

CHIPMOS TECHNOLOGIES BERMUDA LTD
Form 20-F
June 29, 2005
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As filed with the Securities and Exchange Commission on June 29, 2005

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 20-F

REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR 12(g) OF THE SECURITIES EXCHANGE ACT OF 1934

OR

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

For the fiscal year ended December 31, 2004

OR

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

For the transition period from _____ to _____

Commission file number 0 31106

ChipMOS TECHNOLOGIES (Bermuda) LTD.

(Exact Name of Registrant as Specified in Its Charter)

Bermuda

(Jurisdiction of Incorporation or Organization)

No. 1, R & D Road 1

Hsinchu Science Park

Hsinchu, Taiwan

Republic of China

(Address of Principal Executive Offices)

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

Title of Each Class

Name of Each Exchange on Which Registered

None

None

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

Common Shares

Common Shares, par value US\$0.01 each

(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.

As of December 31, 2004, 67,320,542 Common Shares, par value US\$0.01 each were outstanding.

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

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CAUTIONARY STATEMENT FOR PURPOSES OF THE SAFE HARBOR PROVISIONS OF THE PRIVATE SECURITIES LITIGATION REFORM ACT OF 1995

Except for historical matters, the matters discussed in this annual report are forward-looking statements that are subject to significant risks and uncertainties. These statements are generally indicated by the use of forward-looking terminology such as the words believe, expect, intend, anticipate, estimate, plan, project, may, will or other similar words that express an indication of actions or results of actions that may or are expected to occur in the future. Forward-looking statements include, but are not limited to, statements under the following headings related to the indicated topic:

Item 3. Key Information Risk Factors Risks Relating to Our Industry A decline in average selling prices for our services could result in a decrease in our earnings, about the trend of declining average selling prices;

Item 3. Key Information Risk Factors Risks Relating to Our Business A decrease in market demand for LCD and other flat-panel display driver semiconductors may adversely affect our capacity utilization rates and thereby negatively affect our profitability, about our expectation with respect to the growth in demand for liquid crystal display, or LCD, and other flat-panel display driver semiconductors;

Item 3. Key Information Risk Factors Risks Relating to Our Business We depend on key customers for a substantial portion of our net revenue and a loss of, or deterioration of the business from, any one of these customers could result in decreased net revenue and materially adversely affect our results of operations, about our expectation to rely on key customers;

Item 3. Key Information Risk Factors Risks Relating to Our Business The testing and assembly process is complex and our production yields and customer relationships may suffer as a result of defects or malfunctions in our testing and assembly equipment and the introduction of new packages, about the need to offer more sophisticated testing and assembly technologies;

Item 3. Key Information Risk Factors Risks Relating to Our Business Because of the highly cyclical nature of our industry, our capital requirements are difficult to plan. If we cannot obtain additional capital when we need it, we may not be able to maintain or increase our current growth rate and our profits will suffer, about our anticipated capital needs;

Item 4. Information on the Company Industry Background, about the expected growth in the semiconductor industry, including but not limited to the expected growth in the memory semiconductor market, LCD and other flat-panel display driver semiconductor market, mixed-signal semiconductor market and the outsourcing trends of the semiconductor industry in Taiwan and Mainland China; and

Item 5. Operating and Financial Review and Prospects, about the trends relating to our business.

Actual results may be materially different from those indicated by our forward-looking statements. Please see Item 3. Key Information Risk Factors for a discussion of certain other factors that may cause actual results to differ materially from those indicated by our forward-looking statements.

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Not applicable.

Item 2. Offer Statistics and Expected Timetable

Not applicable.

Item 3. Key Information**Selected Financial Data**

The following tables set forth our selected consolidated financial data. The selected consolidated balance sheet data as of December 31, 2003 and 2004 and our consolidated statement of operations and cash flows data for 2002, 2003 and 2004 are derived from our audited consolidated financial statements included herein, and should be read in conjunction with, and are qualified in their entirety by reference to, these audited consolidated financial statements and related notes beginning on page F-1 of this annual report. These audited consolidated financial statements have been audited by Moore Stephens. The selected consolidated balance sheet data as of December 31, 2000, 2001 and 2002 and the consolidated statement of operations and cash flows data for the years ended December 31, 2000 and 2001 are derived from our audited consolidated financial statements not included herein. Our consolidated financial statements have been prepared and presented in accordance with ROC GAAP, which differs in some material respects from US GAAP. Please see Note 27 to our audited consolidated financial statements for a description of the principal differences between ROC GAAP and US GAAP for the periods covered by these financial statements. The financial data set forth below have been presented as if (1) we had been in existence since July 28, 1997, and (2) we acquired our interest in ChipMOS Taiwan on July 28, 1997.

	Year ended December 31,					
	2000	2001	2002	2003	2004	2004
	NT\$	NT\$	NT\$	NT\$	NT\$	US\$
(in millions, except per share data)						
Consolidated Statement of Operations Data:						
ROC GAAP:						
Net revenue:						
Related parties ⁽¹⁾	5,311.1	3,719.0	3,665.4	5,072.9	4,844.4	152.6
Others	2,913.1	1,526.1	2,860.5	3,953.6	10,191.4	321.1

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Total net revenue	8,224.2	5,245.1	6,525.9	9,026.5	15,035.8	473.7
Cost of revenue	5,511.0	6,029.3	6,711.7	7,459.5	10,857.5	342.1
Gross profit (loss)	2,713.2	(784.2)	(185.8)	1,567.0	4,178.3	131.6
Operating expenses:						
Research and development	357.4	408.9	326.8	295.0	296.4	9.3
Sales and marketing	138.0	34.7	37.3	65.4	308.5	9.7
General and administrative	238.5	248.0	310.2	439.9	673.3	21.2
Total operating expenses	733.9	691.6	674.3	800.3	1,278.2	40.2
Income (loss) from operations	1,979.3	(1,475.8)	(860.1)	766.7	2,900.1	91.4
Other expenses, net	(106.9)	(77.2)	(397.6)	(77.1)	(395.8)	(12.5)
Income (loss) before income tax and minority interests and interest in bonuses paid by subsidiaries ⁽²⁾	1,872.4	(1,553.0)	(1,257.7)	689.6	2,504.3	78.9
Income tax benefit (expense)	(333.4)	(32.4)	(97.9)	29.0	141.8	4.5
Income (loss) before minority interests and interest in bonuses paid by subsidiaries ⁽²⁾	1,539.0	(1,585.4)	(1,355.6)	718.6	2,646.1	83.4
Minority interests	(465.7)	450.5	385.3	(256.9)	(997.9)	(31.4)

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	Year ended December 31,					
	2000	2001	2002	2003	2004	2004
	NT\$	NT\$	NT\$	NT\$	NT\$	US\$
	(in millions, except per share data)					
Interest in bonuses paid by subsidiaries ⁽²⁾	(115.9)					
Pre-acquisition earnings ⁽³⁾				20.7	27.7	0.8
Net income (loss)	957.4	(1,134.9)	(970.3)	482.4	1,675.9	52.8
Earning (loss) per share:						
Basic	\$ 17.76	\$ (19.45)	\$ (16.49)	\$ 8.19	\$ 26.54	\$ 0.84
Diluted	\$ 17.76	\$ (19.45)	\$ (16.49)	\$ 8.12	\$ 26.38	\$ 0.83
Weighted-average number of shares outstanding:						
Basic	53.9	58.3	58.8	58.9	63.1	63.1
Diluted	53.9	58.3	58.8	59.4	63.5	63.5
US GAAP:⁽⁴⁾						
Net income (loss)	\$ 879.8	\$ (993.5)	\$ (913.4)	\$ 485.3	\$ 1,665.5	\$ 52.5
Earning (loss) per share:						
Basic	\$ 16.42	\$ (17.03)	\$ (15.52)	\$ 8.24	\$ 26.38	\$ 0.83
Diluted	\$ 16.42	\$ (17.03)	\$ (15.52)	\$ 8.17	\$ 26.22	\$ 0.83
Weighted-average number of shares outstanding:						
Basic	53.6	58.3	58.8	58.9	63.1	63.1
Diluted	53.6	58.3	58.8	59.4	63.5	63.5

- (1) Related parties include Mosel Vitelic Inc., or Mosel, Siliconware Precision Industries Co. Ltd., or Siliconware Precision, PlusMOS Technologies Inc., or PlusMOS, Ultima Electronics Corp., or Ultima, ProMOS Technologies Inc., or ProMOS, ThaiLin Semiconductor Corp., or ThaiLin, CHANTEK ELECTRONIC CO., LTD., or Chantek, Best Home Corp. Ltd., or Best Home, DenMOS TECHNOLOGY Inc., or DenMOS, Sun-Fund Securities Ltd., or Sun-Fund, Advanced Micro Chip Technology Co., Ltd., or AMCT, Jesper Limited, Prudent Holdings Group Ltd. and Mou-Fu Investment Ltd. See Note 20 of the notes to the consolidated financial statements. Effective April 1, 2004, PlusMOS was merged into Chantek with Chantek as the surviving entity. See Item 4. Information on the Company Our Structure and History CHANTEK ELECTRONIC CO., LTD. AMCT was liquidated in October 2004. See Item 4. Information on the Company Our Structure and History Advanced Micro Chip Technology Co., Ltd.
- (2) Refers to bonuses to directors, supervisors and employees paid by a subsidiary.
- (3) For 2003, represents our share of pre-acquisition profits of ThaiLin prior to December 1, 2003, the date when we began to consolidate the accounts of ThaiLin. For 2004, represents our share of pre-acquisition profits of Chantek prior to April 1, 2004, the date when we began to consolidate the accounts of Chantek, the surviving entity after the merger of Chantek and PlusMOS.
- (4) Reflects the US GAAP adjustments as described in Note 27 of the notes to the consolidated financial statements.

	As of December 31,					
	2000	2001	2002	2003	2004	2004
	NT\$	NT\$	NT\$	NT\$	NT\$	US\$
	(in millions)					
Consolidated Balance Sheet Data:						
ROC GAAP:						
Current assets:						
Cash and cash equivalents	1,190.5	1,181.1	2,487.5	1,731.0	4,849.1	152.8
Restricted cash and cash equivalents	34.0	234.0	76.9	282.4	87.0	2.7
Short-term investments	2,048.2	969.9	874.9	664.3	2,832.6	89.2
Notes and accounts receivable	1,988.2	1,481.5	1,697.4	2,644.8	3,399.4	107.1
Other receivables related parties	19.1	11.6	11.5	266.2	6.6	0.2

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Other receivables	third parties	18.1	10.6	92.3	866.6	164.6	5.2
Inventories		325.2	172.3	166.5	335.5	661.0	20.8
Prepaid expenses and other current assets		87.6	17.9	223.2	422.2	116.9	3.7
Total current assets		5,753.9	4,119.6	5,668.7	7,479.7	12,707.7	400.4
Long-term investments		280.3	271.4	1,441.9	640.5	642.4	20.2
Property, plant and equipment, net		12,428.8	10,799.6	10,043.6	11,086.8	17,426.6	549.0
Intangible assets	net	321.4	155.3	51.9	225.2	319.1	10.1
Other assets		178.6	755.4	747.6	233.5	449.3	14.2
Total assets		18,963.0	16,101.3	17,953.7	19,665.7	31,545.1	993.9
Current liabilities:							
Short-term bank loans		233.6	1,066.8	2,032.6	1,566.8	800.6	25.2
Current portion of long-term loans		1,076.3	1,180.0	352.2	692.8	1,821.8	57.4
Current portion of long-term bonds payable						1,200.0	37.8
Convertible bonds					267.6		
Notes and accounts payable		228.2	120.1	145.4	372.7	656.9	20.7
Accrued expenses and other current liabilities		417.7	152.8	465.1	438.0	608.6	19.2
Total current liabilities		3,209.9	3,021.0	4,083.4	3,951.1	5,915.4	186.4
Long-term liabilities		3,125.5	1,969.4	4,011.4	3,438.9	7,608.1	239.7
Other liabilities		180.4	175.0	258.5	599.5	768.5	24.2
Total liabilities		6,515.8	5,165.4	8,353.3	7,989.5	14,292.0	450.3
Minority interests		3,738.4	3,336.7	2,887.1	4,428.0	7,092.5	223.5
Total shareholders' equity		8,708.8	7,599.2	6,713.3	7,248.2	10,160.6	320.1
US GAAP⁽¹⁾:							
Current assets:							
Cash and cash equivalents		1,190.5	1,181.1	2,487.5	1,731.0	4,849.1	152.8
Restricted cash and cash equivalents		34.0	234.0	76.9	282.4	87.0	2.7
Short-term investments		2,048.2	995.6	869.4	660.7	2,839.6	89.5
Notes and accounts receivable		1,988.2	1,481.5	1,697.4	2,644.8	3,399.4	107.1

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	As of December 31,					
	2000	2001	2002	2003	2004	2004
	NT\$	NT\$	NT\$	NT\$	NT\$	US\$
	(in millions)					
Other receivables related parties	19.1	11.6	11.5	266.2	6.6	0.2
Other receivables third parties	18.1	10.6	92.3	866.6	164.6	5.2
Inventories	324.3	171.4	166.2	335.5	661.0	20.8
Prepaid expenses and other current assets	87.6	17.9	223.2	422.2	116.9	3.7
Total current assets	5,752.9	4,144.5	5,663.0	7,476.1	12,714.7	400.6
Long-term investments	280.3	425.0	1,521.1	625.1	636.8	20.1
Property, plant and equipment, net	12,288.6	10,762.5	10,062.8	11,082.4	17,411.7	548.5
Intangible assets net	57.2	41.1	33.5	225.2	319.1	10.1
Other assets	175.2	750.4	740.5	224.7	439.4	13.8
Total assets	18,554.2	16,123.5	18,020.9	19,633.5	31,521.7	993.1
Current liabilities:						
Short-term bank loans	233.6	1,066.8	2,032.6	1,566.8	800.6	25.2
Current portion of long-term loans	1,076.3	1,180.0	352.2	692.8	1,821.8	57.4
Current portion of long-term bonds payable					1,200.0	37.8
Convertible bonds				267.6		
Notes and accounts payable	228.2	120.1	145.4	372.7	656.9	20.7
Accrued expenses and other current liabilities	470.0	152.8	465.1	438.0	608.6	19.2
Total current liabilities	3,262.2	3,021.0	4,083.4	3,951.1	5,915.4	186.4
Long-term liabilities	3,125.5	1,969.4	4,011.4	3,438.9	7,608.1	239.7
Other liabilities	98.9	137.2	258.8	603.7	772.7	24.3
Total liabilities	6,486.6	5,127.6	8,353.6	7,993.7	14,296.2	450.4
Minority interests	3,590.1	3,354.9	2,907.1	4,418.5	7,092.9	223.5
Total shareholders equity	8,477.5	7,641.0	6,760.2	7,221.3	10,132.6	319.2

(1) Reflects the US GAAP adjustments as described in Note 27 of the notes to the consolidated financial statements.

	Year ended December 31,					
	2000	2001	2002	2003	2004	2004
	NT\$	NT\$	NT\$	NT\$	NT\$	US\$
	(in millions)					
Consolidated Statement of Cash Flows Data:						
ROC GAAP:						
Capital expenditures	\$ 7,022.0	\$ 992.0	\$ 2,091.3	\$ 2,508.2	8,282.6	\$ 261.0
Depreciation and amortization	2,013.1	2,815.4	2,820.6	2,715.0	3,536.8	111.4
Net cash provided by (used in):						
Operating activities	4,295.4	1,620.5	1,463.7	1,877.1	7,623.0	240.2
Investing activities	(7,548.4)	(1,409.7)	(3,135.9)	(760.8)	(10,037.9)	(316.3)
Financing activities	4,294.2	(219.8)	2,978.6	(1,841.5)	5,694.6	179.4
Effect of exchange rate changes on cash	(0.4)	(0.4)		(31.4)	(161.5)	(5.1)
Net increase (decrease) in cash	1,040.8	(9.4)	1,306.4	(756.6)	3,118.2	98.2

Exchange Rates

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References to US\$ and US dollars are to United States dollars and references to NT\$ and NT dollars are to New Taiwan dollars. This annual report contains translations of certain NT dollar amounts into US dollars at specified rates solely for the convenience of the reader. Unless otherwise noted, all translations from NT dollars to US dollars and from US dollars to NT dollars were made at the noon buying rate in The City of New York for cable transfers in NT dollars per US dollar as certified for customs purposes by the Federal Reserve Bank of New York as of December 31, 2004, which was NT\$31.74 to US\$1.00. We make no representation that the NT dollar or US dollar amounts referred to in this annual report could have been or could be converted into US dollars or NT dollars, as the case may be, at any particular rate or at all. On June 23, 2005, the noon buying rate was NT\$31.35 to US\$1.00.

The following table sets out, for the years and the months indicated, information concerning the number of NT dollars for which one US dollar could be exchanged based on the noon buying rate for cable transfers in NT dollars as certified for customs purposes by the Federal Reserve Bank of New York.

	NT dollars per US dollar noon buying rate			
	Average	High	Low	Period-end
2000	31.60	33.25	30.50	33.17
2001	33.82	35.13	32.23	35.08
2002	34.53	35.16	32.85	34.70
2003	34.41	34.98	33.72	33.99

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	NT dollars per US dollar noon buying rate			
	Average	High	Low	Period-end
2004	33.37	34.16	31.74	31.74
December 2004	32.17	32.49	31.17	31.74
2005 (through June 23, 2005)	31.41	32.22	30.65	31.35
January 2005	31.85	32.22	31.65	31.71
February 2005	31.50	31.79	31.06	31.06
March 2005	31.11	31.73	30.65	31.46
April 2005	31.48	31.70	31.23	31.23
May 2005	31.27	31.47	30.98	31.13
June (through June 23, 2005)	31.32	31.48	31.15	31.35

Sources: Federal Reserve Statistical Release H.10 (512), 1999-2005, Board of Governors of the Federal Reserve System.

Risk Factors**Risks Relating to Our Industry**

Because we depend on the highly cyclical semiconductor industry, which is characterized by significant and sometimes prolonged downturns from time to time, our net revenue and earnings may fluctuate significantly, which in turn could cause the market price of our common shares to decline.

Because our business is, and will continue to be, dependent on the requirements of semiconductor companies for independent testing and assembly services, any downturn in the highly cyclical semiconductor industry may reduce demand for our services and adversely affect our results of operations. All of our customers operate in this industry and variations in order levels from our customers and in service fee rates may result in volatility in our net revenue and earnings. For instance, during periods of decreased demand for assembled semiconductors, some of our customers may even simplify or forego final testing of certain types of semiconductors, such as dynamic random access memory, or DRAM, further intensifying our difficulties. From time to time, the semiconductor industry has experienced significant, and sometimes prolonged, downturns, which have adversely affected our results of operations. Although our net revenue for 2004 increased approximately 67% from 2003, and we generated a net income of NT\$1,676 million in 2004 (US\$53 million) compared to NT\$482 million in 2003, we cannot give any assurances that our growth in revenue and income will continue or that any future downturn will not affect our results of operations.

Any deterioration in the market for end-user applications for semiconductor products would reduce demand for our services and may result in a decrease in our earnings.

Market conditions in the semiconductor industry track, to a large degree, those for their end-user applications. Any deterioration in the market conditions for the end-user applications of semiconductors we test and assemble could reduce demand for our services and, in turn, materially adversely affect our financial condition and results of operations. Our net revenue is largely attributable to fees derived from testing and assembling semiconductors for use in personal computers, consumer electronic products, display applications and communications equipment. A significant decrease in demand for products in these markets could put pricing pressure on our testing and assembly services and negatively affect our net revenue and earnings. While the market demand for personal computers and communications equipment has recovered since the

beginning of 2003, a significant decrease in demand could again negatively affect our net revenue and earnings.

A decline in average selling prices for our services could result in a decrease in our earnings.

Historically, prices for our testing and assembly services in relation to any given semiconductor tend to decline over the course of its product and technology life cycle. While the average selling price of our testing and assembly services for synchronous dynamic random access memory, or SDRAM, and DRAM increased by approximately 39% and 7%, respectively, in 2004 from 2003, we cannot assure you that this trend will continue in the future. If we cannot reduce the cost of our testing and assembly services, or introduce higher-margin testing and assembly services for new package types, to offset the decrease in average selling prices for our services, our earnings could decrease.

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A reversal or slowdown in the outsourcing trend for semiconductor testing and assembly services could reduce our profitability.

In recent years, integrated device manufacturers, or IDMs, have increasingly outsourced stages of the semiconductor production process, including testing and assembly, to independent companies like us to shorten production cycles. In addition, the availability of advanced independent semiconductor manufacturing services has also enabled the growth of so-called fabless semiconductor companies that focus exclusively on design and marketing and outsource their manufacturing, testing and assembly requirements to independent companies. Our net revenue indirectly generated from these IDMs and fabless companies constitutes a substantial portion of our net revenue, representing 90% of our net revenue in 2004. We cannot assure you that these companies will continue to outsource their testing and assembly requirements to independent companies like us. A reversal of, or a slowdown in, this outsourcing trend could result in reduced demand for our services, which in turn could reduce our profitability.

Risks Relating to Our Business

If we are unable to compete effectively in the highly competitive semiconductor testing and assembly markets, we may lose customers and our income may decline.

The semiconductor testing and assembly markets are very competitive. We face competition from a number of IDMs with in-house testing and assembly capabilities and other independent semiconductor testing and assembly companies. Our competitors may have access to more advanced technologies and greater financial and other resources than we do. Many of our competitors have shown a willingness to reduce prices quickly and sharply in the past to maintain capacity utilization in their facilities during periods of reduced demand. In addition, an increasing number of our competitors conduct their operations in lower cost centers in Asia such as Mainland China, Thailand, Vietnam and the Philippines. While our prices for testing and assembly of memory and mixed-signal semiconductors increased by approximately 12% in 2004 from 2003, we cannot assure you our prices will not decrease in the future. Any renewed or continued erosion in the prices or demand for our testing and assembly services as a result of increased competition could adversely affect our profits.

We are highly dependent on the market for memory products. A downturn in the market for these products could significantly reduce our net revenue and net income.

A significant percentage of our net revenue is derived from testing and assembling memory semiconductors. Our net revenue derived from the testing and assembly of memory semiconductors accounted for 56%, 62% and 71% of our net revenue in 2002, 2003 and 2004, respectively. In the past, our service fees for testing and assembling memory semiconductors were sharply reduced in tandem with the decrease in the average selling price of DRAM. While the weighted average selling price for DRAM increased in 2004, we cannot assure you that this trend will continue and that there will not be any reductions in DRAM prices in the future. Any failure of the demand for DRAM to increase or any further decrease in the demand for memory products may therefore decrease the demand for our services and significantly reduce our net revenue and net income.

A decrease in market demand for LCD and other flat-panel display driver semiconductors may adversely affect our capacity utilization rates and thereby negatively affect our profitability.

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We began offering testing and assembly services for LCD and other flat-panel display driver semiconductors in the second quarter of 2000. Our testing and assembly services for LCD and other flat-panel display driver semiconductors generated net revenue of NT\$992 million, NT\$1,683 million and NT\$2,750 million in 2002, 2003 and 2004, respectively. We spent NT\$1,232 million, NT\$1,255 million and NT\$1,380 million in 2002, 2003 and 2004, respectively, on equipment for tape carrier package, or TCP, chip-on-film, or COF, and chip-on-glass, or COG, technologies, which are used in testing and assembly services for LCD and other flat-panel display driver semiconductors. Most of this equipment may not be used for technologies other than TCP, COF or COG. While there was a significant demand for our LCD and other flat-panel display driver semiconductor testing and assembly services in 2004, any decrease in demand for these services would significantly impair our capacity utilization rates and may result in our inability to generate sufficient revenue to cover the significant depreciation expenses for the equipment used in testing and assembling LCD and other flat-panel display driver semiconductors, thereby negatively affecting our profitability. See also Because of our high fixed costs, if we are unable to achieve relatively high capacity utilization rates, our earnings and profitability may be adversely affected.

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Our significant amount of indebtedness and interest expense will limit our cash flow and could adversely affect our operations.

We have a significant level of debt and interest expense. We had approximately NT\$3,828 million (US\$121 million) and NT\$7,608 million (US\$240 million) in short- and long-term indebtedness outstanding as of December 31, 2004 including US\$84 million (NT\$2,676 million) of convertible notes due 2009, which bear interest at an annual rate of 1.75%. The notes are convertible into our common shares at an initial conversion price of US\$7.85, which may be adjusted in certain circumstances, but shall not be less than 80% of the initial conversion price.

Our significant indebtedness poses risks to our business, including the risks that:

we could use a substantial portion of our consolidated cash flow from operations to pay principal and interest on our debt, thereby reducing the funds available for working capital, capital expenditures, acquisitions and other general corporate purposes;

insufficient cash flow from operations may force us to sell assets, or seek additional capital, which we may be unable to do at all or on terms favorable to us;

our level of indebtedness may make us more vulnerable to economic or industry downturns; and

our debt service obligations increase our vulnerabilities to competitive pressures, because many of our competitors may be less leveraged than we are.

The indenture governing the convertible notes we issued in November 2004 does not limit our ability to incur additional indebtedness in the future. If new indebtedness is incurred, the risks that we face could intensify. Our ability to make required payments on the convertible notes and to satisfy any other debt obligations will depend on our future operating performance and our ability to obtain additional debt or equity financing on commercially reasonable terms. For additional information on our indebtedness, see Item 5. Operating and Financial Review and Prospects Liquidity and Capital Resources Capital Resources.

Our results of operations may fluctuate significantly and may cause the market price of our common shares to be volatile.

Our results of operations have varied significantly from period to period and may continue to vary in the future. Among the more important factors affecting our quarterly and annual results of operations are the following:

our ability to accurately predict customer demand, as we must commit significant capital expenditures in anticipation of future orders;

our ability to quickly adjust to unanticipated declines or shortfalls in demand and market prices for our testing and assembly services, due to our high percentage of fixed costs;

changes in prices for our testing and assembly services;

volume of orders relative to our testing and assembly capacity;

capital expenditures and production uncertainties relating to the roll-out of new testing or assembly services;

our ability to obtain adequate testing and assembly equipment on a timely basis;

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changes in costs and availability of raw materials, equipment and labor;

changes in our product mix; and

earthquakes, drought and other natural disasters, as well as industrial accidents.

Because of the factors listed above, our future results of operations or growth rates may be below the expectations of research analysts and investors. If so, the market price of our shares, and the market value of your investment, may fall.

We depend on key customers for a substantial portion of our net revenue and a loss of, or deterioration of the business from, any one of these customers could result in decreased net revenue and materially adversely affect our results of operations.

We depend on a small group of customers for a substantial portion of our business. In 2004, our five largest customers accounted for 55.1% of our net revenue. Our two largest customers, ProMOS Technologies, or ProMOS, and Powerchip Semiconductor Corp, or Powerchip, accounted for 28% and 11%, respectively, of our net revenue in 2004. ProMOS is an affiliate of Mosel Vitelic Inc., or Mosel, which, as of April 30, 2005, indirectly owned approximately 38.8% of our outstanding common shares.

We expect that we will continue to depend on a relatively limited number of customers for a significant portion of our net revenue. Any adverse development in our key customers' operations, competitive position or customer base could materially reduce our net revenue and adversely affect our business and profitability. Since new customers usually require us to pass a lengthy and rigorous qualification process, if we lose any of our key customers, we may not be able to replace them in a timely manner. Also, semiconductor companies generally rely on service providers with whom they have established relationships to meet their testing and assembly needs for existing and future applications. If any of our key customers reduces, delays or cancels its orders, and if we are unable to attract new key customers or use our excess capacity to service our remaining customers, our net revenue could be reduced and our business and results of operations materially adversely affected.

Because of our high fixed costs, if we are unable to achieve relatively high capacity utilization rates, our earnings and profitability may be adversely affected.

Our operations are characterized by a high proportion of fixed costs. For memory and mixed-signal semiconductor testing services, our fixed costs represented 53%, 53% and 58% of our total cost of revenue in 2002, 2003 and 2004, respectively. For memory and mixed-signal semiconductor assembly services, our fixed costs represented 44%, 28% and 22% of our total cost of revenue in 2002, 2003 and 2004, respectively. For LCD and other flat-panel display driver semiconductor testing and assembly services, our fixed costs represented 52%, 50% and 48% of our total cost of revenue in 2002, 2003 and 2004, respectively. Our profitability depends in part not only on absolute pricing levels for our services, but also on the utilization rates for our testing and assembly equipment, commonly referred to as capacity utilization rates. Increases or decreases in our capacity utilization rates significantly affect our gross margins as unit costs generally decrease as the fixed costs are allocated over a larger number of units. In 2004, our capacity utilization rate was 89% for memory and mixed-signal semiconductor testing services, 76% for LCD and other flat-panel display driver semiconductor testing and assembly services and 88% for memory and mixed-signal assembly services. If we fail to increase or maintain our capacity utilization rates, our earnings and profitability may be adversely affected.

The testing and assembly process is complex and our production yields and customer relationships may suffer as a result of defects or malfunctions in our testing and assembly equipment and the introduction of new packages.

Semiconductor testing and assembly are complex processes that require significant technological and process expertise. Semiconductor testing involves sophisticated testing equipment and computer software. We develop computer software to test our customers' semiconductors. We also develop conversion software programs that enable us to test semiconductors on different types of testers. Similar to most software programs, these software programs are complex and may contain programming errors or bugs. In addition, the testing process is subject to human error by our employees who operate our testing equipment and related software. Any significant defect in our testing or conversion software, malfunction in our testing equipment or human error could reduce our production yields and damage our customer relationships.

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The assembly process involves a number of steps, each of which must be completed with precision. Defective packages primarily result from:

contaminants in the manufacturing environment;

human error;

equipment malfunction;

defective raw materials; or

defective plating services.

These and other factors have, from time to time, contributed to lower production yields. They may do so in the future, particularly as we expand our capacity or change our processing steps. In addition, to be competitive, we must continue to expand our offering of packages. Our production yields on new packages typically are significantly lower than our production yields on our more established packages. Our failure to maintain high standards or acceptable production yields, if significant and prolonged, could result in a loss of customers, increased costs of production, delays, substantial amounts of returned goods and related claims by customers. Further, to the extent our customers have set target production yields, we may be required to compensate our customers in a pre-agreed manner. Any of these problems could materially adversely affect our business reputation and result in reduced net revenue and profitability.

Because of the highly cyclical nature of our industry, our capital requirements are difficult to plan. If we cannot obtain additional capital when we need it, we may not be able to maintain or increase our current growth rate and our profits will suffer.

Our capital requirements are difficult to plan as our industry is highly cyclical and rapidly changing. To remain competitive, we will need capital to fund the expansion of our facilities as well as to fund our equipment purchases and research and development activities. We believe that our current cash and cash equivalents, cash flow from operations and available credit facilities will be sufficient to meet our working capital and capital expenditure requirements under our existing arrangements through the end of 2006, except for the investment in a new production facility in Shanghai owned by ChipMOS TECHNOLOGIES (Shanghai) LTD., or ChipMOS Shanghai, a wholly-owned subsidiary of our controlled consolidated subsidiary, Modern Mind Technology Limited, or Modern Mind. In addition, future capacity expansions or market or other developments may require additional funding. Our ability to obtain external financing in the future depends on a number of factors, many of which are beyond our control. They include:

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

general market conditions for financing activities by semiconductor testing and assembly companies; and

economic, political and other conditions in Taiwan and elsewhere.

If we are unable to obtain funding in a timely manner or on acceptable terms, our growth prospects and potential future profitability will suffer.

If Modern Mind fails to invest an additional US\$157.5 million into ChipMOS Shanghai by December 6, 2007, ChipMOS Shanghai's business license may become automatically void and ChipMOS Shanghai may have to be liquidated, which could hurt our growth prospects and potential future profitability.

Under applicable regulations of the People's Republic of China, or PRC, and the terms of the business license of ChipMOS Shanghai, a wholly-owned subsidiary of our controlled consolidated subsidiary, Modern Mind, the business license of ChipMOS Shanghai may automatically become void and ChipMOS Shanghai may have to be liquidated if Modern Mind fails to invest an additional US\$157.5 million by December 6, 2007, unless an additional extension has been obtained from the relevant PRC regulatory authorities. We may not have sufficient financial resources to meet ChipMOS Shanghai's investment commitments without obtaining additional financing. Even if we have the financial resources available, we may decide not to fund the investment if it would cause Mosel to violate applicable ROC laws and regulations. See Risks Relating to Countries in Which We Conduct Operations. The investment in Mainland China by our controlled consolidated subsidiary, Modern Mind, through ChipMOS Shanghai, and the related contractual arrangements may result in Mosel violating ROC laws governing investments in Mainland China by ROC companies or persons. Any sanctions on Mosel as a result of any violation of ROC laws may cause Mosel to decrease its ownership in us significantly or cause Mosel to take other actions that may not be in the best interest of our other shareholders.

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We understand that the relevant PRC regulatory authority is not legally obligated to, but in practice may, grant Modern Mind a grace period if it submits in advance an application for extending the deadlines for making the remaining investments in ChipMOS Shanghai. In March 2005, Modern Mind was granted an extension of the investment deadline from December 6, 2005 to December 6, 2007 by the relevant PRC regulatory authority. If we are unable to obtain the funding in a timely manner or on acceptable terms or if we are unwilling to provide funding to ChipMOS Shanghai through Modern Mind, ChipMOS Shanghai may lose its business license and may have to be liquidated and our growth prospects and potential future profitability may suffer.

Disputes over intellectual property rights could be costly, deprive us of technologies necessary for us to stay competitive, render us unable to provide some of our services and reduce our opportunities to generate revenue.

Our ability to compete successfully and achieve future growth will depend, in part, on our ability to protect our proprietary technologies and to secure on commercially acceptable terms critical technologies that we do not own. We cannot assure you that we will be able to independently develop, or secure from any third party, the technologies required for our testing and assembly services. Our failure to successfully obtain these technologies may seriously harm our competitive position and render us unable to provide some of our services.

Our ability to compete successfully also depends on our ability to operate without infringing upon the proprietary rights of others. The semiconductor testing and assembly industry is characterized by frequent litigation regarding patent and other intellectual property rights. We may incur legal liabilities if we infringe upon the intellectual property or other proprietary rights of others. The situation is exacerbated by our inability to ascertain what patent applications have been filed in the United States or elsewhere until they are granted. If any third party succeeds in its intellectual property infringement claims against us or our customers, we could be required to:

discontinue using the disputed process technologies, which would prevent us from offering some of our testing and assembly services;

pay substantial monetary damages;

develop non-infringing technologies, which may not be feasible; or

acquire licenses to the infringed technologies, which may not be available on commercially reasonable terms, if at all.

Any one of these developments could impose substantial financial and administrative burdens on us and hinder our business. Any litigation, whether as plaintiff or defendant, is costly and diverts our resources. If we fail to obtain necessary licenses or if litigation relating to patent infringement or other intellectual property matters occurs, it could prevent us from testing and assembling particular products or using particular technologies, which could reduce our opportunities to generate revenue.

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If we are unable to obtain raw materials and other necessary inputs from our suppliers in a timely and cost-effective manner, our production schedules would be delayed and we may lose customers and growth opportunities and become less profitable.

Our operations require us to obtain sufficient quantities of raw materials at acceptable prices in a timely and cost-effective manner. We source most of our raw materials, including critical materials like leadframes, organic substrates, epoxy, gold wire and molding compound for assembly, and tapes for TCPs, from a limited group of suppliers. We purchase all of our materials on a purchase order basis and have no long-term contracts with any of our suppliers. From time to time, suppliers have extended lead times, increased the price or limited the supply of required materials to us because of market shortages. Consequently, we may, from time to time, experience difficulty in obtaining sufficient quantities of raw materials 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 yield. Although we typically maintain at least two suppliers for each key raw material, we cannot assure you that we will be able to obtain sufficient quantities of raw materials and other supplies of an acceptable quality in the future. It usually takes from three to six months to switch from one supplier to another, depending on the complexity of the raw material. If we begin to produce modules and subsystems, we will need significantly greater quantities and more types of raw materials and other inputs. Many of the new inputs we need to purchase will be mechanical or other non-semiconductor related products such as flat-panel displays or ink-jet printer heads. We currently do not have any arrangements with suppliers to provide the additional inputs that will be required for the modules and subsystems we currently contemplate producing. As a result, we cannot assure you that we will initially be able to purchase supplies of our non-semiconductor related inputs for our modules and subsystems. If we are unable to obtain raw materials and other necessary inputs in a timely and cost-effective manner, we may need to delay our production and delivery schedules, which may result in the loss of business and growth opportunities and could reduce our profitability.

If we are unable to obtain additional testing and assembly equipment or facilities in a timely manner and at a reasonable cost, we may be unable to fulfill our customers' orders and may become less competitive and less profitable.

The semiconductor testing and assembly business is capital intensive and requires significant investment in expensive equipment manufactured by a limited number of suppliers. The market for semiconductor testing and assembly equipment is characterized, from time to time, by intense demand, limited supply and long delivery cycles. Our operations and expansion plans depend on our ability to obtain equipment from a limited number of suppliers in a timely and cost-effective manner. Currently, the lead time for the delivery of testers for which we have placed orders has been increasing from the usual three months after the date of order. We have no binding supply agreements with any of our suppliers and we acquire our testing and assembly equipment on a purchase order basis, which exposes us to changing market conditions and other significant risks. Semiconductor testing and assembly also requires us to operate sizeable facilities. If we are unable to obtain equipment or facilities in a timely manner, we may be unable to fulfill our customers' orders, which could negatively impact our financial condition and results of operations as well as our growth prospects.

If we are unable to manage the expansion of our operations and resources effectively, our growth prospects may be limited and our future profitability may be reduced.

We expect to continue to expand our operations and increase the number of our employees. Rapid expansion puts a strain on our managerial, technical, financial, operational and other resources. As a result of our expansion, we will need to implement additional operational and financial controls and hire and train additional personnel. We cannot assure you that we will be able to do so effectively in the future, and our failure to do so could jeopardize our expansion plans and seriously harm our operations.

Bermuda law may be less protective of shareholder rights than laws of the United States or other jurisdictions.

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Our corporate affairs are governed by our memorandum of association, our bye-laws and laws governing corporations incorporated in Bermuda. Shareholder suits such as class actions (as these terms are understood with respect to corporations incorporated in the United States) are generally not available in Bermuda. Therefore, our shareholders may be less able under Bermuda law than they would be under the laws of the United States or other jurisdictions to protect their interests in connection with actions by our management, members of our Board of Directors or our controlling shareholder.

It may be difficult to bring and enforce suits against us in the United States.

We are incorporated in Bermuda and a majority of our directors and most of our officers are not residents of the United States. A substantial portion of our assets is located outside the United States. As a result, it may be difficult for our shareholders to serve notice of a lawsuit on us or our directors and officers within the United States. Because most of our assets are located outside the United States, it may be difficult for our shareholders to enforce in the United States judgments of United States courts. Appleby Spurling Hunter, our counsel in Bermuda, has advised us that there is some uncertainty as to the enforcement in Bermuda, in original actions or in actions for enforcement of judgments of United States courts, of liabilities predicated upon United States federal securities laws.

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Investor confidence and the market prices of our shares may be adversely impacted if we or our independent public registered accounting firm is unable to conclude our internal control over our financial reporting is effective as of December 31, 2006 as required by Section 404 of the Sarbanes-Oxley Act of 2002.

We are subject to the SEC's reporting obligations. The SEC, as directed by Section 404 of the Sarbanes-Oxley Act of 2002, adopted rules requiring each public company 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 public registered accounting firm 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 December 31, 2006. Our management may not conclude that our internal controls are effective. Moreover, even if our management concludes that our internal controls over our financial reporting is effective, our independent public registered accounting firm may disagree. If our independent public registered accounting firm is not satisfied with our internal controls over our financial reporting or the level at which our controls are documented, designed, operated or reviewed, or if the independent public registered accounting firm interprets the requirements, rules or regulations differently from us, then it may decline to attest to our management's assessment or may issue an adverse opinion. Any of these possible outcomes could result in an adverse reaction in the financial marketplace due to a loss of investor confidence in the reliability of our consolidated financial statements, which ultimately could negatively impact the market prices of our common shares.

Any environmental claims or failure to comply with any present or future environmental regulations, or any new environmental regulations, may require us to spend additional funds, may impose significant liability on us for present, past or future actions, and may dramatically increase the cost of providing our services to our customers.

We are subject to various laws and regulations relating to the use, storage, discharge and disposal of chemical by-products of, and water used in, our assembly process. Although we have not suffered material environmental claims in the past, a failure or a claim that we have failed to comply with any present or future regulations could result in the assessment of damages or imposition of fines against us, suspension of production or a cessation of our operations or negative publicity. New regulations could require us to acquire costly equipment or to incur other significant expenses. Any failure on our part to control the use of, or adequately restrict the discharge of, hazardous substances could subject us to future liabilities that may materially reduce our earnings.

Fluctuations in exchange rates could result in foreign exchange losses.

Currently, most of our net revenue is denominated in NT dollars. Our cost of revenue and operating expenses, on the other hand, are incurred in several currencies, including NT dollars, Japanese yen, US dollars and Renminbi, or RMB. In addition, a substantial portion of our capital expenditures, primarily for the purchase of testing and assembly equipment, has been, and is expected to continue to be, denominated in Japanese yen with much of the remainder in US dollars. We also have debt denominated in NT dollars, Japanese yen, US dollars and RMB. Fluctuations in exchange rates, primarily among the US dollar, the NT dollar and the Japanese yen, will affect our costs and operating margins in NT dollar terms. In addition, these fluctuations could result in exchange losses and increased costs in NT dollar terms. Despite selective hedging and other techniques implemented by us, fluctuations in exchange rates have affected, and may continue to affect, our financial condition and results of operations.

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We may increase our inventory if we expand our services to manufacturing modules and subsystems, which in turn could increase our working capital requirements and subject us to increased risks of inventory losses or writedowns.

If we expand our services to the manufacturing of modules and subsystems, such as liquid crystal modules and ink-jet print head modules, we will need to purchase wafers, LCD panels, color filters, polarizer film, ink-jet print heads and other inputs related to our module and subsystems business. We anticipate that we will have to purchase many of these inputs in advance of our completion of the production of the corresponding module or subsystem and thus will hold some of these inputs, either alone or as part of work in progress, in inventory for a period of time. As a result, although we will try to minimize the time between purchase of the inputs and sale of the final modules or subsystems, we will be subject to the risk that the value of such inputs and work in progress will decline, perhaps significantly, prior to the completion of production and sale of the final module or subsystem. Moreover, deteriorating market conditions may result in an increase in our inventory levels, a decline in the average selling price of our products and a corresponding decrease in the stated value of our inventories. We cannot assure you that we will be able to maintain our inventories at a satisfactory level or that we will not incur losses on inventories in the future.

We may not be successful in our acquisitions of and investments in other companies and businesses, and may therefore be unable to implement fully our business strategy.

As part of our growth strategy, from time to time, we make acquisitions and investments in companies or businesses. For example, we acquired through ChipMOS Taiwan an equity interest in Chantek in 2002, subsequently increased that interest to 68.0% as of April 30, 2005, and announced a merger of Chantek into ChipMOS Taiwan on June 16, 2005. In 2002, we acquired through ChipMOS Taiwan an equity interest in ThaiLin Semiconductor Corp., or ThaiLin, that was 27.6% as of April 30, 2005. In 2004, we acquired certain testing and assembly equipment from First International Computer Testing and Assembly, or FICTA, as well as a 67.8% stake in First Semiconductor Technology Inc., which interest we sold to First Semiconductor Technology Inc. in April 2005. We merged WORLD-WIDE TEST Technology Inc., or WWT, into one of our subsidiaries, as discussed in more detail in Item 4. Information on the Company Our Structure and History ChipMOS Logic TECHNOLOGIES, INC. below. The success of our acquisitions and investments depends on a number of factors, including:

our ability to identify suitable opportunities for investment or acquisition;

our ability to reach an acquisition or investment agreement on terms that are satisfactory to us or at all;

the extent to which we are able to exercise control over the acquired company;

the economic, business or other strategic objectives and goals of the acquired company compared to those of our company; and

our ability to successfully integrate the acquired company or business with our company.

If we are unsuccessful in our acquisitions and investments, we may not be able to implement fully our business strategy to maintain or grow our business.

Potential conflicts of interest with Siliconware Precision could interfere with our ability to conduct the operations of ChipMOS Taiwan and could result in the loss of our customers to Siliconware Precision.

As of April 30, 2005, Siliconware Precision owned 28.7% of the outstanding equity securities of ChipMOS Taiwan. Siliconware Precision provides testing and assembly services for logic and mixed-signal semiconductors. Under the terms of the joint venture agreement between Mosel and Siliconware Precision regarding the operation of ChipMOS Taiwan, Siliconware Precision is entitled to nominate two of the seven board members of ChipMOS Taiwan. One of ChipMOS Taiwan's directors, who is also a director of ChipMOS Bermuda, is the current representative of Siliconware Precision, and another director is an employee of Siliconware Precision. As a result, conflicts of interest between these directors' duty to Siliconware Precision and to us may arise. We cannot assure you that when such conflicts of interest arise, these directors will act completely in our interests or that conflicts of interest will be resolved in our favor. These conflicts may result in the loss by us of existing or potential customers to Siliconware Precision.

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We depend on key personnel, and our revenue could decrease and our costs could increase if we lose their services.

We depend on the continued service of our executive officers and skilled engineering, technical and other personnel. We will also be required to hire a substantially greater number of skilled employees in connection with our expansion plans. In particular, we depend on a number of skilled employees in connection with our LCD and other flat-panel display driver semiconductor testing and assembly services, and the competition for such employees in Taiwan and Mainland China is intense. We may not be able to either retain our present personnel or attract additional qualified personnel as and when needed. Moreover, we do not carry key person insurance for any of our executive officers nor do we have employment contracts with any of our executive officers or employees, and, as a result, none of our executive officers or employees is bound by any non-competition agreement. If we lose any of our key personnel, it could be very difficult to find and integrate replacement personnel, which could affect our ability to provide our services, resulting in reduced net revenue and earnings. In addition, we may need to increase employee compensation levels in order to retain our existing officers and employees and to attract additional personnel. Seven percent of the workforce at our facilities in Taiwan are foreign workers employed by us under work permits that are subject to government regulations on renewal and other terms. Consequently, if the regulations in Taiwan relating to the employment of foreign workers were to become significantly more restrictive or if we are otherwise unable to attract or retain these workers at reasonable cost, we may be unable to maintain or increase our level of services and may suffer reduced net revenue and earnings.

Risks Relating to Our Relationship with Mosel

Mosel exercises significant control over our company and could cause us to take actions that may not be, or refrain from taking actions that may be, in our best interest or the best interest of our other shareholders.

Mosel indirectly owned approximately 38.8% of our common shares as of April 30, 2005. As our largest shareholder, Mosel exercises significant control over all matters submitted to our shareholders for approval and other corporate actions, such as:

election of directors;

timing and manner of dividend distributions;

approval of contracts between us and Mosel or its affiliates, which could involve conflicts of interest; and

open market purchase programs or other purchases of our common shares.

Mosel's substantial interests in our company could also:

delay, defer or prevent a change in who controls us;

discourage bids for our shares at a premium over the market price; and

adversely affect the market price of our common shares.

Moreover, because Mosel has the power to direct or influence our corporate actions, we may be required to engage in transactions that may not be agreeable to our other shareholders or that may not be in the best interest of our other shareholders.

In April 2003, ChipMOS Taiwan purchased from third-party bondholders NT\$570 million worth of index bonds due in 2003 of Mosel, as described in more detail in Item 7. Major Shareholders and Related Party Transactions Other Related Party Transactions Mosel Vitelic Inc. If we acquire debt or other securities of Mosel in the future, there can be no assurance that we will be able to resell such securities or otherwise recoup any or all of our money used to acquire them.

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ChipMOS Taiwan entered into certain transactions that, if determined to have constituted impermissible financings or purchases of assets or equity of Mosel under ROC law, could result in the resignations of members of our management. As a result, our business operations could be disrupted and the market price of our shares could decline.

ROC law limits the ability of a company incorporated in Taiwan to purchase any equity interest in companies, directly or indirectly, holding more than 50% of its issued and outstanding voting securities or registered capital or to provide loans or other financing to any company. During 2002, ChipMOS Taiwan engaged in certain transactions as described in more detail in Item 7. Major Shareholders and Related Party Transactions Related Party Transactions Certain Transactions in 2002. In addition, ChipMOS Taiwan purchased NT\$242 million worth of Mosel shares in 2002, the market value of which as of April 30, 2005 was approximately NT\$23 million. See notes 4 and 20 to our consolidated financial statements included in this annual report for details of the allowances for loss we have made in 2003 and 2004 against this and other short-term investments. Lee and Li, our ROC special counsel, has advised us that these transactions do not violate relevant ROC law provisions prohibiting a subsidiary from buying or taking collateral in shares of companies holding, directly or indirectly, more than 50% of its issued and outstanding voting securities or registered capital because Mosel's then indirect interest (calculated as the product of (a) Mosel's percentage interest in ChipMOS Bermuda and (b) ChipMOS Bermuda's percentage interest in ChipMOS Taiwan) in ChipMOS Taiwan was less than 50% and ChipMOS Bermuda is incorporated outside of Taiwan. However, we understand that there is no applicable judicial precedent and there is some doubt as to how a court would rule if presented with the situation.

If it were to be determined that any of the transactions described above constituted an impermissible financing or purchase of assets of Mosel by ChipMOS Taiwan or an impermissible purchase of Mosel's equity by ChipMOS Taiwan, then ChipMOS Taiwan's then chairman and any responsible officers would be jointly and severally liable to ChipMOS Taiwan for any losses suffered by ChipMOS Taiwan and may also be severally liable criminally for any breach of fiduciary duties that resulted in losses and damages suffered by ChipMOS Taiwan. Moreover, certain of these transactions may not have been in full compliance with ChipMOS Taiwan's then applicable internal procedures due to the failure to have received an appropriate valuation opinion prior to entering into such purchases. The failure to comply fully with ChipMOS Taiwan's then applicable internal procedures could constitute evidence of a failure by the then chairman of ChipMOS Taiwan and responsible officers to comply fully with their fiduciary duties, which could result in them being held criminally liable for any breach of fiduciary duties that resulted in losses and damages to ChipMOS Taiwan. If members of our current management were held to have breached their fiduciary duties or become criminally liable for the transactions described above, they may become obliged, whether under law or otherwise, to resign from their respective positions at ChipMOS Bermuda and our affiliates. Any loss of the services of these persons could disrupt our business, damage our reputation, and cause the market price of our shares to decline.

The ongoing criminal investigations and trial involving Mr. Hung-Chiu Hu, Mr. Robert Ma Kam Fook and Mr. Jwo-Yi Miao, our former directors, could have a material adverse effect on our business and cause our stock price to decline.

Mr. Hung-Chiu Hu and Mr. Jwo-Yi Miao are currently on criminal trial in the Taipei District Court, and Mr. Robert Ma Kam Fook is under criminal investigation by the Taipei Prosecutor's Office, in connection with alleged embezzlement during the 1990s at Pacific Electric Wire & Cable Co., Ltd., or Pacific Electric, a company incorporated in Taiwan and, until April 28, 2004, listed on the Taiwan Stock Exchange. Mr. Hu and Mr. Miao have been indicted for offenses including breach of trust and violation of the Taiwan Commercial Accounting Law and the Taiwan Securities and Exchange Law. Mr. Robert Ma Kam Fook is under investigation in connection with alleged money laundering activities related to the alleged offenses of Mr. Hu. We understand that the investigations were initiated after certain directors of Pacific Electric filed a complaint in February 2004 with the Taipei Prosecutor's Office against Mr. Hu alleging that he embezzled certain corporate funds and misappropriated certain assets while he was an executive vice president and a director of Pacific Electric. Pacific Electric and its directors have also filed similar lawsuits against certain former chairmen, directors and officers of Pacific Electric.

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On December 21, 2004, our board established a special investigation committee solely comprised of Messrs. Pierre Laflamme and Yeong-Her Wang, two of the Company's independent directors. Concurrent with the establishment of the special investigation committee, our board requested the resignations of Mr. Hu and Mr. Miao, who subsequently resigned from our board on June 2, 2005 and June 8, 2005, respectively. Our board also accepted the resignation of Mr. Robert Ma Kam Fook on December 21, 2004. The special investigation committee engaged Diwan, Ernst & Young (Ernst & Young), as its forensic accounting advisor and Baker & McKenzie as its legal advisor to review transactions that were similar in nature to the transactions that allegedly implicated Messrs. Hu, Miao and Ma at Pacific Electric as well as significant related party transactions between ChipMOS Bermuda, including its subsidiaries and affiliates, and Messrs. Hu, Miao and Ma and any companies or entities affiliated with any of them. The special investigation committee also engaged Hong Kong counsel.

On June 23, 2005, the special investigation committee presented its final report to our Board of Directors. The special investigation committee concluded that the review conducted by Ernst & Young and Baker & McKenzie did not reveal previously unknown information regarding losses suffered by ChipMOS Bermuda, other than a potential liability relating to a credit facility entered into with Trident (Asia) Investments Limited (Trident) and HSH Nordbank AG, Hong Kong Branch (Nordbank). The special investigation committee noted that total losses from transactions reviewed by it in the amount of NT\$454 million (US\$14 million), relating to impairment losses and realized losses of certain investments, have been reflected in our 2002, 2003 and 2004 financial statements, and a potential decline in the value of our investment in respect of Ultima Technology Corp. (BVI), which has been preliminarily estimated to be approximately NT\$245 million (US\$8 million), is not yet reflected in our financial statements. See, notes 4, 9 and 20 to our financial statements contained in this annual report and Item 7. Major Shareholders and Related Party Transactions. For information regarding the credit facility, see ChipMOS Bermuda and ChipMOS Hong Kong may be held liable for outstanding loan balances drawn down by Trident as joint borrowers under a credit facility entered into with Nordbank. The special investigation committee did not make any factual findings as to the business purpose of the transactions reviewed or as to persons at the Company responsible for such transactions.

Any adverse publicity from the investigation, trial or conviction of Messrs. Hu, Miao or Ma could have a material adverse effect on our business or cause our stock price to decline. For additional information on the special investigation committee, see Item 6. Directors, Senior Management and Employees - Special Investigation Committee.

ChipMOS Bermuda and ChipMOS Hong Kong may be held liable for outstanding loan balances drawn down by Trident as joint borrowers under a credit facility entered into with Nordbank.

In January 2003, ChipMOS Bermuda, ChipMOS Hong Kong (formerly referred to as ChipMOS Far East) and Trident entered into a HK\$150 million credit facility with Nordbank. ChipMOS Hong Kong borrowed funds under the facility in 2003 and repaid them in 2004, and ChipMOS Bermuda has never borrowed under this facility. According to information provided to the special investigation committee by Trident, the outstanding loan balance under the credit facility was approximately US\$6.4 million as of March 31, 2005, and final repayment under the credit facility is due June 30, 2005. On November 18, 2004, ChipMOS Bermuda and ChipMOS Hong Kong sent letters to Nordbank seeking to terminate the credit facility. By letter dated March 21, 2005, Nordbank confirmed receipt of the letters. Nonetheless, as a joint-borrower under the credit facility, there may be a risk that the Company may be found liable for any unpaid balances of Trident due under the credit facility.

Potential conflicts of interest with our major shareholder and its affiliates may cause us to turn down orders from other customers.

As of April 30, 2005, Mosel indirectly held a 38.8% interest in us through its wholly-owned subsidiary Giant Haven Investments Ltd., and its indirectly held subsidiary, Mou-Fu Investment Ltd. Its affiliate, ProMOS, in which Mosel indirectly held a 17.9% interest as of April 30, 2005, designs and manufactures DRAM.

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Mosel, with its significant ownership interest in us, has the ability to influence our major business decisions, including the allocation of testing and assembly service capacities and the development of our testing and assembly technologies. Mosel's involvement in the semiconductor business may lead to conflicts of interest in providing testing and assembly services to our other customers. Such a situation could damage our relationship with our other customers and could encourage them to divert their business with us to our competitors. In addition, one of our directors is currently the acting president of Mosel. As a result, conflicts of interest between this director's duty to Mosel and us may arise. For an example of such a conflict of interest, see [Risks Relating to Countries in Which We Conduct Operations](#). The investment in Mainland China by our controlled consolidated subsidiary, Modern Mind, through ChipMOS Shanghai, and the related contractual arrangements may result in Mosel violating ROC laws governing investments in Mainland China by ROC companies or persons. Any sanctions on Mosel as a result of any violation of ROC laws may cause Mosel to decrease its ownership in us significantly or cause Mosel to take other actions that may not be in the best interest of our other shareholders. We cannot give any assurances that when conflicts of interest arise, Mosel's directors or officers on our board will act in our interests, or that conflicts of interest will be resolved in our favor. These conflicts may result in the loss of existing or potential customers.

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Any decision by Mosel to pledge or sell its interests in us could result in a change of control in our company and could cause our stock price to decline.

In order to raise funds, Mosel may decide to pledge or sell our common shares to obtain additional capital. Any pledge or sale of our common shares by Mosel could result in a change of control in our company and could affect the market price of our common shares.

Potential defaults by Mosel under the terms of the joint venture agreement between Mosel and Siliconware Precision regarding the operation of ChipMOS Taiwan could harm our relationship with Mosel or require us to dilute our shareholding in ChipMOS Taiwan.

Under the terms of the joint venture agreement between Mosel and Siliconware Precision regarding the operation of ChipMOS Taiwan, Mosel has agreed to cooperate with Siliconware Precision to ensure that the shares of ChipMOS Taiwan are listed on the Taiwan Stock Exchange, the GreTai Securities Market or any other stock exchange. Mosel has also agreed to maintain at least a 28.8% equity interest in ChipMOS Taiwan for five years after such listing. We currently have no plans to list ChipMOS Taiwan, and Mosel currently has no direct equity interest in ChipMOS Taiwan. There can be no assurance that Siliconware Precision may not in the future seek to enforce against Mosel its obligations under the joint venture agreement. Remedies for breaches by Mosel of, or non-compliance by Mosel with, the terms of the joint venture agreement may include damages, the right of Siliconware Precision to purchase from Mosel additional shares of ChipMOS Taiwan or the right of Siliconware Precision to sell to Mosel its shares of ChipMOS Taiwan. Any litigation or any payments that Mosel will be required to make could strain Mosel's resources or adversely affect its financial condition, which could in turn adversely affect our relationship with Mosel. Any transfer of ChipMOS Taiwan shares could affect Mosel's ownership interests in and its exercise of significant control over ChipMOS Taiwan or us. As a result of any breach by Mosel of the joint venture agreement, Siliconware Precision's right to purchase ChipMOS Taiwan shares from Mosel would be limited to the number of ChipMOS Taiwan shares then owned by Mosel, and Siliconware Precision would be entitled to require Mosel to purchase all of the ChipMOS Taiwan shares then owned by Siliconware Precision. There can be no assurance that resolution of any disputes between Siliconware Precision and Mosel in this regard will not have an adverse effect on our business or financial condition.

Risks Relating to Countries in Which We Conduct Operations

The investment in Mainland China by our controlled consolidated subsidiary, Modern Mind, through ChipMOS Shanghai, and the related contractual arrangements may result in Mosel violating ROC laws governing investments in Mainland China by ROC companies or persons. Any sanctions on Mosel as a result of any violation of ROC laws may cause Mosel to decrease its ownership in us significantly or cause Mosel to take other actions that may not be in the best interest of our other shareholders.

ROC laws and regulations prohibit any investment by ROC entities in Mainland China in the semiconductor testing and assembly industry. Investment is defined for this purpose to mean:

establishing a new company or enterprise in Mainland China;

increasing one's equity interest in an existing company or enterprise in Mainland China;

acquiring shares of an existing company or enterprise in Mainland China; or

establishing or expanding a branch office in Mainland China.

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We provide our services in Mainland China through ChipMOS Shanghai, a company incorporated under the laws of the PRC and a wholly-owned subsidiary of Modern Mind. Modern Mind is a company incorporated under the laws of the British Virgin Islands and is wholly owned by Jesper Limited, a company incorporated under the laws of the British Virgin Islands. While we do not own any equity interest in Modern Mind, we control Modern Mind through our ownership of a convertible note issued by Modern Mind, convertible into common shares with a controlling equity interest in Modern Mind at a conversion rate of one common share of Modern Mind for every US\$1.00 if repayment is not made when due. Under accounting principles that are applicable to us, Modern Mind is our controlled consolidated subsidiary. In addition, we have obtained from Jesper Limited an irrevocable option to acquire the common shares of Modern Mind then owned by Jesper Limited. Payment under the demand notes is fully and unconditionally guaranteed by Jesper Limited and secured by a security interest in the entire equity interest in Modern Mind and ChipMOS Shanghai. We are also in the process of implementing certain additional contractual arrangements with regard to ChipMOS Shanghai. Please see Item 4. Information on the Company Our Structure and History Modern Mind Technology Limited and ChipMOS TECHNOLOGIES (Shanghai) LTD. for further details on these contractual arrangements.

As the regulations described above are applicable only to entities organized within the ROC with respect to specified investments in Mainland China made by these entities, in the opinion of Lee and Li, our ROC special counsel, ChipMOS Bermuda's indirect control over ChipMOS Shanghai through the ownership of convertible notes or demand notes issued by Modern Mind and the above contemplated contractual arrangements are in compliance with all existing ROC laws and regulations. There are, however, substantial uncertainties regarding the interpretation and application of ROC laws and regulations, including the laws and regulations governing the enforcement and performance of our contractual arrangements. Accordingly, we cannot assure you that ROC regulatory authorities will not take a view contrary to the opinion of our ROC special counsel.

In addition, under current applicable ROC regulations, if a company incorporated in the ROC has directly or indirectly invested in a company incorporated outside of the ROC and has controlling power over the management and operations of that non-ROC company, an investment by the non-ROC company in the PRC will constitute an investment by the ROC shareholder that is subject to ROC laws and regulations. As a result, for the purposes of these regulations, any investment (within the meaning of the ROC laws regulating investments in Mainland China) by ChipMOS Bermuda in ChipMOS Shanghai may be deemed to be an investment in Mainland China by Mosel, if Mosel is determined to have controlling power over our management and operations. While the regulations do not define what constitutes controlling power over management and operations, we understand from our ROC special counsel, Lee and Li, that, due to Mosel's equity interest in us and representatives on our Board of Directors, any conversion of the convertible notes or demand notes into shares of Modern Mind or other acquisition of shares of Modern Mind or ChipMOS Shanghai by ChipMOS Bermuda may be deemed an investment in Mainland China by Mosel and require approval by the Investment Commission of the ROC Ministry of Economic Affairs, or the Investment Commission, and be subject to the prohibitions described in the first paragraph of this risk factor. As a result, so long as Mosel is deemed to have controlling power over ChipMOS Bermuda's management and operations, ChipMOS Bermuda may have to choose not to convert its convertible notes or demand notes into common shares of Modern Mind in order to avoid any violations by Mosel under these regulations. As a result, any significant ownership of our common shares by Mosel could materially and adversely restrict our ability and flexibility in structuring our investment in Mainland China and thereby affect our business prospects.

If Mosel were determined to be in violation of the applicable ROC laws and regulations governing investments in Mainland China, Mosel may be ordered by the Investment Commission to cease such investment activities in Mainland China within a specified period of time and may be subject to a fine of between NT\$50,000 and NT\$25 million. Mosel could comply with the order of the Investment Commission either by causing us to terminate our investment activities in Mainland China or by taking actions that will cause Mosel to cease having controlling power over our management and operations. If Mosel does not comply with the order of the Investment Commission, the ROC government can impose on the chairman of Mosel up to two years imprisonment, a fine of up to NT\$25 million, or both. We cannot provide any assurance that any actions taken by Mosel to address any orders by the Investment Commission will be in the best interest of our other shareholders. See Risks Relating to Our Relationship with Mosel Potential conflicts of interest with our major shareholder and its affiliates may cause us to turn down orders from other customers. Any termination or disposal of ChipMOS Shanghai's operations in Mainland China could have a material adverse effect on our financial condition, results of operations or prospects, as well as the market price of our common shares.

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ROC laws and regulations prohibit certain technology cooperation between ROC persons or entities with PRC persons or entities, and our current technology transfer arrangements between ChipMOS Bermuda and ChipMOS Shanghai may be found to be in violation of such prohibition, which may result in the termination of such technology transfer arrangements and therefore have a material adverse effect on the operations of ChipMOS Shanghai and our financial condition and results of operations.

ROC laws and regulations prohibit any transfer of semiconductor testing and assembly technologies to any person or entity located in Mainland China. The ROC Ministry of Economic Affairs has the ultimate administrative authority in interpreting such laws and regulations. Under a technology transfer agreement, dated August 1, 2002, ChipMOS Bermuda licensed to ChipMOS Shanghai testing and assembly-related technologies that ChipMOS Bermuda controlled at that time, which included technologies that ChipMOS Bermuda had licensed from ChipMOS Taiwan. ChipMOS Bermuda also provided technical support and consulting services under this agreement to ChipMOS Shanghai. On April 7, 2004, ChipMOS Bermuda entered into an assignment agreement with ChipMOS Taiwan, pursuant to which ChipMOS Taiwan transferred all of the technologies it owned to ChipMOS Bermuda, including those previously licensed to ChipMOS Bermuda. ChipMOS Bermuda will continue to license such technologies to ChipMOS Shanghai pursuant to the above mentioned technology transfer agreement dated August 1, 2002.

In the opinion of Lee and Li, our ROC special counsel, our technology transfer arrangements after April 7, 2004 as described above are in compliance with all applicable ROC laws and regulations. However, substantial uncertainties regarding the interpretation and application of those laws and regulations exist. Accordingly, we cannot assure you that ROC regulatory authorities will not take a view contrary to the opinion of our ROC special counsel. If ChipMOS Taiwan were determined to be in violation of applicable ROC laws and regulations governing technology cooperation with PRC persons and entities, ChipMOS Taiwan may be ordered by the Investment Commission to terminate such activity within a specified period of time and may be subject to a fine of between NT\$50,000 and NT\$25 million. In addition, if ChipMOS Taiwan does not comply with the order of the Investment Commission, the ROC government can impose on the chairman of ChipMOS Taiwan up to two years imprisonment, a fine of up to NT\$25 million, or both. Any termination of our current technology transfer to ChipMOS Shanghai could materially adversely affect our Mainland China operations and our financial condition, results of operations or prospects, as well as the market price of our common shares.

Our current ownership structure and contractual arrangements with Jesper Limited, Modern Mind and ChipMOS Shanghai may not be effective in providing operational control of our Mainland China operations.

We provide our services in Mainland China through ChipMOS Shanghai, a wholly-owned subsidiary of Modern Mind. While we do not own any equity interest in Modern Mind, we have a controlling interest in Modern Mind through our ownership of a convertible note issued by Modern Mind. In 2004, we restructured our control of ChipMOS Shanghai and the way we provide our services in Mainland China through contractual arrangements with Jesper Limited, Modern Mind, and ChipMOS Shanghai. See The investment in Mainland China by our controlled consolidated subsidiary, Modern Mind, through ChipMOS Shanghai, and the related contractual arrangements may result in Mosel violating ROC laws governing investments in Mainland China by ROC companies or persons. Any sanctions on Mosel as a result of any violation of ROC laws may cause Mosel to decrease its ownership in us significantly or cause Mosel to take other actions that may not be in the best interest of our other shareholders for further details on these contractual arrangements. These contractual arrangements, however, may not be as effective in providing control over our Mainland China operations as would direct ownership in ChipMOS Shanghai.

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Our ability to direct the operations we conduct through our subsidiaries and affiliated companies that we do not fully own may be limited by legal duties owed to other shareholders of such companies.

We conduct almost all of our operations through companies that we do not fully own. For example, almost all of our current consolidated operations are conducted through ChipMOS Taiwan, our 70.3% subsidiary, Chantek, ChipMOS Taiwan's 68.0% subsidiary as of April 30, 2005, ThaiLin, ChipMOS Taiwan's 27.6% subsidiary as of April 30, 2005, and ChipMOS Shanghai, in which we exercise control without holding any direct or indirect equity interest. We also conduct other activities through our affiliated entities. In accordance with the various laws of the relevant jurisdictions in which our subsidiaries and affiliates are organized, each of our subsidiaries and affiliates and their respective directors owe various duties to their respective shareholders. As a result, the actions we wish our subsidiaries or affiliates to take could be in conflict with their or their directors' legal duties owed to their other shareholders. When those conflicts arise, our ability to cause our subsidiaries or affiliates to take the action we desire may be limited.

Any future outbreak of severe acute respiratory syndrome or other new or unusual diseases may materially affect our operations and business.

An outbreak of a contagious disease such as severe acute respiratory syndrome, for which there is no known cure or vaccine, may potentially result in a quarantine of infected employees and related persons, and affect our operations at one or more of our facilities or the operations of our customers or suppliers. We cannot predict at this time the impact any future outbreak could have on our business and results of operations.

Strained relations between the Republic of China and the People's Republic of China could negatively affect our business and the market price of our shares.

Our principal executive offices and most of our testing and assembly facilities are located in Taiwan. The ROC has a unique international political status. The PRC government regards Taiwan as a renegade province and does not recognize the legitimacy of the ROC. Although significant economic and cultural relations have been established during recent years between the ROC and the PRC, relations have often been strained. In March 2005, the PRC government enacted an Anti-Secession Law codifying its policy of retaining the right to use military force to gain control over Taiwan, particularly under what it considers as highly provocative circumstances, such as a declaration of independence by Taiwan or the refusal by the ROC to accept the PRC's stated "one China" policy. Past developments in relations between the ROC and the PRC have on occasion depressed the market prices of the securities of Taiwanese or Taiwan related companies, including our own. Relations between the ROC and the PRC and other factors affecting military, political or economic conditions in Taiwan could have a material adverse effect on our financial condition and results of operations, as well as the market price and the liquidity of our common shares.

We are vulnerable to disasters and other events disruptive to our business and operations.

We currently provide most of our testing services through our facilities in the Hsinchu Industrial Park and the Hsinchu Science Park in Taiwan and all of our assembly services through our facility in the Southern Taiwan Science Park in Taiwan. Significant damage or other impediments to these facilities as a result of natural disasters, industrial strikes or industrial accidents could significantly increase our operating costs.

Taiwan is particularly susceptible to earthquakes. For example, in late 1999, Taiwan suffered severe earthquakes that caused significant property damage and loss of life, particularly in the central part of Taiwan. These earthquakes damaged production facilities and adversely affected the

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operations of many companies involved in the semiconductor and other industries. We experienced NT\$1 million in damages to our machinery and equipment, NT\$6 million in damages to our facilities, NT\$1 million in damages to our inventory and five days of delay in our production schedule as a result of these earthquakes.

In addition, the production facilities of many of our suppliers and customers and providers of complementary semiconductor manufacturing services, including foundries, are located in Taiwan. If our customers are affected, it could result in a decline in the demand for our testing and assembly services. If our suppliers and providers of complementary semiconductor manufacturing services are affected, our production schedule could be interrupted or delayed. As a result, a major earthquake, natural disaster or other disruptive event in Taiwan could severely disrupt the normal operation of business and have a material adverse effect on our financial condition and results of operations.

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Risks Relating to Our Holding Company Structure

Our ability to receive dividends and other payments from our subsidiaries may be restricted by commercial, statutory and legal restrictions, and thereby materially adversely affect our ability to grow, fund investments, make acquisitions, pay dividends, and otherwise fund and conduct our business.

We are a holding company, and our most significant asset is our ownership interest in ChipMOS Taiwan. Although we control ChipMOS Shanghai through Modern Mind, we do not hold any equity interest in these entities due to ROC regulatory restrictions on investments in Mainland China. As long as we do not hold any equity interest in these entities, we are not entitled to any dividends distributed by these entities and our contractual arrangements may not effectively prevent these entities from declaring any dividends to their shareholders. Dividends we receive from our subsidiaries, if any, will be subject to taxation.

The ability of our subsidiaries to pay dividends, repay intercompany loans from us or make other distributions to us is restricted by, among other things, the availability of funds, the terms of various credit arrangements entered into by our subsidiaries, as well as statutory and other legal restrictions. In addition, although there are currently no foreign exchange control regulations which restrict the ability of our subsidiaries located in Taiwan to distribute dividends to us, we cannot assure you that the relevant regulations will not be changed and that the ability of our subsidiaries to distribute dividends to us will not be restricted in the future. A Taiwan company is generally not permitted to distribute dividends or to make any other distributions to shareholders for any year in which it did not have either earnings or retained earnings (excluding reserves). In addition, before distributing a dividend to shareholders following the end of a fiscal year, the company must recover any past losses, pay all outstanding taxes and set aside 10% of its annual net income (less prior years' losses and outstanding taxes) as a legal reserve until the accumulated legal reserve equals its paid-in capital, and may set aside a special reserve.

In addition, PRC law requires that our PRC-incorporated subsidiary only distributes dividends out of its net income, if any, as determined in accordance with PRC accounting standards and regulations. Under PRC law, it is also required to set aside at least 10% of its after-tax net income each year into its reserve fund until the accumulated legal reserve amounts to 50% of its registered capital. PRC-incorporated companies are further required to maintain a bonus and welfare fund at percentages determined at their sole discretion. The reserve fund and the bonus and welfare fund are not distributable as dividends. Any limitation on dividend payments by our subsidiaries could materially adversely affect our ability to grow, fund investments, make acquisitions, pay dividends, and otherwise fund and conduct our business.

Our ability to make further investments in ChipMOS Taiwan may be dependent on regulatory approvals. If ChipMOS Taiwan is unable to receive the equity financing it requires, its ability to grow and fund its operations may be materially adversely affected.

As ChipMOS Taiwan is not a listed company, it generally depends on us to meet its equity financing requirements. Any capital contribution by us to ChipMOS Taiwan may require the approval of the relevant ROC authorities. For example, any capital contribution by us to ChipMOS Taiwan will require the approval of the authorities of the Science Park Administration. We may not be able to obtain any such approval in the future in a timely manner, or at all. If ChipMOS Taiwan is unable to receive the equity financing it requires, its ability to grow and fund its operations may be materially adversely affected.

Risks Relating to Our Common Shares

Volatility in the price of our common shares may result in shareholder litigation that could in turn result in substantial costs and a diversion of our management's attention and resources.

The financial markets in the United States and other countries have experienced significant price and volume fluctuations, and market prices of technology companies have been and continue to be extremely volatile. Volatility in the price of our common shares may be caused by factors outside of our control and may be unrelated or disproportionate to our results of operations. In the past, following periods of volatility in the market price of a public company's securities, shareholders have frequently instituted securities class action litigation against that company. Litigation of this kind could result in substantial costs and a diversion of our management's attention and resources.

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Certain provisions in our bye-laws make the acquisition of us by another company more difficult and therefore may delay, defer or prevent a change of control.

Our bye-laws provide that our Board of Directors is divided into three classes of directors, each class to be re-elected only once every three years. As a result, shareholders would not generally be able to replace a majority of the directors until after two annual general meetings. In addition, any extraordinary corporate transaction such as a merger, amalgamation or consolidation, or a sale or transfer of all or substantially all of our assets, cannot be done without the approval of shareholders representing 70% of all votes present at a general meeting called to consider such extraordinary transaction.

Future sales or issuance of common shares by us or our current shareholders could depress our share price and you may suffer dilution.

Sales of substantial amounts of shares in the public market, or the perception that future sales may occur, could depress the prevailing market price of our shares. As of April 30, 2005, we had approximately 67.4 million shares outstanding, approximately 30.7 million shares of which are currently freely tradeable within the United States without restriction or further registration under the Securities Act of 1933. In July 2004, we issued 7,000,000 common shares pursuant to a registration statement filed on May 21, 2004. In November 2004, we issued US\$85 million of convertible notes in a private offering outside of the United States, and in December 2004, we repurchased and cancelled US\$699,000 of those convertible notes. We plan to issue, from time to time, additional shares in connection with employee compensation and to finance possible future investments or acquisitions. The issuance of additional shares may have a dilutive effect on other shareholders and may cause the price of our common shares to decrease. See Item 6. Directors, Senior Management and Employees Share Option Plan for a discussion of the Share Option Plan that we have adopted for the benefit of all of our directors, officers, employees and consultants.

In addition, the indictment relating to Mr. Hu alleges that embezzled funds were used in investments by PacMOS Technologies Holdings Limited, which, as of April 30, 2005, owned 5.8% of our outstanding common shares. As a result, PacMOS may be ordered by relevant authorities to dispose of its investments made with any embezzled funds, which may result in a sale of our shares by PacMOS. A sale of a significant number of our shares by PacMOS or our other current shareholders could depress our share price.

Conversion of the notes will dilute the ownership interest of existing shareholders and future issuances of our securities could dilute your ownership.

In November 2004, we issued US\$85 million (NT\$2,698 million) of convertible notes due 2009, which bear interest at an annual rate of 1.75%. The notes are convertible into our common shares at an initial conversion price of US\$7.85, which may be adjusted in certain circumstances, but shall not be less than 80% of the initial conversion price. The conversion of some or all of the convertible notes will dilute the ownership interest of existing shareholders. Any sales in the public market of the common shares issuable upon such conversion could adversely affect prevailing market prices of our common shares. In addition, the existence of the convertible notes may encourage short selling by market participants because the conversion of the notes could depress the price of our common shares. As of April 30, 2005, no conversion of the convertible notes had taken place.

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Item 4. Information on the Company

Overview

We believe that we are one of the leading independent providers of semiconductor testing and assembly services. Specifically, we believe that we are the largest independent provider of testing and assembly services for LCD and other flat-panel display driver semiconductors globally and a leading provider of testing and assembly services for advanced memory products in Taiwan. The depth of our engineering expertise and the breadth of our testing and assembly technologies enable us to provide our customers with advanced and comprehensive solutions. In addition, our geographic presence in Taiwan and Mainland China is attractive to customers wishing to take advantage of the logistical and cost efficiencies stemming from our close proximity to foundries and producers of consumer electronic products in Taiwan and Mainland China. Our production facilities are located in Hsinchu and Tainan, Taiwan and Shanghai, Mainland China.

Industry Background

Semiconductor Industry Trends

Growth in the semiconductor industry is largely driven by end-user demand for consumer electronics, communications equipment and computers, for which semiconductors are critical components. Highly cyclical, the worldwide semiconductor industry has experienced peaks and troughs over the last decade, with a severe downturn at the end of 2000 that was followed by a modest recovery in late 2002. Since then, the industry has continued to expand and is expected to continue its growth over the next few years, driven by overall global GDP growth, increased information technology spending, and demand for new and improved electronic products and applications, along with further improvements in the cost, performance, speed and size of semiconductors.

Selected Key Semiconductor Markets

Various sectors of the semiconductor industry are expected to benefit from the anticipated growth in demand for new and improved electronic products and applications. These sectors include the memory semiconductor market, the LCD and other flat-panel display driver semiconductor market and the mixed-signal semiconductor market.

Memory Semiconductor Market

The memory market is expected to grow as memory content in consumer electronics and PC applications increases due to increasing operating system requirements, increasing use of graphics in gaming and other applications, continued growth of broadband content and a transition to 64-bit PC architecture. The memory market is dominated by two segments – DRAM and flash memory. Growth in the DRAM market is expected to be driven by an increase in PC unit shipments and wireless handsets that use multi-chip packages. The flash memory market is expected to continue to experience strong growth due to increasing memory requirements for cellular handsets, digital cameras and digital audio devices.

LCD and Other Flat-Panel Display Driver Semiconductor Market

Flat-panel displays are used in applications such as PC monitors, notebook computers, television sets, cellular handsets and digital cameras. Thin-film-transistor LCDs, or TFT-LCDs, account for about three-fourths of the flat-panel display market. We currently expect the market for LCD and other flat-panel display driver semiconductors, which are semiconductors that control flat panels, to grow significantly due to increasing demand for flat-panel displays.

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The communications market is one of the main drivers of growth in the semiconductor industry. Mixed-signal semiconductors, which are chips with analog functionality covering more than half of the chip area, are largely used in the communications market. The increasing use of digital technology in communications equipment requires chips with both digital and analog functionality for applications such as modems, network routers, switches, cable set-top boxes and cellular handsets. As the size and cost of cellular handsets and other communications-related devices have decreased, components have increased in complexity. Mixed-signal semiconductors, such as LCD controllers and DVD controllers, are also used in consumer electronic products.

Overview of the Semiconductor Manufacturing Process

The manufacturing of semiconductors is a complex process that requires increasingly sophisticated engineering and manufacturing expertise. The manufacturing process may be broadly divided into the following stages:

Process	Description
Circuit Design	The design of a semiconductor is developed by laying out circuit patterns and interconnections.
Wafer Fabrication	Wafer fabrication begins with the generation of a photomask, a photographic negative onto which a circuit design pattern is etched or transferred by an electron beam or laser beam writer. Each completed wafer contains many fabricated chips, each known as a die.
Wafer Probe	Each individual die is then electrically tested, or probed, for defects. Dies that fail this test are discarded, or, in some cases, salvaged using laser repair.
Assembly	The assembly of semiconductors serves to protect the die, facilitates its integration into electronic systems and enables the dissipation of heat. The process begins with the dicing of the wafers into chips. Each die is affixed to a leadframe-based or organic substrate-based package. Then, electrical connections are formed, in many cases by connecting the terminals on the die to the inner leads of the package using fine metal wires. Finally, each chip is encapsulated for protection, usually in a molded epoxy enclosure.
Final Test	Assembled semiconductors are tested to ensure that the device meets performance specifications. Testing takes place on specialized equipment using software customized for each application. For memory semiconductors, this process also includes burn-in testing to screen out defective devices by applying very high temperatures and voltages.

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Outsourcing Trends in Semiconductor Manufacturing

Historically, integrated device manufacturers, or IDMs, designed, manufactured, tested and assembled semiconductors primarily at their own facilities. In recent years, there has been a trend in the industry to outsource stages in the manufacturing process to reduce the high fixed costs resulting from the increasingly complex manufacturing process. Virtually every significant stage of the manufacturing process can be outsourced. The independent semiconductor manufacturing services market currently consists of wafer fabrication and probing services and semiconductor testing and assembly services. Most of the world's major IDMs now use some independent semiconductor manufacturing services to maintain a strategic mix of internal and external manufacturing capacity. We believe that many of these IDMs are significantly reducing their investments in new semiconductor testing and assembly facilities. The availability of technologically advanced independent semiconductor manufacturing services has also enabled the growth of fabless semiconductor companies that focus exclusively on semiconductor design and marketing and outsource their fabrication, testing and assembly requirements to independent companies.

We believe the outsourcing of semiconductor manufacturing services, and in particular of testing and assembly services, will increase for many reasons, including the following:

Significant Capital Expenditure Requirements. Driven by increasingly sophisticated technological requirements, wafer fabrication, testing and assembly processes have become highly complex, requiring substantial investment in specialized equipment and facilities and sophisticated engineering and manufacturing expertise. In addition, product life cycles have been shortening, magnifying the need to continually upgrade or replace manufacturing, testing and assembly equipment to accommodate new products. As a result, new investments in in-house fabrication, testing and assembly facilities are becoming less desirable for IDMs because of the high investment costs, as well as difficulties in achieving sufficient economies of scale and utilization rates to be competitive with the independent service providers. Independent foundry, testing and assembly companies, on the other hand, are able to realize the benefits of specialization and achieve economies of scale by providing services to a large base of customers across a wide range of products. This enables them to reduce costs and shorten production cycles through high capacity utilization and process expertise.

Increasing Focus on Core Competencies. As the costs of semiconductor manufacturing facilities increase, semiconductor companies are expected to further outsource their wafer fabrication, testing and assembly requirements to focus their resources on core competencies, such as semiconductor design and marketing.

Time-to-Market Pressure. Increasingly short product life cycles have amplified time-to-market pressure for semiconductor companies, leading them to rely increasingly on independent companies as a key source for effective wafer fabrication, testing and assembly services.

Semiconductor Testing and Assembly Services Industry

Growth in the semiconductor testing and assembly services industry is driven by increased outsourcing of the various stages of the semiconductor manufacturing process by IDMs and fabless semiconductor companies.

The Semiconductor Industry and Conditions of Outsourcing in Taiwan and Mainland China

Taiwan is one of the world's leading locations for outsourced semiconductor manufacturing. The semiconductor industry in Taiwan has developed such that the various stages of the semiconductor manufacturing process have been disaggregated, thus allowing for specialization. The disaggregation of the semiconductor manufacturing process in Taiwan permits these semiconductor manufacturing service providers to focus on particular parts of the production process, develop economies of scale, maintain higher capacity utilization rates and remain flexible in responding to customer needs. There are several leading service providers in Taiwan, each of which offers substantial capacity, high-quality manufacturing, leading semiconductor wafer fabrication, test, assembly and process technologies, and a full range of services. These service providers have access to an educated labor pool and a large number of engineers suitable for sophisticated manufacturing industries. As a result, many of the world's leading semiconductor companies outsource some or all of their semiconductor manufacturing needs to Taiwan's semiconductor manufacturing service providers and take advantage of the close proximity among facilities. In addition, companies located in Taiwan are very active in the design and manufacture of electronic systems, which has created significant local demand for semiconductor devices.

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Mainland China is emerging as a similarly attractive location for outsourced semiconductor manufacturing. Mainland China is an attractive manufacturing location for electronic products because companies can take advantage of a well-educated yet low-cost labor force, cost savings due to tax benefits and a large domestic market. These factors have driven a rapid relocation of much of the electronics industry manufacturing and supply chain to Mainland China. An increasing number of global electronic systems manufacturers and contract manufacturers are relocating production facilities to Mainland China. We believe that these electronic product manufacturers and contract manufacturers will source an increasing portion of their demand for semiconductors from semiconductor suppliers located in Mainland China in order to reduce production cycle times, decrease costs, simplify supply chain logistics and meet local content requirements.

Overview of the Company

We provide a broad range of back-end testing services, including engineering testing, wafer probing and final testing of memory and mixed-signal semiconductors. We also offer a broad selection of leadframe-based and organic substrate-based package assembly services for memory and mixed-signal semiconductors. Our advanced leadframe-based packages include thin small outline packages, or TSOPs, and our advanced organic substrate-based packages include fine-pitch ball grid array, or fine-pitch BGA, packages. In addition, we provide testing and assembly services for LCD and other flat-panel display driver semiconductors by employing tape carrier package, or TCP, chip-on-film, or COF, and chip-on-glass, or COG, technologies. We also provide semiconductor turnkey services by purchasing fabricated wafers and then selling tested and assembled semiconductors, primarily memory products.

Semiconductors tested and assembled by us are used in personal computers, graphics applications, such as game consoles and personal digital assistants, or PDAs, communications equipment, such as cellular handsets, and consumer electronic products and display applications, such as flat-panel displays. In 2004, 40% of our net revenue was from testing services for memory and mixed-signal semiconductors, 39% from assembly services for memory and mixed-signal semiconductors, 18% from LCD and other flat-panel display driver semiconductor testing and assembly services and 3% from semiconductor turnkey services.

Our Structure and History

We are a holding company, incorporated in August 2000 under the Companies Act 1981 of Bermuda. We provide most of our services in Taiwan through our majority-owned subsidiary, ChipMOS TECHNOLOGIES INC., or ChipMOS Taiwan, and its subsidiaries and investees. We also provide services in Mainland China through ChipMOS TECHNOLOGIES (Shanghai) LTD., or ChipMOS Shanghai, a wholly-owned subsidiary of Modern Mind Technology Limited, or Modern Mind, which is one of our controlled consolidated subsidiaries. As of April 30, 2005, Mosel Vitelic Inc., or Mosel, indirectly owned approximately 38.8% of our common shares.

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The following chart illustrates our corporate structure and our equity interest in each of our principal subsidiaries and affiliates as of April 30, 2005.⁽¹⁾

- (1) Under ROC Financial Accounting Standards and the regulations of the Taiwan Securities and Futures Commission, we are required to consolidate the financial results of any subsidiaries in which we hold a controlling interest or voting interest in excess of 50%. In 2002, we consolidated the financial results of ChipMOS Taiwan and its 100% owned subsidiaries, ChipMOS Japan, ChipMOS USA, ChipMOS TECHNOLOGIES (H.K.) Limited, Modern Mind and its wholly-owned subsidiary, ChipMOS Shanghai. In 2003, we also consolidated the financial results of ThaiLin. From January 12 and 28, 2004, onwards, we also consolidated the financial results of Advanced Micro Chip Technology Co., Ltd. (which was liquidated in October 2004), and ChipMOS Logic, respectively, and from April 1, 2004, onwards, we also consolidated the financial results of Chantek. Starting from April 30, 2004, our financial results also included the financial results of WWT, which was merged into ChipMOS Logic. Starting from November 1, 2004, our financial statements also included the results of First Semiconductor Technology, Inc. in which ChipMOS Taiwan acquired a 67.8% equity interest on November 1, 2004 and sold back this interest to First Semiconductor Technology, Inc. on April 29, 2005.
- (2) As of April 30, 2005, 3,899,999 shares of ChipMOS Hong Kong (formerly ChipMOS Far East Limited) were issued to us and one share was issued to Shih-Jye Cheng, our chairman and chief executive officer, representing 100% of the then issued share capital of ChipMOS Hong Kong. Shih-Jye Cheng holds the one share issued to him as trustee for and on behalf of our company.
- (3) On June 16, 2005, ChipMOS Taiwan and Chantek entered into a merger agreement, whereby Chantek will be merged into ChipMOS Taiwan, with ChipMOS Taiwan as the surviving entity. Under the merger agreement, shareholders of Chantek (other than ChipMOS Taiwan) may elect to receive cash or ChipMOS Taiwan shares in exchange for their Chantek shares. If all Chantek shareholders (other than ChipMOS Taiwan) elect to receive ChipMOS Taiwan shares, ChipMOS Taiwan will issue an additional 13.3 million shares and ChipMOS Bermuda's interest in ChipMOS Taiwan will be reduced to approximately 69.3%. As of June 23, 2005, ChipMOS Taiwan expects the merger to close on November 1, 2005. For additional information regarding the merger agreement, please see ChipMOS TECHNOLOGIES INC. below.
- (4) We control Modern Mind through our ownership of a convertible note issued by Modern Mind that may be converted into a controlling equity interest in Modern Mind. We do not currently own any equity interest in Modern Mind. ChipMOS Shanghai is a wholly-owned subsidiary of Modern Mind.

Below is a description of our principal consolidated subsidiaries:

ChipMOS TECHNOLOGIES INC. ChipMOS TECHNOLOGIES INC., or ChipMOS Taiwan, was incorporated in Taiwan in July 1997 as a joint venture company of Mosel and Siliconware Precision and with the participation of other investors. Its operations consist of the testing and assembly of semiconductors. ChipMOS Taiwan also provides testing and assembly services on a turnkey basis, which entails ChipMOS Taiwan purchasing fabricated wafers and then selling tested and assembled semiconductors. We acquired our interest in ChipMOS Taiwan by issuing our common shares to ChipMOS Taiwan's shareholders in exchange for their 70.3% shareholding in ChipMOS Taiwan in January 2001. In October 2001, ChipMOS Taiwan issued 6,911,732 common shares as employee bonuses. In December 2002, we issued 531,175 common shares in exchange for 5,633,442 ChipMOS Taiwan common shares held by these employees. As of April 30, 2005, we held 70.3% of the outstanding common shares of ChipMOS Taiwan and Siliconware Precision held 28.7%.

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On June 16, 2005, ChipMOS Taiwan and Chantek, a 68.0% subsidiary of ChipMOS Taiwan, agreed to merge in a stock-for-stock transaction. Under the terms of the merger agreement, Chantek will be delisted from the Taiwan GreTai Securities Market and merged into ChipMOS Taiwan, with ChipMOS Taiwan as the surviving entity. Chantek shares will be exchangeable for ChipMOS Taiwan shares at the ratio of 3.6 to 1. Shareholders of Chantek may elect to receive cash payment of NT\$6.16 per Chantek share in lieu of shares of ChipMOS Taiwan. If all Chantek shareholders (other than ChipMOS Taiwan) elect to receive ChipMOS Taiwan shares, ChipMOS Taiwan will issue approximately 13.3 million new shares and ChipMOS Bermuda's interest in ChipMOS Taiwan will be reduced to approximately 69.3%. If all Chantek shareholders (other than ChipMOS Taiwan) elect to receive cash payment, ChipMOS Taiwan will pay approximately NT\$295 million (US\$9 million), and ChipMOS Bermuda's interest in ChipMOS Taiwan will remain unchanged. Shareholders of ChipMOS Taiwan who do not approve of the merger may elect to receive cash payments no greater than the sum of the number of shares times the net book value per share as of March 31, 2005. If the shareholders of ChipMOS Taiwan (other than ChipMOS Bermuda) elect to receive cash payments, ChipMOS Taiwan will pay approximately NT\$3,971 million (US\$125 million). ChipMOS Taiwan currently expects to close the merger on November 1, 2005.

ChipMOS TECHNOLOGIES (H.K.) Limited. ChipMOS TECHNOLOGIES (H.K.) Limited, or ChipMOS Hong Kong (formerly ChipMOS Far East Limited), was incorporated in Hong Kong in November 2002. It is engaged in financial management and marketing and sales. As of April 30, 2004, we held 100% of the outstanding common shares of ChipMOS Hong Kong. Effective May 31, 2005, the name of ChipMOS Far East Limited was changed to ChipMOS TECHNOLOGIES (H.K.) Limited.

Modern Mind Technology Limited and ChipMOS TECHNOLOGIES (Shanghai) LTD. Modern Mind was incorporated in the British Virgin Islands in January 2002. Modern Mind conducts its operations through ChipMOS Shanghai, a wholly-owned subsidiary incorporated in Mainland China in June 2002. ChipMOS Shanghai is engaged in wafer testing, semiconductor assembly and testing, and module and subsystem manufacturing. We acquired a 100% equity interest in Modern Mind on December 12, 2002, and then transferred it to Jesper Limited on December 31, 2002. In 2003, we acquired from Jesper Limited a convertible note in the amount of US\$37.5 million issued by Modern Mind that may be converted into a controlling equity interest in Modern Mind at a conversion rate of one ordinary share of Modern Mind for every US\$1.00 if the repayment is not made when due. In 2004, we restructured our control of ChipMOS Shanghai and our Mainland China operations. On July 29, 2004, we replaced the US\$37.5 million convertible note previously issued by Modern Mind in its entirety with a US\$62.8 million demand note issued by Modern Mind, with the difference representing a US\$25 million loan that we extended to Modern Mind from the net proceeds of our July 2004 offering of common shares. In addition, we extended a loan in the aggregate amount of US\$30 million to Modern Mind from the net proceeds of our November 2004 convertible debt offering in exchange for demand notes issued by Modern Mind in the same aggregate amount. The demand notes are convertible at any time into common shares representing, immediately after the conversion, almost 100% of the then outstanding common shares of Modern Mind at a conversion rate of US\$1.00 for each common share of Modern Mind. Payment under the demand notes are fully and unconditionally guaranteed by Jesper Limited and secured by a security interest in the entire equity interest in Modern Mind and ChipMOS Shanghai. We have obtained from Jesper Limited an irrevocable option to acquire at any time the common shares of Modern Mind then owned by Jesper Limited.

In addition, on April 22, 2004, ChipMOS Hong Kong and ChipMOS Shanghai entered into an exclusive services agreement, pursuant to which ChipMOS Shanghai will provide its services exclusively to ChipMOS Hong Kong or customers designated by ChipMOS Hong Kong. Under the exclusive services agreement, ChipMOS Hong Kong will purchase and consign to ChipMOS Shanghai all of the equipment required to render those services. The exclusive services agreement has a term of ten years which is automatically renewable for additional ten year periods unless either party provides written notice of intention to terminate at least 30 days prior to the expiration of such ten year term. In addition, ChipMOS Hong Kong may terminate the exclusive services agreement at any time by giving 30 days' prior written notice.

See Item 3. Key Information Risk Factors Risks Relating to Countries in Which We Conduct Operations The investments in Mainland China by our controlled consolidated subsidiary, Modern Mind, through ChipMOS Shanghai, and the related contractual arrangements may result in Mosel violating ROC laws governing investment in Mainland China by ROC companies or persons. Any sanctions on Mosel as a result of any violation of ROC laws may cause Mosel to decrease its ownership in us significantly or cause Mosel to take other actions that may not be in the best interest of our other shareholders and Item 3. Key Information Risk Factors Risks Relating to Countries in Which We Conduct Operations Our current ownership structure and contractual arrangements with Jesper Limited, Modern Mind and ChipMOS Shanghai may not be effective in providing operational control of our Mainland China operations for risks associated with our investment in Mainland China and these contractual arrangements.

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ThaiLin Semiconductor Corp. ThaiLin was incorporated in Taiwan in May 1996, and is listed on the GreTai Securities Market in Taiwan. It is engaged in the provision of semiconductor testing services. ChipMOS Taiwan acquired a 41.8% interest in ThaiLin in December 2002. As of April 30, 2005, ChipMOS Taiwan held a 27.6% interest in ThaiLin. Under applicable accounting principles, ThaiLin was consolidated into our consolidated financial statements in 2003 because ChipMOS Taiwan was deemed to exert significant control over ThaiLin through common directors and management. Mr. S.J. Cheng, our chairman and chief executive officer and the director and chairman of ChipMOS Taiwan is also a director and the chairman of ThaiLin. In addition, four of the seven directors of ThaiLin are appointed by ChipMOS Taiwan. In August 2004, ThaiLin completed a NT\$1,000 million convertible bond offering, and ChipMOS Taiwan purchased bonds in an amount of NT\$100 million in that offering to maintain its percentage ownership in ThaiLin. ChipMOS Taiwan converted these convertible bonds in March 2005.

Advanced Micro Chip Technology Co., Ltd. AMCT was incorporated in Taiwan in March 2000. It provided gold bumping services, which are used in connection with the assembly of LCD and other flat-panel display driver semiconductors. In February 2003, ChipMOS Taiwan acquired a 23.1% interest in AMCT and increased its ownership during 2003 to 30.8% as of December 31, 2003. ChipMOS Taiwan purchased additional interests in AMCT in January, February and March 2004. As a result, ChipMOS Taiwan held a 99.7% equity interest in AMCT as of April 30, 2004. ChipMOS Taiwan completed the integration of all of AMCT's business operations into ChipMOS Taiwan in April 2004 and completed liquidation of AMCT in October 2004.

CHANTEK ELECTRONIC CO., LTD. Chantek was incorporated in Taiwan in May 1989 and is listed on the GreTai Securities Market in Taiwan. It provides semiconductor assembly services for low-density volatile and non-volatile memory semiconductors, consumer semiconductors and microcontroller semiconductors. ChipMOS Taiwan acquired its ownership interest in Chantek in September 2002.

PlusMOS Technologies Inc., or PlusMOS, was incorporated in Taiwan in March 2000 as a joint venture between ChipMOS Taiwan and Mosel for the manufacture, design and sale of DRAM modules. On April 1, 2004, PlusMOS was merged into Chantek in a stock-for-stock merger pursuant to which shareholders of PlusMOS received 1.1 common shares of Chantek in exchange for one common share of PlusMOS. The merger was approved by the shareholders of Chantek and PlusMOS in December 2003. Upon consummation of this merger, ChipMOS Taiwan directly held a 34.2% interest in Chantek, which is the surviving entity. As a result, ChipMOS Taiwan became the controlling shareholder of Chantek. Starting from April 1, 2004, we began consolidating Chantek into our consolidated financial results and increased our interest in Chantek to 68.0% on November 30, 2004.

On June 16, 2005, ChipMOS Taiwan and Chantek entered into a merger agreement, whereby Chantek will be merged into ChipMOS Taiwan, with ChipMOS Taiwan as the surviving entity. For additional information regarding the merger agreement, see ChipMOS TECHNOLOGIES INC. above.

ChipMOS Logic TECHNOLOGIES INC. ChipMOS Logic was incorporated in Taiwan in January 2004, with ChipMOS Taiwan holding a 62.5% interest and ThaiLin holding a 37.5% interest. ChipMOS Logic is engaged in logic testing services. On April 30, 2004, WWT, a Taiwan-based company engaged in logic testing services, merged into ChipMOS Logic, with ChipMOS Logic as the surviving entity, in a stock-for-stock merger pursuant to which shareholders of WWT received one common share of ChipMOS Logic in exchange for 10 common shares of WWT. Upon consummation of the merger between WWT and ChipMOS Logic, ChipMOS Taiwan and ThaiLin owned approximately 52.9% and 24.6%, respectively, of ChipMOS Logic, with the original management team of WWT, two original shareholders of WWT, including one creditor bank, and the management team of ChipMOS Logic owning the remaining interest. As of April 30, 2005, ChipMOS Taiwan and ThaiLin owned approximately 56.1% and 24.6%, respectively, of ChipMOS Logic.

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First Semiconductor Technology, Inc. First Semiconductor Technology was incorporated in the United States of America in June 1998 and engages in IC logic testing services. ChipMOS Taiwan acquired a 67.8% ownership interest in First Semiconductor Technology on November 1, 2004 in connection with the purchase of certain assets and equipment from First International Computer Testing and Assembly, and transferred this interest to First Semiconductor Technology, Inc. on April 29, 2005 pursuant to a share repurchase agreement.

Our Strategy

Our goal is to reinforce our position as a leading independent provider of semiconductor testing and assembly services, concentrating principally on memory, mixed-signal and LCD and other flat-panel display driver semiconductors. The principal components of our business strategy are set forth below.

Focus on Providing Our Services to the High-Growth Segments of the Semiconductor Industry.

We intend to continue our focus on developing and providing advanced testing and assembly services for high-growth segments of the semiconductor industry, such as memory, mixed-signal and LCD and other flat-panel display driver semiconductors. In 2004, our revenue from testing and assembly of semiconductors for these segments accounted for 97% of our net revenue. We believe that our investments in equipment and research and development in some of these areas allow us to offer a differentiated service from our competition. In order to continue to benefit from the expected growth in these segments, we intend to continue to invest in capacity to meet the testing and assembly requirements of these key semiconductor market segments.

Continue to Invest in the Research and Development of Advanced Testing and Assembly Technologies.

We believe that our ability to provide progressively more advanced testing and assembly services to customers is critical to our business. In addition, advanced semiconductor testing and assembly services typically generate higher margins due to the greater expertise required and the more sophisticated technologies used. We will continue to invest in the research and development of advanced testing and assembly technologies. For example, we are expanding our capabilities in fine-pitch BGA and the testing and assembly of TCPs. We have also introduced COF based on our proprietary technology and COG testing and assembly services for LCD and other flat-panel display driver semiconductors.

In addition, we will continue to pursue the development of new testing and assembly technologies jointly with domestic and foreign research institutions and universities. We expect to focus our research and development efforts in the following areas:

developing new software conversion programs to increase the capabilities of our testers;

developing technologies for wafer-level burn-in and testing before assembly;

acquiring three-dimensional technology and flip-chip assembly capabilities, which provide numerous size and performance advantages compared with traditional (face-up) configurations;

improving manufacturing yields for new assembly technologies; and

developing environmentally friendly assembly services that focus on eliminating the lead and halogen elements from the materials employed in the package and reducing the toxicity of gaseous chemical wastes.

In 2004, we spent approximately 2% of our net revenue on research and development. We will continue to invest our resources to recruit and retain experienced research and development personnel. As of April 30, 2005, our research and development team comprised 192 persons.

Build on Our Strong Presence in Taiwan and Expand Our Operations in Mainland China.

We intend to build on our strong presence in key centers of semiconductor and electronics manufacturing to further grow our business. Currently, most of our operations are in Taiwan, one of the world's leading locations for outsourced semiconductor manufacturing. This presence provides us with several advantages. First, our proximity to other semiconductor companies is attractive to customers who wish to outsource various stages of the semiconductor manufacturing process. Second, our proximity to many of our suppliers, customers and the end-users of our customers' products enables us to be involved in the early stages of the semiconductor design process, enhances our ability to quickly respond to our customers' changing requirements and shortens our customers' time-to-market. Third, we have access to an educated labor pool and a large number of engineers who are able to work closely with our customers and other providers of semiconductor manufacturing services.

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As with our operations in Taiwan, we intend to similarly benefit from our operations in Mainland China through ChipMOS Shanghai. We intend to invest in and expand our operations in Mainland China, increasing our testing and assembly services for memory semiconductors. We also plan to expand our testing and assembly services in our Shanghai facility to include LCD and other flat-panel display driver semiconductors.

Expand Our Offering of Vertically Integrated Services.

We believe that one of our competitive strengths is our ability to provide vertically integrated services to our customers. Vertically integrated services consist of the integrated testing, assembly and direct shipment of semiconductors to end-users designated by our customers. Providing vertically integrated services enables us to shorten lead times for our customers. As time-to-market and cost increasingly become sources of competitive advantage for our customers, they increasingly value our ability to provide them with comprehensive back-end services. Through ThaiLin, Chantek and ChipMOS Logic, we are able to offer vertically integrated services for a broad range of products, including memory, mixed-signal and LCD and other flat-panel display driver semiconductors. We believe that these affiliations, which offer complementary technologies, products and services as well as additional capacity, will continue to enhance our own development and expansion efforts into new and high-growth markets. We intend to establish new alliances with leading companies and, if suitable opportunities arise, engage in merger and acquisition activities that will further expand the services we can provide.

Focus on Increasing Sales through Long-Term Agreements with New and Existing Customers.

From time to time, we strategically agree to commit a portion of our testing and assembly capacity to certain of our customers. We intend to enter into long-term capacity agreements with more of our existing customers, as well as diversify our customer base by entering into long-term agreements with new customers. The customers we currently have long-term agreements with include ProMOS, DenMOS, Himax, Novatek and Oki. See [Customers](#) below for a more detailed discussion of these long-term agreements. We believe that these long-term agreements help to insulate us from volatility in our capacity utilization rates and help us develop close relationships with our customers. As of April 30, 2005, 44% percent of our total current capacity was reserved under these long-term agreements.

Principal Products and Services

The following table presents, for the periods shown, revenue by service segment as a percentage of our net revenue.

	Year ended December 31,		
	2002 ⁽¹⁾	2003 ⁽²⁾	2004 ⁽³⁾
Testing			
Memory testing revenue	34.5%	32.1%	36.5%
Mixed-signal testing revenue	1.2	2.9	3.5
Total testing revenue	35.7	35.0	40.0
Assembly			
Memory assembly revenue	21.5	29.9	34.1
Mixed-signal assembly revenue	0.2	0.3	4.4
Total assembly revenue	21.7	30.2	38.5

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LCD and other flat-panel display driver semiconductor testing and assembly revenue	15.2	18.7	18.3
Semiconductor turnkey revenue ⁽⁴⁾	27.4	16.1	3.2
Total net revenue	100.0%	100.0%	100.0%

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- (1) In 2002, we consolidated the financial results of ChipMOS Taiwan and its 100% owned subsidiaries, ChipMOS Japan, ChipMOS USA, ChipMOS Hong Kong, Modern Mind and its wholly-owned subsidiary, ChipMOS Shanghai.
 - (2) In 2003, we consolidated the financial results of ThaiLin.
 - (3) From January 12 and 28, 2004, onwards, we consolidated the financial results of Advanced Micro Chip Technology Co., Ltd. (which was liquidated in October 2004), and ChipMOS Logic, respectively, and from April 1, 2004, onwards, we also consolidated the financial results of Chantek. Starting from April 30, 2004, our financial results also included the financial results of WWT, which was merged into ChipMOS Logic. Starting from November 1, 2004, our financial statements also included the results of First Semiconductor Technology, Inc. in which ChipMOS Taiwan acquired a 67.8% equity interest on November 1, 2004 and sold back this interest to First Semiconductor Technology, Inc. on April 29, 2005.
 - (4) In 2003, includes trading revenue generated by ChipMOS Hong Kong.

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Memory and Mixed-Signal Semiconductors

Testing

We provide testing services for memory and mixed-signal semiconductors:

Memory. We provide testing services for a variety of memory semiconductors, such as SRAM, DRAM and flash memory. To speed up the time-consuming process of memory product testing, we provide multi-site testing, which can test up to 128 devices simultaneously. The memory semiconductors we test are used primarily in personal notebook computers and handheld consumer electronic devices and wireless communication devices.

Mixed-Signal. We conduct tests on a wide variety of mixed-signal semiconductors, with lead counts ranging from the single digits to over 640 and operating frequencies of up to 600 MHz. The semiconductors we test include those used for networking and wireless communications, data communications, graphics and disk controllers for home entertainment and personal computer applications. We also test a variety of application specific integrated circuits, or ASICs, for applications such as cellular handsets, digital still cameras and personal digital assistants.

The following is a description of our pre-assembly testing services:

Engineering Testing. We provide engineering testing services, including software program development, electrical design validation, reliability and failure analyses.

Software Program Development. Design and test engineers develop a customized software program and related hardware to test semiconductors on advanced testing equipment. A customized software program is required to test the conformity of each particular semiconductor to its particular function and specification.

Electrical Design Validation. A prototype of the designed semiconductor is submitted to electrical tests using advanced test equipment, customized software programs and related hardware. These tests assess whether the prototype semiconductor complies with a variety of different operating specifications, including functionality, frequency, voltage, current, timing and temperature range.

Reliability Analysis. Reliability analysis is designed to assess the long-term reliability of the semiconductor and its suitability of use for its intended applications. Reliability testing may include operating-life evaluation, during which the semiconductor is subjected to high temperature and voltage tests.

Failure Analysis. If the prototype semiconductor does not perform to specifications during either the electrical validation or reliability analysis process, failure analysis is performed to determine the reasons for the failure. As part of this analysis, the prototype semiconductor may be subjected to a variety of tests, including electron beam probing and electrical testing.

Wafer Probing. Wafer probing is the step immediately before the assembly of semiconductors and involves visual inspection and electrical testing of the processed wafer for defects to ensure that it meets our customer's specifications. Wafer probing employs sophisticated design and manufacturing technologies to connect the terminals of each chip for testing. Defective chips are marked on the surface or memorized in an electronic file, known as a mapping file, to facilitate subsequent processing.

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Laser Repairing. In laser repairing of memory products, specific poly or metal fuses are blown after wafer probing to enable a spare row or column of a memory cell to replace a defective memory cell.

After assembly, we perform the following testing services:

Burn-In Testing. This process screens out unreliable products using high temperature, high voltage and prolonged stress to ensure that finished products will survive a long period of end-user service. This process is used only for memory products.

Top Marking. By using either a laser marker or an ink marker, we mark products according to our customers' specifications, including the logo, product type, date code and lot number.

Final Testing. Assembled semiconductors are tested to ensure that the devices meet performance specifications. Tests are conducted using specialized equipment with software customized for each application in different temperature conditions ranging from minus 45 degrees celsius to 85 degrees celsius. One of the tests includes speed testing to classify the parts into different speed grades.

Final Inspection and Packing. Final inspection involves visual or auto-inspection of the devices to check for any bent leads, inaccurate markings or other construction defects. Packing involves dry packing, packing-in-tube and tape and reel. Dry pack involves heating semiconductors in the tray at 125 to 150 degrees celsius for about two hours to remove the moisture before the semiconductors are vacuum-sealed in an aluminum bag. Packing-in-tube involves packing the semiconductors in anti-static tubes for shipment. Tape and reel pack involves transferring semiconductors from a tray or tube onto an anti-static embossed tape and rolling the tape onto a reel for shipment to customers.

Assembly

Our assembly services generally involve the following steps:

<i>Wafer Lapping</i>	The wafers are ground to their required thickness.
<i>Die Saw</i>	Wafers are cut into individual dies, or chips, in preparation for the die-attach process.
<i>Die Attach</i>	Each individual die is attached to the leadframe or substrate.
<i>Wire Bonding</i>	Using gold wires, the dies are connected to the package inner leads.
<i>Molding</i>	The die and wires are encapsulated to provide physical support and protection.
<i>Marking</i>	Each individual package is marked to provide product identification.
<i>Dejunking and Trimming</i>	Mold flash is removed from between the lead shoulders through dejunking, and the dambar is cut during the trimming process.
<i>Electrical Plating</i>	A solderable coating is added to the package leads to prevent oxidization and to keep solder wettability of the package leads.

Forming/Singulation

Forming involves the proper configuration of the device packages leads, and singulation separates the packages from each other.

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We offer a broad range of package formats designed to provide our customers with a broad array of assembly services. The assembly services we offer customers are leadframe-based packages, which include thin small outline packages, and organic substrate-based packages, including fine-pitch BGA.

The differentiating characteristics of these packages include:

the size of the package;

the number of electrical connections which the package can support;

the electrical performance and requirements of the package; and

the heat dissipation requirements of the package.

As new applications for semiconductor devices require smaller components, the size of packages has also decreased. In leading-edge packages, the size of the package is reduced to just slightly larger than the size of the individual chip itself in a process known as chip scale packaging.

As semiconductor devices increase in complexity, the number of electrical connections required also increases. Leadframe-based products have electrical connections from the semiconductor device to the electronic product through leads on the perimeter of the package. Organic substrate-based products have solder balls on the bottom of the package, which create the electrical connections with the product and can support large numbers of electrical connections.

Leadframe-Based Packages. These are generally considered the most widely used package category. Each package consists of a semiconductor chip encapsulated in a plastic molding compound with metal leads on the perimeter. This design has evolved from a design plugging the leads into holes on the circuit board to a design soldering the leads to the surface of the circuit board.

The following diagram presents the basic components of a standard leadframe-based package for memory semiconductors:

To satisfy the demand for miniaturization of portable electronic products, we are currently developing and will continue to develop increasingly smaller versions of leadframe-based packages to keep pace with continually shrinking semiconductor device sizes. Our advanced leadframe-based packages generally are thinner and smaller, have more leads and have advanced thermal and electrical characteristics when compared to traditional packages. As a result of our continual product development, we offer leadframe-based packages with a wide range of lead counts and sizes to satisfy our customers' requirements.

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The following table presents our principal leadframe-based packages, including the number of leads in each package, commonly known as lead-count, a description of each package and the end-user applications of each package.

Package	Lead-count	Description	End-User Applications
Small Outline J-lead Package (SOJ)	24-42	Designed for low lead-count memory devices, including DRAM and high speed SRAM	Personal computers, consumer electronics, audio and video products
Plastic Dual-in-line Package (PDIP)	16-48	Package with insertion leads on longer sides used in consumer electronics products	Electronic games, monitors, copiers, printers, audio and video products, personal computers
Plastic Leaded Chip Carrier (PLCC)	32-44	Package with leads on four sides used in consumer electronics products in which the size of the package is not vital	Copiers, printers, scanners, personal computers, electronic games, monitors
Thin Small Outline Package I (TSOP I)	28-48	Designed for high volume production of low lead-count memory devices, including flash memory, SRAM and MROM	Notebook computers, personal computers, still and video cameras and standard connections for peripherals for computers
Thin Small Outline Package II (TSOP II)	24-86	Designed for memory devices, including flash memory, SRAM, DRAM, SDRAM and DDR DRAM	Disk drives, recordable optical disk drives, audio and video products, consumer electronics, communication products
Low-Profile Quad Flat Package (LQFP)	48-128	Low-profile and light weight package designed for ASICs, digital signal processors, microprocessors/controllers, graphics processors, gate arrays, SSRAM, SDRAM, personal computer chipsets and mixed-signal devices	Wireless communication products, notebook computers, digital cameras, cordless/radio frequency devices
Thin Quad Flat Package (TQFP)	64-128	Designed for lightweight portable electronics requiring broad performance characteristics and mixed-signal devices	Notebook computers, personal computers, disk drives, office equipment, audio and video products and wireless communication products
Small Outline Package (SOP)	28-44	Designed for low lead-count memory and logic semiconductors, including SRAM and micro-controller units	Personal computers, consumer electronics, audio and video products, communication products
Multi-Chip Package (TSOP with organic substrate)	24-66	Our patented design for memory devices, including SRAM, DRAM and SDRAM	Notebook computers, personal computers, disk drives, audio and video products, consumer products, communication products

Organic Substrate-based Packages. As the number of leads surrounding a traditional leadframe-based package increases, the leads must be placed closer together to reduce the size of the package. The close proximity of one lead to another can create electrical shorting problems and requires the development of increasingly sophisticated and expensive techniques to accommodate the high number of leads on the circuit boards.

The BGA format solves this problem by effectively creating external terminals on the bottom of the package in the form of small bumps or balls. These balls are evenly distributed across the entire bottom surface of the package, allowing greater distance between the individual leads. The ball grid array configuration enables high lead count devices to be manufactured less expensively with less delicate handling at installation.

Our organic substrate-based packages employ a fine-pitch BGA design, which uses a plastic or tape laminate rather than a leadframe and places the electrical connections, or leads, on the bottom of the package rather than around the perimeter. The fine-pitch BGA format was developed to address the need for the smaller footprints required by advanced memory devices. Benefits of ball grid array assembly over leadframe-based assembly include:

smaller size;

smaller footprint on a printed circuit board;

better electrical signal integrity; and

easier attachment to a printed circuit board.

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The following diagram presents the basic component parts of a fine-pitch BGA package:

The following table presents the lead-count, description and end-user applications of organic substrate-based packages we currently assemble:

Package	Connections	Description	End-User Applications
Fine-pitch BGA	36-208	Low-cost and space-saving assembly designed for low input/output count, suitable for semiconductors that require a smaller package size than standard BGA	Memory, analog, flash memory, ASICs, radio frequency devices, personal digital assistants, cellular handsets, communication products, notebook computers, wireless systems
Fine-Pitch BGA (face down chip type)	54-92	Our patented design for DRAM products that require high performance and chip scale package	Notebook computers, cellular handsets, global positioning systems, personal digital assistants, wireless systems
Multi-Chip BGA	48-208	Our patented design for assembly of two or more memory chips (to increase memory density) or memory and logic chips in one BGA package	Notebook computers, digital cameras, personal digital assistants, global positioning systems, sub-notebooks, board processors, wireless systems
Stacked-Chip CSP	48-72	Designed for assembly of two or more memory chips or logic and memory chips in one chip scale package (CSP)	Cellular handsets, digital cameras, personal digital assistants, wireless systems, notebook computers, global positioning systems

The following table presents the organic substrate-based packages we currently plan to assemble in the future, including the number of connections, a description of the package and the end-user applications of each package:

Package	Connections	Description	End-User Applications
Micro BGA	46-72	Designed for high-speed, high-density, high-performance memory devices, such as Rambus DRAM, DDR DRAM and flash memory	High performance computers, game consoles, notebooks, visual cellular handsets, mixed-signal, wireless systems

LCD and Other Flat-Panel Display Driver Semiconductors

We also offer testing and assembly services for LCD and other flat-panel display driver semiconductors. We employ TCP, COF and COG technologies for testing and assembling LCD and other flat-panel display driver semiconductors. In addition, we offer gold bumping services to our customers.

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Gold bumping technology, which can be used in TCP, COF and COG technologies, is a necessary interconnection technology for LCD and other flat-panel display driver semiconductors. Most gold bumping services are performed on six- or eight-inch wafers. Gold bumping technology provides the best solution for fine-pitch chips and is able to meet the high production requirement for LCD and other flat-panel display driver semiconductors or other chips that require thin packaging profiles.

The gold bumping fabrication process uses thin film metal deposition, photolithography and electrical plating technologies. A series of barrier and seed metal layers are deposited over the surface of the wafer. A layer of thick photoresist material is spin-coated over these barrier and seed layers. A photomask is used to pattern the locations over each of the bond pads that will be bumped. UV exposure and developing processes open the photoresist material, which defines the bump shape. The gold bump is then electroplated over the pad and the deposited barrier metal layers. Once the plating is complete, a series of etching steps are used to remove the photoresist material and the metal layers that are covering the rest of the wafer. The gold bump protects the underlying materials from being etched. The gold bumped wafers will go through an annealing furnace to soften the gold bumps to fit the hardness requirement of TCP, COF and COG assembly processes.

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Tape Carrier Package Technology

TCPs offer a high number of inputs and outputs, a thin package profile and a smaller footprint on the circuit board, without compromising performance. Key package features include surface mount technology design, fine-pitch tape format and slide carrier handling. Because of their flexibility and high number of inputs and outputs, TCPs are primarily employed either for STN-LCD or TFT-LCD driver semiconductors.

Testing of tape carrier packages. We conduct full function testing of LCD and other flat-panel display driver semiconductors with a specially designed probe handler to ensure reliable contact to the test pads on the TCP tape. We can test STN-LCD or TFT-LCD driver semiconductors with frequencies of up to 500 MHz and at voltages up to 40V. The test is performed in a temperature-controlled environment with the device in tape form. The assembled and tested LCD and other flat-panel display driver semiconductors in tape form are packed between spacer tapes together with a desiccant in an aluminum bag to avoid contact during shipment.

Assembly of tape carrier packages. TCPs use a tape-automated bonding process to connect die and tape. The printed circuit tape is shipped with a reel. The reel is then placed onto an inner lead bonder, where the LCD or other flat-panel display driver semiconductor is configured onto the printed circuit tape. The resulting TCP component consists of the device interconnected to a three-layer tape, which includes a polyamide-down carrier film, an epoxy-based adhesive layer and a metal layer. The tape metallization area of the interconnections is tin plated over a metal layer. The silicon chip and inner lead area is encapsulated with a high temperature thermoset polymer coating after inner lead bonding. The back face of the chip is left uncoated for thermal connection to the printed circuit board.

The following diagram presents the basic components of a tape carrier package:

Chip-on-Film Technology

In 2001, we commenced testing and assembly services using COF technology. We have developed this proprietary technology from our existing TCP technology, and it has been widely accepted by our customers. The primary use of the COF module is to replace the liquid crystal module, or LCM, in certain applications. LCM is mainly employed in handheld electronics, such as PDAs and cellular handsets.

COF technology provides several additional advantages. For example, COF is able to meet the size, weight and higher resolution requirements in electronic products, such as flat-panel displays. This is because of its structural design, including an adhesive-free two-layer tape that is highly flexible, bending strength and its capacity to receive finer patterning pitch.

The TCP and COF assembly process involves the following steps:

Wafer Lapping

The wafers are ground to their required thickness.

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<i>Die Saw</i>	Wafers are cut into individual dies, or chips, in preparation for inner lead bonding.
<i>Inner Lead Bonding</i>	An inner lead bonder machine connects the chip to the printed circuit tape.
<i>Potting</i>	The package is sealed with an epoxy.
<i>Potting Cure</i>	The potting cure process matures the epoxy used during the potting stage with high temperatures.
<i>Marking</i>	A laser marker is used to provide product identification.
<i>Marking Cure</i>	The marking cure process matures the marking ink by subjecting the semiconductor to high temperatures.

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Chip-on-Glass Technology

COG technology is an electronic assembly technology that is used increasingly in assembling LCD and other flat-panel display driver semiconductors for communications equipment. Compared to the traditional bonding process for TCP or COF, the new COG technology requires lower bonding temperature. In addition, the COG technology reduces assembly cost as it does not use tapes for interconnection between the LCD panel and the printed circuit board.

The COG assembly technology involves the following steps:

<i>Wafer Lapping</i>	The wafers are ground to their required thickness.
<i>Die Saw</i>	Wafers are cut into individual dies, or chips, in preparation for the pick and place process.
<i>Pick and Place</i>	Each individual die is picked and placed into a chip tray.
<i>Inspection and Packing</i>	Each individual die in a tray is visually or auto-inspected for defects. The dies are packed within a tray in an aluminum bag after completion of the inspection process.

Semiconductor Turnkey

Our semiconductor turnkey services consist of our purchase of fabricated wafers, primarily memory semiconductors, principally from Siltronic Electronic Corp. and MediaTek Inc. We then test and assemble the dies cut from the fabricated wafers and resell the completed semiconductors to our customers. We typically engage in more semiconductor turnkey services when the market demand for our other testing and assembly services decreases. In 2004, the level of our semiconductor turnkey services declined due to the increase in customer orders for our testing and assembly services. In 2003, our revenue from our semiconductor turnkey services also included trading revenue generated by ChipMOS Hong Kong from purchases and sales of certain components for DVD/CD-ROM/CD-RW drives provided to third parties. We did not generate any trading revenue in 2004.

Other Services

Drop Shipment

We offer drop shipment of semiconductors directly to end-users designated by our customers. We provide drop shipment services, including assembly in customer-approved and branded boxes, to a majority of our testing and assembly customers. Since drop shipment eliminates the additional step of inspection by the customer prior to shipment to end-users, quality of service is a key to successful drop shipment service. We believe that our ability to successfully execute our full range of services, including drop shipment services, is an important factor in maintaining existing customers as well as attracting new customers.

Software Development, Conversion and Optimization Program

We work closely with our customers to provide sophisticated software engineering services, including test program development, conversion and optimization, and related hardware design. Generally, testing requires customized testing software and related hardware to be developed for each particular product. Software is often initially provided by the customer and then converted by us at our facilities for use on one or more of our testing machines and contains varying functionality depending on the specified testing procedures. Once a conversion test program has been developed, we perform correlation and trial tests on the semiconductors. Customer feedback on the test results enables us to adjust the conversion test programs prior to actual testing. We also typically assist our customers in collecting and analyzing the test results and recommend engineering solutions to improve their design and production process.

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Customers

We believe that the following factors have been, and will continue to be, important factors in attracting and retaining customers:

our advanced testing and assembly technologies;

our strong capabilities in testing and assembling LCD and other flat-panel display driver semiconductors;

our focus on high-density memory products and mixed-signal communications products; and

our reputation for high quality and reliable customer-focused services.

The number of our customers has grown from 46 in 1999 to 180 in 2004 and more than 188 in the first quarter of 2005. Our top 15 customers in the first quarter of 2005 include (in alphabetical order):

Atmel Corporation

Cypress Semiconductor Corp.

DenMOS Technology, Inc.

Elite Semiconductor Memory Technology Inc.

Higtech Technology Co., Ltd.

Himax Technologies, Inc.

Hynix Semiconductor Inc.

Integrated Silicon Solution, Inc.

Macronix International Co., Ltd.

Novatek Microelectronics Corp., Ltd.

Oki Electric Industry Co., Ltd.

Powerchip Semiconductor Corp.

ProMOS Technologies Inc.

Semiconductor Manufacturing International Corporation

Spancion Inc.

In 2002, our largest customer, Mosel, accounted for 35% of our net revenue, our second largest customer, Ultima, accounted for approximately 19% of our net revenue and our third largest customer, Macronix International Co. Ltd., accounted for approximately 5% of our net revenue. In 2003, our largest customer was ProMOS, which accounted for 19% of our net revenue, while our second largest customer, Mosel, accounted for almost 19% of our net revenue, and our third largest customer, Ultima, accounted for 12% of our net revenue. Mosel ceased to be a key customer of ours following the transfer of all of its DRAM business to ProMOS in the period from July to December 2003. In 2004, our largest customer was ProMOS, our second largest was Powerchip Semiconductor Corp., and our third largest customer was Himax Technologies, Inc., accounting for 28%, 11%, and 6% of our net revenue, respectively. We have been successful in attracting new customers, such as Renesas Technology Corporation, FASL (Kuala Lumpur) Sdn. Bhd. and Texas Instrument Japan Limited in 2003 and Hynix Semiconductor Inc. in 2004. In April 2005, we extended the duration of our agreement with ProMOS, under which we reserve assembly capacity and testing services for ProMOS and ProMOS is committed to place orders in the amount of the reserved capacity, until the end of 2009. In May 2005, we extended the duration of our contract with Himax Technologies, Inc. until the end of 2008.

The majority of our customers do not enter into long-term contracts with us, and instead purchase our services through purchase orders and provide us every month with three-month non-binding rolling forecasts. The price for our services is typically agreed upon at the time when a purchase order is placed. In 2002, 2003 and 2004, we entered into several long-term agreements with some of our key customers, including ProMOS, DenMOS, Himax, Novatek and Oki, under which we reserved capacity for such customers and under which such customers committed to place orders in the amount of the reserved capacity primarily through 2005 and 2006, some of which may be reduced by these customers under the agreements. These agreements generally provide that the price of our services will be agreed upon at the time our customers place the orders under such agreements. If we are unable to test and assemble the agreed number of semiconductors in any given month, such customers may generally use a third party to cover the shortfall. However, under these agreements, we are generally entitled to cure any shortfall in the following month. If we fail to do so, we may generally be liable for damages up to the amount equal to the number of shortfall units in the given month multiplied by the average sales price per unit in that month. If a customer fails to place orders according to the reserved capacity, we are generally entitled to damages based on our costs for the equipment, tooling costs, costs for personnel dedicated to the provisions of capacity to such customer, and the costs for raw materials. As of April 30, 2005, 44% of our total current capacity has been reserved for such customers.

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The following table sets forth, for the periods indicated, the percentage breakdown of our net revenue, categorized by geographic region based on the jurisdiction in which each customer is headquartered.

	Year ended		
	December 31,		
	2002	2003	2004
Taiwan	88%	84%	81%
Japan	3	5	4
United States	3	5	11
Hong Kong SAR	6	5	1
Others	(1)	1	3
Total	100%	100%	100%

(1) Less than 1%.

Qualification and Correlation by Customers

Our customers generally require that our facilities undergo a stringent qualification process during which the customer evaluates our operations, production processes and product reliability, including engineering, delivery control and testing capabilities. The qualification process typically takes up to eight weeks, or longer, depending on the requirements of the customer. For test qualification, after we have been qualified by a customer and before the customer delivers semiconductors to us for testing in volume, a process known as correlation is undertaken. During the correlation process, the customer provides us with test criteria, information regarding process flow and sample semiconductors to be tested and either provides us with the test program or requests that we develop a new or conversion program. In some cases, the customer also provides us with a data log of results of any testing of the semiconductor that the customer may have conducted previously. The correlation process typically takes up to two weeks, but can take longer depending on the requirements of the customer.

Sales and Marketing

We maintain sales and marketing offices in Taiwan, Hong Kong, Japan and the United States. Our sales and marketing strategy is to focus on memory semiconductors in Taiwan, mixed-signal semiconductors in Taiwan, Japan and the United States, LCD and other flat-panel display driver semiconductors in Japan, Taiwan and Hong Kong, and module and subsystem manufacturing in Taiwan and Mainland China. As of April 30, 2005, our sales and marketing efforts were primarily carried out by teams of sales professionals, application engineers and technicians totaling 38 staff. Each of these teams focuses on specific customers and/or geographic regions. As part of our emphasis on customer service, these teams:

actively participate in the design process at the customers' facilities;

resolve customer testing and assembly issues; and

promote timely and individualized resolutions to customers' issues.

We conduct marketing research through our in-house customer service personnel and through our relationships with our customers and suppliers to keep abreast of market trends and developments. Furthermore, we do product and system bench-marking analyses to understand the application and assembly technology evolution, such as analysis on mobile handsets and CD-/DVD-ROM players. In addition, we regularly collect data from different segments of the semiconductor industry and, when possible, we work closely with our customers to design and develop testing and assembly services for their new products. These co-development or sponsorship projects can be critical when customers seek large-scale, early market entry with a significant new product.

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We have appointed a non-exclusive sales agent for promoting our services for memory semiconductors in the United States and Japan. Our sales agent helps us promote and market our services, maintain relations with our existing and potential customers and communicate with our customers on quality, specific requirements and delivery issues. We generally pay our sales agent a commission of 2.5% or 5% of our revenue from services for memory semiconductors in the United States and Japan. For the years ended December 31, 2003 and 2004, we paid NT\$9 million and NT\$22 million, respectively, in commissions to our sales agent.

Research and Development

We believe that research and development is critical to our future success. In 2002, 2003 and 2004 we spent approximately NT\$327 million, or 5%, NT\$295 million, or 3%, and NT\$296 million, or 2%, respectively, of our net revenue on research and development. We intend to sustain our commitment to these efforts.

Our research and development efforts have focused primarily on improving the efficiency, production yields and technology of our testing and assembly services. From time to time, we jointly develop new technology with universities and research institutions. For testing, our research and development efforts focus particularly on complex, high-speed, high-pin count and high-density semiconductors in fine-pitch and thin packages. Our projects include:

development of testing environments for simultaneous wafer probing and package testing;

development/conversion of test programs;

development of wafer-level burn-in;

development of wafer-level testing;

testing new products using existing machines;

providing customers remote access to monitor test results; and

development of testing technologies for modules and subsystems for flat-panel displays.

We are also continuing development of interface designed to provide for high frequency testing by minimizing electrical noise.

For assembly, our research and development efforts focus on:

high performance;

fine pitch;

miniaturization;

multi-chip assembly;

multi-chip modules;

stacked-chip chip scale package;

modules and subsystems for flat-panel displays;

thinner and more flexible assembly such as chip-on-film packaging;

three-dimensional assembly; and

developing environmentally friendly assembly services.

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Our projects include developing multi-chip package, lead-free products, 12-inch wafer technologies, 100 micron wafer thickness technology, COF module, liquid crystal on silicon microdisplay, or LCOS microdisplay, optical engine assembly technologies, compact camera modules, and advanced probe card technology. We work closely with our customers to design and modify testing software and with equipment vendors to increase the efficiency and reliability of testing and assembly equipment. Our research and development operations also include a mechanical engineering group, which currently designs handler kits for semiconductor testing and wafer probing, as well as software to optimize capacity utilization.

As of April 30, 2005, we employed 192 employees 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 maintain laboratory facilities to analyze the characteristics of semiconductor packages by computer simulation, and verify their performance by measurement devices. The use of computer simulation substantially reduces the time required to validate the suitability of a package for a given application, as compared with physical testing methods.

Quality Control

We believe that our reputation for high quality and reliable services has been an important factor in attracting and retaining leading international semiconductor companies as customers for our testing and assembly services. We are committed to delivering semiconductors that meet or exceed our customers' specifications on time and at a competitive cost. We maintain quality control staff at each of our facilities. As of April 30, 2005, we employed 399 personnel for our quality control activities. Our quality control staff typically includes engineers, technicians and other employees who monitor testing and assembly processes in order to ensure high quality. We employ quality control procedures in the following critical areas:

sales quality assurance: following market trends to anticipate customers' future needs;

design quality assurance: when developing new testing and assembly processes;

supplier quality assurance: consulting with our long-term suppliers;

manufacturing quality assurance: through a comprehensive monitoring program during mass production; and

service quality assurance: quickly and effectively responding to customers' claims after completion of sale.

All of our facilities have been QS 9000 certified by the International Automotive Sector Group. Our facilities in Hsinchu and Tainan have also been ISO 9002 certified. ISO 9002 certification is required by many countries for sales of industrial products in those countries. The QS 9000 quality standards provide for continual improvement with an emphasis on the prevention of defects and reduction of variation and waste in the supply chain. Like ISO 9002 certification, QS 9000 certification is required by some semiconductor manufacturers as a threshold indicator of a company's quality control standards. We also earned the 1998 QC Group Award from The Chinese Society of Quality, which is equivalent to the similar award from the American Society of Quality. In addition, our laboratories have been awarded Chinese National Laboratory accreditation under the categories of electricity, electrical test and temperature calibration.

Further demonstrating our commitment to, and achievements in, quality management, ChipMOS Taiwan obtained the ISO/TS 16949:2002 quality system certification on November 26, 2003. The ISO/TS 16949:2002 certification system was jointly developed by members of the International Automotive Task Force (IATF) and approved by the International Organization for Standardization. This technical specification is a common automotive quality system requirements catalog based on ISO 9001:2000, AVSQ (Italian), EAQF (French), Q.S.-9000 (US) and VDA6.1 (German) automotive catalogs. The ISO/TS (Technical Specification) 16949:2002 certification system seeks to actively incorporate quality management policies and objectives into the operation flows of the company. This certification stresses the supervision and measurement of both process and performance. The certification system became effective in March 2002.

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On June 26, 2003, ChipMOS Shanghai obtained the ISO 9001:2000 quality system certification with respect to manufacturing and supply of semiconductor assembly, test and module manufacturing.

Our testing and assembly operations are carried out in clean rooms where air purity, temperature and humidity are controlled. To ensure the stability and integrity of our operations, we maintain clean rooms at our facilities that meet US federal 209E class 1,000, 10,000 and 100,000 standards. A class 1,000 clean room means a room containing less than 1,000 particles of contaminants per cubic foot.

We have established manufacturing quality control systems that are designed to ensure high-quality services to our customers and maintain reliability and high production yields at our facilities. We employ specialized equipment for manufacturing quality and reliability control, including:

temperature cycling testers, thermal shock testers, pressure cook testers and highly accelerated stress testers for reliability analyses;

a scanning acoustic tomograph and scanning electronic microscope for physical failure analysis, semi-auto probe and curve tracer and direct current tester station for electrical failure analysis; and

three-dimensional measurement for full-dimension measurement.

In addition, to enhance our performance and our research and development capabilities, we also installed a series of high-cost equipment, such as temperature humidity bias testers, low temperature storage-life testers and highly accelerated stress testers. We believe that many of our competitors do not own this equipment.

As a result of our ongoing focus on quality, we achieved monthly assembly yields of an average of 99.99% for our TSOP packages, 99.85% for our TCP packages, 99.78% for our COF packages and 99.50% for our COG packages in 2004. The assembly yield, which is the industry standard for measuring production yield, is equal to the number of integrated circuit packages that are shipped back to customers divided by the number of individual integrated circuits that are attached to leadframes or organic substrate.

Facilities

We provide testing services through our three facilities in Taiwan and one facility in Shanghai, with one facility at each of the following locations: the Hsinchu Industrial Park, the Hsinchu Science Park, the Southern Taiwan Science Park and the Shanghai Qingpu Industrial Zone. We provide assembly services through our facility at the Southern Taiwan Science Park and our facility at the Shanghai Qingpu Industrial Zone. We own the land for our Hsinchu Industrial Park testing facility, and we lease the land for our Hsinchu Science Park testing facility and Tainan assembly facility from the Science Park Administration under three 20-year leases. Two leases for our Hsinchu Science Park facility will expire in 2008 and 2017, respectively, and the lease for our Southern Taiwan Science Park facility will expire in 2016.

In March 2002, Modern Mind entered into a cooperation agreement with the Shanghai Qingpu Industrial Zone Development Group Company under which Modern Mind has agreed to construct a permanent wholly-owned facility in the Shanghai Qingpu Industrial Zone to provide testing

and assembly services. Modern Mind commenced construction of the facility in Shanghai in June 2002. We currently expect to move into this facility in the third quarter of 2005. Pending commencement of production at the permanent facility, Modern Mind is operating in a temporary facility leased from a third party. Commercial testing and assembly services at this temporary facility commenced in March 2003. Modern Mind currently offers TSOP packages and testing and assembly of memory semiconductors, and intends to expand into the various testing and assembly services offered by us. Subsequent to the commencement of production at the permanent facility, we will also provide gold bumping services at the temporary facility. In connection with the planned operations in Shanghai, Modern Mind has invested, through ChipMOS Shanghai, US\$92.5 million in the new testing and assembly facility and equipment currently being used in the temporary facility in Shanghai and Modern Mind has committed to invest an additional US\$157.5 million by December 6, 2007 in the permanent testing and assembly facility.

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In December 2004, we sold our Kaohsiung testing facility to Radiant Opto-Electronics Corporation.

The following table shows the location, primary use and size of each of our facilities, and the principal equipment installed at each facility, as of April 30, 2005.

Location of Facility	Primary Use	Size of Land	Testers/Bonders
Chupei, Hsinchu Chantek	Assembly/Gold Bumping ⁽¹⁾	21,620 square meters	256 wire bonders 2 stepper 2 aligners
Chupei, Hsinchu ChipMOS Logic	Testing	12,873 square meters	63 testers
Hsinchu Industrial Park, Taiwan ThaiLin	Testing	25,779 square meters	78 testers
Hsinchu Science Park, Taiwan	Testing	28,632 square meters	161 testers
Southern Taiwan Science Park, Taiwan	Assembly/Testing	56,680 square meters	156 wire bonders 88 inner lead bonders 105 testers
Shanghai Qingpu Industrial Zone, Mainland China	Assembly/Testing/Modules and Subsystem Manufacturing	291,959 square meters	6 testers 51 wire bonders

(1) Gold bumping equipment at this facility belongs to ChipMOS Taiwan.

On August 24, 2004, we, through ThaiLin and ChipMOS Taiwan, entered into an agreement for the acquisition of certain testing and assembly assets of FICTA, including 52 testers, 133 wire bonders, machinery, equipment, raw materials, spare parts, and related patents. The value of the transaction was approximately NT\$1,050 million (US\$33 million) and the transaction closed on November 1, 2004.

Raw Materials

Semiconductor testing requires minimal raw materials. Fabricated wafers are the main raw materials for our semiconductor turnkey services. Substantially all of the raw materials used in our memory and mixed-signal semiconductor assembly processes are interconnect materials such as leadframes, organic substrates, gold wire and molding compound. Raw materials used in the LCD and other flat-panel display driver semiconductor testing and assembly process include carrier tape, resin, spacer tape, plastic reel, aluminum bags, and inner and outer boxes. Cost of raw materials represented 35%, 23% and 21% of our net revenue in 2002, 2003 and 2004, respectively.

We do not maintain large inventories of leadframes, organic substrates, gold wire or molding compound, but generally maintain sufficient stock of each principal raw material for approximately one month's production based on blanket orders and rolling forecasts of near-term requirements received from customers. In addition, several of our principal suppliers dedicate portions of their inventories, typically in amounts equal to the average monthly amounts supplied to us, as reserves to meet our production requirements. However, shortages in the supply of materials experienced by the semiconductor industry have in the past resulted in occasional price adjustments and delivery delays. See Item 3. Key Information Risk Factors Risks Relating to Our Business If we are unable to obtain raw materials and other necessary inputs from our suppliers in a timely and cost-effective manner, our production schedules would be delayed and we may lose customers and growth opportunities and become less profitable for a discussion of the risks associated with our raw materials purchasing methods. For example, with the exception of aluminum bags and inner and outer boxes, which we acquire from local sources, the raw materials used in our TCP process and

for modules are obtained from a limited number of Japanese suppliers.

Equipment

Testing of Memory and Mixed-Signal Semiconductors

Testing equipment is the most capital intensive component of the testing business. Upon the acquisition of new testing equipment, we install, configure, calibrate and perform burn-in diagnostic tests on the equipment. We also establish parameters for the testing equipment based on anticipated requirements of existing and potential customers and considerations relating to market trends. As of April 30, 2005, we operated 308 testers. We generally seek to purchase testers with similar functionality that are able to test a variety of different semiconductors. We purchase testers from major international manufacturers, including Advantest Corporation, Agilent Technologies and Credence Systems Corporation.

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In general, particular semiconductors can be tested using a limited number of specially designed testers. As part of the qualification process, customers will specify the machines on which their semiconductors may be tested. We often develop test program conversion tools that enable us to test semiconductors on multiple equipment platforms. This portability among testers enables us to allocate semiconductor testing across our available testing capacity and thereby improve capacity utilization rates. If a customer requires the testing of a semiconductor that is not yet fully developed, the customer consigns its testing software programs to us to test specific functions. If a customer specifies testing equipment that is not widely applicable to other semiconductors we test, we require the customer to furnish the equipment on a consignment basis. Currently, we do not have any testers consigned to us.

We will continue to acquire additional testing equipment in the future to the extent market conditions, cash generated from operations, the availability of financing and other factors make it desirable to do so. Some of the equipment and related spare parts that we require have been in short supply in recent years. Moreover, the equipment is only available from a limited number of vendors or is manufactured in relatively limited quantities and may have lead times from order to delivery in excess of six months.

Assembly of Memory and Mixed-Signal Semiconductors

The number of wire bonders at a given facility is commonly used as a measure of the assembly capacity of the facility. Typically, wire bonders may be used, with minor modifications, for the assembly of different products. We purchase wire bonders principally from Shinkawa Co., Ltd. As of April 30, 2005, we operated 463 wire bonders. In addition to wire bonders, we maintain a variety of other types of assembly equipment, such as wafer grinders, wafer mounters, wafer saws, die bonders, automated molding machines, laser markers, solder platers, pad printers, dejunkers, trimmers, formers, substrate saws and lead scanners.

Testing and Assembly of LCD and Other Flat-Panel Display Driver Semiconductors

We acquired TCP-related equipment from Sharp to begin our TCP-related services. We subsequently purchased additional TCP-related testers from Yokogawa Electric Corp. and Advantest Corporation and assembly equipment from Shibaura Mechatronics Corp., Athlete FA Corp. and Sharp Takaya Electronics Corp. As of April 30, 2005, we operated two steppers and two aligners for gold bumping and 88 inner lead bonders for assembly and 105 testers for LCD and other flat-panel display driver semiconductors. We are currently in the process of purchasing additional testing equipment. The testing equipment can be used for the TCP, COF and COG processes, while the inner lead bonders are only used in the TCP and COF processes. The same types of wafer grinding, auto wafer mount and die saw equipment is used for the TCP, COF and COG processes. In addition, auto inspection machines and manual work are used in the COG process, which is more labor intensive than the TCP and COF processes.

Competition

The independent testing and assembly markets are very competitive. Our competitors include large IDMs with in-house testing and assembly capabilities and other independent semiconductor testing and assembly companies, especially those offering vertically integrated testing and assembly services, such as Advanced Semiconductor Engineering Inc., Amkor Technology, Inc., ASAT Limited, ASE Test Limited, King Yuan Electronics Co., Ltd., Siliconware Precision, and STATS ChipPAC Ltd. We believe that the principal measures of competitiveness in the independent semiconductor testing industry are:

engineering capability of software development;

quality of service;

flexibility;

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capacity;

production cycle time; and

price.

In assembly services, we compete primarily on the basis of:

production yield;

production cycle time;

process technology, including our COF technology for LCD and other flat-panel display driver semiconductor assembly services;

quality of service;

capacity;

location; and

price.

IDMs that use our services continually evaluate our performance against their own in-house testing and assembly capabilities. These IDMs may have access to more advanced technologies and greater financial and other resources than we do. We believe, however, that we can offer greater efficiency and lower costs while maintaining an equivalent or higher level of quality for three reasons:

first, we offer a broader and more complex range of services as compared to the IDMs, which tend to focus their resources on improving their front-end operations;

second, we generally have lower unit costs because of our higher utilization rates; and

finally, we offer a wider range of services in terms of complexity and technology.

Intellectual Property

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As of April 30, 2005, we held 433 patents in Taiwan, one patent in the United Kingdom, one patent in Japan, 14 patents in the United States and eight patents in the People's Republic of China, relating to various semiconductor testing and assembly technologies. These patents will expire at various dates through June 1, 2024. As of April 30, 2005, we also had a total of three pending patent applications in the United States, 67 in Taiwan and one in the People's Republic of China. In addition, we have registered ChipMOS and its logo and InPack as trademarks in Taiwan, and ChipMOS and its logo as trademarks in the United States, the People's Republic of China, Japan and in the European Community.

We expect to continue to file patent applications where appropriate to protect our proprietary technologies. We may need to enforce our patents or other intellectual property rights or to defend ourselves against claimed infringement of the rights of others through litigation, which could result in substantial costs and a diversion of our resources. See Item 3. Key Information Risk Factors Risks Relating to Our Business Disputes over intellectual property rights could be costly, deprive us of technologies necessary for us to stay competitive, render us unable to provide some of our services and reduce our opportunities to generate revenue.

We acquired our testing and assembly technology for TCPs under a licensing agreement with Sharp Corporation. The term of the agreement with Sharp is for five years beginning February 10, 2000. Pursuant to this agreement, Sharp licensed to us TCP-related technology and intellectual property rights. We in turn pay a royalty fee to Sharp ranging from 3% to 5% of the service fee paid to us by our customers minus the material cost incurred from providing TCP-related services over the term of the licensing agreement, except for the TCP-related services provided to Sharp. Sharp has granted us a grace period for the payment of the royalty fees, which expired in September 2004, during which we may defer the payment of a portion of the royalty fee due to Sharp until the expiry of the grace period or until the amount of deferred royalty fee exceeds approximately ¥151 million. In 2002, 2003 and 2004, we incurred royalty obligations of ¥32 million, ¥22 million and ¥16 million, respectively, to Sharp, the total amount of which was paid in October 2004.

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On April 7, 2004, ChipMOS Bermuda entered into an assignment agreement with ChipMOS Taiwan, as amended on May 14 and October 11, 2004, pursuant to which ChipMOS Taiwan transferred all of the technologies it owned to ChipMOS Bermuda for a purchase price of US\$19.7 million, which was paid in November 2004.

On April 7, 2004, ChipMOS Bermuda entered into a patent license agreement with ChipMOS Taiwan, which was amended on July 8, 2004, October 11, 2004 and December 30, 2004, pursuant to which ChipMOS Bermuda grants to ChipMOS Taiwan a non-exclusive royalty-bearing license with respect to certain patents and patent applications until the expiration of the term of the last of these patents. Under the patent license agreement, ChipMOS Taiwan will pay ChipMOS Bermuda a royalty in the aggregate of US\$20 million, payable in 80 quarterly installments of US\$250,000 each. The first installment was paid in April 2005.

Environmental Matters

Semiconductor testing does not generate significant pollutants. The semiconductor assembly process generates gaseous chemical wastes, principally at the molding stage. Liquid waste is produced when silicon wafers are ground thinner and diced into chips with the aid of diamond saws and cooled with running water. In addition, excess material on leads and moldings are removed from assembled semiconductors in the trimming and dejunking processes, respectively. We have installed various types of liquid and gaseous chemical waste-treatment equipment at our semiconductor assembly facilities. We believe that we have adopted adequate and effective environmental protection measures that are consistent with semiconductor industry practices in Taiwan and Mainland China. In addition, we believe we are in compliance in all material respects with current environmental laws and regulations applicable to our operations and facilities.

All of our facilities in Taiwan have been certified as meeting the ISO 14001 environmental standards by the International Organization for Standardization. Our testing facility at the Hsinchu Science Park won both the Plant Greenery and Beautification Award in 1999, 2000 and 2002 and the Safety & Health Excellent Personnel Award in 2001 from the Science Park Administration, the Green Office Award from the Environment Protection Administration of the ROC in 2000 and the Outstanding Voluntary Protection Program Award by the Labor Affairs Commission of the ROC in 1999. Our assembly facility at the Southern Taiwan Science Park won the Green Office Award from the Environment Protection Administration of the ROC in 2001. In 2003, we won several environmental awards, including the Environmental Protection Excellent Unit Award, the Plant Greenery and Beautification Award, the Environment Maintain Award and the Safety & Health Excellent Personnel Award, each awarded by the Science Park Administration. We will continue to implement programs, measures and related training to reduce industrial waste, save energy, and control pollution. In 2001, ChipMOS Taiwan completed a lead-free process control program, which offers a lead-free method in a semiconductor package, a lead-free plating, a lead-free solder ball and a lead-free reliability method and specification. The same lead-free process control program was completed by Chantek in April 2005.

Insurance

We maintain insurance policies on our buildings, equipment and inventories. These insurance policies cover property damages due to all risks, including but not limited to, fire and lightning and earthquakes. The maximum coverage of our property insurance is approximately NT\$23,123 million. In addition, ThaiLin also maintains an all-risks policy for a maximum coverage of approximately NT\$3,243 million, and ChipMOS Shanghai maintains property insurance policies for a maximum coverage of approximately RMB235 million. As of the end of 2004, we had received approximately NT\$113 million in insurance compensation related to the earthquake that occurred on September 21, 1999.

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Insurance coverage on facilities under construction is maintained by us and our contractors, who are obligated to procure necessary insurance policies and bear the relevant expenses of which we are the beneficiary.

We also maintain insurance on the wafers delivered to us while these wafers are in our possession and during transportation from suppliers to us and from us to our customers.

Employees

See Item 6. Directors, Senior Management and Employees Employees for certain information relating to our employees.

Taxation

See Item 5. Operating and Financial Review and Prospects Taxation for certain information regarding the effect of PRC and ROC tax regulations on our operations.

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Item 5. Operating and Financial Review and Prospects

Overview

We provide a broad range of semiconductor testing and assembly services primarily for memory, mixed-signal, and LCD and other flat-panel display driver semiconductors. We also provide semiconductor turnkey services by purchasing fabricated wafers and selling tested and assembled semiconductors. In 2004, our consolidated net revenue was NT\$15,036 million (US\$474 million) and our net income was NT\$1,676 million (US\$53 million).

We are a holding company, incorporated in Bermuda on August 1, 2000. We provide most of our services through our majority-owned subsidiary, ChipMOS Taiwan, and its subsidiaries and investees. ChipMOS Taiwan was founded in 1997 as a joint venture between Mosel and Siliconware Precision and with the participation of other investors. As of April 30, 2005, we held 70.3% of the outstanding common shares of ChipMOS Taiwan, and Siliconware Precision held 28.7%. In Taiwan, we conduct testing operations in our facilities at the Hsinchu Science Park and the Hsinchu Industrial Park and testing and assembly operations in our facility at the Southern Taiwan Science Park. We also conduct operations in Mainland China through ChipMOS Shanghai, a wholly-owned subsidiary of Modern Mind Technology Limited, or Modern Mind, which is one of our controlled consolidated subsidiaries. ChipMOS Shanghai operates a testing and assembly facility at the Qingpu Industrial Zone in Shanghai. Through our subsidiaries, we also have equity interests in other companies that are engaged in the semiconductor industry. See Item 4. Information on the Company Overview of the Company for more details.

The following key trends are important to understanding our business:

Capital Intensive Nature of Our Business. Our operations, in particular our testing operations, are characterized by relatively high fixed costs. We expect to continue to incur substantial depreciation and other expenses as a result of our previous acquisitions of testing and assembly equipment and facilities. Our profitability depends in part not only on absolute pricing levels for our services, but also on capacity utilization rates for our testing and assembly equipment. In particular, increases or decreases in our capacity utilization rates could significantly affect our gross margins since the unit cost of testing and assembly services generally decreases as fixed costs are allocated over a larger number of units.

The current generation of advanced testers typically cost between US\$2 million and US\$3 million each, while wire bonders used in assembly typically cost approximately US\$85,000 each and inner-lead bonders for tape carrier package, or TCP, chip-on-film, or COF, assembly cost approximately US\$370,000 each and chip-on-glass, or COG, assembly cost approximately US\$160,000 each. We begin depreciating our equipment when it is placed into commercial operation. There may be a time lag between the time when our equipment is placed into commercial operation and when it achieves high levels of utilization. In periods of depressed semiconductor industry conditions, we may experience lower than expected demand from our customers and a sharp decline in the average selling prices of our testing and assembly services, resulting in an increase in depreciation expenses relative to net revenue. In particular, the capacity utilization rates for our testing equipment may be severely affected during a semiconductor industry downturn as a result of the decrease in outsourcing demand from integrated device manufacturers, or IDMs, which typically maintain larger in-house testing capacity than in-house assembly capacity.

Highly Cyclical Nature of the Semiconductor Industry. Highly cyclical, the worldwide semiconductor industry has experienced peaks and troughs over the last decade, with a severe downturn beginning in the fourth quarter of 2000 that was followed by a modest recovery since 2002. The significant decrease in market demand for semiconductors that began in 2000 adversely affected our results of operations for 2001 and 2002. During periods of decreased demand for assembled semiconductors, some of our customers may forego or simplify final testing of certain types of semiconductors, such as DRAM, further intensifying our difficulties.

Declining Average Selling Prices of Our Testing and Assembly Services. The semiconductor industry is characterized by a general decrease in prices for products and services over the course of their product and technology life cycles. The rate of decline is particularly steep during periods of intense competition and adverse market conditions. The average selling prices of our testing and assembly services, except those for LCD and other flat-panel display driver semiconductors, experienced sharp declines during such periods as a result of intense price competition from other independent testing and assembly companies that attempt to maintain high capacity utilization levels in the face of reduced demand.

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To offset the effects of decreasing average selling prices, we will continue to seek to:

improve production efficiency and maintain high capacity utilization rates;

concentrate on testing of high-demand, high-growth semiconductors;

develop new assembly technologies; and

implement new technologies and platforms to shift into higher margin services.

Market Conditions for the End-User Applications for Semiconductors. Market conditions in the semiconductor industry, to a large degree, track those for their end-user applications. Any deterioration in the market conditions for the end-user applications of semiconductors that we test and assemble may reduce demand for our services and, in turn, materially adversely affect our financial condition and results of operations. Our net revenue is largely attributable to fees from testing and assembling semiconductors for use in personal computers, consumer electronic products, display applications and communications equipment. The markets for these products are intensely competitive, and a significant decrease in demand could put pricing pressure on our testing and assembly services and negatively affect our earnings.

Change in Product Mix. Declines in average selling prices have been partially offset over the last three years by a change in our revenue mix. In particular, revenue from testing and assembly of LCD and other flat-panel display driver semiconductors and 12-inch wafer processing have increased as a percentage of our total net revenue. We intend to continue focusing on testing and assembling more semiconductors that provide higher margins and developing and offering new technologies in testing and assembly services, in order to mitigate the effects of declining average selling prices on our profitability.

Recent Acquisitions

On April 1, 2004, PlusMOS merged into Chantek in a stock-for-stock merger, with Chantek as the surviving entity. Chantek provides semiconductor assembly services for low-density volatile and non-volatile memory semiconductors, consumer semiconductors and microcontroller semiconductors, and subsequent to the merger, also manufactures, designs and sells DRAM modules. Upon the consummation of the merger, ChipMOS Taiwan held a 34.2% interest in Chantek, and Chantek became one of our consolidated subsidiaries as of April 1, 2004. The consolidation of Chantek has significantly affected our financial results for the year ended December 31, 2004 and our financial position as of December 31, 2004.

On April 30, 2004, WWT, a Taiwan-based logic testing company, merged into ChipMOS Logic, one of our majority-owned subsidiaries, with ChipMOS Logic as the surviving entity. We consolidated our mixed-signal semiconductor testing services into the combined entity and provide mixed-signal semiconductor testing services to both our existing customers and WWT's customers through ChipMOS Logic. The merger affected our results of operations, cash flow from operations and financial position for future periods starting from April 30, 2004.

On August 24, 2004, we, through ThaiLin and ChipMOS Taiwan, entered into an agreement for the acquisition of certain testing and assembly assets of FICTA, including 52 testers, 133 wire bonders, and machinery, equipment, raw materials, spare parts, and patents. The value of the

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transaction was approximately NT\$1,050 million (US\$33 million) and the transaction closed on November 1, 2004. As part of this transaction, ChipMOS Taiwan acquired a 67.8% ownership interest in First Semiconductor Technology, Inc., which was incorporated in the United States of America in June 1998 and engages in IC logic testing services. This acquisition did not have a material effect on our financial results for the year ended December 31, 2004 nor our financial position as of December 31, 2004. On April 29, 2005, ChipMOS Taiwan transferred its interest in First Semiconductor Technology, Inc. to First Semiconductor Technology, Inc. in a transaction valued at NT\$63 million (US\$2 million).

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Table of Contents**Net Revenue**

We conduct our business according to our four main business segments: (1) testing services for memory and mixed-signal semiconductors, (2) assembly services for memory and mixed-signal semiconductors, (3) LCD and other flat-panel display driver semiconductor testing and assembly services, and (4) semiconductor turnkey services, whereby we purchase fabricated wafers and sell tested and assembled semiconductors and, from 2003, also conduct certain trading activity. The following table sets forth, for the periods indicated, our consolidated net revenue for each segment.

	Year ended December 31,			
	2002 ⁽¹⁾	2003 ⁽²⁾	2004 ⁽³⁾	2004 ⁽³⁾
	NT\$	NT\$	NT\$	US\$
	(in millions)			
Testing				
Memory	\$ 2,254.2	\$ 2,890.3	\$ 5,491.9	\$ 173.0
Mixed-signal	76.9	265.5	529.7	16.7
Total testing	2,331.1	3,155.8	6,021.6	189.7
Assembly				
Memory	1,404.5	2,701.4	5,130.1	161.7
Mixed-signal	10.7	27.5	660.7	20.8
Total assembly	1,415.2	2,728.9	5,790.8	182.5
LCD and other flat-panel display driver semiconductor testing and assembly	991.8	1,683.5	2,749.8	86.6
Semiconductor turnkey ⁽⁴⁾	1,787.8	1,458.3	473.6	14.9
Total	\$ 6,525.9	\$ 9,026.5	\$ 15,035.8	\$ 473.7

- (1) In 2002, we consolidated the financial results of ChipMOS Taiwan and its 100% owned subsidiaries, ChipMOS Japan, ChipMOS USA, ChipMOS Hong Kong, Modern Mind and its wholly-owned subsidiary, ChipMOS Shanghai.
- (2) In 2003, we consolidated the financial results of ThaiLin.
- (3) From January 12 and 28, 2004, onwards, we consolidated the financial results of Advanced Micro Chip Technology Co., Ltd. (which was liquidated in October 2004), and ChipMOS Logic, respectively, and from April 1, 2004, onwards, we also consolidated the financial results of Chantek. Starting from April 30, 2004, our financial results also included the financial results of WWT, which was merged into ChipMOS Logic. Starting from November 1, 2004, our financial statements also included the results of First Semiconductor Technology, Inc. in which ChipMOS Taiwan acquired a 67.8% equity interest on November 1, 2004 and sold back this interest to First Semiconductor Technology, Inc. on April 29, 2005.
- (4) In 2003, includes trading revenue generated by ChipMOS Hong Kong.

Our net revenue consists primarily of service fees for testing and assembling semiconductors, and to a lesser extent, fees from equipment rentals to semiconductor manufacturers for engineering testing, less allowances for product returns. We offer testing services for memory semiconductors, mixed-signal semiconductors and testing and assembly services for LCD and other flat-panel display driver semiconductors. We also offer semiconductor turnkey services to utilize our excess capacity available from time to time.

Some of our customers have entered into agreements with us, under which we reserve an agreed capacity for such customers and under which such customers commit to place orders in the amount of the reserved capacity for periods from 2005 to 2009, some of which may be reduced by these customers under the agreements. As of April 30, 2005, 44% percent of our total current capacity was reserved under the above mentioned capacity guarantee contracts. However, most of our other customers generally do not place purchase orders far in advance and our contracts with customers generally do not require minimum purchases of our products or services. Our customers' purchase orders have varied significantly from period to period because demand for their products is often volatile.

Our financial condition and results of operations have also been, and are likely to continue to be, affected by price pressures on our service fees, which tend to decline in tandem with the declining average selling prices of the products we test and assemble over the course of their product and technology life cycles. In order to maintain our margins, it is necessary to offset the fee erosion by continually improving our production efficiency and maintaining high capacity utilization rates. We also plan to continue to develop and implement new technologies and expand our services into higher-margin segments. These efforts require significant upfront investment in advance of incremental revenue, which could impact our margins.

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Pricing

We price our testing fees primarily based on the cost of testing the products to our customers' specifications, including the costs of the required material and components, the depreciation expenses relating to the equipment involved and our overhead expenses, and with reference to prevailing market prices. Accordingly, the testing fee for a particular product would principally depend on the time taken to perform the tests, the complexity of the product and the testing process, and the cost of the equipment used to perform the test. For example, testing fees for memory semiconductors are significantly higher than those for other products because of the longer time required and the need for burn-in testing.

We price our assembly services on a per unit basis, taking into account the complexity of the package, our costs, including the costs of the required material and components, the depreciation expenses relating to the equipment involved and our overhead expenses, prevailing market conditions, the order size, the strength and history of our relationship with the customer and our capacity utilization.

We price our testing and assembly services for LCD and other flat-panel display driver semiconductors on the basis of our costs, including the costs of the required material and components, the depreciation expenses relating to the equipment involved and our overhead expenses, and the price for comparable services.

Because we purchase fabricated wafers for our turnkey services, we price our semiconductor turnkey services based on the market price of the wafers as well as the factors we use to price our testing and assembly services, as described above.

We offer volume discounts to all customers who purchase large quantities of our services and special discounts to customers who use our turnkey services or all of our vertically integrated services.

Revenue Recognition

We generally recognize our revenue upon shipment of tested and assembled semiconductors to locations designated by our customers, including our internal warehouse for customers using our warehousing services. Revenue from product sales is recognized when title of products and risks of ownership are transferred to customers, generally upon shipment of the products. We submit invoices at the time of shipment or delivery and currently require customers to pay within 60 days after the last day of the month during which the invoice was sent, except that we currently require ProMOS Technologies Inc., or ProMOS, to pay within 75 days and Ultima Electronics Corp., or Ultima, and Mosel Vitelic Inc., or Mosel, to pay within 90 days. Prior to July 2001, we extended most customers 60 day payment terms. We have not experienced any significant collection problems. We do not require our customers to provide collateral for payment.

Related Party Revenues

In 2002, 2003 and 2004, 56%, 56% and 32%, respectively, of our net revenue were derived from related parties. While we believe that our transactions with related parties were entered into on an arm's-length basis, we have from time to time extended them favorable payment terms,

as discussed in the preceding paragraph. See Item 7. Major Shareholders and Related Party Transactions for more information concerning our related party transactions.

Geography and Currency

We generate most of our net revenue from customers headquartered in Taiwan, which represented 88%, 84% and 81% of our net revenue in 2002, 2003 and 2004, respectively. We also generate net revenue from customers in the PRC, Japan, the United States, Hong Kong and other countries. Our service fees and revenue are generally denominated in the currency of the jurisdiction in which our facilities are located, for example NT dollars for our Taiwan operations and RMB for our Mainland China operations. As we generate most of our net revenue from Taiwanese customers using our Taiwanese operations, and since most of our labor and overhead costs are denominated in NT dollars, we consider the NT dollar to be our functional currency.

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See Note 25 to our audited consolidated financial statements and Item 11. Quantitative and Qualitative Disclosure about Market Risk Market Risks Foreign Currency Risks for certain information on our exchange rate risks.

Cost of Revenue and Gross Profit (Loss)

Our cost of revenue consists primarily of the following: depreciation and amortization expenses, raw material costs, and labor and overhead expenses, which include royalty payments for licensed technologies, sub-contract fees and rental expenses. Our operations, in particular our testing operations, are characterized by relatively high fixed costs. We expect to continue to incur substantial depreciation and other expenses as a result of our previous and future acquisitions of testing and assembly equipment and facilities, including our investment in our Mainland China operations. Our profitability depends in part not only on absolute pricing levels for our services, but also on our capacity utilization rates. As of April 30, 2005, we had 413 testers, 463 wire bonders, 88 inner-lead bonders, two steppers and two aligners. We use inner-lead bonders for the assembly of LCD and other flat-panel display driver semiconductors using TCP or COF technology, and wire bonders for thin small outline package, or TSOP, ball-grid array, or BGA, and some other package assembly technologies. Our average capacity utilization rate for assembly of memory and mixed-signal semiconductors was 88% in 2004, 89% in 2003 and 60% in 2002. In addition, our average capacity utilization rate for LCD and other flat-panel display driver semiconductor testing and assembly was 76% in 2004, 82% in 2003 and 62% in 2002.

Most of our labor and overhead costs are denominated in NT dollars. However, we also incur costs of revenues and operating expenses associated with testing and assembly services in several other currencies, including Japanese yen, US dollars and RMB. In addition, a substantial portion of our capital expenditures, primarily for the purchase of testing and assembly equipment, has been, and is expected to continue to be, denominated in Japanese yen with much of the remainder in US dollars.

The following table sets forth, for the periods indicated, our gross profit (loss) and our gross profit (loss) margin as a percentage of net revenue.

	Year ended December 31,			
	2002 ⁽¹⁾	2003 ⁽²⁾	2004 ⁽³⁾	2004 ⁽³⁾
	NT\$	NT\$	NT\$	US\$
	(in millions, except percentages)			
Gross profit (loss):				
Testing				
Memory	\$ (48.8)	\$ 607.7	\$ 2,329.0	\$ 73.4
Mixed-signal	(304.8)	(161.3)	(100.9)	(3.2)
Total testing	(353.6)	446.4	2,228.1	70.2
Assembly				
Memory	18.9	538.7	1,095.4	34.5
Mixed-signal	2.0	5.7	(122.3)	(3.8)
Total assembly	20.9	544.4	973.1	30.7
LCD and other flat-panel display driver semiconductor testing and assembly	126.0	528.2	970.2	30.5
Semiconductor turnkey ⁽¹⁾	20.9	48.0	6.9	0.2
Total	\$ (185.8)	\$ 1,567.0	\$ 4,178.3	131.6
Gross profit (loss) margin:				
Testing				
Memory	(2.2)%	21.0%	42.4%	42.4%
Mixed-signal	(396.7)	(60.8)	(19.1)	(19.1)

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Total testing	(15.2)	14.1	37.0	37.0
Assembly				
Memory	1.4	19.9	21.4	21.4
Mixed-signal	18.5	20.8	(18.5)	(18.5)
Total assembly	1.5	19.9	16.8	16.8

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	Year ended December 31,			
	2002 ⁽¹⁾	2003 ⁽²⁾	2004 ⁽³⁾	2004 ⁽³⁾
	NT\$	NT\$	NT\$	US\$
	(in millions, except percentages)			
LCD and other flat-panel display driver semiconductor testing and assembly	12.7	31.4	35.3	35.3
Semiconductor turnkey ⁽⁴⁾	1.2	3.3	1.5	1.5
Overall	(2.8)%	17.4%	27.8%	27.8%

- (1) In 2002, we consolidated the financial results of ChipMOS Taiwan and its 100% owned subsidiaries, ChipMOS Japan, ChipMOS USA, ChipMOS TECHNOLOGIES (H.K.) Limited, Modern Mind and its wholly-owned subsidiary, ChipMOS Shanghai.
- (2) In 2003, we consolidated the financial results of ThaiLin.
- (3) From January 12 and 28, 2004, onwards, we consolidated the financial results of Advanced Micro Chip Technology Co., Ltd. (which was liquidated in October 2004), and ChipMOS Logic, respectively, and from April 1, 2004, onwards, we also consolidated the financial results of Chantek. Starting from April 30, 2004, our financial results also included the financial results of WWT, which was merged into ChipMOS Logic. Starting from November 1, 2004, our financial statements also included the results of First Semiconductor Technology, Inc. in which ChipMOS Taiwan acquired a 67.8% equity interest on November 1, 2004 and sold back this interest to First Semiconductor Technology, Inc. on April 29, 2005.
- (4) In 2003, includes trading revenue generated by ChipMOS Hong Kong.

Operating Expenses*Research and Development*

Research and development expenses consist primarily of personnel expenses, amortization expenses relating to technology, expenditures to qualify our services for specific customers and other consulting fees and certification fees paid to third parties. Research and development expenses are recognized as they are incurred. We currently expect to continue to hire a significant number of additional employees in our research and development department. We currently expect that research and development expenses will increase in absolute terms in the future as we expand into new technologies and service offerings.

Sales and Marketing

Sales and marketing expenses consist primarily of shipping and handling expenses incurred in delivering products to our customers designated locations, advertising, corporate communications and other marketing expenses, personnel expenses for sales and marketing staff, service marketing expenses and service support expenses. We currently expect marketing expenses to increase in absolute terms in the future, related to the planned growth of our business.

General and Administrative

General and administrative expenses consist of salaries and related expenses for executive, finance and accounting, and management information systems personnel, professional fees, bad debt provision, and other corporate expenses. They also include stock-based compensation

that is expensed using the intrinsic value-based method. See Item 6. Directors, Senior Management and Employees Share Option Plan for more information concerning our share option plan. We also pay Mosel an annual administrative fee for the provision of certain administrative services. We expect general and administrative expenses to increase in absolute terms as we add personnel and incur additional expenses related to the growth of our business and operations, particularly our Mainland China operations.

Other Income (Expenses), Net

Our other income principally consists of gains on sale of investments, warehouse space rental revenue, interest income, foreign exchange gains and gains on disposal of property, plant and equipment. Our other expenses principally consist of interest expense, investment losses recognized by equity method, financing costs, allowance for losses on short-term investments, losses on disposal of property, plant and equipment and foreign exchange losses. Accordingly, whether we record other income, net or other expenses, net in any fiscal year would depend on the amount of these items.

Minority Interests and Interest in Bonuses Paid by Subsidiaries

Minority interests represent the portion of our income that is attributable to the shareholding in our consolidated subsidiaries that we do not own. For 2002, the minority interests were attributable to the minority interests owned by Siliconware Precision and other investors in ChipMOS Taiwan. For 2003, the minority interests were attributable to the minority interests owned by Siliconware Precision and other investors in ChipMOS Taiwan and the public shareholders' interest in ThaiLin. Commencing in 2004, minority interests will also include the portion of our income attributable to the shareholdings in Chantek and ChipMOS Logic that we do not own.

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Interest in bonuses paid by subsidiaries represents our portion of ChipMOS Taiwan's distributable earnings that are appropriated as bonuses to employees and remuneration to directors and supervisors of ChipMOS Taiwan, as required by ROC regulations and ChipMOS Taiwan's articles of incorporation. None of our subsidiaries paid any such bonuses to directors, supervisors and employees in 2002, 2003 and 2004.

Net Income (Loss)

Our business incurred net losses in 2002, primarily due to the overall weak economic conditions in the semiconductor markets we serve. We were again profitable in 2003 and 2004 with net income of NT\$482 million and NT\$1,676 million, respectively, due to increased revenue and improved gross margins. We believe our future results will be dependent upon the overall economic conditions in the markets we serve, the competitive environment in which we operate, and our ability to successfully implement our strategy, among other things. For additional information on factors that will affect our future performance, see Item 3. Key Information Risk Factors.

Results of Operations

The following table presents selected operating data as a percentage of net revenue for the periods indicated:

	Year ended December 31,		
	2002	2003	2004
	(percentage of net revenue)		
ROC GAAP:			
Net revenue	100.0%	100.0%	100%
Cost of revenue	102.8	82.6	72.2
Gross profit (loss) margin	(2.8)	17.4	27.8
Operating expenses:			
Research and development	5.0	3.3	2.0
Sales and marketing	0.6	0.7	2.0
General and administrative	4.8	4.9	4.5
Total operating expenses	10.4	8.9	8.5
Income (loss) from operations	(13.2)	8.5	19.3
Other income (expenses), net	(6.1)	(0.9)	(2.6)
Income (loss) before income tax and minority interests and interest in bonuses paid by subsidiaries ⁽¹⁾	(19.3)	7.6	16.7
Income tax benefit (expense)	(1.5)	0.3	0.9
Income (loss) before minority interests and interest in bonuses paid by subsidiaries	(20.8)	7.9	17.6
Minority interests	5.9	(2.8)	(6.6)
Interest in bonuses paid by subsidiaries ⁽¹⁾			
Pre-acquisition earnings ⁽²⁾		0.2	0.1
Net income (loss)	(14.9)%	5.3%	11.1%

-
- (1) Refers to bonuses to directors, supervisors and employees.
 - (2) Represents our share of pre-acquisition profits of ThaiLin prior to December 1, 2003, the date when we began to consolidate the accounts of ThaiLin. For 2004, represents our share of pre-acquisition profits of Chantek prior to April 1, 2004, the date when we began to consolidate the accounts of Chantek, the surviving entity after the merger of Chantek and PlusMOS.

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Net Revenue. Our net revenue increased by NT\$6,009 million, or 67%, to NT\$15,036 million (US\$474 million) in 2004, from NT\$9,027 million in 2003. This increase was primarily due to an increase in revenue from memory semiconductor testing and assembly services, LCD and other flat-panel display driver semiconductor testing and assembly services and the effects of consolidating revenue from ThaiLin, ChipMOS Logic, Chantek and First Semiconductor Technology. Net revenue from testing services for memory and mixed-signal semiconductors increased by NT\$2,866 million, or 91%, to NT\$6,022 million (US\$190 million) in 2004, primarily due to the increased demand for our testing services for memory semiconductors, in particular DRAM and flash memory semiconductors and mixed-signal semiconductors. Net revenue from assembly services for memory and mixed-signal semiconductors increased by NT\$3,062 million, or 112%, to NT\$5,791 million (US\$182 million) in 2004, primarily due to the increased demand for our assembly services for memory semiconductors, in particular DRAM and flash memory semiconductors and mixed-signal semiconductors. Net revenues from LCD and other flat-panel display driver semiconductor testing and assembly services increased by NT\$1,066 million, or 63%, to NT\$2,750 million (US\$87 million) in 2004, primarily due to the increase in sales volume, in particular for LCD and other flat-panel display driver semiconductors using the more advanced COF packages, which reached 4% of our net revenue. The aggregate contribution from the consolidation of the financial results of ThaiLin, ChipMOS Logic, Chantek and First Semiconductor Technology was 24% of our net revenue. The increase in net revenue was partially offset by a decrease in net revenue from semiconductor turnkey services. Our net revenue from semiconductor turnkey services decreased by NT\$984 million, or 68%, to NT\$474 million (US\$15 million) in 2004 due to the increase in customer orders for our testing and assembly services.

Cost of Revenue and Gross Margin. Cost of revenue increased by NT\$3,398 million, or 46%, to NT\$10,858 million (US\$342 million) in 2004 from NT\$7,460 million in the same period in 2003. This increase was primarily due to an increase of NT\$1,813 million in overhead expenses, an increase of NT\$1,151 million in raw material costs and an increase of NT\$596 million in labor costs. Overhead expenses increased primarily due to an increase of NT\$414 million in salaries for certain supervisors in our fabs, an increase of NT\$693 million in depreciation, an increase of NT\$117 million in inventory supplies, an increase of NT\$125 million in maintenance costs, an increase of NT\$96 million in utilities, an increase of NT\$92 million in subcontract fees and an increase of NT\$66 million in expensable equipment.

Our gross profit margin was 28% in 2004, compared to 17% in 2003, and our gross profit increased to NT\$4,178 million (US\$132 million) in 2004 from NT\$1,567 million in 2003. The aggregate impact of consolidating the financial results of ThaiLin, ChipMOS Logic, Chantek and First Semiconductor Technology represented 8% of our gross profit in 2004. However, due to the consolidation of the financial results of Chantek, our gross margin in 2004 was negatively affected. Our gross profit margin for testing services for memory and mixed-signal semiconductors was 37% in 2004, compared to a gross profit margin of 14% in 2003, primarily due to the increase in our utilization rate. Our mixed-signal testing and mixed-signal assembly portions of our business continued to under perform with net losses of NT\$101 million and NT\$122 million, respectively in 2004. Our gross profit margin for LCD and other flat-panel display driver semiconductor assembly and testing services increased to 35% in 2004, from 31% in 2003, primarily due to an increase in our capacity utilization rate and a decrease in unit cost. Our gross profit margin for assembly services for memory and mixed-signal semiconductors was 17% in 2004 and 20% in 2003. Our gross profit margin for semiconductor turnkey services was approximately 1% in 2004 and in 2003 (excluding the trading business).

Research and Development Expenses. Research and development expenses increased by NT\$1 million, or 0.3%, to NT\$296 million (US\$9 million) in 2004 from NT\$295 million in 2003. This increase was primarily due to an increase of NT\$45 million in salary expenses as a result of an increase in the number of employees, partially offset by a decrease of NT\$30 million in depreciation and a decrease of NT\$10 million in professional fees. Our level of research and development expenses increased slightly in 2004 as we continued to focus on research and development projects relating to wafer-level chip scale packaging, or WLCSP, MEMS probe cards for wafer-level testing and the application of COF technologies to other devices.

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Sales and Marketing Expenses. Sales and marketing expenses increased by NT\$243 million, or 374%, to NT\$308 million (US\$10 million) in 2004 from NT\$65 million in the same period in 2003. This large increase was primarily due to an increase of NT\$20 million in commissions and an increase of NT\$18 million in salary expenses as a result of increased sales, as well as an increase of NT\$174 million in bad debt expenses primarily related to an allowance for receivables from Ultima Electronics Corp.

General and Administrative Expenses. General and administrative expenses increased by NT\$233 million, or 53%, to NT\$673 million (US\$21 million) in 2004 from NT\$440 million in the same period in 2003. This increase was primarily due to an increase of NT\$132 million in salary expenses, and increase of NT\$25 million in entertainment expenses and an increase of NT\$27 million in depreciation.

Other Expenses, Net. Other expenses, net increased by NT\$319 million, or 414%, to NT\$396 million (US\$12 million) in 2004 from NT\$77 million in 2003. This increase was primarily due to impairment loss for long-term investments, capital reduction loss for long-term investments and loss on sale of investments of NT\$214 million (US\$7 million), NT\$50 million (US\$2 million) and NT\$40 million (US\$1 million), respectively, primarily related to our investments in Best Home and Sun-Fund, which were partially offset by a reduction in foreign exchange loss of NT\$45 million (US\$1 million).

Income (loss) Before Income Tax and Minority Interests. Income before income tax and minority interests increased to NT\$2,504 million (US\$79 million) in 2004 from NT\$690 million in 2003. This change was primarily due to an increase in income from operations to NT\$2,900 million (US\$91 million) in 2004 offset by an increase of NT\$319 million in other expenses.

Income Taxes. We recorded an income tax benefit of NT\$142 million (US\$4 million) in 2004 compared to an income tax benefit of NT\$29 million in 2003. This change was primarily due to tax credits resulting from investments by ChipMOS Taiwan and ThaiLin. We currently believe that we will incur income tax expenses in future periods.

Minority Interests. Minority interests increased by NT\$741 million to NT\$998 million (US\$31 million) in 2004 from NT\$257 million in 2003. The increase was primarily due to the significant growth in income generated by our subsidiaries that we do not fully own.

Net Income. As a result of the foregoing, including the consolidation of the financial results of ThaiLin, ChipMOS Logic, Chantek and First Semiconductor Technology as our net income was NT\$1,676 million (US\$53 million) in 2004, compared to net income of NT\$482 million in 2003. The aggregate impact of consolidating the financial results of ThaiLin, ChipMOS Logic, Chantek and First Semiconductor Technology decreased our net income in 2004 by 8%.

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

Net Revenue. Our net revenue increased by NT\$2,501 million, or 38%, to NT\$9,027 million in 2003 from NT\$6,526 million in 2002 as a result of an increase in revenue from all our services except semiconductor turnkey services. Net revenue from assembly services for memory and mixed-signal semiconductors increased by NT\$1,314 million, or 93%, to NT\$2,729 million as a result of an increase in volume for these services due to an increase in demand resulting from the continued recovery of the semiconductor industry in 2003. Net revenue from testing services for memory and mixed-signal semiconductors increased by NT\$825 million, or 35%, to NT\$3,156 million primarily due to an increase in volume for these services as a result of an increase in demand due to the continued recovery of the semiconductor industry in 2003. Our revenue from LCD and other flat-panel display driver semiconductor testing and assembly services increased by NT\$692 million, or 70%, to

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NT\$1,683 million, due to increases in both volume and price for these services as a result of a continued increase in demand for end-use applications for LCD and other flat-panel display driver semiconductors in 2003. Our revenue from semiconductor turnkey services decreased by NT\$330 million, or 18%, to NT\$1,458 million due to the increase in customer orders for our testing and assembly services.

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Cost of Revenue and Gross Margin. Cost of revenue increased by NT\$748 million, or 11%, to NT\$7,460 million in 2003 from NT\$6,712 million in 2002. This increase was primarily due to an increase of NT\$534 million in overhead expenses, an increase of NT\$349 million in other costs and an increase of NT\$182 million in labor costs, which was partially offset by a decrease of NT\$239 million in raw material costs associated with semiconductor turnkey services as a result of a decrease in the volume of semiconductor turnkey services and a decrease of NT\$31 million in inventory revaluation allowance. Overhead expenses increased primarily due to an increase of NT\$183 million in subcontract fees, an increase of NT\$125 million in salaries for certain supervisors in our fabs, an increase of NT\$83 million in expensable equipment in service, an increase of NT\$81 million in maintenance costs and inventory supplies, and an increase of NT\$41 million in rental expenses.

Gross profit margin was 17% in 2003, compared to a gross loss margin of 3% in 2002, as our gross profit increased to NT\$1,567 million in 2003 from a gross loss of NT\$186 million in 2002. Our gross profit margin for assembly services for memory and mixed-signal semiconductors increased from 2% in 2002 to 20% in 2003, primarily because of a decrease in unit cost for assembly services for memory and mixed-signal semiconductors. Our gross profit margin for testing services for memory and mixed-signal semiconductors was 14% in 2003, compared to a gross loss margin of 15% in 2002, primarily due to the increase in our utilization rate in testing services for memory and mixed-signal semiconductors. Our gross profit margin for LCD and other flat-panel display driver semiconductor testing and assembly services increased to 31% in 2003 from 13% in 2002, primarily due to an increase in utilization rate and a decrease in unit cost. Our gross profit margin for semiconductor turnkey services increased to 3% in 2003 from 1% in 2002, primarily due to the inclusion of trading revenue generated by ChipMOS Hong Kong in 2003.

Research and Development Expenses. Research and development expenses decreased by NT\$32 million, or 10%, to NT\$295 million in 2003 from NT\$327 million in 2002. This decrease was primarily due to a decrease of NT\$80 million in amortization expenses related to technology and other deferred charges, partially offset by an increase of NT\$32 million in depreciation expenses related to research and development equipment, and an increase of NT\$19 million in salary expenses.

Sales and Marketing Expenses. Sales and marketing expenses increased by NT\$28 million, or 75%, to NT\$65 million in 2003 from NT\$37 million in 2002. This increase was primarily due to an increase of NT\$17 million in bad debt provisions, an increase of NT\$4 million in sales commissions, and an increase of NT\$3 million in import-export expenses.

General and Administrative Expenses. General and administrative expenses increased by NT\$130 million, or 42%, to NT\$440 million in 2003 from NT\$310 million in 2002. This increase was primarily due to an increase of NT\$48 million in general and administrative expenses relating to the development and expansion of our operations in Mainland China, an increase of NT\$26 million in salary expenses, an increase of NT\$21 million in fees for professional services, an increase of NT\$13 million in entertainment expenses, and an increase of NT\$3 million in stock option compensation expenses.

Other Expenses, Net. Other expenses, net decreased by NT\$321 million, or 81%, to NT\$77 million in 2003 from NT\$398 million in 2002. This decrease was primarily due to a decrease of NT\$140 million in allowance for loss on short-term investment, a decrease of NT\$86 million in investment loss recognized by equity method, an increase of NT\$44 million in gain on disposal of property, plant and equipment, an increase of NT\$42 million in gain on sale of investment and an increase of NT\$9 million in interest income, partially offset by an increase of NT\$36 million in foreign exchange loss.

Income (Loss) Before Income Tax and Minority Interests and Interest in Bonuses Paid by Subsidiaries. Income before income tax and minority interests and interest in bonuses to directors, supervisors and employees paid by subsidiaries increased to NT\$690 million in 2003 from a loss of NT\$1,258 million in 2002. This change was primarily due to an increase in income from operations to NT\$767 million and a decrease of NT\$321 million in other expenses, net.

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Income Taxes. We had an income tax benefit of NT\$29 million in 2003, compared to an income tax expense of NT\$98 million for 2002. The NT\$29 million income tax benefit was primarily due to income tax credits of NT\$188 million and a reversal of a valuation allowance of NT\$66 million taken in respect of deferred tax assets, which more than offset our tax expense.

Minority Interests. In 2003, we had positive minority interests of NT\$257 million compared with negative minority interests of NT\$385 million in 2002. This change was primarily due to our increased operations at our subsidiaries that we do not fully own.

Net Income (Loss). As a result of the foregoing, our net income was NT\$482 million in 2003 compared to a net loss of NT\$970 million in 2002.

Critical Accounting Policies

We prepare our consolidated financial statements in conformity with ROC GAAP. Under ROC GAAP, we are required to make certain estimates, judgments and assumptions about matters that are highly uncertain at the time those estimates, judgments and assumptions are made, and our financial condition or results of operations may be materially impacted if we use different but nonetheless reasonable estimates, judgments or assumptions about those matters for that particular period or if we change our estimates, judgments or assumptions from period to period.

Under ROC GAAP, the significant accounting policies are set forth in Note 2 of the notes to the consolidated financial statements. The significant accounting policies that require us to make estimates and assumptions about the effect of matters that are inherently uncertain are discussed below. In connection with the reconciliation of our consolidated financial statements to US GAAP, there are no additional accounting policies that we believe are critical to us.

Allowance for Doubtful Receivables and Sales Returns

Our accounts receivable balance on our balance sheet is affected by our allowances for doubtful accounts and sales returns, which reflect our estimate of the expected amount of the receivables that we will not be able to collect and our estimate of the expected amount of sales returns.

Our determination of the allowance for doubtful receivables is based on our determination of two different types of reserves. The first type of reserve involves an individual examination of available information regarding any customer that we have reason to believe may have an inability to meet its financial obligations. For these customers, we use our judgment, based on the available facts and circumstances, and record a specific reserve for that customer against amounts due to reduce the receivable to the amount that is expected to be collected. These specific reserves are reevaluated and adjusted as additional information is received. The second type of reserve is a general reserve established for all customers based on a range of percentages applied to aging categories. These percentages are based on historical collection and write-off experience. If circumstances change, our estimates of the recoverability of amounts due to us could be reduced by a material amount. As of December 31, 2004, we provided NT\$222 million (US\$7 million) for the first type of reserve and NT\$32 million (US\$1 million) for the second type of reserve.

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Our determination of the allowances for sales returns as of the end of any quarter, is based upon calculating an average historical return rate, usually based on the previous three quarters, and multiplying this by the revenue of that quarter. As of December 31, 2004, we provided NT\$38 million (US\$1 million) for the allowance of sales returns.

The allowance we set aside for doubtful receivables and sales returns was NT\$45 million in 2002, NT\$97 million in 2003 and NT\$292 million (US\$9 million) in 2004. The allowances as of December 31, 2002, 2003 and 2004 represented 2%, 3% and 8%, respectively, of our accounts receivable and other receivables as of those dates. The allowance in 2002, 2003 and 2004 reflected a reduction of NT\$3 million, NT\$20 million and NT\$194 million (US\$6 million), respectively, in accounts receivable that was charged to marketing expenses. If we were to change our estimate of the allowance for doubtful receivables and sales returns either upward or downward 10%, our operating income would be affected by NT\$24 million (US\$1 million) for 2004.

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An increase in our allowance for doubtful receivables and sales returns would decrease our recorded revenue and our current assets.

Inventory Valuation

We state our inventories at the lower of cost or market value. Market value represents net realizable value for finished goods and work in process and replacement value for raw materials. We use the standard cost method to determine the cost of our inventories, adjusted to approximate weighted-average cost at the end of the period. We periodically evaluate the composition of our inventory and identify slow-moving inventories. Inventory items identified as slow-moving are evaluated to determine whether reserves are required.

In 2002, we reserved NT\$51 million for inventory valuation allowance, mainly due to the decrease in the prevailing market prices for tested and assembled DRAM and SDRAM below the historical cost of our inventory. In 2003, we did not record any inventory allowances because the market price for our inventories was higher than cost in 2003. In 2004, we reserved NT\$64 million (US\$2 million) of inventory valuation allowance, primarily due to the consolidation of Chantek. In addition, we reserved NT\$36 million in 2002, NT\$42 million in 2003 and NT\$47 million (US\$1 million) in 2004 for identified slow-moving inventories.

As of December 31, 2004, we recorded NT\$64 million (US\$2 million) of inventory valuation allowances. If the prevailing market price for our testing and assembling services had been 10% lower, we would have been required to recognize a valuation allowance of approximately NT\$31 million (US\$1 million). That amount would have decreased our inventory value and income for 2004 by 5% and 2%.

Valuation Allowance for Deferred Tax Assets

When we have net operating loss carry forwards, investment tax credits or temporary differences in the amount of tax recorded for tax purposes and accounting purposes, we may be able to reduce the amount of tax that we would otherwise be required to pay in future periods. We recognize all existing future tax benefits arising from these tax attributes as deferred tax assets and then, based on our internal estimates of our future profits, establish a valuation allowance equal to the extent, if any, that it is not certain that deferred tax assets will be realized. We record a benefit or expense under the income tax expense/benefit line of our statement of operations when there is a net change in our total deferred tax assets and liabilities in a period. Because the calculation of income tax benefit is dependent on our internal estimation of our future profitability, it is inherently subjective. In 2002, we recorded valuation allowances of NT\$181 million, in 2003, we recorded a reversal of a valuation allowance of NT\$66 million and in 2004 we recorded a reversal of valuation allowances of NT\$462 million (US\$15 million).

In calculating our valuation allowance for deferred taxes as of December 31, 2004, we have assumed that the semiconductor industry will continue its growth in the next few years. Furthermore, we have assumed that our revenue and profitability will be favorably impacted by this growth in the industry as a whole.

As of December 31, 2004, the ending balance for our valuation allowances was NT\$1,651 million (US\$52 million). If our current estimate of future profit had been 10% higher, we would have decreased our valuation allowances accordingly. That, in turn, would have increased our deferred tax assets. In contrast, if our current estimate of future profit had been 10% lower, we would have been required to recognize an additional valuation allowance. That, in turn, would have decreased our deferred tax assets and increased our tax expense for the year ended December 31, 2004. The steady growth in our sales and profitability in 2004 and our near-term outlook as of December 31, 2004 was a key factor in determining the amount of our valuation allowance as of December 31, 2004.

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In addition, because the recording of deferred tax assets and income tax benefit is based on our assumptions of levels of profitability, if we subsequently determine that it is unlikely that we will achieve those profit levels, or otherwise believe that we will not incur sufficient tax liabilities to fully utilize the deferred tax assets, we will reduce our deferred tax assets in an amount equal to that determination and incur a charge to income in that amount at that time. Because our expectation for future income is generally less during periods of reduced income, we will be more likely to take significant valuation allowances in respect of income tax assets during those periods of already reduced income.

Impairment Loss of Long-Lived Assets

Under US GAAP, we evaluate our long-lived assets for impairment whenever indicators of impairment exist. We record impairment losses on long-lived assets used in operations if events and circumstances indicate that the assets might be impaired and the undiscounted cash flows estimated to be generated by those assets are less than the carrying amount of those items. Assumptions about the carrying value of the long-lived assets require significant judgment on our expected cash flow. Our cash flow estimates are based on historical results adjusted to reflect our best estimate of future market and operating conditions. The net carrying value of assets not recoverable is reduced to fair value. Our management periodically reviews the carrying value of our long-lived assets and this review is based upon our projections of anticipated future cash flows. Based on the assessment of our management, we recognized NT\$214 million (US\$7 million) impairment loss for long-term investments in 2004. While we believe that our estimates of future cash flows are reasonable, different assumptions regarding such cash flows could materially affect our evaluations.

In determining whether any impairment charges were necessary as of December 31, 2004, we have assumed that the semiconductor industry will continue its growth in the next few years. Based upon our assumption of growth in the semiconductor industry and our other assumptions in our internal budget, for the purpose of determining whether any impairment charges are necessary as of December 31, 2004, we estimate that our future cash flows, on an undiscounted basis, are greater than our NT\$17,427 million (US\$549 million) in long-lived assets. Any increases in estimated future cash flows would have no impact on the reported value of the long-lived assets. In contrast, if our current estimate of future cash flows from those assets had been 36% lower, those cash flows would have been less than the reported amount of long-lived assets. In that case, we would have been required to recognize an impairment loss that would have significantly increased our net loss before taxes for the year ended December 31, 2004.

Senior Management's Discussion with the Audit Committee

Our management has discussed the development and selection of the estimates mentioned in the critical accounting policies described above with the audit committee of our Board of Directors and the audit committee has reviewed our disclosure relating to the critical accounting policies in this section.

Liquidity and Capital Resources

Since our inception, we have funded our operations and growth primarily through the issuance of equity and notes, a mixture of short- and long-term loans and cash flow from operations. As of December 31, 2004, our primary sources of liquidity were cash and cash equivalents (excluding restricted cash and cash equivalents) of NT\$4,849 million (US\$153 million), short-term investments of NT\$2,833 million (US\$89 million) and NT\$2,170 million (US\$68 million) available to us in undrawn credit facilities, which have expired or will expire between January 2005 and December 2005.

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The following table sets forth our cash flows with respect to operating activities, investing activities, financing activities and the effect of exchange rate changes on cash for the periods indicated.

	Year ended December 31,			
	2002 ⁽¹⁾	2003 ⁽²⁾	2004 ⁽³⁾	2004 ⁽³⁾
	NT\$	NT\$	NT\$	US\$
	(in millions)			
Net cash provided by (used in):				
Operating activities	\$ 1,463.7	\$ 1,877.1	\$ 7,623.0	\$ 240.2
Investing activities	(3,135.9)	(760.8)	(10,037.9)	(316.3)
Financing activities	2,978.6	(1,841.5)	5,694.6	179.4
Effect of exchange rate changes on cash		(31.4)	(161.5)	(5.1)
Net increase (decrease) in cash	\$ 1,306.4	\$ (756.6)	\$ 3,118.2	\$ 98.2

- (1) In 2002, we consolidated the financial results of ChipMOS Taiwan and its 100% owned subsidiaries, ChipMOS Japan, ChipMOS USA, ChipMOS Hong Kong, Modern Mind and its wholly-owned subsidiary, ChipMOS Shanghai.
- (2) In 2003, we consolidated the financial results of ThaiLin. In 2003, also includes trading revenue generated by ChipMOS Hong Kong.
- (3) From January 12 and 28, 2004, onwards, we consolidated the financial results of Advanced Micro Chip Technology Co., Ltd. (which was liquidated in October 2004), and ChipMOS Logic, respectively, and from April 1, 2004, onwards, we also consolidated the financial results of Chantek. Starting from April 30, 2004, our financial results also included the financial results of WWT, which was merged into ChipMOS Logic. Starting from November 1, 2004, our financial statements also included the results of First Semiconductor Technology, Inc. in which ChipMOS Taiwan acquired a 67.8% equity interest on November 1, 2004 and sold back this interest to First Semiconductor Technology, Inc. on April 29, 2005.

Net Cash Provided by Operating Activities

Net cash provided by operating activities totaled NT\$7,623 million (US\$240 million) in 2004, compared to NT\$1,877 million in 2003. The increase in 2004 compared to 2003 was primarily due to net income of NT\$1,676 million (US\$53 million) compared to net income of NT\$482 million in 2003. Our accounts receivables with related parties and with third parties increased to NT\$1,411 million (US\$44 million) and NT\$1,926 million (US\$61 million), respectively, as of December 31, 2004 compared to NT\$1,342 million and NT\$1,291 million, respectively, as of December 31, 2003. We recorded positive minority interests of NT\$1,845 million (US\$58 million) in 2004 compared to NT\$609 million in 2003. Our depreciation and amortization expenses increased to NT\$3,537 million (US\$111 million) in 2004 from NT\$2,715 million in 2003. The increase in depreciation and amortization in 2004 was primarily due to the acquisition of property, plant and equipment and the impact of consolidating the financial results of ThaiLin, ChipMOS Logic, Chantek and First Semiconductor Technology and because we incurred less incremental depreciation expenses from the purchase of new equipment.

Net cash provided by operating activities totaled NT\$1,877 million in 2003, compared to NT\$1,464 million in 2002. The increase in 2003 compared to 2002 was primarily due to a net income of NT\$482 million in 2003 compared to a net loss of NT\$970 million in 2002. Our accounts receivables with related parties and our accounts receivables with third parties increased to NT\$1,342 million and NT\$1,291 million, respectively, as of December 31, 2003, from NT\$1,105 million and NT\$562 million, respectively, as of December 31, 2002. We recorded

positive minority interests of NT\$609 million in 2003 compared to negative minority interests of NT\$450 million in 2002. Our depreciation and amortization expenses decreased to NT\$2,715 million in 2003 from NT\$2,821 million in 2002. The decrease in depreciation and amortization in 2003 was due to the full amortization of technology know-how provided by Mosel and Siliconware Precision and because we incurred less incremental depreciation expenses from the purchase of new equipment.

Net Cash Used in Investing Activities

Net cash used in investing activities totaled NT\$10,038 million (US\$316 million) in 2004, compared to NT\$761 million in 2003. Net cash used in investing activities primarily reflected capital expenditures of NT\$8,187 million (US\$258 million) in the acquisition of property, plant and equipment and an increase of NT\$1,869 million (US\$59 million) in short-term investments.

Net cash used in investing activities totaled NT\$761 million in 2003, compared to NT\$3,136 million in 2002. Net cash used in investing activities primarily reflected expenditures in acquiring properties and equipment, which was NT\$2,402 million in 2003 and NT\$2,308 million in 2002. Expenditures in acquiring long-term investments was NT\$15 million in 2003 and NT\$1,271 million in 2002. We incurred capital expenditures of NT\$2,402 million in 2003 for the purchase of testing and wafer sorting equipment for memory semiconductors and NT\$2,308 million in 2002 for the purchase of testing and wafer sorting equipment for LCD and other flat-panel display driver semiconductors.

Table of Contents**Net Cash Provided by (Used in) Financing Activities**

Net cash provided by financing activities totaled NT\$5,695 million (US\$179 million) in 2004, compared to NT\$1,842 million net cash used in 2003. Net cash provided by financing activities in 2004 primarily reflected net proceeds of NT\$2,739 million (US\$86 million) from the issuance of convertible notes, borrowings of NT\$2,725 million (US\$86 million) in long-term loans, partially offset by a NT\$986 million (US\$31 million) repayment of bank loans, and net proceeds of NT\$1,245 million (US\$39 million) from the issuance of stock.

Net cash used in financing activities totaled NT\$1,842 million in 2003, compared to NT\$2,979 million provided in 2002. Net cash used in financing activities in 2003 primarily reflected a repayment of a NT\$576 million loan from Jesper Limited, NT\$719 million repayments on bank loans, NT\$352 million repayments on long-term loans, NT\$284 million payments on bonds and NT\$159 million repayments on commercial paper.

Tabular Disclosure of Contractual Obligations and Commercial Commitments

The following table summarizes our contractual obligations and commitments as of December 31, 2004 for the periods indicated:

Contractual Obligations	Payments Due by Period				
	Total	Less than 1 year	1-3 years	4-5 years	More than 5 years
	NT\$	NT\$	NT\$ (in millions)	NT\$	NT\$
Long-term debt ⁽¹⁾	\$ 11,364.3	\$ 3,348.9	\$ 4,045.7	\$ 3,835.0	\$ 134.7
Short-term loans ⁽¹⁾	804.7	804.7			
Working capital loans	233.6	233.6			
Other short-term obligations	571.1	571.1			
Operating leases	211.0	16.2	48.7	32.5	113.6
Royalty or other license payments ⁽²⁾	17.4	17.4			
Investment ⁽³⁾	5,316.5	952.2	4,364.3		
Total contractual cash obligations	\$ 17,713.9	\$ 5,139.4	\$ 8,458.7	\$ 3,867.5	\$ 248.3

(1) Includes interest payments. Assumes level of relevant interest rates remains at December 31, 2004 level throughout all relevant periods.

(2) Assumes net revenue from relevant services for calculating royalty or license fees remain constant at 2004 levels.

(3) Represents commitment to build a new facility in Shanghai Qingpu Industrial Zone.

In addition, the following table summarizes our other commercial commitments as of December 31, 2004 for the periods indicated:

Our Commercial Commitments	Total Amounts Committed	Amount of Commitment Expiration Per Period			
		Less than 1 year	1-3 years	4-5 years	Over 5 years

	NT\$	NT\$	NT\$	NT\$	NT\$
			(in millions)		
Lines of credit	\$ 1,096.0	\$ 1,096.0	\$	\$	\$
Total commercial commitments	\$ 1,096.0	\$ 1,096.0	\$	\$	\$

Capital Resources

Our capital expenditure in 2002 was funded by NT\$1,464 million cash flows from operations and an increase of NT\$1,214 million of long-term borrowings. Capital expenditure in 2003 was funded by NT\$1,877 million cash flows from operations and an increase of NT\$223 million in bank loans. Capital expenditure in 2004 was funded b