>Cash and cash equivalents at end of year</b>	<b>74,902,448</b>	<b>118,771,773</b>	<b>101,381,973</b>	<b>3,194,139</b>
<b>Supplemental disclosures of cash flow information :</b>				
Cash paid for interest	1,993,014	1,581,736	1,974,367	62,204
Cash paid for income tax	198,036	94,841	296,820	9,352
<b>Investing activities partially paid by cash :</b>				
Acquisition of property, plant and equipment	32,284,302	23,401,654	81,726,103	2,574,861
Add: Payable at beginning of year	12,482,283	8,788,838	7,370,809	232,225
Add: Transferred from merger with SiSMC			84,675	2,668
Less: Payable at end of year	(8,788,838)	(7,370,809)	(8,071,379)	(254,297)
Cash paid for acquiring property, plant and equipment	35,977,747	24,819,683	81,110,208	2,555,457
<b>Investing and financing activities not affecting cash flows :</b>				
Principal amount of exchangeable bonds exchanged by bondholders		194,304	11,614,141	365,915
Book value of reference shares delivered for exchange		(75,505)	(3,898,638)	(122,830)
Elimination of related balance sheet accounts		4,348	90,983	2,866

Recognition of gain on disposal of investments	123,147	7,806,486	245,951
--	---------	-----------	---------

The accompanying notes are an integral part of these consolidated financial statements

F-9

**Table of Contents**

UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. General Descriptions of Reporting Entities

United Microelectronics Corporation (the Company) was incorporated in May 1980 and commenced operations in April 1982. The Company is a full service semiconductor wafer foundry, and provides a variety of services to fit individual customer needs. These services include intellectual property, embedded IC design, design verification, mask tooling, wafer fabrication, and testing. The Company's common shares were publicly listed on the Taiwan Stock Exchange (TSE) in July 1985 and its American Depositary Shares (ADSs) were listed on the New York Stock Exchange (NYSE) in September 2000.

Based on the resolution of the board of directors' meeting on February 26, 2004, the effective date of the merger with SiS Microelectronics Corp. (SiSMC) was July 1, 2004. The Company was the surviving company, and SiSMC was the dissolved company. The merger was approved by the relevant government authorities. All the assets, liabilities, rights, and obligations of SiSMC have been fully incorporated into the Company since July 1, 2004.

The Company's consolidated financial statements include the financial statements of the Company and the following subsidiaries (hereinafter referred to collectively as the Group):

Hsun Chieh Investment Co., Ltd. (Hsun Chieh) was incorporated in January 2000 and is engaged in the business of investments. The Company owned 99.97% of interest in Hsun Chieh as of December 31, 2003 and 2004.

UMC Japan (UMCJ) was incorporated in May 1984 in Japan and is engaged in the business of sales and manufacturing of integrated circuit. The Group owned 51.89% and 51.93 % of interest in UMCJ as of December 31, 2003 and 2004, respectively.

UMC Group (USA) (UMC-USA) was incorporated in August 1997 and is engaged in the business of sales of semiconductor products and providing related foundry services. The Company owned 100% of interest in UMC-USA as of December 31, 2003 and 2004.

UMCi Ltd. (UMCi) was incorporated in January 2001 and is engaged in the business of sales and manufacturing of integrated circuit. The Group owned 77.72% of interest in UMCi as of December 31, 2003, and the Company owned 100% of interest in UMCi as of December 31, 2004.

United Microelectronics (Europe) B.V. (UME BV) was incorporated in May 1989 and is engaged in the business of sales of semiconductor products and providing related foundry services. The Company acquired UME BV in May 2002, and owned 100% of interest as of December 31, 2003 and 2004.

Edgar Filing: UNITED MICROELECTRONICS CORP - Form 20-F/A

United Microdisplay Optronics Corp. (UMO) was incorporated in September 2002 and is engaged in the business of sales and manufacturing of chips for Liquid Crystal on Silicon (LCOS). The Company owned 83.48% of interest in UMO as of December 31, 2003 and 2004.

**F-10**

**Table of Contents**

UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Fortune Venture Capital Corporation (Fortune), Unitruth Investment Corp., UMC Capital Corporation, United Microelectronics Corp. (Samoa), and United Foundry Service, Inc. were excluded from the consolidation (see Note 2 - Principles of Consolidation).

2. Summary of Significant Accounting Policies

The financial statements were prepared in conformity with the Guidelines Governing the Preparation of Financial Reports by Securities Issuers and accounting principles generally accepted in the Republic of China (ROC).

Summary of significant accounting policies is as follows:

*Principles of Consolidation*

The consolidated financial statements include the accounts of the Company and certain majority-owned (above 50%) subsidiaries in accordance with the requirements of the Statements of Financial Accounting Standards of the Republic of China (ROC SFAS) No. 7. All intercompany accounts and transactions have been eliminated in the consolidated financial statements.

Pursuant to ROC SFAS NO.7, if the total assets and operating revenues of a subsidiary are less than 10% of the non-consolidated total assets and operating revenues of the Company, respectively, the subsidiary's financial statements may, at the option of the Company, not be consolidated. Irrespective of the above test, when the total combined assets or operating revenues of all such non-consolidated subsidiaries constitute up to 30% of the Company's non-consolidated total assets or operating revenues, then each individual subsidiary with total assets or operating revenues up to 3% of the Company's non-consolidated total assets or operating revenues has to be included in the consolidation. Such subsidiaries are included in the consolidated financial statements thereafter, unless the percentage of the combined total assets or operating revenues for all such subsidiaries becomes less than 20% of the Company's respective non-consolidated amount.

The difference between the acquisition cost and the net equity of the subsidiary is amortized over 5 years.

**Table of Contents**

UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

*Foreign Currency Transactions*

Transactions denominated in foreign currencies are translated into New Taiwan Dollars at the exchange rates prevailing on the transaction dates. Receivables, other monetary assets, and liabilities denominated in foreign currencies are translated into New Taiwan Dollars at the exchange rates prevailing on the balance sheet date. Exchange gains or losses are included in the current year's results. However, exchange gains or losses from investments in foreign entities are recorded as cumulative translation adjustments in stockholders' equity.

*Translation of Foreign Currency Financial Statements*

The financial statements of foreign subsidiaries are translated into New Taiwan Dollars using the spot rates as of each financial statement date for asset and liability accounts, average exchange rates for profit and loss accounts, historical exchange rates for equity accounts, and exchange rates on dividend declaration date for dividends. The cumulative translation effects from subsidiaries using functional currencies other than the New Taiwan Dollars are included in the cumulative translation adjustment in stockholders' equity.

*Use of Estimates*

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that will affect the amount of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amount of revenues and expenses during the reported period. Actual results could differ from those estimates.

*Cash Equivalents*

Cash equivalents are short-term, highly liquid investments that are readily convertible to known amounts of cash and with maturity dates that do not present significant risks on changes in value resulting from changes in interest rates, including commercial paper with original maturities of 3 months or less.

*Marketable Securities*

Marketable securities are recorded at cost when acquired and are stated at the lower of aggregate cost or market value on the balance sheet date. Cash dividends are recorded as dividend income when received. Costs of money market funds and short-term notes are identified specifically while other marketable securities are determined on the weighted average method. The market values of listed debt, equity securities, and



closed-end funds are determined by the average closing price during the last month of the fiscal year. The market value for open-end funds is determined by the net asset value at the balance sheet date. The amount by which the aggregate cost exceeds the market value is reported as a loss in the current year. In subsequent periods, recoveries of the market value are recognized as a gain to the extent that the market value does not exceed the original aggregate cost of the investment.

**F-12**

**Table of Contents**

UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Allowance for Doubtful Accounts

The allowance for doubtful accounts is provided based on management's judgment and on the evaluation of collectibility and aging analysis of accounts and other receivables.

Inventories

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 adjusted to actual costs using the weighted average method at the end of each month. Inventories are stated at the lower of aggregate cost or market value at the balance sheet date. The market values of raw materials and supplies are determined on the basis of replacement cost while the work in process and finished goods are determined by net realizable values. An allowance for loss on decline in market value and obsolescence is provided, when necessary.

Long-term Investments

Long-term investments are recorded at cost when acquired. Investments acquired by contribution of technological know-how are credited to deferred credits among affiliates, which will be amortized to income over a period of 5 years.

Investments of less than 20% of the outstanding voting shares in listed investees, where significant influence on operating decisions of the investees does not reside with the Group, are accounted for by the lower of aggregate cost or market value method. The unrealized loss resulting from the decline in market value of investments that are held for long-term investment purpose is deducted from the stockholders' equity. The market value is determined by the average closing price during the last month of the fiscal year. Investments of less than 20% of the outstanding voting shares in unlisted investees are accounted for under the cost method. Impairment losses for the investees will be recognized if an other than temporary impairment is evident and the book value after recognizing the losses shall be treated as a new cost basis of such investment.

Investment income or loss from investments in both listed and unlisted investees is accounted for under the equity method provided that the Group owns at least 20% of the outstanding voting shares of the investees and has significant influence on operational decisions of the investees. The difference of the acquisition cost and the underlying equity in the investee's net assets is amortized over 5 years.

The change in the Group's proportionate share in the net assets of its investee resulting from its subscription to additional shares of stock, issued by such investee, at the rate not proportionate to its existing equity ownership in such investee, is charged to the capital reserve and long-term investments account.



**Table of Contents**

UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Unrealized intercompany gains and losses arising from downstream transactions with investees accounted for under the equity method are eliminated in proportion to the Group's ownership percentage while those from transactions with majority-owned (above 50%) subsidiaries are eliminated entirely. Unrealized intercompany gains and losses arising from upstream transactions with investees accounted for under the equity method are eliminated in proportion to the Group's ownership percentage. Unrealized intercompany gains and losses arising from transactions between investees accounted for under the equity method are eliminated in proportion to the multiplication of the Group's ownership percentage; while those arising from transactions between majority-owned subsidiaries are eliminated in proportion to the Group's ownership percentage in the subsidiary incurred with a gain or loss.

*Property, Plant and Equipment*

Property, plant and equipment are stated at cost. Interest incurred on loans used to finance the construction of property, plant and equipment is capitalized and depreciated accordingly.

Maintenance and repairs are charged to expense as incurred. Significant renewals and improvements are treated as capital expenditure and are depreciated accordingly. When property, plant and equipment are disposed, their original cost and accumulated depreciation are written off and the related gain or loss is classified as non-operating income or expenses. Idle assets are transferred to other assets according to the lower of net book or net realizable value, with the difference charged to non-operating expenses. The corresponding depreciation expenses provided are also classified as non-operating expenses.

Depreciation is provided on the straight-line basis using the estimated economic life of the assets less salvage value, if any. When the estimated economic life expires, property, plant and equipment, which are still in use, are depreciated over the newly estimated remaining useful life using the salvage value. The estimated economic life of the property, plant and equipment is as follows: buildings - 3 to 55 years; machinery and equipment - 3 to 6 years; transportation equipment - 2 to 5 years; furniture and fixtures - 2 to 20 years; leased assets and leasehold improvements - the lease period, or estimated economic life, whichever is shorter.

*Intangible Assets*

Patents are stated at cost and amortized over their estimated economic life using the straight-line method. Technological know-how is stated at cost and amortized over its estimated economic life using the straight-line method. Goodwill arising from the merger is amortized using the straight-line method over 15 years. At each balance sheet date, the Group assesses whether there is any indication of impairment other than temporary. If any such indication exists, the recoverable amount is estimated and provision for impairment loss is provided accordingly. The book value after recognizing the impairment loss is recorded as the new cost.

**Table of Contents**

UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

*Deferred Charges*

Deferred charges are stated at cost and amortized on a straight-line basis as follows: bonds issuance costs over the life of the bonds, patent license fees - the term of contract or estimated economic life of the related technology, and software - 3 years.

At each balance sheet date, the Group assesses whether there is any indication of impairment other than temporary. If any such indication exists, the recoverable amount is estimated and provision for impairment losses is provided accordingly. The book value after recognizing the impairment loss is recorded as the new cost.

*Convertible and Exchangeable Bonds*

The issuance costs of convertible and exchangeable bonds are classified as deferred charges and amortized over the life of the bonds.

The excess of the stated redemption price over the par value is accrued as compensation interest payable over the redemption period, using the effective interest method.

When convertible bondholders exercise their conversion rights, the book value of bonds is credited to common stock at an amount equal to the par value of the common stock and the excess is credited to capital reserve; no gain or loss is recognized on bond conversion.

When exchangeable bondholders exercise their rights to exchange for the reference shares, the book value of the bond is to be offset against the book value of the investment in reference shares and the related stockholders' equity accounts, with the difference recognized as gain or loss on disposal of investments.

*Pension Plan*

The net pension cost is computed based on an actuarial valuation in accordance with the provision of the Statements of Financial Accounting Standards of the Republic of China (ROC SFAS) No. 18, which requires consideration of pension cost components such as service cost, interest cost, expected return on plan assets, and the amortization of net obligation at transition, pension gain or loss, and prior service cost.



**Table of Contents**

UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

*Employee Stock Option Plan*

The Group applies intrinsic value method to recognize the difference between the market price of the stock and the exercise price of its employee stock option as compensation cost. Starting January 1, 2004, the Group also discloses pro forma net income and earnings per share under the fair value method for only these options granted since January 1, 2004.

*Treasury Stock*

The Group adopted the ROC SFAS No. 30, which requires that treasury stock held by the Group itself to be accounted for under the cost method. Cost of treasury stock is shown as a deduction to stockholders' equity, while gain or loss from selling treasury stock is treated as an adjustment to the capital reserve. The Group's stock held by its subsidiaries is also treated as treasury stock in the Group's account.

*Revenue Recognition*

The main sales term of the Group is Free on Board (FOB) or Free Carrier (FCA). Revenue is recognized when ownership and liability for risk of loss or damage to the products have been transferred to customers, usually upon shipment. Sales returns and discounts taking into consideration customers' complaints and past experiences are accrued in the same year of sales.

*Capital Expenditure versus Operating Expenditure*

An expenditure is capitalized when it is probable that future economic benefits associated with the expenditure will flow to the Company and the expenditure amount exceeds a predetermined level. Otherwise it is charged to expense when incurred.

*Income Tax*

The Group adopted the ROC SFAS No. 22 Accounting for Income Taxes for inter-period and intra-period income tax allocation. Provision for income tax includes deferred income tax resulting from temporary differences, loss carry-forward and investment tax credits. Deferred income tax assets and liabilities are recognized for the expected tax consequences of temporary differences between the tax bases of assets and liabilities and their reported amounts in the financial statements using enacted tax rates and laws that will be in effect when the difference is expected to reverse. Valuation allowance on deferred income tax assets is provided to the extent that it is more likely than not that the tax benefits will not be realized.

According to the ROC SFAS No. 12, the Group recognized the tax benefit from the purchase of equipment and technology, research and development expenditure, employee training, and certain equity investments.

**F-16**



**Table of Contents**

UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Income tax (10%) on unappropriated earnings is recorded as expense in the year when the shareholders have resolved that the earnings shall be retained.

*Earnings per Share*

Earnings per share are computed according to the ROC SFAS No. 24. Basic earnings per share is computed by dividing net income (loss) by weighted average number of shares outstanding during the year. Diluted earnings per share is computed by taking basic earnings per share into consideration plus additional common shares that would have been outstanding if the dilutive share equivalents had been issued. The net income (loss) would also be adjusted for the interest and other income or expenses derived from any underlying dilutive share equivalents. The weighted average outstanding shares are adjusted retroactively for stock dividends and bonus share issues.

*Derivative Financial Instruments*

The interest rate swap agreements entered into for hedging purposes are accounted for on a net accrual basis in accordance with the contractual interest rate as an adjustment to the interest income or expense of the hedged items.

Foreign exchange forward contracts are held to hedge the exchange rate risk arising from net assets or liabilities denominated in foreign currency. These forward contracts are translated and recorded using the spot rate at the inception of the contracts, and the discount or premium of the forward contracts is amortized over their lifespan. The difference between the spot rate at the inception of a forward contract and the spot rate at the balance sheet date is reflected in the statement of income. The receivables and payables of the foreign exchange forward contracts are offset and the resulting balances are recorded as either assets or liabilities. Exchange gains or losses from the settlement of forward contracts are included in the current period's earnings.

*Merger*

The Company merged with SiSMC and recognized the sum of the difference between the acquisition costs, which are the market price of equity stocks issued and other related costs, and the fair value of the identifiable net assets acquired as goodwill in compliance with the ROC SFAS No. 25 Enterprise Mergers Accounting of Purchase Method. The fair value of identifiable net assets and goodwill deducted from the par value of the equity stocks issued and other related costs is recognized as capital reserve.

3. Accounting Change

None.

**F-17**

**Table of Contents**

## UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## 4. Cash and Cash Equivalents

	As of December 31,	
	2003	2004
	NT\$ 000	NT\$ 000
Cash:		
Cash on hand	3,344	2,396
Checking and savings accounts	3,263,716	5,963,814
Time deposits	105,578,263	86,889,832
<b>Subtotal</b>	<b>108,845,323</b>	<b>92,856,042</b>
Cash equivalents:		
Commercial paper	9,926,450	8,525,931
<b>Total</b>	<b>118,771,773</b>	<b>101,381,973</b>

## 5. Marketable Securities, Net

	As of December 31,	
	2003	2004
	NT\$ 000	NT\$ 000
Listed equity securities	1,443,545	1,446,302
Convertible bonds	376,783	1,756,248
<b>Total</b>	<b>1,820,328</b>	<b>3,202,550</b>
Less: Allowance for loss on decline in market value		(58,853)
<b>Net</b>	<b>1,820,328</b>	<b>3,143,697</b>

## 6. Notes Receivable

As of December 31,	
2003	2004

Edgar Filing: UNITED MICROELECTRONICS CORP - Form 20-F/A

	NT\$ 000	NT\$ 000
Notes receivable	8,756	2,040

7. Accounts Receivable, Net

	As of December 31,	
	2003	2004
	NT\$ 000	NT\$ 000
Accounts receivable	15,500,554	11,779,505
Less: Allowance for sales returns and discounts	(325,745)	(437,549)
Less: Allowance for doubtful accounts	(95,741)	(74,342)
Net	15,079,068	11,267,614

F-18

**Table of Contents**

## UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## 8. Other Financial Assets, Current

	As of December 31,	
	2003	2004
	NT\$ 000	NT\$ 000
Credit-linked deposits and repackage bonds	4,166,594	2,942,434
Interest rate swaps	128,539	35,532
Forward contracts		38,633
<b>Total</b>	<b>4,295,133</b>	<b>3,016,599</b>
Less: Noncurrent portion	(1,848,530)	(2,562,754)
<b>Net</b>	<b>2,446,603</b>	<b>453,845</b>

Please refer to Note 31 for disclosures on risks of other financial assets.

## 9. Inventories, Net

	As of December 31,	
	2003	2004
	NT\$ 000	NT\$ 000
Raw materials	209,616	252,847
Supplies and spare parts	1,607,312	2,208,545
Work in process	6,880,234	7,837,998
Finished goods	194,651	1,500,101
<b>Total</b>	<b>8,891,813</b>	<b>11,799,491</b>
Less: Allowance for loss on decline in market value and obsolescence	(521,648)	(1,786,493)
<b>Net</b>	<b>8,370,165</b>	<b>10,012,998</b>

- (1) The insurance coverage for inventories amounted to NT\$8,328 million and NT\$11,093 million as of December 31, 2003 and 2004, respectively.
- (2) Inventories were not pledged.



**Table of Contents**

## UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## 10. Long-term Investments

(1) Details of long-term investments are as follows:

(Equity securities refer to common shares unless otherwise stated)

Investee Company	As of December 31,			
	2003		2004	
	Amount	Percentage of Ownership or Voting Rights	Amount	Percentage of Ownership or Voting Rights
	NT\$ 000		NT\$ 000	
<i>Investments accounted for under the equity method:</i>				
United Foundry Service, Inc.	95,484	100.00	103,881	100.00
UMC Capital Corporation	1,265,822	100.00	1,310,493	100.00
United Microelectronics Corp. (Samoa)	7,463	100.00	5,854	100.00
Unitruth Investment Corp.			100,115	100.00
Fortune Venture Capital Corporation	2,280,265	99.99	2,354,878	99.99
Pacific Venture Capital Co., Ltd	313,298	49.99	304,810	49.99
Thintek Optronics Corp.	73,421	49.99	53,618	49.99
UCA Technology, Inc.	49,500	49.50	43,097	49.50
United Radiotek Incorporation	91,426	49.50	86,107	49.04
Vista Point, Inc.	62,030	48.77	31,263	48.77
DuPont Photomasks Taiwan Ltd.	1,069,669	45.35	1,058,515	45.35
Unitech Capital Inc.	757,050	42.00	730,930	42.00
UC Fund II	164,162	35.45	150,079	35.45
Unimicron Technology Corp.	4,875,575	33.41	5,280,435	32.65
RiRa Electronics, Inc.	43,355	32.50	13,106	32.50
Star Semiconductor Corp.	47,022	48.48	37,161	28.20
AFA Technology, Inc.	70,372	48.97	42,660	26.53
Holtek Semiconductor Inc.	715,142	27.59	731,442	25.23
Crystal Media, Inc.			21,150	24.88
Faraday Technology Corp.	1,918,758	24.82	1,940,771	23.88
ITE Tech Inc.	341,310	24.38	281,313	22.23
Novatek Microelectronics Corp. (Note A)	1,380,336	20.95	1,735,661	19.12
Ubit Technology, Inc. (Note A)	19,900	39.80	17,120	18.99
Harvatek Corporation (Note A)	278,527	18.84	349,074	18.23
Patentop, Ltd. (Note A)	11,688	18.00	6,599	18.00
AMIC Technology Corporation (Note A)	142,154	16.96	125,071	16.82

**Table of Contents**

## UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Investee Company	As of December 31,			
	2003		2004	
	Amount	Percentage of Ownership or Voting Rights	Amount	Percentage of Ownership or Voting Rights
	NT\$ 000		NT\$ 000	
<i>Investments accounted for under the equity method: (continued)</i>				
Applied Component Technology Corp. (Note A)	43,872	21.42	19,874	16.44
Silicon Integrated Systems Corp. (Note C)	5,288,088	16.18	4,226,303	16.16
U-Media Technology, Inc. (Note A)			12,000	11.11
Smedia Technology Corp. (Note A)			18,000	10.59
SerComm Corporation (Note A)	168,827	10.46	174,903	9.80
AMOD Technology Co., Ltd. (Note A)			5,875	9.40
Davicom Semiconductor, Inc. (Note A)			22,958	2.50
Bravotek Corporation	37,500	50.00		
VastView Technology, Inc.	60,567	33.81		
Chariotek Inc.	28,500	47.50		
Advance Materials Corporation	166,443	15.78		
Wiseware Technology Corporation	37,500	25.00		
Subtotal	21,905,026		21,395,116	
<i>Investments accounted for under the cost method or the lower of cost or market value method:</i>				
VastView Technology, Inc.			29,759	19.94
Kits OnLine Technology Corp.	56,231	15.91	56,231	15.91
Advance Materials Corporation			152,321	15.78
Everglory Resource Technology Co., Ltd.	74,000	15.14	74,000	15.14
LighTuning Tech., Inc.	24,772	15.08	24,772	15.08
Printech International Inc.	30,000	12.00	30,000	12.00
Golden Technology Venture Capital Investment Corp.	80,000	10.67	80,000	10.67
MediaTek Incorporation	1,055,237	11.13	969,048	10.06
NCTU Spring I Technology Venture Capital Investment Corp.	43,482	10.06	43,482	10.06
Trendchip Technologies Corp.	60,406	9.25	60,406	9.25
Incomm Technologies Co., Ltd.	44,480	12.60	36,140	8.67
United Industrial Gases Co., Ltd.	146,250	8.27	146,250	8.11
Ralink Technology Corporation	55,500	7.40	55,500	7.40
Subtron Technology Co., Ltd.	244,080	8.14	244,080	7.29



**Table of Contents**

## UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Investee Company	As of December 31,			
	2003		2004	
	Amount	Percentage of Ownership or Voting Rights	Amount	Percentage of Ownership or Voting Rights
	NT\$ 000		NT\$ 000	
<i>Investments accounted for under the cost method or the lower of cost or market value method (continued):</i>				
EE Solution, Inc.			51,900	7.28
Chipsence Corp.			41,800	6.91
Giga Solution Technology Co., Ltd.			105,000	6.83
Epitech Corporation	94,613	6.90	117,823	6.75
Fortune Semiconductor Corporation	71,500	8.21	71,500	6.64
NCTU Spring Venture Capital Co., Ltd.	20,000	6.28	20,000	6.28
Riselink Venture Capital Corp.			80,000	6.20
C-Com Corporation	62,681	14.97	9,806	5.36
Cosmos Technology Venture Capital Investment Corp.	40,000	5.03	40,000	5.03
Parawin Venture Capital Corp.	50,000	5.00	50,000	5.00
HiTop Communications Corp.			17,964	4.99
Industrial Bank of Taiwan Corp.	1,150,000	5.00	1,139,196	4.95
Programmable Microelectronics (Taiwan) Corp.			23,760	4.95
Beyond Innovation Technology Co., Ltd.	22,158	8.00	18,096	4.86
Animation Technologies Corp.			29,700	4.74
Coretronic Corporation	276,192	4.46	276,192	4.32
Taiwan Asia Pacific Venture Fund	29,295	4.15	21,625	4.15
IBT Venture Co.	90,000	3.81	76,142	3.81
ZyDAS Technology Corp.			23,000	3.33
ProSys Technology Integration, Inc.	2,790	3.08	2,790	3.08
Brodweb Corp.			8,000	2.86
Billionton Systems Inc.	30,948	3.05	30,948	2.77
Uli Electronics Inc.			44,940	2.63
Sheng-Hua Venture Capital Corp.	50,000	2.50	50,000	2.50
Princeton Technology Corporation	97,901	2.43	97,901	2.36
Pixart Imaging, Inc.	16,107	1.91	16,107	1.84
Taimide Tech., Inc.			37,500	1.83
AU Optronics Corp. (Note B)	5,991,447	9.74	959,082	1.44
Mega Financial Holding Company	4,991,630	1.36	4,991,630	1.36
ULTRA CHIP, Inc.	38,000	3.01	15,048	1.19
Trident Technologies, Inc.			12,025	0.97

**Table of Contents**

## UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Investee Company	As of December 31,			
	2003		2004	
	Amount	Percentage of Ownership or Voting Rights	Amount	Percentage of Ownership or Voting Rights
	NT\$ 000		NT\$ 000	
<i>Investments accounted for under the cost method or the lower of cost or market value method (continued):</i>				
Largan Optoelectronics, Co., Ltd.	39,866	0.71	39,866	0.69
Premier Image Technology Corporation	27,964	0.62	27,964	0.59
Averlogic Corporation	1,391	0.19	1,159	0.16
Taiwan High Speed Rail Corporation (Note D)	300,000		300,000	
Pacific Technology Partners, L.P. (Note E)	282,086		336,099	
ForteMedia, Inc. (Note D)	108,456		108,456	
Pacific United Technology, L.P. ((Note E)	69,260		126,560	
Alpha and Omega Semiconductor, Inc. (Note D)	46,883		46,883	
VenGlobal Capital Fund III, L.P. (Note E)	33,195		33,195	
Formerica International Holding, Inc. (Note D)	30,898		30,898	
Aurora Systems, Inc. (Note D)	6,355		6,355	
Silicon Data International Co., Ltd.	10,200	1.75		
Giga Solution Technology Co., Ltd.	105,000	19.44		
Enovation Group, Inc.	11,809	14.34		
ATP Electronics Taiwan, Inc.	50,000	10.00		
RF Integration Corporation	98,610	9.76		
Union Technology Corp.	18,000	5.14		
Leadtek Research, Inc.	99,875	4.74		
King Yuan Electronics Co., Ltd.	366,101	3.33		
Linden Technologies, Inc. (Note D)	92,385			
Chip Express Corporation (Note D)	68,198			
Primarion, Inc. (Note D)	38,816			
Broadcom Corporation (Note D)	7,093			
SandCraft, Inc. (Note D)	4,832			
Triscend Corp. (Note D)	4,600			
Netlogic Microsystems, Inc. (Note D)	3,195			
Subtotal	16,964,768		11,538,899	
<i>Prepaid long-term investments :</i>				
Chip Advanced Technology			16,630	
EE Solutions	52,343			
Subtotal	52,343		16,630	
Less: Allowance for loss on decline in market value	(62,888)		(238,367)	
Total	38,859,249		32,712,278	



**Table of Contents**

## UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note A: The investments were accounted for under the equity method as the percentage of ownership directly and indirectly held was over 20% or significant influences were exercised by the Group.

Note B: Among the shares held by the Company in AU Optronics Corp., approximately 337,455 thousand and 71,215 thousand shares with the book value of NT\$4,772 million and NT\$959 million as of December 31, 2003 and 2004, respectively, were utilized as reference shares for the Company's zero coupon exchangeable bonds.

Note C: During the first quarter of 2003, the Company acquired additional interests in Silicon Integrated Systems Corp., an investee previously accounted for under the lower of cost or market value method. Percentage of voting rights held by the Company was the highest among shareholders and significant influences were exercised. Thus, equity method was applied.

Note D: The amount represented the investments in preferred shares. As the Group did not possess voting rights and significant influences, thus cost method was applied.

Note E: The amounts represented investments in limited partnership without voting rights. As the Group was not able to exercise significant influences, the investments were accounted for under the cost method.

(2) Investment income accounted for under the equity method, which were based on the audited financial statements of the investees, were NT\$231 million, NT\$301 million and NT\$552 million for the years ended December 31, 2002, 2003 and 2004, respectively.

(3) The long-term investments were not pledged.

## 11. Property, Plant and Equipment

	As of December 31, 2003		
	Cost	Accumulated Depreciation	Book Value
	NT\$ 000	NT\$ 000	NT\$ 000
Land	1,560,237		1,560,237
Buildings	17,721,538	(4,341,358)	13,380,180
Machinery and equipment	272,927,438	(162,407,026)	110,520,412
Transportation equipment	90,955	(46,809)	44,146
Furniture and fixtures	2,521,756	(1,339,705)	1,182,051
Leased assets	47,783	(31,855)	15,928
Leasehold improvements	40,848	(34,162)	6,686
Construction in progress and prepayments	22,846,921		22,846,921
<b>Total</b>	<b>317,757,476</b>	<b>(168,200,915)</b>	<b>149,556,561</b>

**Table of Contents**

## UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

	As of December 31, 2004		
	Cost	Accumulated Depreciation	Book Value
	NT\$ 000	NT\$ 000	NT\$ 000
Land	1,320,095		1,320,095
Buildings	21,237,012	(5,347,449)	15,889,563
Machinery and equipment	358,364,726	(216,336,818)	142,027,908
Transportation equipment	89,252	(55,385)	33,867
Furniture and fixtures	2,638,541	(1,631,683)	1,006,858
Leased assets	47,783	(47,783)	
Leasehold improvements	38,620	(37,912)	708
Construction in progress and prepayments	31,745,156		31,745,156
<b>Total</b>	<b>415,481,185</b>	<b>(223,457,030)</b>	<b>192,024,155</b>

- (1) Total interest expense before capitalization amounted to NT\$2,006 million, NT\$1,789 million and NT\$1,788 million for the years ended December 31, 2002, 2003 and 2004, respectively.

Details of capitalized interest are as follows:

	For the year ended December 31,		
	2002	2003	2004
	NT\$ 000	NT\$ 000	NT\$ 000
Machinery and equipment	545,551	456,871	348,924
Other property, plant and equipment	5,162	5,795	3,956
<b>Total interest capitalized</b>	<b>550,713</b>	<b>462,666</b>	<b>352,880</b>
<b>Interest rates applied</b>	<b>3.34%~3.89%</b>	<b>1.55%~3.50%</b>	<b>1.55%~3.55%</b>

- (2) The insurance coverage for property, plant and equipment amounted to NT\$308,267 million and NT\$419,144 million as of December 31, 2003 and 2004, respectively.

- (3) Please refer to Note 26 for property, plant and equipment pledged as collateral.



**Table of Contents**

## UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## 12. Other assets - Others

	As of December 31,	
	2003	2004
	NT\$ 000	NT\$ 000
Leased assets	681,742	1,382,090
Deposits-out	1,272,321	3,317,107
Restricted deposits	156,816	5,000
Others	283,112	212,112
<b>Total</b>	<b>2,393,991</b>	<b>4,916,309</b>

Please refer to Note 26 for restricted deposits pledged as collateral.

## 13. Short-term Loans

	As of December 31,	
	2003	2004
	NT\$ 000	NT\$ 000
Unsecured bank loans	1,884,899	2,986,919
Interest rates	1.60%~1.74%	0.86%~2.89%

The unused short-term lines of credits amounted to NT\$16,312 million and NT\$8,129 million as of December 31, 2003 and 2004, respectively.

## 14. Bonds Payable

As of December 31,	
2003	2004

Edgar Filing: UNITED MICROELECTRONICS CORP - Form 20-F/A

	NT\$ 000	NT\$ 000
Secured domestic bonds payable	1,710,002	570,003
Unsecured domestic bonds payable	40,000,000	32,750,000
Convertible bonds payable	18,057,869	9,391,140
Exchangeable bonds payable	14,804,484	3,107,029
Premiums on exchangeable bonds	187,360	
Premiums on convertible bonds	33,151	20,592
Compensation interest payable	126,763	
	<u>                    </u>	<u>                    </u>
Subtotal	74,919,629	45,838,764
Less: Current portion	(16,705,716)	(2,820,003)
	<u>                    </u>	<u>                    </u>
Net	58,213,913	43,018,761
	<u>                    </u>	<u>                    </u>

F-26



**Table of Contents**

UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

- (1) On April 27, 2000, the Company issued five-year secured bonds amounting to NT\$3,990 million. The interest is paid semi-annually with stated interest rate of 5.6%. The bonds are repayable in installments every six months from April 27, 2002 to April 27, 2005.
- (2) During the period from April 16 to April 27, 2001, the Company issued five-year and seven-year unsecured bonds totaling NT\$15,000 million, each with face value of NT\$7,500 million. The interest is paid annually with stated interest rates of 5.1195% through 5.1850% and 5.2170% through 5.2850%, respectively. The five-year bonds and seven-year bonds are repayable starting from April 2004 to April 2006 and April 2006 to April 2008, respectively, both in three yearly installments at the rates of 30%, 30% and 40%.
- (3) During the period from October 2 to October 15, 2001, the Company issued three-year and five-year unsecured bonds totaling NT\$10,000 million, each with a face value of NT\$5,000 million. The interest is paid annually with stated interest rates of 3.3912% through 3.420% and 3.4896% through 3.520%, respectively. The three-year bonds were repaid at 100% of its principal amount during the period from October 2 to October 15, 2004. The five-year bonds will be repayable in October 2006, upon the maturity of the bonds.
- (4) On December 12, 2001, the Company issued zero coupon convertible bonds amounting to US\$302.4 million on the Luxembourg Stock Exchange (LSE). The terms and conditions of the bonds are as follows:
  - a. Final Redemption

Unless previously redeemed, repurchased, cancelled or converted, the bonds can be redeemed at 101.675% of their principal amount on March 1, 2004.

- b. Redemption at the Option of the Company

The Company may redeem all, but not some only, of the bonds, subject to giving no less than 30 nor more than 60 days advance notice, at the early redemption amount, provided that:

- (a) On or at any time after June 13, 2003, the closing price of the ADSs on the NYSE or other applicable securities exchange on which the ADSs are listed on any ADS trading day for 20 out of 30 consecutive ADS trading days ending at any time within the period of 5 ADS trading days prior to the date of the redemption notice shall have been at least 130% of the conversion price or last adjusted conversion price, as the case may be, on each such day, or
    - (b) At any time prior to maturity at least 90% in principal amount of the bonds have already been redeemed, repurchased, cancelled or converted.

**Table of Contents**

UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

c. Conversion Period

- (a) In respect of the common shares, on or after January 22, 2002, and on or prior to February 20, 2004, or
- (b) In respect of the ADSs, on or after the later of January 22, 2002 and the date on which the shelf registration statement covering resales of certain ADSs issuable upon conversion of the bonds has been declared effective by the U.S. Securities and Exchange Commission, on or prior to February 20, 2004.

d. Conversion Price

- (a) In respect of the common shares, will be NT\$66.67 per share, and
- (b) In respect of the ADSs, will be US\$9.673 per ADS.

The applicable conversion price will be subject to adjustments upon the occurrence of certain events set out in the indenture.

e. Reacquisition of the Bonds

As of December 31, 2003, the Company had reacquired a total amount of US\$62 million of the bonds from the open market. The corresponding loss on the reacquisition amounting to NT\$5 million for the year ended December 31, 2003 was recognized as other losses. As of December 31, 2004, the Company has reacquired a total amount of US\$63 million of the bonds from the open market. The corresponding loss on the reacquisition amounting to NT\$0.06 million for the year ended December 31, 2004 was recognized as other losses.

f. Redemption of the Bonds

On February 27, 2004, the remaining balance of bonds was redeemed.

- (5) On May 10, 2002, the Company issued LSE listed zero coupon exchangeable bonds exchangeable for common shares or ADSs of AU Optronics Corp. (AUO) with an aggregate principal amount of US\$235 million. The terms and conditions of the bonds are as follows:

- a. Final Redemption

Edgar Filing: UNITED MICROELECTRONICS CORP - Form 20-F/A

Unless previously redeemed, exchanged or purchased and cancelled, the bonds must be redeemed at their principal amounts in US Dollars on May 10, 2007.

**F-28**

**Table of Contents**

UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

b. Redemption at the Option of the Company

The Company may redeem the bonds, in whole or in part, in principal amount thereof, on or after August 10, 2002 and prior to May 10, 2007 at their principal amount, if the closing price of the AUO common shares on the TSE, translated into US Dollars at the prevailing exchange rate, for a period of 20 consecutive trading days, the last of which occurs not more than 10 days prior to the date upon which notice of such redemption is published, is at least 120% of the exchange price then in effect translated into US Dollars at the rate of NT\$34.645=US\$1.00.

The Company may also redeem the bonds, in whole, but not in part, if at least 90% in principal amount of the bonds has already been exchanged, redeemed or purchased and cancelled.

c. Redemption at the Option of Bondholders

The Company will, at the option of the holders, redeem such bonds on February 10, 2005 at their principal amount.

d. Tax Redemption

The Company may redeem all, but not part, of the bonds, at any time in the event of certain changes in the ROC's tax rules which would require the Company to gross up for payments of principal, or to gross up for payments of interest or premium.

e. Terms of Exchange

Subject to prior permitted redemption and as otherwise provided in the offering, the bonds are exchangeable at any time on or after June 19, 2002 and prior to April 10, 2007, into AUO shares or AUO ADSs at an exchange price of NT\$51.30 per share, determined on the basis of a fixed exchange rate of NT\$34.645=US\$1.00; provided however, that if the exercise date falls within 5 business days from the beginning of, and during, any closed period, the right of the exchanging holder of the bonds to vote with respect to the shares it receives will be subject to certain restrictions.

The exchange price will be subject to adjustments upon the occurrence of certain events set out in the indenture.

f. Exchange of the Bonds

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

As of December 31, 2004, certain bondholders have exercised their rights to exchange their bonds with the total principal amount of US\$137 million into AUO shares. The corresponding gain on the exchange amounting to NT\$3,457 million for the year ended December 31, 2004 was recognized as a gain on disposal of investments.

**F-29**

---

**Table of Contents**

UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

- (6) During the period from May 21 to June 24, 2003, the Company issued five-year and seven-year unsecured bonds totaling NT\$15,000 million, each with a face value of NT\$7,500 million. The interest is paid annually with stated interest rates of 4.0% minus USD 12-Month LIBOR and 4.3% minus USD 12-Month LIBOR, respectively. Stated interest rates are reset annually based on the prevailing USD 12-Month LIBOR. The five-year bonds and seven-year bonds are repayable in 2008 and 2010, respectively, upon the maturity of the bonds.
- (7) On July 15, 2003, the Company issued its second LSE listed zero coupon exchangeable bonds exchangeable for common shares of AUO with an aggregate principal amount of US\$206 million. The issue price was set at 103.0% of the principal amount. The terms and conditions of the bonds are as follows:
- a. Final Redemption

Unless previously redeemed, exchanged or purchased and cancelled, the bonds must be redeemed at their principal amount in US Dollars on July 15, 2008.

- b. Redemption at the Option of the Company

The Company may redeem the bonds, in whole or in part, in principal amount thereof, on or after January 15, 2004 and on or prior to July 15, 2005, at their principal amount, plus a certain premium (the Early Redemption Amount ) and thereafter until July 15, 2008 at their principal amount, if the closing price of the AUO common shares on the TSE, translated into US Dollars at the prevailing exchange rate, for a period of 20 consecutive trading days, the last of which occurs not more than 10 days prior to the date upon which notice of such redemption is published, is at least 125% of the exchange price then in effect translated into US Dollars at the rate of NT\$34.390=US\$1.00.

The Company may also redeem the bonds, in whole, but not in part, if at least 90% in principal amount of the bonds has already been exchanged, redeemed or purchased and cancelled.

- c. Redemption at the Option of Bondholders

The Company will, at the option of any bondholders, redeem such bond starting on July 15, 2005 at its principal amount.

- d. Tax Redemption

The Company may redeem all, but not part, of the bonds, at any time, in the event of certain changes in the ROC's tax rules which would require the Company to gross up for payments of principal, or to gross up for payments of interest or premium.



**Table of Contents**

UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

e. Terms of Exchange

Subject to prior permitted redemption and as otherwise provided in the offering, the bonds are exchangeable at any time on or after August 14, 2003 and prior to June 30, 2008, into AUO shares at an exchange price of NT\$36.387 per share, determined on the basis of a fixed exchange rate of NT\$34.390=US\$1.00; provided however, that if the exercise date falls within 5 business days from the beginning of, and during, any closed period, the right of the exchanging holder of the bonds to vote with respect to the shares it receives will be subject to certain restrictions.

The exchange price will be subject to adjustment upon the occurrence of certain events set out in the indenture.

f. Exchange of the Bonds

As of December 31, 2003, certain bondholders have exercised their rights to exchange their bonds with the total principal amount of US\$6 million into AUO shares. The corresponding gain on the exchange amounting of NT\$123 million for the year ended December 31, 2003 was recognized as a gain on disposal of investments.

As of December 31, 2004, all bondholders have exercised their rights to exchange their bonds into AUO shares. The corresponding gain on the exchange amounting to NT\$4,349 million for the year ended December 31, 2004 was recognized as a gain on disposal of investments.

- (8) On March 25, 2002, the Company's subsidiary, UMCJ, issued LSE listed zero coupon convertible bonds with an aggregate principal amount of JPY17,000 million and the issue price was set at 101.75% of the principal amount. The terms and conditions of the bonds are as follows:

a. Final Redemption

Unless previously converted, purchased and cancelled or redeemed, the bonds must be redeemed on March 26, 2007, at their principal amount.

b. Redemption at the Option of UMCJ

- (a) On or at any time after March 25, 2005, UMCJ may redeem all, but not part, of the bonds if the closing price of the shares on the Japan OTC Market is at least 120% of the conversion price then in effect for at least 20 out of 30 consecutive trading days ending on the trading day immediately prior to the date of the notice of redemption; or if the principal amount that has not been redeemed, repurchased and cancelled or converted is equal to or less than 10% of original aggregate principal amount.





**Table of Contents**

UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

- (b) In case of a corporate split or share exchange / share transfer, UMCJ may redeem all, but not part, of the bonds on or prior to the effective date of the transaction, provided that UMCJ is not able to ensure that the bondholders have the right to receive shares which they would have received had the conversion rights been exercised prior to the transaction.
  - (c) If a change in who controls UMCJ occurs, bondholders will be able to require UMCJ to redeem their bonds on the date that is 85 days after the change of control occurs.
- c. Conversion Period

At any time on or after May 3, 2002, to and including March 19, 2007.

- d. Conversion Price

The conversion price was set at JPY 400,000 per share, subject to adjustments upon the occurrence of certain events set out in the indenture.

- e. Reacquisition of the Bonds

As of December 31, 2003, UMCJ has reacquired and cancelled a total amount of JPY 7,650 million of the bonds from the open market. The corresponding gain on the reacquisition amounting to JPY 505 million for the year ended December 31, 2003 was recognized as other income. As of December 31, 2004, UMCJ has reacquired and cancelled a total amount of JPY 8,370 million and JPY 7,650 million of the bonds from the open market.

- (9) On November 25, 2003, the Company's subsidiary, UMCJ, issued its second LSE listed zero coupon convertible bonds with an aggregate principal amount of JPY 21,500 million and the issue price was set at 101.25% of the principal amount. The terms and conditions of the bonds are as follows:

- a. Final Redemption

Unless previously converted, purchased and cancelled or redeemed, the bonds must be redeemed on November 25, 2013 at their principal amount.

- b. Redemption at the Option of UMCJ

Edgar Filing: UNITED MICROELECTRONICS CORP - Form 20-F/A

- (a) On or at any time after November 27, 2006, UMCJ may redeem all, but not part, of the bonds if the closing price of the shares on the Japan OTC Market is at least 120% of the conversion price then in effect for at least 20 out of 30 consecutive trading days ending on the trading day immediately prior to the date of the notice of redemption; or if the principal amount that has been redeemed, repurchased and cancelled or converted is equal to or less than 10% of original aggregate principal amount.

**F-32**

**Table of Contents**

UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

- (b) In case of a corporate split or share exchange / share transfer, UMCJ may redeem all, but not part, of the bonds on or prior to the effective date of the transaction, provided that UMCJ is not able to ensure that the bondholders have the right to receive shares which they would have received had the conversion rights been exercised prior to the transaction.
  - (c) If a change in who controls UMCJ occurs, the bondholders will be able to require UMCJ to redeem their bonds on the date that is 70 days after the change of control occurs.
- c. Conversion Period

At any time on or after January 5, 2004, and on or prior to November 11, 2013.

- d. Conversion Price

The conversion price was set at JPY 187,500 per share, subject to adjustment upon the occurrence of certain events set out in the indenture.

(10) Repayments of the above bonds in the future years are as follows:

*(assuming the convertible bonds and exchangeable bonds are both paid off upon maturity)*

<b>Bonds repayable in</b>	<b>Amount</b>
	<b>NT\$ 000</b>
2005	2,820,003
2006	10,250,000
2007	8,059,519
2008	10,500,000
2009 and thereafter	14,188,650
<b>Total</b>	<b>45,818,172</b>

15. Long-term Loans

**As of December 31,**

Edgar Filing: UNITED MICROELECTRONICS CORP - Form 20-F/A

	<u>2003</u>	<u>2004</u>
	<u>NT\$ 000</u>	<u>NT\$ 000</u>
Secured long-term loans	2,739,269	19,044,000
Unsecured long-term loans	3,598,875	4,666,500
	<u>6,338,144</u>	<u>23,710,500</u>
Total	6,338,144	23,710,500
Less: Current portion	(4,217,611)	(5,441,143)
	<u>2,120,533</u>	<u>18,269,357</u>
Net	2,120,533	18,269,357
	<u>0.95%~2.53%</u>	<u>0.81%~3.55%</u>
Interest rates	0.95%~2.53%	0.81%~3.55%

F-33

**Table of Contents**

## UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

- (1) The above long-term loans will be repaid by installments with the last payment on March 25, 2008. Repayments in the coming years respectively are as follows:

Long-term loans repayable in	Amount
	NT\$ 000
2005	5,441,143
2006	7,774,393
2007	7,774,393
2008	2,720,571
Total	23,710,500

- (2) The long-term loans denominated in US Dollars amounted to US\$48 million and US\$600 million as of December 31, 2003 and 2004, respectively. The long-term loans denominated in Japanese Yen amounted to JPY 11,250 million and JPY 15,000 million as of December 31, 2003 and 2004, respectively.
- (3) Assets pledged as collateral to secure these loans are detailed in Note 26.

## 16. Pension Fund

- (1) Change in benefit obligation during the year:

	For the year ended December 31,	
	2003	2004
	NT\$ 000	NT\$ 000
Projected benefit obligation at beginning of year	(3,287,327)	(3,725,630)
Service cost	(482,185)	(471,937)
Interest cost	(123,168)	(123,181)
Benefits paid	15,720	36,894
Gain (loss) on projected benefit obligation	151,330	(70,507)
Projected benefit obligation at end of year	(3,725,630)	(4,354,361)

- (2) Change in pension assets during the year:

	<b>For the year ended December 31,</b>	
	<b>2003</b>	<b>2004</b>
	<b>NT\$ 000</b>	<b>NT\$ 000</b>
Fair value of plan assets at beginning of year	991,058	1,196,723
Actual return on plan assets	33,312	35,728
Contributions from employer	193,311	193,711
Benefits paid	(15,720)	(36,894)
Transferred in from merger with SiSMC		3,703
Others	(5,238)	11,159
<b>Fair value of plan assets at end of year</b>	<b>1,196,723</b>	<b>1,404,130</b>

F-34

**Table of Contents**

## UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

- (3) The funding status of the pension plan is as follows:

	As of December 31,	
	2003	2004
	NT\$ 000	NT\$ 000
Benefit obligation		
Vested benefit obligation	(424,662)	(455,706)
Non-vested benefit obligation	(1,210,526)	(1,378,172)
Accumulated benefit obligation	(1,635,188)	(1,833,878)
Effect from projected salary increase	(2,090,442)	(2,520,483)
Projected benefit obligation	(3,725,630)	(4,354,361)
Fair value of plan assets	1,196,723	1,404,130
Funded status	(2,528,907)	(2,950,231)
Unrecognized net transitional benefit obligation	261,627	219,572
Unrecognized loss	16,244	28,956
Adjustment required to recognize minimum liabilities	(41,852)	(11,705)
Accrued pension liabilities per actuarial report	(2,292,888)	(2,713,408)
Over accrual	(17,004)	
Accrued pension liabilities recognized in the balance sheet	(2,309,892)	(2,713,408)

- (4) The components of net periodic pension cost are as follows:

	For the year ended December 31,		
	2002	2003	2004
	NT\$ 000	NT\$ 000	NT\$ 000
Service cost	427,082	482,185	471,937
Interest cost	110,230	123,168	123,181
Expected return on plan assets	(30,258)	(26,727)	(26,884)
Amortization of unrecognized net transitional benefit obligation	39,537	45,927	45,444
Amortization of unrecognized pension loss	6,129	13,784	13,279
Transferred in from merger with SiSMC			8,844
Net periodic pension cost	552,720	638,337	635,801



The actuarial assumptions underlying are as follows:

	For the year ended December 31,								
	2002			2003			2004		
	The Company	UMO	UMCJ	The Company	UMO	UMCJ	The Company	UMO	UMCJ
Discount rate	4.00%	4.00%	2.00%	3.50%	3.50%	2.00%	3.50%	3.75%	2.00%
Rate of salary increase	5.50%	6.00%	3.71%	5.00%	5.00%	3.71%	5.00%	4.00%	3.71%
Expected return on plan assets	3.25%	3.25%	1.00%	2.75%	2.75%	1.00%	3.50%	2.75%	1.00%

F-35

**Table of Contents**

UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

17. Capital Stock

- (1) As recommended by the board of directors and approved by the shareholders meeting on June 9, 2003, the Company issued 665,898 thousand new shares from the capitalization of retained earnings, of which NT\$6,079 million were stock dividends and NT\$580 million were employees bonus.
- (2) As of December 31, 2003, 22,000,000 thousand common shares were authorized to be issued and 16,140,744 thousand common shares were issued, each at a par value of NT\$10.
- (3) Based on the resolution of the board of directors meeting on February 26, 2004, the Company merged with SiSMC on July 1, 2004, the effective date, through the issuance of 357,143 thousand new shares at a par value of NT\$10 each. 2.24 shares of SiSMC were exchanged to 1 share of the Company, the surviving company.
- (4) As recommended by the board of directors and amended by the shareholders meeting on June 1, 2004, the Company issued 1,399,685 thousand new shares from the capitalization of retained earnings that amounted to NT\$13,335 million and capital reserve that amounted to NT\$661 million, of which NT\$12,224 million were stock dividends and NT\$1,111 million were employees bonus.
- (5) On July 22, 2004, the Company wrote off 149,728 thousand shares of treasury stock, which were bought back during the period from August 1 to September 28, 2001, and the period from August 14 to September 25, 2002, for conversion of the convertible bonds.
- (6) The employee stock options issued by the Company on October 7, 2002, were exercised into 44,138 thousand shares during 2004. The effective date of issuance of new shares was December 28, 2004.
- (7) As of December 31, 2004, 22,000,000 thousand common shares were authorized to be issued and 17,791,982 thousand common shares were issued, each at a par value of NT\$10.
- (8) The Company has issued a total of 231,497 thousand ADSs which were traded on the NYSE as of December 31, 2004. The total number of common shares represented by all issued ADSs is 1,157,486 thousand shares (One ADS represents five common shares).

**Table of Contents**

## UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## 18. Employee Stock Options

On September 11, 2002, October 8, 2003, and September 30, 2004, the Company was authorized by the relevant government authorities to issue Employee Stock Options with a total number of 1 billion, 150 million, and 150 million units, respectively. Each unit entitles an optionee to subscribe to 1 share of the Company's common stock. Settlement upon the exercise of the options will be made through the issuance of new shares by the Company. The exercise price of options was set at the closing price of the Company's common stock on the date of grant. The grant period for the options is 6 years and an optionee may exercise the options in accordance with certain schedules as prescribed by the plan starting 2 years from the date of grant. Detailed information relevant to the Employee Stock Options is disclosed as follows:

<u>Date of grant</u>	<u>Total number of options granted (in thousands)</u>	<u>Total number of options outstanding (in thousands)</u>	<u>Exercise price (NT\$)</u>
October 7, 2002	939,000	773,498	17.7
January 3, 2003	61,000	50,920	19.9
November 26, 2003	57,330	50,810	27.8
March 23, 2004	33,330	28,570	25.7
July 1, 2004	56,590	51,140	23.2
October 13, 2004	20,200	18,920	20.0

- (1) A summary of the Company's stock option plans, and related information for the years ended December 31, 2003 and 2004 are as follows:

	<b>For the year ended December 31,</b>			
	<b>2003</b>		<b>2004</b>	
	<b>Option (in thousands)</b>	<b>Weighted-average Exercise Price</b>	<b>Option (in thousands)</b>	<b>Weighted-average Exercise Price</b>
	<b>NT\$</b>		<b>NT\$</b>	
Outstanding at beginning of year	928,059	17.7	980,664	18.4
Granted	118,330	23.7	110,120	23.4
Exercised			(44,138)	17.7
Forfeited	(65,725)	18.4	(72,788)	19.3
Outstanding at end of year	980,664	18.4	973,858	18.9
Exercisable at end of year			368,896	
Weighted-average fair value of options granted during the year	NT\$ 3.0		NT\$ 3.8	



**Table of Contents**

## UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

- (2) The information of the Company's outstanding stock options as of December 31, 2004, is as follows:

Authorization Date	Range of Exercise Price	Outstanding Stock Options			Exercisable Stock Options	
		Option (in thousands)	Weighted-average Expected Remaining Years	Weighted-average Exercise Price	Option (in thousands)	Weighted-average Exercise Price
	NT\$			NT\$		NT\$
91.09.11	17.7~19.9	824,418	2.1	17.8	368,896	17.7
92.10.08	23.2~27.8	130,520	3.6	25.5		
93.09.30	20.0	18,920	4.2	20.0		
		<u>973,858</u>	<u>2.4</u>	<u>18.9</u>	<u>368,896</u>	<u>17.7</u>

- (3) The Company has used the intrinsic value method to recognize compensation costs for its employee stock options issued since January 1, 2004. The compensation cost for the year ended December 31, 2004, is NT\$0. Pro forma information using the fair value method on net income and earnings per share is as follows:

	For the year ended December 31, 2004	
	Basic earnings per share	Diluted earnings per share
	NT\$ 000	NT\$ 000
Net Income	31,843,381	31,873,101
Earnings per share (in dollars)	1.89	1.86
Pro forma net income	31,761,407	31,791,127
Pro forma earnings per share (in dollars)	1.89	1.86

The fair value of the options granted after January 1, 2004, was estimated at the date of grant using the Black-Scholes option pricing model with the following weighted-average assumptions for the year ended December 31, 2004: expected dividend yields of 11.40%; volatility factors of the expected market price of the Company's common stock of 0.49%, 0.49%, and 0.48%, respectively; risk-free interest rate of 2.70%, 2.85%, and 2.70%, respectively; and a weighted-average expected life of the option of 4.4 years.

**Table of Contents**

## UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## 19. Treasury Stock

- (1) The Company bought back its own shares from the open market during the years ended December 31, 2002, 2003 and 2004. Details of the treasury stock transactions are as follows:

For the year ended December 31, 2002*(In thousands of shares)*

<u>Purpose</u>	As of January 1,		As of December 31,	
	<u>2002</u>	<u>Increase</u>	<u>Decrease</u>	<u>2002</u>
For transfer to employees	37,425	49,114		86,539
For conversion of the convertible bonds into shares	129,035	20,693		149,728
<b>Total shares</b>	<b>166,460</b>	<b>69,807</b>		<b>236,267</b>

For the year ended December 31, 2003*(In thousands of shares)*

<u>Purpose</u>	As of January 1,		As of December 31,	
	<u>2003</u>	<u>Increase</u>	<u>Decrease</u>	<u>2003</u>
For transfer to employees	86,539	99,195	136,620	49,114
For conversion of the convertible bonds into shares	149,728			149,728
<b>Total shares</b>	<b>236,267</b>	<b>99,195</b>	<b>136,620</b>	<b>198,842</b>

For the year ended December 31, 2004*(In thousands of shares)*

Edgar Filing: UNITED MICROELECTRONICS CORP - Form 20-F/A

<b>Purpose</b>	<b>As of January 1,</b>		<b>As of December 31,</b>	
	<b>2004</b>	<b>Increase</b>	<b>Decrease</b>	<b>2004</b>
For transfer to employees	49,114	192,067		241,181
For conversion of the convertible bonds into shares	149,728		149,728	
<b>Total shares</b>	<b>198,842</b>	<b>192,067</b>	<b>149,728</b>	<b>241,181</b>

- (2) On July 22, 2004, the Company wrote off 149,728 thousand shares of treasury stock, amounting to NT\$4,923 million, which were bought back for conversion of the convertible bonds into shares from August 1 to September 28, 2001, and from August 14 to September 25, 2002.

F-39

**Table of Contents**

UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

- (3) According to the Securities and Exchange Law of the ROC, total shares of treasury stock shall not exceed 10% of the Company's stock issued. Total purchase amount shall not exceed the sum of the retained earnings, capital reserve-premiums, and realized capital reserve. As such, the maximum number of shares of treasury stock that the Company could hold as of December 31, 2003 and 2004 was 1,614,074 thousand shares and 1,779,198 thousand shares while the ceiling of the amount was NT\$67,177 million and NT\$89,425 million, respectively. As of December 31, 2003 and 2004, the Company held 198,842 thousand shares and 241,181 thousand shares of treasury stock, which amounted to NT\$7,101 million and NT\$7,376 million, respectively.
- (4) Treasury stock shall not be pledged, nor does it entitle voting rights or receive dividends, in compliance with Securities and Exchange Law of the ROC.
- (5) As of December 31, 2003, the Company's subsidiaries, Hsun Chieh and Fortune, held 503,456 thousand shares and 18,340 thousand shares of the Company's stock, with a book value of NT\$29.32 and NT\$9.37 per share, respectively. The average closing price during December 2003 was NT\$29.32.

As of December 31, 2004, the Company's subsidiaries, Hsun Chieh and Fortune, held 543,732 thousand shares and 19,808 thousand shares of the Company's stock, with a book value of NT\$20.08 and NT\$8.68 per share, respectively. The average closing price during December 2004 was NT\$20.08.

20. Retained Earnings and Dividend Policies

According to the Company's Articles of Incorporation, current year's earnings, if any, shall be distributed in the following order :

- (1) Payment of all taxes and dues;
- (2) Offset prior years' operation losses;
- (3) Set aside 10% of the remaining amount after deducting items (1) and (2) as a legal reserve;
- (4) Set aside 0.1% of the remaining amount after deducting items (1), (2) and (3) as directors' and supervisors' remuneration; and
- (5) After deducting items (1), (2) and (3) above from the current year's earnings, no less than 5% of the remaining amount together with the prior years' unappropriated earnings is to be allocated as employees' bonus which will be settled through issuance of new Company shares. Employees of the Company's subsidiaries, meeting certain requirements determined by the board of directors, are also eligible for the employees' bonus.
- (6) The distribution of the remaining portion, if any, will be recommended by the board of directors and approved through the shareholders' meeting.





**Table of Contents**

## UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

The Company is currently in its growth stage; the policy for dividend distribution should reflect factors such as the current and future investment environment, fund requirements, domestic and international competition and capital budgets; as well as the benefit of shareholders, share bonus equilibrium, and long-term financial planning. The board of directors shall make the distribution proposal annually and present it at the shareholders meeting. The Company's Articles of Incorporation further provide that at least 50% of the dividends to shareholders, if any, must be paid in the form of stock dividends. Accordingly, no more than 50% of the dividends can be paid in the form of cash.

The appropriation of 2004 retained earnings has not yet been recommended by the board of directors as of the date of the Report of Independent Auditors. Information on the board of directors' recommendations and shareholders' approval can be obtained from the Market Observation Post System on the website of the TSE.

Details of the 2003 employee bonus settlement and directors' and supervisors' remuneration are as follows:

	<b>For the year ended December 31, 2003</b>		
	<b>As approved by</b>	<b>As recommended</b>	
	<b>the shareholders</b>	<b>by the board of</b>	
	<b>meeting</b>	<b>directors</b>	<b>Differences</b>
<b>1. Settlement of employees' bonus by issuance of new shares</b>			
a. Number of shares (in thousands)	111,127	111,127	
b. Amount	\$ 1,111,273	\$ 1,111,273	
c. Percentage on total number of outstanding shares at year end (%)	0.70	0.70	
<b>2. Remuneration paid to directors and supervisors</b>	<b>\$ 12,618</b>	<b>\$ 12,618</b>	
<b>3. Effect on earnings per share before retroactive adjustments</b>			
a. Basic and diluted earnings per share (NTD)	\$ 0.92/0.90	\$ 0.92/0.90	
b. Pro forma basic and diluted earnings per share taking into consideration employees' bonus and directors' and supervisors' remuneration (NTD)	\$ 0.84/0.83	\$ 0.84/0.83	

**Table of Contents**

## UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Pursuant to Article 41 of the Securities and Exchange Law of the ROC, a special reserve is set aside from the current net income and prior unappropriated earnings for items that are accounted for as deductions to stockholders' equity such as unrealized loss on long-term investments and cumulative translation adjustments. However, there are the following exceptions for the Company's investees' unrealized loss on long-term investments arising from the merger which was recognized by the Company in proportion to the Company's ownership percentage:

- a. According to the explanatory letter No. 101801 of the Securities and Futures Commission (SFC), if the Company recognizes the investees' capital reserve - excess from the merger in proportion to the ownership percentage-then the special reserve is exempted for the amount originated from the acquisition of the long-term investments.
- b. However, if the Company and its investees transfer a portion of the capital reserve to increase capital, a special reserve equal to the amount of the transfer shall be provided according to the explanatory letter No.101801-1 of the SFC.
- c. In accordance with the explanatory letter No.170010 of the SFC applicable to listed companies, when the market value of the Company's stock held by its subsidiaries at year-end is lower than the book value, a special reserve shall be provided for in the Company's accounts in proportion to its ownership percentage.

For the 2003 appropriations approved by the shareholders' meeting on June 1, 2004, unrealized loss on long-term investments exempted from the provision of special reserve pursuant to the above regulations amounted to NT\$14,826 million.

## 21. Operating Costs and Expenses

The Group's personnel, depreciation, and amortization expenses are summarized as follows:

	For the year ended December 31,								
	2002			2003			2004		
	Operating costs	Operating expenses	Total	Operating costs	Operating expenses	Total	Operating costs	Operating expenses	Total
	NT\$ 000	NT\$ 000	NT\$ 000	NT\$ 000	NT\$ 000	NT\$ 000	NT\$ 000	NT\$ 000	NT\$ 000
Personnel expenses									
Salaries	5,083,606	2,122,316	7,205,922	6,135,769	2,453,842	8,589,611	8,761,122	3,390,638	12,151,760
Labor and health insurance	405,291	145,184	550,475	459,361	147,940	607,301	525,172	156,691	681,863
Pension	463,178	146,772	609,950	337,911	166,287	504,198	507,357	182,194	689,551
Other personnel expenses	201,463	200,325	401,788	36,791	411,968	448,759	154,281	119,520	273,801
Depreciation	34,895,683	1,671,852	36,567,535	37,390,728	1,842,751	39,233,479	43,435,482	2,142,602	45,578,084
Amortization	326,379	1,164,565	1,490,944	172,533	1,292,831	1,465,364	782,440	1,386,967	2,169,407

The numbers of employees as of December 31, 2002, 2003 and 2004 were 10,167, 10,576 and 12,531, respectively.

**F-42**

**Table of Contents**

## UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## 22. Income Tax

- (1) Reconciliation between the income tax expense and the income tax calculated on pre-tax financial statement income based on the statutory tax rate is as follows:

	For the year ended December 31,		
	2002	2003	2004
	NT\$ 000	NT\$ 000	NT\$ 000
Income tax on pre-tax income at statutory tax rate	1,830,019	3,467,870	7,472,675
Permanent differences			
Investment loss	55,445	114,282	635,045
Gain on disposal of investments	(1,602,035)	(1,668,153)	(3,087,700)
Loss carry-forward	(344,763)		62,881
Other permanent differences	1,157,097	(550,046)	(2,824,334)
Subtotal	(734,256)	(2,103,917)	(5,214,108)
Change in investment tax credit	(3,999,022)	545,636	(4,382,861)
Change in valuation allowance against deferred income tax assets			
Investment tax credit	2,957,538	(877,820)	(5,442)
Loss carry-forward	119,769	(157,959)	2,464,282
Subtotal	3,077,307	(1,035,779)	2,458,840
Change in tax rate		1,063	14,091
Estimated 10% income tax on unappropriated earnings	46,705	126,794	29,419
Adjustment of prior year's tax expense	37,916	(28,547)	9,484
Income tax on interest revenue separately taxed	12,062	6,349	(13,740)
Income tax expense	270,731	979,469	373,800

**Table of Contents**

## UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

- (2) Significant components of deferred income tax assets and liabilities are as follows:

	As of December 31,	
	2003	2004
	NT\$ 000	NT\$ 000
Deferred income tax assets		
Investment tax credit	20,195,499	22,271,168
Loss carry-forward	4,161,872	4,583,963
Pension	540,886	661,805
Allowance on sales returns and discounts	92,395	268,715
Allowance for loss on obsolescence of inventories	130,412	324,625
Compensation interest payable	30,587	
Organization cost	234	2
Others	614,866	814,924
<b>Total deferred income tax assets</b>	<b>25,766,751</b>	<b>28,925,202</b>
Valuation allowance	(13,034,410)	(16,786,726)
<b>Net deferred income tax assets</b>	<b>12,732,341</b>	<b>12,138,476</b>
Deferred income tax liabilities		
Unrealized exchange gain	(374,353)	(249,734)
Depreciation	(4,893,245)	(4,468,159)
Others	(26,362)	(20,712)
<b>Total deferred income tax liabilities</b>	<b>(5,293,960)</b>	<b>(4,738,605)</b>
<b>Total net deferred income tax assets</b>	<b>7,438,381</b>	<b>7,399,871</b>
Deferred income tax assets current	9,242,541	9,923,193
Deferred income tax liabilities current	(374,353)	(249,734)
Valuation allowance	(5,914,810)	(6,064,491)
<b>Net</b>	<b>2,953,378</b>	<b>3,608,968</b>
Deferred income tax assets noncurrent	16,524,210	19,002,009
Deferred income tax liabilities noncurrent	(4,919,607)	(4,488,871)
Valuation allowance	(7,119,600)	(10,722,235)
<b>Net</b>	<b>4,485,003</b>	<b>3,790,903</b>
<b>Total net deferred income tax assets</b>	<b>7,438,381</b>	<b>7,399,871</b>

- (3) The Company's income tax returns for all the fiscal years through 1999 and 2002 have been assessed and approved by the Tax Authority.

**F-44**

**Table of Contents**

## UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

- (4) Pursuant to the Statute for the Establishment and Administration of Science Park of ROC, the Company was granted several four-year income tax exemption periods with respect to income derived from the expansion of operations. The starting date of the exemption period attributable to the expansion in 2000 had not yet been decided by the Company. The income tax exemption for other periods will expire on December 31, 2009.
- (5) The Group earns investment tax credits for the amount invested in production equipment, research and development, employee training, and investments in high technology industry and venture capital.

As of December 31, 2004, the Group's unused investment tax credit was as follows:

<u>Expiration year</u>	<u>Investment tax credits earned</u>	<u>Balance of unused investment tax credits</u>
	NT\$ 000	NT\$ 000
2004	8,097,450	3,714,589
2005	5,338,222	5,338,222
2006	4,044,620	4,044,620
2007	1,536,606	1,536,606
2008	7,637,131	7,637,131
<b>Total</b>	<b>26,654,029</b>	<b>22,271,168</b>

- (6) Under the rules of the Income Tax Law of the ROC, net loss can be carried forward for 5 years. As of December 31, 2004, the unutilized accumulated loss was as follows:

<u>Expiration year</u>	<u>Accumulated loss</u>	<u>Unutilized accumulated loss</u>
	NT\$ 000	NT\$ 000
2006	11,437,788	11,437,788
2007	4,155,271	4,155,271
2008	334,917	334,917
2009	2,053,616	2,053,616
<b>Total</b>	<b>17,981,592</b>	<b>17,981,592</b>

- (7) The balance of the Company's imputation credit accounts as of December 31, 2003 and 2004 were NT\$10.4 million and NT\$0.4 million, respectively. The actual creditable ratio for 2002 and 2003 was 1.24% and 0.69%, respectively.





**Table of Contents**

## UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

- (8) The ending balances of unappropriated earnings as of December 31, 2003 and 2004 were as follows:

	As of December 31,	
	2003	2004
	NT\$ 000	NT\$ 000
Prior to January 1, 1998	64,220	
After January 1, 1998	13,972,602	29,498,329
<b>Total</b>	<b>14,036,822</b>	<b>29,498,329</b>

## 23. Earnings per Share

- (1) The Company held zero coupon convertible bonds and employee stock options during 2004, and thus has a complex capital structure. The calculation of basic and diluted earnings per share, for the years ended December 31, 2002, 2003 and 2004, was disclosed as follows:

(shares expressed in thousands)

	For the year ended December 31,		
	2002	2003	2004
	NT\$ 000	NT\$ 000	NT\$ 000
Net income	7,072,032	14,020,257	31,843,381
Effect of dilution:			
Employee stock options			
Convertible bonds	59,233	50,954	29,720
<b>Adjusted net income assuming dilution</b>	<b>7,131,265</b>	<b>14,071,211</b>	<b>31,873,101</b>
Weighted average of shares outstanding	16,740,780	16,644,032	16,828,205
Effect of dilution:			
Employee stock options	47,193	228,762	245,983
Convertible bonds	169,905	152,565	20,660
<b>Adjusted weighted average of shares outstanding assuming dilution</b>	<b>16,957,878</b>	<b>17,025,359</b>	<b>17,094,848</b>
Retroactively adjusted weighted average of shares outstanding	16,740,780	16,644,032	
Retroactively adjusted weighted average of shares outstanding assuming dilution	16,957,878	17,025,359	

Edgar Filing: UNITED MICROELECTRONICS CORP - Form 20-F/A

Earnings per share (in dollars) - basic Net income	0.42	0.84	1.89
Earnings per share (in dollars) - diluted Net income	0.42	0.83	1.86

F-46

**Table of Contents**

## UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

- (2) Pro forma information on earnings per share as if the Company's unconsolidated subsidiary - Fortune Venture Capital Corporation's investment in the Company is not treated as treasury stock is set out as follows:

<i>(shares expressed in thousands)</i>	2003	
	Basic	Diluted
	NT\$ 000	NT\$ 000
Net income	14,020,257	14,071,211
Weighted average of shares outstanding:		
Beginning balance	14,754,533	14,754,533
Stock dividends and employees' bonus at 4.4% in 2003	649,200	649,200
Stock dividends and employees' bonus at 8.7% in 2004	1,338,574	1,338,574
Purchase of 99,195 thousand shares of treasury stock in 2003	(87,216)	(87,216)
Treasury stock transferred to employees of 136,620 thousand shares in 2003	8,950	8,950
Dilutive shares of employee stock options accounted for under treasury stock method		228,762
Dilutive shares issued assuming conversion of bonds		152,565
Ending balance	16,664,041	17,045,368
Earnings per share		
Net income (in dollars)	\$ 0.84	\$ 0.83

<i>(shares expressed in thousands)</i>	2004	
	Basic	Diluted
	NT\$ 000	NT\$ 000
Net income	31,843,381	31,873,101
Weighted average of shares outstanding:		
Beginning balance	15,438,446	15,438,446
Stock dividends and employees' bonus at 8.7% in 2004	1,341,591	1,341,591
Purchase of 192,067 thousand shares of treasury stock in 2004	(132,214)	(132,214)
Issuance of 357,143 thousand shares from merger with SiSMC	195,150	195,150
Exercise of 44,138 thousand units of employees' stock options	5,166	5,166
Dilutive shares of employee stock options accounted for under treasury stock method		245,983
Dilutive shares issued assuming conversion of bonds		20,660
Ending balance	16,848,139	17,114,782

Earnings per share		
Net income (in dollars)	\$ 1.89	\$ 1.86

F-47

**Table of Contents**

UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

24. Merger

In order to integrate resources, reduce operating costs, enlarge business scales, and improve its financial structure, profitability and global competitiveness, based on the resolution of the board of directors' meeting on February 26, 2004, the Company merged with SiSMC, the dissolved company, on July 1, 2004. The merger was approved by the relevant government authorities. All the assets, liabilities, rights and obligations of SiSMC have been fully incorporated into the Company since July 1, 2004. The accounting treatment regarding the merger is in compliance with the ROC SFAS No. 25 Enterprise Mergers - Accounting of Purchase Method.

Relevant information required by ROC SFAS No. 25 is disclosed as follows:

(1) Information of the dissolved company:

SiSMC was split from Silicon Integrated Systems Corp. on December 15, 2003. It was mainly engaged in manufacturing of integrated circuits and components of semiconductors.

(2) Effective date, percentage of acquisition and accounting treatment:

Based on the agreement and the resolution of the board of directors' meeting, the effective date of the merger was July 1, 2004. All the stocks of the dissolved company were exchanged by the surviving company's newly issued shares, and the merger was accounted for under the purchase method.

(3) The period of combining the dissolved company's operating result:

The operating result for the period from July 1, 2004 to December 31, 2004 of the dissolved company was integrated into the operating result of the Company.

(4) Acquisition cost and the types, quantities, and amount of securities issued for the merger:

According to the agreement, 357,143 thousand common shares, amounting to NT\$3,571 million, were newly issued by the Company for the merger. The newly issued shares were allocated to the dissolved company's shareholders in proportion to their ownership. 2.24 common shares were to be exchanged for 1 new share. Since SiSMC was not a public company, there is no market value. Thus, the acquisition cost was determined based on the appraisal made by China Property Appraising Center Co., Ltd.

- (5) Amortization method and useful lives for goodwill or deferred credit:

The difference between the acquisition cost and the fair value of identifiable net assets was recognized as goodwill, which was to be amortized under the straight-line method for 15 years according to the Article 35 of Enterprise Mergers and Acquisitions Law of the ROC.

**F-48**

**Table of Contents**

## UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

- (6) Contingent price, warrants, or commitments and accounting treatments in the merger contracts:

None.

- (7) Decisions of disposal of significant assets from the merger:

None.

- (8) Pro forma information on operating results:

The operating result for the period from July 1, 2004 to December 31, 2004 of the dissolved company was consolidated into the financial statements of the Company.

Since SiSMC was split from Silicon Integrated Systems Corp. on December 15, 2003, the pro forma operating results from January 1, 2003 to December 14, 2003 of SiSMC are included in the following pro forma information. The pro forma information on the operating results stated below is based on the assumption that the Company merged with SiSMC on January 1, 2003 and 2004.

*(Shares expressed in thousands)*

	For the year ended December 31,	
	2003	2004
	NT\$ 000	NT\$ 000
Net operating revenues	102,508,661	131,446,247
Net income	12,968,078	30,669,982
Weighted average of shares outstanding	17,032,221	17,021,234
Earnings per share-basic (in dollars)	0.76	1.80

## 25. Related Party Transactions

**Name of related parties****Relationship**

United Foundry Service, Inc.	Equity investee
UMC Capital Corporation	Equity investee
United Microelectronics Corp. (Samoa)	Equity investee
Fortune Venture Capital Corporation	Equity investee



Edgar Filing: UNITED MICROELECTRONICS CORP - Form 20-F/A

DuPont Photomasks Taiwan Ltd. (DPT)	Equity investee
Holtek Semiconductor Inc. (Holtek)	Equity investee
Integrated Technology Express Inc.	Equity investee
Unimicron Technology Corp.	Equity investee
Applied Component Technology Corp.	Equity investee
Novatek Microelectronics Corp.	Equity investee
Faraday Technology Corp. (Faraday)	Equity investee
Silicon Integrated Systems Corp.	Equity investee

**F-49**

**Table of Contents**

## UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

<u>Name of related parties</u>	<u>Relationship with the Company</u>
AMIC Technology Corporation	Equity investee
Pacific Venture Capital Co., Ltd.	Equity investee
MediaTek Incorporation (MediaTek)	The Company is its supervisor
AU Optronics Corp. (Discharged on April 22, 2004)	The Company is its director and supervisor
Industrial Bank of Taiwan Corp. (IBT) (Holding shares were below 5% in the 3rd quarter of 2004)	
Chiao Tung Bank Co., Ltd. (Chiao Tung)	The Company is its major shareholder
Davicom Semiconductor, Inc.	The Company is its parent company's director and supervisor
Aptos (Taiwan) Corp.	Subsidiary's equity investee
United Radiotek Incorporation	Subsidiary's equity investee
UCA Technology, Inc.	Subsidiary's equity investee
AFA Technologies, Inc.	Subsidiary's equity investee
Harvatek Corp.	Subsidiary's equity investee
Thintek Optronics Corp.	Subsidiary's equity investee
Star Semiconductor Corp.	Subsidiary's equity investee
AEVOE Inc.	Subsidiary's equity investee
Ubit Technology Inc.	Subsidiary's equity investee
Smedia Technology Corp.	Subsidiary's equity investee
U-Media Technology, Inc.	Subsidiary's equity investee
Averlogic Corporation	Subsidiary is its director and supervisor
Epitech Corp.	Subsidiary is its director and supervisor
Coretronic Corporation	Subsidiary is its director and supervisor
Printech International, Inc.	Subsidiary is its director and supervisor
Fortune Semiconductor Corporation	Subsidiary is its director
Princeton Technology Corporation	Subsidiary is its director
Silicon 7, Inc.	Subsidiary is its director
Shin-Etsu Handotai Taiwan Co., Ltd. (Shin-Etsu)	Subsidiary is its director
Kits Online Technology Corp.	Subsidiary is its director
Giga Solution Tech. Co., Ltd.	Subsidiary is its director
Pixart Imaging, Inc.	Subsidiary is its director
InComm Technologies Co., Ltd.	Subsidiary is its director
Trendchip Technologies Corp.	Subsidiary is its director
Programmable Microelectronics (Taiwan) Corp.	Subsidiary is its director
LighTuning Tech., Inc.	Subsidiary is its director and supervisor
Cion Technology Corp.	Subsidiary is its director
VastView Technology Inc.	Subsidiary is its director and supervisor
XGI Technology Inc.	Affiliate Company

**Table of Contents**

## UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## Significant Related Party Transactions

(1) *Operating revenues*

	For the year ended December 31,					
	2002		2003		2004	
	Amount	Percentage	Amount	Percentage	Amount	Percentage
	NT\$ 000		NT\$ 000		NT\$ 000	
MediaTek	9,637,752	13	9,298,407	10	8,494,486	7
Others	6,682,023	9	8,614,577	9	12,138,274	9
<b>Total</b>	<b>16,319,775</b>	<b>22</b>	<b>17,912,984</b>	<b>19</b>	<b>20,632,760</b>	<b>16</b>

The sales price to the above related parties was determined through mutual agreement based on the market conditions. The collection period for overseas sales was net 30~60 days for the related parties and 30~60 days for third-party customers, while the terms for domestic sales were month-end 30~60 days for the related parties and 30~60 days for the third-party customers.

(2) *Purchases*

	For the year ended December 31,					
	2002		2003		2004	
	Amount	Percentage	Amount	Percentage	Amount	Percentage
	NT\$ 000		NT\$ 000		NT\$ 000	
Shin-Etsu	2,273,128	14	2,698,980	14	3,952,085	15
Others	219,235	1	288,289	2	317,206	1
<b>Total</b>	<b>2,492,363</b>	<b>15</b>	<b>2,987,269</b>	<b>16</b>	<b>4,269,291</b>	<b>16</b>

The purchases from the above related parties were dealt with in the ordinary course of business similar to those from third-party suppliers. The payment terms for purchase from overseas were net 60 days for the related parties and net 30~90 days for the third-party suppliers, respectively,

while the terms for domestic purchases were month-end 60 days and month-end 30-90 days for the related parties and third-party suppliers.

(3) *Notes receivable*

	As of December 31,			
	2003		2004	
	Amount	Percentage	Amount	Percentage
	NT\$ 000		NT\$ 000	
Holtek	101,203	92	39,034	95
Others	550			
<b>Total</b>	<b>101,753</b>	<b>92</b>	<b>39,034</b>	<b>95</b>

**Table of Contents**

## UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(4) *Accounts receivable, net*

	As of December 31,			
	2003		2004	
	Amount	Percentage	Amount	Percentage
	NT\$ 000		NT\$ 000	
MediaTek	1,713,842	9	1,026,286	8
Others	1,955,802	11	1,241,651	9
<b>Total</b>	<b>3,669,644</b>	<b>20</b>	<b>2,267,937</b>	<b>17</b>
Less: Allowance for sales returns and discounts	(283,420)		(200,143)	
Less: Allowance for doubtful accounts	(100,853)		(31,006)	
<b>Net</b>	<b>3,285,371</b>		<b>2,036,788</b>	

(5) *Accounts payable*

	As of December 31,			
	2003		2004	
	Amount	Percentage	Amount	Percentage
	NT\$ 000		NT\$ 000	
Shin-Etsu	754,354	11	628,641	12
Others	58,495	1	53,407	1
<b>Total</b>	<b>812,849</b>	<b>12</b>	<b>682,048</b>	<b>13</b>

(6) *Loans*

## For the year ended December 31, 2002

Maximum balance	Ending	Interest rate	Interest expense
-----------------	--------	---------------	------------------

Edgar Filing: UNITED MICROELECTRONICS CORP - Form 20-F/A

			balance		
	Amount	Month			
	NT\$ 000		NT\$ 000		NT\$ 000
Chiao Tung	1,224,575	January	868,195	2.07%-4.00%	32,717
IBT	998,750	January	783,296	2.89%-3.94%	16,216
<b>Total</b>			<b>1,651,491</b>		<b>48,933</b>

For the year ended December 31, 2003

	Maximum balance		Ending balance	Interest rate	Interest expense
	Amount	Month			
	NT\$ 000		NT\$ 000		NT\$ 000
Chiao Tung	865,796	January	282,557	1.66%-2.68%	15,840
IBT	783,296	January		2.54%-2.89%	2,535
<b>Total</b>			<b>282,557</b>		<b>18,375</b>

F-52

**Table of Contents**

## UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

For the year ended December 31, 2004

	Maximum balance		Ending balance	Interest rate	Interest expense
	Amount	Month			
	NT\$ 000		NT\$ 000		NT\$ 000
Chiao Tung	282,547	January		1.83%-2.53%	2,453

*(7) Disposal of property, plant and equipment*

The Group had no significant disposal of property, plant and equipment with related parties for the years ended December 31, 2002, 2003 and 2004.

*(8) Other transactions*

The Group has made several other transactions, including service charges, joint development expenses of intellectual property, subcontract expenses and commissions etc., with related parties totaling approximately NT\$363 million, NT\$493 million and NT\$596 million for the years ended December 31, 2002, 2003 and 2004, respectively.

As of December 31, 2003, the joint development contracts of intellectual property entered into with Faraday have amounted to approximately NT\$1,589 million, and a total amount of NT\$584 million has been paid. As of December 31, 2004, the joint development contracts of intellectual property entered into with Faraday have amounted to approximately NT\$2,185 million, and a total amount of NT\$1,142 million has been paid.

The Company has purchased approximately NT\$917 million, NT\$524 million and NT\$442 million of masks from DPT during the years ended December 31, 2002, 2003 and 2004, respectively.

As of December 31, 2003 and 2004, other receivables arising from usage of facilities and rental revenues from related parties are NT\$84 million and NT\$7 million, respectively.

## 26. Assets Pledged as Collateral

Edgar Filing: UNITED MICROELECTRONICS CORP - Form 20-F/A

As of December 31, 2003 and 2004, the following assets have been pledged as collateral against certain obligations of the Group.

Assets Pledged	As of December 31,		Purpose of pledge
	2003	2004	
	NT\$ 000	NT\$ 000	
Time deposits	178,691	5,000	Long-term loans
Land	452,916		Long-term loans
Buildings	1,201,678		Long-term loans
Machinery and equipment	11,127,841	30,054,212	Long-term loans and bonds payable
Construction in progress and prepayments	1,151,543		Long-term loans
<b>Total</b>	<b>14,112,669</b>	<b>30,059,212</b>	

F-53



**Table of Contents**

## UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## 27. Commitments and Contingent Liabilities

- (1) The Company has entered into several patent license agreements and joint development contracts of intellectual property for a total contract amount of approximately NT\$19 billion. Royalties and joint development fees for the future years are set out as follows:

<u>For the year ended December 31,</u>	<u>Amount</u>
	<u>NT\$ 000</u>
2005	3,267,197
2006	1,421,768
2007	1,521,573
2008	293,444
2009	127,449
<b>Total</b>	<b>6,631,431</b>

- (2) The Company signed several construction contracts for the expansion of its factory space. As of December 31, 2004, these construction contracts have amounted to approximately NT\$0.55 billion and the unpaid portion of the contracts was approximately NT\$0.42 billion.
- (3) Oak Technology, Inc. (Oak) and the Company entered into a settlement agreement on July 31, 1997 concerning a complaint filed with the United States International Trade Commission (ITC) by Oak against the Company and others, alleging unfair trade practices based on alleged patent infringement regarding certain CD-ROM controllers. On October 27, 1997, Oak filed a civil action in a California federal district court, alleging claims for breach of the settlement agreement and fraudulent misrepresentation. The Company has formally denied the material allegations of the Complaint, and asserted counterclaims against Oak for breach of contract, intentional interference with economic advantage and rescission and restitution based on fraudulent concealment and/or mistake. The Company also asserted declaratory judgment claims for invalidity and unenforceability of the relevant Oak patent. On May 2, 2001, the United States Court of Appeals for the Federal Circuit upheld the ITC's findings of no patent infringement and no unfair trade practice arising out of a second ITC case filed by Oak against the Company and others. Based on the Federal Circuit's opinion and on a covenant not to sue filed by Oak, the declaratory judgment patent counterclaims were disclaimed from the district court case. However, in connection with its breach of contract and other claims, Oak seeks damages in excess of US\$750 million. The district court has not yet set dates for dispositive motions or for trial. The Company believes that Oak's claims are meritless, and intends to vigorously defend the suit, and to pursue its counterclaims. As with all litigation, however, the Company cannot predict the outcome with certainty.

**Table of Contents**

## UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

- (4) The Group entered into several operating lease contracts for land. These operating leases expire in various years through 2032 and are renewable. Future minimum lease payments under those leases are as follows:

<u>For the year ended December 31,</u>	<u>Amount</u>
	<u>NT\$ 000</u>
2005	210,875
2006	205,125
2007	190,028
2008	186,833
2009 and thereafter	2,393,672
<b>Total</b>	<b>3,186,533</b>

- (5) The Company entered into several wafer-processing contracts with its customers. According to the contracts, the Company shall guarantee processing capacity, while these customers make deposits to the Company.

## 28. Significant Disaster Loss

None.

## 29. Significant Subsequent Events

On February 15, 2005, the Hsinchu District Prosecutor's Office conducted a search of the Company's facilities to investigate possible criminal offenses committed by the Company's Vice Chairman arising from an alleged relationship between Hejian Technology (Suzhou) Co., Ltd. (Hejian), a semiconductor manufacturer in Suzhou, China, and the Company. It was alleged that the Company's Vice Chairman breached his fiduciary duty to the Company and violated ROC securities laws. In May 2005, the Hsinchu District Prosecutor's Office expanded its investigation to include approximately 25 defendants, including the Company's Chairman and Vice Chairman. It was alleged that the defendants collectively moved the Company's funds, technology, equipment, customers' orders and labor resources to Hejian without regulatory approval which constituted a violation of ROC securities laws and a breach of fiduciary duty to the Company. As of June 10, 2005, no formal charge had been filed against the Company or any of its officials, including its Chairman and Vice Chairman. The outcome of this matter is not determinable and is uncertain at this time.

Coinciding with the investigation conducted by the Hsinchu District Prosecutor's Office, the ROC Financial Supervisory Commission, or FSC, a regulatory authority that supervises securities, banking, futures, and insurance activities in Taiwan, initiated a separate investigation into alleged violation of ROC securities laws by the Company and its officials. In April 2005, the FSC fined the Company's Chairman NT\$3.0 million for the delay or failure to make timely public disclosure concerning certain information relating to Hejian. In addition to the fines against its Chairman, the Company was fined NT\$30,000 by the Taiwan Stock Exchange for its delay in making public disclosure concerning certain information relating to Hejian. Although the Company and its Chairman have respectively appealed the fines, the outcome of these appeals is not known at this time.

30. Certain comparative amounts have been reclassified to conform to the current year's presentation.

**F-55**

**Table of Contents**

## UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## 31. Financial Instruments

## (1) Financial instruments

	As of December 31,			
	2003		2004	
	Book Value	Fair Value	Book Value	Fair Value
	NT\$ 000	NT\$ 000	NT\$ 000	NT\$ 000
<b>Non-derivative Financial Instruments</b>				
Financial assets				
Cash and cash equivalents	118,771,773	118,771,773	101,381,973	101,381,973
Marketable securities	1,820,328	2,278,195	3,143,697	3,176,319
Notes and accounts receivables	19,183,894	19,183,894	14,007,099	14,007,099
Long-term investments	38,859,249	83,057,858	32,712,278	75,610,904
Financial liabilities				
Short-term loans	1,884,899	1,884,899	2,986,919	2,986,919
Payables	19,563,678	19,563,678	23,113,196	23,113,196
Bonds payable (current portion included)	74,919,629	77,402,957	45,838,764	46,217,941
Long-term loans (current portion included)	6,338,144	6,338,144	23,710,500	23,710,500
Derivative Financial Instruments				
Credit-linked deposits and repackage bonds - non-trading purpose	4,166,594	4,166,594	2,942,434	2,942,434
Interest rate swaps - non-trading purpose	128,539	(18,882)	35,532	(416,149)
Forward contracts - non-trading purpose			38,633	38,633

The methods and assumptions used to measure the fair value of financial instruments are as follows:

- a. The book values of short-term financial instruments and other financial assets (credit-linked deposits and repackage bonds) approximate fair values due to their short maturities. The majority of investment portfolios of the credit-linked deposits and repackage bonds are either corporate bonds of maturity within one year, or highly liquidable secondary market bonds. Short-term financial instruments include cash and cash equivalents, notes receivable, accounts receivable, short-term loans, and payables.

**Table of Contents**

## UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

- b. The fair values of marketable securities and long-term investments are based on the quoted market value. If the market values of marketable securities and long-term investments are unavailable, the net assets values of the investees are used as fair values.
- c. The fair values of bonds payable are determined by the market value. The book values of long-term loans approximate the fair values as the loans bear floating rates.
- d. The fair values of derivative financial instruments are based on the amount the Company expects to receive (positive) or to pay (negative) assuming that the contracts are settled early at the balance sheet date.
- (2) The Company and its subsidiary, UMCJ, held credit-linked deposits and repackage bonds for the earning of interest income. Details are disclosed as follows:
- a. Principal amount in original currency

As of December 31, 2003The Company

<u>Credit-linked deposits and repackage bonds referenced to</u>	<u>Amount</u>		<u>Due Date</u>
Siliconwave Precision Industries Co., Ltd. European Convertible Bonds and Loans	USD	5 million	2004.07.30
Siliconwave Precision Industries Co., Ltd. European Convertible Bonds and Loans	USD	5 million	2004.07.30
Siliconwave Precision Industries Co., Ltd. European Convertible Bonds	USD	5 million	2004.07.28
Siliconwave Precision Industries Co., Ltd. European Convertible Bonds	USD	10 million	2004.08.02
Siliconwave Precision Industries Co., Ltd. European Convertible Bonds	USD	5 million	2004.08.01
Siliconwave Precision Industries Co., Ltd. European Convertible Bonds and Loans	NTD	210 million	2004.07.30
King Yuan Electronics Co., Ltd. European Convertible Bonds	USD	4.2 million	2004.04.18
Chi Feng Blinds Industry Co., Ltd. European Convertible Bonds	USD	2 million	2005.12.19
Stark Technology, Inc. European convertible Bonds	USD	5 million	2004.07.10
UMCi Ltd. Loans	USD	15 million	2004.03.10
UMC Japan European Convertible Bonds	JPY	1,000 million	2007.03.28

**Table of Contents**

## UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

**The Company**

<b>Credit-linked deposits and repackage bonds referenced to</b>	<b>Amount</b>	<b>Due Date</b>
UMC Japan European Convertible Bonds	JPY 600 million	2007.11.29
UMC Japan European Convertible Bonds	JPY 400 million	2007.11.02
The Company's Convertible Bonds	NTD 100 million	2004.03.05
Cathay Financial Holding Co., Ltd. European Convertible Bonds	USD 3 million	2005.05.23
Cathay Financial Holding Co., Ltd. European Convertible Bonds	USD 2 million	2005.05.23
Fubon Holding Co., Ltd., Siliconwave Precision Industries Co., Ltd. and the Company's European Convertible Bonds	USD 5 million	2004.07.30

**UMCJ**

<b>Credit-linked deposits and repackage bonds referenced to</b>	<b>Amount</b>	<b>Due Date</b>
UMC Japan European Convertible Bonds	JPY 1,000 million	2007.03.29
UMC Japan European Convertible Bonds	JPY 2,000 million	2007.11.28
UMC Japan European Convertible Bonds	JPY 1,100 million	2007.03.29

**As of December 31, 2004****The Company**

<b>Credit-linked deposits and repackage bonds referenced to</b>	<b>Amount</b>	<b>Due Date</b>
Siliconwave Precision Industries Co., Ltd. European Convertible Bonds and Loans	NTD 400 million	2007.02.05
Siliconwave Precision Industries Co., Ltd. European Convertible Bonds and Loans	NTD 200 million	2007.02.05
Chi Feng Blinds Industry Co., Ltd. European Convertible Bonds	USD 2 million	2005.12.19
HannStar Display Corporation European Convertible Bonds	USD 5 million	2005.10.19
UMC Japan European Convertible Bonds	JPY 640 million	2007.03.28
UMC Japan European Convertible Bonds	JPY 600 million	2007.11.29
UMC Japan European Convertible Bonds	JPY 400 million	2007.11.29
Cathay Financial Holding Co., Ltd. European Convertible Bonds	USD 3 million	2005.05.23
Cathay Financial Holding Co., Ltd. European Convertible Bonds	USD 2 million	2005.05.23
Advanced Semiconductor Engineering Inc. European Convertible Bonds and Loans	NTD 200 million	2007.09.25

**UMCI**

Credit-linked deposits and repackage bonds referenced to	Amount	Due Date
UMC Japan European Convertible Bonds	JPY 1,000 million	2007.03.29
UMC Japan European Convertible Bonds	JPY 2,000 million	2007.11.28
UMC Japan European Convertible Bonds	JPY 1,100 million	2007.03.29

F-58

**Table of Contents**

UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

b. Credit risk

The counterparties of the above investments are major international financial institutions. The repayment in full of these investments is subject to the non-occurrence of one or more credit events, which are referenced to the entities' fulfillment of their own obligations as well as repayment of their corporate bonds. Upon the occurrence of one or more of such credit events, the Company and its subsidiary - UMCJ may receive nil or less than full amount of these investments. The Company and its subsidiary - UMCJ have selected reference entities with high credit ratings to minimize the credit risk.

c. Liquidity risk

Early withdrawal is not allowed for the above investments unless called by the issuer. However, the anticipated liquidity risk is low since most of the investments will be matured within 1 year or are relatively liquid in the secondary market.

d. Market risk

There is no market risk for the above investments except for the fluctuations in the exchange rates of US Dollars and Japanese Yen to NT Dollars on the balance sheet date and the settlement date.

(3) The Company entered into interest rate swap and forward contracts and its subsidiaries, UMCi and UMCJ, entered into forward contracts for hedging the interest rate risks arising from the counter-floating rate of domestic bonds and for hedging the exchange rate risks arising from the net assets or liabilities denominated in foreign currency. The hedging strategy was developed with the objective to reduce the market risk, and not for trading purpose. The relevant information on the derivative financial instruments entered into by the Company and its subsidiaries, UMCi and UMCJ, is as follows:

a. The Company utilized interest rate swap agreements to hedge its interest rate risks on its counter-floating rate domestic bonds issued from May 21 to June 24, 2003. The periods of the interest rate swap agreements are the same as those of the domestic bonds, which are five and seven years. The floating rate is reset annually. The details of interest rate swap agreements are summarized as follows:



**Table of Contents**

## UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of December 31, 2003, and 2004, the Company had the following interest rate swap agreements in effect:

<u>Notional Amount</u>	<u>Contract Period</u>	<u>Interest Rate Received</u>	<u>Interest Rate Paid</u>
NT\$7,500 million	May 20, 2003 to May 20, 2008	4.0% minus USD	
		12-month LIBOR	1.52%
NT\$7,500 million	May 20, 2003 to May 20, 2010	4.3% minus USD	
		12-month LIBOR	1.48%

- b. The details of forward contracts entered into by the Company and its subsidiaries, UMCi and UMCJ, are summarized as follows:

As of December 31, 2003UMCi

<u>Type</u>	<u>Notional Amount</u>	<u>Contract Period</u>
Forward contracts	Buy EUR 67 million Sell USD 84 million	December 31, 2003 to January 26, 2004

As of December 31, 2004The Company

<u>Type</u>	<u>Notional Amount</u>	<u>Contract Period</u>
Forward contracts	Sell USD 77 million	December 23, 2004 to January 20, 2005

UMCJ

Edgar Filing: UNITED MICROELECTRONICS CORP - Form 20-F/A

Type	Notional Amount	Contract Period
Forward contracts	Sell USD 10 million	December 30, 2004 to January 04, 2005

c. Transaction risk

(a) Credit risk

There is no significant credit risk exposure with respect to the above transactions because the counterparties are reputable financial institutions with good global standing.

(b) Liquidity and cash flow risk

The cash flow requirements on the interest rate swap agreements are limited to the net interest payables or receivables arising from the differences in the swap rates. The cash flow requirements on forward contracts are limited to the net difference between the forward and spot rates at the settlement date. Therefore, no significant cash flow risk is anticipated since the working capital is sufficient to meet the cash flow requirements.

**F-60**

**Table of Contents**

UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(c) Market risk

Interest rate swap agreements and forward contracts are intended for hedging purposes. Gains or losses arising from the fluctuations in interest rates and exchange rates are likely to be offset against the gains or losses from the hedged items. As a result, no significant exposure to market risk is anticipated.

(d) The presentation of derivative financial instruments on financial statements

The net receivables or payables resulting from interest rate swap and forward contracts were recorded under current assets or current liabilities.

As of December 31, 2003 and 2004, the balances of current assets arising from interest rate swap were NT\$129 million and NT\$36 million, respectively.

As of December 31, 2004, the balance of current assets arising from forward contracts was NT\$39 million and related exchange loss in NT\$310 million was recorded under non-operating expenses for the year ended December 31, 2004.

32. Segment Information

(1) Operations in different industries

The Group's major business is operating as a full service semiconductor foundry.

(2) Operations in different geographic areas

The geographic region to which revenue is assigned is based on the location of the Group or its subsidiaries to which revenue earned from external customers is attributable.

For the year ended December 31,

2002	2003	2004
------	------	------

	Net operating		Net operating		Net operating	
	Revenues	Long-lived assets	Revenues	Long-lived assets	Revenues	Long-lived assets
	NT\$ 000	NT\$ 000	NT\$ 000	NT\$ 000	NT\$ 000	NT\$ 000
Taiwan	35,622,456	148,650,597	42,870,696	119,837,725	43,369,100	142,123,090
Asia, excluding Taiwan	7,298,697	22,088,806	10,548,816	33,395,966	11,139,860	58,557,465
North America	28,612,248	66,722	35,698,268	32,072	54,856,841	72,668
Europe and others	3,891,955	27,898	6,585,952	21,207	19,824,939	15,116
	<b>75,425,356</b>	<b>170,834,023</b>	<b>95,703,732</b>	<b>153,286,970</b>	<b>129,190,740</b>	<b>200,768,339</b>

F-61

**Table of Contents**

## UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## 33. US GAAP Reconciliation

Translations of amounts from New Taiwan dollars (NT\$) into United States dollars for the reader's convenience were calculated at the noon buying rate of US\$1.00 to NT\$31.74 on December 31, 2004 in The City of New York for cable transfers of NT\$ as certified for customs purposes by the Federal Reserve Bank of New York. No representation is made that the NT amounts could have been, or could be, converted into United States dollars at such rate.

Subsequent to the filing of our initial consolidated financial statements on Form 20-F for the year ended December 31, 2004 and through the process of addressing financial statement comments raised by the US SEC, we noted that certain US GAAP financial information as disclosed in Note 33 to our financial statements were miscalculated for the years ended December 31, 2002, 2003 and 2004. Accordingly, we restated the consolidated financial statements pursuant to US GAAP for the following items:

- i) an understatement of goodwill impairment charge of NT\$8,075 million for the year ended December 31, 2004 due to a miscalculation of the fair value of certain equity method investees and certain liabilities in the reporting unit.
- ii) embedded derivatives instruments which were fair valued inappropriately resulting in an understatement (overstatement) to net income of NT\$(516) million, NT\$1,855 million and NT\$(1,202) million for the years ended December 31, 2002, 2003 and 2004, respectively.
- iii) an understatement of compensation expense amounting to NT\$211 million relating to employee bonuses for the year ended December 31, 2004.

The effects arising from the amendments to the consolidated financial statements under US GAAP are summarized as follows:

(In million NT dollars, except per share amounts)	For the year ended December 31, 2002		
	As reported	Restatement	As restated
Net Income	294	(516)	(222)
Basic earning per share (in dollars)	0.02	(0.03)	(0.01)
Diluted earning per share (in dollars)	0.02	(0.03)	(0.01)

  

(In million NT dollars)	As of December 31, 2002		
	As reported	Restatement	As restated
Total Assets	442,645		442,645

Edgar Filing: UNITED MICROELECTRONICS CORP - Form 20-F/A

Total Liabilities	92,596	516	93,112
Shareholders' equity	334,025	(516)	333,509

F-62

**Table of Contents**

## UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

	<b>For the year ended December 31, 2003</b>		
	<b>As reported</b>	<b>Restatement</b>	<b>As restated</b>
<b>(In million NT dollars, except per share amounts)</b>			
Net Income	10,476	1,855	12,331
Basic earning per share (in dollars)	0.63	0.12	0.75
Diluted earning per share (in dollars)	0.62	0.11	0.73

	<b>As of December 31, 2003</b>		
	<b>As reported</b>	<b>Restatement</b>	<b>As restated</b>
<b>(In million NT dollars)</b>			
Total Assets	486,360	(53)	486,307
Total Liabilities	108,925	(1,392)	107,533
Shareholders' equity	362,396	1,340	363,736

	<b>For the year ended December 31, 2004</b>		
	<b>As reported</b>	<b>Restatement</b>	<b>As restated</b>
<b>(In million NT dollars, except per share amounts)</b>			
Net Loss	(4,749)	(9,488)	(14,237)
Basic loss per share (in dollars)	(0.28)	(0.57)	(0.85)
Diluted loss per share (in dollars)	(0.28)	(0.57)	(0.85)

	<b>As of December 31, 2004</b>		
	<b>As reported</b>	<b>Restatement</b>	<b>As restated</b>
<b>(In million NT dollars)</b>			
Total Assets	460,322	(8,108)	452,214
Total Liabilities	101,354	(171)	101,183
Shareholders' equity	350,358	(7,938)	342,420

The accompanying consolidated financial statements have been prepared in conformity with generally accepted accounting principles in the Republic of China (ROC GAAP), which differ in certain material respects from generally accepted accounting principles in the United States (US GAAP). Such differences include methods of consolidation and methods for measuring the amounts shown in the financial statements, as well as additional disclosures required by US GAAP. Material GAAP differences are stated as amended below.

**Table of Contents**

## UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(1) *Compensation*

	For the year ended December 31,		
	2002	2003	2004
	NT\$ 000	NT\$ 000	NT\$ 000 [Restated]
Net income impact of compensation adjustments			
US GAAP adjustments:			
Remuneration to directors and supervisors	(6,365)	(11,903)	(28,659)
Treasury stock transferred to employees		(699,742)	
Employees' bonuses			
Accrual	(823,702)	(1,838,363)	(2,527,721)
Adjustment to fair market value	(6,592,188)	(433,422)	(1,235,278)
<b>Total employees' bonuses</b>	<b>(7,415,890)</b>	<b>(2,271,785)</b>	<b>(3,762,999)</b>
Allocation to inventories, net of allocations to inventories in prior period and sold in current period	73,338	68,436	40,607
<b>Total net income adjustment relating to compensation</b>	<b>(7,348,917)</b>	<b>(2,914,994)</b>	<b>(3,751,051)</b>

	As of December 31,	
	2003	2004
	NT\$ 000	NT\$ 000
Stockholders' equity impact of compensation adjustments		
US GAAP adjustments:		
Remuneration to directors and supervisors	(12,618)	(28,659)
Employees' bonuses	141,774	182,381
<b>Total stockholders' equity adjustment relating to compensation</b>	<b>129,156</b>	<b>153,722</b>

Remuneration to directors and supervisors - The Company's Articles of Incorporation requires a cash remuneration payment to its directors and supervisors from appropriating a portion of distributed earnings. Under ROC GAAP, such payments are charged directly to retained earnings in the period when shareholders approve such payment. Under US GAAP, such cash payments should be recorded as compensation expense in the period when services are rendered.



**Table of Contents**

UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Treasury stock transferred to employees - From time to time, the Company acquires its common stock and reissue these treasury stocks to certain of our employees to compensate them for their productivity and loyalty to our company. Under ROC GAAP, the difference, if any, between the cost paid by the Company for the treasury stock and the cash received from our employees is charged to a shareholders' equity account. Under US GAAP, the Company recognizes compensation expense based on the difference between the fair market value of the stock on the date of grant and the amount of cash received from the employees. The fair market value of our treasury stock is determined based on the quoted market price of our common stock on the date of grant.

Employees' bonuses - Certain employees of the Company are entitled to bonuses, which are determined in accordance with the provisions of the Company's Articles of Incorporation and settled in the form of shares, as discussed in Note 20. Under ROC GAAP, such bonuses are treated as an appropriation of retained earnings and the amount, recorded at the par value of the common shares issued, would be charged against retained earnings in the period when the shareholders' approval is obtained. Under US GAAP, the fair value of employees' bonuses is recognized as compensation expense. Pursuant to the Company's Article of Incorporation, the Company must pay a minimum employee bonus when certain objectively determinable financial criteria are met as at the year end date. Shareholders' approval of the minimum employee bonus is determined to be reasonably assured. Accordingly, the minimum employee bonus is accrued, based on the fair value of the shares at the balance sheet date, as a compensation expense in the period when services are rendered. If the shareholders of the Company approve an amount in excess of the minimum employee bonus, an additional compensation expense is recorded based on the fair value of the additional shares issued at the time when such approval is obtained.

The difference between US GAAP and ROC GAAP in this respect has resulted in adjustments to net income and shareholders' equity. The total amount charged to compensation expense from 2002 to 2004 represents an aggregate of 340 million shares. The minimum compensation expense accrued for employee bonuses in 2002, 2003 and 2004 before allocation to inventories were NT\$824 million, NT\$1,838 million and NT\$2,528 million, respectively. In addition, there is also a reclassification from retained earnings to capital reserve of NT\$34,186 million and NT\$34,933 million at December 31, 2003 and 2004, respectively.

(2) *Equity Investments - Net income variance between US GAAP and ROC GAAP*

The Group's proportionate share of the income (loss) from an equity investee under ROC GAAP may differ from US GAAP if the equity investee's net income (loss) is different under the two GAAPs. Those differences for the equity investees include accounting for compensation, technological know-how and investment in marketable securities, etc.

**Table of Contents**

## UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(3) *Investments in Debt and Equity Securities*

Under ROC GAAP, marketable securities are classified as either short-term or long-term investments and carried at the lower of aggregate cost or market value. The determination of whether an investment is short-term or long-term takes into consideration the Company's ability and intention to hold those securities, whether the securities have quoted market prices and whether the securities are actively bought and sold by the Company. All unrealized losses for short term investments are recognized in the statement of income and to the extent unrealized gains represent recoveries of previously recorded losses, they are recognized in the statement of income. Unrealized gains in excess of original cost are not recognized until realized. For long term investments, a decline in market value below cost is charged to stockholders' equity unless this decline is not expected to be recovered in the future in which case, the decline is charged as a loss to the statement of income. Unrealized appreciation in market value above original cost is not recognized until realized. Under US GAAP, according to SFAS 115, equity securities, over which the Group exercises no significant influence or control and with readily determinable fair values, and debt securities are to be classified as either trading, available-for-sale or held-to-maturity securities. Debt securities that the Group has the positive intent and ability to hold to maturity are classified as held-to-maturity securities and reported at amortized cost. Debt and equity securities that are bought and traded for short-term profit are classified as trading securities and reported at fair value, with unrealized gains and losses included in earnings. Debt and equity securities not classified as either held-to-maturity or trading securities are classified as available-for-sale securities and reported at fair value, with unrealized gains and losses excluded from earnings and reported in other comprehensive income except for unrealized losses that are deemed to be other than temporary which are charged to earnings.

## (a) Change in fair value of investments

The Group's investments in marketable securities for trading purposes are classified as short term investments under ROC GAAP and as trading securities under US GAAP, the unrealized gains and losses for the years ended December 31, 2002, 2003 and 2004 on trading securities still held at each of the respective balance sheet dates were NT\$19,400, NT\$494,564 and NT\$(374,908), respectively.

The Group holds investments in convertible bonds which are convertible to the common stock of the issuer. Under ROC GAAP, these investments were accounted for in whole as short-term investments. Under US GAAP, pursuant to SFAS 133, holders of investments in convertible bonds must bifurcate the embedded conversion options and separately account for them at fair value, unless the underlying investment has been already accounted for at fair value under SFAS 115. In 2003, the Company held one convertible bond investment with its host contract classified as an available-for-sale security. The equity option was fair valued (NT\$10 million) using an option-pricing model and bifurcated from the host bond investment with a carrying value of NT\$29 million. Changes in fair value of such options amounted to NT\$(25) million and NT\$2 million reported in earnings for the years ended December 31, 2002 and 2003, respectively. In 2004, all of our investments in convertible bonds were accounted for as trading securities and recorded at fair value in accordance with SFAS 115; hence the equity option is not required to be separately accounted for under SFAS 133.

**Table of Contents**

## UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

The Group holds equity securities, over which the Group does not have the ability to exercise significant influence or control, that are classified as long-term investments under ROC GAAP; whereas under US GAAP, such equity securities are classified as available-for-sale securities. Information on sales of available-for-sale equity securities for the years ended December 31, 2002, 2003 and 2004 are as follows:

	<b>Proceeds from sales</b>	<b>Gross realized gains</b>	<b>Gross realized losses</b>
	<b>NT\$ 000</b>	<b>NT\$ 000</b>	<b>NT\$ 000</b>
For the year ended December 31, 2002	8,530,551	6,520,197	264
For the year ended December 31, 2003	7,931,116	5,465,928	92,517
For the year ended December 31, 2004	17,663,280	11,972,460	15,431

Information on available-for-sale equity securities still held at each balance sheet date is as follows:

	<b>Fair Value</b>	<b>Total unrealized gains</b>	<b>Total unrealized losses</b>	<b>Net unrealized gains (losses)</b>
	<b>NT\$ 000</b>	<b>NT\$ 000</b>	<b>NT\$ 000</b>	<b>NT\$ 000</b>
As of December 31, 2002	35,127,937	19,322,091	574,484	18,747,607
As of December 31, 2003	49,792,187	33,979,754	792,858	33,186,896
As of December 31, 2004	27,432,594	19,490,852	25,926	19,464,926

The Group did not transfer any available-for-sale securities to trading securities for the years ended December 31, 2002, 2003 and 2004. For the years ended December 31, 2002, 2003 and 2004, NT\$5,034,105, NT\$3,036,738 and NT\$10,790,505, respectively, were reclassified from other comprehensive income to the statement of income upon the disposal of available-for-sale securities.

**Table of Contents**

UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(b) Impairment of investments in securities

Under ROC GAAP, for long term investments over which the Group does not have the ability to exercise significant influence or control, unrealized losses would be reported on the statement of income if evidence indicates that the value of an investment has been impaired and is unlikely to recover in the future. ROC GAAP does not define nor provide additional guidance on how to assess the likelihood of future recovery; therefore the Company's policy is to take a longer term view in assessing future recovery and such term may exceed six months. Under US GAAP, for individual securities classified as either available-for-sale or held-to-maturity, the Group would determine whether a decline in fair value below cost is other than temporary pursuant to guidance provided by SFAS 115 and EITF 03-1. The Company considers, amongst other factors, information concerning significant adverse changes in market conditions in which the investee operates and investee specific operating issues in determining whether a decline in value is other than temporary. In general, the Company considers a decline in market value below cost for a continuous period of 6 months to represent an other than temporary decline under US GAAP. 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. Accordingly, net income under US GAAP would be increased (decreased) by NT\$(349) million, NT\$781 million and NT\$(3,050) million for the year ended December 31, 2002, 2003 and 2004 respectively.

(c) Difference in application of equity accounting

Under ROC GAAP, equity investments where an investor company has an ownership interest of at least 20% are generally required to be accounted for under the equity method. However, when there is evidence indicating that the investor company does not have significant influence over the equity investee, despite an ownership interest of 20% or more, the investor company should not account for the equity investee under the equity method. On the contrary, when there is evidence indicating that the investor company has significant influence over the equity investee's operating and financial policies, despite an ownership interest of less than 20%, the investor company will account for the equity investee under the equity method. Under US GAAP, the Group is required to use the equity method to account for an investment in common stock when the investment in voting stock gives it the ability to exercise significant influence over operating and financial policies of an investee. An investment (direct or indirect) of 20% or more of the voting stock of an investee leads to a presumption that in the absence of evidence to the contrary an investor has the ability to exercise significant influence over an investee.

There were no significant differences between ROC GAAP and US GAAP on statements of operations for the year ended December 31, 2002. Under ROC GAAP, when an investor company's ownership percentage of an investee's outstanding common stock is the highest among shareholders, the investor company is considered to have significant influence over the investee and equity accounting shall be applied, despite an ownership interest of less than 20%. However, under US GAAP, this does not qualify for a relationship of significant influence and hence equity accounting shall not be applied unless the investor holds more than 20% of the voting rights. The difference between US GAAP and ROC GAAP in this respect would result in a decrease in investment loss accounted for under the equity method of NT\$465 million and NT\$861 million and an increase in unrealized gain on available-for-sale securities of NT\$750 million and NT\$148 million, for the year ended December 31, 2003 and 2004.

**Table of Contents**

UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(d) Adjustments due to change in ownership of investees

When the convertible bonds issued by the Group's subsidiary are required by bondholders from the third parties to be converted into the issuer's common shares, or the Group converts its investment in convertible bonds issued by its equity investee into the investee's common shares, the Group's relative ownership interest in the subsidiary may change. Under ROC GAAP, the change in the Group's proportionate share in the net assets of its investee resulting from its subscription to additional shares of stock, issued by such investee, at the rate not proportionate to its existing equity ownership in such investee, is recorded to the capital reserve and long-term investments account.

Under US GAAP, a dilution of ownership interest is recognized as a gain or loss in the statement of income upon conversion, as long as the value of the proceeds can be objectively determined and the realization of the gain is reasonably assured at the time of conversion. For the years ended December 31, 2002, 2003 and 2004, approximately NT\$9.5 million, NT\$70 million and NT\$9 million were reclassified from capital reserve to a gain in the statement of income relating to these transactions. In addition, under US GAAP, the increase in ownership interest is treated as a purchase of additional shares and the difference between the total cost of the investment and the proportionate share of the fair value of net assets is allocated to goodwill, which was amortized over the estimated useful lives prior to January 1, 2002. Upon the first adoption of the SFAS 141, Business Combination and SFAS 142, Goodwill and Other Intangible Assets by the Group on January 1, 2002, goodwill created from acquisition is no longer amortized. For the year ended December 31, 2000, the Group capitalized goodwill of NT\$468.3 million resulting from the Group's exercising conversion right on bonds issued by its subsidiary, with NT\$49.4 million and NT\$93.7 million being amortized in the statement of income for the years ended December 31, 2000 and 2001, respectively, and nil for the subsequent periods.

(4) *Treasury Stock and Gain on Disposal of Treasury Stock*

Under ROC GAAP, when the Group's equity investee sells the Company's stock, it recognizes the gain or loss in its statement of operations. Under US GAAP, the Group's equity in income (loss) of an investee is adjusted to eliminate the Company's proportionate share of any such gains or losses. Further, the Company's stock owned by an investee is proportionately deducted from the investment as treasury stock.

**Table of Contents**

## UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

*(5) Technological Know-how*

The Group entered into three joint ventures from 1995 through 1996. Both the Group and the joint venture partners contributed cash to the joint ventures. In addition, the Group contributed technological know-how to the joint ventures for shares of the joint venture companies. Both parties mutually agreed to the value of this transferred technological know-how before the transfer of shares. The technological know-how contributed has not been recognized on the Group's balance sheet, as these were internally generated intangible assets with no carrying value.

Under ROC GAAP, the Group recognized the cash contributed as the initial cost of the investment. The difference between the proportionate share of the net assets in the joint venture and the cash contributed is amortized to income over the estimated useful life of the technological know-how, which is the source of this difference. Further, the joint venture recognized value for the technological know-how as an intangible asset contributed, which is the cause of the difference between the proportionate share of the net assets and the cash contributed.

Under US GAAP, the investor initially records its joint venture investment at cost, representing the amount of cash contributed and/or net book value of non-cash assets contributed. The joint venture normally records cash investments at the amount contributed, non-cash assets at fair value, and intangible assets at the predecessor basis, which is normally zero. The joint venture does not recognize value for the technological know-how contributed, thus causing a difference from ROC GAAP.

This practice only applies to entities that are being consolidated or accounted for under the equity method.

*(6) Convertible and Exchangeable Bond Liabilities*

Details of the bonds outstanding as of December 31, 2003 and 2004 are provided below:

	December 31	
	2003	2004
	NT\$ 000	NT\$ 000
Domestic secured bonds :		
Issued in April 2000 and due on April 2005, 5.6% interest payable semi-annually	1,710,002	570,003
Domestic unsecured bonds :		
Issued in April 2001 and due on April 2006, 5.1195% ~ 5.1850% interest payable annually	7,500,000	5,250,000
Issued in April 2001 and due on April 2008, 5.2170% ~ 5.2850% interest payable annually	7,500,000	7,500,000
Issued in October 2001 and due on October 2004, 3.3912% ~ 3.420% interest payable annually	5,000,000	
Issued in October 2001 and due on October 2006, 3.4896% ~ 3.520% interest payable annually	5,000,000	5,000,000
Issued in May~June 2003 and due on May~June 2008, 4.0% minus USD 12-Month Libor interest payable annually	7,500,000	7,500,000

Edgar Filing: UNITED MICROELECTRONICS CORP - Form 20-F/A

Issued in May~June 2003 and due on May~June 2010, 4.3% minus USD 12-Month Libor interest payable annually	7,500,000	7,500,000
Zero coupon convertible bonds :		
Issued in December 2001 and due on March 2004	8,188,954	
Issued in March 2002 and due on March 2007	2,991,065	2,914,277
Issued in November 2003 and due on November 2013	6,877,850	6,476,863
Zero coupon exchangeable bonds :		
Issued in May 2002 and due on May 2007	7,994,700	3,107,029
Issued in July 2003 and due on July 2008	6,809,784	
Premiums on exchangeable bonds	187,360	
Premiums on convertible bonds	33,151	20,592
Compensation interest payable	126,763	
	<hr/>	<hr/>
Subtotal	74,919,629	45,838,764
Less : Current Portion	(16,705,716)	(2,820,003)
	<hr/>	<hr/>
Net	\$ 58,213,913	\$ 43,018,761
	<hr/>	<hr/>

F-70

**Table of Contents**

UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

*Convertible Bonds*

Under ROC GAAP, when convertible bonds are issued, the entire instrument is recorded as a liability at an amount equal to the proceeds received. Any discount or premium to the par value of the convertible bond is amortized to the statement of income by using the effective interest rate method. If the convertible bonds contain a redemption premium above its par value amount, the excess is accrued, using the effective interest rate method, over the period to redemption as a charge to interest expense. Upon conversion, the carrying value of the bond is credited to common stock at its par value and the difference between the carrying value of the bond and the par value of stock is recorded to capital reserve. No gain or loss is recognized.

Under US GAAP, in accordance with SFAS 133, *Accounting for Derivative Instruments and Hedging Activities*, the conversion feature embedded in a bond does not have to be separately accounted for as a derivative at fair value, if the feature is indexed only to the issuer's own stock and would otherwise be classified in stockholders' equity in the issuer's statement of financial position.

The Group had issued zero coupon convertible bonds on December 12, 2001, totaling US\$302.4 million. This US dollar denominated convertible bond permits the bondholder to convert into either the Company's common stock which is traded on the Taiwan Stock Exchange (denominated in New Taiwan Dollars) or into the Company's ADS which are traded on the New York Stock Exchange (denominated in US Dollars). The conversion terms contain a fixed foreign exchange feature which determines the rate at which the bond will be converted into New Taiwan Dollar stock. As a result, the combination of the conversion feature and the fixed foreign exchange rate results in a compound embedded derivative instrument which meets the definition of a derivative instrument under SFAS 133 and hence requires the compound embedded derivative to be fair valued. In addition to the compound derivative, the convertible bonds also contain a call feature, which gives the Group the right to redeem the bonds at the early redemption price under certain conditions before maturity. The conversion option with a fixed exchange rate feature and the call option are accounted for at fair value at each reporting date with any change in fair value reported to the statement of income. The difference between the bond face value and the amount attributed to the embedded derivative is amortized to interest expense over the term to maturity of the bond instrument. As of December 31, 2003, the fair value of the derivative was nil, resulting in a gain of NT\$479 million and NT\$17 million being recognized for the years ended December 31, 2002 and 2003, respectively. The Group recognized interest expense arising from the amortization of bond discount of NT\$221 million, NT\$203 million and NT\$29 million for the years ended December 31, 2002, 2003 and 2004, respectively.



**Table of Contents**

UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

**Exchangeable Bonds**

The Company has issued and outstanding exchangeable bonds denominated in US dollars which permit the holders to exchange the bonds into shares of a third party entity. Under ROC GAAP, when exchangeable bonds are issued, the entire instrument is recorded as a liability at an amount equal to the proceeds received and any discount or premium to the par value is amortized to the statement of income by using the effective interest rate method. If an exchangeable bond is exchanged into the underlying securities, a gain or loss is recognized in the statement of income for the difference, if any, between the carrying value of the bond and the carrying value of the securities exchanged.

Under US GAAP, pursuant to SFAS 133, the exchange feature which is indexed to the security of a third party entity qualifies as a derivative instrument and is required to be accounted for at fair value with changes in fair value reported on the statement of income. The Group had two US dollar-denominated exchangeable bonds issued in May 2002 and July 2003. The underlying securities into which they can be exchanged are the third party entity's common stocks traded on the Taiwan Stock Exchange (denominated in New Taiwan Dollars) or into its ADS securities which are traded on the New York Stock Exchange (denominated in US Dollars). The exchangeable bonds contain a fixed foreign exchange feature which determines the rate at which the bonds will convert into common stock if exchanged. Also, the terms of the bonds permit the Group to redeem the bonds at the early redemption price if certain conditions are met. Therefore, the exchangeable bonds which contain a compound derivative instrument, comprising of the exchange option with a fixed foreign exchange rate feature and a call option, is recognized at fair value with any changes to fair value recorded to the statement of income. The difference between the bond face value and the amount attributed to the embedded derivative is amortized to interest expenses over the term of the bond instrument. As of December 31, 2003 and 2004, the fair value of the compound derivative instrument was NT\$703 million and NT\$183 million, respectively, resulting in a gain (loss) of NT\$337 million, NT\$(365) million and NT\$520 million being recognized for the years ended December 31, 2002, 2003 and 2004, respectively. The Group also recognized interest expense arising from the amortization of bond discount of NT\$49 million, NT\$102 million and NT\$59 million for the years ended December 31, 2002, 2003 and 2004, respectively.

**Table of Contents**

UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(7) *Goodwill*

Under ROC GAAP, the fair value of the net assets received is deemed to be the value of the consideration for the acquisition of the remaining interests in United Semiconductor, United Silicon, UTEK Semiconductor and United Integrated Circuits in January 2000. Under ROC GAAP, the acquisition cost of the merger with SiSMC was determined using the average market price of the shares exchanged over one month before the effective date, which represented the reasonable market price of the net assets merged from SiSMC. Under US GAAP, EITF No. 99-12 requires that the securities exchanged should be valued based on the market prices a few days before and after the date when the terms of the acquisition are agreed to and announced. Under US GAAP, the acquisition was accounted for using the purchase method of accounting and the purchase price was determined using the market value of the shares exchanged. The difference between the fair value of the shares exchanged and the fair value of the net assets acquired created goodwill.

For 2004 and prior years, pursuant to the ROC SFAS No. 25 Business Combinations Accounting Treatment under Purchase Method and Business Mergers And Acquisitions Act, goodwill was amortized by using the straight line method over a period of 15 years. Under ROC GAAP, goodwill is not subject to an impairment test. Effective for fiscal years beginning January 1, 2005, a new accounting standard issued under ROC GAAP (Statement of Financial Accounting Standards No. 35 Accounting for Asset Impairment) will subject goodwill to an annual impairment test. Upon the adoption of SFAS 141 & 142 on January 1, 2002 by the Group, the goodwill ceased to be amortized and is subject to an annual impairment test or when events and circumstances indicate a possible impairment may exist. The Company has determined that it has one reporting unit whose fair value is best determined by its quoted market prices on the New York Stock Exchange (for its ADS securities) and on the Taiwan Stock Exchange (for its common stock). Goodwill is assigned to the one reporting unit and tested, pursuant to SFAS 142, annually on December 31, as determined by the Company's accounting policy. In the past, the quoted market prices on these stock exchanges have been very volatile which the Company believes is reflective of the cyclical nature of its business and industry. In fiscal years 2002 and 2003, the Company's stock price at year end supported its conclusion that no goodwill impairment loss existed. During 2004, the Company experienced a gradual and continual decline in its stock price commencing in the second quarter of 2004. The Company believes the decline was primarily driven by lower investor confidence in the short-term prospects of the Taiwan semiconductor industry which also had the same impact on the stock prices of other semiconductor companies in Taiwan. As such, the Company recognized a goodwill impairment charge of NT\$39,795 million as of December 31, 2004 (2003 NT\$nil; 2002 NT\$nil).

**Table of Contents**

## UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(8) *Earnings per Share*

Under ROC GAAP, basic earnings per share are calculated by dividing net income by the weighted average number of shares outstanding during the year. Diluted earnings per share are calculated by taking basic earnings per share into consideration plus additional common shares that would have been outstanding if the dilutive share equivalents had been issued. The net income would also be adjusted for the interest and other income or expenses derived from any underlying dilutive share equivalents. The weighted average shares outstanding are adjusted retroactively for stock dividends issued and shares issued for employees' bonus, as described under (1) Compensation above.

Under US GAAP, basic earnings per share are calculated by dividing net income attributable to common stockholders by the weighted average number of shares outstanding during the year. Shares issued for employees' bonus are considered to be contingently issuable shares and are included in the computation of basic earnings per share as of the date that all necessary conditions have been satisfied. Diluted earnings per share are calculated by taking into consideration additional common shares that would have been outstanding if the dilutive share equivalents had been issued. Contingently issuable shares are included in the computation of diluted earnings per share, if dilutive, as if they have been outstanding since the beginning of the period if all necessary conditions for their issuance have been satisfied by the end of the period. The net income attributable to common stockholders would also be adjusted for the interest and other income or expenses derived from any underlying dilutive share equivalents.

The reconciliation of the numerators and denominators used in computing the basic and diluted earnings per share under US GAAP are as below:

	<b>For the Year Ended 2004</b>		
	<b>Income</b>	<b>Shares</b>	<b>Per-Share</b>
	<b>(Numerator)</b>	<b>(Denominator)</b>	<b>Amount</b>
	<b>In thousands</b>	<b>In thousands</b>	<b>In dollar NT\$</b>
Net Loss restated	(14,236,841)		
Basic EPS and diluted EPS			
Loss available to common stockholders	(14,236,841)	16,812,498	(0.85)

**Table of Contents**

## UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of December 31, 2004, there were 973.858 million issued and outstanding stock options and 123.303 million contingently issuable shares, which were not included in the computation of diluted earnings per share due to their antidilutive effect.

	For the Year Ended 2003		
	Income (Numerator)	Shares (Denominator)	Per-Share Amount
	In thousands	In thousands	In dollar NT\$
Net Income restated	12,331,096		
Basic EPS			
Income available to common stockholders	12,331,096	16,530,334	0.75
Effect of Dilutive Securities			
Employee stock options		227,310	
Contingently issuable stock		68,228	
Diluted EPS			
Income available to common stockholders including assumed conversions	12,331,096	16,825,872	0.73

As of December 31, 2003, there were 54.96 million issued and outstanding stock options and zero coupon convertible bonds with a principle amount of US\$240.71 million, which were not included in the computation of diluted earnings per share due to their antidilutive effect.

	For the Year Ended 2002		
	Income (Numerator)	Shares (Denominator)	Per-Share Amount
	In thousands	In thousands	In dollar NT\$
Net Loss - restated	(221,811)		
Basic EPS and diluted EPS			
Loss available to common stockholders	(221,811)	16,498,696	(0.01)

As at December 31, 2002, there were 93.9 million issued and outstanding stock options, 43.853 million contingently issuable shares and US\$302.4 million zero coupon convertible bonds, which were not included in the computation of diluted earnings per share due to their antidilutive effect.

**Table of Contents**

UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

*(9) Tax Effect of US GAAP Adjustments*

Undistributed earnings generated after 1997 are subject to a 10% tax in compliance with the Income Tax Law of the ROC. Under ROC GAAP, the 10% tax on undistributed earnings is recorded as an expense at the time shareholders resolve that its earnings shall be retained. Under US GAAP, the Group would measure its income tax expense, including the tax effects of temporary differences, using the tax rate that includes the tax on undistributed earnings.

*(10) Principles of Consolidation*

Under ROC GAAP, certain majority-owned (above 50%) subsidiaries are not consolidated if they meet specific exclusion rules detailed in the accounting policies footnote. Under US GAAP, consolidation is generally required when one of the companies in a group directly or indirectly has a controlling financial interest in the other companies. The usual condition for controlling financial interest is ownership of a majority of the voting interest and, therefore, as a general rule, ownership by one company, directly or indirectly, of over fifty percent of the outstanding voting shares of another company is a condition pointing towards consolidation. Consolidation of majority-owned subsidiaries is required in the preparation of consolidated financial statements, unless control does not rest with the majority owner. As such, under US GAAP, the Company consolidates those subsidiaries that are excluded from consolidation under ROC GAAP due to the exclusion rules (Fortune Venture Capital Corporation, Unitruth Investment Corp., UMC Capital Corporation, United Microelectronics Corp. (Samoa), and United Foundry Service, Inc.) The net income and stockholders' equity variances between US GAAP and ROC GAAP for those entities are included in the adjustment for equity investments.

*(11) Stock Dividends*

Under ROC GAAP, stock dividends are recorded at a par value with a charge to retained earnings. Under US GAAP, if the ratio of distribution is less than 25 percent of the same class of shares outstanding, the fair value of the shares issued should be charged to retained earnings. The accumulative effect of these dividends would have decreased retained earnings and increased capital reserve for the years ended December 31, 2003, and 2004 by approximately NT\$251,384 million and NT\$270,651 million, respectively.

*(12) Other financial assets and liabilities*

Interest rate swap

To eliminate the variability of cash flows in the interest payments of its NT\$15 billion variable-rate domestic bonds issued in May to June 2003, the Company entered into interest rate swap agreements with notional amounts of NT\$15 billion that effectively convert the floating-rate domestic bonds to a fixed-rate basis over the term of the bonds. Under ROC GAAP, the periodic cash settlement under the interest rate swap is accrued in the statement of income as an adjustment to interest expense. The net receivable or payable under the interest rate swap is included as other financial assets. Changes in fair value of the interest rate swap, as a hedging instrument, are not required to be accounted for as of the balance sheet date.

**F-76**

**Table of Contents**

UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Under US GAAP, SFAS 133 requires the recognition of all derivative instruments as either assets or liabilities in the statement of financial position at fair value. The accounting for changes in the fair value of a derivative instrument depends on whether it has been designated and qualifies as part of a hedging relationship and further, on the type of hedging relationship. For those derivative instruments that are designated and qualified as hedging instruments, a company must designate the hedging instrument, based upon the exposure being hedged, as a fair value hedge, a cash flow hedge or a hedge of a net investment in a foreign operation.

The Company's interest rate swap agreements were designated as cash flow hedges. For derivative instruments that are designated and qualified as cash flow hedges to hedge the exposure to variability in expected future cash flows that is attributable to a particular risk, the effective portion of the gain or loss on the derivative instrument is reported as other comprehensive income, a component of stockholders' equity, and reclassified into earnings in the same period or periods during which the hedged transaction affects earnings. Therefore, to recognize the change in fair value of the interest rate swap, an amount of NT\$(19) million and NT\$(397) million was included in other comprehensive income under US GAAP for the years ended December 31, 2003 and 2004, respectively.

Credit-linked deposits and repackage bonds

At December 31, 2002, 2003 and 2004, the Company held assets in the form of credit-linked deposits. The Company placed deposits in major financial institutions ( Financial Institutions ) and these deposits are credit-linked to debt securities ( Reference Entities Securities ) issued by other entities ( Reference Entities ) such that ultimate repayment of deposit is dependent on whether the Credit Event occurs. For example, if the Reference Entities go bankrupt or default ( Credit Event ) on their obligations then the Company may suffer a loss on its credit-linked deposits. When a Credit Event occurs, the Financial Institutions can settle the Company's credit-linked deposits with cash received from the sale of the Reference Entities Securities, if any, or by transferring the Reference Entities Securities to the Company. The Company can not redeem or settle the credit-linked deposits prior to the stated maturity date.

Under ROC GAAP, these investments are accounted for as monetary deposits and classified as current or non-current other financial assets on the balance sheet based on their terms to maturity. The deposits are valued at cost and interest receivable is accrued based on the stated coupon rate of the deposits.

**Table of Contents**

UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Under US GAAP, these credit-linked deposits, which are linked to the credit worthiness of the Reference Entities Securities, contain an embedded derivative that is not clearly and closely related to the interest-bearing deposits. Therefore, the embedded derivative is bifurcated pursuant to SFAS 133 from the underlying deposits and measured at fair value at each reporting date with any change in fair value recorded to the statement of income. At inception, the derivative instrument was fair valued based on the difference in the present value of the interest amount earned using the coupon rate and a risk-free interest rate ( Additional Interest ). An offsetting asset is recognized in other financial assets to represent the additional interest payments that will be earned by the Company over the term of the credit-linked deposit. The underlying deposits have been accounted for as held-to-maturity investments at amortized cost pursuant to SFAS 115. If there are material changes to the credit-worthiness of the Reference Entities then the fair value of the derivative would be recalculated to determine the impact to the statement of income. If not, the change in the fair value of the derivative represents only a change in its time value which is charged to the statement of income. As of December 31, 2003 and 2004, the fair value of embedded derivative was NT\$167 million and NT\$146 million respectively.

*(13) Gross Profit and Operating Income*

Inventory loss provision, gain and losses from disposal of property, plant and equipment, and gain and losses from foreign currency exchange were presented below the operating income subtotal in the statement of operations as permitted under ROC GAAP. Under US GAAP, the inventory loss provision is included in the determination of gross profit. Further, the inventory loss provision, gain from disposal of property, plant and equipment, and gain from foreign currency exchange are included in the determination of operating income.

*(14) Gain on Disposal of Fixed Assets*

Under ROC GAAP, gains and losses from the disposal of fixed assets were both recognized in the statement of operations, with gains reclassified from retained earnings to capital reserve. However, according to the amendments of the Company Law of ROC, such transfer of gains to capital reserve shall no longer be required effective from January 1, 2001. The accumulated gain transferred in prior years can be transferred back from the capital reserve and be treated as a one-time increase in retained earnings subject to the shareholders' approval. Under US GAAP, the reclassification of the gain from retained earnings is not permitted. As of December 31, 2004, the accumulated gain transferred in prior years by investees that has not been transferred back from capital reserve under ROC GAAP amounted to NT\$1.7 million.



**Table of Contents**

UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

*(15) Reclassification of Time Deposits*

Under ROC GAAP, cash and cash equivalents include time deposits. Under US GAAP, cash equivalents are short-term, highly liquid investments that are readily convertible to cash with original maturities of 3 months or less. Thus, time deposits with original maturities of more than 3 months are classified as cash equivalents under ROC GAAP but should be included in marketable securities for trading purpose under US GAAP.

*(16) Employee Stock Options*

The Group has elected to follow Accounting Principles Board Opinion No. 25, *Accounting for Stock Issued to Employees* (APB 25) and related interpretations in accounting for its employee stock options because, as discussed below, the alternative fair value accounting provided for under SFAS No. 123, *Accounting for Stock-Based Compensation*, requires use of option valuation models that were not developed for use in valuing employee stock options. Under APB 25, because the exercise price of the Company's employee stock options equals the market price of the underlying stock on the date of grant, no compensation expense is recognized for the Company.

On September 11, 2002, October 8, 2003, and September 30, 2004, the Company was authorized to issue Employee Stock Options. The total number of options to be granted under these three plans is 1.3 billion units, with each unit entitling the optionee to subscribe to 1 share of the Company's common stock. The grant period for options is 6 years and an optionee may exercise his/her options starting from 2 years after the grant: employees may exercise up to 50% of the options after 2 years, up to 75% after 3 years and up to 100% after 4 years. The total number of option units outstanding as of December 31, 2004, was 973,858 thousand units.

Pro forma information regarding net income and earnings per share is required by SFAS No. 123, and has been determined as if the Group had accounted for its employee stock options under the fair value method of that Statement. The fair value for these options was estimated at the date of grant using a Black-Scholes option pricing model with the following weighted-average assumptions for the years ended December 31, 2002, 2003 and 2004, respectively: risk-free interest rate of 1.98%, 2.40% and 2.75%; dividend yields of 22.63%, 17.24% and 11.40%; volatility factors of the expected market price of the Company's common stock of 0.54, 0.52 and 0.49; and a weighted-average expected life of the option of 4.4 years.

**Table of Contents**

## UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

The Black-Scholes option valuation model was developed for use in estimating the fair value of traded options which have no vesting restrictions and are fully transferable. In addition, option valuation models require the input of highly subjective assumptions including the expected stock price volatility. Because the Group's employee stock options have characteristics significantly different from those of traded options, and because changes in the subjective input assumptions can materially affect the fair value estimate, in management's opinion, the existing models do not necessarily provide a reliable single measure of the fair value of its employee stock options.

For purposes of pro forma disclosures, the estimated fair value of the options is amortized to expense over the options' vesting period. The Group's pro forma information follows (in thousands except for earnings per share information):

	For the year ended December 31,			
	2002	2003	2004	
	NT\$ 000	NT\$ 000	NT\$ 000	US\$ 000
	[Restated]	[Restated]	[Restated]	[Restated]
Net income, as reported under US GAAP	(221,811)	12,331,096	(14,236,841)	(448,546)
Add: Stock-based employee compensation expense included in reported net income, net of related tax effects	5,387	87,291	(89,753)	(2,828)
Deduct: Total stock-based employee compensation expense determined under fair value based method for all awards, net of related tax effects	(398,583)	(250,082)	(535,494)	(16,871)
<b>Pro forma net income</b>	<b>(615,007)</b>	<b>12,168,305</b>	<b>(14,862,088)</b>	<b>(468,245)</b>
<b>Basic earnings (loss) per share (in dollars):</b>				
- as reported	(0.01)	0.75	(0.85)	(0.03)
- pro forma	(0.04)	0.74	(0.88)	(0.03)
<b>Diluted earnings (loss) per shares (in dollars)</b>				
- as reported	(0.01)	0.73	(0.85)	(0.03)
- pro forma	(0.04)	0.72	(0.88)	(0.03)

The pro forma net income effect for the periods prior to September 2002 is mainly attributable to the employee stock options issued by a subsidiary of the Company.

**Table of Contents**

## UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

A summary of the Company's stock option activity, and related information for the years ended December 31, 2003 and 2004 are as follows:

	For the year ended December 31,			
	2003		2004	
	Options	Weighted-Average	Options	Weighted-Average
	(in thousands)	Exercise Price	(in thousands)	Exercise Price
	NT\$		NT\$	
Outstanding-beginning of year	928,059	17.7	980,664	18.4
Granted	118,330	23.7	110,120	23.4
Exercised			(44,138)	17.7
Forfeited	(65,725)	18.4	(72,788)	19.3
<b>Outstanding-end of year</b>	<b>980,664</b>	<b>18.4</b>	<b>973,858</b>	<b>18.9</b>
Exercisable at end of year			368,896	
Weighted-average fair value of options granted during the year	NT\$ 3.0		NT\$ 3.8	

Exercise prices for options outstanding as of December 31, 2004 range from NT\$17.7 to NT\$27.8. The weighted-average remaining contractual life of those options is 2.4 years.

**Table of Contents**

## UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## Reconciliation of Consolidated Net Income

	For the year ended December 31,			
	2002	2003	2004	
	NT\$ 000	NT\$ 000	NT\$ 000	US\$ 000
	[Restated]	[Restated]	[Restated]	[Restated]
Net income, ROC GAAP	7,072,032	14,020,257	31,843,381	1,003,257
US GAAP adjustments:				
(1) Compensation	(7,348,917)	(2,914,994)	(3,751,051)	(118,181)
(2) Equity investments:				
(1) Compensation	(471,136)	(421,133)	(370,881)	(11,685)
(3) Investments in debt and equity securities	(64,049)	6,429	2,550	80
(5) Technological know-how	22,527	21,664	10,751	339
Others	(85,114)	(138,745)	(413,743)	(13,035)
(3) Investments in debt and equity securities				
(a) Change in fair value of investments in securities	30,206	504,386	(483,461)	(15,232)
(b) Impairment of investments in securities	(348,906)	1,477,618	(3,050,065)	(96,095)
(c) Difference in application of equity accounting		464,555	861,303	27,136
(d) Adjustments due to change in ownership of investees	449,365	(278,721)	(37,966)	(1,196)
(6) Change in fair value of the embedded derivatives in convertible / exchangeable bond liabilities	815,595	(347,257)	520,220	16,390
(6) Interest expense of the convertible / exchangeable bond liabilities	(270,414)	(304,963)	(87,634)	(2,761)
(7) Amortization of goodwill arising from merger with SiSMC			21,206	668
(7) Impairment loss on goodwill			(39,795,046)	(1,253,782)
(9) Income tax effect	(23,000)	242,000	493,595	15,551
(12) Interest income of the credit-linked deposits	(83,834)	(117,991)	(65,930)	(2,077)
(12) Change in fair value of the embedded derivatives in credit-linked deposits	83,834	117,991	65,930	2,077
Net income (losses), US GAAP	(221,811)	12,331,096	(14,236,841)	(448,546)
(8) Basic earnings (losses) per share under US GAAP (in dollars)	(0.01)	0.75	(0.85)	(0.03)
(8) Diluted earnings (losses) per share under US GAAP (in dollars)	(0.01)	0.73	(0.85)	(0.03)
Weighted-average number of shares outstanding-basic (in thousands)	16,498,696	16,530,334	16,812,498	16,812,498
Weighted-average number of shares outstanding-diluted (in thousands)	16,498,696	16,825,872	16,812,498	16,812,498

**Table of Contents**

## UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## Reconciliation of Other Comprehensive Income

	For the year ended December 31,			
	2002	2003	2004	
	NT\$ 000	NT\$ 000	NT\$ 000	US\$ 000
Other comprehensive (loss) income, ROC GAAP	(620,397)	823,013	(1,744,165)	(54,952)
(3) Marketable securities-available for sale	20,147,099	33,356,195	19,862,641	625,792
(2) Translation adjustments	(478)	1,748	8,125	256
(12) Interest rate swaps		(18,882)	(416,149)	(13,111)
Other comprehensive income, US GAAP	19,526,224	34,162,074	17,710,452	557,985

## Reconciliation of Gross Profits

	For the year ended December 31,			
	2002	2003	2004	
	NT\$ 000	NT\$ 000	NT\$ 000 [Restated]	US\$ 000 [Restated]
Gross profit, ROC GAAP	12,538,054	21,765,919	36,798,425	1,159,371
(1) Compensation	(5,415,162)	(2,194,222)	(2,818,562)	(88,802)
(10) Consolidation of unconsolidated subsidiaries		102,382	199,931	6,299
(13) Inventory loss provision	(955,074)	(1,443,565)	(1,884,466)	(59,372)
Gross profit, US GAAP	6,167,818	18,230,514	32,295,328	1,017,496

**Table of Contents**

## UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

	For the year ended December 31,			
	2002	2003	2004	
	NT\$ 000	NT\$ 000	NT\$ 000 [Restated]	US\$ 000 [Restated]
Operating income, ROC GAAP	112,258	9,739,927	21,806,397	687,032
(1) Compensation	(7,348,917)	(2,914,994)	(3,751,051)	(118,181)
(7) Amortization of goodwill arising from merger with SiSMC			21,206	668
(7) Impairment loss on goodwill			(39,795,046)	(1,253,782)
(10) Consolidation of unconsolidated subsidiaries	(24,890)	(40,931)	(58,227)	(1,834)
(13) Inventory loss provision	(955,074)	(1,443,565)	(1,884,466)	(59,372)
(13) Foreign currency exchange gain (loss)	(104,243)	244,951	(929,038)	(29,271)
(14) Gain (loss) on disposal of property, plant and equipment	14,403	46,268	(90,658)	(2,856)
Operating (loss) income, US GAAP	(8,306,463)	5,631,656	(24,680,883)	(777,596)

**Table of Contents**

## UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## Reconciliation of Consolidated Stockholders' Equity

	As of December 31,		
	2003	2004	
	NT\$ 000	NT\$ 000	US\$ 000
	[Restated]	[Restated]	[Restated]
Total stockholders' equity, ROC GAAP	232,233,046	266,373,876	8,392,372
(1) Compensation	129,156	153,722	4,843
(2) Equity investments:			
(1) Compensation	(150,524)	(189,123)	(5,958)
(3) Marketable securities - trading	31,563	32,800	1,033
(3) Marketable securities - available for sale	951,500	1,067,865	33,644
(5) Technological know-how	(14,972)	(4,159)	(131)
Translation adjustments	1,042	154	5
Others	(344,210)	554,596	17,473
(3) Investments in Debt and Equity Securities			
(a) Change in fair value of investments in securities	32,968,417	18,718,179	589,735
(b) Impairment of investments in securities	(2,176,217)	(5,226,282)	(164,659)
(c) Difference in application of equity accounting	396,777	1,458,562	45,953
(d) Change in ownership of investees	1,652,828	1,527,584	48,128
(4) Treasury stock	(3,372)	(2,169)	(68)
(6) Change in fair value of the embedded derivatives in convertible / exchangeable bond liabilities	468,338	988,558	31,146
(6) Interest expense of the convertible / exchangeable bond liabilities	(575,377)	(663,011)	(20,889)
(7) Unamortized goodwill due to acquisition	98,268,000	98,268,000	3,096,030
(7) Difference arising from merger with SiSMC		(840,079)	(26,468)
(7) Impairment loss on goodwill		(39,795,046)	(1,253,782)
(9) Income tax effect	(81,000)	412,595	12,999
(12) Interest rate swaps	(18,882)	(416,149)	(13,111)
Stockholders' equity, US GAAP	363,736,113	342,420,473	10,788,295

**Table of Contents**

## UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Movements in Stockholders' Equity in Accordance with US GAAP

	For the year ended December 31,			
	2002	2003	2004	
	NT\$ 000	NT\$ 000	NT\$ 000	US\$ 000
	[Restated]	[Restated]	[Restated]	[Restated]
Balance at January 1,	349,492,233	333,509,353	363,736,113	11,459,865
(1) Compensation	7,415,890	2,971,527	3,762,999	118,557
(2) Adjustment of capital reserve and retained earnings accounted for under the equity method	197,989	535,183	1,613,750	50,843
(2) Cumulative translation adjustment on foreign long-term investment	829,758	187,252	(2,226,953)	(70,162)
(3) Change in fair value of investments in securities the Company	(20,936,211)	13,846,828	(13,766,778)	(433,736)
(3) Change in fair value of investments in securities equity investees	(545,915)	620,652	(60,625)	(1,910)
(3) Change in ownership of investees	20,981	(1,403,074)	(406,216)	(12,798)
(4) Treasury stock	(2,743,561)	1,156,178	(5,196,817)	(163,731)
Shares issued for merger with SiSMC			8,810,715	277,590
Exercise of employees' stock options			788,393	24,839
(12) Interest rate swaps		(18,882)	(397,267)	(12,516)
Net income (losses)	(221,811)	12,331,096	(14,236,841)	(448,546)
Balance at end of year	333,509,353	363,736,113	342,420,473	10,788,295

Summarized US GAAP balance sheet and statement of operations information is presented below:

	As of December 31,		
	2003	2004	
	NT\$ 000	NT\$ 000	US\$ 000
	[Restated]	[Restated]	[Restated]
Current assets	152,900,376	133,210,887	4,196,940
Non-current assets	333,406,866	319,002,850	10,050,499
Current liabilities	44,361,587	36,904,775	1,162,721
Non-current liabilities	63,171,293	64,278,235	2,025,149
Minority interests	15,038,249	8,610,254	271,274



	For the year ended December 31,			
	2002	2003	2004	
	NT\$ 000	NT\$ 000	NT\$ 000	US\$ 000
	[Restated]	[Restated]	[Restated]	[Restated]
Net operating revenues	75,425,356	95,703,732	129,190,740	4,070,281
Cost of goods sold	(69,257,538)	(77,473,218)	(96,895,412)	(3,052,785)
Operating (loss) income	(8,306,463)	5,631,656	(24,680,883)	(777,596)
Net income	(221,811)	12,331,096	(14,236,841)	(448,546)

F-86

**Table of Contents**

## UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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

	As of December 31,		
	2003	2004	
	NT\$ 000	NT\$ 000	US\$ 000
	[Restated]	[Restated]	[Restated]
<b>Cash and Cash Equivalents:</b>			
As reported under ROC GAAP	118,771,773	101,381,973	3,194,139
Consolidation of unconsolidated subsidiaries	847,185	746,017	23,504
Reclassification to marketable securities	(30,422,651)	(46,570,371)	(1,467,245)
<b>As adjusted under US GAAP</b>	<b>89,196,307</b>	<b>55,557,619</b>	<b>1,750,398</b>
<b>Marketable Securities, trading:</b>			
Reported as marketable securities under ROC GAAP	1,820,328	3,143,697	99,045
Reclassification from cash & cash equivalents	30,422,651	46,570,371	1,467,246
Reclassification to marketable securities, available-for-sale	(21,198)		
Change in fair value of marketable securities	550,014	66,554	2,097
<b>As adjusted under US GAAP</b>	<b>32,771,795</b>	<b>49,780,622</b>	<b>1,568,388</b>
<b>Represented by:</b>			
Trading securities - current	32,094,948	49,780,622	1,568,388
Trading securities - noncurrent	676,847		
	<b>32,771,795</b>	<b>49,780,622</b>	<b>1,568,388</b>
<b>As of December 31,</b>			
	2003	2004	
	NT\$ 000	NT\$ 000	US\$ 000
	[Restated]	[Restated]	[Restated]
	<b>Other Financial Assets, Current:</b>		
As reported under ROC GAAP	2,446,603	453,845	14,299
Reclassification to marketable securities, held-to-maturity	(2,318,064)	(379,680)	(11,962)
Interest rate swaps	(18,882)	(416,149)	(13,111)

As adjusted under US GAAP	109,657	(341,984)	(10,774)
---------------------------	---------	-----------	----------

F-87

**Table of Contents**

## UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

	As of December 31,		
	2003	2004	
	NT\$ 000	NT\$ 000	US\$ 000
<b>Long-term Investments:</b>			
As reported under ROC GAAP	38,919,249	32,712,278	1,030,633
Consolidation of unconsolidated subsidiaries	(770,610)	(806,245)	(25,402)
Equity investments compensation	(150,524)	(189,123)	(5,959)
Change in fair value of marketable securities	32,418,403	18,651,625	587,638
Impairment loss in marketable securities	(2,176,217)	(5,226,282)	(164,659)
Treasury stock	(3,372)	(2,169)	(68)
Reclassification from ROC GAAP marketable securities	21,198		
Difference in application of equity accounting	396,777	1,458,562	45,953
Equity investments	1,995,468	3,000,434	94,532
<b>As adjusted under US GAAP</b>	<b>70,650,372</b>	<b>49,599,080</b>	<b>1,562,668</b>
<b>Marketable Securities, held-to-maturity:</b>			
As reported under ROC GAAP			
Reclassification from other financial assets	4,166,594	2,942,434	92,704
<b>As adjusted under US GAAP</b>	<b>4,166,594</b>	<b>2,942,434</b>	<b>92,704</b>
<b>Other Financial Assets, Non-current:</b>			
As reported under ROC GAAP	1,848,530	2,562,754	80,742
Reclassification to marketable securities, held-to-maturity	(1,848,530)	(2,562,754)	(80,742)
<b>As adjusted under US GAAP</b>			

**Table of Contents**

## UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

	As of December 31,		
	2003	2004	
	NT\$ 000	NT\$ 000 [Restated]	US\$ 000 [Restated]
<b>Other Assets:</b>			
As reported under ROC GAAP	2,333,991	4,916,309	154,893
Consolidation of unconsolidated subsidiaries	1,649	1,206	38
<b>As adjusted under US GAAP</b>	<b>2,335,640</b>	<b>4,917,515</b>	<b>154,931</b>
<b>Goodwill:</b>			
As reported under ROC GAAP		4,497,726	141,705
Goodwill upon conversion of convertible bonds	325,302	325,302	10,249
Goodwill arising from merger with SiSMC		(1,026,277)	(32,334)
Goodwill due to acquisition	98,268,000	98,268,000	3,096,030
Impairment loss on goodwill		(39,795,046)	(1,253,782)
<b>As adjusted under US GAAP</b>	<b>98,593,302</b>	<b>62,269,705</b>	<b>1,961,868</b>
<b>Accrued Expenses:</b>			
As reported under ROC GAAP	5,213,758	9,204,536	289,998
Consolidation of unconsolidated subsidiaries	3,438	7,568	239
Compensation	12,618	28,659	903
<b>As adjusted under US GAAP</b>	<b>5,229,814</b>	<b>9,240,763</b>	<b>291,140</b>
<b>Financial Instrument Liabilities:</b>			
As reported under ROC GAAP			
Embedded derivatives in convertible/exchangeable bonds	703,182	182,961	5,764
<b>As adjusted under US GAAP</b>	<b>703,182</b>	<b>182,961</b>	<b>5,764</b>
<b>Minority Interests:</b>			
As reported under ROC GAAP	15,078,024	8,728,877	275,012
Consolidation of unconsolidated subsidiaries	50	17,297	545
Others	(39,825)	(135,920)	(4,282)
<b>As adjusted under US GAAP</b>	<b>15,038,249</b>	<b>8,610,254</b>	<b>271,275</b>

**Table of Contents**

## UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## Cash Flows Information

	For the year ended December 31,			
	2002	2003	2004	
	NT\$ 000	NT\$ 000	NT\$ 000	US\$ 000
Cash flows from operating activities, ROC GAAP	30,526,954	49,624,987	73,937,930	2,329,487
Remuneration paid to directors and supervisors		(5,650)	(12,618)	(398)
Difference due to principles in consolidation	(20,765)	(76,626)	(165,141)	(5,203)
Cash flows from operating activities, US GAAP	30,506,189	49,542,711	73,760,171	2,323,886
Cash flows from investing activities, ROC GAAP	(36,438,724)	(24,114,432)	(83,132,307)	(2,619,165)
Net effect of time deposits reclassified to marketable securities	(1,905,493)	(8,874,541)	(16,147,719)	(508,750)
Difference due to principles in consolidation	309,704	65,582	125,364	3,950
Cash flows from investing activities, US GAAP	(38,034,513)	(32,923,391)	(99,154,662)	(3,123,965)
Cash flows from financing activities, ROC GAAP	3,162,286	17,581,150	(6,832,256)	(215,257)
Remuneration paid to directors and supervisors		5,650	12,618	398
Cash flows from financing activities, US GAAP	3,162,286	17,586,800	(6,819,638)	(214,859)
Foreign exchange effect, ROC GAAP	747,864	777,620	(1,363,167)	(42,948)
Difference due to principles in consolidation	11,344	(6,504)	(61,392)	(1,934)
Foreign exchange effect, US GAAP	759,208	771,116	(1,424,559)	(44,882)
Net increase in cash and cash equivalents, ROC GAAP	(2,001,620)	43,869,325	(17,389,800)	(547,883)
Net effect of time deposits reclassified to marketable securities	(1,905,493)	(8,874,541)	(16,147,719)	(508,750)
Difference due to principles in consolidation	300,283	(17,548)	(101,169)	(3,187)
Net (decrease) increase in cash and cash equivalents, US GAAP	(3,606,830)	34,977,236	(33,638,688)	(1,059,820)
Cash and cash equivalents at beginning of year, US GAAP	57,825,901	54,219,071	89,196,307	2,810,218
Cash and cash equivalents at end of year, US GAAP	54,219,071	89,196,307	55,557,619	1,750,398

**Table of Contents**

## UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

**Concentration of credit risk**

The Group designs, develops, manufactures and markets a variety of semiconductor products. Financial instruments that potentially subject the Group to significant concentrations of credit risk consist principally of cash and cash equivalents and trade accounts and notes receivable. The Group limits its exposure to credit loss by depositing its cash and cash equivalents with high credit quality financial institutions. The Group's revenues and trade accounts and notes receivable are derived primarily from the sale of production foundry wafers, including memory and logic products and wafers. For the years ended December 31, 2003 and 2004, the Group distributed its products on a global basis but mainly to divisions in North America (37.30% and 42.46%, respectively), Asia (55.82% and 42.19%, respectively), and Europe and others (6.88% and 15.35%, respectively). The Group's sales are primarily denominated in currencies other than NT Dollars, primarily US Dollars. Two customers revenue represented 12% and 13%, respectively, of the consolidated revenue for the year ended December 31, 2002, one customer's revenue represented 10% of the consolidated revenue for the year ended December 31, 2003, and two customers' revenue represented 11% and 10%, respectively, of the consolidated revenue for the year ended December 31, 2004. The Group routinely assesses the financial strength of substantially all customers. The Group also requires collateral for certain sales to mitigate the credit risk.

**Merger**

On July 1, 2004, the Company acquired SiSMC by issuing 357,143 thousands shares with a fair value of approximately NT\$8,811 million. SiSMC is principally engaged in manufacturing of integrated circuits and components of semiconductors. Through the acquisition, the Company expected to enlarge business scales and improve global competitiveness.

The acquisition was accounted for using the purchase method and the estimated fair value of the assets acquired and liabilities assumed at the date of acquisition are summarized as follows:

	<b>At July 1, 2004</b>	
	<b>NT\$ 000</b>	<b>US\$ 000</b>
Cash and cash equivalents	70,384	2,218
Other current assets	890,447	28,054
Property, plant and equipment	11,614,711	365,933
Other intangible assets	291,046	9,170
Other assets	478,890	15,088
<b>Total assets acquired</b>	<b>13,345,478</b>	<b>420,463</b>
Current liabilities	2,349,479	74,023
Long-term debt	2,545,455	80,197
Other liabilities	35,396	1,115

Total liabilities assumed	4,930,330	155,335
Net assets acquired	8,415,148	265,127
Fair value of share consideration paid	8,810,714	277,590
Goodwill - tax deductible	395,566	12,463

**F-91**



**Table of Contents**

UNITED MICROELECTRONICS CORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

*New Accounting Pronouncements*

In December 2004, the FASB issued SFAS Statement No. 123 (revised 2004), *Share-Based Payment* (SFAS 123R), which is a revision of FASB Statement No. 123 *Accounting for Stock-Based Compensation*. SFAS 123R requires all share-based payments to employees, including grants of employee stock options, to be recognized in the financial statements based on their fair values. It is effective for the Group no later than its first fiscal year beginning after June 15, 2005. The Group does not expect a material impact on its financial statements resulting from the adoption of SFAS Statement No. 123 (R).

In November 2004, SFAS Statement No. 151 amended the guidance in ARB No. 43, Chapter 4, *Inventory Pricing*, to clarify the accounting for abnormal amounts of idle facility expense, freight, handling costs, and wasted material (spoilage) should be recognized as current period charges and requires the allocation of fixed production overheads to inventory based on the normal capacity of the production facilities. The guidance is effective for inventory costs incurred during fiscal years beginning after June 15, 2005. The adoption of SFAS No. 151 is not expected to have a material effect on earnings or financial position of the Group.

**Table of Contents****EXHIBIT INDEX****Exhibit**

<b>Number</b>	<b>Description of Exhibits</b>
*1.1	Articles of Incorporation of the Company as last amended on June 13, 2005 (English Translation)
2.1	Form of Deposit Agreement among the Company, and Holders and Beneficial Owners of American Depositary Shares issued thereunder, including the form of American Depositary Shares (1)
4.1	Lease Agreement with Hsinchu Science Park Administration in relation to government-owned land located at Hsinchu Science Park, Ko-Kuan Section, No. 20-22, Hsinchu, Taiwan, ROC, the site of Fab 6A (in Chinese with English summary translation) (2)
4.2	Lease Agreement with Hsinchu Science Park Administration in relation to government-owned land located at Hsinchu Science Park, third section of first phase, Hsinchu, Taiwan, ROC, the site of Fab 8AB and United Tower (in Chinese with English summary translation) (3)
4.3	Lease Agreement with Hsinchu Science Park Administration in relation to government-owned land located at Hsinchu Science Park, third section of first phase, Hsinchu, Taiwan, ROC, the site of Fab 8C (in Chinese with English summary translation) (4)
4.4	Lease Agreement with Hsinchu Science Park Administration in relation to government-owned land located at Hsinchu Science Park, third section of first phase, Hsinchu, Taiwan, ROC, the site of Fab 8D (in Chinese with English summary translation) (5)
4.5	Lease Agreement with Hsinchu Science Park Administration in relation to government-owned land located at Hsinchu Science Park, third section of second phase, Hsinchu, Taiwan, ROC, the site of Fab 8E (in Chinese with English summary translation) (6)
4.6	Lease Agreement with Hsinchu Science Park Administration in relation to government-owned land located at Hsinchu Science Park, Gin-Shan section, Hsinchu, Taiwan, ROC, the site of Fab 8F (in Chinese with English summary translation) (7)
4.7	Lease Agreement with Southern Taiwan Science Park Administration in relation to government-owned land located at Tainan Science Park, Tainan, Taiwan, ROC, the site of Fab 12A (in Chinese with English summary translation) (8)
4.8	Merger Agreement, entered into as of February 26, 2004, between United Microelectronics Corporation and SiS Microelectronics Corporation (English Translation) (9)
*8.1	List of Significant Subsidiaries of United Microelectronics Corporation
11.1	Code of Ethics for Directors, Supervisors and Officers (10)
11.2	Employee Code of Conduct (11)
*12.1	Certification of our Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
*12.2	Certification of our Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
*13.1	Certification of our Chief Executive Officer pursuant to 18 U.S.C. § 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
*13.2	Certification of our Chief Financial Officer pursuant to 18 U.S.C. § 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
*15.1	Consent of Independent Registered Public Accounting Firm

\* filed herewith.

- (1) Incorporated by reference to Exhibit (a) to the Registrant's Registration Statement on Form F-6 (File No. 333-13796) filed with the Commission on August 6, 2001.
- (2) Incorporated by reference to Exhibit 10.6 to the Registrant's Registration Statement on Form F-1 (File No. 333-12444) filed with the Commission on August 28, 2000, as amended.
- (3) Incorporated by reference to Exhibit 10.7 to the Registrant's Registration Statement on Form F-1 (File No. 333-12444) filed with the Commission on August 28, 2000, as amended.
- (4) Incorporated by reference to Exhibit 10.8 to the Registrant's Registration Statement on Form F-1 (File No. 333-12444) filed with the Commission on August 28, 2000, as amended.

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

- (5) Incorporated by reference to Exhibit 10.9 to the Registrant's Registration Statement on Form F-1 (File No. 333-12444) filed with the Commission on August 28, 2000, as amended.
- (6) Incorporated by reference to Exhibit 10.10 to the Registrant's Registration Statement on Form F-1 (File No. 333-12444) filed with the Commission on August 28, 2000, as amended.
- (7) Incorporated by reference to Exhibit 10.11 to the Registrant's Registration Statement on Form F-1 (File No. 333-12444) filed with the Commission on August 28, 2000, as amended.
- (8) Incorporated by reference to Exhibit 10.12 to the Registrant's Registration Statement on Form F-1 (File No. 333-12444) filed with the Commission on August 28, 2000, as amended.
- (9) Incorporated by reference to Exhibit 4.8 to the Registrant's Annual Report on Form 20-F for the fiscal year ended December 31, 2003 (File No. 1-15128) filed with the Commission on June 17, 2004.
- (10) Incorporated by reference to Exhibit 99.1 to the Form 6-K filed with the Commission on March 25, 2005.
- (11) Incorporated by reference to Exhibit 99.2 to the Form 6-K filed with the Commission on March 25, 2005.